

## **Appendix A: Reduced Scale Architectural Plans**

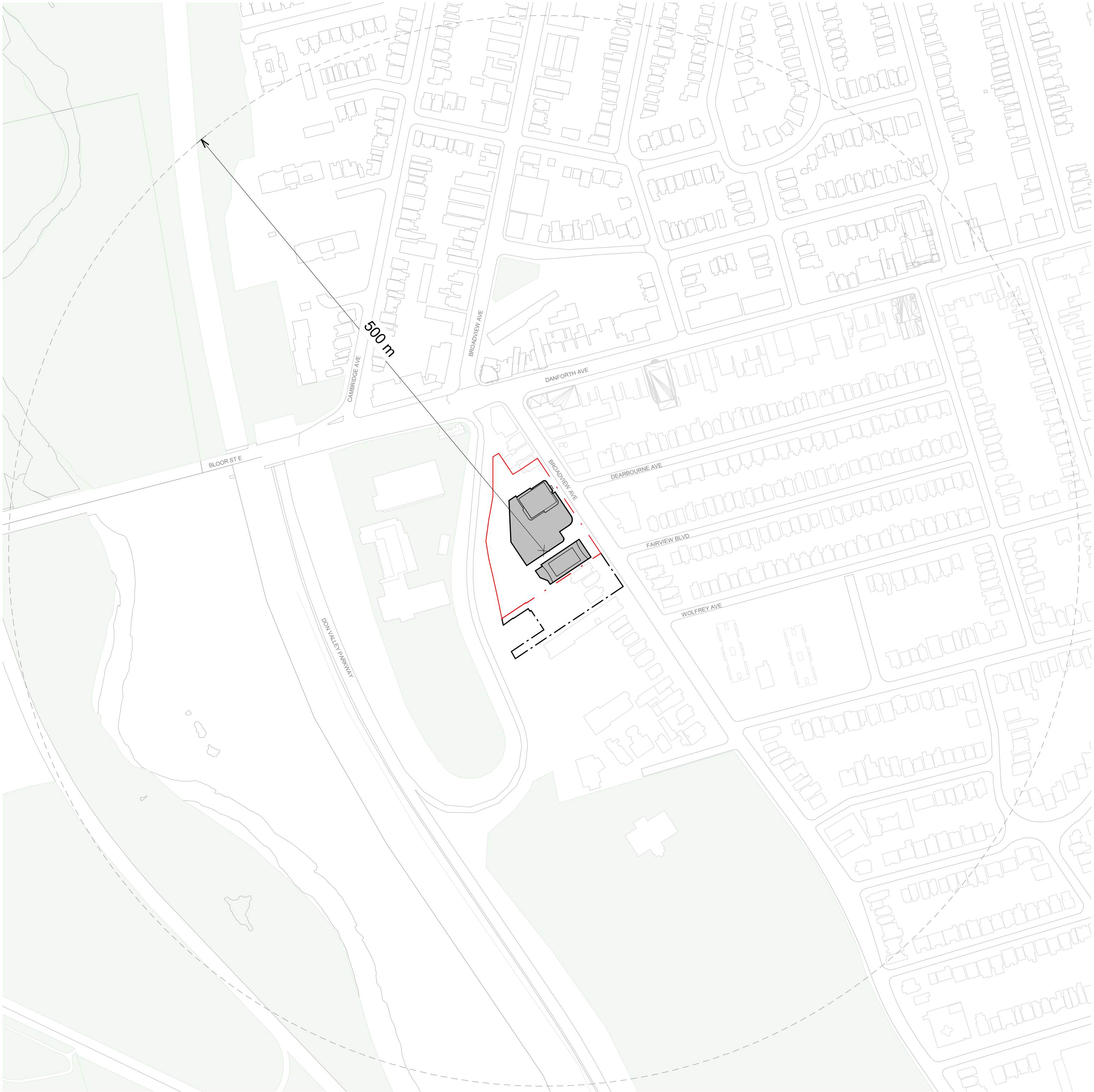




# BROADVIEW + DANFORTH



AERIAL VIEW OF PROJECT SITE LOOKING WEST



1  
A 000  
CONTEXT PLAN  
SCALE: 1:2500

## CLIENT

CP REIT Ontario Properties Limited  
700-22 ST CLAIR AVE E,  
TORONTO, ON M4T 2S5

## PROJECT ADDRESS

682-742 BROADVIEW AVE,  
TORONTO, ON M4K 2P1

## CONSULTANTS

|                                                                                                                                  |                                                                                                                |                                                                                                                                 |                                                                                                                      |                                                                                                                                  |                                                                                                                        |
|----------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------|
| ARCHITECT<br><b>SUPERKUL INC.</b><br>101-35 GOLDEN AVENUE<br>TORONTO, ON M6R 2J5<br>(T) 416.596.0700                             | PLANNER<br><b>URBAN STRATEGIES INC.</b><br>197 SPADINA AVE<br>TORONTO, ON M5T 2C8<br>(T) 416.340.9004          | LANDSCAPE ARCHITECT<br><b>PMA</b><br>1A HOWARD PARK AVENUE, UNIT 2<br>TORONTO, ON M6R 1V3<br>(T) 416.239.9818                   | GEOTECHNICAL ENGINEER<br><b>SLR CONSULTING</b><br>100 STONE ROAD WEST, 201<br>GUELPH, ON N1G 5L3<br>(T) 226.706.8080 | SUSTAINABILITY CONSULTANT<br><b>EQ BUILDING PERFORMANCE INC.</b><br>20 FLORAL PARKWAY<br>CONCORD, ON L4K 4R1<br>(T) 416.645.1186 | ENERGY ANALYSIS<br><b>EQ BUILDING PERFORMANCE INC.</b><br>20 FLORAL PARKWAY<br>CONCORD, ON L4K 4R1<br>(T) 416.645.1186 |
| TRANSPORTATION ENGINEER<br><b>BA CONSULTING GROUP LTD.</b><br>95 ST CLAIR AVE W #1000<br>TORONTO, ON M4V 1N6<br>(T) 416.961.7110 | WIND CONSULTANT<br><b>SLR CONSULTING</b><br>100 STONE ROAD WEST, 201<br>GUELPH, ON N1G 5L3<br>(T) 226.706.8080 | STRUCTURAL ENGINEER<br><b>JABLONSKY, AST &amp; PARTNERS</b><br>3 CONCORDE GATE, #400<br>TORONTO, ON M3C 3N7<br>(T) 416.447.7405 | ECOLOGIST CONSULTANT<br><b>SLR CONSULTING</b><br>100 STONE ROAD WEST, 201<br>GUELPH, ON N1G 5L3<br>(T) 226.706.8080  | CIVIL ENGINEER<br><b>COUNTERPOINT ENGINEERING</b><br>8395 JANE STREET, SUITE 100<br>VAUGHAN, ON L4K 5Y2<br>(T) 905.326.1404      |                                                                                                                        |

## ISSUED FOR ZBA - 250926

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Prior to commencement of the Work the Contractor shall verify all drawing dimensions, datum, and levels with the Contract Documents and with the conditions on site, ascertain any discrepancies between the site and the Contract Documents, and bring these items to the attention of the Architect for clarification.

**superkul**

101 - 35 Golden Avenue  
Toronto, ON M6R 2J5

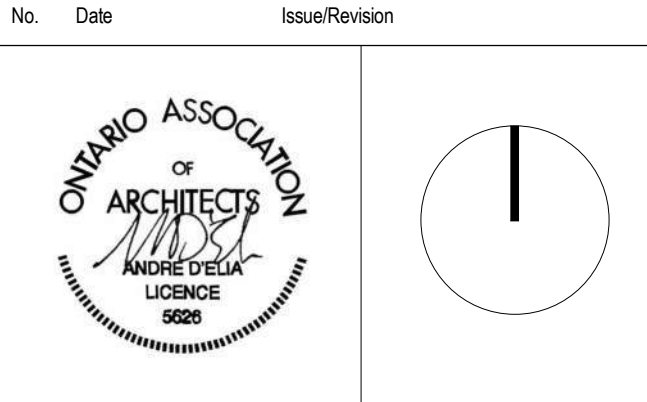
t+ 416.596.0700  
f+ 416.533.6986  
www.superkul.ca

**ChoiceProperties**

### CONTEXT LEGEND

- Park
- Subject Site
- Subject Mass
- Context

|   |        |                         |
|---|--------|-------------------------|
| 3 | 202008 | ZBA Submission 2        |
| 2 | 202107 | ZBA Submission 1        |
| 1 | 202106 | Pre-App Consult Meeting |



Broadview + Danforth

682-742 Broadview Ave,  
Toronto, Ontario

Title:  
**Cover Sheet & Drawing List**

Project No. 2017    Scale    As indicated  
Drawing No.

**A 000**



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### GREEN ROOF STATISTICS BUILDING B

Gross Floor Area, as defined in Green Roof Bylaw

The total area of each floor level of a building, above and below average grade, measured from the exterior of the main wall of each floor level, including voids at the level of each floor, such as a atrium, mezzanine, stairwell, escalator, elevator, ventilation duct or utility shaft, but excluding areas used for the purpose of parking or loading

### Definitions

**FLOOR PLATE AREA** - The total area of a floor of a building, measured from the exterior of the main wall of the floor level, including voids at the level of the floor such as an atrium, mezzanine, stairwell, escalator, elevator, ventilation duct or utility shaft.

**GROSS FLOOR AREA** - The total area of each floor level of a building, above and below average grade, measured from the exterior of the main wall of each floor level, including voids at the level of each floor, such as an atrium, mezzanine, stairwell, escalator, elevator, ventilation duct or utility shaft, but excluding areas used for the purpose of parking or loading

### LOADING NOTES

- [illegible]

### SITE PLAN NOTES

2. THE BUILDING IS TO BE SPARKLEDRILL.
3. RESIDENTIAL VISITOR PARKING SPACES WILL BE INDIVIDUALLY SIGNED AT THE FRONT OF EACH SPACE FOR THE USE OF RESIDENTIAL VISITORS. BUILDING MANAGEMENT SHALL PROVIDE EVIDENCE OF THIS ARRANGEMENT.
4. ALL EXISTING DRIVEWAYS AND BOULEVARDS WILL BE REPAVED TO THE MINIMUM 1% AND MAXIMUM 4% SLOPE TOWARDS THE ROADWAY.
5. REFER TO SITE SERVING DOCUMENTS FOR SEWER AND WATER SERVICE INFORMATION.
6. ALL EXISTING WALKWAYS ARE TO BE RECONSTRUCTED.
7. ALL EXISTING ACCESSORIES, CURB CUTS, TRAFFIC CONTROL SIGNS, ETC. ALONG THE DEVELOPMENT SITE FRONTS THAT ARE NOT REQUIRED ARE TO BE REMOVED. THE BOULEVARD WITHIN THE PUBLIC RIGHT OF WAY, IN ACCORDANCE WITH CITY STANDARDS AND TO THE SATISFACTION OF THE EXECUTIVE DIRECTOR OF TECHNICAL SERVICES ARE TO BE REINSTATED.
8. PROPOSED ACCESS TO THE FRONT-OF-WAY/LANEWAY FOR THIS PROJECT TO BE DESIGNED IN ACCORDANCE WITH CITY STANDARD AND TO THE SATISFACTION OF THE EXECUTIVE DIRECTOR OF TECHNICAL SERVICES.
9. NO SPEED BUMPS SHALL BE INSTALLED ON ANY DESIGNATED FIRE ROUTE.
10. MAX. POROSITY OF ALL GREEN STANDING, VENTILATION AND EXHAUST SHALL BE 20mm x 20mm Per Project.
11. ALL EXTERIOR LIGHT FIXTURES TO BE DARK SKY COMPLIANT.

## UTILITY/SERVICES NOTES

1. THE METHOD OF INSTALLATION FOR THE PROPOSED SERVICE CONNECTIONS WILL BE AT THE DISCRETION OF TORONTO WATER.  
2. EXISTING CONNECTIONS NO LONGER IN USE SHALL BE DISCONNECTED BY TORONTO WATER AT THE OWNER'S COST.  
3. THE LOCATION OF THE WATER METER SHALL BE TO TORONTO WATERS SATISFACTION.\*  
4. THE DEVELOPER SHALL PROVIDE A PERMANENT ACCESS ROAD TO ALL AVAILABLE WATER SERVICES IN ACCORDANCE WITH THE TORONTO MUNICIPAL CODE, CHAPTER S61: WATER SUPPLY; THE BUILDING CODE AND CSA B44 SERIES STANDARDS.  
5. THE BUILDING'S STORM AND SANITARY SYSTEM MUST BE DESIGNED TO BE ABLE TO OPERATE UNDER MUNICIPAL SURCHARGE CONDITIONS.
- \*NOTE THAT SHOULD ANY PARTY INCLUDING THE APPLICANT OR ANY SUBSEQUENT OWNER, APPLY FOR MORE THAN ONE CONDOMINIUM CORPORATION ENCOMPASSING WHOLE OR ALL OF THIS DEVELOPMENT OR MAKE AN APPLICATION THAT RESULTS IN A LAND DIVISION OF THIS PROPERTY, THE APPLICANT SHALL OBTAIN WRITTEN APPROVAL FROM TORONTO WATER TO THE APPROVED SERVICES. SUCH ASSURANCES WILL BE DETERMINED AT THE TIME OF APPLICATION FOR CONDOMINIUM APPROVAL.

|                                                                                       |                                                  |
|---------------------------------------------------------------------------------------|--------------------------------------------------|
|    | VEHICULAR ENTRY / EXIT                           |
|    | FIRE DEPARTMENT CONNECTION                       |
|    | FIRE HYDRANT                                     |
|    | MANHOLE COVER                                    |
|    | CATCH BASIN                                      |
|    | HYDRO POLE                                       |
|    | ELECTRICAL STAND                                 |
|    | EXTENT OF BELOW GRADE OPENING ELEMENT ABOVE      |
|    | OPENING TO BELOW GRADE                           |
|    | EXTENT OF GROUND FLOOR                           |
|    | 600mm BICYCLE PARKING SPACE                      |
|    | GEODETIC ELEVATION                               |
|    | ELEVATION FROM ESTABLISHED GRADE                 |
|    | EXISTING GRADE ELEVATION                         |
|    | BARRIER FREE TURNING RADIUS                      |
|    | PROPERTY LINE                                    |
|    | PROPERTY LINE - NOT PART OF DEVELOPMENT          |
|    | VEGETATION DRIP LINE                             |
|   | 10M SETBACK FROM VEGETATION DRIP LINE            |
|  | LTSOs (LONG TERM STABLE TOP OF SLOPE)            |
|  | SETBACK FROM LTSOs                               |
|  | LTSOs FROM LTSOs (LONG TERM STABLE TOP OF SLOPE) |
|  | FINISHED FLOOR ELEVATION                         |
|  | TOP OF PARAPET                                   |
|  | TOP OF ROOF                                      |
|  | TOP OF STRUCTURE                                 |
|  | TORONTO GREEN STANDARDS                          |
|  | TREE PROTECTION ZONE                             |

**NOTE**

SURVEY INFORMATION TAKEN FROM  
"TOPOGRAPHIC SURVEY OF PART OF LOT 15  
CONCESSION 1, LOTS 1 TO 9 BOTH INCLUSIVE  
AND PART OF LOT 17 REGISTERED PLAN 274 E,  
CITY OF TORONTO"  
BY SPEIGHT, VAN NOSTRAND & GIBSON LIMITED  
DATED APRIL 23, 2025.

|   |          |                          |
|---|----------|--------------------------|
| 3 | 20250926 | ZBA Submission 2         |
| 2 | 20210726 | ZAA Submission 1         |
| 1 | 20210610 | Pre-App Consult. Meeting |



### Broadview + Danforth

2-742 Broadview Ave  
Toronto, Ontario

## Site Plan - Phase 1

|                  |       |              |
|------------------|-------|--------------|
| Project No. 2017 | Scale | As indicated |
| Drawing No.      |       |              |

**A 001a**



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Prior to commencement of the Work the Contractor shall verify all drawing dimensions, datums, and levels with the Contract Documents and with the conditions on site; ascertain any discrepancies between the site and the Contract Documents, and bring these items to the attention of the Architect for clarification.

| GREEN ROOF STATISTICS BUILDING B                                              |                        |                         |          |
|-------------------------------------------------------------------------------|------------------------|-------------------------|----------|
| Green Roof                                                                    |                        |                         | Provided |
| Ground Floor Area, as defined in Green Roof Bylaw (m <sup>2</sup> )           |                        | 33,702.1 m <sup>2</sup> |          |
| Total Roof Area (m <sup>2</sup> )                                             |                        | 3,011.8 m <sup>2</sup>  |          |
| Area of Residential Private Terraces (m <sup>2</sup> )                        |                        |                         |          |
| Roofing Outdoor Amenity Space, if in a Residential Building (m <sup>2</sup> ) |                        | 944.6 m <sup>2</sup>    |          |
| Area of Renewable Energy Devices (m <sup>2</sup> )                            |                        |                         |          |
| Tower(s) Roof Area with floor plate less than 750m <sup>2</sup>               |                        |                         |          |
| Total Available Roof Space (m <sup>2</sup> )                                  |                        | 2,067.2 m <sup>2</sup>  |          |
| Green Roof Coverage                                                           |                        |                         |          |
| Coverage of Available Roof Space (m <sup>2</sup> )                            | Required               | 2,042.4 m <sup>2</sup>  | Provided |
| Coverage of Available Roof Space (%)                                          | 1,240.3 m <sup>2</sup> | 60%                     | 63%      |

### Definitions

### LOADING NOTES

- LOADING NOTES:**
1. TYPE G LOADING SPACE AND ADJACENT STAGING PAD HAVE VERTICAL CLEARANCE OF 8 METERS IN MINIMUM.
  2. OVERHEAD DOOR TO LOADING SPACE WILL HAVE MIN. 4 METERS HEIGHT. 2 MTR DEEP STAGING AREA DIRECTLY IN FRONT OF THE LOADING AREA WILL HAVE MIN. VERTICAL CLEARANCE OF 6.5 M. 50 M STAGING AREA FOR THE DEVELOPMENT.
  3. THE TRUCKS WILL BE SHARED BETWEEN RESIDENTIAL AND NON-RESIDENTIAL USES. NON-RESIDENTIAL COMPLIANT WILL ONLY SCHEDULE USE ON OFF-DAY DAYS FROM THE COLLECTION DAYS OF THE RESIDENTIAL COMPLIANT TO ENSURE THAT THE TYPE G LOADING SPACE WILL BE VACANT FOR CITY WASTE COLLECTION.
  4. TYPE G LOADING SPACE WILL BE LEVEL (+/- 2%) AND CONSTRUCTED WITH MIN 200MM THICK SACRIFICIAL CONCRETE SLAB.
  5. ALL ACCESS DRIVERS TO BE USED TO ACCESS THE TRUCKS TO THE TRUCK STAGING AND PARKING GARAGE THAT LARGE TRUCKS ARE MANOEUVRING WITHIN THE PUBLIC LANE.
  6. ALL CROSS DRIVERS TO BE USED BY THE GARAGE COLLECTION VEHICLE WILL HAVE:
  - MINIMUM VERTICAL CLEARANCE OF 4 METERS THROUGHOUT;
  - MINIMUM WIDTH OF 4.5 METRES THROUGHOUT;
  - AND METRES WIDE AT POINT OF INGRESS AND EGRESS
  - NO PARKING IS TO BE PROVIDED AND MAINTAINED ADJACENT TO THE LOADING SPACE.
  8. CONSTRUCT ANY TYPE G LOADING SPACE AND ALL DRIVERSWAYS AND PASSAGeways PROVIDING ACCESS THERE TO, TO THE REQUIREMENTS OF THE ONTARIO BUILDING CODE, INCLUDING ALLOWANCE FOR CITY WASTE COLLECTION.
  9. THE RESIDENTIAL SOLID WASTE ROOM WILL ACCOMMODATE GARBAGE, RECYCLING AND ORGANICS FOR THE RESIDENTIAL COMPONENT OF THE BUILDING VIA USE OF A BASKET IN THE DEVELOPMENT.
  10. "COLLECTION OF WASTE MATERIALS FOR THIS DEVELOPMENT WILL TAKE PLACE IN AN ENCLOSED LOADING PAD. AN ON-SITE STAFF PERSON IS RESPONSIBLE FOR MOVING THE TRUCKS TO THE COLLECTION SPACE IN ACCORDANCE WITH THE COLLECTION DIRECTIVES TO THE COLLECTION SPACE.
  11. THIS BUILDING IS DESIGNED WITH A TYPE G LOADING SPACE A FLASHING WARNING LIGHT SIGN AND/OR APPROPRIATE SIGNAGE ADJACENT TO THE SPACE. AT NO POINT WILL BE IN PLACE AND IN COMPLIANCE WITH THE COLLECTION DIRECTIVES TO THE COLLECTION SPACE.
  12. SOLID WASTE MANAGEMENT TO BE NOTIFIED UPON COMPLETION OF THE DEVELOPMENT AND SHOULD PUBLIC WASTE COLLECTION BE USED. ALL NECESSARY APPLICATION AND WAIVER TO BE SUBMITTED TO THE CITY OF MISSISSAUGA.
  13. NON-RESIDENTIAL GARBAGE WILL BE COLLECTED BY LICENSED PRIVATE WASTE MANAGEMENT COMPANY.
  14. THE TRUCKS WILL BE USED BY THE TRUCK STAGING AND PARKING GARAGE TO REPORT FOR COLLECTION OF WASTE IN ACCORDANCE WITH CHAPTER B1 OF THE MUNICIPAL CODE, "WASTE COLLECTION, COMMERCIAL PROPERTIES".
- THE TRUCK STAGING AND PARKING GARAGE WILL BE AVAILABLE TO MANOEUVRE BINS FOR THE COLLECTION DRIVER AND ALSO ACT AS A FLAGMAN WHEN THE TRUCK IS REVERSING. IN THE EVENT THE ON-SITE STAFF PERSON IS UNAVAILABLE AT THE TIME CITY COLLECTION VEHICLE ARRIVES AT THE SITE, THE COLLECTION VEHICLE WILL LEAVE THE SITE AND NOT RETURN UNTIL THE NEXT SCHEDULED COLLECTION DATE.

### SITE PLAN NOTES

- SITE PLAN NOTES:**
1. THE BUILDING IS TO BE SPRINKLERED.
  2. RESIDENTIAL VEHICLE PARKING SPACES WILL BE INDIVIDUALLY SIGNED AT THE FRONT OF EACH SPACE FOR THE USE OF RESIDENTIAL TRAFFIC. BUILDING MANAGEMENT SHALL PROVIDE ORIENTATION TO THIS ARRANGEMENT.
  3. SIDEWALKS AND BOULEVARDS WITHIN THE RIGHT OF WAY TO HAVE A MINIMUM 1% AND MAXIMUM 4% SLOPE TOWARDS THE ROADWAY.
  4. REFER TO SITE SERVICES DOCUMENTS FOR SEWER AND WATER SERVICE INFORMATION.
  5. ALL FENCING WALLS ARE TO BE PROFESSIONAL GRADE.
  6. ALL EXISTING ACCESSIBLE CURB CUTS, TRAFFIC CONTROL SIGNS, ETC. ALONG THE DEVELOPMENT SITE FRONTS/AGES THAT ARE NOT IN CONFORMANCE WITH THE CITY OF TORONTO'S TRAFFIC CONTROL SIGNS AND MARKINGS BYLAW SHALL BE REPLACED OR REPAIRED TO THE SATISFACTION OF THE EXECUTIVE DIRECTOR OF TECHNICAL SERVICES. SIGNS ARE TO BE RENAISSANCE.
  7. PROPOSED ACCESS TO THE RIGHT-OF-WAY/LANEWAY FOR THIS PROJECT IS TO BE DESIGNED IN ACCORDANCE WITH CITY STANDARD N-1.
  8. ALL EXISTING AND PROPOSED CURBS AND SIDEWALK VEHICULAR ENTRANCES SHALL BE CONFORM TO CITY STANDARD N-1.
  9. NO SPEED BUMPS SHALL BE INSTALLED ON ANY DESIGNATED FIRE ROUTE.
  10. MAX. PROPOSED ALL GRADE LEVEL VENTILATION SHALL BE 20mm x 20mm PER TORONTO GREEN BUILDING STANDARDS.
  11. ALL EXTERIOR LIGHT FIXTURES TO BE DARK SKY COMPLIANT.

**UTILITY/SERVICES NOTES**

- [illegible]

|  |                                                     |
|--|-----------------------------------------------------|
|  | PEDESTRIAN ENTRY / EXIT                             |
|  | VEHICULAR ENTRY / EXIT                              |
|  | FIRE DEPARTMENT CONNECTION                          |
|  | FIRE HYDRANT                                        |
|  | MAN-HOLE COVER                                      |
|  | CATCH BASIN                                         |
|  | HYDRO POLE                                          |
|  | ELECTRICAL STAND                                    |
|  | EXTENT OF BELOW GRADE                               |
|  | OPENING TO ELEMENT ABOVE                            |
|  | BUILD UP BELOW                                      |
|  | EXTENT OF GROUND FLOOR                              |
|  | 800X1800MM BICYCLE PARKING SPACE                    |
|  | GEOTECT ELEVATION                                   |
|  | ELEVATION FROM ESTABLISHED GRADE                    |
|  | EXISTING GRADE ELEVATION FH                         |
|  | BARrier FREE TURNING RADIUS                         |
|  | PROPERTY LINE                                       |
|  | PROPERTY LINE - NOT PART OF DEVELOPMENT             |
|  | VEGETATION DRIP LINE                                |
|  | 1/4M SETBACK FROM VEGETATION DRIP LINE              |
|  | LTSLOS (LONG TERM SLOPE OF SLOPE)                   |
|  | SETBACK FROM LTSLOS (LONG TERM STABLE TOP OF SLOPE) |
|  | FINISHED FLOOR ELEVATION                            |
|  | TOP OF FINAMENT                                     |
|  | TOP OF ROOF                                         |
|  | TOP OF STRUCTURE                                    |
|  | TORONTO GREEN STANDARDS                             |
|  | TREE PROTECTION ZONE                                |

**NOTE**

SURVEY INFORMATION TAKEN FROM  
"TOPOGRAPHIC SURVEY OF PART OF LOT 15  
CONCESSION 1, LOTS 1 TO 9 BOTH INCLUSIVE  
AND PART OF LOT 17 REGISTERED PLAN 274 E,  
CITY OF TORONTO"  
BY SPEIGHT, VAN NOSTRAND & GIBSON LIMITED.  
DATED APRIL 23, 2025.

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| 3 | 20250926 | ZBA Submission 2         |
| 2 | 20210726 | ZAA Submission 1         |
| 1 | 20210610 | Pre-App Consult. Meeting |



Broadview + Danforth

682-742 Broadview Ave  
Toronto, Ontario

Title

## Site Plan

|                  |       |             |
|------------------|-------|-------------|
| Project No. 2017 | Scale | As indicate |
| Drawing No.      |       |             |

**A 001b**



| BUILDING A AND B STATISTICS SUMMARY |                    |            |          |      |      |      |             |                 |        |           |                |         |              |         |         |         |         |    |    |     |     |
|-------------------------------------|--------------------|------------|----------|------|------|------|-------------|-----------------|--------|-----------|----------------|---------|--------------|---------|---------|---------|---------|----|----|-----|-----|
| Overall Statistics Summary          |                    |            |          |      |      |      |             |                 |        |           |                |         |              |         |         |         |         |    |    |     |     |
| Building                            | Total # of Storeys | Unit Count | Unit Mix |      |      |      |             |                 |        | Total GCA | GFA Deductions | GFA     |              | Amenity |         | Loading | Parking |    |    |     |     |
|                                     |                    |            | Studio   | 1 BD | 2 BD | 3 BD | Residential | Non-Residential | Indoor |           |                | Outdoor | Barrier Free | Bicycle |         |         |         |    |    |     |     |
| Building A                          | 39                 | 385        | 30       | 8%   | 212  | 55%  | 105         | 27%             | 38     | 10%       | 30249.06       | 4170.51 | 26078.55     | 0.00    | 1097.62 | 443.41  | 2       | 3  | 0  | 424 |     |
| Building B                          | 42                 | 472        | 42       | 9%   | 266  | 56%  | 118         | 25%             | 46     | 10%       | 36582.04       | 4401.73 | 29891.61     | 2288.70 | 944.09  | 944.58  | 5       | 48 | 19 | 535 |     |
| TOTAL                               |                    |            | 857      | 72   | 8%   | 478  | 56%         | 223             | 26%    | 84        | 10%            | 66831   | 8572         | 55970   | 2289    | 2042    | 1388    | 7  | 51 | 19  | 959 |

| BUILDING A STATISTICS |       |           |           |                |             |                 |           |              |             | SITE FSI: 6.12 |  |  |  |
|-----------------------|-------|-----------|-----------|----------------|-------------|-----------------|-----------|--------------|-------------|----------------|--|--|--|
| Area Summary          |       |           |           |                |             |                 |           |              |             |                |  |  |  |
| Level                 | Count | Total GLA | Total GCA | GFA Deductions | GFA         |                 | Total GFA |              |             |                |  |  |  |
|                       |       |           |           |                | Residential | Non-Residential |           |              |             |                |  |  |  |
| Below Grade           |       |           |           |                |             |                 |           |              |             |                |  |  |  |
| P1                    | 1     | 0.00      | 0.00      | 0.00           | 0.00        | 0.00            | 0.00      |              |             |                |  |  |  |
| Above Grade           |       |           |           |                |             |                 |           |              |             |                |  |  |  |
| Ground                | 1     | 0.00      | 784.34    | 224.54         | 559.80      | 0.00            | 559.80    |              |             |                |  |  |  |
| Mezzanine             | 1     | 0.00      | 676.59    | 609.47         | 67.12       | 0.00            | 67.12     |              |             |                |  |  |  |
| 2                     | 1     | 0.00      | 792.00    | 243.48         | 548.52      | 0.00            | 548.52    |              |             |                |  |  |  |
| 3-4                   | 2     | 0.00      | 1584.00   | 112.84         | 1471.16     | 0.00            | 1471.16   |              |             |                |  |  |  |
| 5-7                   | 3     | 0.00      | 2376.00   | 169.26         | 2206.74     | 0.00            | 2206.74   |              |             |                |  |  |  |
| 8-9                   | 2     | 0.00      | 853.47    | 732.89         | 120.58      | 0.00            | 120.58    |              |             |                |  |  |  |
| 10-39                 | 30    | 0.00      | 22797.23  | 1692.60        | 21104.63    | 0.00            | 21104.63  |              |             |                |  |  |  |
| 40 (MPH)              | 1     | 0.00      | 385.42    | 385.42         | 0.00        | 0.00            | 0.00      |              |             |                |  |  |  |
| Project Totals        | -     | 0.00      | 30249.06  | 4170.51        | 26078.55    | 0.00            | 26078.55  |              |             |                |  |  |  |
|                       |       |           |           |                |             |                 | Total GFA | 26,078.55 m² | 280,707 ft² |                |  |  |  |

| Residential Units      |        |       |       |       |             |     |  |  |
|------------------------|--------|-------|-------|-------|-------------|-----|--|--|
| Level                  | Studio | 1 BD  | 2 BD  | 3 BD  | Total Units |     |  |  |
| Below Grade            |        |       |       |       |             |     |  |  |
| P1                     | 0      | 0     | 0     | 0     | 0           | 0   |  |  |
| Above Grade            |        |       |       |       |             |     |  |  |
| Ground                 | 0      | 0     | 0     | 0     | 0           | 0   |  |  |
| Mezzanine              | 0      | 0     | 0     | 0     | 0           | 0   |  |  |
| 2                      | 0      | 1     | 0     | 1     | 2           | 2   |  |  |
| 3-4                    | 0      | 10    | 4     | 0     | 14          | 20  |  |  |
| 5-7                    | 0      | 21    | 9     | 3     | 33          | 33  |  |  |
| 8-9                    | 0      | 0     | 0     | 0     | 0           | 0   |  |  |
| 10-39                  | 30     | 180   | 90    | 30    | 330         | 330 |  |  |
| 40 (MPH)               | 0      | 0     | 0     | 0     | 0           | 0   |  |  |
|                        |        |       |       |       |             |     |  |  |
| Proposed Unit Mix      | 30     | 212   | 105   | 38    | 385         |     |  |  |
|                        | 8%     | 55%   | 27%   | 10%   |             |     |  |  |
| Average Unit Size (m²) | 29.36  | 51.22 | 72.16 | 90.38 | 60.78       |     |  |  |
| (ft²)                  | 316    | 551   | 777   | 973   | 654         |     |  |  |
|                        |        |       |       |       |             |     |  |  |
| 15% BF Required        | 5      | 32    | 16    | 6     | 59          |     |  |  |
| BF Provided            | 0      | 0     | 0     | 0     | 0           |     |  |  |

| Residential Units      |        |       |       |       |             |
|------------------------|--------|-------|-------|-------|-------------|
| Level                  | Studio | 1 BD  | 2 BD  | 3 BD  | Total Units |
| Below Grade            |        |       |       |       |             |
| P1                     | 0      | 0     | 0     | 0     | 0           |
| Above Grade            |        |       |       |       |             |
| Ground                 | 0      | 0     | 0     | 0     | 0           |
| Mezzanine              | 0      | 0     | 0     | 0     | 0           |
| 2                      | 0      | 1     | 0     | 1     | 2           |
| 3-4                    | 0      | 10    | 6     | 4     | 20          |
| 5-7                    | 0      | 21    | 9     | 3     | 33          |
| 8-9                    | 0      | 0     | 0     | 0     | 0           |
| 10-39                  | 30     | 180   | 90    | 30    | 330         |
| 40 (MPH)               | 0      | 0     | 0     | 0     | 0           |
| Proposed Unit Mix      | 30     | 212   | 105   | 38    | 385         |
|                        | 8%     | 55%   | 27%   | 10%   |             |
| Average Unit Size (m²) | 23.36  | 51.22 | 72.16 | 90.38 | 60.78       |
|                        | 316    | 551   | 777   | 973   | 654         |
| 15% BF Required        | 5      | 32    | 16    | 6     | 59          |
| BF Provided            | 0      | 0     | 0     | 0     | 0           |

BUILDING B STATISTICS

| Area Summary   |       |           |           |                |              |                     |           |
|----------------|-------|-----------|-----------|----------------|--------------|---------------------|-----------|
| Level          | Count | Total GLA | Total GCA | GFA Deductions | Residential  | GFA Non-Residential | Total GFA |
| Below Grade    |       |           |           |                |              |                     |           |
| P1             | 1     | 0.00      | 0.00      | 0.00           | 0.00         | 0.00                | 0.00      |
| Above Grade    |       |           |           |                |              |                     |           |
| Ground         | 1     | 0.00      | 2882.42   | 575.55         | 345.52       | 1961.35             | 2306.87   |
| Mezzanine      | 1     | 0.00      | 843.51    | 457.74         | 58.42        | 327.35              | 385.77    |
| 2              | 1     | 0.00      | 766.54    | 700.79         | 65.75        | 0.00                | 65.75     |
| 3-39           | 37    | 0.00      | 29343.87  | 1951.38        | 27392.49     | 0.00                | 27392.49  |
| 40             | 1     | 0.00      | 750.37    | 52.74          | 697.63       | 0.00                | 697.63    |
| 41             | 1     | 0.00      | 706.13    | 52.74          | 653.39       | 0.00                | 653.39    |
| 42             | 1     | 0.00      | 665.64    | 52.74          | 612.90       | 0.00                | 612.90    |
| B MPH          | 1     | 0.00      | 623.56    | 558.05         | 65.51        | 0.00                | 65.51     |
| Project Totals | -     | 0.00      | 36582.04  | 4401.73        | 29891.61     | 2288.70             | 32180.30  |
| Total GFA      |       |           |           |                | 32,180.30 m² | 346,386 ft²         |           |

| Residential Units      |        |       |       |       |             |
|------------------------|--------|-------|-------|-------|-------------|
| Level                  | Studio | 1 BD  | 2 BD  | 3 BD  | Total Units |
| Below Grade            |        |       |       |       |             |
| P1                     | 0      | 0     | 0     | 0     | 0           |
| Above Grade            |        |       |       |       |             |
| Ground                 | 0      | 0     | 0     | 0     | 0           |
| Mezzanine              | 0      | 0     | 0     | 0     | 0           |
| 2                      | 0      | 0     | 0     | 0     | 0           |
| 3-39                   | 37     | 256   | 111   | 37    | 444         |
| 40                     | 1      | 4     | 2     | 3     | 10          |
| 41                     | 1      | 2     | 3     | 3     | 9           |
| 42                     | 3      | 1     | 2     | 3     | 9           |
| B MPH                  | 0      | 0     | 0     | 0     | 0           |
| Proposed Unit Mix      | 42     | 266   | 118   | 46    | 472         |
|                        | 9%     | 56%   | 25%   | 10%   |             |
| Average Unit Size (m²) | 33.79  | 49.99 | 67.09 | 82.31 | 58.30       |
| (ft²)                  | 364    | 538   | 722   | 886   | 627         |
| 15% BF Required        | 7      | 40    | 18    | 7     | 72          |
| BF Provided            | 0      | 0     | 0     | 0     | 0           |

| Residential Units      |        |       |       |       |             |
|------------------------|--------|-------|-------|-------|-------------|
| Level                  | Studio | 1 BD  | 2 BD  | 3 BD  | Total Units |
| Below Grade            |        |       |       |       |             |
| P1                     | 0      | 0     | 0     | 0     | 0           |
| Above Grade            |        |       |       |       |             |
| Ground                 | 0      | 0     | 0     | 0     | 0           |
| Mezzanine              | 0      | 0     | 0     | 0     | 0           |
| 2                      | 0      | 0     | 0     | 0     | 0           |
| 3-39                   | 37     | 259   | 111   | 37    | 444         |
| 40                     | 1      | 4     | 2     | 3     | 10          |
| 41                     | 1      | 2     | 3     | 3     | 9           |
| 42                     | 3      | 1     | 2     | 3     | 9           |
| B MPH                  | 0      | 0     | 0     | 0     | 0           |
| Proposed Unit Mix      | 42     | 266   | 118   | 46    | 472         |
|                        | 9%     | 56%   | 25%   | 10%   |             |
| Average Unit Size (m²) | 33.79  | 49.90 | 67.69 | 82.11 | 58.30       |
|                        | 364    | 538   | 722   | 886   | 627         |
| 15% BF Required        | 7      | 40    | 18    | 7     | 72          |
| BF Provided            | 0      | 0     | 0     | 0     | 0           |

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Prior to commencement of the Work the Contractor shall verify all drawing dimensions, datum, and lines with the Contract Documents and with the conditions on site, ascertain any discrepancies between the Site and the Contract Documents, and bring these items to the attention of the Architect for clarification.

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25th Submission 2  
24th Submission 1  
Pre-App Consult Meeting

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| Broadview + Danforth                                                                                |       |                |
| 682-742 Broadview Ave,<br>Toronto, Ontario                                                          |       |                |
| Title:<br>Project Statistics<br>Summary                                                             |       |                |
| Project No. 2017                                                                                    | Scale |                |
| Drawing No.                                                                                         |       |                |

A 002



TORONTO GREEN STANDARDS VERSION 4.0, TIER 1

|                                                                                                                                                                                                                                                                                                                                     |             |  |  |  |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|--|--|--|
| 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 also allows zoning before Amendment applications. Complete the table and copy it directly into the Site Plan Control application as part of the application.                                                      |             |  |  |  |
| For zoning before 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: <a href="https://www.toronto.ca/greenstandards/">https://www.toronto.ca/greenstandards/</a> |             |  |  |  |
| General Project Description                                                                                                                                                                                                                                                                                                         | Proposed    |  |  |  |
| Total Gross Floor Area                                                                                                                                                                                                                                                                                                              | 26078.55 m² |  |  |  |
| Breakdown of project components (m²)                                                                                                                                                                                                                                                                                                |             |  |  |  |
| Residential                                                                                                                                                                                                                                                                                                                         | 26078.55 m² |  |  |  |
| Retail                                                                                                                                                                                                                                                                                                                              |             |  |  |  |
| Commercial                                                                                                                                                                                                                                                                                                                          |             |  |  |  |
| Industrial                                                                                                                                                                                                                                                                                                                          |             |  |  |  |
| Health/Day-Officer                                                                                                                                                                                                                                                                                                                  |             |  |  |  |
| Total number of residential units                                                                                                                                                                                                                                                                                                   | 385         |  |  |  |

|                                                                                                                                                                                                                                                                                                                                     |          |          |            |  |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|----------|------------|--|
| 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 also allows zoning before Amendment applications. Complete the table and copy it directly into the Site Plan Control application as part of the application.                                                      |          |          |            |  |
| For zoning before 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: <a href="https://www.toronto.ca/greenstandards/">https://www.toronto.ca/greenstandards/</a> |          |          |            |  |
| Cycling Infrastructure                                                                                                                                                                                                                                                                                                              | Required | Proposed | Proposed % |  |
| Number of long-term bicycle parking spaces (all uses)                                                                                                                                                                                                                                                                               | 347      | 347      | 100%       |  |
| Number of short-term bicycle parking spaces (non-residential)                                                                                                                                                                                                                                                                       |          |          |            |  |
| Number of long-term bicycle parking located on:                                                                                                                                                                                                                                                                                     |          |          |            |  |
| a) 1st story of building                                                                                                                                                                                                                                                                                                            |          | 207      |            |  |
| b) 2nd story of building                                                                                                                                                                                                                                                                                                            |          | 140      |            |  |
| c) 3rd level below ground                                                                                                                                                                                                                                                                                                           |          |          |            |  |
| d) second level below ground                                                                                                                                                                                                                                                                                                        |          |          |            |  |
| e) other levels below ground                                                                                                                                                                                                                                                                                                        |          |          |            |  |

T.G.S GREEN ROOF REQUIREMENTS

|                                                                  |             |          |
|------------------------------------------------------------------|-------------|----------|
| Green Roof                                                       | Provided    |          |
| Gross Floor Area, as defined in Green Roof Bylaw (m²)            | 30,079.6 m² |          |
| Total Roof Area (m²)                                             | 957.5 m²    |          |
| Area of Residential Private Terraces (m²)                        |             |          |
| Rooftop Outdoor Amenity Space, if in a Residential Building (m²) | 166.1 m²    |          |
| Area of Renewable Energy Devices (m²)                            |             |          |
| Tower(s) Roof Area with floor plate less than 750m²              |             |          |
| Total Available Roof Space (m²)                                  | 791.4 m²    |          |
| Green Roof Coverage                                              | Required    | Provided |
| Coverage of Available Roof Space (m²)                            | 474.8 m²    | 478.6 m² |
| Coverage of Available Roof Space (%)                             | 60%         | 60%      |

PARKING SUMMARY

NO BELOW GRADE PARKING PROVIDED  
AT GRADE VISITOR / PUDO: 3

PROJECT STATISTICS SUMMARY

|                    |  |                                                    |             |
|--------------------|--|----------------------------------------------------|-------------|
| MUNICIPAL ADDRESS  |  | 682-742 BROADVIEW AVE, TORONTO, ON M4K 2P1         |             |
| ZONING DESIGNATION |  | SITE DENSITY                                       |             |
| ZBL 438-86         |  | LOT AREA                                           | 9,524.03 m² |
| ZBL 569-2013       |  | PROPOSED PARKLAND DEDICATION                       |             |
| ZBL 223-2025       |  | F.S.I = TOTAL GFA / LOT AREA ( 26078.55 / 9524.03) | 2.74        |
|                    |  | SITE FSI: 6.12                                     |             |

AREA SUMMARY

| Area Summary (m²) |           |           |                |             |                     | Residential Units |              |         |             |      |             |                         |       |       |       |       |       |
|-------------------|-----------|-----------|----------------|-------------|---------------------|-------------------|--------------|---------|-------------|------|-------------|-------------------------|-------|-------|-------|-------|-------|
| Level             | Total GLA | Total GCA | GFA Deductions | Residential | GFA Non-Residential | Total GFA         | Level        | Studio  | 1 BD        | 2 BD | 3 BD        | Total Units             |       |       |       |       |       |
| Below Grade       |           |           |                |             |                     | Below Grade       |              |         |             |      |             |                         |       |       |       |       |       |
| P1                | 0.00      | 0.00      | 0.00           | 0.00        | 0.00                | 0.00              | P1           | 0       | 0           | 0    | 0           | 0                       |       |       |       |       |       |
| Above Grade       |           |           |                |             |                     |                   |              |         |             |      |             |                         |       |       |       |       |       |
| Ground            | 0.00      | 784.34    | 224.54         | 569.80      | 0.00                | 569.80            | Ground       | 0       | 0           | 0    | 0           | 0                       |       |       |       |       |       |
| Mezzanine         | 0.00      | 676.59    | 609.47         | 67.12       | 0.00                | 67.12             | Mezzanine    | 0       | 0           | 0    | 0           | 0                       |       |       |       |       |       |
| 2                 | 0.00      | 792.00    | 243.48         | 548.52      | 0.00                | 548.52            | 2            | 0       | 1           | 0    | 1           | 2                       |       |       |       |       |       |
| 3                 | 0.00      | 792.00    | 56.42          | 735.58      | 0.00                | 735.58            | 3            | 0       | 5           | 3    | 2           | 10                      |       |       |       |       |       |
| 4                 | 0.00      | 792.00    | 56.42          | 735.58      | 0.00                | 735.58            | 4            | 0       | 5           | 3    | 2           | 10                      |       |       |       |       |       |
| 5                 | 0.00      | 792.00    | 56.42          | 735.58      | 0.00                | 735.58            | 5            | 0       | 7           | 3    | 1           | 11                      |       |       |       |       |       |
| 6                 | 0.00      | 792.00    | 56.42          | 735.58      | 0.00                | 735.58            | 6            | 0       | 7           | 3    | 1           | 11                      |       |       |       |       |       |
| 7                 | 0.00      | 792.00    | 56.42          | 735.58      | 0.00                | 735.58            | 7            | 0       | 7           | 3    | 1           | 11                      |       |       |       |       |       |
| 8                 | 0.00      | 426.74    | 366.45         | 60.29       | 0.00                | 60.29             | 8            | 0       | 0           | 0    | 0           | 0                       |       |       |       |       |       |
| 9                 | 0.00      | 759.91    | 56.42          | 703.49      | 0.00                | 703.49            | 9            | 0       | 0           | 0    | 0           | 0                       |       |       |       |       |       |
| 10                | 0.00      | 759.91    | 56.42          | 703.49      | 0.00                | 703.49            | 10           | 1       | 6           | 3    | 1           | 11                      |       |       |       |       |       |
| 11                | 0.00      | 759.91    | 56.42          | 703.49      | 0.00                | 703.49            | 11           | 1       | 6           | 3    | 1           | 11                      |       |       |       |       |       |
| 12                | 0.00      | 759.91    | 56.42          | 703.49      | 0.00                | 703.49            | 12           | 1       | 6           | 3    | 1           | 11                      |       |       |       |       |       |
| 13                | 0.00      | 759.91    | 56.42          | 703.49      | 0.00                | 703.49            | 13           | 1       | 6           | 3    | 1           | 11                      |       |       |       |       |       |
| 14                | 0.00      | 759.91    | 56.42          | 703.49      | 0.00                | 703.49            | 14           | 1       | 6           | 3    | 1           | 11                      |       |       |       |       |       |
| 15                | 0.00      | 759.91    | 56.42          | 703.49      | 0.00                | 703.49            | 15           | 1       | 6           | 3    | 1           | 11                      |       |       |       |       |       |
| 16                | 0.00      | 759.91    | 56.42          | 703.49      | 0.00                | 703.49            | 16           | 1       | 6           | 3    | 1           | 11                      |       |       |       |       |       |
| 17                | 0.00      | 759.91    | 56.42          | 703.49      | 0.00                | 703.49            | 17           | 1       | 6           | 3    | 1           | 11                      |       |       |       |       |       |
| 18                | 0.00      | 759.91    | 56.42          | 703.49      | 0.00                | 703.49            | 18           | 1       | 6           | 3    | 1           | 11                      |       |       |       |       |       |
| 19                | 0.00      | 759.91    | 56.42          | 703.49      | 0.00                | 703.49            | 19           | 1       | 6           | 3    | 1           | 11                      |       |       |       |       |       |
| 20                | 0.00      | 759.91    | 56.42          | 703.49      | 0.00                | 703.49            | 20           | 1       | 6           | 3    | 1           | 11                      |       |       |       |       |       |
| 21                | 0.00      | 759.91    | 56.42          | 703.49      | 0.00                | 703.49            | 21           | 1       | 6           | 3    | 1           | 11                      |       |       |       |       |       |
| 22                | 0.00      | 759.91    | 56.42          | 703.49      | 0.00                | 703.49            | 22           | 1       | 6           | 3    | 1           | 11                      |       |       |       |       |       |
| 23                | 0.00      | 759.91    | 56.42          | 703.49      | 0.00                | 703.49            | 23           | 1       | 6           | 3    | 1           | 11                      |       |       |       |       |       |
| 24                | 0.00      | 759.91    | 56.42          | 703.49      | 0.00                | 703.49            | 24           | 1       | 6           | 3    | 1           | 11                      |       |       |       |       |       |
| 25                | 0.00      | 759.91    | 56.42          | 703.49      | 0.00                | 703.49            | 25           | 1       | 6           | 3    | 1           | 11                      |       |       |       |       |       |
| 26                | 0.00      | 759.91    | 56.42          | 703.49      | 0.00                | 703.49            | 26           | 1       | 6           | 3    | 1           | 11                      |       |       |       |       |       |
| 27                | 0.00      | 759.91    | 56.42          | 703.49      | 0.00                | 703.49            | 27           | 1       | 6           | 3    | 1           | 11                      |       |       |       |       |       |
| 28                | 0.00      | 759.91    | 56.42          | 703.49      | 0.00                | 703.49            | 28           | 1       | 6           | 3    | 1           | 11                      |       |       |       |       |       |
| 29                | 0.00      | 759.91    | 56.42          | 703.49      | 0.00                | 703.49            | 29           | 1       | 6           | 3    | 1           | 11                      |       |       |       |       |       |
| 30                | 0.00      | 759.91    | 56.42          | 703.49      | 0.00                | 703.49            | 30           | 1       | 6           | 3    | 1           | 11                      |       |       |       |       |       |
| 31                | 0.00      | 759.91    | 56.42          | 703.49      | 0.00                | 703.49            | 31           | 1       | 6           | 3    | 1           | 11                      |       |       |       |       |       |
| 32                | 0.00      | 759.91    | 56.42          | 703.49      | 0.00                | 703.49            | 32           | 1       | 6           | 3    | 1           | 11                      |       |       |       |       |       |
| 33                | 0.00      | 759.91    | 56.42          | 703.49      | 0.00                | 703.49            | 33           | 1       | 6           | 3    | 1           | 11                      |       |       |       |       |       |
| 34                | 0.00      | 759.91    | 56.42          | 703.49      | 0.00                | 703.49            | 34           | 1       | 6           | 3    | 1           | 11                      |       |       |       |       |       |
| 35                | 0.00      | 759.91    | 56.42          | 703.49      | 0.00                | 703.49            | 35           | 1       | 6           | 3    | 1           | 11                      |       |       |       |       |       |
| 36                | 0.00      | 759.91    | 56.42          | 703.49      | 0.00                | 703.49            | 36           | 1       | 6           | 3    | 1           | 11                      |       |       |       |       |       |
| 37                | 0.00      | 759.91    | 56.42          | 703.49      | 0.00                | 703.49            | 37           | 1       | 6           | 3    | 1           | 11                      |       |       |       |       |       |
| 38                | 0.00      | 759.91    | 56.42          | 703.49      | 0.00                | 703.49            | 38           | 1       | 6           | 3    | 1           | 11                      |       |       |       |       |       |
| 39                | 0.00      | 759.91    | 56.42          | 703.49      | 0.00                | 703.49            | 39           | 1       | 6           | 3    | 1           | 11                      |       |       |       |       |       |
| 40                | 0.00      | 385.42    | 385.42         | 0.00        | 0.00                | 0.00              | 40           | 0       | 0           | 0    | 0           | 0                       |       |       |       |       |       |
| Project Totals    |           |           |                |             |                     | 0.00              | 30249.06     | 4170.51 | 26078.55    | 0.00 | 26078.55    | Proposed Unit Mix       | 30    | 212   | 105   | 38    | 385   |
|                   |           |           |                |             |                     | 0.00              | 26,078.55    | 0.00    | 280,707 ft² | 0.00 | 280,707 ft² | Average Unit Size (m²)  | 29.36 | 51.22 | 72.16 | 30.38 | 60.78 |
|                   |           |           |                |             |                     | 0.00              | 26,078.55 m² | 0.00    | 280,707 ft² | 0.00 | 280,707 ft² | Average Unit Size (ft²) | 316   | 551   | 777   | 973   | 654   |
|                   |           |           |                |             |                     | 0.00              |              |         |             |      |             | 15% BF Required         | 5     | 32    | 16    | 6     | 59    |
|                   |           |           |                |             |                     | 0.00              |              |         |             |      |             | BF Provided             | 0     | 0     | 0     | 0     | 0     |

BICYCLE PROVISIONS

| Bicycle Parking                 | Rate           | Calculation  | Required | Provided | Location      | Notes |
|---------------------------------|----------------|--------------|----------|----------|---------------|-------|
| Per By-Law 223-2025             |                |              |          |          |               |       |
| Public Bike Spaces (Short-Term) |                |              | 10       | 10       | Ground        |       |
| Residential Bike Spaces         |                |              |          |          |               |       |
| Long-Term                       | 0.9 per unit   | (0.9 * 385)  | 347      | 347      | P1, Mezzanine |       |
| EV Equipped                     | 15% of spots   | (0.15 * 347) | 53       | 53       | P1, Mezzanine |       |
| Oversized                       | 5% of spots    | (0.05 * 347) | 18       | 18       | P1, Mezzanine |       |
| Not Stacked or Vertical         | 40% of spots   | (0.40 * 347) | 139      | 202      | P1, Mezzanine |       |
| Short-Term                      | 0.2 per unit   | (0.2 * 385)  | 77       | 77       | P1            |       |
| Residential Total               |                |              | 424      | 424      |               |       |
| Non-Residential Bike Spaces     |                |              |          |          |               |       |
| Long-Term                       | 0.2 /100m²     | (0.2 * 0)    | 0        | 0        |               |       |
| EV Equipped                     | 15% of spots   | (0.15 * 0)   | 0        | 0        |               |       |
| Oversized                       | 5% of spots    | (0.05 * 0)   | 0        | 0        |               |       |
| Not Stacked or Vertical         | 40% of spots   | (0.40 * 0)   | 0        | 0        |               |       |
| Short-Term                      | 3 + 0.3 /100m² | (0.3 * 0)    | 0        | 0        |               |       |
| Non-Residential Total           |                |              | 0        | 0        |               |       |
| Total Bicycle Parking           |                |              |          |          |               |       |
| Long-Term                       |                |              | 347      | 347      |               |       |
| EV Equipped                     |                |              | 53       | 53       |               |       |
| Oversized                       |                |              | 18       | 18       |               |       |
| Short-Term                      |                |              | 77       | 77       |               |       |
| Total                           |                |              |          | 424      |               |       |

AMENITY AREAS SUMMARY

| Amenity Space         | Required    | Provided    | Location |
|-----------------------|-------------|-------------|----------|
| Indoor Amenity        |             |             |          |
| 2.0 m² per unit       | 770         | 477.56      | 2        |
| (2.0 * 385)           |             | 310.03      | 8        |
|                       |             | 310.03      | 9        |
| Total Indoor Amenity  |             | 1,097.62 m² |          |
| Outdoor Amenity       |             |             |          |
| 2.0 m² per unit       | 770         | 145.81      | 2        |
| (2.0 * 385)           |             | 297.60      | 8        |
| Total Outdoor Amenity |             | 443.41 m²   |          |
| Total Amenity Space   | 1,540.00 m² | 1,541.02 m² |          |

WASTE MANAGEMENT REQUIREMENTS

| Waste Room Area             | Calculation  | Required  | Provided | Notes  |
|-----------------------------|--------------|-----------|----------|--------|
| 25m² for the first 50 units | (385 - 50)   | 335 units | 25       | -      |
| 0.26m² per add. unit        | (335 * 0.26) |           | 88       | -      |
| Total Area                  | (25 + 88)    |           | 113      | 120 m² |
| Bulk Items                  |              |           |          |        |
| Compactor Required          | (385 > 31)   | True      | Yes      | Yes    |
| Household Hazardous Waste   |              |           |          |        |
| 1m³ per every 100 units     | (385 / 100)  | 4 m³      | 4        | 4      |
| Total Area                  |              | 127 m²    | 136 m²   |        |

| Loading       | Required | Provided |
|---------------|----------|----------|
| Type A        | 0        | 0        |
| Type B        | 0        | 0        |
| Type C        | 1        | 1        |
| Type G        | 1        | 1        |
| Total Loading | 2        |          |

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Prior to commencement of the Work the Contractor shall verify all drawing dimensions, details, and levels with the Contract Documents and with the conditions on site, ascertain any discrepancies between the Site and the Contract Documents, and bring these items to the attention of the Architect for clarification.

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ChoiceProperties

|   |          |                         |
|---|----------|-------------------------|
| 3 | 20250325 | 25A Submission 2        |
| 2 | 20250726 | 25A Submission 1        |
| 1 | 20210610 | Pre-App Consult Meeting |

|     |      |                |
|-----|------|----------------|
| No. | Date | Issue/Revision |
|-----|------|----------------|



Broadview + Danforth

682-742 Broadview Ave,  
Toronto, Ontario

Title:  
Project Statistics - Building  
A

|             |      |       |
|-------------|------|-------|
| Project No. | 2017 | Scale |
| Drawing No. |      |       |

A 003





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 (TGS) template is submitted with the Plan Control Applications and also allows zoning by-law amendment applications. Complete the table and copy it directly into the Site Plan submitted as part of the application.

For zoning by-law 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 <https://www.toronto.ca/greenstandards/>.

| General Project Description          | Required     | Proposed |
|--------------------------------------|--------------|----------|
| Total Gross Floor Area               | 32180.3 sqm  |          |
| Breakdown of project components (m²) |              |          |
| Residential                          | 29891.61 sqm |          |
| Retail                               | 2288.7 sqm   |          |
| Commercial                           |              |          |
| Industrial                           |              |          |
| Health/Day-Officer                   |              |          |
| Total number of residential units    | 472          |          |

## Section 1: For Stand Alone Zoning By-law Amendment Applications and Site Plan Control Applications

| Low Emissions Transportation                  | Required | Proposed | Proposed % |
|-----------------------------------------------|----------|----------|------------|
| Number of Parking Spaces                      |          |          |            |
| Number of EV Parking Spaces (Residential)     |          |          |            |
| Number of EV Parking Spaces (Non-Residential) |          |          |            |

| Cycling Infrastructure                                | Required | Proposed | Proposed % |
|-------------------------------------------------------|----------|----------|------------|
| Number of long-term bicycle parking spaces (all uses) | 430      | 430      | 100%       |
| Number of long-term bicycle parking located on:       |          |          |            |
| a) 1st story of building                              |          |          |            |
| b) second story of building                           |          | 221      |            |
| c) 3rd level below ground                             |          | 208      |            |
| d) second level below ground                          |          |          |            |
| e) other levels below ground                          |          |          |            |



Page 1 of 8



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              | 105      | 105      | 100%       |
| Number of shower and change facilities (non-residential) |          |          |            |

| Total Canopy                                           | Required   | Proposed | Proposed % |
|--------------------------------------------------------|------------|----------|------------|
| Total lot volume (40% of the site area + 65 m² x 30 m) | 1803 m³    | 1803 m³  | 100%       |
| 3 Bed                                                  | 1387.09 m³ | 150 m³   | 11%        |
| lot volume provided within the site area (m³)          |            | 35m³     |            |

## Section 2: For Site Plan Control Applications

| Cycling Infrastructure                                                                      | Required | Proposed | Proposed % |
|---------------------------------------------------------------------------------------------|----------|----------|------------|
| Number of short-term bicycle parking spaces (all uses) on grade or on lot level below grade |          |          |            |
| Number of publicly accessible bicycle parking spaces                                        |          |          |            |
| Number of engaged outlets for electric bicycles                                             |          |          |            |

| Total Canopy                                           | Required | Proposed | Proposed % |
|--------------------------------------------------------|----------|----------|------------|
| Total site area (m²)                                   |          |          |            |
| Total lot volume (40% of the site area + 65 m² x 30 m) |          |          |            |
| Total number of trees planted                          |          |          |            |
| Number of surface parking spaces (if applicable)       |          |          |            |
| Number of shade trees located in surface parking area  |          |          |            |

| Landscaping & Biodiversity                                                                                     | Required | Proposed | Proposed % |
|----------------------------------------------------------------------------------------------------------------|----------|----------|------------|
| Total non-roof landscape area (m²)                                                                             |          |          |            |
| Total non-roof landscape area located in Urban Heat Island (Urban Heat Island (UHI) or non-residential 50% m²) |          |          |            |
| Area of non-roof landscape treated with (deducted m²)                                                          |          |          |            |
| a) high-impact surface material                                                                                |          |          |            |
| b) open-paved pavement                                                                                         |          |          |            |
| c) shade from tree canopy                                                                                      |          |          |            |

Page 2 of 8

| Green Roof                                                        | Provided                                     |
|-------------------------------------------------------------------|----------------------------------------------|
| Gross Floor Area, as defined in Green Roof Bylaw (m²)             | 33,702.1 m²                                  |
| Total Roof Area (m²)                                              | 3,011.8 m²                                   |
| Area of Residential Private Terraces (m²)                         |                                              |
| Roof-top Outdoor Amenity Space, if in a Residential Building (m²) | 944.6 m²                                     |
| Area of Renewable Energy Devices (m²)                             |                                              |
| Tower(s) Roof Area with floor plate less than 750m²               |                                              |
| Total Available Roof Space (m²)                                   | 2,067.2 m²                                   |
| Green Roof Coverage                                               | Required: 1,240.3 m²<br>Provided: 1,294.2 m² |
| Coverage of Available Roof Space (%)                              | 60% / 63%                                    |

## PARKING SUMMARY

| Vehicular Parking Per By-Law 223-2025 | Rate             | Calculation  | Required | Provided | Notes |
|---------------------------------------|------------------|--------------|----------|----------|-------|
| Residential Parking                   |                  |              |          |          |       |
| Occupants                             | 0.5 per unit     | (0.5 * 472)  | 0        | 11       |       |
| Barrier Free                          | as defined below |              | 9        | 2        |       |
| EV Equipped                           | 100% of spots    |              | 11       | 11       |       |
| Visitor                               | 0.2 per unit     | (0.2 * 472)  | 0        | 6        |       |
| Barrier Free                          | as defined below |              | 2        | 1        |       |
| EV Equipped                           | 25% of spots     | (0.25 * 6)   | 1        | 0        |       |
| Residential Total                     |                  |              | 0        | 17       |       |
| Non-Residential Parking               |                  |              |          |          |       |
| All Uses                              | 1 /100m²         | (1.0 * 22.9) | 22       | 31       |       |
| Barrier Free                          | as defined below |              | 1        | 5        |       |
| EV Equipped                           | 25% of spots     | (0.25 * 22)  | 7        | 6        |       |
| Non-Residential Total                 |                  |              | 22       | 31       |       |

|                         |    |    |
|-------------------------|----|----|
| Total Vehicular Parking | 22 | 48 |
| Barrier Free            | 12 | 12 |
| EV Equipped             | 19 | 19 |

## Barrier Free Parking Requirements - City of Toronto

\* Rates shown below are the 'effective parking rates' used only for calculating accessible parking counts

## Apartment Building, Assisted Housing, Mixed Use

| Unit Type     | Rate         | Calculation | Count | Notes |
|---------------|--------------|-------------|-------|-------|
| Studio < 45m² | 0.3 per unit | (0.3 * 42)  | 12.6  |       |
| Studio > 45m² | 1 per unit   | (1.0 * 0)   | 0     |       |
| 1 Bed         | 0.5 per unit | (0.5 * 266) | 133   |       |
| 2 Bed         | 0.8 per unit | (0.8 * 116) | 94.4  |       |
| 3 Bed         | 1 per unit   | (1.0 * 46)  | 46    |       |
| Total         |              |             | 286   |       |

|                                                    |     |
|----------------------------------------------------|-----|
| 1 if less than 13                                  | N/A |
| 13 to 100, 1 per every 25 or part                  | N/A |
| > 100 = 5+ 1 for every 50 or part in excess of 100 | 9   |
| Required Number of Barrier Free Occupant Spots     | 9   |

| Visitor | Rate         | Calculation | Count | Notes |
|---------|--------------|-------------|-------|-------|
|         | 0.1 per unit | (0.1 * 472) | 47    |       |

|                                                    |     |
|----------------------------------------------------|-----|
| 1 if less than 13                                  | N/A |
| 13 to 100, 1 per every 25 or part                  | 2   |
| > 100 = 5+ 1 for every 50 or part in excess of 100 | N/A |
| Required Number of Barrier Free Visitor Spots      | 2   |

| Non - Residential                                  | Rate     | Calculation  | Count | Notes |
|----------------------------------------------------|----------|--------------|-------|-------|
|                                                    | 1 /100m² | (1.0 * 22.9) | 22    |       |
| 1 if less than 13                                  | N/A      |              | 1     |       |
| 13 to 100, 1 per every 25 or part                  | N/A      |              | 1     |       |
| > 100 = 5+ 1 for every 50 or part in excess of 100 | N/A      |              | 1     |       |
| Required Number of Barrier Free Non-Res Spots      |          |              | 1     |       |

\* EV Equipped Spaces shall be capable of min level 2 charging per TGS AQ1.2

MUNICIPAL ADDRESS 682-742 BROADVIEW AVE, TORONTO, ON M4K 2P1

## ZONING DESIGNATION

|              |  |
|--------------|--|
| ZBL 438-86   |  |
| ZBL 569-2013 |  |
| ZBL 223-2025 |  |

## SITE DENSITY

|                                                    |             |
|----------------------------------------------------|-------------|
| LOT AREA                                           | 9,524.03 m² |
| PROPOSED PARKLAND DEDICATION                       |             |
| F.S.I = TOTAL GFA / LOT AREA ( 32180.30 / 9524.03) | 3.38        |
| SITE FSI: 6.12                                     |             |

## AREA SUMMARY

| Area Summary (m²) |           |           |                |             |                     | Residential Units |                   |                        |       |       |       |             |
|-------------------|-----------|-----------|----------------|-------------|---------------------|-------------------|-------------------|------------------------|-------|-------|-------|-------------|
| Level             | Total GLA | Total GCA | GFA Deductions | Residential | GFA Non-Residential | Total GFA         | Level             | Studio                 | 1 BD  | 2 BD  | 3 BD  | Total Units |
| Below Grade       |           |           |                |             |                     |                   | Below Grade       |                        |       |       |       |             |
| P1                | 0.00      | 0.00      | 0.00           | 0.00        | 0.00                | 0.00              | P1                | 0                      | 0     | 0     | 0     | 0           |
| Above Grade       |           |           |                |             |                     |                   | Above Grade       |                        |       |       |       |             |
| Ground            | 0.00      | 2882.42   | 575.55         | 345.52      | 1961.35             | 2306.87           | Ground            | 0                      | 0     | 0     | 0     | 0           |
| Mezzanine         | 0.00      | 843.51    | 457.74         | 58.42       | 327.35              | 385.77            | Mezzanine         | 0                      | 0     | 0     | 0     | 0           |
| 2                 | 0.00      | 766.54    | 700.79         | 65.75       | 0.00                | 65.75             | 2                 | 0                      | 0     | 0     | 0     | 0           |
| 3                 | 0.00      | 793.08    | 52.74          | 740.34      | 0.00                | 740.34            | 3                 | 1                      | 7     | 3     | 1     | 12          |
| 4                 | 0.00      | 793.08    | 52.74          | 740.34      | 0.00                | 740.34            | 4                 | 1                      | 7     | 3     | 1     | 12          |
| 5                 | 0.00      | 793.08    | 52.74          | 740.34      | 0.00                | 740.34            | 5                 | 1                      | 7     | 3     | 1     | 12          |
| 6                 | 0.00      | 793.08    | 52.74          | 740.34      | 0.00                | 740.34            | 6                 | 1                      | 7     | 3     | 1     | 12          |
| 7                 | 0.00      | 793.08    | 52.74          | 740.34      | 0.00                | 740.34            | 7                 | 1                      | 7     | 3     | 1     | 12          |
| 8                 | 0.00      | 793.08    | 52.74          | 740.34      | 0.00                | 740.34            | 8                 | 1                      | 7     | 3     | 1     | 12          |
| 9                 | 0.00      | 793.08    | 52.74          | 740.34      | 0.00                | 740.34            | 9                 | 1                      | 7     | 3     | 1     | 12          |
| 10                | 0.00      | 793.08    | 52.74          | 740.34      | 0.00                | 740.34            | 10                | 1                      | 7     | 3     | 1     | 12          |
| 11                | 0.00      | 793.08    | 52.74          | 740.34      | 0.00                | 740.34            | 11                | 1                      | 7     | 3     | 1     | 12          |
| 12                | 0.00      | 793.08    | 52.74          | 740.34      | 0.00                | 740.34            | 12                | 1                      | 7     | 3     | 1     | 12          |
| 13                | 0.00      | 793.08    | 52.74          | 740.34      | 0.00                | 740.34            | 13                | 1                      | 7     | 3     | 1     | 12          |
| 14                | 0.00      | 793.08    | 52.74          | 740.34      | 0.00                | 740.34            | 14                | 1                      | 7     | 3     | 1     | 12          |
| 15                | 0.00      | 793.08    | 52.74          | 740.34      | 0.00                | 740.34            | 15                | 1                      | 7     | 3     | 1     | 12          |
| 16                | 0.00      | 793.08    | 52.74          | 740.34      | 0.00                | 740.34            | 16                | 1                      | 7     | 3     | 1     | 12          |
| 17                | 0.00      | 793.08    | 52.74          | 740.34      | 0.00                | 740.34            | 17                | 1                      | 7     | 3     | 1     | 12          |
| 18                | 0.00      | 793.08    | 52.74          | 740.34      | 0.00                | 740.34            | 18                | 1                      | 7     | 3     | 1     | 12          |
| 19                | 0.00      | 793.08    | 52.74          | 740.34      | 0.00                | 740.34            | 19                | 1                      | 7     | 3     | 1     | 12          |
| 20                | 0.00      | 793.08    | 52.74          | 740.34      | 0.00                | 740.34            | 20                | 1                      | 7     | 3     | 1     | 12          |
| 21                | 0.00      | 793.08    | 52.74          | 740.34      | 0.00                | 740.34            | 21                | 1                      | 7     | 3     | 1     | 12          |
| 22                | 0.00      | 793.08    | 52.74          | 740.34      | 0.00                | 740.34            | 22                | 1                      | 7     | 3     | 1     | 12          |
| 23                | 0.00      | 793.08    | 52.74          | 740.34      | 0.00                | 740.34            | 23                | 1                      | 7     | 3     | 1     | 12          |
| 24                | 0.00      | 793.08    | 52.74          | 740.34      | 0.00                | 740.34            | 24                | 1                      | 7     | 3     | 1     | 12          |
| 25                | 0.00      | 793.08    | 52.74          | 740.34      | 0.00                | 740.34            | 25                | 1                      | 7     | 3     | 1     | 12          |
| 26                | 0.00      | 793.08    | 52.74          | 740.34      | 0.00                | 740.34            | 26                | 1                      | 7     | 3     | 1     | 12          |
| 27                | 0.00      | 793.08    | 52.74          | 740.34      | 0.00                | 740.34            | 27                | 1                      | 7     | 3     | 1     | 12          |
| 28                | 0.00      | 793.08    | 52.74          | 740.34      | 0.00                | 740.34            | 28                | 1                      | 7     | 3     | 1     | 12          |
| 29                | 0.00      | 793.08    | 52.74          | 740.34      | 0.00                | 740.34            | 29                | 1                      | 7     | 3     | 1     | 12          |
| 30                | 0.00      | 793.08    | 52.74          | 740.34      | 0.00                | 740.34            | 30                | 1                      | 7     | 3     | 1     | 12          |
| 31                | 0.00      | 793.08    | 52.74          | 740.34      | 0.00                | 740.34            | 31                | 1                      | 7     | 3     | 1     | 12          |
| 32                | 0.00      | 793.08    | 52.74          | 740.34      | 0.00                | 740.34            | 32                | 1                      | 7     | 3     | 1     | 12          |
| 33                | 0.00      | 793.08    | 52.74          | 740.34      | 0.00                | 740.34            | 33                | 1                      | 7     | 3     | 1     | 12          |
| 34                | 0.00      | 793.08    | 52.74          | 740.34      | 0.00                | 740.34            | 34                | 1                      | 7     | 3     | 1     | 12          |
| 35                | 0.00      | 793.08    | 52.74          | 740.34      | 0.00                | 740.34            | 35                | 1                      | 7     | 3     | 1     | 12          |
| 36                | 0.00      | 793.08    | 52.74          | 740.34      | 0.00                | 740.34            | 36                | 1                      | 7     | 3     | 1     | 12          |
| 37                | 0.00      | 793.08    | 52.74          | 740.34      | 0.00                | 740.34            | 37                | 1                      | 7     | 3     | 1     | 12          |
| 38                | 0.00      | 793.08    | 52.74          | 740.34      | 0.00                | 740.34            | 38                | 1                      | 7     | 3     | 1     | 12          |
| 39                | 0.00      | 793.08    | 52.74          | 740.34      | 0.00                | 740.34            | 39                | 1                      | 7     | 3     | 1     | 12          |
| 40                | 0.00      | 793.07    | 52.74          | 697.63      | 0.00                | 697.63            | 40                | 1                      | 2     | 3     | 3     | 10          |
| 41                | 0.00      | 706.13    | 52.74          | 653.39      | 0.00                | 653.39            | 41                | 1                      | 2     | 3     | 3     | 9           |
| 42                | 0.00      | 665.64    | 52.74          | 612.90      | 0.00                | 612.90            | 42                | 3                      | 1     | 2     | 3     | 9           |
| B-MPH             | 0.00      | 623.56    | 558.05         | 65.51       | 0.00                | 65.51             | B-MPH             | 0                      | 0     | 0     | 0     | 0           |
| Project Totals    | 0.00      | 36582.04  | 4401.73        | 29891.61    | 2288.70             | 32180.30          | Proposed Unit Mix | 42                     | 266   | 116   | 46    | 472         |
|                   |           |           |                |             | 24,635 ft²          |                   |                   | 9%                     | 56%   | 25%   | 10%   |             |
|                   |           |           |                |             | 32,180.30 m²        | 346,386 ft²       |                   | 33.79                  | 49.99 | 67.09 | 62.51 | 58.30       |
|                   |           |           |                |             |                     |                   |                   | Average Unit Size (m²) | 364   | 536   | 722   | 866         |
|                   |           |           |                |             |                     |                   |                   | (ft²)                  |       |       |       |             |
|                   |           |           |                |             |                     |                   |                   | 15% BF Required        | 7     | 40    | 18    | 7           |
|                   |           |           |                |             |                     |                   |                   | BF Provided            | 0     | 0     | 0     | 0           |

## BICYCLE PROVISIONS

| Bicycle Parking Per By-Law 223-2025 | Rate           | Calculation  | Required | Provided | Location      | Notes |
|-------------------------------------|----------------|--------------|----------|----------|---------------|-------|
| Public Bike Spaces (Short-Term)     |                |              | 10       | 10       | Ground        |       |
| Residential Bike Spaces             |                |              |          |          |               |       |
| Long-Term                           | 0.9 per unit   | (0.9 * 472)  | 425      | 425      | P1, Mezzanine |       |
| EV Equipped                         | 15% of spots   | (0.15 * 425) | 64       | 64       | P1, Mezzanine |       |
| Oversized                           | 5% of spots    | (0.05 * 425) | 22       | 22       | P1, Mezzanine |       |
| Not Stacked or Vertical             | 40% of spots   | (0.40 * 425) | 170      | 210      | P1, Mezzanine |       |
| Short-Term                          | 0.2 per unit   | (0.2 * 472)  | 95       | 95       | P1            |       |
| Residential Total                   |                |              | 520      | 520      |               |       |
| Non-Residential Bike Spaces         |                |              |          |          |               |       |
| Long-Term                           | 0.2 /100m²     | (0.2 * 23)   | 5        | 5        | P1            |       |
| EV Equipped                         | 15% of spots   | (0.15 * 5)   | 1        | 1        | P1            |       |
| Oversized                           | 5% of spots    | (0.05 * 5)   | 1        | 1        | P1            |       |
| Not Stacked or Vertical             | 40% of spots   | (0.40 * 5)   | 2        | 5        | P1            |       |
| Short-Term                          | 3 + 0.3 /100m² | (0.3 * 23)   | 10       | 10       | P1            |       |
| Non-Residential Total               |                |              | 15       | 15       |               |       |
| Total Bicycle Parking               |                |              |          |          |               |       |
| Long-Term                           |                |              | 430      | 430      |               |       |
| EV Equipped                         |                |              | 65       | 65       |               |       |
| Oversized                           |                |              | 23       | 23       |               |       |
| Short-Term                          |                |              | 105      | 105      |               |       |
| Total                               |                |              | 535      | 535      |               |       |

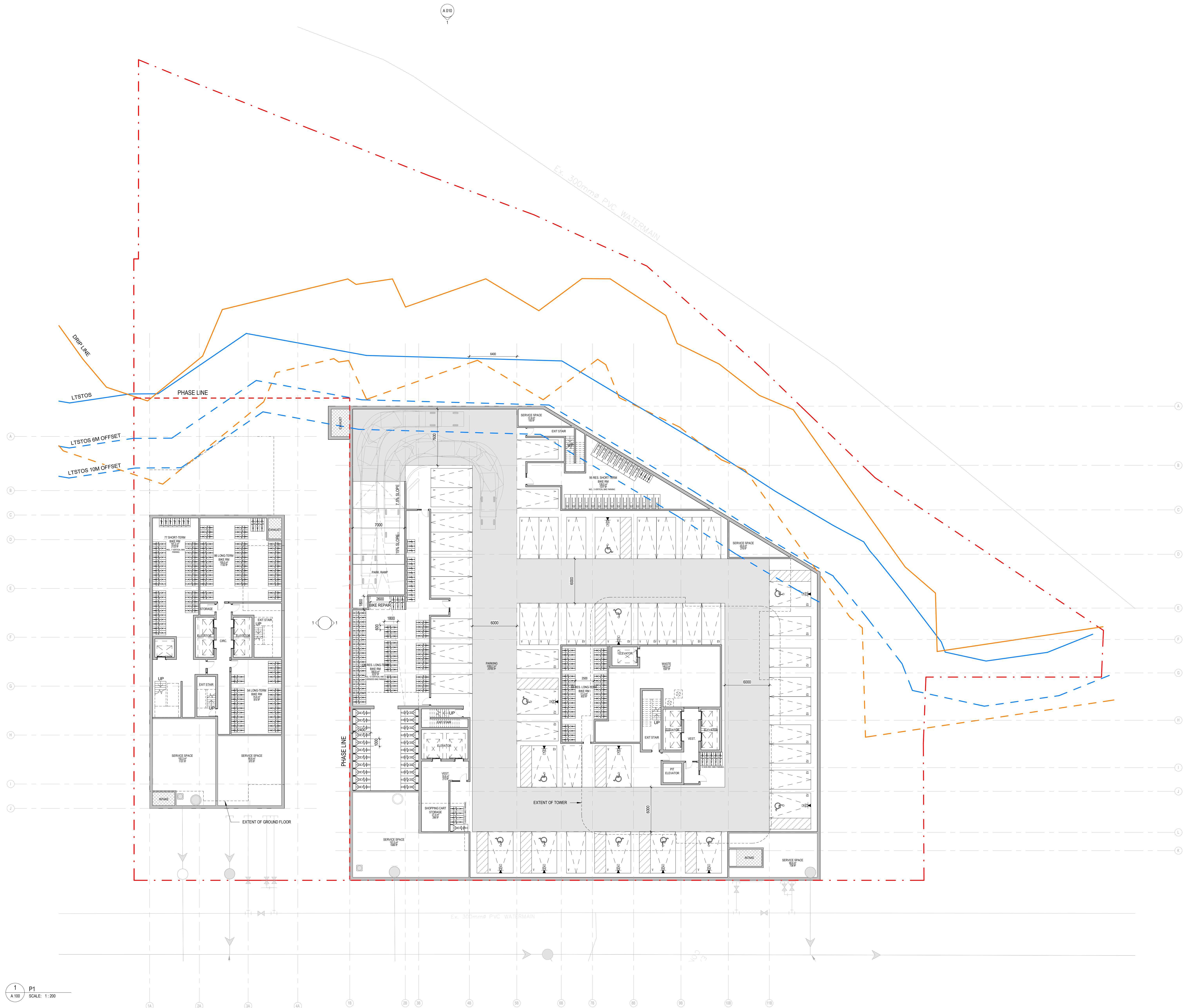
## AMENITY AREAS SUMMARY

| Amenity Space                  | Required    | Provided    | Location     |
|--------------------------------|-------------|-------------|--------------|
| Indoor Amenity                 |             |             |              |
| 2.0 m² per unit<br>(2.0 * 472) | 944         | 632.79      | 2            |
| Total Indoor Amenity           |             | 944.09      | 311.30 B-MPH |
| Outdoor Amenity                |             |             |              |
| 2.0 m² per unit<br>(2.0 * 472) | 944         | 944.58      | 2            |
| Total Outdoor Amenity          |             | 944.58      | m²           |
| Total Amenity Space            |             |             |              |
|                                | 1,888.00 m² | 1,888.67 m² |              |



[illegible]

Figure 10: Typical Parking Space Dimensions. The figure consists of three diagrams illustrating different parking space configurations. The first diagram, labeled 'TYPICAL PARKING SPACE', shows a standard rectangular space with a width of 2600 and a height of 6000. The second diagram, labeled 'TYPICAL OBSTRUCTED PARKING SPACE', shows a similar space but with a vertical obstruction on the right side, labeled 'OBSTRUCTION', with a width of 300 and a height of 3000. The third diagram, labeled 'TYPICAL BARRIER FREE PARKING SPACE PER 609-2017', shows a wider space with a width of 3400 and a height of 6000, with a barrier-free section on the right side of 1500 width.





Prior to commencement of the Work the Contractor shall verify all drawing dimensions, datums, and levels with the Contract Documents and with the conditions on site; ascertain any discrepancies between the site and the Contract Documents, and bring these items to the attention of the Architect for clarification.

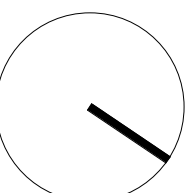
ChoiceProperties

 Residential Loading

 Commercial Loading / Maneuvering



| No. | Date | Issue/Revision |
|-----|------|----------------|
|-----|------|----------------|



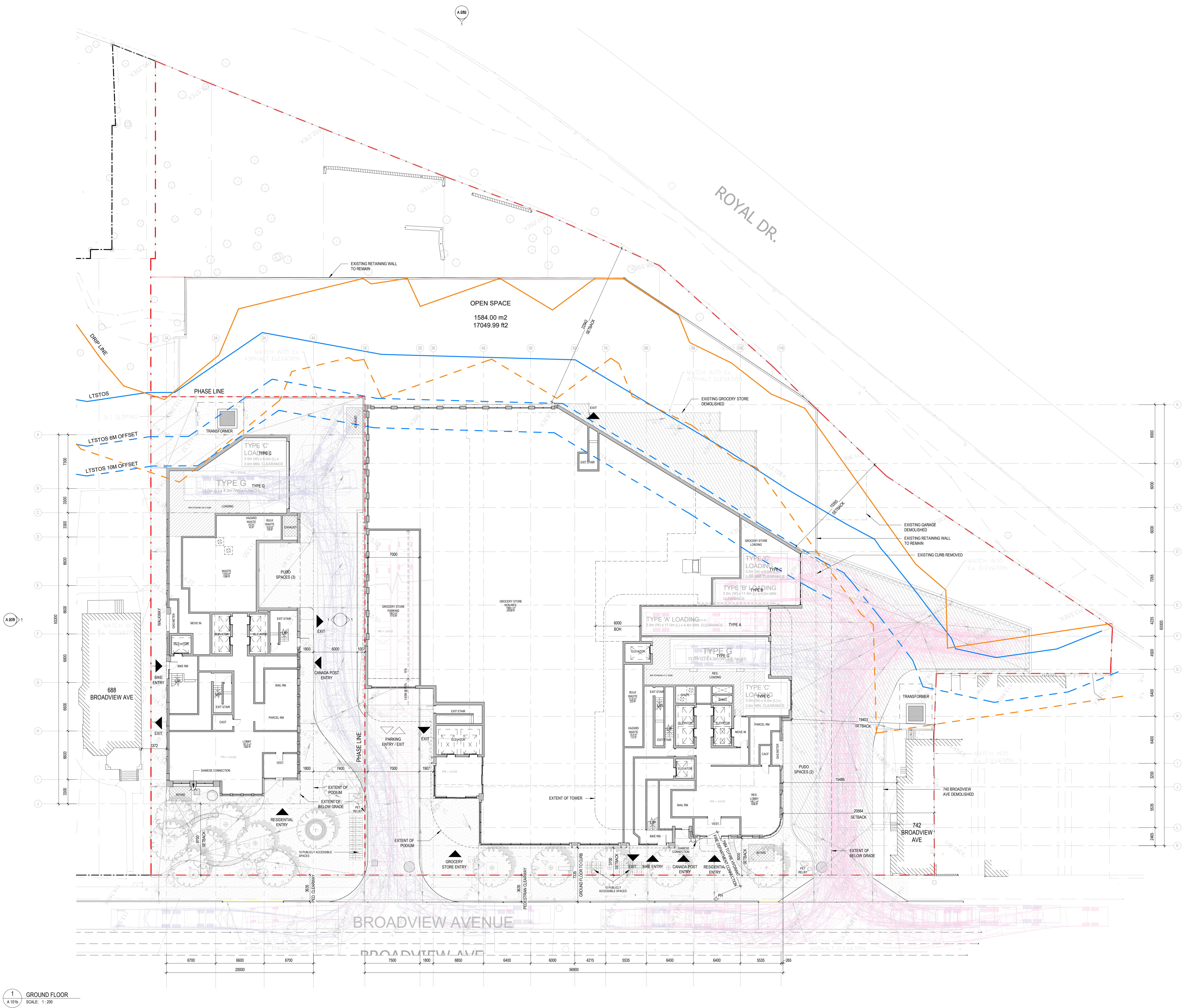
Title:  
Floor Plan - Ground Phase  
1

**A 101a**



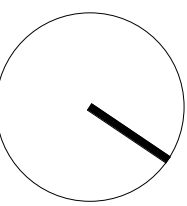
MANEUVERING LEGEND

- Residential Loading
- Commercial Loading / Maneuvering



|   |          |                         |
|---|----------|-------------------------|
| 3 | 20200925 | 25th Submission 2       |
| 2 | 20210708 | 24th Submission 1       |
| 1 | 20210610 | Pre-App Consult Meeting |

No. Date Issue/Revision



Broadview + Danforth

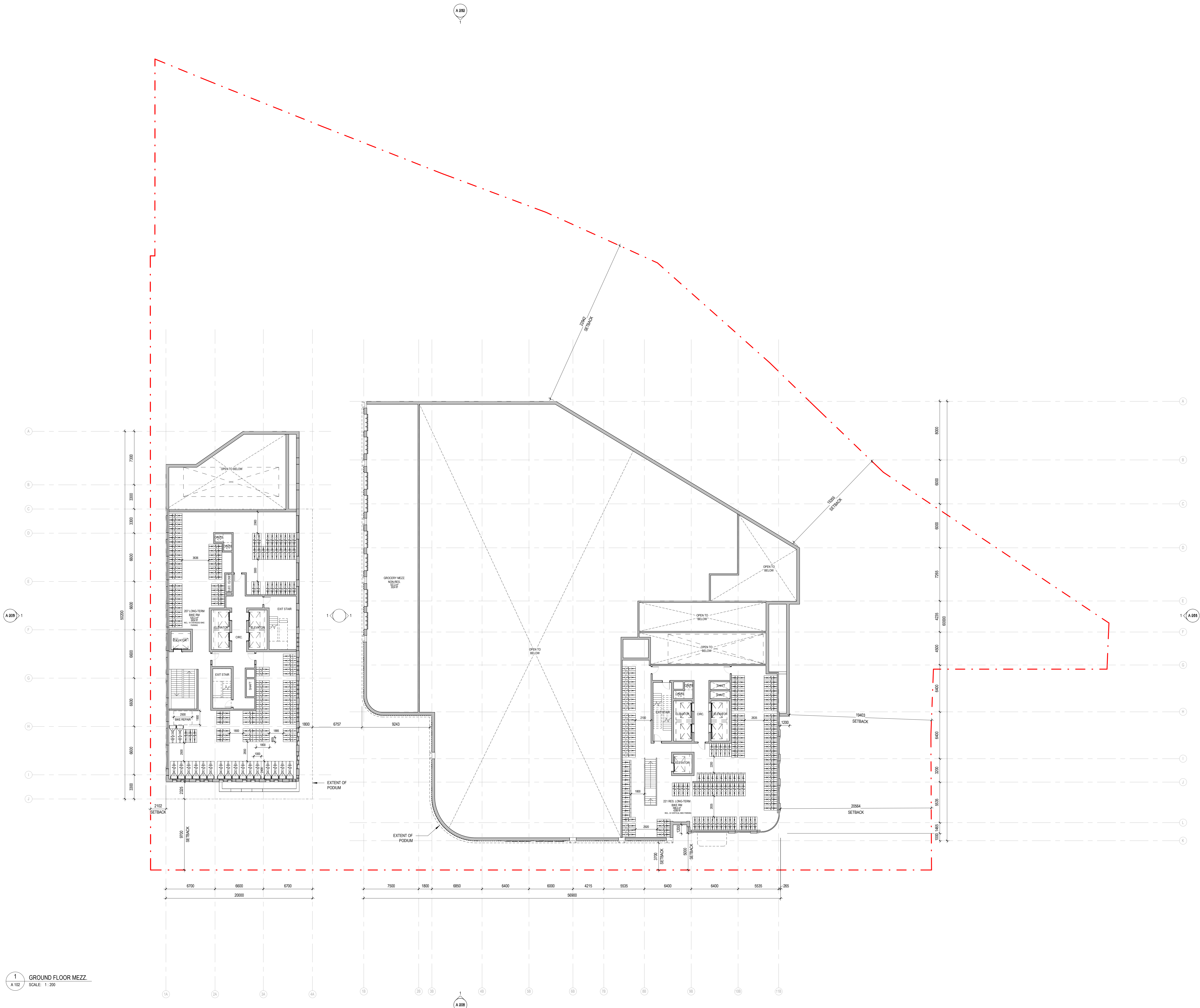
682-742 Broadview Ave,  
Toronto, Ontario

Title:  
Floor Plan - Ground

Project No. 2017 Scale As indicated  
Drawing No.

**A 101b**





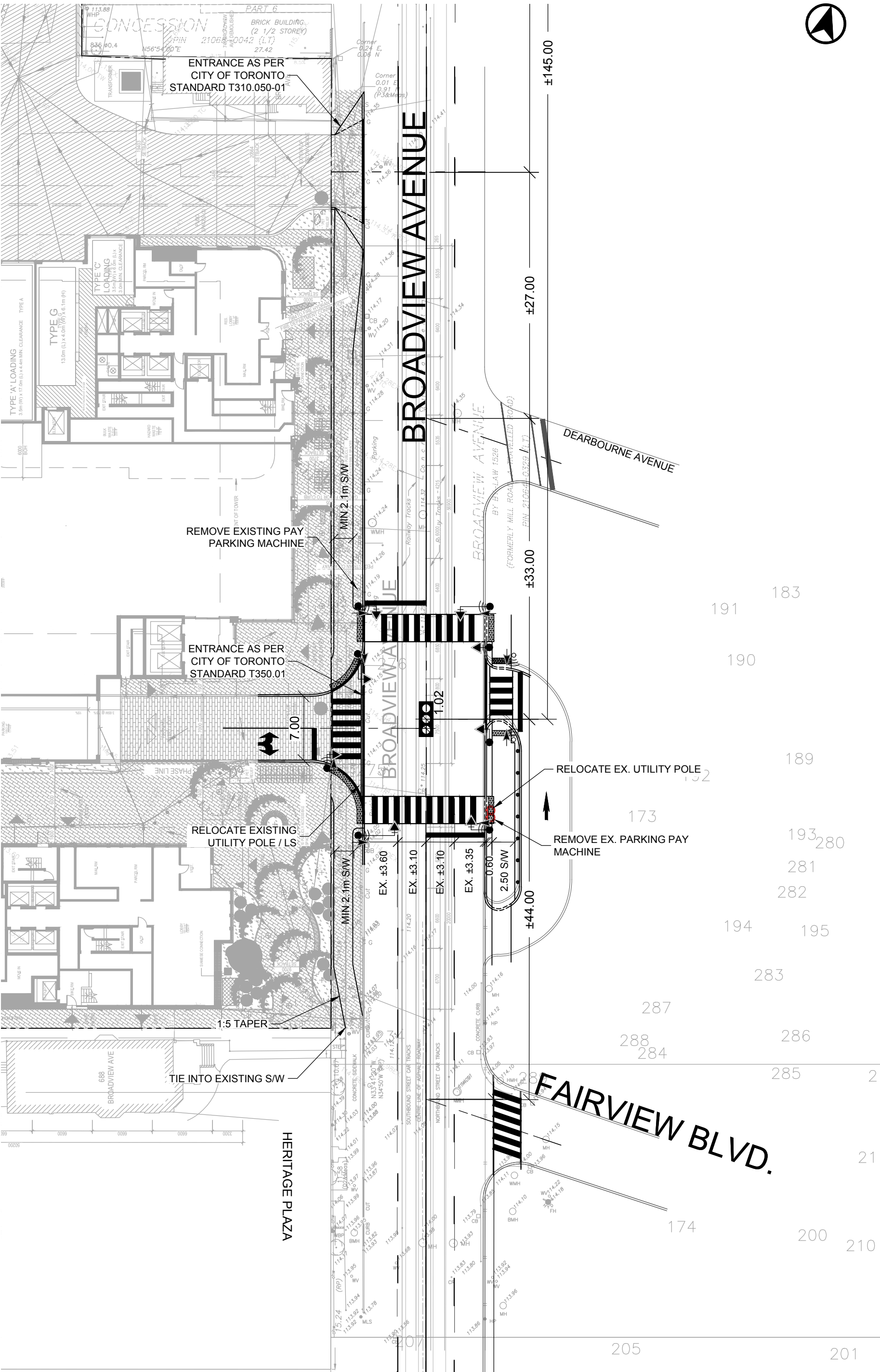


## **Appendix B: Functional Road Plan**





Date Plotted: September 26, 2025    Filename: J:\7708-09\BA\Functional Design\R06 - Sep26, 2025\BA-BroadviewChoice-FD-R06-Sep26-25.dwg



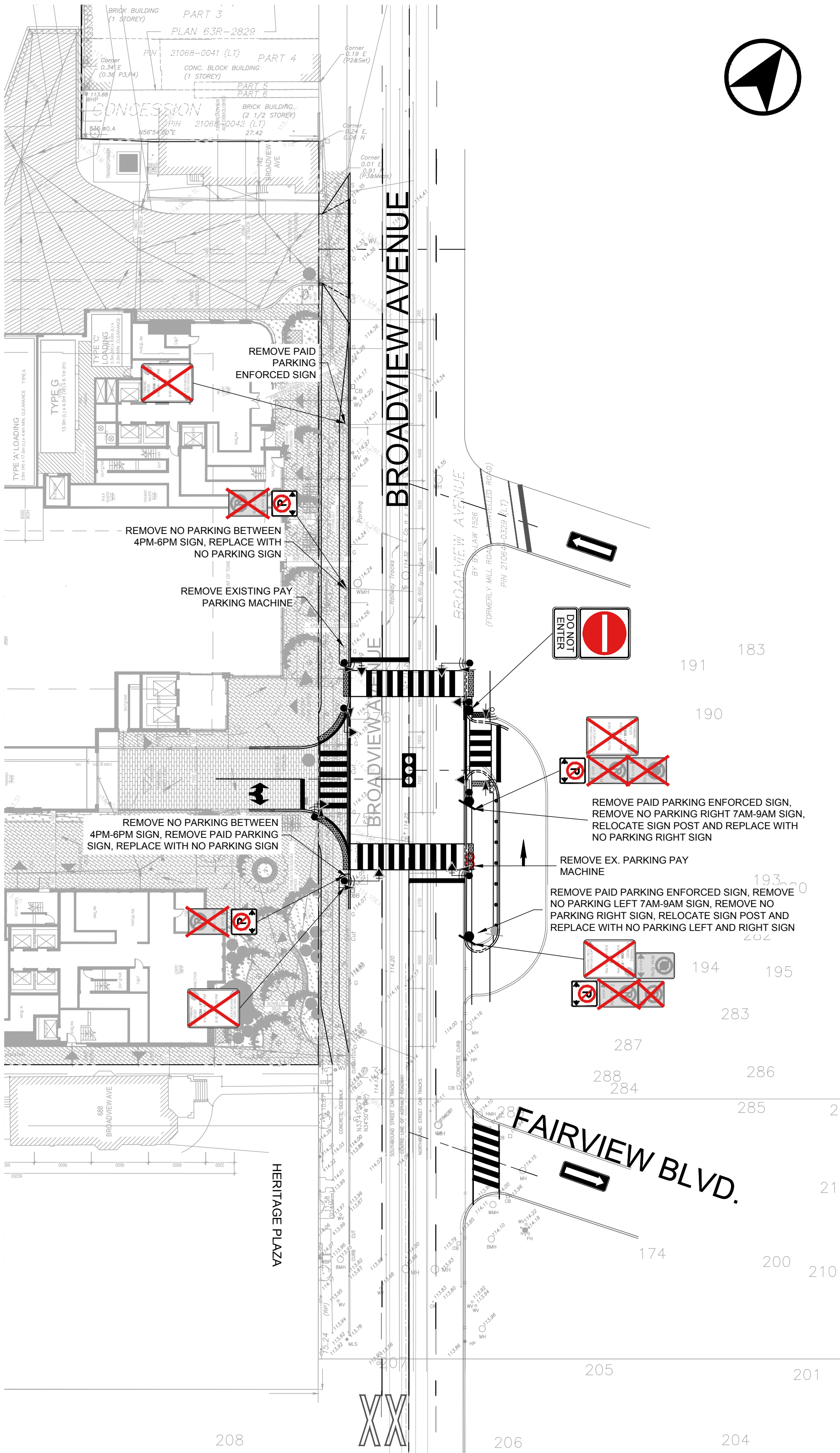
CHOICE - BROADVIEW  
FUNCTIONAL ROAD DESIGN

Project: CHOICE - BROADVIEW  
Project No. 7708-09  
Date: JULY 26, 2021  
Revised: September 26, 2025

Scale 1:400

Drawing No. FD-01





PAVEMENT MARKING:

(NOTE-ALL MARKINGS MUST CONFORM TO THE ONTARIO TRAFFIC MANUAL (OTM) BOOK 11

- 10cm (4 in.) YELLOW SOLID
- 10cm (4 in.) WHITE (3m (10 ft.) LINE, 6m (20 ft.) GAP)
- THROUGH ARROW (3m (10 ft.))
- LEFT/RIGHT TURN ARROW (3m (10 ft.))
- ALL STOP BARS TO BE 60cm (2 ft.) WHITE SOLID
- PEDESTRIAN CROSSING
  - COLD PLASTIC "POLYMERIC"
  - WIDTH AS SHOWN
  - PATTERN: 60cm PAINTED, 60cm GAP
  - TRAFFIC WHITE

TRAFFIC SIGNAL LEGEND

- HIGHWAY SIGNAL HEAD WITH BACKBOARD AND MAST ARM
- AUDIBLE PEDESTRIAN PUSH BUTTON WITH SYMBOLIZED SIGN
- PROPOSED STEEL TRAFFIC SIGNAL POLE

PROPOSED SIGN LEGEND

- Rb-19 (600 x 600)mm
- Rb-19t (300 x 600)mm
- Rb-51 (300 x 300)mm
- Rb-51 (300 x 300)mm

EXISTING SIGN LEGEND

- Ex. Rb-52 (300 x 450)mm
- Ex. Rb-52 (300 x 450)mm
- Ex. Rb-52 (300 x 450)mm
- Ex. Rb-56 (300 x 450)mm
- Ex. Rb-51 (300 x 300)mm
- Ex. Rb-56 (300 x 450)mm
- PAY DISPLAY (450 x 600)mm
- PAY DISPLAY (450 x 600)mm

BA Consulting Group Ltd.  
300 - 45 St. Clair Ave. W.  
Toronto ON M4V 1K9  
TEL 416 961 7110  
EMAIL bagroup@bagroup.com

**MOVEMENT  
IN URBAN  
ENVIRONMENTS**  
BAGROUP.COM

BROADVIEW

FUNCTIONAL ROAD DESIGN

PAVEMENT MARKING AND SIGNAGE PLAN

Date: September 26, 2025

Project No.: 7708-09

Scale: 1:400

SN-01

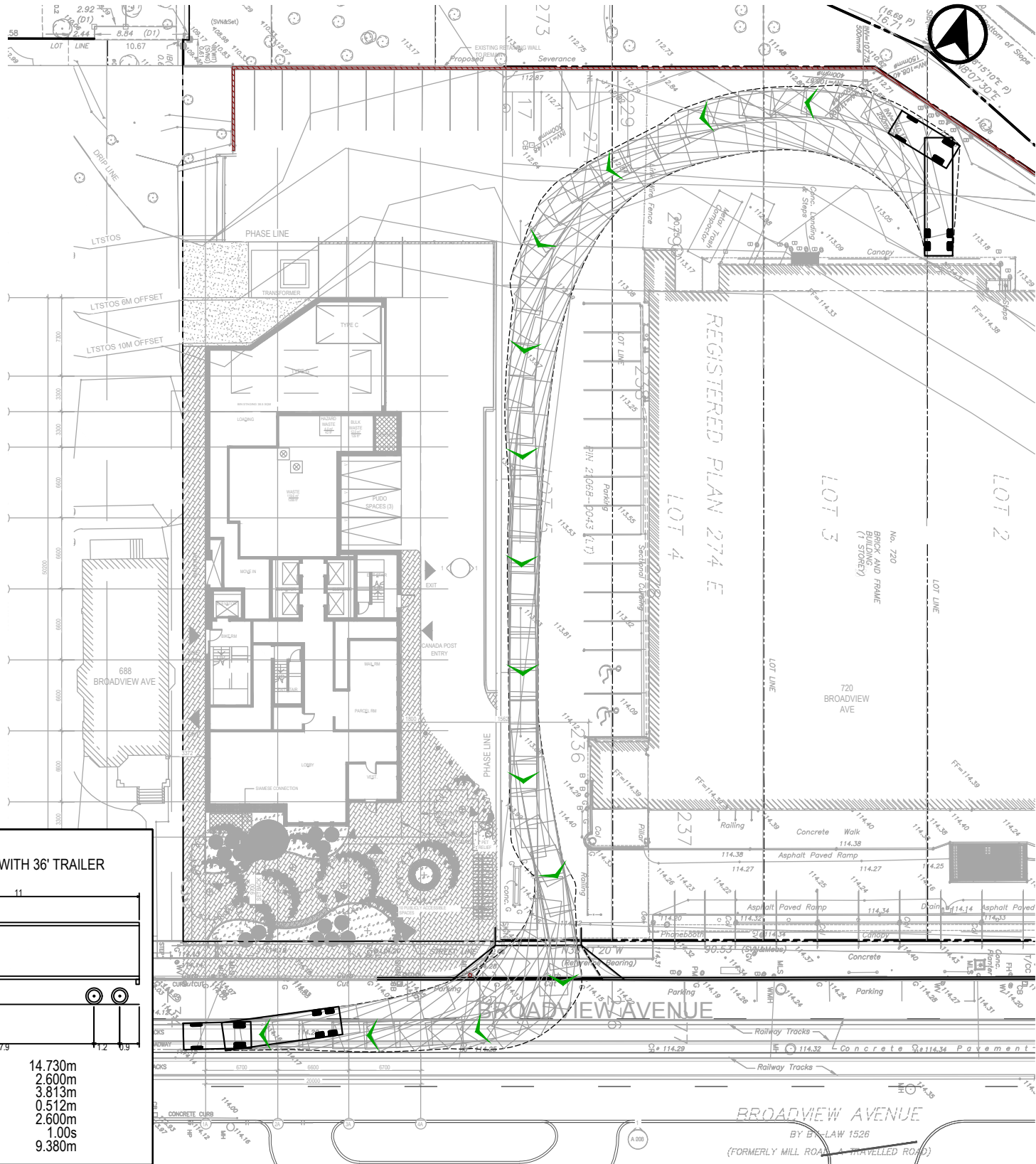
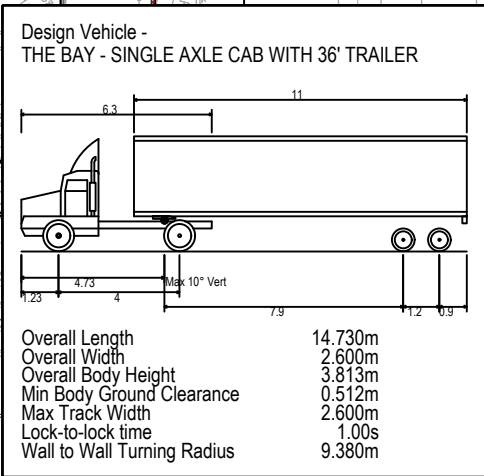
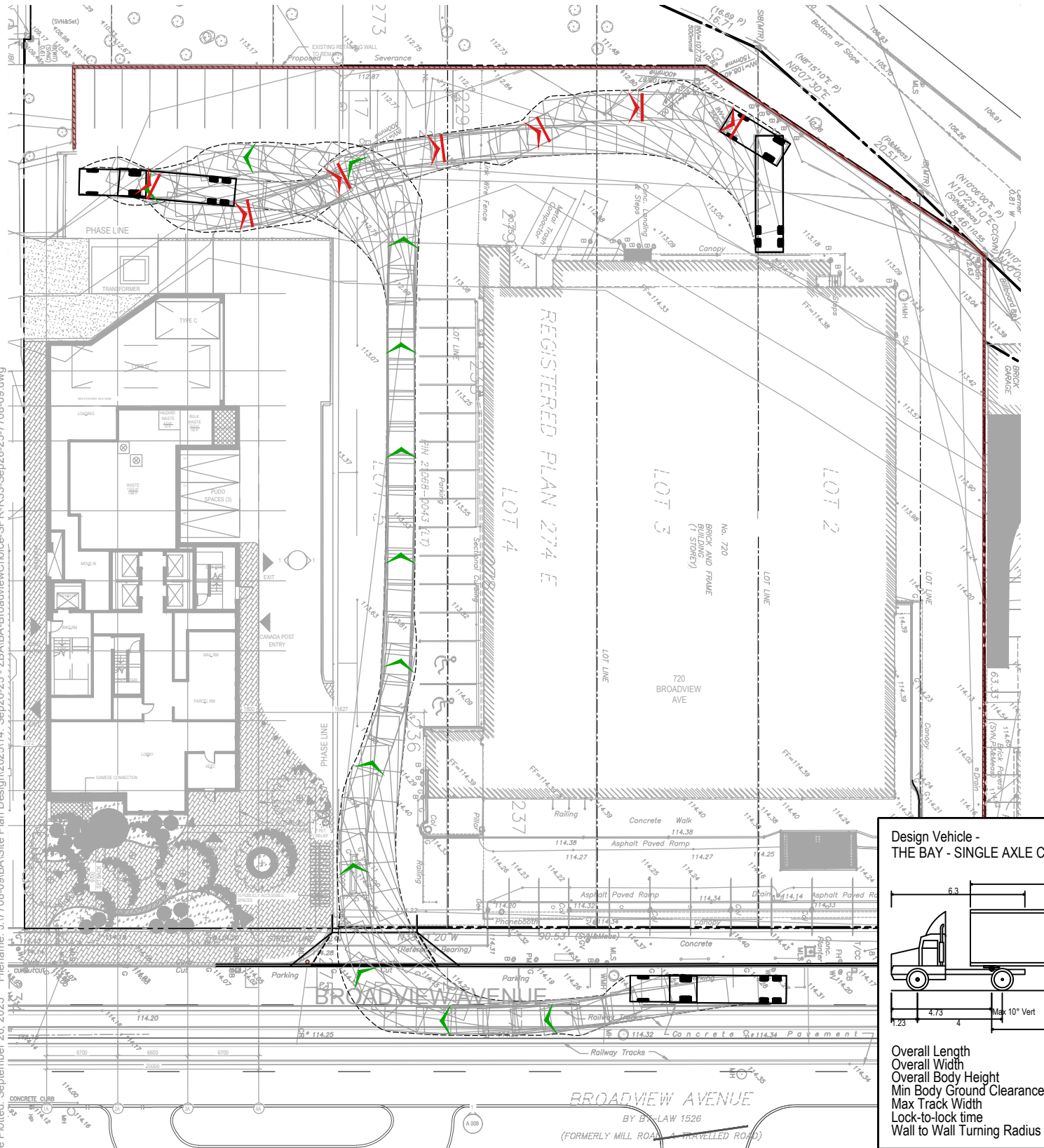


## **Appendix C: Vehicle Manoeuvring Diagrams**





Date Plotted: September 26, 2025. Filename: J:\7708-09\B\Site Plan Design\2025\14\_Sep26-25 - ZBA\BA-BroadviewChoice-SPR-R33-Sep26-25-7708-09.dwg



CHOICE - BROADVIEW  
VEHICLE MANOEUVRING DIAGRAM  
EXISTING GROCERY STORE  
SINGLE AXLE 36' TRAILER

Project: CHOICE - BROADVIEW  
Project No. 7708-09  
Date: JANUARY 10, 2023  
Revised: September 26, 2025

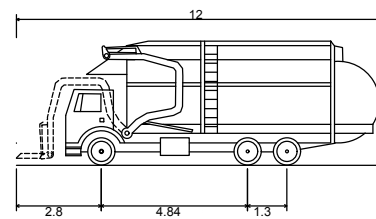
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Drawing No. VMD-00



Date Plotted: September 26, 2025. Filename: J:\7708-09\B\Site Plan Design\2025\14\_Sep26-25 - ZBA\BA-BroadviewChoice-SPR-R33-Sep26-25-7708-09.dwg

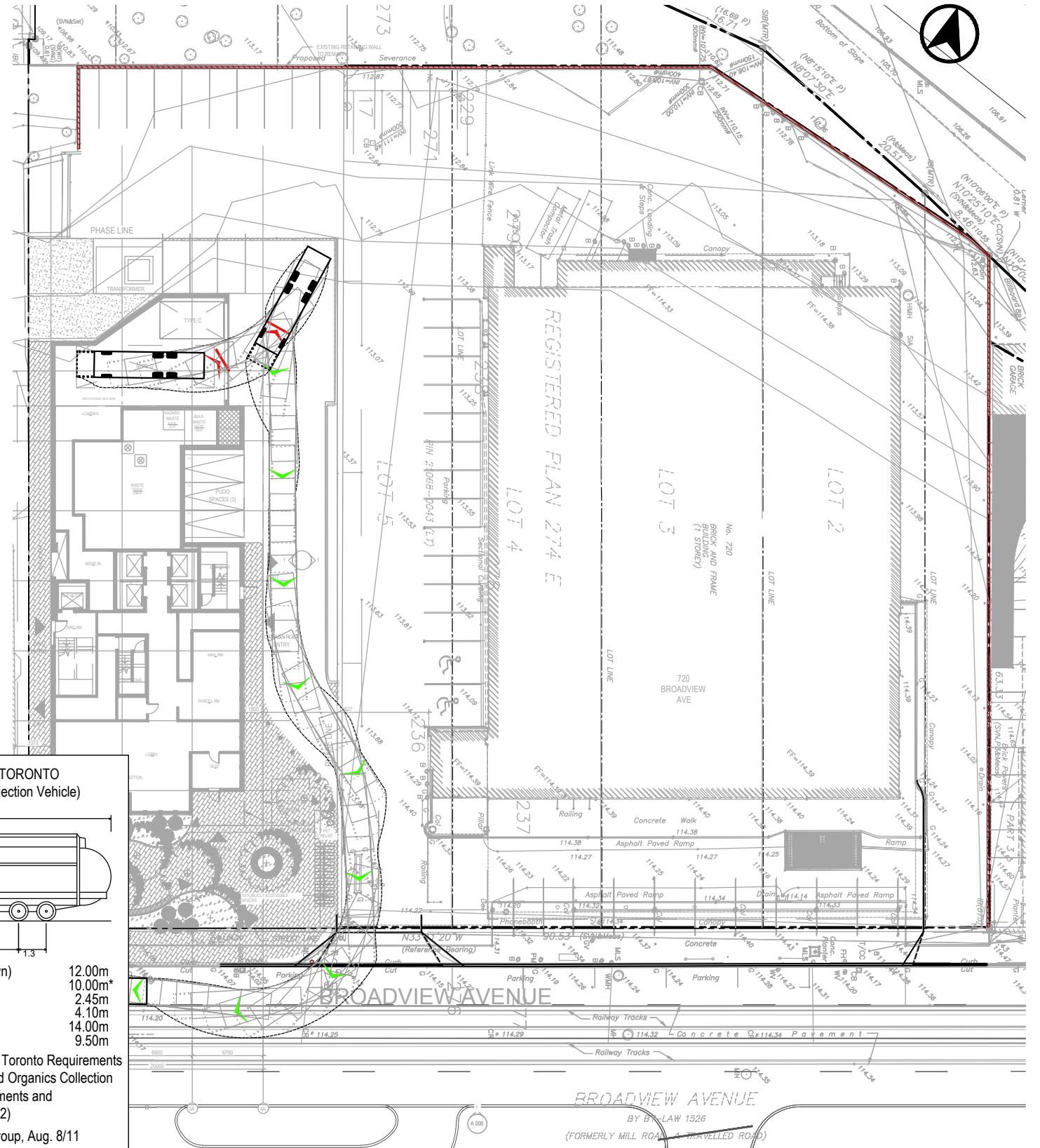


Design Vehicle - CITY OF TORONTO  
(Front Loading Refuse Collection Vehicle)



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

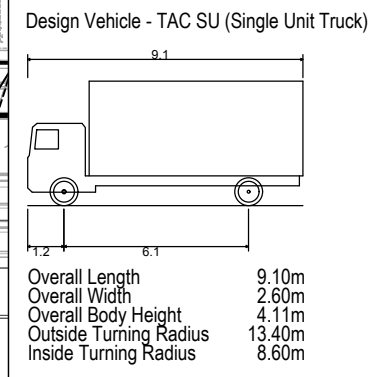
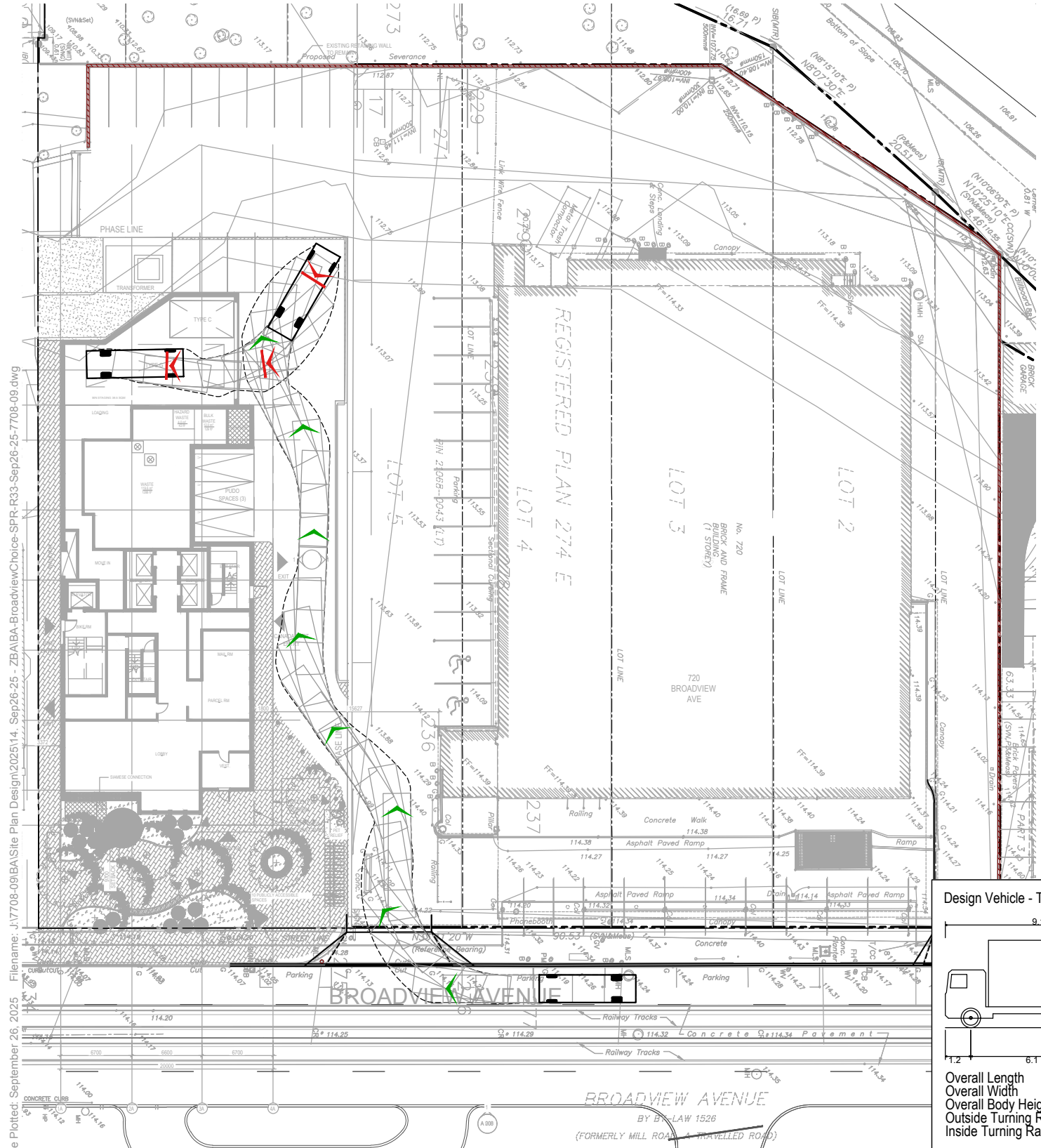


CHOICE - BROADVIEW  
VEHICLE MANOEUVRING DIAGRAM  
PHASE 1 SOUTH BLOCK - TYPE 'G'  
CITY OF TORONTO WASTE COLLECTION VEHICLE

Project: CHOICE - BROADVIEW  
Project No. 7708-09  
Date: JANUARY 10, 2023  
Revised: September 26, 2025

Scale 0 5 10 15 20m  
1:500  
Drawing No. VMD-01





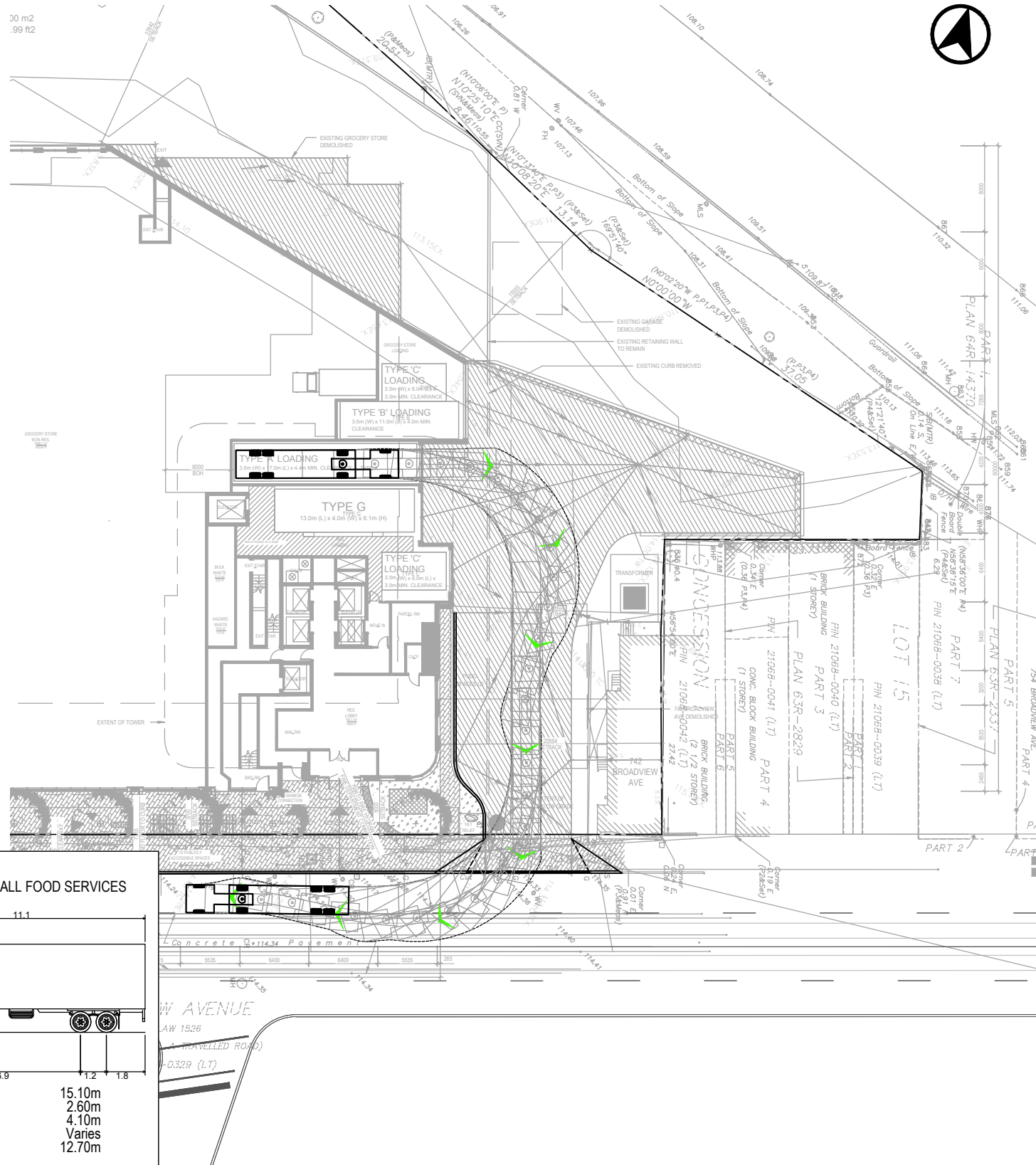
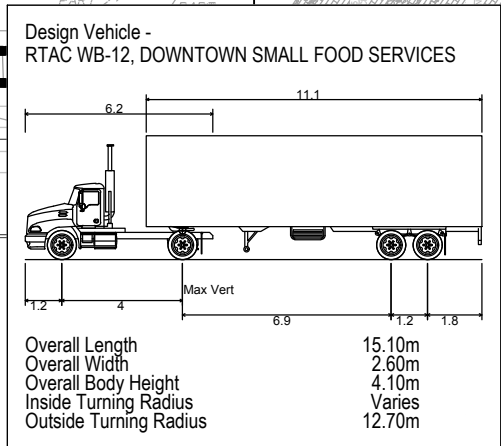
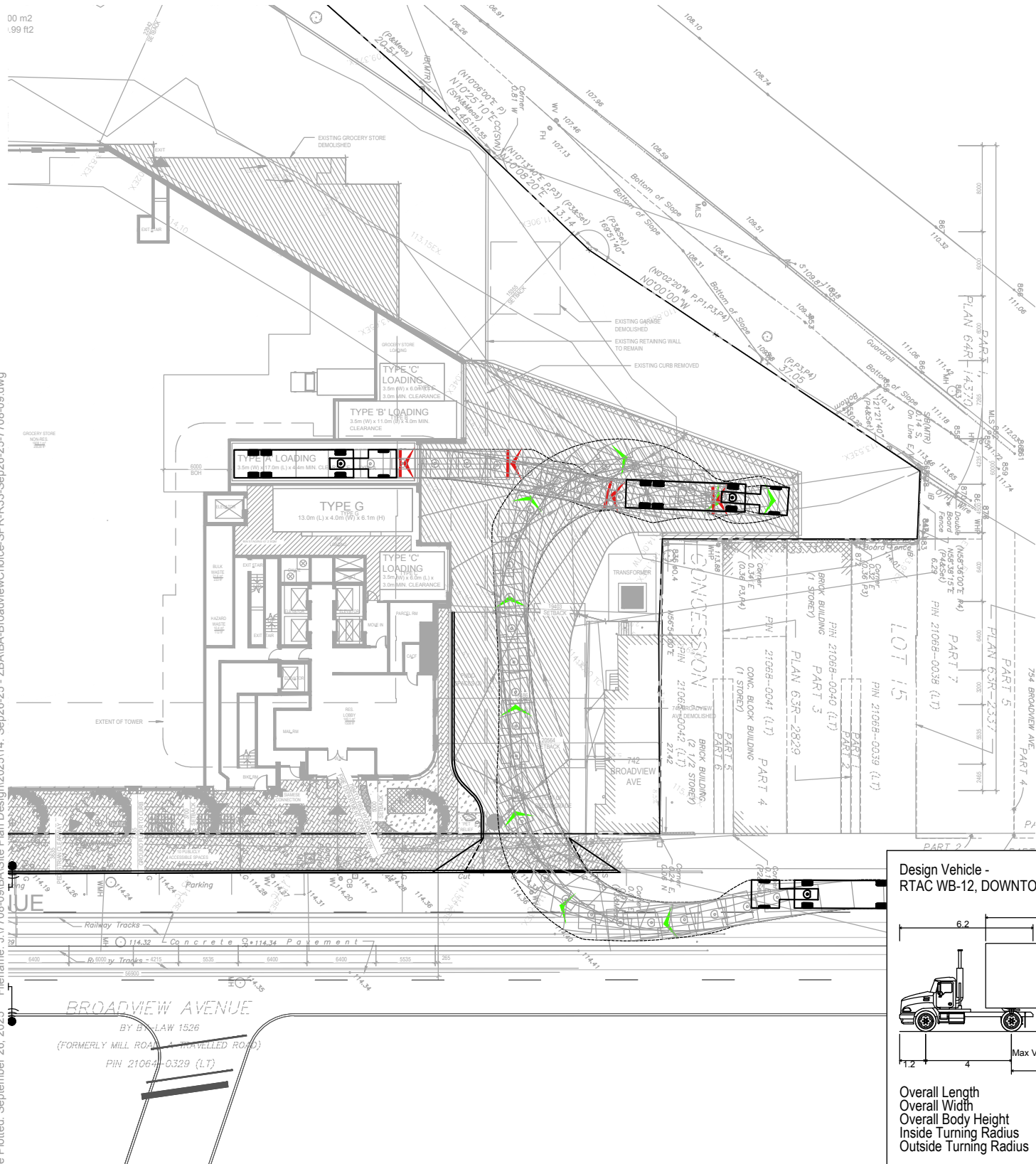
CHOICE - BROADVIEW  
VEHICLE MANOEUVRING DIAGRAM  
PHASE 1 SOUTH BLOCK - TYPE 'G'  
TAC SINGLE UNIT (SU) TRUCK

Project: CHOICE - BROADVIEW  
Project No. 7708-09  
Date: JANUARY 10, 2023  
Revised: September 26, 2025

Scale 0 5 10 15 20m  
1:500  
Drawing No. VMD-02



File: J:\7708-09\BAsite Plan Design\202514\_Sep26-25 - ZBA-BA-BroadviewChoice-SPR-R33-Sep26-25-7708-09.dwg  
Date Plotted: September 26, 2025



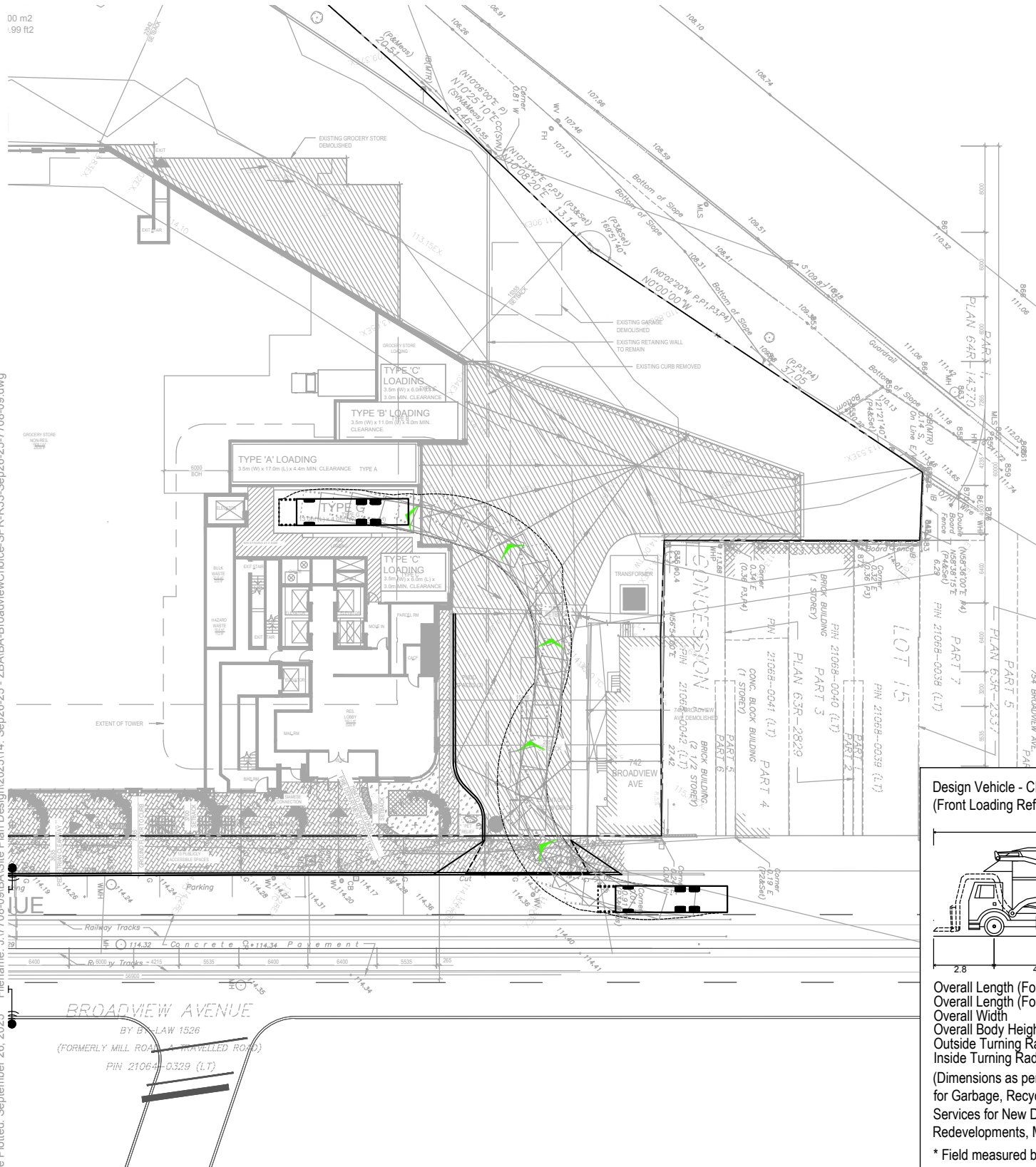
CHOICE - BROADVIEW  
VEHICLE MANOEUVRING DIAGRAM  
NORTH BLOCK - TYPE 'A'  
TAC WB-12

Project: CHOICE - BROADVIEW  
Project No. 7708-09  
Date: JANUARY 10, 2023  
Revised: September 26, 2025

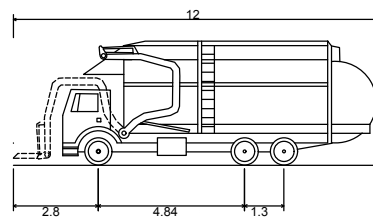
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Drawing No. VMD (00)



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Date Plotted: September 26, 2025

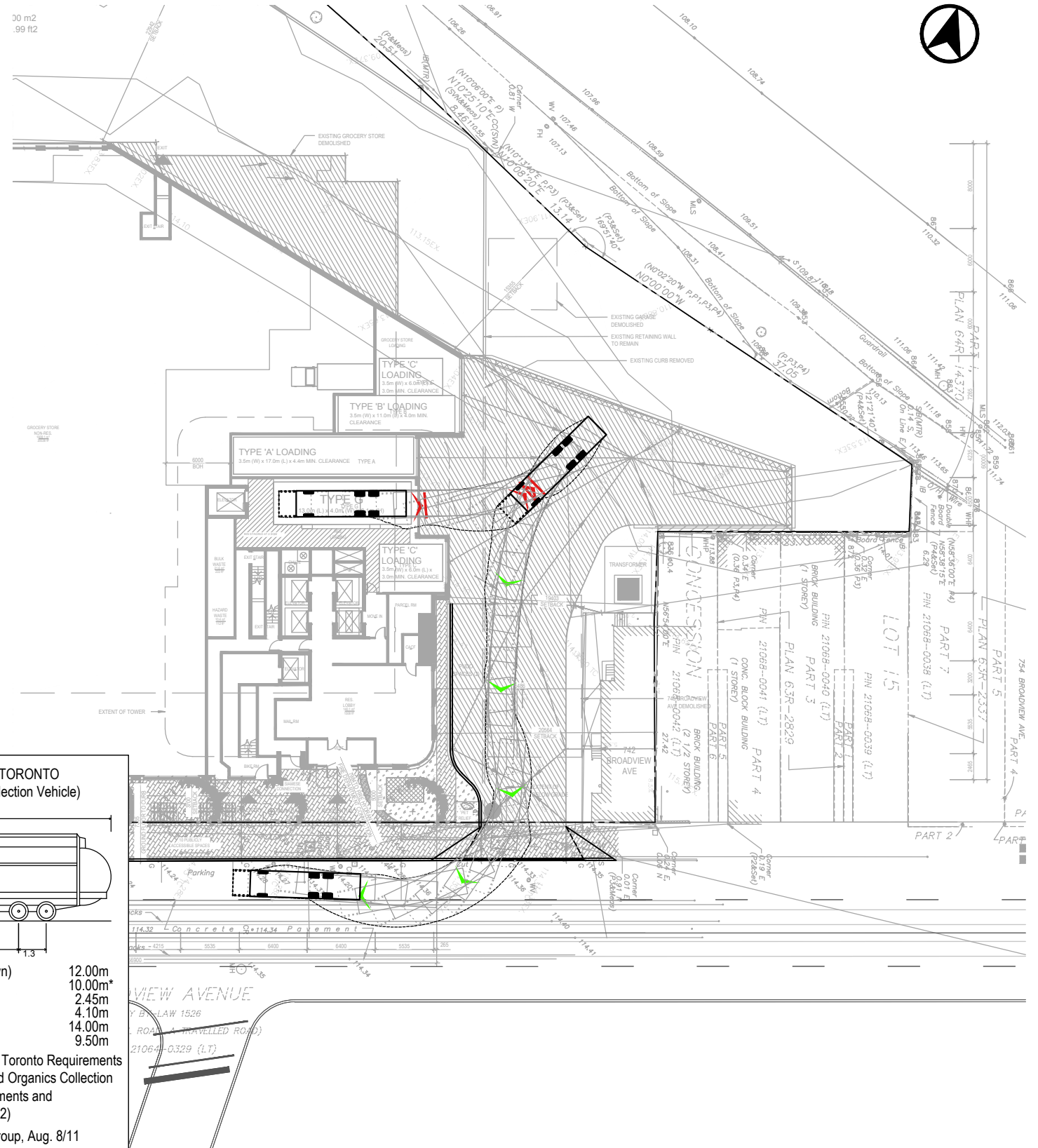


Design Vehicle - CITY OF TORONTO  
(Front Loading Refuse Collection Vehicle)



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



# CHOICE - BROADVIEW VEHICLE MANOEUVRING DIAGRAM NORTH BLOCK - TYPE 'G'

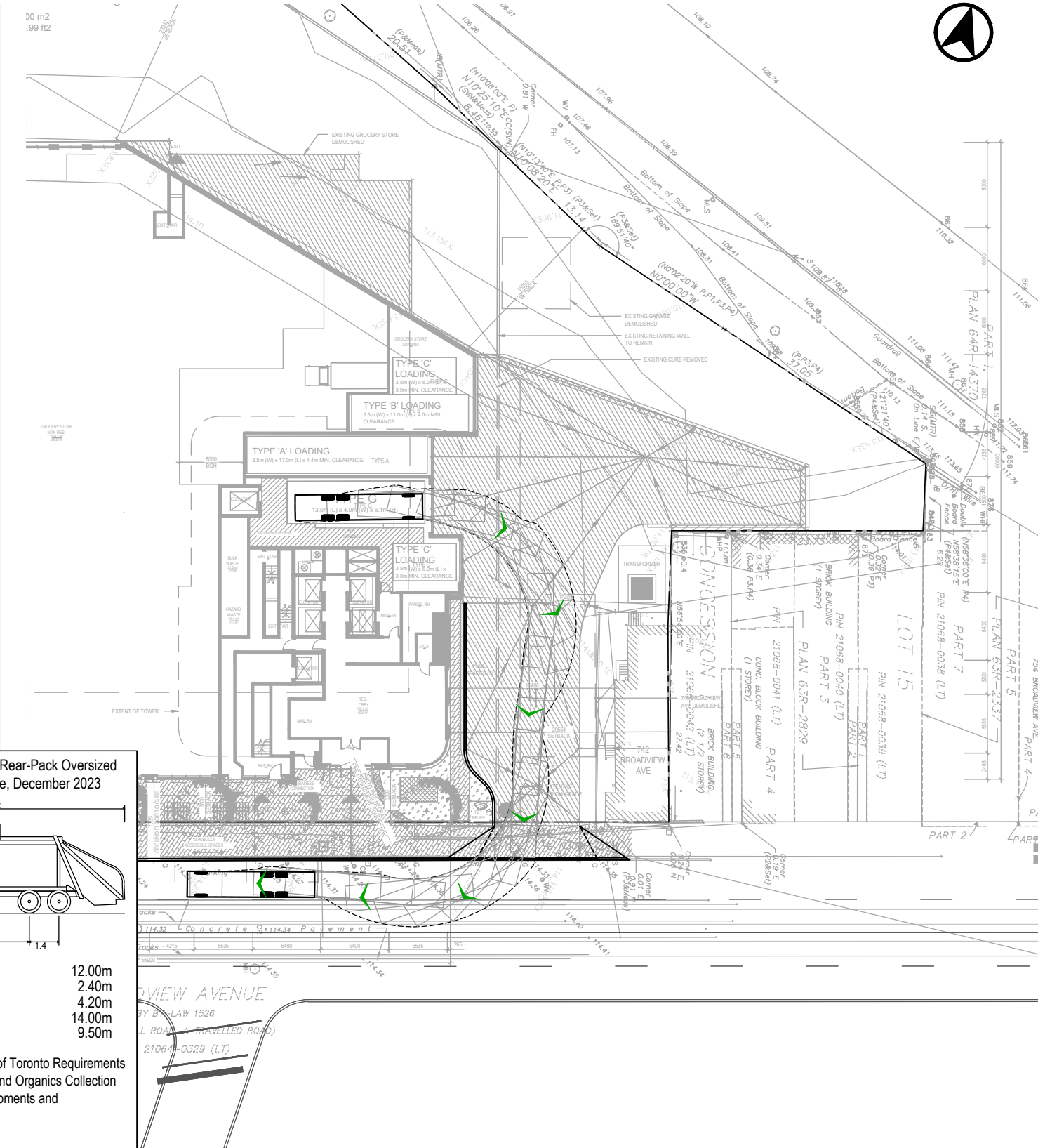
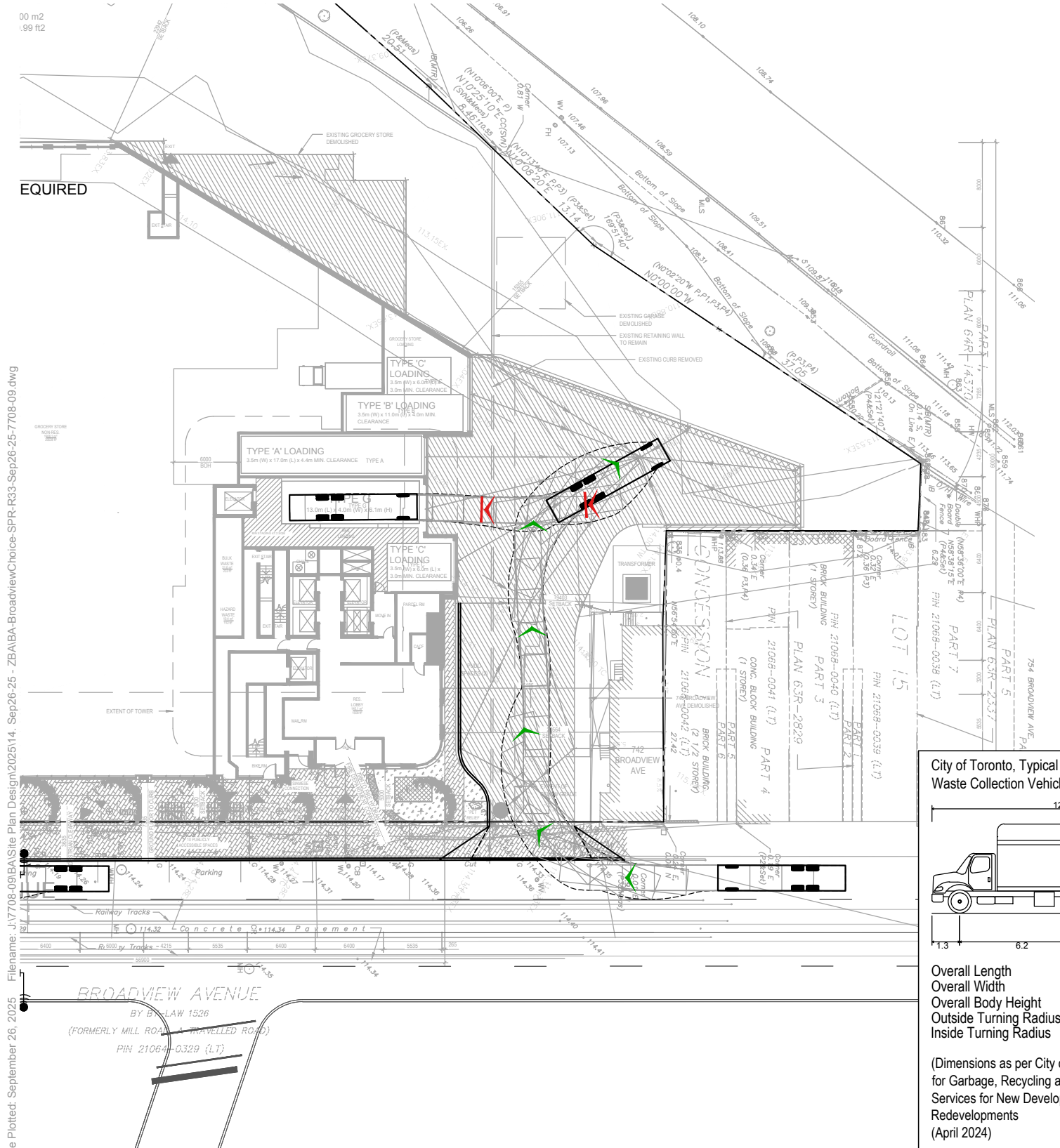
CITY OF TORONTO FRONT-LOADING WASTE COLLECTION VEHICLE

Project: CHOICE - BROADVIEW  
Project No. 7708-09  
Date: JANUARY 10, 2023  
Revised: September 26, 2025

Scale 0 5 10 15 20m  
1:500

Drawing No. VMD (01)





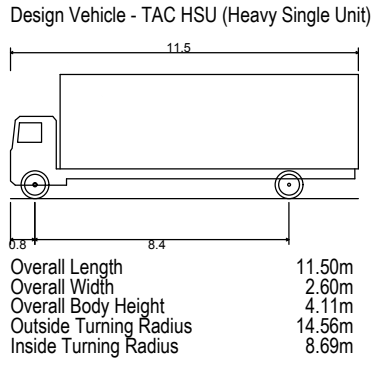
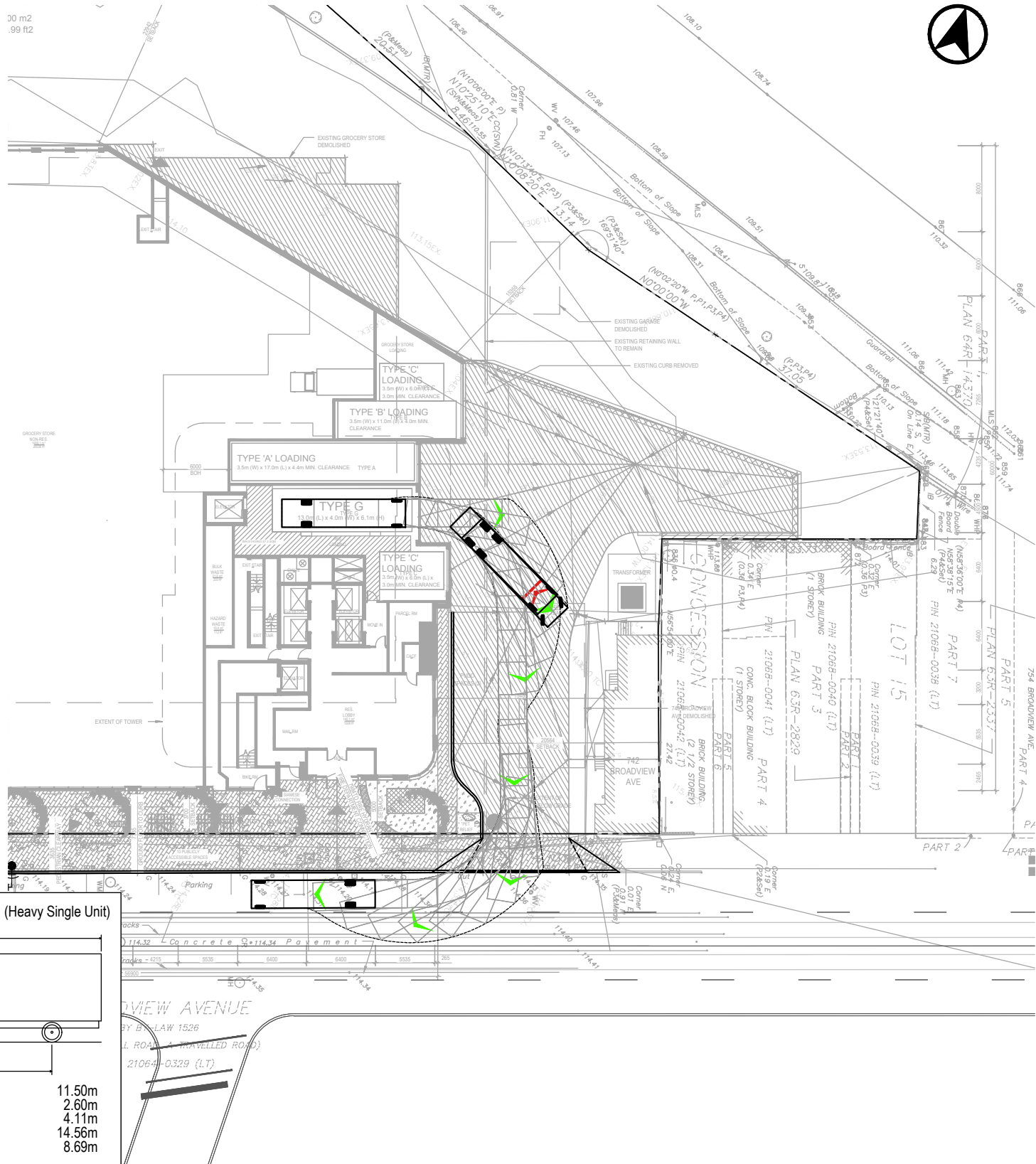
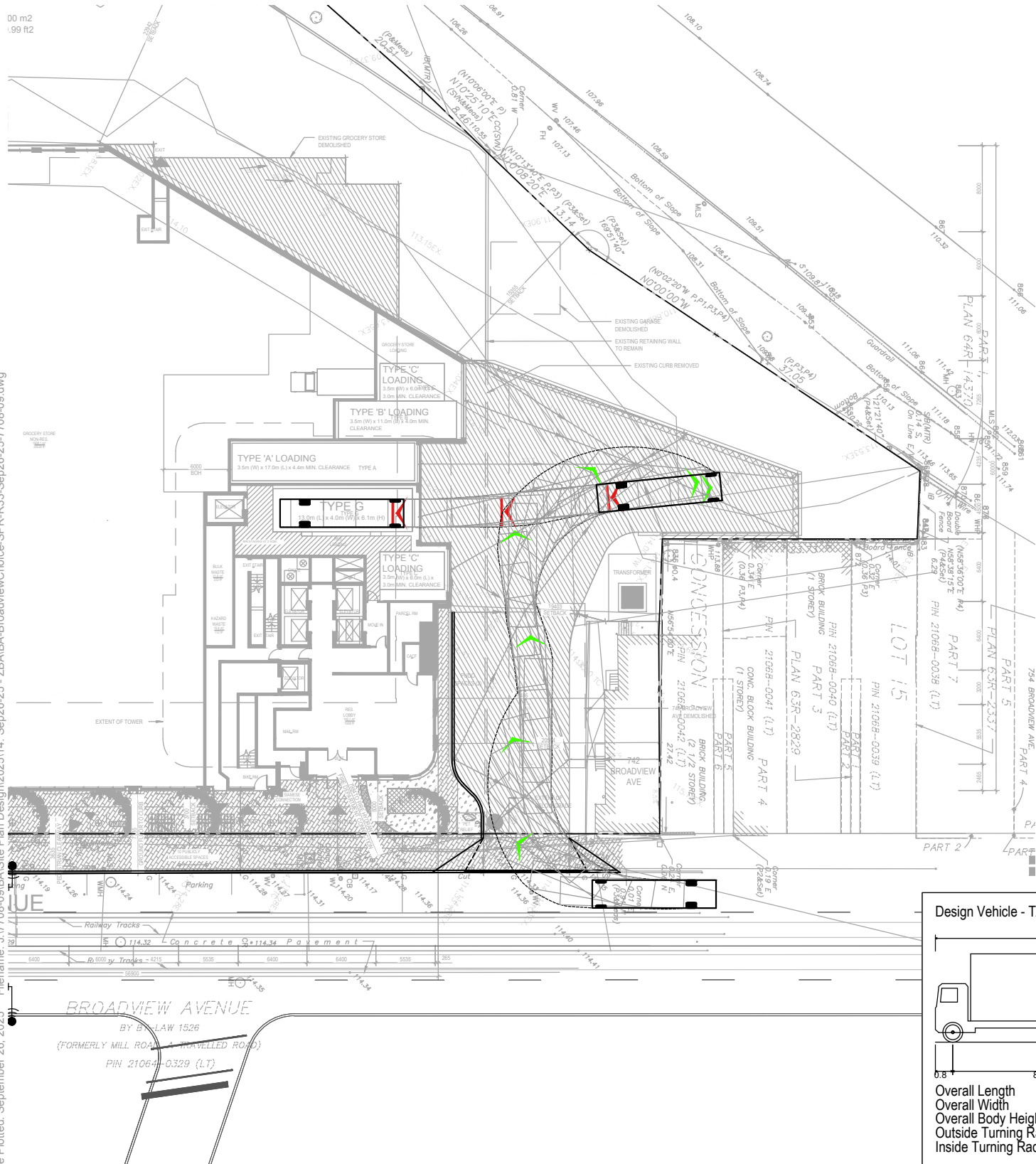
City of Toronto, Typical Rear-Pack Oversized Waste Collection Vehicle, December 2023

Overall Length 12.00m  
Overall Width 2.40m  
Overall Body Height 4.20m  
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 (April 2024))



File: J:\7708-09\BAs\Site Plan Design\202514\_Sep26-25 - ZBA\BA-BroadviewChoice-SPR-R33-Sep26-25-7708-09.dwg  
Date Plotted: September 26, 2025



# CHOICE - BROADVIEW

## VEHICLE MANOEUVRING DIAGRAM

### NORTH BLOCK - TYPE 'G'

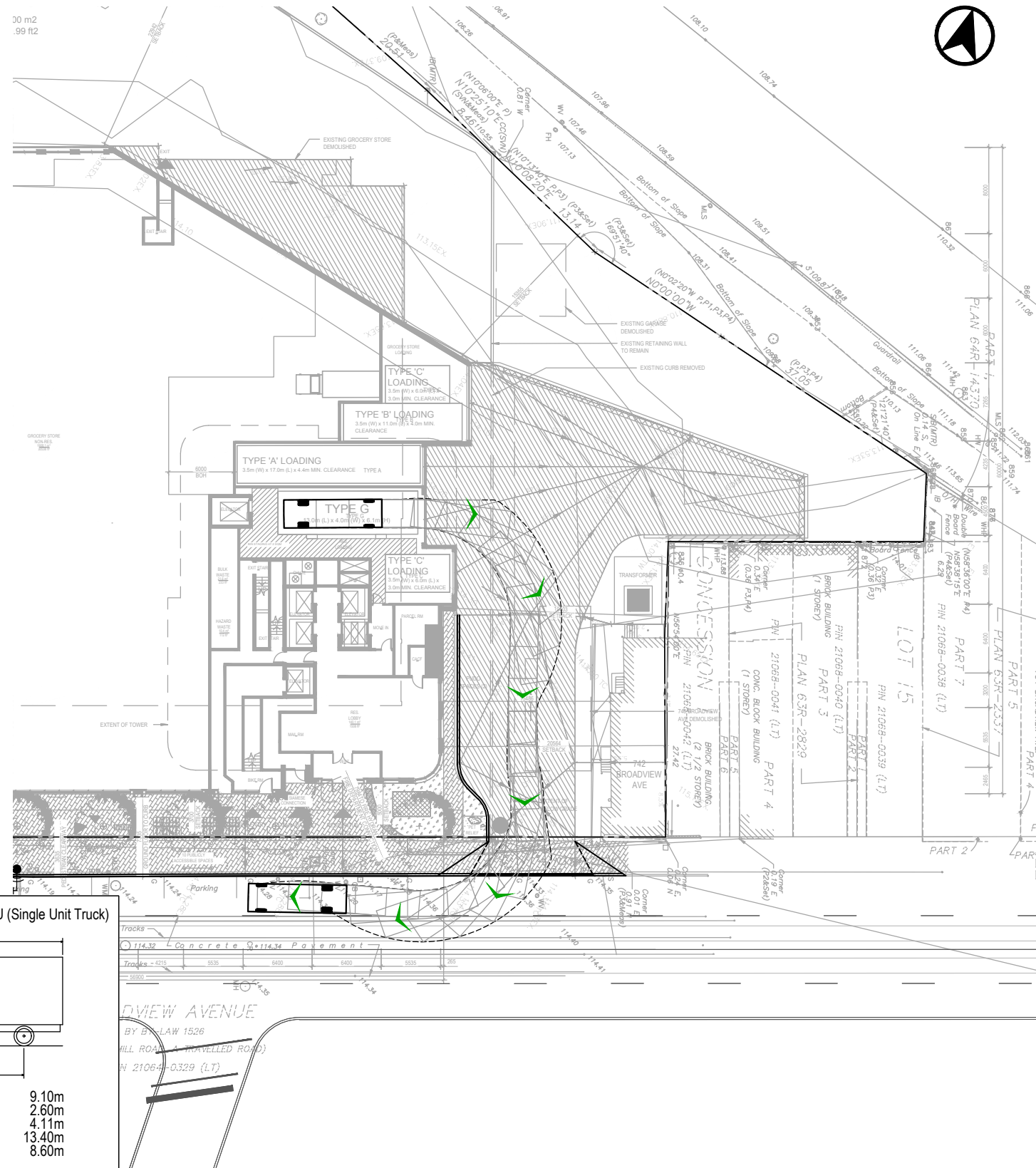
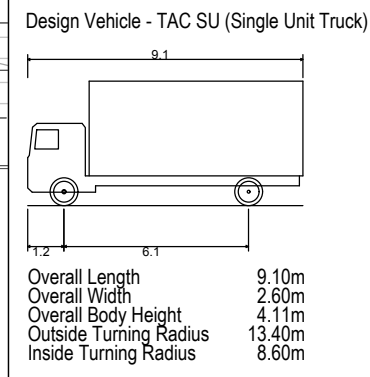
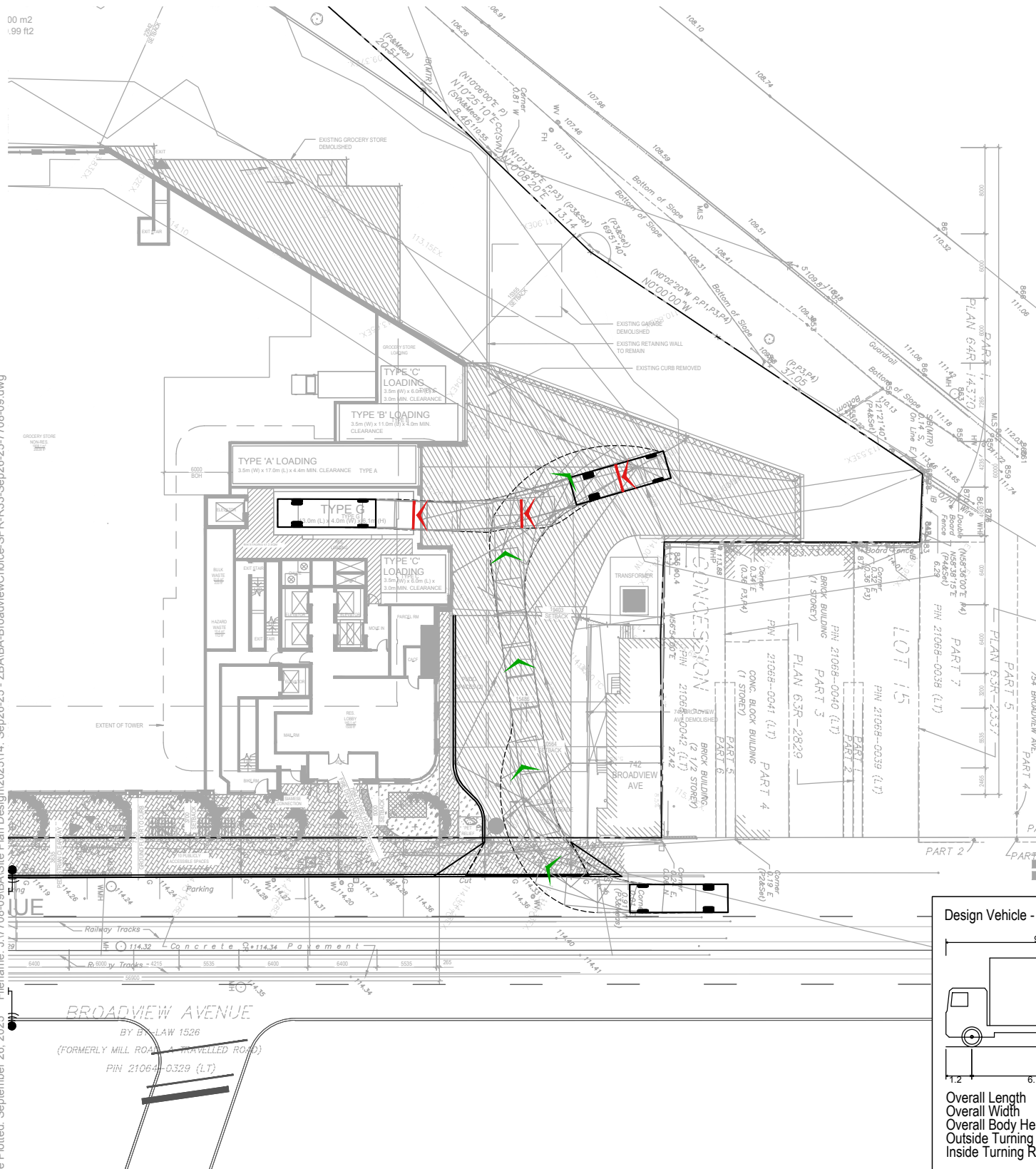
#### TAC HEAVY SINGLE UNIT (HSU) TRUCK

Project: CHOICE - BROADVIEW  
Project No. 7708-09  
Date: JANUARY 10, 2023  
Revised: September 26, 2025

Scale 1:500  
0 5 10 15 20m  
Drawing No. VMD (03)



File name: J:\7708-09\BAs\Site Plan Design\202514\_Sep26-25 - ZBA\BA-BroadviewChoice-SPR-R33-Sep26-25-7708-09.dwg  
Date Plotted: September 26, 2025



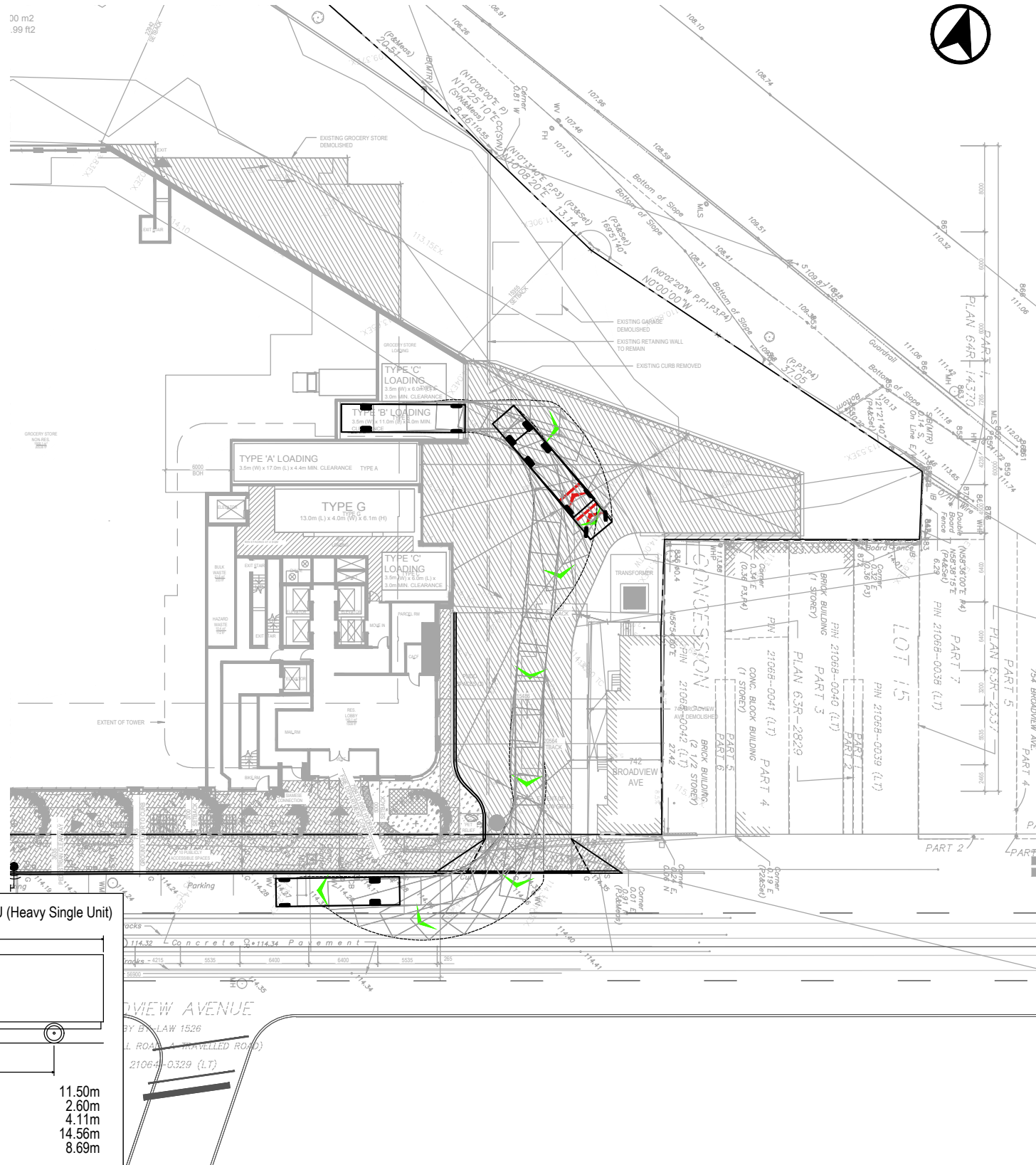
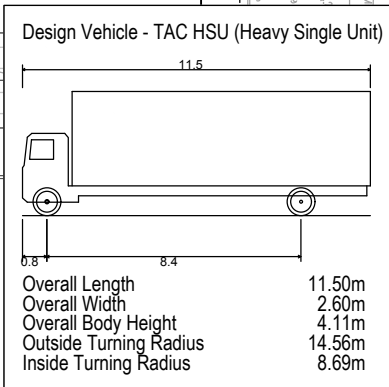
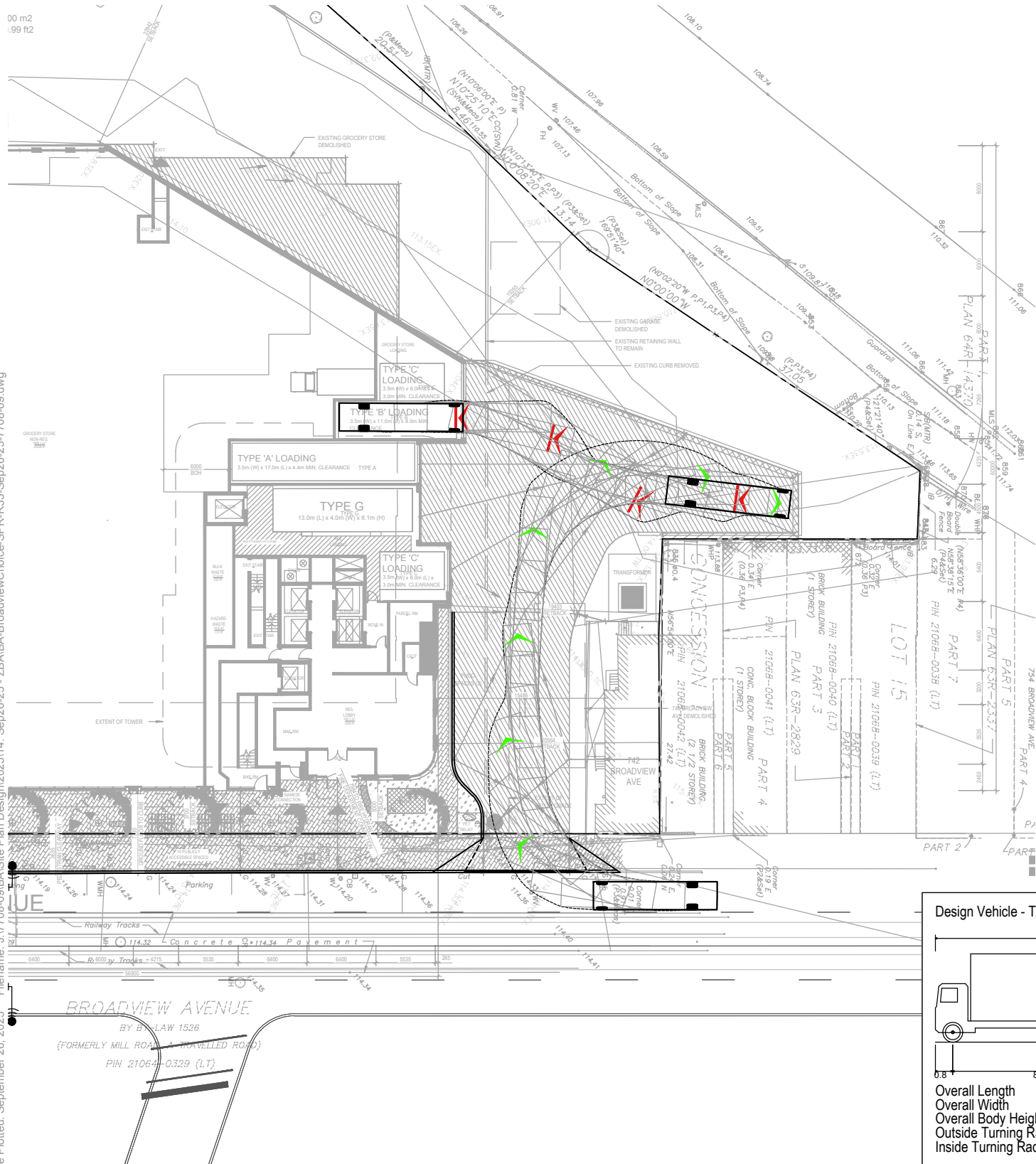
# CHOICE - BROADVIEW VEHICLE MANOEUVRING DIAGRAM NORTH BLOCK - TYPE 'G' TAC SINGLE UNIT (SU) TRUCK

Project: CHOICE - BROADVIEW  
Project No. 7708-09  
Date: JANUARY 10, 2023  
Revised: September 26, 2025

Scale  
1:500  
0 5 10 15 20m  
Drawing No. VMD (04)



File: J:\7708-09\BAs\Site Plan Design\202514\_Sep26-25 - ZBA\BA-BroadviewChoice-SPR-R33-Sep26-25-7708-09.dwg  
Date Plotted: September 26, 2025



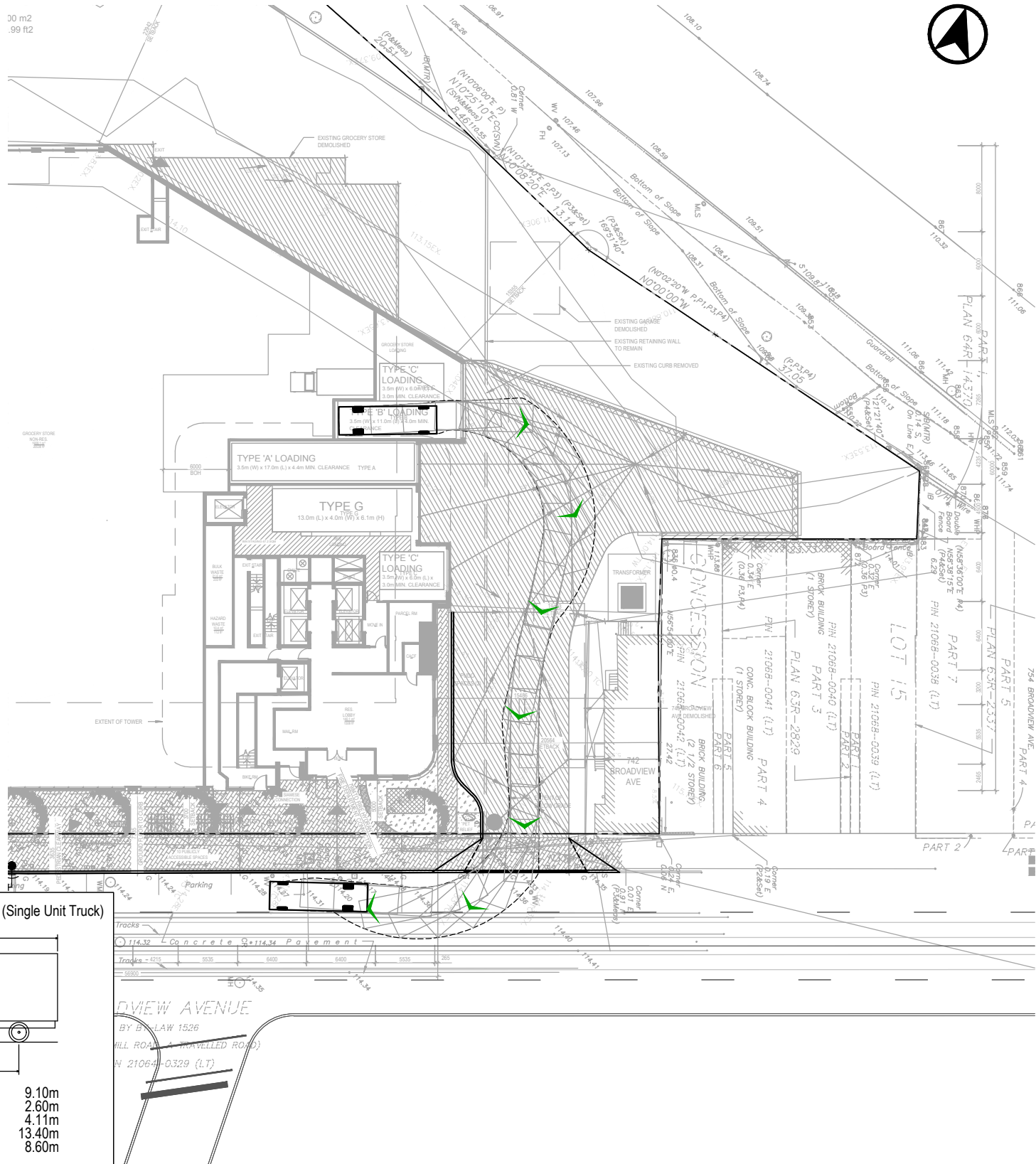
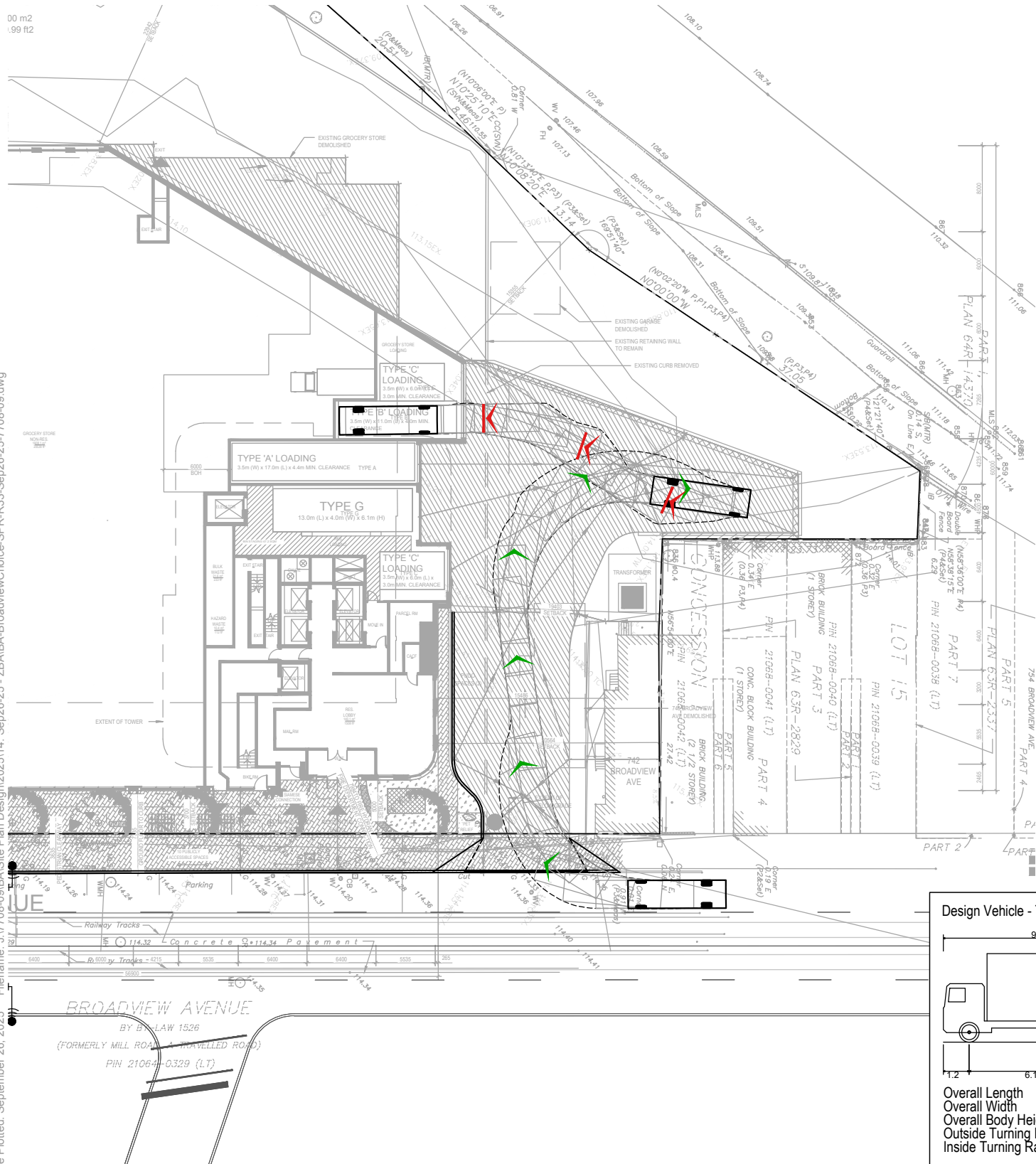
**CHOICE - BROADVIEW**  
**VEHICLE MANOEUVRING DIAGRAM**  
**NORTH BLOCK - TYPE 'B'**  
**TAC HEAVY SINGLE UNIT (HSU) TRUCK**

Project: CHOICE - BROADVIEW  
Project No. 7708-09  
Date: JANUARY 10, 2023  
Revised: September 26, 2025

Scale: 1:500  
Drawing No. VMD (05)



File: J:\7708-09\BAs\Site Plan Design\202514\_Sep26-25 - ZBA\BA-BroadviewChoice-SPR-R33-Sep26-25-7708-09.dwg  
Date Plotted: September 26, 2025



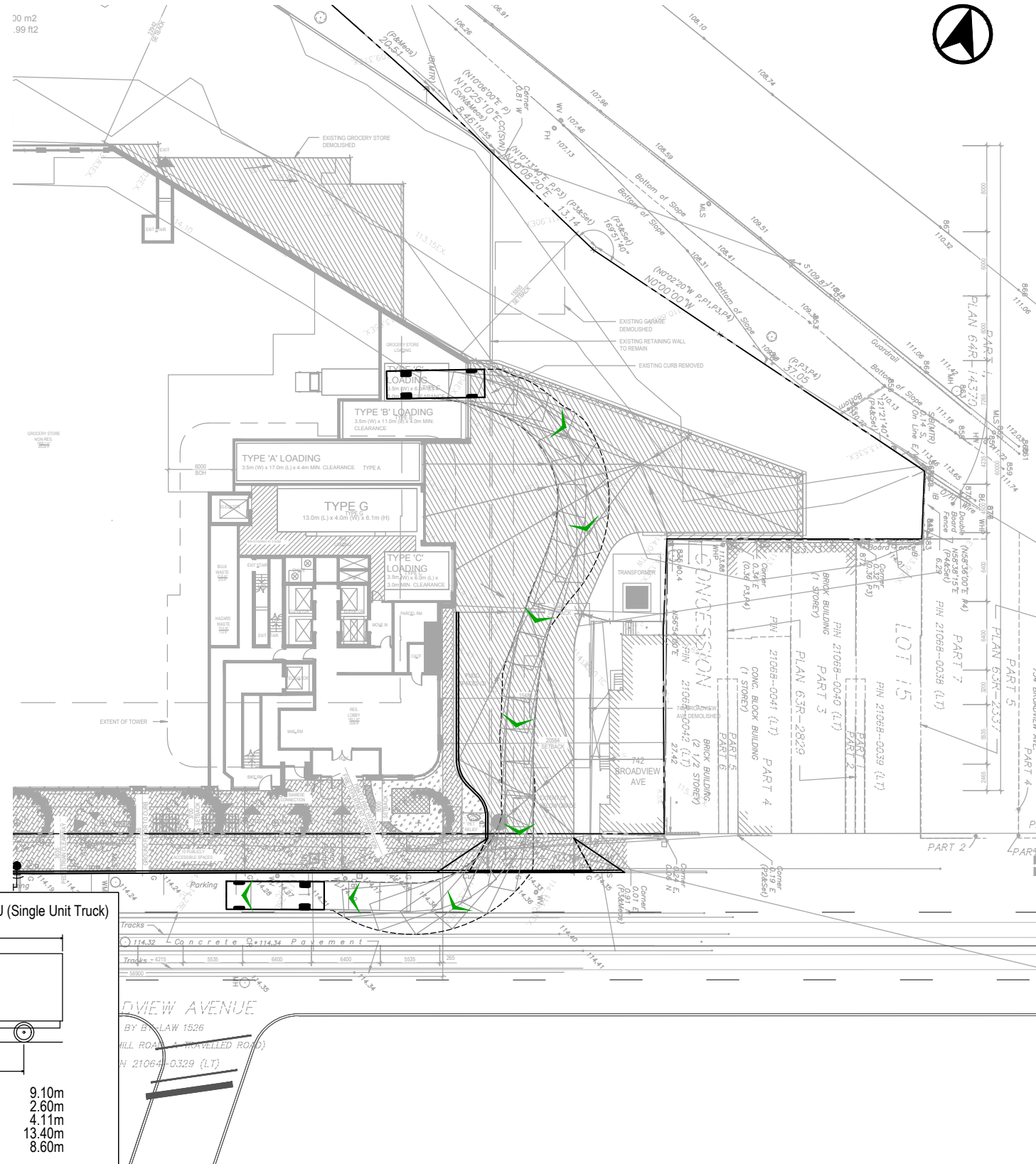
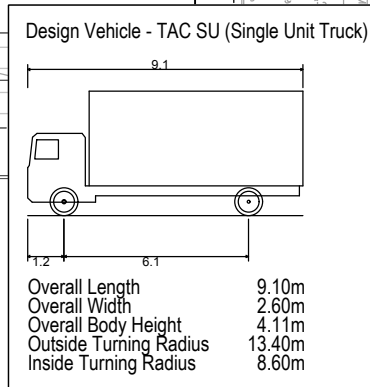
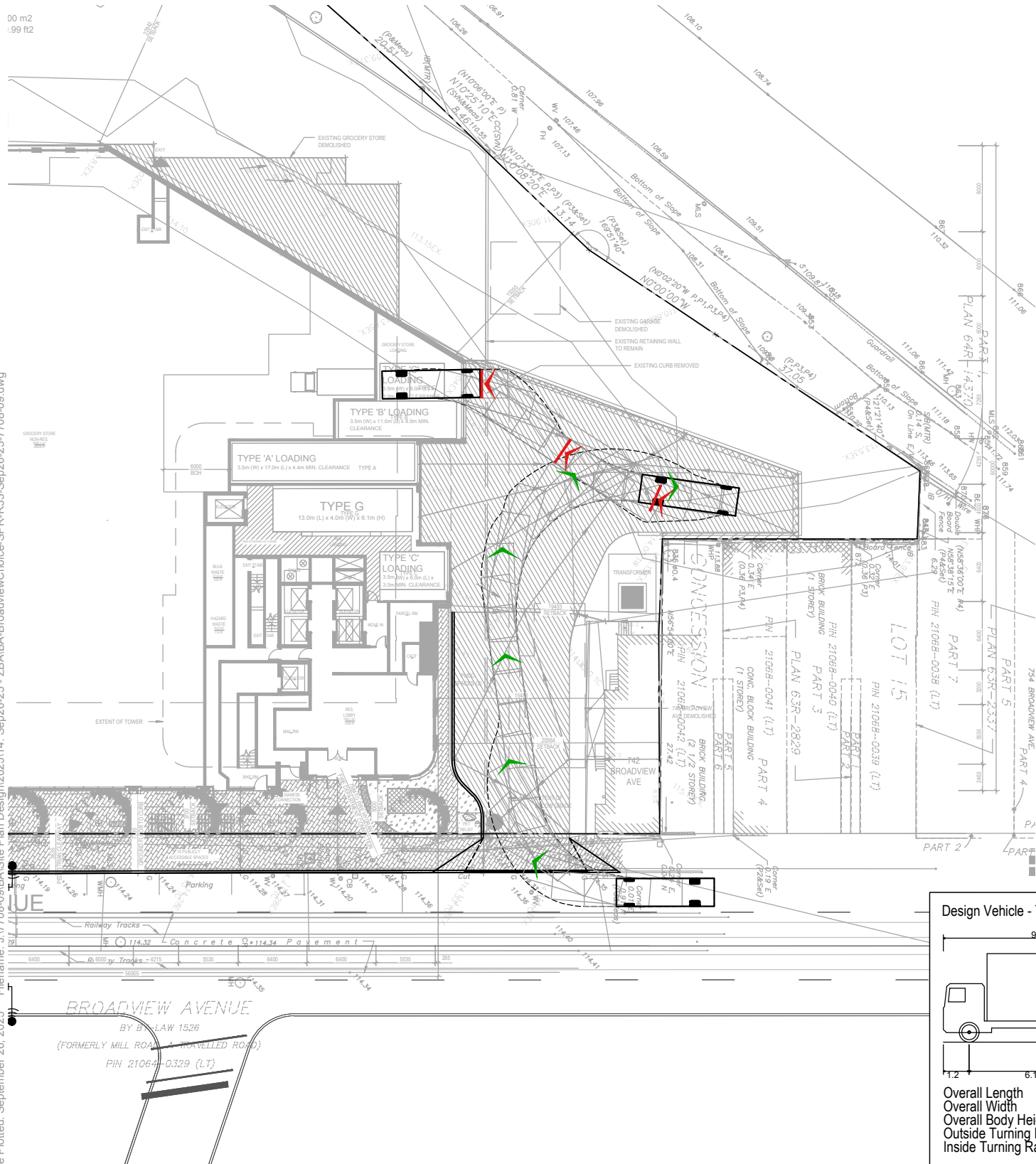
# CHOICE - BROADVIEW VEHICLE MANOEUVRING DIAGRAM NORTH BLOCK - TYPE 'B' TAC SINGLE UNIT (SU) TRUCK

Project: CHOICE - BROADVIEW  
Project No. 7708-09  
Date: JANUARY 10, 2023  
Revised: September 26, 2025

Scale  
1:500  
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Drawing No. VMD (06)



File: J:\7708-09\BAs\Site Plan Design\202514\_Sep26-25 - ZBA\BA-BroadviewChoice-SPR-R33-Sep26-25-7708-09.dwg  
Date Plotted: September 26, 2025



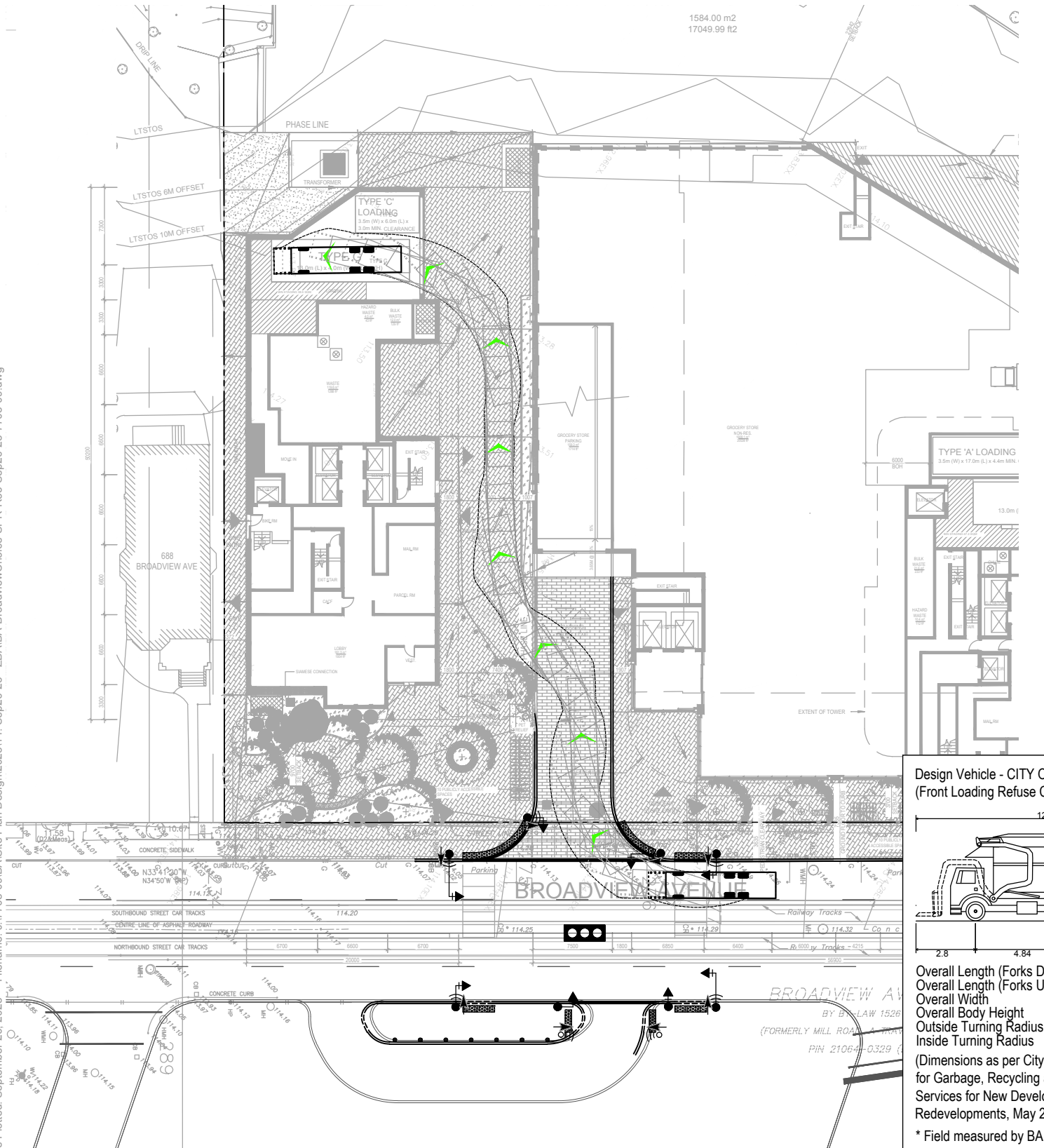
**CHOICE - BROADVIEW**  
**VEHICLE MANOEUVRING DIAGRAM**  
**NORTH BLOCK - TYPE 'C' COMPACTOR**  
**TAC SINGLE UNIT (SU) TRUCK**

Project: CHOICE - BROADVIEW  
Project No. 7708-09  
Date: JANUARY 10, 2023  
Revised: September 26, 2025

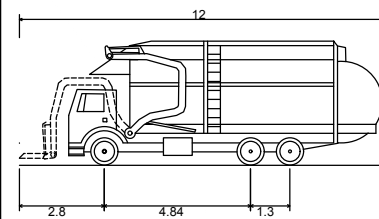
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Drawing No. **VMD (07)**



Date Plotted: September 26, 2025    Filename: J:\7708-09\BA\Site Plan Design\2025\14\_Sep26-25 - ZBA\BA-BroadviewChoice-SPR-R33-Sep26-25-7708-09.dwg

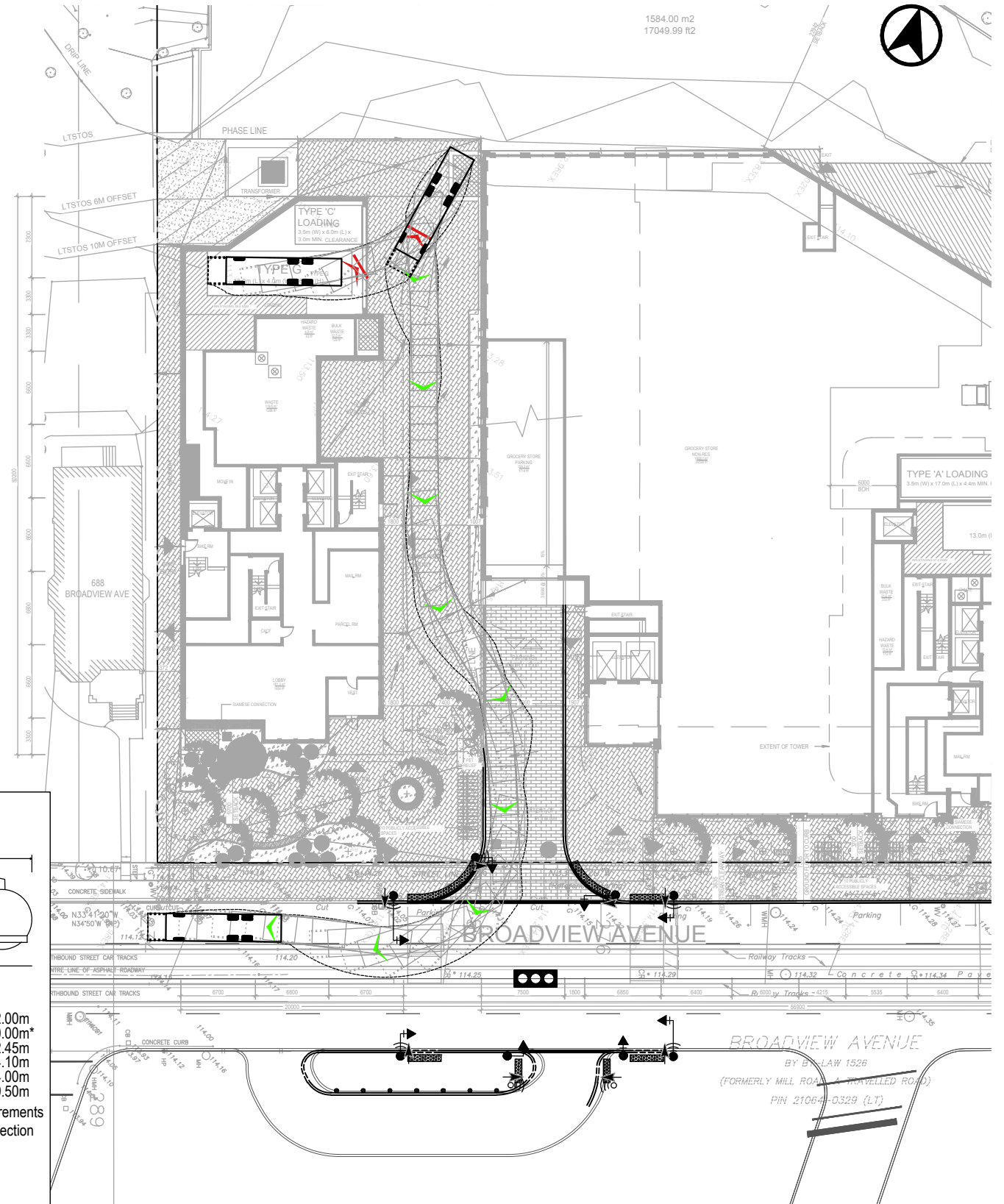


Design Vehicle - CITY OF TORONTO  
(Front Loading Refuse Collection Vehicle)



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



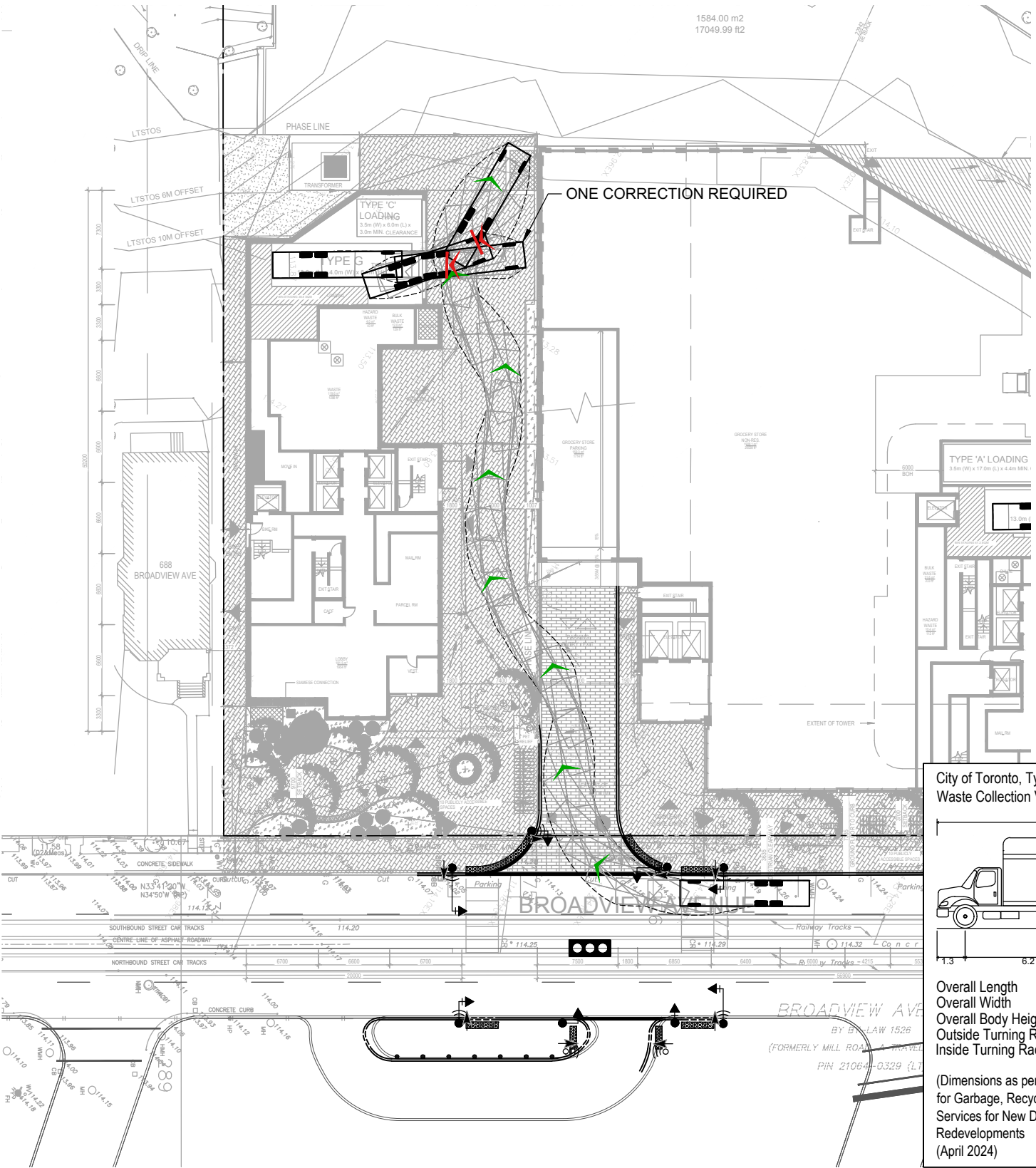
**CHOICE - BROADVIEW**  
**VEHICLE MANOEUVRING DIAGRAM**  
**SOUTH BLOCK - TYPE 'G'**  
**CITY OF TORONTO WASTE COLLECTION VEHICLE**

Project: CHOICE - BROADVIEW  
Project No. 7708-09  
Date: JANUARY 10, 2023  
Revised: September 26, 2025

Scale 0 5 10 15 20m  
1:500  
Drawing No. **VMD (08)**



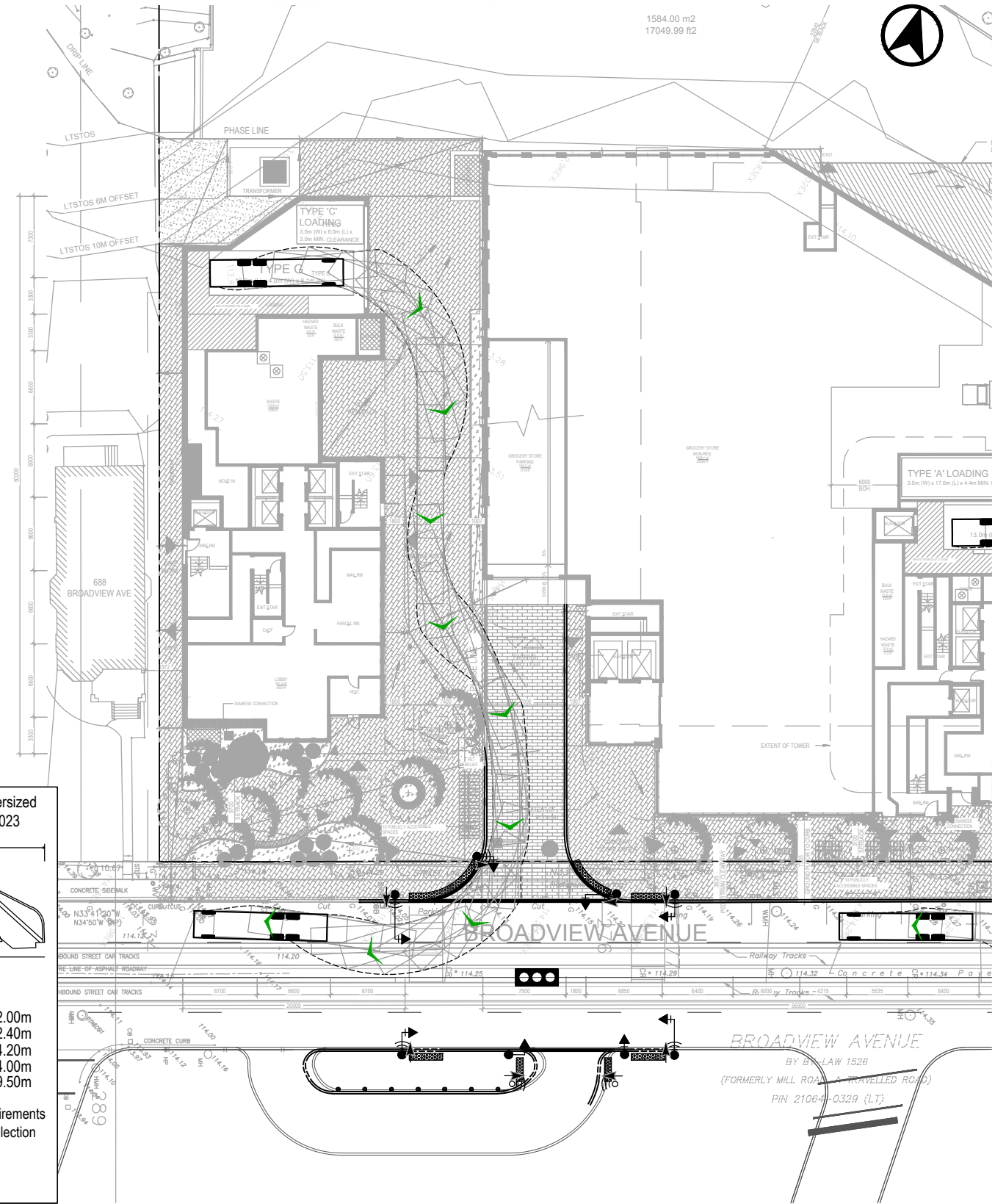
Date Plotted: September 26, 2025    Filename: J:\7708-09\BA\Site Plan Design\2025\14\_Sep26-25 - ZBA\BA-BroadviewChoice-SPR-R33-Sep26-25-7708-09.dwg



City of Toronto, Typical Rear-Pack Oversized Waste Collection Vehicle, December 2023

Overall Length 12.00m  
Overall Width 2.40m  
Overall Body Height 4.20m  
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 (April 2024))



**CHOICE - BROADVIEW**  
**VEHICLE MANOEUVRING DIAGRAM**  
**SOUTH BLOCK - TYPE 'G'**  
**CITY OF TORONTO REAR-PACK WASTE COLLECTION VEHICLE**

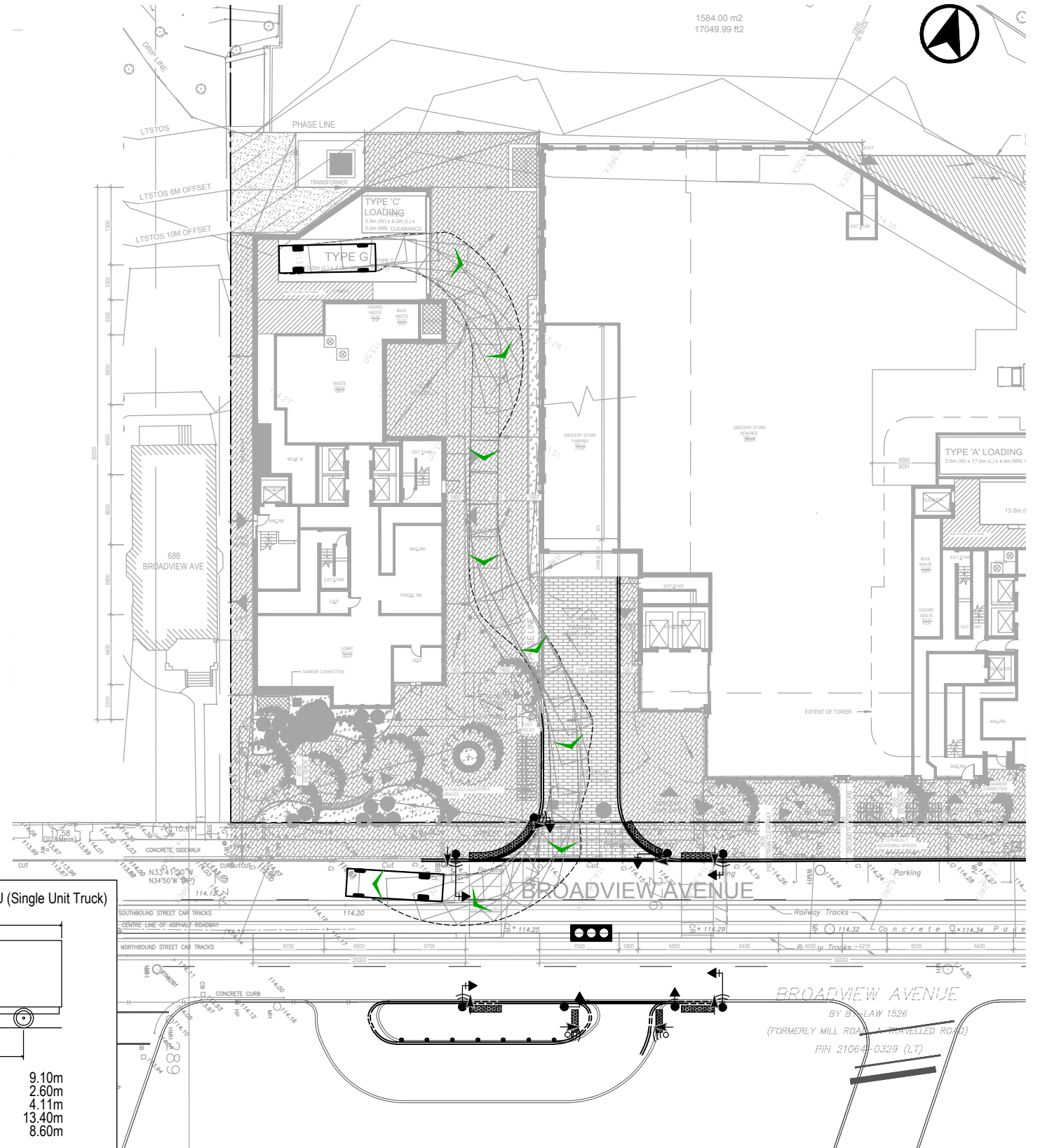
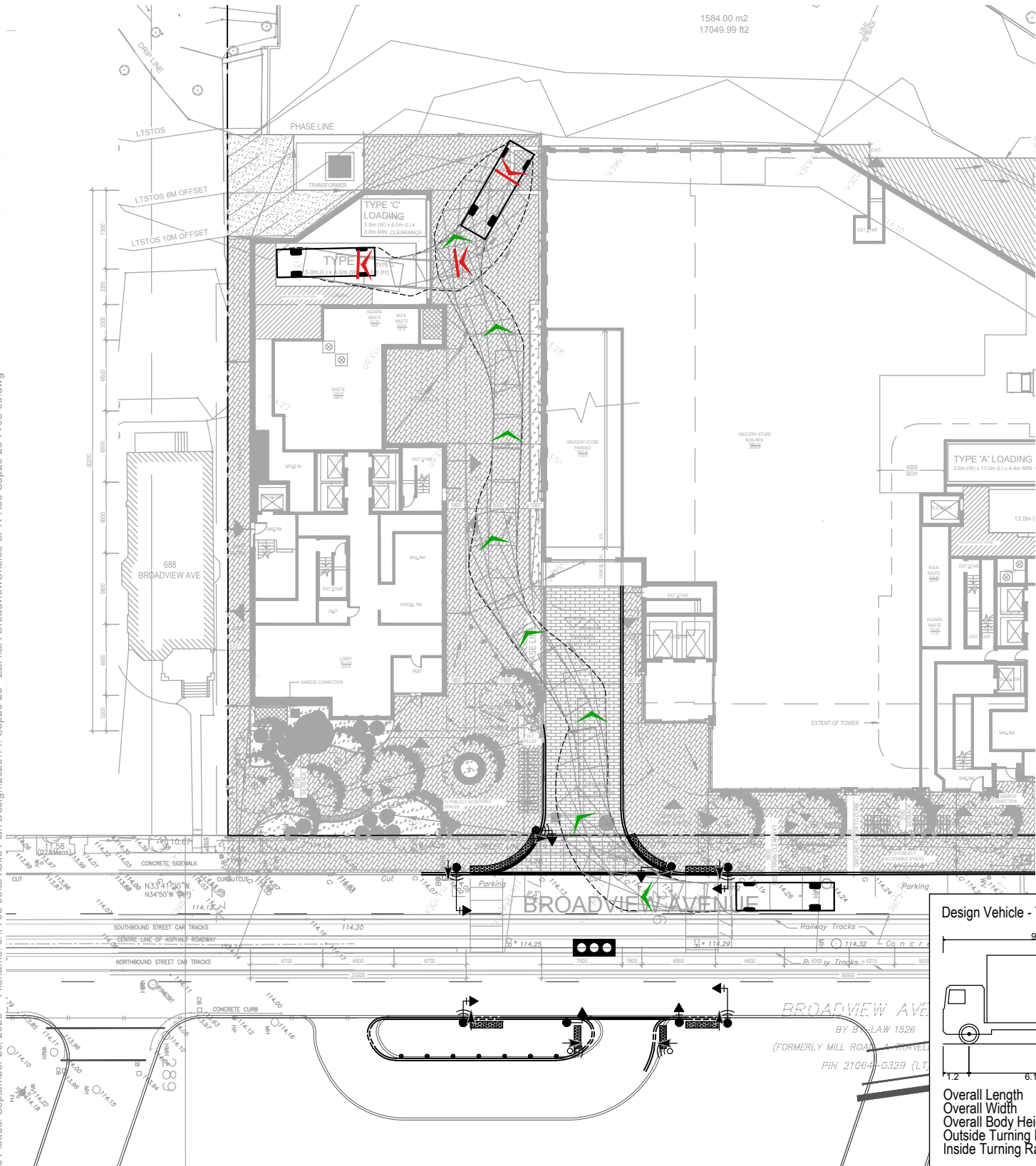
Project: CHOICE - BROADVIEW  
Project No. 7708-09  
Date: JANUARY 10, 2023  
Revised: September 26, 2025

Scale 0 5 10 15 20m  
1:500

Drawing No. **VMD (09)**



Date Plotted: September 26, 2025    Filename: J:\7708-09\BA\Site Plan Design\202514\_Sep26-25 - ZBA\BA-BroadviewChoice-SPR-R33-Sep26-25-7708-09.dwg



**CHOICE - BROADVIEW**  
**VEHICLE MANOEUVRING DIAGRAM**  
**SOUTH BLOCK - TYPE 'G'**  
**TAC SINGLE UNIT (SU) TRUCK**

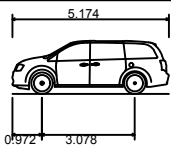
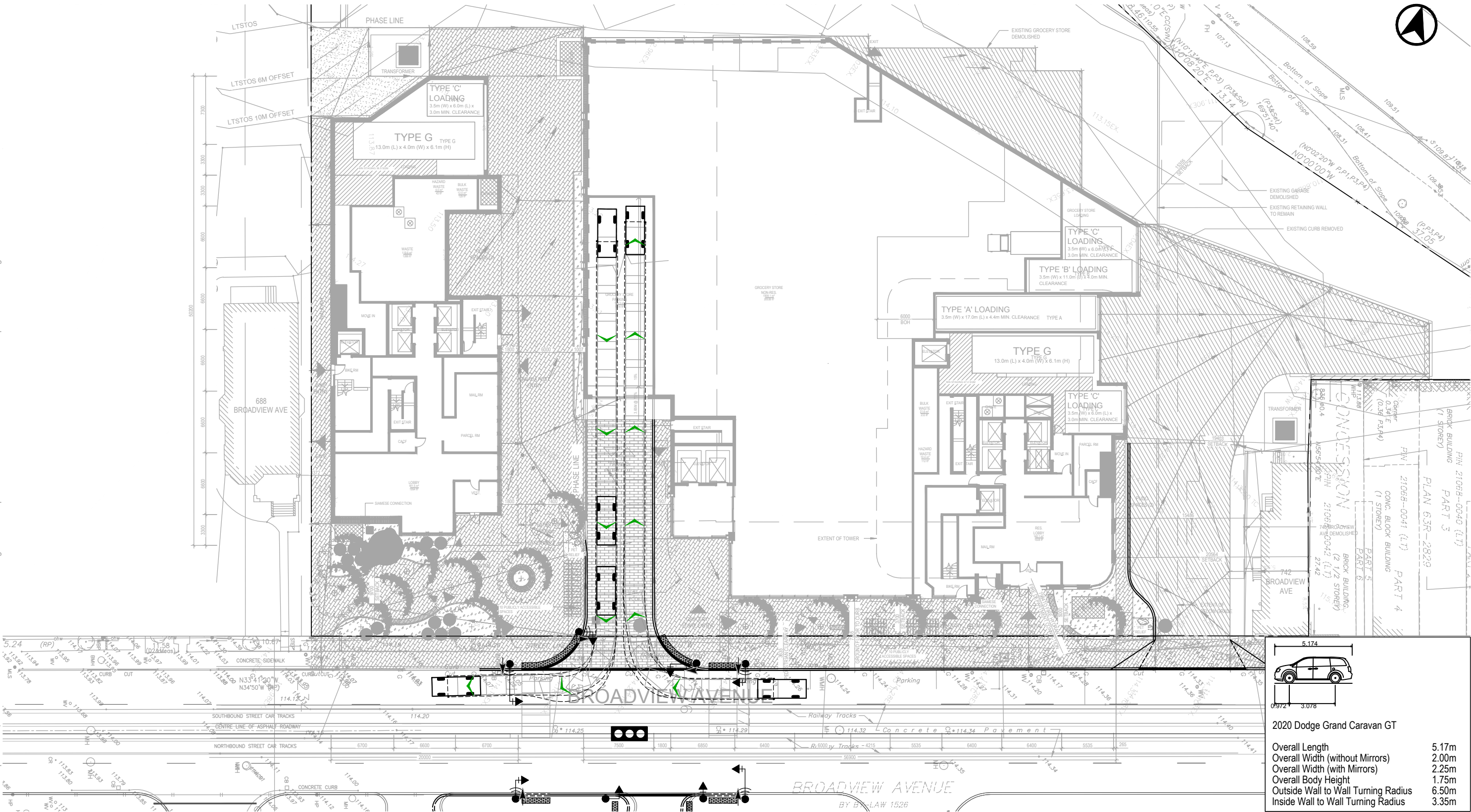
Project: CHOICE - BROADVIEW  
Project No. 7708-09  
Date: JANUARY 10, 2023  
Revised: September 26, 2025

Scale  
0 5 10 15 20m  
1:500

Drawing No.  
**VMD (10)**



File: J:\7708-09\B\Site Plan Design\202514, Sep26-25 - ZBA\BA-BroadviewChoice-SPR-R33-Sep26-25-7708-09.dwg  
Date Plotted: September 26, 2025



2020 Dodge Grand Caravan GT

|                                     |       |
|-------------------------------------|-------|
| Overall Length                      | 5.17m |
| Overall Width (without Mirrors)     | 2.00m |
| Overall Width (with Mirrors)        | 2.25m |
| Overall Body Height                 | 1.75m |
| Outside Wall to Wall Turning Radius | 6.50m |
| Inside Wall to Wall Turning Radius  | 3.35m |



CHOICE - BROADVIEW  
VEHICLE MANOEUVRING DIAGRAM  
SOUTH BLOCK - RAMP  
DODGE GRAND CARAVAN (90% PASSENGER VEHICLE)

Project: CHOICE - BROADVIEW  
Project No. 7708-09  
Date: JULY 27, 2021  
Revised: September 26, 2025



Drawing No. VMD (11)



## **Appendix D: Existing Turning Movement Counts**







Turning Movement Count (2 . BROADVIEW AVE & 720 BROADVIEW AVE (NOFRILLS LOADING ENTRANCE))

| Start Time          | N Approach<br>BROADVIEW AVE |             |              |            |                | S Approach<br>BROADVIEW AVE |             |              |            |                | W Approach<br>720 BROADVIEW AVE |             |              |            |                | Int. Total<br>(15 min) | Int. Total<br>(1 hr) |
|---------------------|-----------------------------|-------------|--------------|------------|----------------|-----------------------------|-------------|--------------|------------|----------------|---------------------------------|-------------|--------------|------------|----------------|------------------------|----------------------|
|                     | Right<br>N:W                | Thru<br>N:S | UTurn<br>N:N | Peds<br>N: | Approach Total | Thru<br>S:N                 | Left<br>S:W | UTurn<br>S:S | Peds<br>S: | Approach Total | Right<br>W:S                    | Left<br>W:N | UTurn<br>W:W | Peds<br>W: | Approach Total |                        |                      |
| 2025-05-06 07:30:00 | 0                           | 72          | 0            | 2          | 72             | 70                          | 0           | 0            | 1          | 70             | 0                               | 0           | 0            | 22         | 0              | 142                    |                      |
| 2025-05-06 07:45:00 | 0                           | 80          | 0            | 1          | 80             | 90                          | 0           | 0            | 0          | 90             | 0                               | 0           | 0            | 28         | 0              | 170                    |                      |
| 2025-05-06 08:00:00 | 0                           | 80          | 0            | 1          | 80             | 94                          | 0           | 0            | 0          | 94             | 0                               | 1           | 0            | 32         | 1              | 175                    |                      |
| 2025-05-06 08:15:00 | 1                           | 106         | 0            | 3          | 107            | 96                          | 1           | 0            | 1          | 97             | 0                               | 0           | 0            | 40         | 0              | 204                    | 691                  |
| 2025-05-06 08:30:00 | 0                           | 105         | 1            | 1          | 106            | 109                         | 1           | 0            | 1          | 110            | 0                               | 1           | 0            | 58         | 1              | 217                    | 766                  |
| 2025-05-06 08:45:00 | 1                           | 89          | 0            | 1          | 90             | 93                          | 0           | 0            | 2          | 93             | 0                               | 0           | 0            | 49         | 0              | 183                    | 779                  |
| 2025-05-06 09:00:00 | 0                           | 88          | 0            | 1          | 88             | 96                          | 0           | 0            | 3          | 96             | 0                               | 0           | 0            | 36         | 0              | 184                    | 788                  |
| 2025-05-06 09:15:00 | 1                           | 79          | 0            | 3          | 80             | 80                          | 0           | 0            | 1          | 80             | 0                               | 0           | 0            | 38         | 0              | 160                    | 744                  |
| ***BREAK***         |                             |             |              |            |                |                             |             |              |            |                |                                 |             |              |            |                |                        |                      |
| 2025-05-06 16:00:00 | 0                           | 107         | 0            | 5          | 107            | 105                         | 0           | 0            | 6          | 105            | 0                               | 0           | 0            | 92         | 0              | 212                    |                      |
| 2025-05-06 16:15:00 | 0                           | 95          | 0            | 1          | 95             | 130                         | 0           | 0            | 3          | 130            | 0                               | 0           | 0            | 130        | 0              | 225                    |                      |
| 2025-05-06 16:30:00 | 2                           | 101         | 0            | 3          | 103            | 105                         | 0           | 0            | 3          | 105            | 1                               | 1           | 0            | 117        | 2              | 210                    |                      |
| 2025-05-06 16:45:00 | 0                           | 129         | 0            | 0          | 129            | 124                         | 0           | 1            | 6          | 125            | 0                               | 2           | 0            | 114        | 2              | 256                    | 903                  |
| 2025-05-06 17:00:00 | 0                           | 104         | 0            | 2          | 104            | 100                         | 0           | 0            | 8          | 100            | 0                               | 0           | 0            | 130        | 0              | 204                    | 895                  |
| 2025-05-06 17:15:00 | 0                           | 114         | 1            | 3          | 115            | 108                         | 1           | 0            | 7          | 109            | 0                               | 2           | 0            | 110        | 2              | 226                    | 896                  |
| 2025-05-06 17:30:00 | 0                           | 115         | 1            | 0          | 116            | 125                         | 0           | 0            | 2          | 125            | 0                               | 1           | 0            | 115        | 1              | 242                    | 928                  |
| 2025-05-06 17:45:00 | 1                           | 121         | 1            | 4          | 123            | 118                         | 0           | 0            | 4          | 118            | 1                               | 1           | 0            | 124        | 2              | 243                    | 915                  |
| Grand Total         | 6                           | 1585        | 4            | 31         | 1595           | 1643                        | 3           | 1            | 48         | 1647           | 2                               | 9           | 0            | 1235       | 11             | 3253                   | -                    |
| Approach%           | 0.4%                        | 99.4%       | 0.3%         |            | -              | 99.8%                       | 0.2%        | 0.1%         |            | -              | 18.2%                           | 81.8%       | 0%           |            | -              | -                      | -                    |
| Totals %            | 0.2%                        | 48.7%       | 0.1%         |            | 49%            | 50.5%                       | 0.1%        | 0%           |            | 50.6%          | 0.1%                            | 0.3%        | 0%           |            | 0.3%           | -                      | -                    |
| Heavy               | 1                           | 111         | 0            |            | -              | 110                         | 0           | 0            |            | -              | 0                               | 0           | 0            |            | -              | -                      | -                    |
| Heavy %             | 16.7%                       | 7%          | 0%           |            | -              | 6.7%                        | 0%          | 0%           |            | -              | 0%                              | 0%          | 0%           |            | -              | -                      | -                    |
| Bicycles            | 0                           | 165         | 0            |            | -              | 121                         | 0           | 0            |            | -              | 1                               | 0           | 0            |            | -              | -                      | -                    |
| Bicycle %           | 0%                          | 10.4%       | 0%           |            | -              | 7.4%                        | 0%          | 0%           |            | -              | 50%                             | 0%          | 0%           |            | -              | -                      | -                    |





Peak Hour: 08:15 AM - 09:15 AM Weather: Overcast Clouds (9 °C)

| Start Time             | N Approach<br>BROADVIEW AVE |       |       |      |                | S Approach<br>BROADVIEW AVE |      |       |      |                | W Approach<br>720 BROADVIEW AVE |      |       |       |                | Int. Total<br>(15 min) |
|------------------------|-----------------------------|-------|-------|------|----------------|-----------------------------|------|-------|------|----------------|---------------------------------|------|-------|-------|----------------|------------------------|
|                        | Right                       | Thru  | UTurn | Peds | Approach Total | Thru                        | Left | UTurn | Peds | Approach Total | Right                           | Left | UTurn | Peds  | Approach Total |                        |
| 2025-05-06 08:15:00    | 1                           | 106   | 0     | 3    | 107            | 96                          | 1    | 0     | 1    | 97             | 0                               | 0    | 0     | 40    | 0              | 204                    |
| 2025-05-06 08:30:00    | 0                           | 105   | 1     | 1    | 106            | 109                         | 1    | 0     | 1    | 110            | 0                               | 1    | 0     | 58    | 1              | 217                    |
| 2025-05-06 08:45:00    | 1                           | 89    | 0     | 1    | 90             | 93                          | 0    | 0     | 2    | 93             | 0                               | 0    | 0     | 49    | 0              | 183                    |
| 2025-05-06 09:00:00    | 0                           | 88    | 0     | 1    | 88             | 96                          | 0    | 0     | 3    | 96             | 0                               | 0    | 0     | 36    | 0              | 184                    |
| Grand Total            | 2                           | 388   | 1     | 6    | 391            | 394                         | 2    | 0     | 7    | 396            | 0                               | 1    | 0     | 183   | 1              | 788                    |
| Approach%              | 0.5%                        | 99.2% | 0.3%  |      | -              | 99.5%                       | 0.5% | 0%    |      | -              | 0%                              | 100% | 0%    |       | -              | -                      |
| Totals %               | 0.3%                        | 49.2% | 0.1%  |      | 49.6%          | 50%                         | 0.3% | 0%    |      | 50.3%          | 0%                              | 0.1% | 0%    |       | 0.1%           | -                      |
| PHF                    | 0.5                         | 0.92  | 0.25  |      | 0.91           | 0.9                         | 0.5  | 0     |      | 0.9            | 0                               | 0.25 | 0     |       | 0.25           | 0.91                   |
| Heavy                  | 1                           | 32    | 0     |      | 33             | 29                          | 0    | 0     |      | 29             | 0                               | 0    | 0     |       | 0              | 62                     |
| Heavy %                | 50%                         | 8.2%  | 0%    |      | 8.4%           | 7.4%                        | 0%   | 0%    |      | 7.3%           | 0%                              | 0%   | 0%    |       | 0%             | 7.9%                   |
| Lights                 | 1                           | 356   | 1     |      | 358            | 365                         | 2    | 0     |      | 367            | 0                               | 1    | 0     |       | 1              | 726                    |
| Lights %               | 50%                         | 91.8% | 100%  |      | 91.6%          | 92.6%                       | 100% | 0%    |      | 92.7%          | 0%                              | 100% | 0%    |       | 100%           | 92.1%                  |
| Single-Unit Trucks     | 1                           | 6     | 0     |      | 7              | 8                           | 0    | 0     |      | 8              | 0                               | 0    | 0     |       | 0              | 15                     |
| Single-Unit Trucks %   | 50%                         | 1.5%  | 0%    |      | 1.8%           | 2%                          | 0%   | 0%    |      | 2%             | 0%                              | 0%   | 0%    |       | 0%             | 1.9%                   |
| Buses                  | 0                           | 13    | 0     |      | 13             | 10                          | 0    | 0     |      | 10             | 0                               | 0    | 0     |       | 0              | 23                     |
| Buses %                | 0%                          | 3.4%  | 0%    |      | 3.3%           | 2.5%                        | 0%   | 0%    |      | 2.5%           | 0%                              | 0%   | 0%    |       | 0%             | 2.9%                   |
| Street-Car             | 0                           | 13    | 0     |      | 13             | 11                          | 0    | 0     |      | 11             | 0                               | 0    | 0     |       | 0              | 24                     |
| Street-Car %           | 0%                          | 3.4%  | 0%    |      | 3.3%           | 2.8%                        | 0%   | 0%    |      | 2.8%           | 0%                              | 0%   | 0%    |       | 0%             | 3%                     |
| Pedestrians            | -                           | -     | -     | 6    | -              | -                           | -    | -     | 6    | -              | -                               | -    | -     | 176   | -              | -                      |
| Pedestrians%           | -                           | -     | -     | 3.1% | -              | -                           | -    | -     | 3.1% | -              | -                               | -    | -     | 89.8% | -              | -                      |
| Bicycles on Crosswalk  | -                           | -     | -     | 0    | -              | -                           | -    | -     | 1    | -              | -                               | -    | -     | 7     | -              | -                      |
| Bicycles on Crosswalk% | -                           | -     | -     | 0%   | -              | -                           | -    | -     | 0.5% | -              | -                               | -    | -     | 3.6%  | -              | -                      |
| Bicycles on Road       | 0                           | 25    | 0     |      | -              | 37                          | 0    | 0     |      | -              | 0                               | 0    | 0     |       | -              | -                      |
| Bicycles on Road%      | 0%                          | 100%  | 0%    |      |                | 100%                        | 0%   | 0%    |      |                | 0%                              | 0%   | 0%    |       |                | -                      |





Peak Hour: 04:45 PM - 05:45 PM Weather: Clear Sky (18 °C)

| Start Time             | N Approach<br>BROADVIEW AVE |       |       |      |                | S Approach<br>BROADVIEW AVE |      |       |      |                | W Approach<br>720 BROADVIEW AVE |      |       |       |                | Int. Total<br>(15 min) |
|------------------------|-----------------------------|-------|-------|------|----------------|-----------------------------|------|-------|------|----------------|---------------------------------|------|-------|-------|----------------|------------------------|
|                        | Right                       | Thru  | UTurn | Peds | Approach Total | Thru                        | Left | UTurn | Peds | Approach Total | Right                           | Left | UTurn | Peds  | Approach Total |                        |
| 2025-05-06 16:45:00    | 0                           | 129   | 0     | 0    | 129            | 124                         | 0    | 1     | 6    | 125            | 0                               | 2    | 0     | 114   | 2              | 256                    |
| 2025-05-06 17:00:00    | 0                           | 104   | 0     | 2    | 104            | 100                         | 0    | 0     | 8    | 100            | 0                               | 0    | 0     | 130   | 0              | 204                    |
| 2025-05-06 17:15:00    | 0                           | 114   | 1     | 3    | 115            | 108                         | 1    | 0     | 7    | 109            | 0                               | 2    | 0     | 110   | 2              | 226                    |
| 2025-05-06 17:30:00    | 0                           | 115   | 1     | 0    | 116            | 125                         | 0    | 0     | 2    | 125            | 0                               | 1    | 0     | 115   | 1              | 242                    |
| Grand Total            | 0                           | 462   | 2     | 5    | 464            | 457                         | 1    | 1     | 23   | 459            | 0                               | 5    | 0     | 469   | 5              | 928                    |
| Approach%              | 0%                          | 99.6% | 0.4%  |      | -              | 99.6%                       | 0.2% | 0.2%  |      | -              | 0%                              | 100% | 0%    |       | -              | -                      |
| Totals %               | 0%                          | 49.8% | 0.2%  |      | 50%            | 49.2%                       | 0.1% | 0.1%  |      | 49.5%          | 0%                              | 0.5% | 0%    |       | 0.5%           | -                      |
| PHF                    | 0                           | 0.9   | 0.5   |      | 0.9            | 0.91                        | 0.25 | 0.25  |      | 0.92           | 0                               | 0.63 | 0     |       | 0.63           | 0.91                   |
| Heavy                  | 0                           | 24    | 0     |      | 24             | 21                          | 0    | 0     |      | 21             | 0                               | 0    | 0     |       | 0              | 45                     |
| Heavy %                | 0%                          | 5.2%  | 0%    |      | 5.2%           | 4.6%                        | 0%   | 0%    |      | 4.6%           | 0%                              | 0%   | 0%    |       | 0%             | 4.8%                   |
| Lights                 | 0                           | 438   | 2     |      | 440            | 436                         | 1    | 1     |      | 438            | 0                               | 5    | 0     |       | 5              | 883                    |
| Lights %               | 0%                          | 94.8% | 100%  |      | 94.8%          | 95.4%                       | 100% | 100%  |      | 95.4%          | 0%                              | 100% | 0%    |       | 100%           | 95.2%                  |
| Single-Unit Trucks     | 0                           | 1     | 0     |      | 1              | 2                           | 0    | 0     |      | 2              | 0                               | 0    | 0     |       | 0              | 3                      |
| Single-Unit Trucks %   | 0%                          | 0.2%  | 0%    |      | 0.2%           | 0.4%                        | 0%   | 0%    |      | 0.4%           | 0%                              | 0%   | 0%    |       | 0%             | 0.3%                   |
| Buses                  | 0                           | 9     | 0     |      | 9              | 8                           | 0    | 0     |      | 8              | 0                               | 0    | 0     |       | 0              | 17                     |
| Buses %                | 0%                          | 1.9%  | 0%    |      | 1.9%           | 1.8%                        | 0%   | 0%    |      | 1.7%           | 0%                              | 0%   | 0%    |       | 0%             | 1.8%                   |
| Street-Car             | 0                           | 14    | 0     |      | 14             | 11                          | 0    | 0     |      | 11             | 0                               | 0    | 0     |       | 0              | 25                     |
| Street-Car %           | 0%                          | 3%    | 0%    |      | 3%             | 2.4%                        | 0%   | 0%    |      | 2.4%           | 0%                              | 0%   | 0%    |       | 0%             | 2.7%                   |
| Pedestrians            | -                           | -     | -     | 5    | -              | -                           | -    | -     | 23   | -              | -                               | -    | -     | 465   | -              | -                      |
| Pedestrians%           | -                           | -     | -     | 1%   | -              | -                           | -    | -     | 4.6% | -              | -                               | -    | -     | 93.6% | -              | -                      |
| Bicycles on Crosswalk  | -                           | -     | -     | 0    | -              | -                           | -    | -     | 0    | -              | -                               | -    | -     | 4     | -              | -                      |
| Bicycles on Crosswalk% | -                           | -     | -     | 0%   | -              | -                           | -    | -     | 0%   | -              | -                               | -    | -     | 0.8%  | -              | -                      |
| Bicycles on Road       | 0                           | 71    | 0     |      | -              | 36                          | 0    | 0     |      | -              | 1                               | 0    | 0     |       | -              | -                      |
| Bicycles on Road%      | 0%                          | 100%  | 0%    |      |                | 100%                        | 0%   | 0%    |      |                | 100%                            | 0%   | 0%    |       |                | -                      |

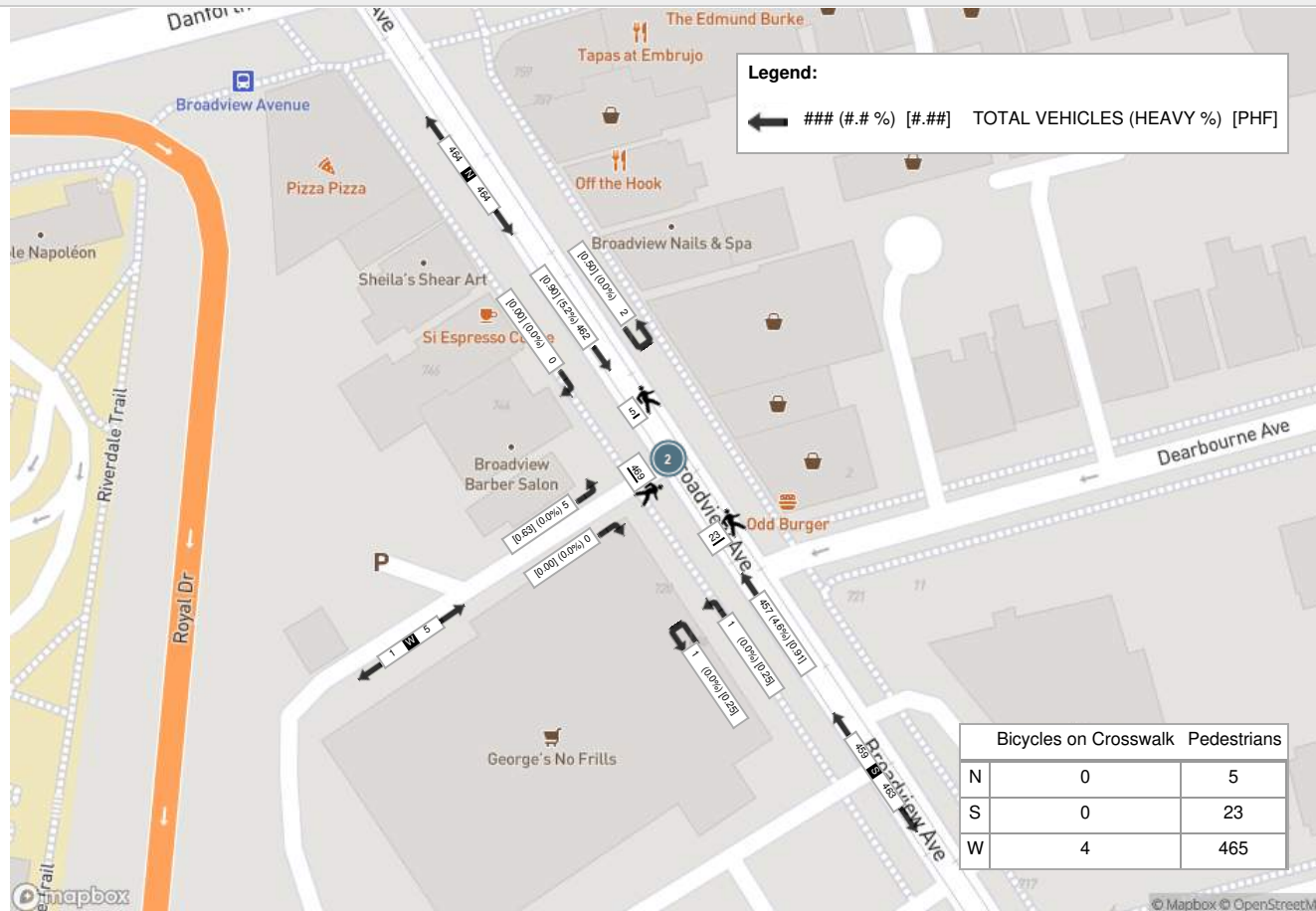


**Peak Hour: 08:15 AM - 09:15 AM Weather: Overcast Clouds (9 °C)**





**Peak Hour: 04:45 PM - 05:45 PM Weather: Clear Sky (18 °C)**







Turning Movement Count (4 . BROADVIEW AVE & 720 BROADVIEW AVE (NORTH PARKING LOT ENTRANCE))

| Start Time          | N Approach<br>BROADVIEW AVE |             |             |              |            |                | E Approach<br>EAST BUILDING DRIVEWAY |             |             |              |            |                | S Approach<br>BROADVIEW AVE |             |             |              |            |                | W Approach<br>720 BROADVIEW AVE (NORTH PARKING LOT ENTRANCE) |             |             |              |            |                | Int. Total<br>(15 min) | Int. Total<br>(1 hr) |  |
|---------------------|-----------------------------|-------------|-------------|--------------|------------|----------------|--------------------------------------|-------------|-------------|--------------|------------|----------------|-----------------------------|-------------|-------------|--------------|------------|----------------|--------------------------------------------------------------|-------------|-------------|--------------|------------|----------------|------------------------|----------------------|--|
|                     | Right<br>N:W                | Thru<br>N:S | Left<br>N:E | UTurn<br>N:N | Peds<br>N: | Approach Total | Right<br>E:N                         | Thru<br>E:W | Left<br>E:S | UTurn<br>E:E | Peds<br>E: | Approach Total | Right<br>S:E                | Thru<br>S:N | Left<br>S:W | UTurn<br>S:S | Peds<br>S: | Approach Total | Right<br>W:S                                                 | Thru<br>W:E | Left<br>W:N | UTurn<br>W:W | Peds<br>W: | Approach Total |                        |                      |  |
| 2025-05-06 07:30:00 | 7                           | 66          | 0           | 0            | 5          | 73             | 0                                    | 0           | 0           | 0            | 25         | 0              | 0                           | 68          | 4           | 0            | 0          | 72             | 0                                                            | 0           | 0           | 0            | 22         | 0              | 145                    |                      |  |
| 2025-05-06 07:45:00 | 8                           | 75          | 0           | 0            | 4          | 83             | 0                                    | 0           | 0           | 0            | 39         | 0              | 0                           | 84          | 6           | 0            | 2          | 90             | 0                                                            | 0           | 0           | 0            | 24         | 0              | 173                    |                      |  |
| 2025-05-06 08:00:00 | 7                           | 74          | 0           | 1            | 3          | 82             | 0                                    | 0           | 0           | 0            | 41         | 0              | 0                           | 94          | 6           | 0            | 1          | 100            | 0                                                            | 0           | 0           | 0            | 28         | 0              | 182                    |                      |  |
| 2025-05-06 08:15:00 | 8                           | 96          | 0           | 0            | 4          | 104            | 0                                    | 0           | 0           | 0            | 51         | 0              | 0                           | 81          | 4           | 0            | 0          | 85             | 0                                                            | 0           | 1           | 0            | 34         | 1              | 190                    | 690                  |  |
| 2025-05-06 08:30:00 | 11                          | 100         | 0           | 0            | 6          | 111            | 0                                    | 0           | 0           | 0            | 61         | 0              | 0                           | 106         | 5           | 0            | 0          | 111            | 0                                                            | 0           | 0           | 0            | 46         | 0              | 222                    | 767                  |  |
| 2025-05-06 08:45:00 | 9                           | 81          | 0           | 1            | 0          | 91             | 0                                    | 0           | 0           | 0            | 35         | 0              | 0                           | 81          | 3           | 0            | 1          | 84             | 0                                                            | 0           | 0           | 0            | 40         | 0              | 175                    | 769                  |  |
| 2025-05-06 09:00:00 | 8                           | 81          | 0           | 0            | 5          | 89             | 1                                    | 0           | 1           | 0            | 41         | 2              | 0                           | 86          | 6           | 0            | 0          | 92             | 0                                                            | 0           | 0           | 0            | 18         | 0              | 183                    | 770                  |  |
| 2025-05-06 09:15:00 | 11                          | 68          | 0           | 0            | 3          | 79             | 1                                    | 0           | 1           | 0            | 42         | 2              | 0                           | 73          | 1           | 0            | 1          | 74             | 0                                                            | 0           | 0           | 0            | 33         | 0              | 155                    | 735                  |  |
| ***BREAK***         |                             |             |             |              |            |                |                                      |             |             |              |            |                |                             |             |             |              |            |                |                                                              |             |             |              |            |                |                        |                      |  |
| 2025-05-06 16:00:00 | 14                          | 93          | 0           | 1            | 7          | 108            | 0                                    | 0           | 1           | 0            | 58         | 1              | 0                           | 101         | 6           | 0            | 0          | 107            | 0                                                            | 0           | 0           | 0            | 61         | 0              | 216                    |                      |  |
| 2025-05-06 16:15:00 | 15                          | 85          | 0           | 0            | 6          | 100            | 1                                    | 0           | 1           | 0            | 63         | 2              | 0                           | 117         | 10          | 1            | 1          | 128            | 0                                                            | 0           | 1           | 0            | 68         | 1              | 231                    |                      |  |
| 2025-05-06 16:30:00 | 8                           | 100         | 0           | 0            | 3          | 108            | 0                                    | 0           | 0           | 0            | 68         | 0              | 0                           | 99          | 7           | 0            | 0          | 106            | 0                                                            | 0           | 0           | 0            | 82         | 0              | 214                    |                      |  |
| 2025-05-06 16:45:00 | 17                          | 119         | 0           | 0            | 4          | 136            | 2                                    | 0           | 0           | 0            | 73         | 2              | 0                           | 113         | 9           | 0            | 2          | 122            | 0                                                            | 0           | 0           | 0            | 106        | 0              | 260                    | 921                  |  |
| 2025-05-06 17:00:00 | 9                           | 98          | 0           | 0            | 3          | 107            | 0                                    | 0           | 0           | 0            | 60         | 0              | 0                           | 94          | 14          | 0            | 0          | 108            | 0                                                            | 0           | 1           | 0            | 100        | 1              | 216                    | 921                  |  |
| 2025-05-06 17:15:00 | 10                          | 107         | 0           | 0            | 2          | 117            | 0                                    | 0           | 0           | 0            | 68         | 0              | 0                           | 103         | 12          | 0            | 0          | 115            | 0                                                            | 0           | 0           | 0            | 79         | 0              | 232                    | 922                  |  |
| 2025-05-06 17:30:00 | 18                          | 100         | 0           | 0            | 5          | 118            | 0                                    | 0           | 0           | 0            | 84         | 0              | 0                           | 127         | 9           | 0            | 1          | 136            | 0                                                            | 0           | 0           | 0            | 84         | 0              | 254                    | 962                  |  |
| 2025-05-06 17:45:00 | 12                          | 119         | 0           | 1            | 3          | 132            | 0                                    | 0           | 0           | 0            | 99         | 0              | 0                           | 104         | 4           | 0            | 0          | 108            | 0                                                            | 0           | 0           | 0            | 100        | 0              | 240                    | 942                  |  |
| Grand Total         | 172                         | 1462        | 0           | 4            | 63         | 1638           | 5                                    | 0           | 4           | 0            | 908        | 9              | 0                           | 1531        | 106         | 1            | 9          | 1638           | 0                                                            | 0           | 3           | 0            | 925        | 3              | 3288                   | -                    |  |
| Approach%           | 10.5%                       | 89.3%       | 0%          | 0.2%         | -          | -              | 55.6%                                | 0%          | 44.4%       | 0%           | -          | -              | 0%                          | 93.5%       | 6.5%        | 0.1%         | -          | -              | 0%                                                           | 0%          | 100%        | 0%           | -          | -              | -                      | -                    |  |
| Totals %            | 5.2%                        | 44.5%       | 0%          | 0.1%         | -          | 49.8%          | 0.2%                                 | 0%          | 0.1%        | 0%           | 0.3%       | 0%             | 0%                          | 46.6%       | 3.2%        | 0%           | -          | 49.8%          | 0%                                                           | 0%          | 0.1%        | 0%           | 0.1%       | -              | -                      | -                    |  |
| Heavy               | 1                           | 112         | 0           | 0            | -          | -              | 1                                    | 0           | 1           | 0            | -          | -              | 0                           | 106         | 0           | 0            | -          | -              | 0                                                            | 0           | 2           | 0            | -          | -              | -                      | -                    |  |
| Heavy %             | 0.6%                        | 7.7%        | 0%          | 0%           | -          | -              | 20%                                  | 0%          | 25%         | 0%           | -          | -              | 0%                          | 6.9%        | 0%          | 0%           | -          | -              | 0%                                                           | 0%          | 66.7%       | 0%           | -          | -              | -                      | -                    |  |
| Bicycles            | 2                           | 166         | 0           | 0            | -          | -              | 0                                    | 0           | 0           | 0            | -          | -              | 0                           | 101         | 0           | 0            | -          | -              | 0                                                            | 0           | 0           | 0            | -          | -              | -                      | -                    |  |
| Bicycle %           | 1.2%                        | 11.4%       | 0%          | 0%           | -          | -              | 0%                                   | 0%          | 0%          | 0%           | -          | -              | 0%                          | 6.6%        | 0%          | 0%           | -          | -              | 0%                                                           | 0%          | 0%          | 0%           | -          | -              | -                      | -                    |  |





Peak Hour: 08:15 AM - 09:15 AM Weather: Overcast Clouds (9 °C)

| Start Time             | N Approach<br>BROADVIEW AVE |       |      |       |      |                | E Approach<br>EAST BUILDING DRIVEWAY |      |      |       |       |                | S Approach<br>BROADVIEW AVE |       |      |       |      |                | W Approach<br>720 BROADVIEW AVE (NORTH PARKING LOT ENTRANCE) |      |      |       |       |                | Int. Total<br>(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 |                        |
| 2025-05-06 08:15:00    | 8                           | 96    | 0    | 0     | 4    | 104            | 0                                    | 0    | 0    | 0     | 51    | 0              | 0                           | 81    | 4    | 0     | 0    | 85             | 0                                                            | 0    | 1    | 0     | 34    | 1              | 190                    |
| 2025-05-06 08:30:00    | 11                          | 100   | 0    | 0     | 6    | 111            | 0                                    | 0    | 0    | 0     | 61    | 0              | 0                           | 106   | 5    | 0     | 0    | 111            | 0                                                            | 0    | 0    | 0     | 46    | 0              | 222                    |
| 2025-05-06 08:45:00    | 9                           | 81    | 0    | 1     | 0    | 91             | 0                                    | 0    | 0    | 0     | 35    | 0              | 0                           | 81    | 3    | 0     | 1    | 84             | 0                                                            | 0    | 0    | 0     | 40    | 0              | 175                    |
| 2025-05-06 09:00:00    | 8                           | 81    | 0    | 0     | 5    | 89             | 1                                    | 0    | 1    | 0     | 41    | 2              | 0                           | 86    | 6    | 0     | 0    | 92             | 0                                                            | 0    | 0    | 0     | 18    | 0              | 183                    |
| Grand Total            | 36                          | 358   | 0    | 1     | 15   | 395            | 1                                    | 0    | 1    | 0     | 188   | 2              | 0                           | 354   | 18   | 0     | 1    | 372            | 0                                                            | 0    | 1    | 0     | 138   | 1              | 770                    |
| Approach%              | 9.1%                        | 90.6% | 0%   | 0.3%  |      | -              | 50%                                  | 0%   | 50%  | 0%    |       | -              | 0%                          | 95.2% | 4.8% | 0%    |      | -              | 0%                                                           | 0%   | 100% | 0%    |       | -              | -                      |
| Totals %               | 4.7%                        | 46.5% | 0%   | 0.1%  |      | 51.3%          | 0.1%                                 | 0%   | 0.1% | 0%    |       | 0.3%           | 0%                          | 46%   | 2.3% | 0%    |      | 48.3%          | 0%                                                           | 0%   | 0.1% | 0%    |       | 0.1%           | -                      |
| PHF                    | 0.82                        | 0.9   | 0    | 0.25  |      | 0.89           | 0.25                                 | 0    | 0.25 | 0     |       | 0.25           | 0                           | 0.83  | 0.75 | 0     |      | 0.84           | 0                                                            | 0    | 0.25 | 0     |       | 0.25           | 0.87                   |
| Heavy                  | 0                           | 31    | 0    | 0     |      | 31             | 1                                    | 0    | 1    | 0     |       | 2              | 0                           | 25    | 0    | 0     |      | 25             | 0                                                            | 0    | 1    | 0     |       | 1              | 59                     |
| Heavy %                | 0%                          | 8.7%  | 0%   | 0%    |      | 7.8%           | 100%                                 | 0%   | 100% | 0%    |       | 100%           | 0%                          | 7.1%  | 0%   | 0%    |      | 6.7%           | 0%                                                           | 0%   | 100% | 0%    |       | 100%           | 7.7%                   |
| Lights                 | 36                          | 327   | 0    | 1     |      | 364            | 0                                    | 0    | 0    | 0     |       | 0              | 0                           | 329   | 18   | 0     |      | 347            | 0                                                            | 0    | 0    | 0     |       | 0              | 711                    |
| Lights %               | 100%                        | 91.3% | 0%   | 100%  |      | 92.2%          | 0%                                   | 0%   | 0%   | 0%    |       | 0%             | 0%                          | 92.9% | 100% | 0%    |      | 93.3%          | 0%                                                           | 0%   | 0%   | 0%    |       | 0%             | 92.3%                  |
| Single-Unit Trucks     | 0                           | 4     | 0    | 0     |      | 4              | 0                                    | 0    | 0    | 0     |       | 0              | 0                           | 6     | 0    | 0     |      | 6              | 0                                                            | 0    | 1    | 0     |       | 1              | 11                     |
| Single-Unit Trucks %   | 0%                          | 1.1%  | 0%   | 0%    |      | 1%             | 0%                                   | 0%   | 0%   | 0%    |       | 0%             | 0%                          | 1.7%  | 0%   | 0%    |      | 1.6%           | 0%                                                           | 0%   | 100% | 0%    |       | 100%           | 1.4%                   |
| Buses                  | 0                           | 13    | 0    | 0     |      | 13             | 1                                    | 0    | 1    | 0     |       | 2              | 0                           | 8     | 0    | 0     |      | 8              | 0                                                            | 0    | 0    | 0     |       | 0              | 23                     |
| Buses %                | 0%                          | 3.6%  | 0%   | 0%    |      | 3.3%           | 100%                                 | 0%   | 100% | 0%    |       | 100%           | 0%                          | 2.3%  | 0%   | 0%    |      | 2.2%           | 0%                                                           | 0%   | 0%   | 0%    |       | 0%             | 3%                     |
| Street-Car             | 0                           | 14    | 0    | 0     |      | 14             | 0                                    | 0    | 0    | 0     |       | 0              | 0                           | 11    | 0    | 0     |      | 11             | 0                                                            | 0    | 0    | 0     |       | 0              | 25                     |
| Street-Car %           | 0%                          | 3.9%  | 0%   | 0%    |      | 3.5%           | 0%                                   | 0%   | 0%   | 0%    |       | 0%             | 0%                          | 3.1%  | 0%   | 0%    |      | 3%             | 0%                                                           | 0%   | 0%   | 0%    |       | 0%             | 3.2%                   |
| Pedestrians            | -                           | -     | -    | -     | 15   | -              | -                                    | -    | -    | -     | 186   | -              | -                           | -     | -    | -     | 1    | -              | -                                                            | -    | -    | -     | 135   | -              | -                      |
| Pedestrians%           | -                           | -     | -    | -     | 4.4% | -              | -                                    | -    | -    | -     | 54.4% | -              | -                           | -     | -    | -     | 0.3% | -              | -                                                            | -    | -    | -     | 39.5% | -              | -                      |
| Bicycles on Crosswalk  | -                           | -     | -    | -     | 0    | -              | -                                    | -    | -    | -     | 2     | -              | -                           | -     | -    | -     | 0    | -              | -                                                            | -    | -    | -     | 3     | -              | -                      |
| Bicycles on Crosswalk% | -                           | -     | -    | -     | 0%   | -              | -                                    | -    | -    | -     | 0.6%  | -              | -                           | -     | -    | -     | 0%   | -              | -                                                            | -    | -    | -     | 0.9%  | -              | -                      |
| Bicycles on Road       | 0                           | 26    | 0    | 0     |      | -              | 0                                    | 0    | 0    | 0     |       | -              | 0                           | 29    | 0    | 0     |      | -              | 0                                                            | 0    | 0    | 0     |       | -              | -                      |
| Bicycles on Road%      | 0%                          | 100%  | 0%   | 0%    |      |                | 0%                                   | 0%   | 0%   | 0%    |       |                | 0%                          | 100%  | 0%   | 0%    |      |                | 0%                                                           | 0%   | 0%   | 0%    |       |                | -                      |



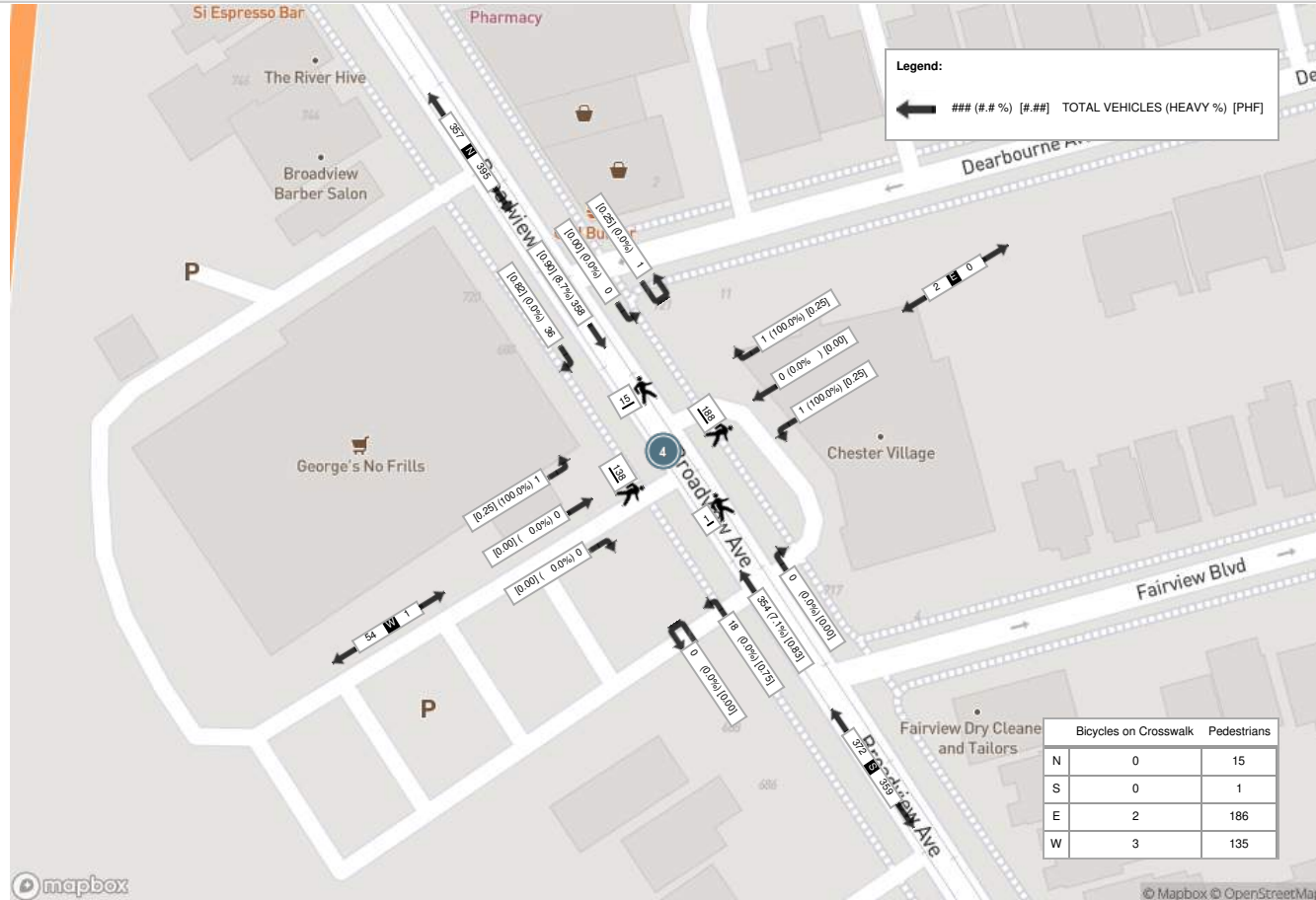


Peak Hour: 04:45 PM - 05:45 PM Weather: Clear Sky (18 °C)

| Start Time             | N Approach<br>BROADVIEW AVE |       |      |       |      |                | E Approach<br>EAST BUILDING DRIVEWAY |      |      |       |       |                | S Approach<br>BROADVIEW AVE |       |      |       |      |                | W Approach<br>720 BROADVIEW AVE (NORTH PARKING LOT ENTRANCE) |      |      |       |       |                | Int. Total<br>(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 |                        |
| 2025-05-06 16:45:00    | 17                          | 119   | 0    | 0     | 4    | 136            | 2                                    | 0    | 0    | 0     | 73    | 2              | 0                           | 113   | 9    | 0     | 2    | 122            | 0                                                            | 0    | 0    | 0     | 106   | 0              | 260                    |
| 2025-05-06 17:00:00    | 9                           | 98    | 0    | 0     | 3    | 107            | 0                                    | 0    | 0    | 0     | 60    | 0              | 0                           | 94    | 14   | 0     | 0    | 108            | 0                                                            | 0    | 1    | 0     | 100   | 1              | 216                    |
| 2025-05-06 17:15:00    | 10                          | 107   | 0    | 0     | 2    | 117            | 0                                    | 0    | 0    | 0     | 68    | 0              | 0                           | 103   | 12   | 0     | 0    | 115            | 0                                                            | 0    | 0    | 0     | 79    | 0              | 232                    |
| 2025-05-06 17:30:00    | 18                          | 100   | 0    | 0     | 5    | 118            | 0                                    | 0    | 0    | 0     | 84    | 0              | 0                           | 127   | 9    | 0     | 1    | 136            | 0                                                            | 0    | 0    | 0     | 84    | 0              | 254                    |
| Grand Total            | 54                          | 424   | 0    | 0     | 14   | 478            | 2                                    | 0    | 0    | 0     | 285   | 2              | 0                           | 437   | 44   | 0     | 3    | 481            | 0                                                            | 0    | 1    | 0     | 369   | 1              | 962                    |
| Approach%              | 11.3%                       | 88.7% | 0%   | 0%    |      | -              | 100%                                 | 0%   | 0%   | 0%    |       | -              | 0%                          | 90.9% | 9.1% | 0%    |      | -              | 0%                                                           | 0%   | 100% | 0%    |       | -              | -                      |
| Totals %               | 5.6%                        | 44.1% | 0%   | 0%    |      | 49.7%          | 0.2%                                 | 0%   | 0%   | 0%    |       | 0.2%           | 0%                          | 45.4% | 4.6% | 0%    |      | 50%            | 0%                                                           | 0%   | 0.1% | 0%    |       | 0.1%           | -                      |
| PHF                    | 0.75                        | 0.89  | 0    | 0     |      | 0.88           | 0.25                                 | 0    | 0    | 0     |       | 0.25           | 0                           | 0.86  | 0.79 | 0     |      | 0.88           | 0                                                            | 0    | 0.25 | 0     |       | 0.25           | 0.93                   |
| Heavy                  | 0                           | 24    | 0    | 0     |      | 24             | 0                                    | 0    | 0    | 0     |       | 0              | 0                           | 20    | 0    | 0     |      | 20             | 0                                                            | 0    | 0    | 0     |       | 0              | 44                     |
| Heavy %                | 0%                          | 5.7%  | 0%   | 0%    |      | 5%             | 0%                                   | 0%   | 0%   | 0%    |       | 0%             | 0%                          | 4.6%  | 0%   | 0%    |      | 4.2%           | 0%                                                           | 0%   | 0%   | 0%    |       | 0%             | 4.6%                   |
| Lights                 | 54                          | 400   | 0    | 0     |      | 454            | 2                                    | 0    | 0    | 0     |       | 2              | 0                           | 417   | 44   | 0     |      | 461            | 0                                                            | 0    | 1    | 0     |       | 1              | 918                    |
| Lights %               | 100%                        | 94.3% | 0%   | 0%    |      | 95%            | 100%                                 | 0%   | 0%   | 0%    |       | 100%           | 0%                          | 95.4% | 100% | 0%    |      | 95.8%          | 0%                                                           | 0%   | 100% | 0%    |       | 100%           | 95.4%                  |
| Single-Unit Trucks     | 0                           | 1     | 0    | 0     |      | 1              | 0                                    | 0    | 0    | 0     |       | 0              | 0                           | 2     | 0    | 0     |      | 2              | 0                                                            | 0    | 0    | 0     |       | 0              | 3                      |
| Single-Unit Trucks %   | 0%                          | 0.2%  | 0%   | 0%    |      | 0.2%           | 0%                                   | 0%   | 0%   | 0%    |       | 0%             | 0%                          | 0.5%  | 0%   | 0%    |      | 0.4%           | 0%                                                           | 0%   | 0%   | 0%    |       | 0%             | 0.3%                   |
| Buses                  | 0                           | 9     | 0    | 0     |      | 9              | 0                                    | 0    | 0    | 0     |       | 0              | 0                           | 7     | 0    | 0     |      | 7              | 0                                                            | 0    | 0    | 0     |       | 0              | 16                     |
| Buses %                | 0%                          | 2.1%  | 0%   | 0%    |      | 1.9%           | 0%                                   | 0%   | 0%   | 0%    |       | 0%             | 0%                          | 1.6%  | 0%   | 0%    |      | 1.5%           | 0%                                                           | 0%   | 0%   | 0%    |       | 0%             | 1.7%                   |
| Street-Car             | 0                           | 14    | 0    | 0     |      | 14             | 0                                    | 0    | 0    | 0     |       | 0              | 0                           | 11    | 0    | 0     |      | 11             | 0                                                            | 0    | 0    | 0     |       | 0              | 25                     |
| Street-Car %           | 0%                          | 3.3%  | 0%   | 0%    |      | 2.9%           | 0%                                   | 0%   | 0%   | 0%    |       | 0%             | 0%                          | 2.5%  | 0%   | 0%    |      | 2.3%           | 0%                                                           | 0%   | 0%   | 0%    |       | 0%             | 2.6%                   |
| Pedestrians            | -                           | -     | -    | -     | 14   | -              | -                                    | -    | -    | -     | 283   | -              | -                           | -     | -    | -     | 3    | -              | -                                                            | -    | -    | -     | 367   | -              | -                      |
| Pedestrians%           | -                           | -     | -    | -     | 2.1% | -              | -                                    | -    | -    | -     | 42.2% | -              | -                           | -     | -    | -     | 0.4% | -              | -                                                            | -    | -    | -     | 54.7% | -              | -                      |
| Bicycles on Crosswalk  | -                           | -     | -    | -     | 0    | -              | -                                    | -    | -    | -     | 2     | -              | -                           | -     | -    | -     | 0    | -              | -                                                            | -    | -    | -     | 2     | -              | -                      |
| Bicycles on Crosswalk% | -                           | -     | -    | -     | 0%   | -              | -                                    | -    | -    | -     | 0.3%  | -              | -                           | -     | -    | -     | 0%   | -              | -                                                            | -    | -    | -     | 0.3%  | -              | -                      |
| Bicycles on Road       | 0                           | 67    | 0    | 0     |      | -              | 0                                    | 0    | 0    | 0     |       | -              | 0                           | 32    | 0    | 0     |      | -              | 0                                                            | 0    | 0    | 0     |       | -              | -                      |
| Bicycles on Road%      | 0%                          | 100%  | 0%   | 0%    |      |                | 0%                                   | 0%   | 0%   | 0%    |       |                | 0%                          | 100%  | 0%   | 0%    |      |                | 0%                                                           | 0%   | 0%   | 0%    |       |                | -                      |

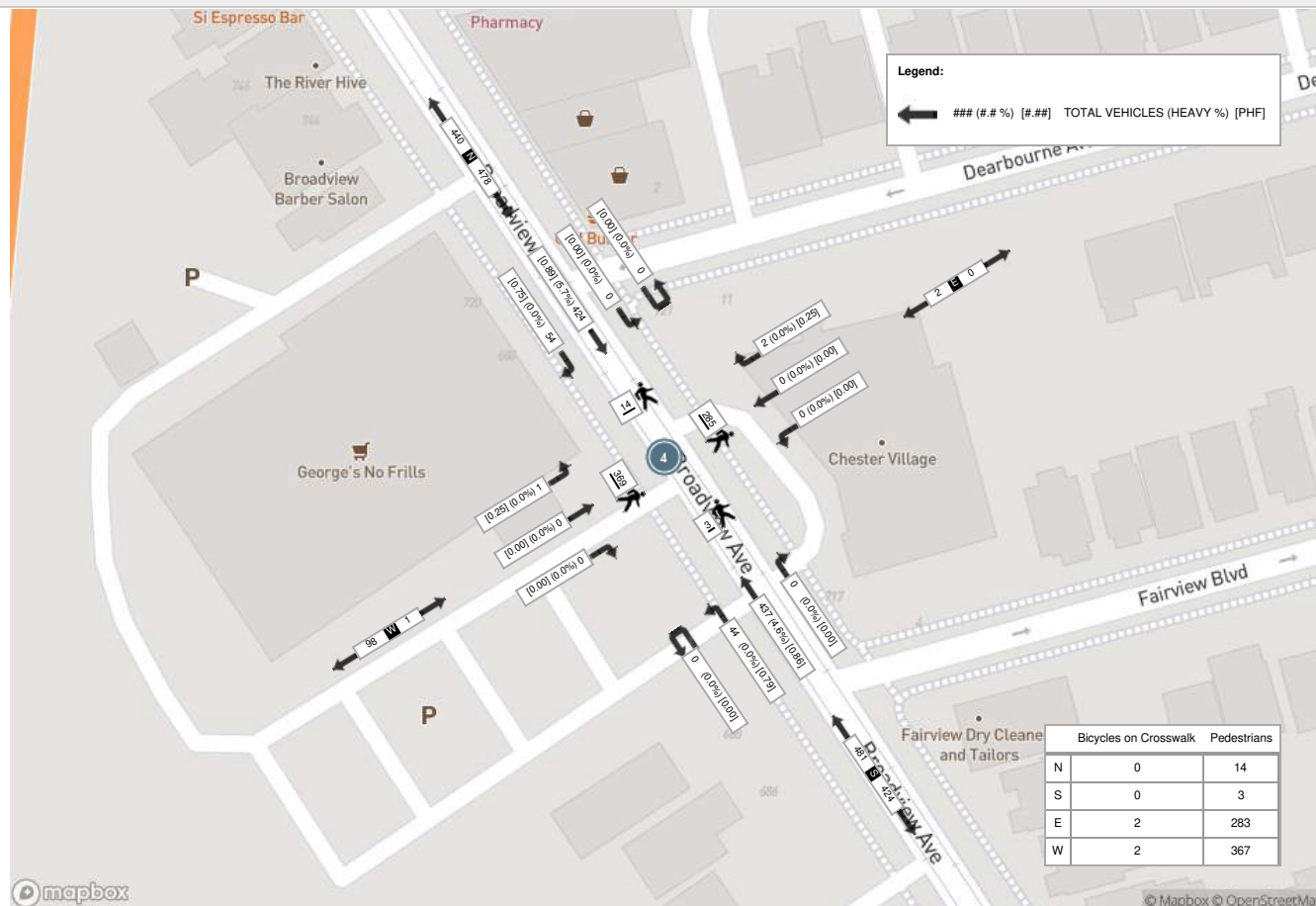


Peak Hour: 08:15 AM - 09:15 AM Weather: Overcast Clouds (9 °C)





Peak Hour: 04:45 PM - 05:45 PM Weather: Clear Sky (18 °C)







Turning Movement Count (5 . BROADVIEW AVE & 720 BROADVIEW AVE (SOUTH PARKING LOT ENTRANCE))

| Start Time          | N Approach<br>BROADVIEW AVE |             |             |              |            |                | E Approach<br>EAST BUILDING DRIVEWAY |             |             |              |            |                | S Approach<br>BROADVIEW AVE |             |             |              |            |                | W Approach<br>720 BROADVIEW AVE (SOUTH PARKING LOT ENTRANCE) |             |             |              |            |                | Int. Total<br>(15 min) | Int. Total<br>(1 hr) |  |
|---------------------|-----------------------------|-------------|-------------|--------------|------------|----------------|--------------------------------------|-------------|-------------|--------------|------------|----------------|-----------------------------|-------------|-------------|--------------|------------|----------------|--------------------------------------------------------------|-------------|-------------|--------------|------------|----------------|------------------------|----------------------|--|
|                     | Right<br>N:W                | Thru<br>N:S | Left<br>N:E | UTurn<br>N:N | Peds<br>N: | Approach Total | Right<br>E:N                         | Thru<br>E:W | Left<br>E:S | UTurn<br>E:E | Peds<br>E: | Approach Total | Right<br>S:E                | Thru<br>S:N | Left<br>S:W | UTurn<br>S:S | Peds<br>S: | Approach Total | Right<br>W:S                                                 | Thru<br>W:E | Left<br>W:N | UTurn<br>W:W | Peds<br>W: | Approach Total |                        |                      |  |
| 2025-05-06 07:30:00 | 0                           | 66          | 0           | 0            | 1          | 66             | 0                                    | 0           | 0           | 0            | 22         | 0              | 0                           | 69          | 0           | 0            | 0          | 69             | 1                                                            | 0           | 3           | 0            | 16         | 4              | 139                    |                      |  |
| 2025-05-06 07:45:00 | 0                           | 76          | 0           | 0            | 0          | 76             | 0                                    | 0           | 0           | 0            | 37         | 0              | 0                           | 89          | 0           | 0            | 0          | 89             | 4                                                            | 0           | 2           | 0            | 19         | 6              | 171                    |                      |  |
| 2025-05-06 08:00:00 | 0                           | 74          | 0           | 0            | 1          | 74             | 0                                    | 0           | 0           | 0            | 40         | 0              | 0                           | 94          | 1           | 0            | 2          | 95             | 3                                                            | 0           | 6           | 0            | 25         | 9              | 178                    |                      |  |
| 2025-05-06 08:15:00 | 1                           | 94          | 0           | 0            | 0          | 95             | 0                                    | 0           | 0           | 0            | 51         | 0              | 0                           | 81          | 1           | 0            | 1          | 82             | 3                                                            | 0           | 4           | 0            | 32         | 7              | 184                    | 672                  |  |
| 2025-05-06 08:30:00 | 0                           | 101         | 0           | 0            | 0          | 101            | 0                                    | 0           | 0           | 0            | 52         | 0              | 0                           | 105         | 0           | 0            | 0          | 105            | 4                                                            | 0           | 5           | 0            | 35         | 9              | 215                    | 748                  |  |
| 2025-05-06 08:45:00 | 1                           | 81          | 0           | 0            | 1          | 82             | 0                                    | 0           | 0           | 0            | 36         | 0              | 1                           | 81          | 0           | 0            | 3          | 82             | 4                                                            | 0           | 3           | 0            | 31         | 7              | 171                    | 748                  |  |
| 2025-05-06 09:00:00 | 0                           | 81          | 2           | 0            | 0          | 83             | 0                                    | 0           | 0           | 0            | 42         | 0              | 0                           | 89          | 0           | 0            | 2          | 89             | 7                                                            | 0           | 4           | 0            | 14         | 11             | 183                    | 753                  |  |
| 2025-05-06 09:15:00 | 0                           | 64          | 1           | 0            | 0          | 65             | 0                                    | 0           | 0           | 0            | 42         | 0              | 1                           | 71          | 0           | 0            | 2          | 72             | 6                                                            | 0           | 3           | 0            | 28         | 9              | 146                    | 715                  |  |
| ***BREAK***         |                             |             |             |              |            |                |                                      |             |             |              |            |                |                             |             |             |              |            |                |                                                              |             |             |              |            |                |                        |                      |  |
| 2025-05-06 16:00:00 | 1                           | 91          | 1           | 1            | 2          | 94             | 0                                    | 0           | 0           | 0            | 54         | 0              | 1                           | 98          | 1           | 0            | 0          | 100            | 15                                                           | 0           | 9           | 0            | 60         | 24             | 218                    |                      |  |
| 2025-05-06 16:15:00 | 0                           | 85          | 1           | 0            | 1          | 86             | 0                                    | 0           | 0           | 0            | 59         | 0              | 0                           | 114         | 1           | 0            | 2          | 115            | 11                                                           | 0           | 12          | 0            | 63         | 23             | 224                    |                      |  |
| 2025-05-06 16:30:00 | 0                           | 100         | 0           | 0            | 1          | 100            | 0                                    | 0           | 0           | 0            | 68         | 0              | 0                           | 100         | 0           | 1            | 1          | 101            | 13                                                           | 0           | 7           | 0            | 71         | 20             | 221                    |                      |  |
| 2025-05-06 16:45:00 | 1                           | 117         | 2           | 0            | 3          | 120            | 0                                    | 0           | 0           | 0            | 61         | 0              | 0                           | 119         | 0           | 0            | 1          | 119            | 18                                                           | 0           | 4           | 0            | 96         | 22             | 261                    | 924                  |  |
| 2025-05-06 17:00:00 | 0                           | 98          | 0           | 0            | 0          | 98             | 0                                    | 0           | 0           | 0            | 57         | 0              | 0                           | 102         | 0           | 0            | 3          | 102            | 17                                                           | 0           | 8           | 0            | 95         | 25             | 225                    | 931                  |  |
| 2025-05-06 17:15:00 | 0                           | 105         | 0           | 0            | 2          | 105            | 0                                    | 0           | 0           | 0            | 65         | 0              | 0                           | 107         | 0           | 0            | 3          | 107            | 16                                                           | 0           | 7           | 0            | 74         | 23             | 235                    | 942                  |  |
| 2025-05-06 17:30:00 | 0                           | 99          | 0           | 0            | 2          | 99             | 0                                    | 0           | 0           | 0            | 81         | 0              | 0                           | 126         | 1           | 0            | 4          | 127            | 13                                                           | 0           | 10          | 0            | 73         | 23             | 249                    | 970                  |  |
| 2025-05-06 17:45:00 | 0                           | 117         | 0           | 0            | 0          | 117            | 0                                    | 0           | 0           | 0            | 94         | 0              | 1                           | 99          | 0           | 0            | 1          | 100            | 18                                                           | 0           | 9           | 0            | 83         | 27             | 244                    | 953                  |  |
| Grand Total         | 4                           | 1449        | 7           | 1            | 14         | 1461           | 0                                    | 0           | 0           | 0            | 861        | 0              | 4                           | 1544        | 5           | 1            | 25         | 1554           | 153                                                          | 0           | 96          | 0            | 815        | 249            | 3264                   | -                    |  |
| Approach%           | 0.3%                        | 99.2%       | 0.5%        | 0.1%         |            | -              | 0%                                   | 0%          | 0%          | 0%           |            | -              | 0.3%                        | 99.4%       | 0.3%        | 0.1%         |            | -              | 61.4%                                                        | 0%          | 38.6%       | 0%           |            | -              | -                      | -                    |  |
| Totals %            | 0.1%                        | 44.4%       | 0.2%        | 0%           |            | 44.8%          | 0%                                   | 0%          | 0%          | 0%           |            | 0%             | 0.1%                        | 47.3%       | 0.2%        | 0%           |            | 47.6%          | 4.7%                                                         | 0%          | 2.9%        | 0%           |            | 7.6%           | -                      | -                    |  |
| Heavy               | 0                           | 108         | 2           | 0            |            | -              | 0                                    | 0           | 0           | 0            |            | -              | 1                           | 105         | 0           | 0            |            | -              | 1                                                            | 0           | 1           | 0            |            | -              | -                      | -                    |  |
| Heavy %             | 0%                          | 7.5%        | 28.6%       | 0%           |            | -              | 0%                                   | 0%          | 0%          | 0%           |            | -              | 25%                         | 6.8%        | 0%          | 0%           |            | -              | 0.7%                                                         | 0%          | 1%          | 0%           |            | -              | -                      | -                    |  |
| Bicycles            | 0                           | 161         | 0           | 1            |            | -              | 1                                    | 0           | 1           | 0            |            | -              | 0                           | 102         | 0           | 0            |            | -              | 1                                                            | 0           | 0           | 0            |            | -              | -                      | -                    |  |
| Bicycle %           | 0%                          | 11.1%       | 0%          | 100%         |            | -              | 0%                                   | 0%          | 0%          | 0%           |            | -              | 0%                          | 6.6%        | 0%          | 0%           |            | -              | 0.7%                                                         | 0%          | 0%          | 0%           |            | -              | -                      | -                    |  |





Peak Hour: 08:15 AM - 09:15 AM Weather: Overcast Clouds (9 °C)

| Start Time             | N Approach<br>BROADVIEW AVE |       |      |       |      |                | E Approach<br>EAST BUILDING DRIVEWAY |      |      |       |       |                | S Approach<br>BROADVIEW AVE |       |      |       |      |                | W Approach<br>720 BROADVIEW AVE (SOUTH PARKING LOT ENTRANCE) |      |       |       |       |                | Int. Total<br>(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 |                        |
| 2025-05-06 08:15:00    | 1                           | 94    | 0    | 0     | 0    | 95             | 0                                    | 0    | 0    | 0     | 51    | 0              | 0                           | 81    | 1    | 0     | 1    | 82             | 3                                                            | 0    | 4     | 0     | 32    | 7              | 184                    |
| 2025-05-06 08:30:00    | 0                           | 101   | 0    | 0     | 0    | 101            | 0                                    | 0    | 0    | 0     | 52    | 0              | 0                           | 105   | 0    | 0     | 0    | 105            | 4                                                            | 0    | 5     | 0     | 35    | 9              | 215                    |
| 2025-05-06 08:45:00    | 1                           | 81    | 0    | 0     | 1    | 82             | 0                                    | 0    | 0    | 0     | 36    | 0              | 1                           | 81    | 0    | 0     | 3    | 82             | 4                                                            | 0    | 3     | 0     | 31    | 7              | 171                    |
| 2025-05-06 09:00:00    | 0                           | 81    | 2    | 0     | 0    | 83             | 0                                    | 0    | 0    | 0     | 42    | 0              | 0                           | 89    | 0    | 0     | 2    | 89             | 7                                                            | 0    | 4     | 0     | 14    | 11             | 183                    |
| Grand Total            | 2                           | 357   | 2    | 0     | 1    | 361            | 0                                    | 0    | 0    | 0     | 181   | 0              | 1                           | 356   | 1    | 0     | 6    | 358            | 18                                                           | 0    | 16    | 0     | 112   | 34             | 753                    |
| Approach%              | 0.6%                        | 98.9% | 0.6% | 0%    |      | -              | 0%                                   | 0%   | 0%   | 0%    |       | -              | 0.3%                        | 99.4% | 0.3% | 0%    |      | -              | 52.9%                                                        | 0%   | 47.1% | 0%    |       | -              | -                      |
| Totals %               | 0.3%                        | 47.4% | 0.3% | 0%    |      | 47.9%          | 0%                                   | 0%   | 0%   | 0%    |       | 0%             | 0.1%                        | 47.3% | 0.1% | 0%    |      | 47.5%          | 2.4%                                                         | 0%   | 2.1%  | 0%    |       | 4.5%           | -                      |
| PHF                    | 0.5                         | 0.88  | 0.25 | 0     |      | 0.89           | 0                                    | 0    | 0    | 0     |       | 0              | 0.25                        | 0.85  | 0.25 | 0     |      | 0.85           | 0.64                                                         | 0    | 0.8   | 0     |       | 0.77           | 0.88                   |
| Heavy                  | 0                           | 31    | 1    | 0     |      | 32             | 0                                    | 0    | 0    | 0     |       | 0              | 1                           | 25    | 0    | 0     |      | 26             | 0                                                            | 0    | 0     | 0     |       | 0              | 58                     |
| Heavy %                | 0%                          | 8.7%  | 50%  | 0%    |      | 8.9%           | 0%                                   | 0%   | 0%   | 0%    |       | 0%             | 100%                        | 7%    | 0%   | 0%    |      | 7.3%           | 0%                                                           | 0%   | 0%    | 0%    |       | 0%             | 7.7%                   |
| Lights                 | 2                           | 326   | 1    | 0     |      | 329            | 0                                    | 0    | 0    | 0     |       | 0              | 0                           | 331   | 1    | 0     |      | 332            | 18                                                           | 0    | 16    | 0     |       | 34             | 695                    |
| Lights %               | 100%                        | 91.3% | 50%  | 0%    |      | 91.1%          | 0%                                   | 0%   | 0%   | 0%    |       | 0%             | 0%                          | 93%   | 100% | 0%    |      | 92.7%          | 100%                                                         | 0%   | 100%  | 0%    |       | 100%           | 92.3%                  |
| Single-Unit Trucks     | 0                           | 4     | 0    | 0     |      | 4              | 0                                    | 0    | 0    | 0     |       | 0              | 0                           | 6     | 0    | 0     |      | 6              | 0                                                            | 0    | 0     | 0     |       | 0              | 10                     |
| Single-Unit Trucks %   | 0%                          | 1.1%  | 0%   | 0%    |      | 1.1%           | 0%                                   | 0%   | 0%   | 0%    |       | 0%             | 0%                          | 1.7%  | 0%   | 0%    |      | 1.7%           | 0%                                                           | 0%   | 0%    | 0%    |       | 0%             | 1.3%                   |
| Buses                  | 0                           | 13    | 1    | 0     |      | 14             | 0                                    | 0    | 0    | 0     |       | 0              | 1                           | 8     | 0    | 0     |      | 9              | 0                                                            | 0    | 0     | 0     |       | 0              | 23                     |
| Buses %                | 0%                          | 3.6%  | 50%  | 0%    |      | 3.9%           | 0%                                   | 0%   | 0%   | 0%    |       | 0%             | 100%                        | 2.2%  | 0%   | 0%    |      | 2.5%           | 0%                                                           | 0%   | 0%    | 0%    |       | 0%             | 3.1%                   |
| Street-Car             | 0                           | 14    | 0    | 0     |      | 14             | 0                                    | 0    | 0    | 0     |       | 0              | 0                           | 11    | 0    | 0     |      | 11             | 0                                                            | 0    | 0     | 0     |       | 0              | 25                     |
| Street-Car %           | 0%                          | 3.9%  | 0%   | 0%    |      | 3.9%           | 0%                                   | 0%   | 0%   | 0%    |       | 0%             | 0%                          | 3.1%  | 0%   | 0%    |      | 3.1%           | 0%                                                           | 0%   | 0%    | 0%    |       | 0%             | 3.3%                   |
| Pedestrians            | -                           | -     | -    | -     | 1    | -              | -                                    | -    | -    | -     | 179   | -              | -                           | -     | -    | -     | 6    | -              | -                                                            | -    | -     | -     | 109   | -              | -                      |
| Pedestrians%           | -                           | -     | -    | -     | 0.3% | -              | -                                    | -    | -    | -     | 59.7% | -              | -                           | -     | -    | -     | 2%   | -              | -                                                            | -    | -     | -     | 36.3% | -              | -                      |
| Bicycles on Crosswalk  | -                           | -     | -    | -     | 0    | -              | -                                    | -    | -    | -     | 2     | -              | -                           | -     | -    | -     | 0    | -              | -                                                            | -    | -     | -     | 3     | -              | -                      |
| Bicycles on Crosswalk% | -                           | -     | -    | -     | 0%   | -              | -                                    | -    | -    | -     | 0.7%  | -              | -                           | -     | -    | -     | 0%   | -              | -                                                            | -    | -     | -     | 1%    | -              | -                      |
| Bicycles on Road       | 0                           | 23    | 0    | 0     |      | -              | 0                                    | 0    | 0    | 0     |       | -              | 0                           | 30    | 0    | 0     |      | -              | 0                                                            | 0    | 0     | 0     |       | -              | -                      |
| Bicycles on Road%      | 0%                          | 100%  | 0%   | 0%    |      |                | 0%                                   | 0%   | 0%   | 0%    |       |                | 0%                          | 100%  | 0%   | 0%    |      |                | 0%                                                           | 0%   | 0%    | 0%    |       |                | -                      |



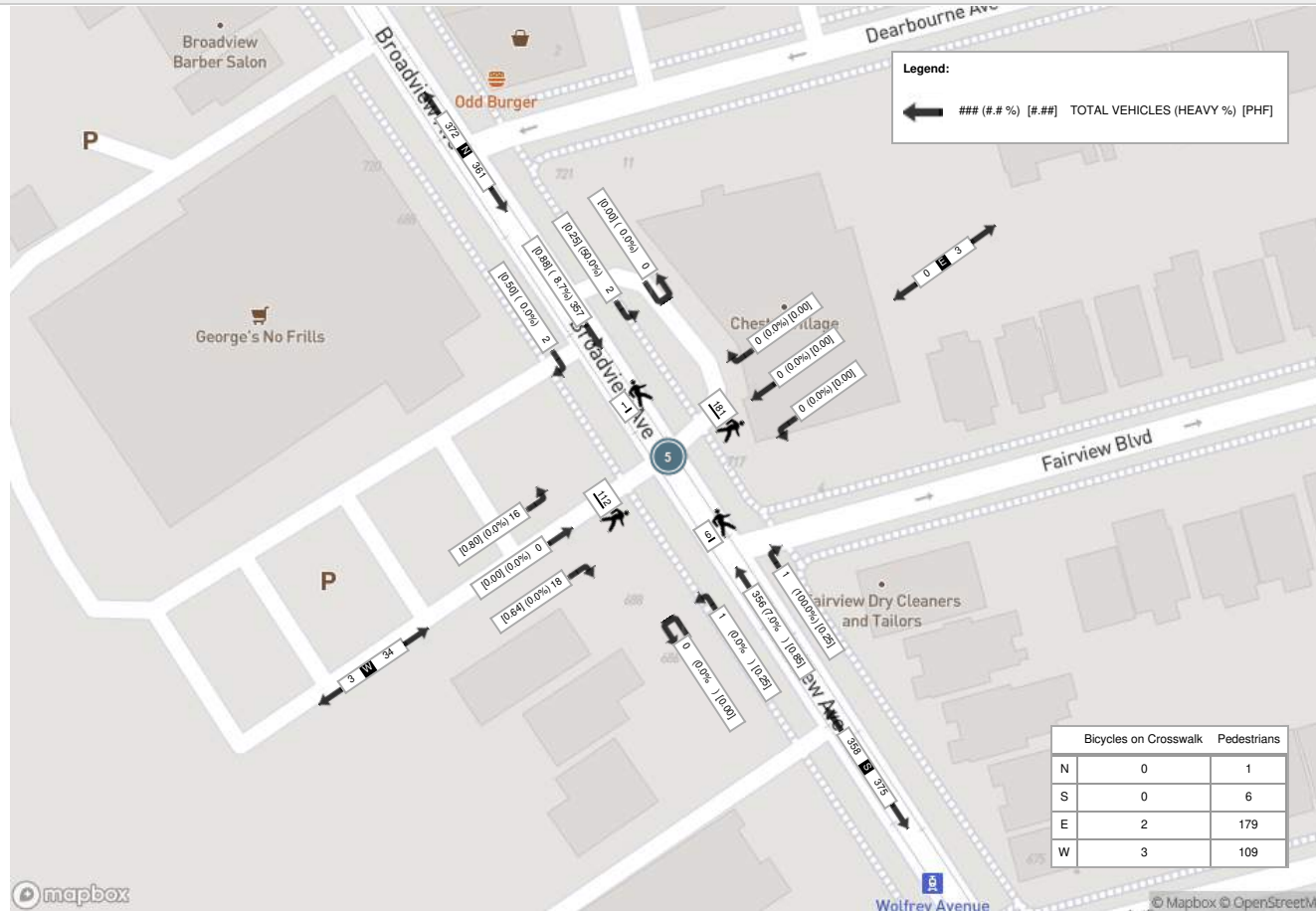


Peak Hour: 04:45 PM - 05:45 PM Weather: Clear Sky (18 °C)

| Start Time             | N Approach<br>BROADVIEW AVE |       |      |       |      |                | E Approach<br>EAST BUILDING DRIVEWAY |      |      |       |       |                | S Approach<br>BROADVIEW AVE |       |      |       |      |                | W Approach<br>720 BROADVIEW AVE (SOUTH PARKING LOT ENTRANCE) |      |       |       |       |                | Int. Total<br>(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 |                        |
| 2025-05-06 16:45:00    | 1                           | 117   | 2    | 0     | 3    | 120            | 0                                    | 0    | 0    | 0     | 61    | 0              | 0                           | 119   | 0    | 0     | 1    | 119            | 18                                                           | 0    | 4     | 0     | 96    | 22             | 261                    |
| 2025-05-06 17:00:00    | 0                           | 98    | 0    | 0     | 0    | 98             | 0                                    | 0    | 0    | 0     | 57    | 0              | 0                           | 102   | 0    | 0     | 3    | 102            | 17                                                           | 0    | 8     | 0     | 95    | 25             | 225                    |
| 2025-05-06 17:15:00    | 0                           | 105   | 0    | 0     | 2    | 105            | 0                                    | 0    | 0    | 0     | 65    | 0              | 0                           | 107   | 0    | 0     | 3    | 107            | 16                                                           | 0    | 7     | 0     | 74    | 23             | 235                    |
| 2025-05-06 17:30:00    | 0                           | 99    | 0    | 0     | 2    | 99             | 0                                    | 0    | 0    | 0     | 81    | 0              | 0                           | 126   | 1    | 0     | 4    | 127            | 13                                                           | 0    | 10    | 0     | 73    | 23             | 249                    |
| Grand Total            | 1                           | 419   | 2    | 0     | 7    | 422            | 0                                    | 0    | 0    | 0     | 264   | 0              | 0                           | 454   | 1    | 0     | 11   | 455            | 64                                                           | 0    | 29    | 0     | 338   | 93             | 970                    |
| Approach%              | 0.2%                        | 99.3% | 0.5% | 0%    |      | -              | 0%                                   | 0%   | 0%   | 0%    |       | -              | 0%                          | 99.8% | 0.2% | 0%    |      | -              | 68.8%                                                        | 0%   | 31.2% | 0%    |       | -              | -                      |
| Totals %               | 0.1%                        | 43.2% | 0.2% | 0%    |      | 43.5%          | 0%                                   | 0%   | 0%   | 0%    |       | 0%             | 0%                          | 46.8% | 0.1% | 0%    |      | 46.9%          | 6.6%                                                         | 0%   | 3%    | 0%    |       | 9.6%           | -                      |
| PHF                    | 0.25                        | 0.9   | 0.25 | 0     |      | 0.88           | 0                                    | 0    | 0    | 0     |       | 0              | 0                           | 0.9   | 0.25 | 0     |      | 0.9            | 0.89                                                         | 0    | 0.73  | 0     |       | 0.93           | 0.93                   |
| Heavy                  | 0                           | 23    | 0    | 0     |      | 23             | 0                                    | 0    | 0    | 0     |       | 0              | 0                           | 20    | 0    | 0     |      | 20             | 0                                                            | 0    | 0     | 0     |       | 0              | 43                     |
| Heavy %                | 0%                          | 5.5%  | 0%   | 0%    |      | 5.5%           | 0%                                   | 0%   | 0%   | 0%    |       | 0%             | 0%                          | 4.4%  | 0%   | 0%    |      | 4.4%           | 0%                                                           | 0%   | 0%    | 0%    |       | 0%             | 4.4%                   |
| Lights                 | 1                           | 396   | 2    | 0     |      | 399            | 0                                    | 0    | 0    | 0     |       | 0              | 0                           | 434   | 1    | 0     |      | 435            | 64                                                           | 0    | 29    | 0     |       | 93             | 927                    |
| Lights %               | 100%                        | 94.5% | 100% | 0%    |      | 94.5%          | 0%                                   | 0%   | 0%   | 0%    |       | 0%             | 0%                          | 95.6% | 100% | 0%    |      | 95.6%          | 100%                                                         | 0%   | 100%  | 0%    |       | 100%           | 95.6%                  |
| Single-Unit Trucks     | 0                           | 1     | 0    | 0     |      | 1              | 0                                    | 0    | 0    | 0     |       | 0              | 0                           | 2     | 0    | 0     |      | 2              | 0                                                            | 0    | 0     | 0     |       | 0              | 3                      |
| Single-Unit Trucks %   | 0%                          | 0.2%  | 0%   | 0%    |      | 0.2%           | 0%                                   | 0%   | 0%   | 0%    |       | 0%             | 0%                          | 0.4%  | 0%   | 0%    |      | 0.4%           | 0%                                                           | 0%   | 0%    | 0%    |       | 0%             | 0.3%                   |
| Buses                  | 0                           | 9     | 0    | 0     |      | 9              | 0                                    | 0    | 0    | 0     |       | 0              | 0                           | 7     | 0    | 0     |      | 7              | 0                                                            | 0    | 0     | 0     |       | 0              | 16                     |
| Buses %                | 0%                          | 2.1%  | 0%   | 0%    |      | 2.1%           | 0%                                   | 0%   | 0%   | 0%    |       | 0%             | 0%                          | 1.5%  | 0%   | 0%    |      | 1.5%           | 0%                                                           | 0%   | 0%    | 0%    |       | 0%             | 1.6%                   |
| Street-Car             | 0                           | 13    | 0    | 0     |      | 13             | 0                                    | 0    | 0    | 0     |       | 0              | 0                           | 11    | 0    | 0     |      | 11             | 0                                                            | 0    | 0     | 0     |       | 0              | 24                     |
| Street-Car %           | 0%                          | 3.1%  | 0%   | 0%    |      | 3.1%           | 0%                                   | 0%   | 0%   | 0%    |       | 0%             | 0%                          | 2.4%  | 0%   | 0%    |      | 2.4%           | 0%                                                           | 0%   | 0%    | 0%    |       | 0%             | 2.5%                   |
| Pedestrians            | -                           | -     | -    | -     | 6    | -              | -                                    | -    | -    | -     | 263   | -              | -                           | -     | -    | -     | 11   | -              | -                                                            | -    | -     | -     | 336   | -              | -                      |
| Pedestrians%           | -                           | -     | -    | -     | 1%   | -              | -                                    | -    | -    | -     | 42.4% | -              | -                           | -     | -    | -     | 1.8% | -              | -                                                            | -    | -     | -     | 54.2% | -              | -                      |
| Bicycles on Crosswalk  | -                           | -     | -    | -     | 1    | -              | -                                    | -    | -    | -     | 1     | -              | -                           | -     | -    | -     | 0    | -              | -                                                            | -    | -     | -     | 2     | -              | -                      |
| Bicycles on Crosswalk% | -                           | -     | -    | -     | 0.2% | -              | -                                    | -    | -    | -     | 0.2%  | -              | -                           | -     | -    | -     | 0%   | -              | -                                                            | -    | -     | -     | 0.3%  | -              | -                      |
| Bicycles on Road       | 0                           | 66    | 0    | 1     |      | -              | 1                                    | 0    | 1    | 0     |       | -              | 0                           | 32    | 0    | 0     |      | -              | 0                                                            | 0    | 0     | 0     |       | -              | -                      |
| Bicycles on Road%      | 0%                          | 100%  | 0%   | 100%  |      |                | 100%                                 | 0%   | 100% | 0%    |       |                | 0%                          | 100%  | 0%   | 0%    |      |                | 0%                                                           | 0%   | 0%    | 0%    |       |                | -                      |

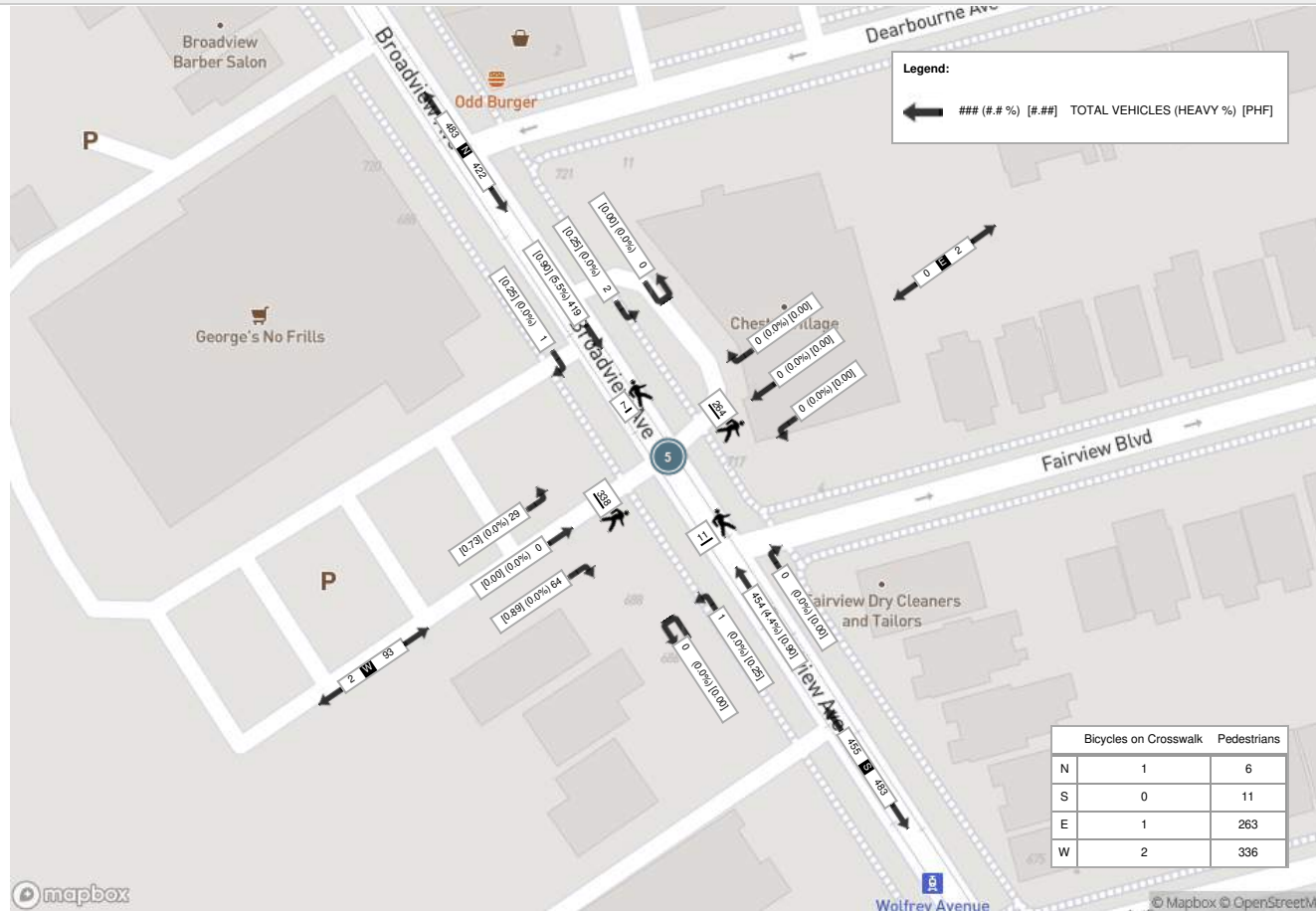


Peak Hour: 08:15 AM - 09:15 AM Weather: Overcast Clouds (9 °C)





Peak Hour: 04:45 PM - 05:45 PM Weather: Clear Sky (18 °C)







Turning Movement Count (1 . BROADVIEW AVE & DANFORTH AVE)

| Start Time          | N Approach<br>BROADVIEW AVE |             |             |              |            |                | E Approach<br>DANFORTH RD |             |             |              |            |                | S Approach<br>BROADVIEW AVE |             |             |              |            |                | W Approach<br>DANFORTH RD |             |             |              |            |                | Int. Total<br>(15 min) | Int. Total<br>(1 hr) |
|---------------------|-----------------------------|-------------|-------------|--------------|------------|----------------|---------------------------|-------------|-------------|--------------|------------|----------------|-----------------------------|-------------|-------------|--------------|------------|----------------|---------------------------|-------------|-------------|--------------|------------|----------------|------------------------|----------------------|
|                     | Right<br>N:W                | Thru<br>N:S | Left<br>N:E | UTurn<br>N:N | Peds<br>N: | Approach Total | Right<br>E:N              | Thru<br>E:W | Left<br>E:S | UTurn<br>E:E | Peds<br>E: | Approach Total | Right<br>S:E                | Thru<br>S:N | Left<br>S:W | UTurn<br>S:S | Peds<br>S: | Approach Total | Right<br>W:S              | Thru<br>W:E | Left<br>W:N | UTurn<br>W:W | Peds<br>W: | Approach Total |                        |                      |
| 2025-05-06 07:30:00 | 55                          | 49          | 0           | 0            | 48         | 104            | 4                         | 131         | 5           | 0            | 64         | 140            | 6                           | 27          | 39          | 0            | 24         | 72             | 18                        | 48          | 22          | 0            | 26         | 88             | 404                    |                      |
| 2025-05-06 07:45:00 | 72                          | 38          | 4           | 0            | 49         | 114            | 3                         | 137         | 5           | 0            | 85         | 145            | 7                           | 37          | 42          | 0            | 38         | 86             | 35                        | 70          | 23          | 0            | 35         | 128            | 473                    |                      |
| 2025-05-06 08:00:00 | 81                          | 34          | 2           | 0            | 97         | 117            | 3                         | 137         | 9           | 0            | 175        | 149            | 11                          | 39          | 43          | 0            | 92         | 93             | 38                        | 59          | 19          | 0            | 105        | 116            | 475                    |                      |
| 2025-05-06 08:15:00 | 61                          | 56          | 5           | 0            | 150        | 122            | 6                         | 130         | 9           | 0            | 168        | 145            | 6                           | 42          | 51          | 0            | 116        | 99             | 40                        | 82          | 20          | 0            | 146        | 142            | 508                    | 1860                 |
| 2025-05-06 08:30:00 | 85                          | 59          | 3           | 0            | 162        | 147            | 7                         | 148         | 7           | 0            | 188        | 162            | 9                           | 41          | 58          | 0            | 137        | 108            | 38                        | 86          | 25          | 0            | 142        | 149            | 566                    | 2022                 |
| 2025-05-06 08:45:00 | 75                          | 53          | 5           | 0            | 151        | 133            | 7                         | 133         | 9           | 0            | 149        | 149            | 10                          | 35          | 54          | 0            | 105        | 99             | 30                        | 69          | 19          | 0            | 102        | 118            | 499                    | 2048                 |
| 2025-05-06 09:00:00 | 53                          | 41          | 2           | 0            | 70         | 96             | 4                         | 126         | 9           | 0            | 132        | 139            | 6                           | 46          | 40          | 0            | 77         | 92             | 41                        | 79          | 36          | 0            | 37         | 156            | 483                    | 2056                 |
| 2025-05-06 09:15:00 | 72                          | 54          | 6           | 0            | 49         | 132            | 7                         | 113         | 12          | 0            | 112        | 132            | 12                          | 30          | 38          | 0            | 59         | 80             | 17                        | 62          | 30          | 0            | 50         | 109            | 453                    | 2001                 |
| ***BREAK***         |                             |             |             |              |            |                |                           |             |             |              |            |                |                             |             |             |              |            |                |                           |             |             |              |            |                |                        |                      |
| 2025-05-06 16:00:00 | 31                          | 37          | 4           | 0            | 91         | 72             | 17                        | 85          | 12          | 0            | 141        | 114            | 10                          | 62          | 25          | 0            | 80         | 97             | 56                        | 167         | 71          | 0            | 46         | 294            | 577                    |                      |
| 2025-05-06 16:15:00 | 33                          | 41          | 1           | 0            | 73         | 75             | 4                         | 68          | 9           | 1            | 198        | 82             | 20                          | 80          | 40          | 0            | 96         | 140            | 44                        | 125         | 77          | 0            | 68         | 246            | 543                    |                      |
| 2025-05-06 16:30:00 | 36                          | 32          | 3           | 0            | 79         | 71             | 13                        | 96          | 10          | 0            | 162        | 119            | 14                          | 65          | 25          | 0            | 77         | 104            | 60                        | 145         | 70          | 0            | 51         | 275            | 569                    |                      |
| 2025-05-06 16:45:00 | 30                          | 61          | 5           | 0            | 113        | 96             | 7                         | 67          | 12          | 0            | 161        | 86             | 24                          | 69          | 29          | 0            | 101        | 122            | 58                        | 136         | 51          | 0            | 79         | 245            | 549                    | 2238                 |
| 2025-05-06 17:00:00 | 44                          | 39          | 9           | 0            | 97         | 92             | 14                        | 86          | 12          | 0            | 194        | 112            | 14                          | 60          | 32          | 0            | 128        | 106            | 53                        | 156         | 60          | 0            | 62         | 269            | 579                    | 2240                 |
| 2025-05-06 17:15:00 | 41                          | 52          | 15          | 0            | 84         | 108            | 13                        | 86          | 6           | 0            | 135        | 105            | 12                          | 72          | 30          | 0            | 91         | 114            | 62                        | 134         | 62          | 0            | 67         | 258            | 585                    | 2282                 |
| 2025-05-06 17:30:00 | 38                          | 48          | 4           | 0            | 118        | 90             | 13                        | 85          | 8           | 0            | 165        | 106            | 21                          | 76          | 27          | 0            | 115        | 124            | 58                        | 138         | 88          | 0            | 65         | 284            | 604                    | 2317                 |
| 2025-05-06 17:45:00 | 32                          | 49          | 7           | 0            | 83         | 88             | 7                         | 74          | 14          | 1            | 205        | 96             | 25                          | 66          | 39          | 0            | 105        | 130            | 64                        | 98          | 83          | 0            | 71         | 245            | 559                    | 2327                 |
| Grand Total         | 839                         | 743         | 75          | 0            | 1514       | 1657           | 129                       | 1702        | 148         | 2            | 2434       | 1981           | 207                         | 847         | 612         | 0            | 1441       | 1666           | 712                       | 1654        | 756         | 0            | 1152       | 3122           | 8426                   | -                    |
| Approach%           | 50.6%                       | 44.8%       | 4.5%        | 0%           | -          | -              | 6.5%                      | 85.9%       | 7.5%        | 0.1%         | -          | -              | 12.4%                       | 50.8%       | 36.7%       | 0%           | -          | -              | 22.8%                     | 53%         | 24.2%       | 0%           | -          | -              | -                      | -                    |
| Totals %            | 10%                         | 8.8%        | 0.9%        | 0%           | -          | 19.7%          | 1.5%                      | 20.2%       | 1.8%        | 0%           | -          | 23.5%          | 2.5%                        | 10.1%       | 7.3%        | 0%           | -          | 19.8%          | 8.5%                      | 19.6%       | 9%          | 0%           | -          | 37.1%          | -                      | -                    |
| Heavy               | 22                          | 93          | 2           | 0            | -          | -              | 6                         | 39          | 5           | 0            | -          | -              | 5                           | 91          | 13          | 0            | -          | -              | 14                        | 39          | 15          | 0            | -          | -              | -                      | -                    |
| Heavy %             | 2.6%                        | 12.5%       | 2.7%        | 0%           | -          | -              | 4.7%                      | 2.3%        | 3.4%        | 0%           | -          | -              | 2.4%                        | 10.7%       | 2.1%        | 0%           | -          | -              | 2%                        | 2.4%        | 2%          | 0%           | -          | -              | -                      | -                    |
| Bicycles            | 31                          | 46          | 8           | 0            | -          | -              | 13                        | 514         | 33          | 1            | -          | -              | 29                          | 39          | 39          | 0            | -          | -              | 65                        | 429         | 33          | 8            | -          | -              | -                      | -                    |
| Bicycle %           | 3.7%                        | 6.2%        | 10.7%       | 0%           | -          | -              | 10.1%                     | 30.2%       | 22.3%       | 50%          | -          | -              | 14%                         | 4.6%        | 6.4%        | 0%           | -          | -              | 9.1%                      | 25.9%       | 4.4%        | 0%           | -          | -              | -                      | -                    |





Peak Hour: 08:15 AM - 09:15 AM Weather: Overcast Clouds (9 °C)

| Start Time             | N Approach<br>BROADVIEW AVE |       |       |       |       |                | E Approach<br>DANFORTH RD |       |       |       |       |                | S Approach<br>BROADVIEW AVE |       |       |       |       |                | W Approach<br>DANFORTH RD |       |       |       |       |                | Int. Total<br>(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 |                        |
| 2025-05-06 08:15:00    | 61                          | 56    | 5     | 0     | 150   | 122            | 6                         | 130   | 9     | 0     | 168   | 145            | 6                           | 42    | 51    | 0     | 116   | 99             | 40                        | 82    | 20    | 0     | 146   | 142            | 508                    |
| 2025-05-06 08:30:00    | 85                          | 59    | 3     | 0     | 162   | 147            | 7                         | 148   | 7     | 0     | 188   | 162            | 9                           | 41    | 58    | 0     | 137   | 108            | 38                        | 86    | 25    | 0     | 142   | 149            | 566                    |
| 2025-05-06 08:45:00    | 75                          | 53    | 5     | 0     | 151   | 133            | 7                         | 133   | 9     | 0     | 149   | 149            | 10                          | 35    | 54    | 0     | 105   | 99             | 30                        | 69    | 19    | 0     | 102   | 118            | 499                    |
| 2025-05-06 09:00:00    | 53                          | 41    | 2     | 0     | 70    | 96             | 4                         | 126   | 9     | 0     | 132   | 139            | 6                           | 46    | 40    | 0     | 77    | 92             | 41                        | 79    | 36    | 0     | 37    | 156            | 483                    |
| Grand Total            | 274                         | 209   | 15    | 0     | 533   | 498            | 24                        | 537   | 34    | 0     | 637   | 595            | 31                          | 164   | 203   | 0     | 435   | 398            | 149                       | 316   | 100   | 0     | 427   | 565            | 2056                   |
| Approach%              | 55%                         | 42%   | 3%    | 0%    |       | -              | 4%                        | 90.3% | 5.7%  | 0%    |       | -              | 7.8%                        | 41.2% | 51%   | 0%    |       | -              | 26.4%                     | 55.9% | 17.7% | 0%    |       | -              | -                      |
| Totals %               | 13.3%                       | 10.2% | 0.7%  | 0%    |       | 24.2%          | 1.2%                      | 26.1% | 1.7%  | 0%    |       | 28.9%          | 1.5%                        | 8%    | 9.9%  | 0%    |       | 19.4%          | 7.2%                      | 15.4% | 4.9%  | 0%    |       | 27.5%          | -                      |
| PHF                    | 0.81                        | 0.89  | 0.75  | 0     |       | 0.85           | 0.86                      | 0.91  | 0.94  | 0     |       | 0.92           | 0.78                        | 0.89  | 0.88  | 0     |       | 0.92           | 0.91                      | 0.92  | 0.69  | 0     |       | 0.91           | 0.91                   |
| Heavy                  | 9                           | 27    | 2     | 0     |       | 38             | 4                         | 11    | 2     | 0     |       | 17             | 2                           | 23    | 5     | 0     |       | 30             | 4                         | 15    | 1     | 0     |       | 20             | 105                    |
| Heavy %                | 3.3%                        | 12.9% | 13.3% | 0%    |       | 7.6%           | 16.7%                     | 2%    | 5.9%  | 0%    |       | 2.9%           | 6.5%                        | 14%   | 2.5%  | 0%    |       | 7.5%           | 2.7%                      | 4.7%  | 1%    | 0%    |       | 3.5%           | 5.1%                   |
| Lights                 | 265                         | 182   | 13    | 0     |       | 460            | 20                        | 526   | 32    | 0     |       | 578            | 29                          | 141   | 198   | 0     |       | 368            | 145                       | 301   | 99    | 0     |       | 545            | 1951                   |
| Lights %               | 96.7%                       | 87.1% | 86.7% | 0%    |       | 92.4%          | 83.3%                     | 98%   | 94.1% | 0%    |       | 97.1%          | 93.5%                       | 86%   | 97.5% | 0%    |       | 92.5%          | 97.3%                     | 95.3% | 99%   | 0%    |       | 96.5%          | 94.9%                  |
| Single-Unit Trucks     | 8                           | 5     | 0     | 0     |       | 13             | 3                         | 6     | 0     | 0     |       | 9              | 1                           | 2     | 5     | 0     |       | 8              | 2                         | 7     | 1     | 0     |       | 10             | 40                     |
| Single-Unit Trucks %   | 2.9%                        | 2.4%  | 0%    | 0%    |       | 2.6%           | 12.5%                     | 1.1%  | 0%    | 0%    |       | 1.5%           | 3.2%                        | 1.2%  | 2.5%  | 0%    |       | 2%             | 1.3%                      | 2.2%  | 1%    | 0%    |       | 1.8%           | 1.9%                   |
| Buses                  | 0                           | 9     | 2     | 0     |       | 11             | 1                         | 4     | 2     | 0     |       | 7              | 1                           | 9     | 0     | 0     |       | 10             | 2                         | 8     | 0     | 0     |       | 10             | 38                     |
| Buses %                | 0%                          | 4.3%  | 13.3% | 0%    |       | 2.2%           | 4.2%                      | 0.7%  | 5.9%  | 0%    |       | 1.2%           | 3.2%                        | 5.5%  | 0%    | 0%    |       | 2.5%           | 1.3%                      | 2.5%  | 0%    | 0%    |       | 1.8%           | 1.8%                   |
| Street-Car             | 0                           | 13    | 0     | 0     |       | 13             | 0                         | 0     | 0     | 0     |       | 0              | 0                           | 12    | 0     | 0     |       | 12             | 0                         | 0     | 0     | 0     |       | 0              | 25                     |
| Street-Car %           | 0%                          | 6.2%  | 0%    | 0%    |       | 2.6%           | 0%                        | 0%    | 0%    | 0%    |       | 0%             | 0%                          | 7.3%  | 0%    | 0%    |       | 3%             | 0%                        | 0%    | 0%    | 0%    |       | 0%             | 1.2%                   |
| Articulated Trucks     | 1                           | 0     | 0     | 0     |       | 1              | 0                         | 1     | 0     | 0     |       | 1              | 0                           | 0     | 0     | 0     |       | 0              | 0                         | 0     | 0     | 0     |       | 0              | 2                      |
| Articulated Trucks %   | 0.4%                        | 0%    | 0%    | 0%    |       | 0.2%           | 0%                        | 0.2%  | 0%    | 0%    |       | 0.2%           | 0%                          | 0%    | 0%    | 0%    |       | 0%             | 0%                        | 0%    | 0%    | 0%    |       | 0%             | 0.1%                   |
| Pedestrians            | -                           | -     | -     | -     | 533   | -              | -                         | -     | -     | -     | 637   | -              | -                           | -     | -     | -     | 430   | -              | -                         | -     | -     | -     | 425   | -              | -                      |
| Pedestrians%           | -                           | -     | -     | -     | 26.2% | -              | -                         | -     | -     | -     | 31.3% | -              | -                           | -     | -     | -     | 21.2% | -              | -                         | -     | -     | -     | 20.9% | -              | -                      |
| Bicycles on Crosswalk  | -                           | -     | -     | -     | 0     | -              | -                         | -     | -     | -     | 0     | -              | -                           | -     | -     | -     | 5     | -              | -                         | -     | -     | -     | 2     | -              | -                      |
| Bicycles on Crosswalk% | -                           | -     | -     | -     | 0%    | -              | -                         | -     | -     | -     | 0%    | -              | -                           | -     | -     | -     | 0.2%  | -              | -                         | -     | -     | -     | 0.1%  | -              | -                      |
| Bicycles on Road       | 9                           | 14    | 0     | 0     |       | -              | 1                         | 186   | 4     | 0     |       | -              | 4                           | 10    | 18    | 0     |       | -              | 8                         | 27    | 0     | 1     |       | -              | -                      |
| Bicycles on Road%      | 100%                        | 100%  | 0%    | 0%    |       |                | 100%                      | 100%  | 100%  | 0%    |       |                | 100%                        | 100%  | 100%  | 0%    |       |                | 100%                      | 100%  | 0%    | 100%  |       |                | -                      |



Peak Hour: 05:00 PM - 06:00 PM Weather: Clear Sky (18 °C)

| Start Time             | N Approach<br>BROADVIEW AVE |       |      |       |       |                | E Approach<br>DANFORTH RD |       |      |       |       |                | S Approach<br>BROADVIEW AVE |       |       |       |       |                | W Approach<br>DANFORTH RD |       |       |       |      |                | Int. Total<br>(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 |                        |
| 2025-05-06 17:00:00    | 44                          | 39    | 9    | 0     | 97    | 92             | 14                        | 86    | 12   | 0     | 194   | 112            | 14                          | 60    | 32    | 0     | 128   | 106            | 53                        | 156   | 60    | 0     | 62   | 269            | 579                    |
| 2025-05-06 17:15:00    | 41                          | 52    | 15   | 0     | 84    | 108            | 13                        | 86    | 6    | 0     | 135   | 105            | 12                          | 72    | 30    | 0     | 91    | 114            | 62                        | 134   | 62    | 0     | 67   | 258            | 585                    |
| 2025-05-06 17:30:00    | 38                          | 48    | 4    | 0     | 118   | 90             | 13                        | 85    | 8    | 0     | 165   | 106            | 21                          | 76    | 27    | 0     | 115   | 124            | 58                        | 138   | 88    | 0     | 65   | 284            | 604                    |
| 2025-05-06 17:45:00    | 32                          | 49    | 7    | 0     | 83    | 88             | 7                         | 74    | 14   | 1     | 205   | 96             | 25                          | 66    | 39    | 0     | 105   | 130            | 64                        | 98    | 83    | 0     | 71   | 245            | 559                    |
| Grand Total            | 155                         | 188   | 35   | 0     | 382   | 378            | 47                        | 331   | 40   | 1     | 699   | 419            | 72                          | 274   | 128   | 0     | 439   | 474            | 237                       | 526   | 293   | 0     | 265  | 1056           | 2327                   |
| Approach%              | 41%                         | 49.7% | 9.3% | 0%    | -     | -              | 11.2%                     | 79%   | 9.5% | 0.2%  | -     | -              | 15.2%                       | 57.8% | 27%   | 0%    | -     | -              | 22.4%                     | 49.8% | 27.7% | 0%    | -    | -              | -                      |
| Totals %               | 6.7%                        | 8.1%  | 1.5% | 0%    | 16.2% | 2%             | 14.2%                     | 1.7%  | 0%   | 18%   | 3.1%  | 11.8%          | 5.5%                        | 0%    | 20.4% | 10.2% | 22.6% | 12.6%          | 0%                        | 45.4% | -     | -     | -    | -              | -                      |
| PHF                    | 0.88                        | 0.9   | 0.58 | 0     | 0.88  | 0.84           | 0.84                      | 0.96  | 0.71 | 0.25  | 0.94  | 0.72           | 0.9                         | 0.82  | 0     | 0.91  | 0.93  | 0.84           | 0.83                      | 0     | 0.93  | -     | -    | -              | 0.96                   |
| Heavy                  | 2                           | 18    | 0    | 0     | 20    | 1              | 5                         | 1     | 0    | 7     | 1     | 19             | 1                           | 0     | 21    | 3     | 4     | 4              | 0                         | 11    | -     | -     | -    | -              | 59                     |
| Heavy %                | 1.3%                        | 9.6%  | 0%   | 0%    | 5.3%  | 2.1%           | 1.5%                      | 2.5%  | 0%   | 1.7%  | 1.4%  | 6.9%           | 0.8%                        | 0%    | 4.4%  | 1.3%  | 0.8%  | 1.4%           | 0%                        | 1%    | -     | -     | -    | -              | 2.5%                   |
| Lights                 | 153                         | 170   | 35   | 0     | 358   | 46             | 326                       | 39    | 1    | 412   | 71    | 255            | 127                         | 0     | 453   | 234   | 522   | 289            | 0                         | 1045  | -     | -     | -    | -              | 2268                   |
| Lights %               | 98.7%                       | 90.4% | 100% | 0%    | 94.7% | 97.9%          | 98.5%                     | 97.5% | 100% | 98.3% | 98.6% | 93.1%          | 99.2%                       | 0%    | 95.6% | 98.7% | 99.2% | 98.6%          | 0%                        | 99%   | -     | -     | -    | -              | 97.5%                  |
| Single-Unit Trucks     | 1                           | 0     | 0    | 0     | 1     | 1              | 4                         | 1     | 0    | 6     | 0     | 2              | 0                           | 0     | 2     | 1     | 4     | 3              | 0                         | 8     | -     | -     | -    | -              | 17                     |
| Single-Unit Trucks %   | 0.6%                        | 0%    | 0%   | 0%    | 0.3%  | 2.1%           | 1.2%                      | 2.5%  | 0%   | 1.4%  | 0%    | 0.7%           | 0%                          | 0%    | 0.4%  | 0.4%  | 0.8%  | 1%             | 0%                        | 0.8%  | -     | -     | -    | -              | 0.7%                   |
| Buses                  | 0                           | 7     | 0    | 0     | 7     | 0              | 1                         | 0     | 0    | 1     | 1     | 6              | 1                           | 0     | 8     | 2     | 0     | 0              | 0                         | 2     | -     | -     | -    | -              | 18                     |
| Buses %                | 0%                          | 3.7%  | 0%   | 0%    | 1.9%  | 0%             | 0.3%                      | 0%    | 0%   | 0.2%  | 1.4%  | 2.2%           | 0.8%                        | 0%    | 1.7%  | 0.8%  | 0%    | 0%             | 0%                        | 0.2%  | -     | -     | -    | -              | 0.8%                   |
| Street-Car             | 0                           | 11    | 0    | 0     | 11    | 0              | 0                         | 0     | 0    | 0     | 0     | 11             | 0                           | 0     | 11    | 0     | 0     | 0              | 0                         | 0     | -     | -     | -    | -              | 22                     |
| Street-Car %           | 0%                          | 5.9%  | 0%   | 0%    | 2.9%  | 0%             | 0%                        | 0%    | 0%   | 0%    | 0%    | 4%             | 0%                          | 0%    | 2.3%  | 0%    | 0%    | 0%             | 0%                        | 0%    | -     | -     | -    | -              | 0.9%                   |
| Articulated Trucks     | 1                           | 0     | 0    | 0     | 1     | 0              | 0                         | 0     | 0    | 0     | 0     | 0              | 0                           | 0     | 0     | 0     | 0     | 1              | 0                         | 1     | -     | -     | -    | -              | 2                      |
| Articulated Trucks %   | 0.6%                        | 0%    | 0%   | 0%    | 0.3%  | 0%             | 0%                        | 0%    | 0%   | 0%    | 0%    | 0%             | 0%                          | 0%    | 0%    | 0%    | 0%    | 0.3%           | 0%                        | 0.1%  | -     | -     | -    | -              | 0.1%                   |
| Pedestrians            | -                           | -     | -    | -     | 380   | -              | -                         | -     | -    | 696   | -     | -              | -                           | -     | 439   | -     | -     | -              | -                         | 264   | -     | -     | -    | -              | -                      |
| Pedestrians%           | -                           | -     | -    | -     | 21.3% | -              | -                         | -     | -    | 39%   | -     | -              | -                           | -     | 24.6% | -     | -     | -              | -                         | 14.8% | -     | -     | -    | -              | -                      |
| Bicycles on Crosswalk  | -                           | -     | -    | -     | 2     | -              | -                         | -     | -    | 3     | -     | -              | -                           | -     | 0     | -     | -     | -              | -                         | 1     | -     | -     | -    | -              | -                      |
| Bicycles on Crosswalk% | -                           | -     | -    | -     | 0.1%  | -              | -                         | -     | -    | 0.2%  | -     | -              | -                           | -     | 0%    | -     | -     | -              | -                         | 0.1%  | -     | -     | -    | -              | -                      |
| Bicycles on Road       | 10                          | 9     | 8    | 0     | -     | 7              | 130                       | 14    | 1    | -     | 14    | 18             | 6                           | 0     | -     | 33    | 207   | 19             | 3                         | -     | -     | -     | -    | -              |                        |
| Bicycles on Road%      | 100%                        | 100%  | 100% | 0%    | -     | 100%           | 100%                      | 100%  | 100% | -     | 100%  | 100%           | 100%                        | 0%    | -     | 100%  | 100%  | 100%           | 100%                      | -     | -     | -     | -    | -              | -                      |



Peak Hour: 08:15 AM - 09:15 AM Weather: Overcast Clouds (9 °C)



Peak Hour: 05:00 PM - 06:00 PM Weather: Clear Sky (18 °C)







Turning Movement Count (3 . BROADVIEW AVE & DEARBOURNE AVE)

| Start Time          | N Approach<br>BROADVIEW AVE |             |              |            |                | E Approach<br>DEARBOURNE AVE |             |              |            |                | S Approach<br>BROADVIEW AVE |             |              |            |                | Int. Total<br>(15 min) | Int. Total<br>(1 hr) |
|---------------------|-----------------------------|-------------|--------------|------------|----------------|------------------------------|-------------|--------------|------------|----------------|-----------------------------|-------------|--------------|------------|----------------|------------------------|----------------------|
|                     | Thru<br>N:S                 | Left<br>N:E | UTurn<br>N:N | Peds<br>N: | Approach Total | Right<br>E:N                 | Left<br>E:S | UTurn<br>E:E | Peds<br>E: | Approach Total | Right<br>S:E                | Thru<br>S:N | UTurn<br>S:S | Peds<br>S: | Approach Total |                        |                      |
| 2025-05-06 07:30:00 | 72                          | 0           | 0            | 2          | 72             | 3                            | 1           | 0            | 24         | 4              | 0                           | 67          | 0            | 3          | 67             | 143                    |                      |
| 2025-05-06 07:45:00 | 79                          | 0           | 1            | 1          | 80             | 3                            | 4           | 0            | 41         | 7              | 0                           | 86          | 0            | 7          | 86             | 173                    |                      |
| 2025-05-06 08:00:00 | 80                          | 0           | 1            | 0          | 81             | 5                            | 2           | 0            | 41         | 7              | 0                           | 90          | 0            | 5          | 90             | 178                    |                      |
| 2025-05-06 08:15:00 | 103                         | 0           | 0            | 2          | 103            | 10                           | 4           | 0            | 53         | 14             | 1                           | 85          | 0            | 2          | 86             | 203                    | 697                  |
| 2025-05-06 08:30:00 | 105                         | 0           | 1            | 2          | 106            | 9                            | 5           | 0            | 51         | 14             | 0                           | 100         | 0            | 6          | 100            | 220                    | 774                  |
| 2025-05-06 08:45:00 | 89                          | 0           | 0            | 1          | 89             | 6                            | 2           | 0            | 37         | 8              | 0                           | 85          | 0            | 0          | 85             | 182                    | 783                  |
| 2025-05-06 09:00:00 | 87                          | 0           | 0            | 3          | 87             | 8                            | 2           | 0            | 43         | 10             | 0                           | 88          | 0            | 6          | 88             | 185                    | 790                  |
| 2025-05-06 09:15:00 | 78                          | 0           | 2            | 2          | 80             | 5                            | 1           | 0            | 42         | 6              | 0                           | 74          | 0            | 5          | 74             | 160                    | 747                  |
| ***BREAK***         |                             |             |              |            |                |                              |             |              |            |                |                             |             |              |            |                |                        |                      |
| 2025-05-06 16:00:00 | 106                         | 0           | 1            | 4          | 107            | 7                            | 3           | 0            | 61         | 10             | 0                           | 99          | 0            | 6          | 99             | 216                    |                      |
| 2025-05-06 16:15:00 | 96                          | 0           | 0            | 4          | 96             | 8                            | 3           | 0            | 70         | 11             | 0                           | 122         | 0            | 7          | 122            | 229                    |                      |
| 2025-05-06 16:30:00 | 101                         | 0           | 0            | 3          | 101            | 9                            | 7           | 0            | 76         | 16             | 0                           | 99          | 0            | 3          | 99             | 216                    |                      |
| 2025-05-06 16:45:00 | 132                         | 0           | 0            | 6          | 132            | 6                            | 4           | 0            | 74         | 10             | 0                           | 118         | 0            | 1          | 118            | 260                    | 921                  |
| 2025-05-06 17:00:00 | 105                         | 0           | 1            | 7          | 106            | 3                            | 4           | 0            | 64         | 7              | 0                           | 96          | 0            | 7          | 96             | 209                    | 914                  |
| 2025-05-06 17:15:00 | 113                         | 0           | 0            | 4          | 113            | 6                            | 3           | 0            | 76         | 9              | 0                           | 105         | 0            | 9          | 105            | 227                    | 912                  |
| 2025-05-06 17:30:00 | 116                         | 0           | 3            | 1          | 119            | 6                            | 0           | 0            | 85         | 6              | 0                           | 122         | 0            | 6          | 122            | 247                    | 943                  |
| 2025-05-06 17:45:00 | 125                         | 0           | 0            | 4          | 125            | 6                            | 4           | 0            | 104        | 10             | 0                           | 109         | 0            | 12         | 109            | 244                    | 927                  |
| Grand Total         | 1587                        | 0           | 10           | 46         | 1597           | 100                          | 49          | 0            | 942        | 149            | 1                           | 1545        | 0            | 85         | 1546           | 3292                   | -                    |
| Approach%           | 99.4%                       | 0%          | 0.6%         | -          | -              | 67.1%                        | 32.9%       | 0%           | -          | -              | 0.1%                        | 99.9%       | 0%           | -          | -              | -                      | -                    |
| Totals %            | 48.2%                       | 0%          | 0.3%         | -          | 48.5%          | 3%                           | 1.5%        | 0%           | -          | 4.5%           | 0%                          | 46.9%       | 0%           | -          | 47%            | -                      | -                    |
| Heavy               | 112                         | 0           | 0            | -          | -              | 2                            | 1           | 0            | -          | -              | 0                           | 108         | 0            | -          | -              | -                      | -                    |
| Heavy %             | 7.1%                        | 0%          | 0%           | -          | -              | 2%                           | 2%          | 0%           | -          | -              | 0%                          | 7%          | 0%           | -          | -              | -                      | -                    |
| Bicycles            | 164                         | 1           | 0            | -          | -              | 13                           | 0           | 0            | -          | -              | 3                           | 103         | 0            | -          | -              | -                      | -                    |
| Bicycle %           | 10.3%                       | 0%          | 0%           | -          | -              | 13%                          | 0%          | 0%           | -          | -              | 300%                        | 6.7%        | 0%           | -          | -              | -                      | -                    |



Peak Hour: 08:15 AM - 09:15 AM Weather: Overcast Clouds (9 °C)

| Start Time             | N Approach<br>BROADVIEW AVE |      |       |      |                | E Approach<br>DEARBOURNE AVE |       |       |       |                | S Approach<br>BROADVIEW AVE |       |       |      |                | Int. Total<br>(15 min) |
|------------------------|-----------------------------|------|-------|------|----------------|------------------------------|-------|-------|-------|----------------|-----------------------------|-------|-------|------|----------------|------------------------|
|                        | Thru                        | Left | UTurn | Peds | Approach Total | Right                        | Left  | UTurn | Peds  | Approach Total | Right                       | Thru  | UTurn | Peds | Approach Total |                        |
| 2025-05-06 08:15:00    | 103                         | 0    | 0     | 2    | 103            | 10                           | 4     | 0     | 53    | 14             | 1                           | 85    | 0     | 2    | 86             | 203                    |
| 2025-05-06 08:30:00    | 105                         | 0    | 1     | 2    | 106            | 9                            | 5     | 0     | 51    | 14             | 0                           | 100   | 0     | 6    | 100            | 220                    |
| 2025-05-06 08:45:00    | 89                          | 0    | 0     | 1    | 89             | 6                            | 2     | 0     | 37    | 8              | 0                           | 85    | 0     | 0    | 85             | 182                    |
| 2025-05-06 09:00:00    | 87                          | 0    | 0     | 3    | 87             | 8                            | 2     | 0     | 43    | 10             | 0                           | 88    | 0     | 6    | 88             | 185                    |
| Grand Total            | 384                         | 0    | 1     | 8    | 385            | 33                           | 13    | 0     | 184   | 46             | 1                           | 358   | 0     | 14   | 359            | 790                    |
| Approach%              | 99.7%                       | 0%   | 0.3%  | -    | -              | 71.7%                        | 28.3% | 0%    | -     | -              | 0.3%                        | 99.7% | 0%    | -    | -              | -                      |
| Totals %               | 48.6%                       | 0%   | 0.1%  | -    | 48.7%          | 4.2%                         | 1.6%  | 0%    | -     | 5.8%           | 0.1%                        | 45.3% | 0%    | -    | 45.4%          | -                      |
| PHF                    | 0.91                        | 0    | 0.25  | -    | 0.91           | 0.83                         | 0.65  | 0     | -     | 0.82           | 0.25                        | 0.9   | 0     | -    | 0.9            | 0.9                    |
| Heavy                  | 31                          | 0    | 0     | -    | 31             | 1                            | 0     | 0     | -     | 1              | 0                           | 28    | 0     | -    | 28             | 60                     |
| Heavy %                | 8.1%                        | 0%   | 0%    | -    | 8.1%           | 3%                           | 0%    | 0%    | -     | 2.2%           | 0%                          | 7.8%  | 0%    | -    | 7.8%           | 7.6%                   |
| Lights                 | 353                         | 0    | 1     | -    | 354            | 32                           | 13    | 0     | -     | 45             | 1                           | 330   | 0     | -    | 331            | 730                    |
| Lights %               | 91.9%                       | 0%   | 100%  | -    | 91.9%          | 97%                          | 100%  | 0%    | -     | 97.8%          | 100%                        | 92.2% | 0%    | -    | 92.2%          | 92.4%                  |
| Single-Unit Trucks     | 4                           | 0    | 0     | -    | 4              | 0                            | 0     | 0     | -     | 0              | 0                           | 8     | 0     | -    | 8              | 12                     |
| Single-Unit Trucks %   | 1%                          | 0%   | 0%    | -    | 1%             | 0%                           | 0%    | 0%    | -     | 0%             | 0%                          | 2.2%  | 0%    | -    | 2.2%           | 1.5%                   |
| Buses                  | 13                          | 0    | 0     | -    | 13             | 1                            | 0     | 0     | -     | 1              | 0                           | 9     | 0     | -    | 9              | 23                     |
| Buses %                | 3.4%                        | 0%   | 0%    | -    | 3.4%           | 3%                           | 0%    | 0%    | -     | 2.2%           | 0%                          | 2.5%  | 0%    | -    | 2.5%           | 2.9%                   |
| Street-Car             | 14                          | 0    | 0     | -    | 14             | 0                            | 0     | 0     | -     | 0              | 0                           | 11    | 0     | -    | 11             | 25                     |
| Street-Car %           | 3.6%                        | 0%   | 0%    | -    | 3.6%           | 0%                           | 0%    | 0%    | -     | 0%             | 0%                          | 3.1%  | 0%    | -    | 3.1%           | 3.2%                   |
| Pedestrians            | -                           | -    | -     | 8    | -              | -                            | -     | -     | 183   | -              | -                           | -     | -     | 14   | -              | -                      |
| Pedestrians%           | -                           | -    | -     | 3.9% | -              | -                            | -     | -     | 88.8% | -              | -                           | -     | -     | 6.8% | -              | -                      |
| Bicycles on Crosswalk  | -                           | -    | -     | 0    | -              | -                            | -     | -     | 1     | -              | -                           | -     | -     | 0    | -              | -                      |
| Bicycles on Crosswalk% | -                           | -    | -     | 0%   | -              | -                            | -     | -     | 0.5%  | -              | -                           | -     | -     | 0%   | -              | -                      |
| Bicycles on Road       | 23                          | 0    | 0     | -    | -              | 5                            | 0     | 0     | -     | -              | 1                           | 29    | 0     | -    | -              | -                      |
| Bicycles on Road%      | 100%                        | 0%   | 0%    | -    | -              | 100%                         | 0%    | 0%    | -     | -              | 100%                        | 100%  | 0%    | -    | -              | -                      |





Peak Hour: 04:45 PM - 05:45 PM Weather: Clear Sky (18 °C)

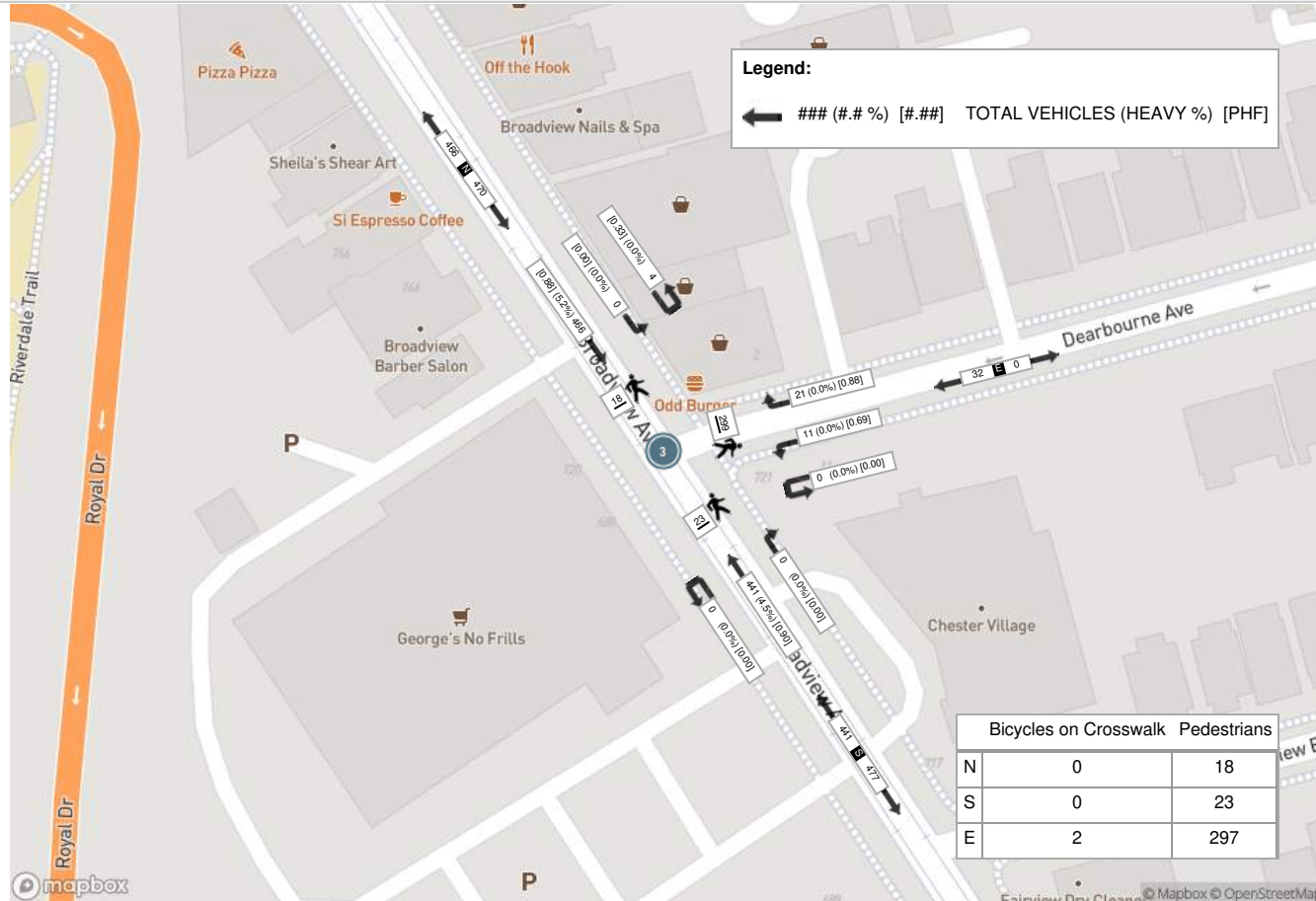
| Start Time             | N Approach<br>BROADVIEW AVE |      |       |      |                | E Approach<br>DEARBOURNE AVE |       |       |       |                | S Approach<br>BROADVIEW AVE |       |       |      |                | Int. Total<br>(15 min) |
|------------------------|-----------------------------|------|-------|------|----------------|------------------------------|-------|-------|-------|----------------|-----------------------------|-------|-------|------|----------------|------------------------|
|                        | Thru                        | Left | UTurn | Peds | Approach Total | Right                        | Left  | UTurn | Peds  | Approach Total | Right                       | Thru  | UTurn | Peds | Approach Total |                        |
| 2025-05-06 16:45:00    | 132                         | 0    | 0     | 6    | 132            | 6                            | 4     | 0     | 74    | 10             | 0                           | 118   | 0     | 1    | 118            | 260                    |
| 2025-05-06 17:00:00    | 105                         | 0    | 1     | 7    | 106            | 3                            | 4     | 0     | 64    | 7              | 0                           | 96    | 0     | 7    | 96             | 209                    |
| 2025-05-06 17:15:00    | 113                         | 0    | 0     | 4    | 113            | 6                            | 3     | 0     | 76    | 9              | 0                           | 105   | 0     | 9    | 105            | 227                    |
| 2025-05-06 17:30:00    | 116                         | 0    | 3     | 1    | 119            | 6                            | 0     | 0     | 85    | 6              | 0                           | 122   | 0     | 6    | 122            | 247                    |
| Grand Total            | 466                         | 0    | 4     | 18   | 470            | 21                           | 11    | 0     | 299   | 32             | 0                           | 441   | 0     | 23   | 441            | 943                    |
| Approach%              | 99.1%                       | 0%   | 0.9%  |      | -              | 65.6%                        | 34.4% | 0%    |       | -              | 0%                          | 100%  | 0%    |      | -              | -                      |
| Totals %               | 49.4%                       | 0%   | 0.4%  |      | 49.8%          | 2.2%                         | 1.2%  | 0%    |       | 3.4%           | 0%                          | 46.8% | 0%    |      | 46.8%          | -                      |
| PHF                    | 0.88                        | 0    | 0.33  |      | 0.89           | 0.88                         | 0.69  | 0     |       | 0.8            | 0                           | 0.9   | 0     |      | 0.9            | 0.91                   |
| Heavy                  | 24                          | 0    | 0     |      | 24             | 0                            | 0     | 0     |       | 0              | 0                           | 20    | 0     |      | 20             | 44                     |
| Heavy %                | 5.2%                        | 0%   | 0%    |      | 5.1%           | 0%                           | 0%    | 0%    |       | 0%             | 0%                          | 4.5%  | 0%    |      | 4.5%           | 4.7%                   |
| Lights                 | 442                         | 0    | 4     |      | 446            | 21                           | 11    | 0     |       | 32             | 0                           | 421   | 0     |      | 421            | 899                    |
| Lights %               | 94.8%                       | 0%   | 100%  |      | 94.9%          | 100%                         | 100%  | 0%    |       | 100%           | 0%                          | 95.5% | 0%    |      | 95.5%          | 95.3%                  |
| Single-Unit Trucks     | 2                           | 0    | 0     |      | 2              | 0                            | 0     | 0     |       | 0              | 0                           | 2     | 0     |      | 2              | 4                      |
| Single-Unit Trucks %   | 0.4%                        | 0%   | 0%    |      | 0.4%           | 0%                           | 0%    | 0%    |       | 0%             | 0%                          | 0.5%  | 0%    |      | 0.5%           | 0.4%                   |
| Buses                  | 8                           | 0    | 0     |      | 8              | 0                            | 0     | 0     |       | 0              | 0                           | 7     | 0     |      | 7              | 15                     |
| Buses %                | 1.7%                        | 0%   | 0%    |      | 1.7%           | 0%                           | 0%    | 0%    |       | 0%             | 0%                          | 1.6%  | 0%    |      | 1.6%           | 1.6%                   |
| Street-Car             | 14                          | 0    | 0     |      | 14             | 0                            | 0     | 0     |       | 0              | 0                           | 11    | 0     |      | 11             | 25                     |
| Street-Car %           | 3%                          | 0%   | 0%    |      | 3%             | 0%                           | 0%    | 0%    |       | 0%             | 0%                          | 2.5%  | 0%    |      | 2.5%           | 2.7%                   |
| Pedestrians            | -                           | -    | -     | 18   | -              | -                            | -     | -     | 297   | -              | -                           | -     | -     | 23   | -              | -                      |
| Pedestrians%           | -                           | -    | -     | 5.3% | -              | -                            | -     | -     | 87.4% | -              | -                           | -     | -     | 6.8% | -              | -                      |
| Bicycles on Crosswalk  | -                           | -    | -     | 0    | -              | -                            | -     | -     | 2     | -              | -                           | -     | -     | 0    | -              | -                      |
| Bicycles on Crosswalk% | -                           | -    | -     | 0%   | -              | -                            | -     | -     | 0.6%  | -              | -                           | -     | -     | 0%   | -              | -                      |
| Bicycles on Road       | 69                          | 1    | 0     |      | -              | 2                            | 0     | 0     |       | -              | 2                           | 33    | 0     |      | -              | -                      |
| Bicycles on Road%      | 100%                        | 100% | 0%    |      |                | 100%                         | 0%    | 0%    |       |                | 100%                        | 100%  | 0%    |      |                | -                      |

**Peak Hour: 08:15 AM - 09:15 AM Weather: Overcast Clouds (9 °C)**





**Peak Hour: 04:45 PM - 05:45 PM Weather: Clear Sky (18 °C)**





Turning Movement Count (6 . BROADVIEW AVE & FAIRVIEW BLVD)

| Start Time          | N Approach<br>BROADVIEW AVE |             |              |            |                | E Approach<br>FAIRVIEW BLVD |             |              |            |                | S Approach<br>BROADVIEW AVE |             |              |            |                | Int. Total<br>(15 min) | Int. Total<br>(1 hr) |
|---------------------|-----------------------------|-------------|--------------|------------|----------------|-----------------------------|-------------|--------------|------------|----------------|-----------------------------|-------------|--------------|------------|----------------|------------------------|----------------------|
|                     | Thru<br>N:S                 | Left<br>N:E | UTurn<br>N:N | Peds<br>N: | Approach Total | Right<br>E:N                | Left<br>E:S | UTurn<br>E:E | Peds<br>E: | Approach Total | Right<br>S:E                | Thru<br>S:N | UTurn<br>S:S | Peds<br>S: | Approach Total |                        |                      |
| 2025-05-06 07:30:00 | 66                          | 3           | 0            | 0          | 69             | 0                           | 0           | 0            | 19         | 0              | 1                           | 70          | 0            | 0          | 71             | 140                    |                      |
| 2025-05-06 07:45:00 | 83                          | 1           | 0            | 1          | 84             | 0                           | 0           | 0            | 34         | 0              | 2                           | 88          | 0            | 0          | 90             | 174                    |                      |
| 2025-05-06 08:00:00 | 75                          | 2           | 0            | 3          | 77             | 0                           | 0           | 0            | 40         | 0              | 1                           | 96          | 0            | 0          | 97             | 174                    |                      |
| 2025-05-06 08:15:00 | 94                          | 1           | 0            | 1          | 95             | 0                           | 0           | 0            | 51         | 0              | 2                           | 82          | 0            | 0          | 84             | 179                    | 667                  |
| 2025-05-06 08:30:00 | 101                         | 4           | 1            | 0          | 106            | 0                           | 0           | 0            | 44         | 0              | 1                           | 105         | 0            | 0          | 106            | 212                    | 739                  |
| 2025-05-06 08:45:00 | 85                          | 2           | 0            | 2          | 87             | 0                           | 0           | 0            | 33         | 0              | 4                           | 82          | 0            | 0          | 86             | 173                    | 738                  |
| 2025-05-06 09:00:00 | 78                          | 7           | 0            | 3          | 85             | 0                           | 0           | 0            | 40         | 0              | 1                           | 89          | 0            | 1          | 90             | 175                    | 739                  |
| 2025-05-06 09:15:00 | 69                          | 1           | 0            | 2          | 70             | 0                           | 0           | 0            | 35         | 0              | 4                           | 73          | 0            | 0          | 77             | 147                    | 707                  |
| ***BREAK***         |                             |             |              |            |                |                             |             |              |            |                |                             |             |              |            |                |                        |                      |
| 2025-05-06 16:00:00 | 101                         | 3           | 0            | 1          | 104            | 0                           | 0           | 0            | 51         | 0              | 8                           | 101         | 0            | 4          | 109            | 213                    |                      |
| 2025-05-06 16:15:00 | 86                          | 9           | 0            | 2          | 95             | 0                           | 0           | 0            | 61         | 0              | 5                           | 115         | 0            | 0          | 120            | 215                    |                      |
| 2025-05-06 16:30:00 | 102                         | 13          | 0            | 0          | 115            | 0                           | 0           | 0            | 63         | 0              | 4                           | 101         | 0            | 3          | 105            | 220                    |                      |
| 2025-05-06 16:45:00 | 121                         | 14          | 1            | 1          | 136            | 0                           | 0           | 0            | 70         | 0              | 3                           | 119         | 0            | 0          | 122            | 258                    | 906                  |
| 2025-05-06 17:00:00 | 108                         | 6           | 0            | 2          | 114            | 0                           | 0           | 0            | 61         | 0              | 2                           | 101         | 0            | 2          | 103            | 217                    | 910                  |
| 2025-05-06 17:15:00 | 114                         | 6           | 1            | 3          | 121            | 0                           | 0           | 0            | 60         | 0              | 6                           | 106         | 0            | 0          | 112            | 233                    | 928                  |
| 2025-05-06 17:30:00 | 107                         | 5           | 0            | 3          | 112            | 0                           | 0           | 0            | 84         | 0              | 6                           | 125         | 0            | 2          | 131            | 243                    | 951                  |
| 2025-05-06 17:45:00 | 129                         | 7           | 1            | 1          | 137            | 0                           | 0           | 0            | 83         | 0              | 3                           | 99          | 0            | 5          | 102            | 239                    | 932                  |
| Grand Total         | 1519                        | 84          | 4            | 25         | 1607           | 0                           | 0           | 0            | 829        | 0              | 53                          | 1552        | 0            | 17         | 1605           | 3212                   | -                    |
| Approach%           | 94.5%                       | 5.2%        | 0.2%         |            | -              | 0%                          | 0%          | 0%           |            | -              | 3.3%                        | 96.7%       | 0%           |            | -              | -                      | -                    |
| Totals %            | 47.3%                       | 2.6%        | 0.1%         |            | 50%            | 0%                          | 0%          | 0%           |            | 0%             | 1.7%                        | 48.3%       | 0%           |            | 50%            | -                      | -                    |
| Heavy               | 112                         | 0           | 0            |            | -              | 0                           | 0           | 0            |            | -              | 1                           | 105         | 0            |            | -              | -                      | -                    |
| Heavy %             | 7.4%                        | 0%          | 0%           |            | -              | 0%                          | 0%          | 0%           |            | -              | 1.9%                        | 6.8%        | 0%           |            | -              | -                      | -                    |
| Bicycles            | 156                         | 9           | 0            |            | -              | 5                           | 2           | 0            |            | -              | 3                           | 100         | 0            |            | -              | -                      | -                    |
| Bicycle %           | 10.3%                       | 10.7%       | 0%           |            | -              | 0%                          | 0%          | 0%           |            | -              | 5.7%                        | 6.4%        | 0%           |            | -              | -                      | -                    |





Peak Hour: 08:15 AM - 09:15 AM Weather: Overcast Clouds (9 °C)

| Start Time             | N Approach<br>BROADVIEW AVE |      |       |      |                | E Approach<br>FAIRVIEW BLVD |      |       |       |                | S Approach<br>BROADVIEW AVE |       |       |      |                | Int. Total<br>(15 min) |
|------------------------|-----------------------------|------|-------|------|----------------|-----------------------------|------|-------|-------|----------------|-----------------------------|-------|-------|------|----------------|------------------------|
|                        | Thru                        | Left | UTurn | Peds | Approach Total | Right                       | Left | UTurn | Peds  | Approach Total | Right                       | Thru  | UTurn | Peds | Approach Total |                        |
| 2025-05-06 08:15:00    | 94                          | 1    | 0     | 1    | 95             | 0                           | 0    | 0     | 51    | 0              | 2                           | 82    | 0     | 0    | 84             | 179                    |
| 2025-05-06 08:30:00    | 101                         | 4    | 1     | 0    | 106            | 0                           | 0    | 0     | 44    | 0              | 1                           | 105   | 0     | 0    | 106            | 212                    |
| 2025-05-06 08:45:00    | 85                          | 2    | 0     | 2    | 87             | 0                           | 0    | 0     | 33    | 0              | 4                           | 82    | 0     | 0    | 86             | 173                    |
| 2025-05-06 09:00:00    | 78                          | 7    | 0     | 3    | 85             | 0                           | 0    | 0     | 40    | 0              | 1                           | 89    | 0     | 1    | 90             | 175                    |
| Grand Total            | 358                         | 14   | 1     | 6    | 373            | 0                           | 0    | 0     | 168   | 0              | 8                           | 358   | 0     | 1    | 366            | 739                    |
| Approach%              | 96%                         | 3.8% | 0.3%  |      | -              | 0%                          | 0%   | 0%    |       | -              | 2.2%                        | 97.8% | 0%    |      | -              | -                      |
| Totals %               | 48.4%                       | 1.9% | 0.1%  |      | 50.5%          | 0%                          | 0%   | 0%    |       | 0%             | 1.1%                        | 48.4% | 0%    |      | 49.5%          | -                      |
| PHF                    | 0.89                        | 0.5  | 0.25  |      | 0.88           | 0                           | 0    | 0     |       | 0              | 0.5                         | 0.85  | 0     |      | 0.86           | 0.87                   |
| Heavy                  | 33                          | 0    | 0     |      | 33             | 0                           | 0    | 0     |       | 0              | 0                           | 26    | 0     |      | 26             | 59                     |
| Heavy %                | 9.2%                        | 0%   | 0%    |      | 8.8%           | 0%                          | 0%   | 0%    |       | 0%             | 0%                          | 7.3%  | 0%    |      | 7.1%           | 8%                     |
| Lights                 | 325                         | 14   | 1     |      | 340            | 0                           | 0    | 0     |       | 0              | 8                           | 332   | 0     |      | 340            | 680                    |
| Lights %               | 90.8%                       | 100% | 100%  |      | 91.2%          | 0%                          | 0%   | 0%    |       | 0%             | 100%                        | 92.7% | 0%    |      | 92.9%          | 92%                    |
| Single-Unit Trucks     | 6                           | 0    | 0     |      | 6              | 0                           | 0    | 0     |       | 0              | 0                           | 6     | 0     |      | 6              | 12                     |
| Single-Unit Trucks %   | 1.7%                        | 0%   | 0%    |      | 1.6%           | 0%                          | 0%   | 0%    |       | 0%             | 0%                          | 1.7%  | 0%    |      | 1.6%           | 1.6%                   |
| Buses                  | 13                          | 0    | 0     |      | 13             | 0                           | 0    | 0     |       | 0              | 0                           | 9     | 0     |      | 9              | 22                     |
| Buses %                | 3.6%                        | 0%   | 0%    |      | 3.5%           | 0%                          | 0%   | 0%    |       | 0%             | 0%                          | 2.5%  | 0%    |      | 2.5%           | 3%                     |
| Street-Car             | 14                          | 0    | 0     |      | 14             | 0                           | 0    | 0     |       | 0              | 0                           | 11    | 0     |      | 11             | 25                     |
| Street-Car %           | 3.9%                        | 0%   | 0%    |      | 3.8%           | 0%                          | 0%   | 0%    |       | 0%             | 0%                          | 3.1%  | 0%    |      | 3%             | 3.4%                   |
| Pedestrians            | -                           | -    | -     | 6    | -              | -                           | -    | -     | 167   | -              | -                           | -     | -     | 1    | -              | -                      |
| Pedestrians%           | -                           | -    | -     | 3.4% | -              | -                           | -    | -     | 95.4% | -              | -                           | -     | -     | 0.6% | -              | -                      |
| Bicycles on Crosswalk  | -                           | -    | -     | 0    | -              | -                           | -    | -     | 1     | -              | -                           | -     | -     | 0    | -              | -                      |
| Bicycles on Crosswalk% | -                           | -    | -     | 0%   | -              | -                           | -    | -     | 0.6%  | -              | -                           | -     | -     | 0%   | -              | -                      |
| Bicycles on Road       | 23                          | 1    | 0     |      | -              | 1                           | 1    | 0     |       | -              | 0                           | 29    | 0     |      | -              | -                      |
| Bicycles on Road%      | 100%                        | 100% | 0%    |      |                | 100%                        | 100% | 0%    |       |                | 0%                          | 100%  | 0%    |      |                | -                      |

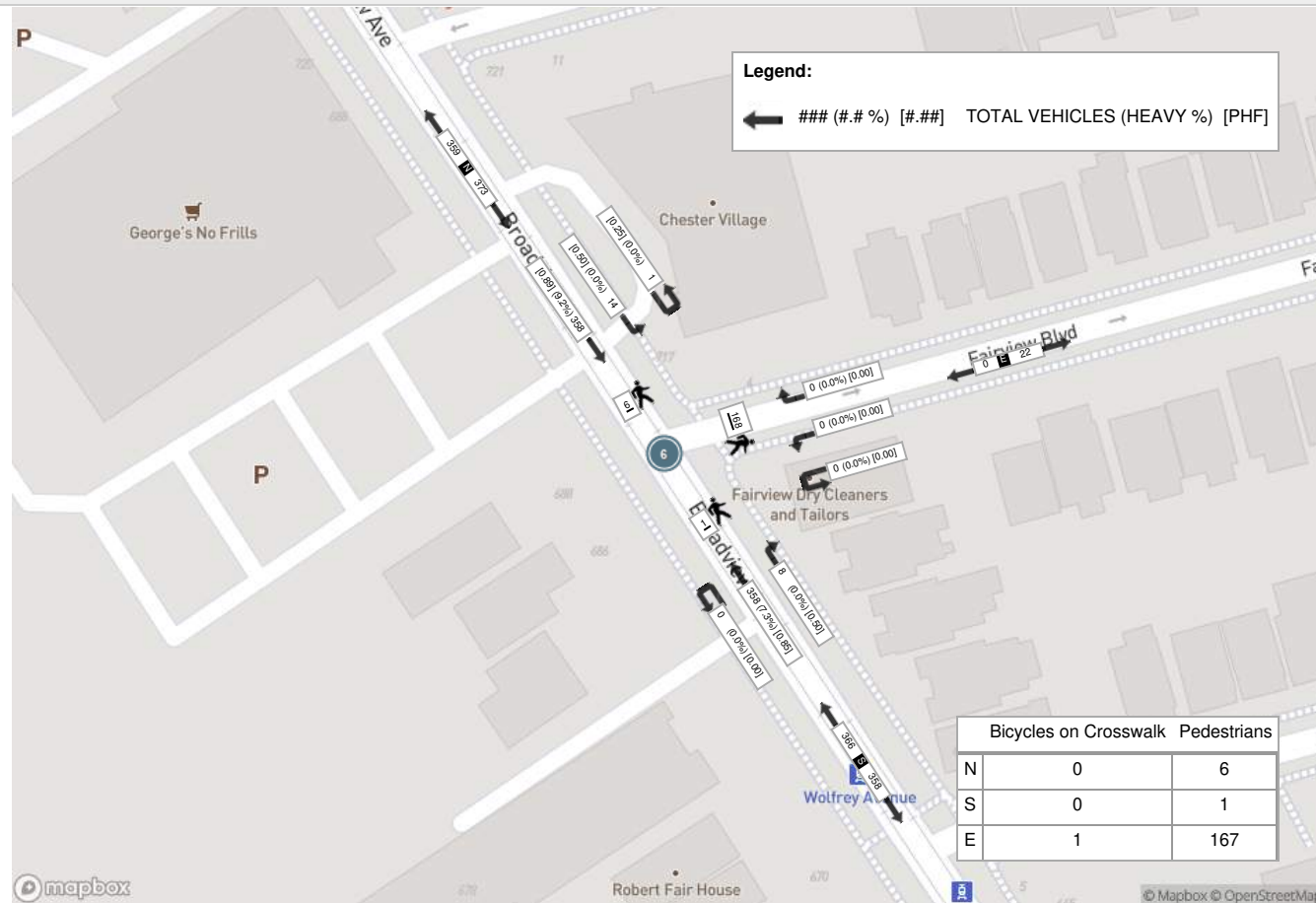


Peak Hour: 04:45 PM - 05:45 PM Weather: Clear Sky (18 °C)

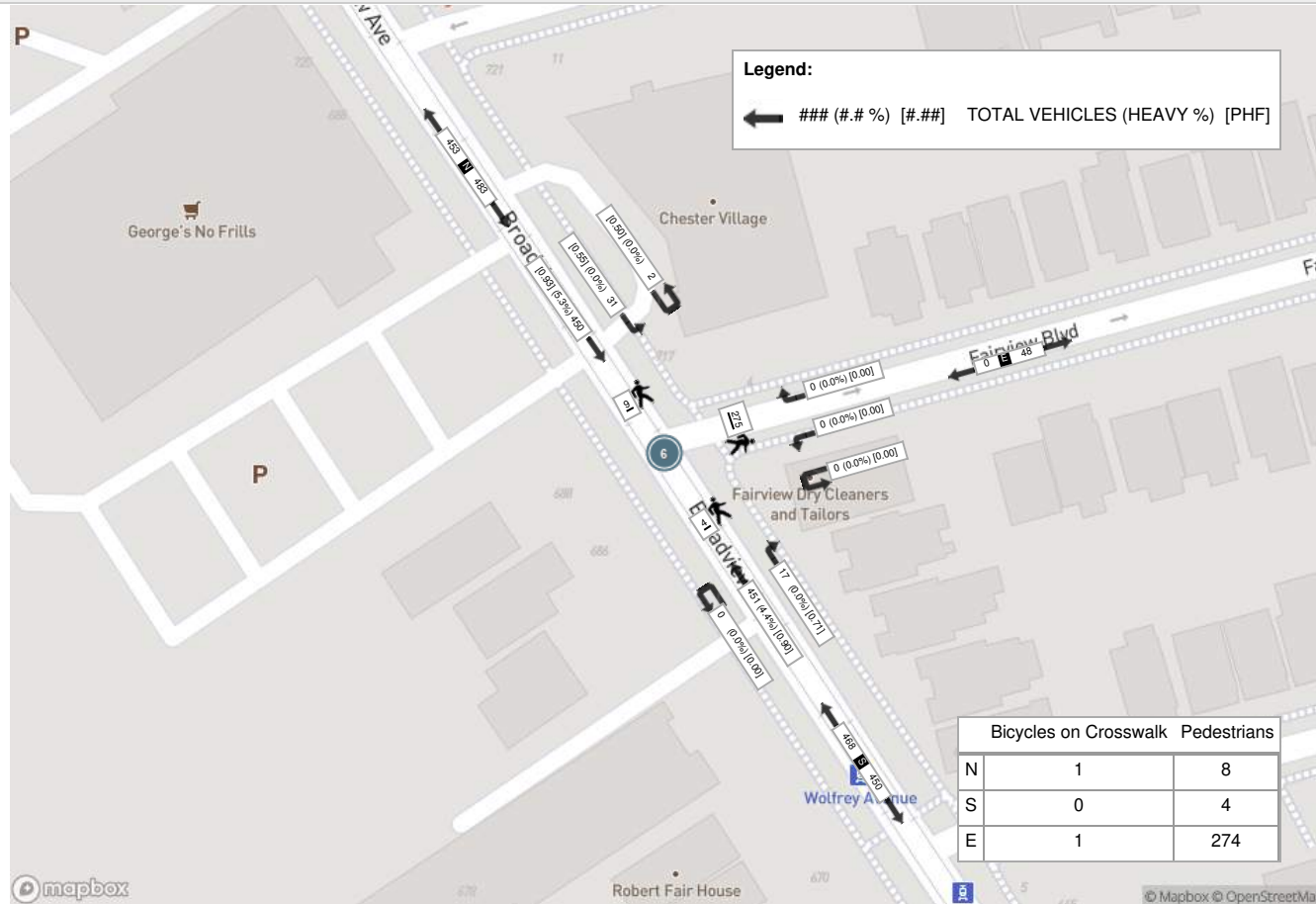
| Start Time             | N Approach<br>BROADVIEW AVE |      |       |      |                | E Approach<br>FAIRVIEW BLVD |      |       |       |                | S Approach<br>BROADVIEW AVE |       |       |      |                | Int. Total<br>(15 min) |
|------------------------|-----------------------------|------|-------|------|----------------|-----------------------------|------|-------|-------|----------------|-----------------------------|-------|-------|------|----------------|------------------------|
|                        | Thru                        | Left | UTurn | Peds | Approach Total | Right                       | Left | UTurn | Peds  | Approach Total | Right                       | Thru  | UTurn | Peds | Approach Total |                        |
| 2025-05-06 16:45:00    | 121                         | 14   | 1     | 1    | 136            | 0                           | 0    | 0     | 70    | 0              | 3                           | 119   | 0     | 0    | 122            | 258                    |
| 2025-05-06 17:00:00    | 108                         | 6    | 0     | 2    | 114            | 0                           | 0    | 0     | 61    | 0              | 2                           | 101   | 0     | 2    | 103            | 217                    |
| 2025-05-06 17:15:00    | 114                         | 6    | 1     | 3    | 121            | 0                           | 0    | 0     | 60    | 0              | 6                           | 106   | 0     | 0    | 112            | 233                    |
| 2025-05-06 17:30:00    | 107                         | 5    | 0     | 3    | 112            | 0                           | 0    | 0     | 84    | 0              | 6                           | 125   | 0     | 2    | 131            | 243                    |
| Grand Total            | 450                         | 31   | 2     | 9    | 483            | 0                           | 0    | 0     | 275   | 0              | 17                          | 451   | 0     | 4    | 468            | 951                    |
| Approach%              | 93.2%                       | 6.4% | 0.4%  |      | -              | 0%                          | 0%   | 0%    |       | -              | 3.6%                        | 96.4% | 0%    |      | -              | -                      |
| Totals %               | 47.3%                       | 3.3% | 0.2%  |      | 50.8%          | 0%                          | 0%   | 0%    |       | 0%             | 1.8%                        | 47.4% | 0%    |      | 49.2%          | -                      |
| PHF                    | 0.93                        | 0.55 | 0.5   |      | 0.89           | 0                           | 0    | 0     |       | 0              | 0.71                        | 0.9   | 0     |      | 0.89           | 0.92                   |
| Heavy                  | 24                          | 0    | 0     |      | 24             | 0                           | 0    | 0     |       | 0              | 0                           | 20    | 0     |      | 20             | 44                     |
| Heavy %                | 5.3%                        | 0%   | 0%    |      | 5%             | 0%                          | 0%   | 0%    |       | 0%             | 0%                          | 4.4%  | 0%    |      | 4.3%           | 4.6%                   |
| Lights                 | 426                         | 31   | 2     |      | 459            | 0                           | 0    | 0     |       | 0              | 17                          | 431   | 0     |      | 448            | 907                    |
| Lights %               | 94.7%                       | 100% | 100%  |      | 95%            | 0%                          | 0%   | 0%    |       | 0%             | 100%                        | 95.6% | 0%    |      | 95.7%          | 95.4%                  |
| Single-Unit Trucks     | 1                           | 0    | 0     |      | 1              | 0                           | 0    | 0     |       | 0              | 0                           | 2     | 0     |      | 2              | 3                      |
| Single-Unit Trucks %   | 0.2%                        | 0%   | 0%    |      | 0.2%           | 0%                          | 0%   | 0%    |       | 0%             | 0%                          | 0.4%  | 0%    |      | 0.4%           | 0.3%                   |
| Buses                  | 9                           | 0    | 0     |      | 9              | 0                           | 0    | 0     |       | 0              | 0                           | 7     | 0     |      | 7              | 16                     |
| Buses %                | 2%                          | 0%   | 0%    |      | 1.9%           | 0%                          | 0%   | 0%    |       | 0%             | 0%                          | 1.6%  | 0%    |      | 1.5%           | 1.7%                   |
| Street-Car             | 14                          | 0    | 0     |      | 14             | 0                           | 0    | 0     |       | 0              | 0                           | 11    | 0     |      | 11             | 25                     |
| Street-Car %           | 3.1%                        | 0%   | 0%    |      | 2.9%           | 0%                          | 0%   | 0%    |       | 0%             | 0%                          | 2.4%  | 0%    |      | 2.4%           | 2.6%                   |
| Pedestrians            | -                           | -    | -     | 8    | -              | -                           | -    | -     | 274   | -              | -                           | -     | -     | 4    | -              | -                      |
| Pedestrians%           | -                           | -    | -     | 2.8% | -              | -                           | -    | -     | 95.1% | -              | -                           | -     | -     | 1.4% | -              | -                      |
| Bicycles on Crosswalk  | -                           | -    | -     | 1    | -              | -                           | -    | -     | 1     | -              | -                           | -     | -     | 0    | -              | -                      |
| Bicycles on Crosswalk% | -                           | -    | -     | 0.3% | -              | -                           | -    | -     | 0.3%  | -              | -                           | -     | -     | 0%   | -              | -                      |
| Bicycles on Road       | 64                          | 5    | 0     |      | -              | 2                           | 1    | 0     |       | -              | 1                           | 31    | 0     |      | -              | -                      |
| Bicycles on Road%      | 100%                        | 100% | 0%    |      |                | 100%                        | 100% | 0%    |       |                | 100%                        | 100%  | 0%    |      |                | -                      |



**Peak Hour: 08:15 AM - 09:15 AM Weather: Overcast Clouds (9 °C)**



**Peak Hour: 04:45 PM - 05:45 PM Weather: Clear Sky (18 °C)**







Turning Movement Count (7 . BROADVIEW AVE & WOLFREY AVE) CustID: 13462704

| Start Time          | N Approach<br>BROADVIEW AVE |             |              |            |                | E Approach<br>WOLFREY AVE |             |              |            |                | S Approach<br>BROADVIEW AVE |             |              |            |                | Int. Total<br>(15 min) | Int. Total<br>(1 hr) |
|---------------------|-----------------------------|-------------|--------------|------------|----------------|---------------------------|-------------|--------------|------------|----------------|-----------------------------|-------------|--------------|------------|----------------|------------------------|----------------------|
|                     | Thru<br>N:S                 | Left<br>N:E | UTurn<br>N:N | Peds<br>N: | Approach Total | Right<br>E:N              | Left<br>E:S | UTurn<br>E:E | Peds<br>E: | Approach Total | Right<br>S:E                | Thru<br>S:N | UTurn<br>S:S | Peds<br>S: | Approach Total |                        |                      |
| 2025-05-06 07:30:00 | 64                          | 1           | 0            | 15         | 65             | 1                         | 0           | 0            | 19         | 1              | 0                           | 71          | 0            | 0          | 71             | 137                    |                      |
| 2025-05-06 07:45:00 | 81                          | 1           | 0            | 18         | 82             | 0                         | 0           | 0            | 29         | 0              | 0                           | 88          | 0            | 0          | 88             | 170                    |                      |
| 2025-05-06 08:00:00 | 73                          | 1           | 0            | 34         | 74             | 2                         | 0           | 0            | 32         | 2              | 0                           | 96          | 0            | 0          | 96             | 172                    |                      |
| 2025-05-06 08:15:00 | 97                          | 0           | 0            | 68         | 97             | 0                         | 0           | 0            | 59         | 0              | 1                           | 87          | 0            | 1          | 88             | 185                    | 664                  |
| 2025-05-06 08:30:00 | 105                         | 0           | 0            | 22         | 105            | 0                         | 1           | 0            | 33         | 1              | 0                           | 105         | 0            | 0          | 105            | 211                    | 738                  |
| 2025-05-06 08:45:00 | 82                          | 1           | 0            | 16         | 83             | 0                         | 2           | 0            | 32         | 2              | 3                           | 83          | 0            | 0          | 86             | 171                    | 739                  |
| 2025-05-06 09:00:00 | 77                          | 1           | 0            | 8          | 78             | 0                         | 2           | 0            | 30         | 2              | 0                           | 90          | 0            | 0          | 90             | 170                    | 737                  |
| 2025-05-06 09:15:00 | 72                          | 1           | 1            | 11         | 74             | 0                         | 0           | 0            | 28         | 0              | 0                           | 77          | 0            | 1          | 77             | 151                    | 703                  |
| ***BREAK***         |                             |             |              |            |                |                           |             |              |            |                |                             |             |              |            |                |                        |                      |
| 2025-05-06 16:00:00 | 98                          | 1           | 1            | 36         | 100            | 4                         | 1           | 0            | 53         | 5              | 0                           | 109         | 0            | 1          | 109            | 214                    |                      |
| 2025-05-06 16:15:00 | 86                          | 0           | 0            | 24         | 86             | 1                         | 1           | 0            | 51         | 2              | 1                           | 113         | 0            | 0          | 114            | 202                    |                      |
| 2025-05-06 16:30:00 | 99                          | 0           | 0            | 38         | 99             | 0                         | 1           | 0            | 66         | 1              | 1                           | 108         | 0            | 1          | 109            | 209                    |                      |
| 2025-05-06 16:45:00 | 120                         | 4           | 0            | 48         | 124            | 3                         | 0           | 0            | 73         | 3              | 0                           | 117         | 0            | 0          | 117            | 244                    | 869                  |
| 2025-05-06 17:00:00 | 109                         | 1           | 0            | 35         | 110            | 0                         | 0           | 0            | 55         | 0              | 0                           | 103         | 0            | 0          | 103            | 213                    | 868                  |
| 2025-05-06 17:15:00 | 109                         | 3           | 0            | 32         | 112            | 1                         | 1           | 0            | 61         | 2              | 0                           | 112         | 0            | 2          | 112            | 226                    | 892                  |
| 2025-05-06 17:30:00 | 101                         | 2           | 0            | 37         | 103            | 3                         | 2           | 0            | 70         | 5              | 0                           | 124         | 0            | 1          | 124            | 232                    | 915                  |
| 2025-05-06 17:45:00 | 124                         | 3           | 0            | 50         | 127            | 2                         | 0           | 0            | 80         | 2              | 0                           | 104         | 0            | 0          | 104            | 233                    | 904                  |
| Grand Total         | 1497                        | 20          | 2            | 492        | 1519           | 17                        | 11          | 0            | 771        | 28             | 6                           | 1587        | 0            | 7          | 1593           | 3140                   | -                    |
| Approach%           | 98.6%                       | 1.3%        | 0.1%         | -          | -              | 60.7%                     | 39.3%       | 0%           | -          | -              | 0.4%                        | 99.6%       | 0%           | -          | -              | -                      | -                    |
| Totals %            | 47.7%                       | 0.6%        | 0.1%         | -          | 48.4%          | 0.5%                      | 0.4%        | 0%           | -          | 0.9%           | 0.2%                        | 50.5%       | 0%           | -          | 50.7%          | -                      | -                    |
| Heavy               | 114                         | 2           | 0            | -          | -              | 1                         | 0           | 0            | -          | -              | 0                           | 106         | 0            | -          | -              | -                      | -                    |
| Heavy %             | 7.6%                        | 10%         | 0%           | -          | -              | 5.9%                      | 0%          | 0%           | -          | -              | 0%                          | 6.7%        | 0%           | -          | -              | -                      | -                    |
| Bicycles            | 160                         | 3           | 0            | -          | -              | 3                         | 3           | 0            | -          | -              | 8                           | 95          | 0            | -          | -              | -                      | -                    |
| Bicycle %           | 10.7%                       | 15%         | 0%           | -          | -              | 17.6%                     | 27.3%       | 0%           | -          | -              | 133.3%                      | 6%          | 0%           | -          | -              | -                      | -                    |



Peak Hour: 08:00 AM - 09:00 AM Weather: Overcast Clouds (9 °C)

| Start Time             | N Approach<br>BROADVIEW AVE |      |       |       |                | E Approach<br>WOLFREY AVE |      |       |       |                | S Approach<br>BROADVIEW AVE |       |       |      |                | Int. Total<br>(15 min) |
|------------------------|-----------------------------|------|-------|-------|----------------|---------------------------|------|-------|-------|----------------|-----------------------------|-------|-------|------|----------------|------------------------|
|                        | Thru                        | Left | UTurn | Peds  | Approach Total | Right                     | Left | UTurn | Peds  | Approach Total | Right                       | Thru  | UTurn | Peds | Approach Total |                        |
| 2025-05-06 08:00:00    | 73                          | 1    | 0     | 34    | 74             | 2                         | 0    | 0     | 32    | 2              | 0                           | 96    | 0     | 0    | 96             | 172                    |
| 2025-05-06 08:15:00    | 97                          | 0    | 0     | 68    | 97             | 0                         | 0    | 0     | 59    | 0              | 1                           | 87    | 0     | 1    | 88             | 185                    |
| 2025-05-06 08:30:00    | 105                         | 0    | 0     | 22    | 105            | 0                         | 1    | 0     | 33    | 1              | 0                           | 105   | 0     | 0    | 105            | 211                    |
| 2025-05-06 08:45:00    | 82                          | 1    | 0     | 16    | 83             | 0                         | 2    | 0     | 32    | 2              | 3                           | 83    | 0     | 0    | 86             | 171                    |
| Grand Total            | 357                         | 2    | 0     | 140   | 359            | 2                         | 3    | 0     | 156   | 5              | 4                           | 371   | 0     | 1    | 375            | 739                    |
| Approach%              | 99.4%                       | 0.6% | 0%    | -     | -              | 40%                       | 60%  | 0%    | -     | -              | 1.1%                        | 98.9% | 0%    | -    | -              | -                      |
| Totals %               | 48.3%                       | 0.3% | 0%    | -     | 48.6%          | 0.3%                      | 0.4% | 0%    | -     | 0.7%           | 0.5%                        | 50.2% | 0%    | -    | 50.7%          | -                      |
| PHF                    | 0.85                        | 0.5  | 0     | -     | 0.85           | 0.25                      | 0.38 | 0     | -     | 0.63           | 0.33                        | 0.88  | 0     | -    | 0.89           | 0.88                   |
| Heavy                  | 36                          | 0    | 0     | -     | 36             | 0                         | 0    | 0     | -     | 0              | 0                           | 26    | 0     | -    | 26             | 62                     |
| Heavy %                | 10.1%                       | 0%   | 0%    | -     | 10%            | 0%                        | 0%   | 0%    | -     | 0%             | 0%                          | 7%    | 0%    | -    | 6.9%           | 8.4%                   |
| Lights                 | 321                         | 2    | 0     | -     | 323            | 2                         | 3    | 0     | -     | 5              | 4                           | 345   | 0     | -    | 349            | 677                    |
| Lights %               | 89.9%                       | 100% | 0%    | -     | 90%            | 100%                      | 100% | 0%    | -     | 100%           | 100%                        | 93%   | 0%    | -    | 93.1%          | 91.6%                  |
| Single-Unit Trucks     | 6                           | 0    | 0     | -     | 6              | 0                         | 0    | 0     | -     | 0              | 0                           | 4     | 0     | -    | 4              | 10                     |
| Single-Unit Trucks %   | 1.7%                        | 0%   | 0%    | -     | 1.7%           | 0%                        | 0%   | 0%    | -     | 0%             | 0%                          | 1.1%  | 0%    | -    | 1.1%           | 1.4%                   |
| Buses                  | 11                          | 0    | 0     | -     | 11             | 0                         | 0    | 0     | -     | 0              | 0                           | 10    | 0     | -    | 10             | 21                     |
| Buses %                | 3.1%                        | 0%   | 0%    | -     | 3.1%           | 0%                        | 0%   | 0%    | -     | 0%             | 0%                          | 2.7%  | 0%    | -    | 2.7%           | 2.8%                   |
| Street-Car             | 19                          | 0    | 0     | -     | 19             | 0                         | 0    | 0     | -     | 0              | 0                           | 12    | 0     | -    | 12             | 31                     |
| Street-Car %           | 5.3%                        | 0%   | 0%    | -     | 5.3%           | 0%                        | 0%   | 0%    | -     | 0%             | 0%                          | 3.2%  | 0%    | -    | 3.2%           | 4.2%                   |
| Pedestrians            | -                           | -    | -     | 140   | -              | -                         | -    | -     | 156   | -              | -                           | -     | -     | 1    | -              | -                      |
| Pedestrians%           | -                           | -    | -     | 47.1% | -              | -                         | -    | -     | 52.5% | -              | -                           | -     | -     | 0.3% | -              | -                      |
| Bicycles on Crosswalk  | -                           | -    | -     | 0     | -              | -                         | -    | -     | 0     | -              | -                           | -     | -     | 0    | -              | -                      |
| Bicycles on Crosswalk% | -                           | -    | -     | 0%    | -              | -                         | -    | -     | 0%    | -              | -                           | -     | -     | 0%   | -              | -                      |
| Bicycles on Road       | 29                          | 0    | 0     | -     | -              | 1                         | 0    | 0     | -     | -              | 0                           | 22    | 0     | -    | -              | -                      |
| Bicycles on Road%      | 100%                        | 0%   | 0%    | -     | -              | 100%                      | 0%   | 0%    | -     | -              | 0%                          | 100%  | 0%    | -    | -              | -                      |

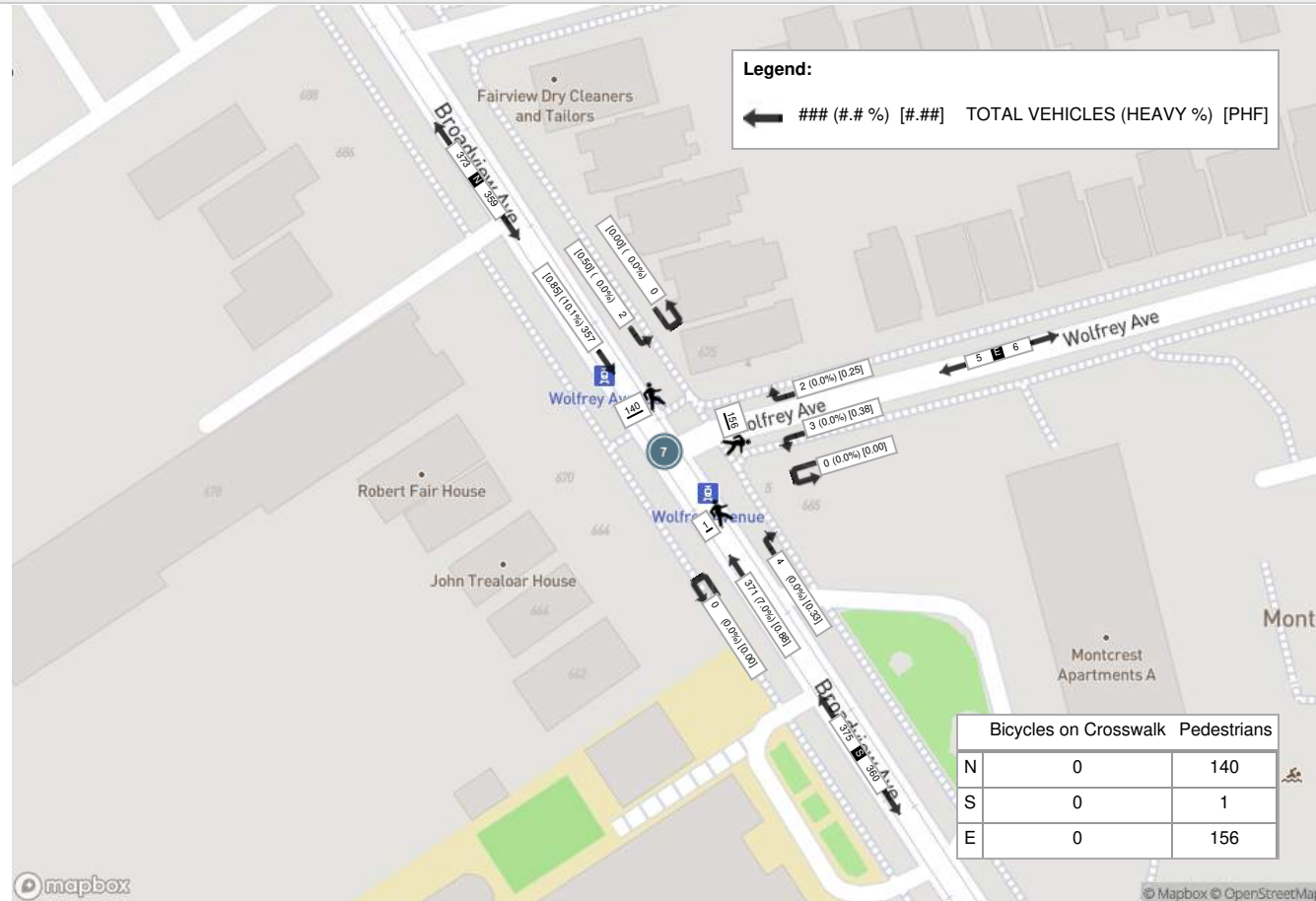




Peak Hour: 04:45 PM - 05:45 PM Weather: Clear Sky (18 °C)

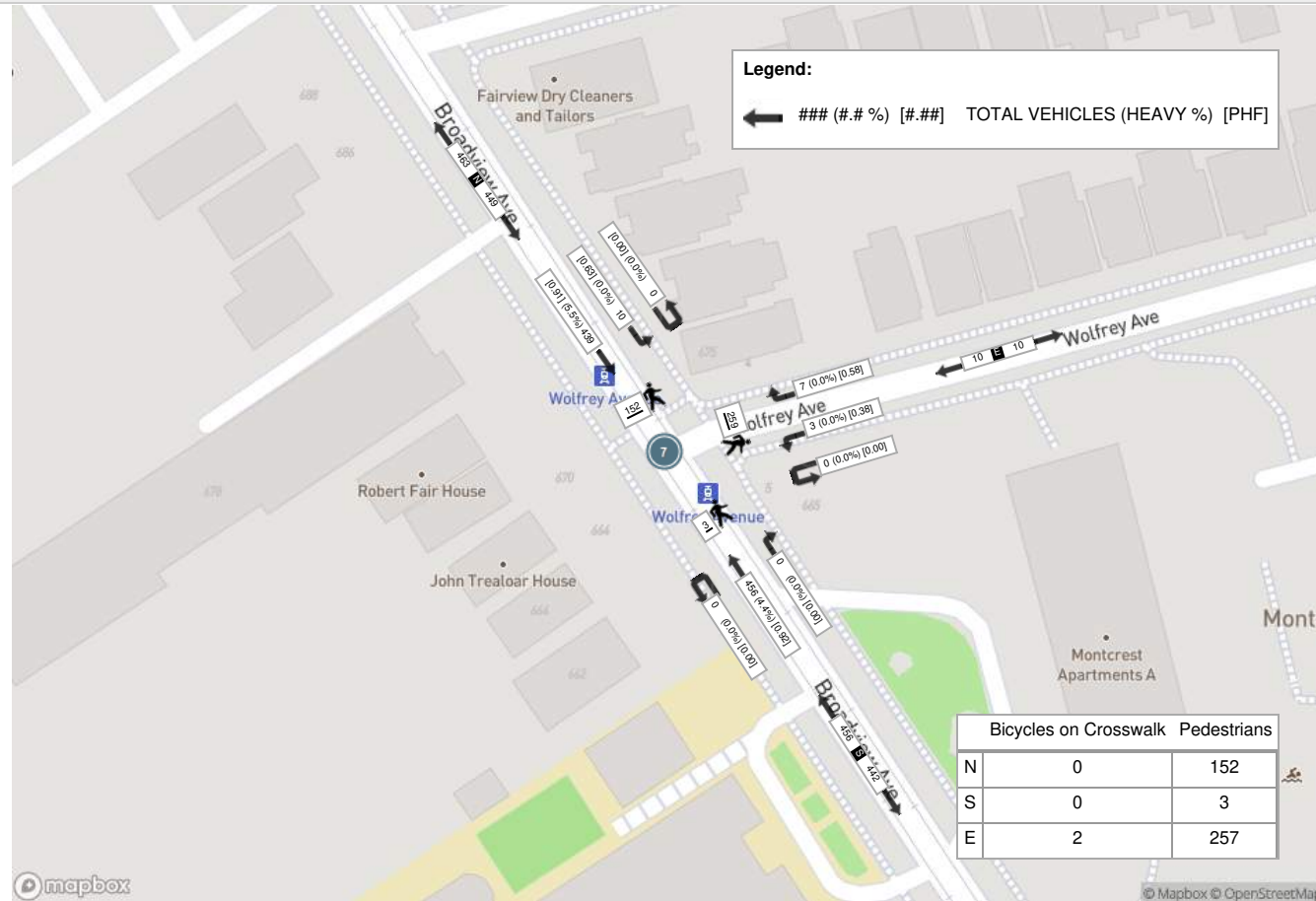
| Start Time             | N Approach<br>BROADVIEW AVE |      |       |       |                | E Approach<br>WOLFREY AVE |      |       |       |                | S Approach<br>BROADVIEW AVE |       |       |       |                | Int. Total<br>(15 min) |
|------------------------|-----------------------------|------|-------|-------|----------------|---------------------------|------|-------|-------|----------------|-----------------------------|-------|-------|-------|----------------|------------------------|
|                        | Thru                        | Left | UTurn | Peds  | Approach Total | Right                     | Left | UTurn | Peds  | Approach Total | Right                       | Thru  | UTurn | Peds  | Approach Total |                        |
| 2025-05-06 16:45:00    | 120                         | 4    | 0     | 48    | 124            | 3                         | 0    | 0     | 73    | 3              | 0                           | 117   | 0     | 0     | 117            | 244                    |
| 2025-05-06 17:00:00    | 109                         | 1    | 0     | 35    | 110            | 0                         | 0    | 0     | 55    | 0              | 0                           | 103   | 0     | 0     | 103            | 213                    |
| 2025-05-06 17:15:00    | 109                         | 3    | 0     | 32    | 112            | 1                         | 1    | 0     | 61    | 2              | 0                           | 112   | 0     | 2     | 112            | 226                    |
| 2025-05-06 17:30:00    | 101                         | 2    | 0     | 37    | 103            | 3                         | 2    | 0     | 70    | 5              | 0                           | 124   | 0     | 1     | 124            | 232                    |
| Grand Total            | 439                         | 10   | 0     | 152   | 449            | 7                         | 3    | 0     | 259   | 10             | 0                           | 456   | 0     | 3     | 456            | 915                    |
| Approach%              | 97.8%                       | 2.2% | 0%    | -     | -              | 70%                       | 30%  | 0%    | -     | -              | 0%                          | 100%  | 0%    | -     | -              | -                      |
| Totals %               | 48%                         | 1.1% | 0%    | 49.1% | 49.1%          | 0.8%                      | 0.3% | 0%    | 1.1%  | 1.1%           | 0%                          | 49.8% | 0%    | 49.8% | 49.8%          | -                      |
| PHF                    | 0.91                        | 0.63 | 0     | 0.91  | 0.91           | 0.58                      | 0.38 | 0     | 0.5   | 0.5            | 0                           | 0.92  | 0     | 0.92  | 0.92           | 0.94                   |
| Heavy                  | 24                          | 0    | 0     | 24    | 24             | 0                         | 0    | 0     | 0     | 0              | 0                           | 20    | 0     | 20    | 20             | 44                     |
| Heavy %                | 5.5%                        | 0%   | 0%    | 5.3%  | 5.3%           | 0%                        | 0%   | 0%    | 0%    | 0%             | 0%                          | 4.4%  | 0%    | 4.4%  | 4.4%           | 4.8%                   |
| Lights                 | 415                         | 10   | 0     | 425   | 425            | 7                         | 3    | 0     | 10    | 10             | 0                           | 436   | 0     | 436   | 436            | 871                    |
| Lights %               | 94.5%                       | 100% | 0%    | 94.7% | 94.7%          | 100%                      | 100% | 0%    | 100%  | 100%           | 0%                          | 95.6% | 0%    | 95.6% | 95.6%          | 95.2%                  |
| Single-Unit Trucks     | 1                           | 0    | 0     | 1     | 1              | 0                         | 0    | 0     | 0     | 0              | 0                           | 2     | 0     | 2     | 2              | 3                      |
| Single-Unit Trucks %   | 0.2%                        | 0%   | 0%    | 0.2%  | 0.2%           | 0%                        | 0%   | 0%    | 0%    | 0%             | 0%                          | 0.4%  | 0%    | 0.4%  | 0.4%           | 0.3%                   |
| Buses                  | 9                           | 0    | 0     | 9     | 9              | 0                         | 0    | 0     | 0     | 0              | 0                           | 7     | 0     | 7     | 7              | 16                     |
| Buses %                | 2.1%                        | 0%   | 0%    | 2%    | 2%             | 0%                        | 0%   | 0%    | 0%    | 0%             | 0%                          | 1.5%  | 0%    | 1.5%  | 1.5%           | 1.7%                   |
| Street-Car             | 14                          | 0    | 0     | 14    | 14             | 0                         | 0    | 0     | 0     | 0              | 0                           | 11    | 0     | 11    | 11             | 25                     |
| Street-Car %           | 3.2%                        | 0%   | 0%    | 3.1%  | 3.1%           | 0%                        | 0%   | 0%    | 0%    | 0%             | 0%                          | 2.4%  | 0%    | 2.4%  | 2.4%           | 2.7%                   |
| Pedestrians            | -                           | -    | -     | 152   | -              | -                         | -    | -     | 257   | -              | -                           | -     | -     | 3     | -              | -                      |
| Pedestrians%           | -                           | -    | -     | 36.7% | -              | -                         | -    | -     | 62.1% | -              | -                           | -     | -     | 0.7%  | -              | -                      |
| Bicycles on Crosswalk  | -                           | -    | -     | 0     | -              | -                         | -    | -     | 2     | -              | -                           | -     | -     | 0     | -              | -                      |
| Bicycles on Crosswalk% | -                           | -    | -     | 0%    | -              | -                         | -    | -     | 0.5%  | -              | -                           | -     | -     | 0%    | -              | -                      |
| Bicycles on Road       | 55                          | 2    | 0     | -     | -              | 0                         | 1    | 0     | -     | -              | 3                           | 31    | 0     | -     | -              | -                      |
| Bicycles on Road%      | 100%                        | 100% | 0%    | -     | -              | 0%                        | 100% | 0%    | -     | -              | 100%                        | 100%  | 0%    | -     | -              | -                      |

**Peak Hour: 08:00 AM - 09:00 AM Weather: Overcast Clouds (9 °C)**





**Peak Hour: 04:45 PM - 05:45 PM Weather: Clear Sky (18 °C)**



## **Appendix E: Signal Warrant Analysis**





Justification 7 - Projected Volumes

Intersection: Broadview Ave / New Site Driveway      Count Date: Future Total

Return to Justifications 1 - 6

INPUT

PRIOR TO START - FILL OUT GEOMETRY INPUTS IN THE INPUT DATA SPREADSHEET - STEPS A to D

a.- Both Intersection Roads Exist?    No

b.- What kind of count estimate available?    AM PM Peak Hour    Proceed to c2

c1.- 8-Hour Count Estimate

| Hour Ending | Main Northbound Approach |     |     | Minor Eastbound Approach |     |     | Main Southbound Approach |     |     | Minor Westbound Approach |     |     | Pedestrians Crossing Main Road |
|-------------|--------------------------|-----|-----|--------------------------|-----|-----|--------------------------|-----|-----|--------------------------|-----|-----|--------------------------------|
|             | LT                       | TH  | RT  | LT                       | TH  | RT  | LT                       | TH  | RT  | LT                       | TH  | RT  |                                |
| 7:00        | N/A                      | N/A | N/A | N/A                      | N/A | N/A | N/A                      | N/A | N/A | N/A                      | N/A | N/A | N/A                            |
| 8:00        | N/A                      | N/A | N/A | N/A                      | N/A | N/A | N/A                      | N/A | N/A | N/A                      | N/A | N/A | N/A                            |
| 9:00        | N/A                      | N/A | N/A | N/A                      | N/A | N/A | N/A                      | N/A | N/A | N/A                      | N/A | N/A | N/A                            |
| 10:00       | N/A                      | N/A | N/A | N/A                      | N/A | N/A | N/A                      | N/A | N/A | N/A                      | N/A | N/A | N/A                            |
| 15:00       | N/A                      | N/A | N/A | N/A                      | N/A | N/A | N/A                      | N/A | N/A | N/A                      | N/A | N/A | N/A                            |
| 16:00       | N/A                      | N/A | N/A | N/A                      | N/A | N/A | N/A                      | N/A | N/A | N/A                      | N/A | N/A | N/A                            |
| 17:00       | N/A                      | N/A | N/A | N/A                      | N/A | N/A | N/A                      | N/A | N/A | N/A                      | N/A | N/A | N/A                            |
| 18:00       | N/A                      | N/A | N/A | N/A                      | N/A | N/A | N/A                      | N/A | N/A | N/A                      | N/A | N/A | N/A                            |
| Total       | 0                        | 0   | 0   | 0                        | 0   | 0   | 0                        | 0   | 0   | 0                        | 0   | 0   | 0                              |

c2.- Peak Hour Estimate

| Peak Hour    | Main Northbound Approach |     |    | Minor Eastbound Approach |    |    | Main Southbound Approach |     |    | Minor Westbound Approach |    |    | Pedestrians Crossing Main Road |
|--------------|--------------------------|-----|----|--------------------------|----|----|--------------------------|-----|----|--------------------------|----|----|--------------------------------|
|              | LT                       | TH  | RT | LT                       | TH | RT | LT                       | TH  | RT | LT                       | TH | RT |                                |
| AM Peak Hour | 10                       | 340 | 0  | 15                       | 0  | 15 | 0                        | 375 | 25 | 0                        | 0  | 0  | 75                             |
| PM Peak Hour | 30                       | 415 | 0  | 25                       | 0  | 35 | 0                        | 440 | 35 | 0                        | 0  | 0  | 75                             |
| AHV          | 10                       | 189 | 0  | 10                       | 0  | 13 | 0                        | 204 | 15 | 0                        | 0  | 0  | 38                             |
|              | Main Street AHV Sum      |     |    | Minor Street AHV Sum     |    |    |                          |     |    |                          |    |    |                                |
|              | 418                      |     |    | 23                       |    |    |                          |     |    |                          |    |    |                                |

c3.- AADT Estimate - can leave movements without data blank. If midblock reading, can assign demand to through movement.

| AADT | Main Northbound Approach |    |    | Minor Eastbound Approach |    |    | Main Southbound Approach |    |    | Minor Westbound Approach |    |    | Pedestrians Crossing Main Road |
|------|--------------------------|----|----|--------------------------|----|----|--------------------------|----|----|--------------------------|----|----|--------------------------------|
|      | LT                       | TH | RT | LT                       | TH | RT | LT                       | TH | RT | LT                       | TH | RT |                                |
|      |                          |    |    |                          |    |    |                          |    |    |                          |    |    |                                |
| AHV  | 0                        | 0  | 0  | 0                        | 0  | 0  | 0                        | 0  | 0  | 0                        | 0  | 0  | 0                              |
|      | Main Street AHV Sum      |    |    | Minor Street AHV Sum     |    |    |                          |    |    |                          |    |    |                                |
|      | 0                        |    |    | 0                        |    |    |                          |    |    |                          |    |    |                                |

d. Justification 7 Result

| Justification               | Description                                           | Minimum Requirement 1<br>Lane Highways |             | Minimum Requirement 2<br>or more lanes |             | Compliance |      | Case?                           |
|-----------------------------|-------------------------------------------------------|----------------------------------------|-------------|----------------------------------------|-------------|------------|------|---------------------------------|
|                             |                                                       | Free Flow                              | Restr. Flow | Free Flow                              | Restr. Flow | Numerical  | %    |                                 |
| 1. Minimum Vehicular Volume | A. Vehicle volume, all approaches (average hour)      | -                                      | -           | -                                      | 900         | 440        | 48.9 | Case 3 -<br>Warrant is Unlikely |
|                             | B. Vehicle volume, along minor streets (average hour) | -                                      | -           | -                                      | 255         | 23         | 8.8  |                                 |
| 2. Delay to cross Traffic   | A. Vehicle volume, major street (average hour)        | -                                      | -           | -                                      | 900         | 418        | 46.4 |                                 |
|                             | B. Combined vehicle and pedestrian volume crossing    | -                                      | -           | -                                      | 75          | 48         | 63.3 |                                 |

## **Appendix F: Synchro Analysis Sheets**





# Queues

## 1: Broadview Ave & Danforth Ave

Existing AM Peak Hour

|                        |  |  |  |  |  |  |   |  |  |
|------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group             | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | NBL                                                                               | NBT                                                                                 | SBL                                                                                 | SBT                                                                                 |
| Lane Configurations    |  |  |  |  |  |  |  |  |  |
| Traffic Volume (vph)   | 100                                                                               | 315                                                                               | 150                                                                               | 35                                                                                | 535                                                                               | 205                                                                               | 165                                                                                 | 15                                                                                  | 210                                                                                 |
| Future Volume (vph)    | 100                                                                               | 315                                                                               | 150                                                                               | 35                                                                                | 535                                                                               | 205                                                                               | 165                                                                                 | 15                                                                                  | 210                                                                                 |
| Lane Group Flow (vph)  | 110                                                                               | 346                                                                               | 165                                                                               | 38                                                                                | 615                                                                               | 225                                                                               | 214                                                                                 | 0                                                                                   | 549                                                                                 |
| Turn Type              | Perm                                                                              | NA                                                                                | Perm                                                                              | Perm                                                                              | NA                                                                                | pm+pt                                                                             | NA                                                                                  | Perm                                                                                | NA                                                                                  |
| Protected Phases       |                                                                                   | 2                                                                                 |                                                                                   |                                                                                   | 6                                                                                 | 7                                                                                 | 4                                                                                   |                                                                                     | 8                                                                                   |
| Permitted Phases       | 2                                                                                 |                                                                                   | 2                                                                                 | 6                                                                                 |                                                                                   | 4                                                                                 |                                                                                     | 8                                                                                   |                                                                                     |
| Detector Phase         | 2                                                                                 | 2                                                                                 | 2                                                                                 | 6                                                                                 | 6                                                                                 | 7                                                                                 | 4                                                                                   | 8                                                                                   | 8                                                                                   |
| Switch Phase           |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)    | 28.0                                                                              | 28.0                                                                              | 28.0                                                                              | 28.0                                                                              | 28.0                                                                              | 6.0                                                                               | 29.0                                                                                | 21.0                                                                                | 21.0                                                                                |
| Minimum Split (s)      | 35.1                                                                              | 35.1                                                                              | 35.1                                                                              | 35.1                                                                              | 35.1                                                                              | 13.5                                                                              | 36.0                                                                                | 36.0                                                                                | 36.0                                                                                |
| Total Split (s)        | 49.0                                                                              | 49.0                                                                              | 49.0                                                                              | 49.0                                                                              | 49.0                                                                              | 14.0                                                                              | 51.0                                                                                | 37.0                                                                                | 37.0                                                                                |
| Total Split (%)        | 49.0%                                                                             | 49.0%                                                                             | 49.0%                                                                             | 49.0%                                                                             | 49.0%                                                                             | 14.0%                                                                             | 51.0%                                                                               | 37.0%                                                                               | 37.0%                                                                               |
| Yellow Time (s)        | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.4                                                                                 | 3.4                                                                                 | 3.4                                                                                 |
| All-Red Time (s)       | 4.1                                                                               | 4.1                                                                               | 4.1                                                                               | 4.1                                                                               | 4.1                                                                               | 4.5                                                                               | 3.6                                                                                 | 3.6                                                                                 | 3.6                                                                                 |
| Lost Time Adjust (s)   | -1.0                                                                              | -1.0                                                                              | -1.0                                                                              | -1.0                                                                              | -1.0                                                                              | -1.0                                                                              | -1.0                                                                                |                                                                                     | -1.0                                                                                |
| Total Lost Time (s)    | 6.1                                                                               | 6.1                                                                               | 6.1                                                                               | 6.1                                                                               | 6.1                                                                               | 6.5                                                                               | 6.0                                                                                 |                                                                                     | 6.0                                                                                 |
| Lead/Lag               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   | Lead                                                                              |                                                                                     | Lag                                                                                 | Lag                                                                                 |
| Lead-Lag Optimize?     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   | Yes                                                                               |                                                                                     | Yes                                                                                 | Yes                                                                                 |
| Recall Mode            | C-Min                                                                             | C-Min                                                                             | C-Min                                                                             | C-Min                                                                             | C-Min                                                                             | None                                                                              | Min                                                                                 | Min                                                                                 | Min                                                                                 |
| v/c Ratio              | 0.57                                                                              | 0.48                                                                              | 0.34                                                                              | 0.15                                                                              | 0.45                                                                              | 0.61                                                                              | 0.32                                                                                |                                                                                     | 0.84                                                                                |
| Control Delay          | 38.1                                                                              | 25.2                                                                              | 5.1                                                                               | 21.8                                                                              | 23.2                                                                              | 26.1                                                                              | 16.7                                                                                |                                                                                     | 44.9                                                                                |
| Queue Delay            | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 |                                                                                     | 0.0                                                                                 |
| Total Delay            | 38.1                                                                              | 25.2                                                                              | 5.1                                                                               | 21.8                                                                              | 23.2                                                                              | 26.1                                                                              | 16.7                                                                                |                                                                                     | 44.9                                                                                |
| Queue Length 50th (m)  | 18.8                                                                              | 56.2                                                                              | 0.0                                                                               | 5.3                                                                               | 51.3                                                                              | 24.0                                                                              | 21.7                                                                                |                                                                                     | 52.1                                                                                |
| Queue Length 95th (m)  | 37.0                                                                              | 74.0                                                                              | 12.4                                                                              | 11.9                                                                              | 59.6                                                                              | #58.4                                                                             | 43.7                                                                                |                                                                                     | 71.5                                                                                |
| Internal Link Dist (m) |                                                                                   | 170.8                                                                             |                                                                                   |                                                                                   | 155.0                                                                             |                                                                                   | 66.0                                                                                |                                                                                     | 120.0                                                                               |
| Turn Bay Length (m)    | 65.0                                                                              |                                                                                   |                                                                                   | 35.0                                                                              |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |
| Base Capacity (vph)    | 207                                                                               | 783                                                                               | 513                                                                               | 267                                                                               | 1472                                                                              | 370                                                                               | 679                                                                                 |                                                                                     | 726                                                                                 |
| Starvation Cap Reductn | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                   |                                                                                     | 0                                                                                   |
| Spillback Cap Reductn  | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                   |                                                                                     | 0                                                                                   |
| Storage Cap Reductn    | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                   |                                                                                     | 0                                                                                   |
| Reduced v/c Ratio      | 0.53                                                                              | 0.44                                                                              | 0.32                                                                              | 0.14                                                                              | 0.42                                                                              | 0.61                                                                              | 0.32                                                                                |                                                                                     | 0.76                                                                                |

### Intersection Summary

Cycle Length: 100

Actuated Cycle Length: 100

Offset: 99 (99%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

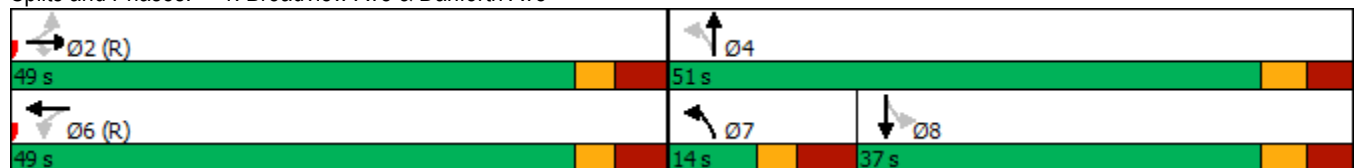
Natural Cycle: 85

Control Type: Actuated-Coordinated

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

Queue shown is maximum after two cycles.

### Splits and Phases: 1: Broadview Ave & Danforth Ave



# HCM Signalized Intersection Capacity Analysis

## 1: Broadview Ave & Danforth Ave

Existing AM Peak Hour

|                                   |  |  |  |  |  |  |  |  |  |  |  |  |
|-----------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Movement                          | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations               |  |  |  |  |  |                                                                                   |  |  |                                                                                     |                                                                                     |  |  |
| Traffic Volume (vph)              | 100                                                                               | 315                                                                               | 150                                                                               | 35                                                                                | 535                                                                               | 25                                                                                | 205                                                                                | 165                                                                                 | 30                                                                                  | 15                                                                                  | 210                                                                                 | 275                                                                                 |
| Future Volume (vph)               | 100                                                                               | 315                                                                               | 150                                                                               | 35                                                                                | 535                                                                               | 25                                                                                | 205                                                                                | 165                                                                                 | 30                                                                                  | 15                                                                                  | 210                                                                                 | 275                                                                                 |
| 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                                                                               | 3.5                                                                               | 3.5                                                                                | 3.5                                                                                 | 3.5                                                                                 | 3.5                                                                                 | 3.5                                                                                 | 3.5                                                                                 |
| Total Lost time (s)               | 6.1                                                                               | 6.1                                                                               | 6.1                                                                               | 6.1                                                                               | 6.1                                                                               |                                                                                   | 6.5                                                                                | 6.0                                                                                 |                                                                                     |                                                                                     | 6.0                                                                                 |                                                                                     |
| Lane Util. Factor                 | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 0.95                                                                              |                                                                                   | 1.00                                                                               | 1.00                                                                                |                                                                                     |                                                                                     | 0.95                                                                                |                                                                                     |
| Frpb, ped/bikes                   | 1.00                                                                              | 1.00                                                                              | 0.66                                                                              | 1.00                                                                              | 0.97                                                                              |                                                                                   | 1.00                                                                               | 0.90                                                                                |                                                                                     |                                                                                     | 0.81                                                                                |                                                                                     |
| Flpb, ped/bikes                   | 0.78                                                                              | 1.00                                                                              | 1.00                                                                              | 0.82                                                                              | 1.00                                                                              |                                                                                   | 0.97                                                                               | 1.00                                                                                |                                                                                     |                                                                                     | 0.99                                                                                |                                                                                     |
| Frt                               | 1.00                                                                              | 1.00                                                                              | 0.85                                                                              | 1.00                                                                              | 0.99                                                                              |                                                                                   | 1.00                                                                               | 0.98                                                                                |                                                                                     |                                                                                     | 0.92                                                                                |                                                                                     |
| Flt Protected                     | 0.95                                                                              | 1.00                                                                              | 1.00                                                                              | 0.95                                                                              | 1.00                                                                              |                                                                                   | 0.95                                                                               | 1.00                                                                                |                                                                                     |                                                                                     | 1.00                                                                                |                                                                                     |
| Satd. Flow (prot)                 | 1300                                                                              | 1789                                                                              | 959                                                                               | 1309                                                                              | 3353                                                                              |                                                                                   | 1689                                                                               | 1393                                                                                |                                                                                     |                                                                                     | 2418                                                                                |                                                                                     |
| Flt Permitted                     | 0.35                                                                              | 1.00                                                                              | 1.00                                                                              | 0.44                                                                              | 1.00                                                                              |                                                                                   | 0.26                                                                               | 1.00                                                                                |                                                                                     |                                                                                     | 0.94                                                                                |                                                                                     |
| Satd. Flow (perm)                 | 475                                                                               | 1789                                                                              | 959                                                                               | 611                                                                               | 3353                                                                              |                                                                                   | 462                                                                                | 1393                                                                                |                                                                                     |                                                                                     | 2280                                                                                |                                                                                     |
| Peak-hour factor, PHF             | 0.91                                                                              | 0.91                                                                              | 0.91                                                                              | 0.91                                                                              | 0.91                                                                              | 0.91                                                                              | 0.91                                                                               | 0.91                                                                                | 0.91                                                                                | 0.91                                                                                | 0.91                                                                                | 0.91                                                                                |
| Adj. Flow (vph)                   | 110                                                                               | 346                                                                               | 165                                                                               | 38                                                                                | 588                                                                               | 27                                                                                | 225                                                                                | 181                                                                                 | 33                                                                                  | 16                                                                                  | 231                                                                                 | 302                                                                                 |
| RTOR Reduction (vph)              | 0                                                                                 | 0                                                                                 | 98                                                                                | 0                                                                                 | 4                                                                                 | 0                                                                                 | 0                                                                                  | 6                                                                                   | 0                                                                                   | 0                                                                                   | 20                                                                                  | 0                                                                                   |
| Lane Group Flow (vph)             | 110                                                                               | 346                                                                               | 67                                                                                | 38                                                                                | 611                                                                               | 0                                                                                 | 225                                                                                | 208                                                                                 | 0                                                                                   | 0                                                                                   | 529                                                                                 | 0                                                                                   |
| Confl. Peds. (#/hr)               | 535                                                                               |                                                                                   | 435                                                                               | 435                                                                               |                                                                                   | 535                                                                               | 425                                                                                |                                                                                     | 635                                                                                 | 635                                                                                 |                                                                                     | 425                                                                                 |
| Confl. Bikes (#/hr)               |                                                                                   |                                                                                   | 25                                                                                |                                                                                   |                                                                                   | 185                                                                               |                                                                                    |                                                                                     | 10                                                                                  |                                                                                     |                                                                                     | 15                                                                                  |
| Heavy Vehicles (%)                | 1%                                                                                | 5%                                                                                | 3%                                                                                | 6%                                                                                | 2%                                                                                | 17%                                                                               | 3%                                                                                 | 14%                                                                                 | 6%                                                                                  | 13%                                                                                 | 13%                                                                                 | 3%                                                                                  |
| Bus Blockages (#/hr)              | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                  | 13                                                                                  | 0                                                                                   | 0                                                                                   | 5                                                                                   | 0                                                                                   |
| Turn Type                         | Perm                                                                              | NA                                                                                | Perm                                                                              | Perm                                                                              | NA                                                                                |                                                                                   | pm+pt                                                                              | NA                                                                                  |                                                                                     | Perm                                                                                | NA                                                                                  |                                                                                     |
| Protected Phases                  |                                                                                   | 2                                                                                 |                                                                                   |                                                                                   | 6                                                                                 |                                                                                   | 7                                                                                  | 4                                                                                   |                                                                                     |                                                                                     | 8                                                                                   |                                                                                     |
| Permitted Phases                  | 2                                                                                 |                                                                                   | 2                                                                                 | 6                                                                                 |                                                                                   |                                                                                   | 4                                                                                  |                                                                                     |                                                                                     | 8                                                                                   |                                                                                     |                                                                                     |
| Actuated Green, G (s)             | 39.5                                                                              | 39.5                                                                              | 39.5                                                                              | 39.5                                                                              | 39.5                                                                              |                                                                                   | 46.4                                                                               | 46.4                                                                                |                                                                                     |                                                                                     | 26.7                                                                                |                                                                                     |
| Effective Green, g (s)            | 40.5                                                                              | 40.5                                                                              | 40.5                                                                              | 40.5                                                                              | 40.5                                                                              |                                                                                   | 47.4                                                                               | 47.4                                                                                |                                                                                     |                                                                                     | 27.7                                                                                |                                                                                     |
| Actuated g/C Ratio                | 0.40                                                                              | 0.40                                                                              | 0.40                                                                              | 0.40                                                                              | 0.40                                                                              |                                                                                   | 0.47                                                                               | 0.47                                                                                |                                                                                     |                                                                                     | 0.28                                                                                |                                                                                     |
| Clearance Time (s)                | 7.1                                                                               | 7.1                                                                               | 7.1                                                                               | 7.1                                                                               | 7.1                                                                               |                                                                                   | 7.5                                                                                | 7.0                                                                                 |                                                                                     |                                                                                     | 7.0                                                                                 |                                                                                     |
| Vehicle Extension (s)             | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                                | 3.0                                                                                 |                                                                                     |                                                                                     | 3.0                                                                                 |                                                                                     |
| Lane Grp Cap (vph)                | 192                                                                               | 724                                                                               | 388                                                                               | 247                                                                               | 1357                                                                              |                                                                                   | 380                                                                                | 660                                                                                 |                                                                                     |                                                                                     | 631                                                                                 |                                                                                     |
| v/s Ratio Prot                    |                                                                                   | 0.19                                                                              |                                                                                   |                                                                                   | 0.18                                                                              |                                                                                   | 0.08                                                                               | 0.15                                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| v/s Ratio Perm                    | 0.23                                                                              |                                                                                   | 0.07                                                                              | 0.06                                                                              |                                                                                   |                                                                                   | 0.20                                                                               |                                                                                     |                                                                                     |                                                                                     | 0.23                                                                                |                                                                                     |
| v/c Ratio                         | 0.57                                                                              | 0.48                                                                              | 0.17                                                                              | 0.15                                                                              | 0.45                                                                              |                                                                                   | 0.59                                                                               | 0.31                                                                                |                                                                                     |                                                                                     | 0.84                                                                                |                                                                                     |
| Uniform Delay, d1                 | 23.0                                                                              | 21.9                                                                              | 19.0                                                                              | 18.9                                                                              | 21.7                                                                              |                                                                                   | 17.4                                                                               | 16.3                                                                                |                                                                                     |                                                                                     | 34.0                                                                                |                                                                                     |
| Progression Factor                | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              |                                                                                   | 1.00                                                                               | 1.00                                                                                |                                                                                     |                                                                                     | 1.00                                                                                |                                                                                     |
| Incremental Delay, d2             | 11.8                                                                              | 2.3                                                                               | 1.0                                                                               | 1.3                                                                               | 1.1                                                                               |                                                                                   | 2.5                                                                                | 0.3                                                                                 |                                                                                     |                                                                                     | 9.5                                                                                 |                                                                                     |
| Delay (s)                         | 34.9                                                                              | 24.2                                                                              | 20.0                                                                              | 20.2                                                                              | 22.7                                                                              |                                                                                   | 19.9                                                                               | 16.5                                                                                |                                                                                     |                                                                                     | 43.5                                                                                |                                                                                     |
| Level of Service                  | C                                                                                 | C                                                                                 | B                                                                                 | C                                                                                 | C                                                                                 |                                                                                   | B                                                                                  | B                                                                                   |                                                                                     |                                                                                     | D                                                                                   |                                                                                     |
| Approach Delay (s)                |                                                                                   | 25.0                                                                              |                                                                                   |                                                                                   | 22.6                                                                              |                                                                                   |                                                                                    | 18.2                                                                                |                                                                                     |                                                                                     | 43.5                                                                                |                                                                                     |
| Approach LOS                      |                                                                                   | C                                                                                 |                                                                                   |                                                                                   | C                                                                                 |                                                                                   |                                                                                    | B                                                                                   |                                                                                     |                                                                                     | D                                                                                   |                                                                                     |
| <b>Intersection Summary</b>       |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| HCM 2000 Control Delay            |                                                                                   |                                                                                   | 27.5                                                                              |                                                                                   |                                                                                   |                                                                                   | HCM 2000 Level of Service                                                          |                                                                                     |                                                                                     | C                                                                                   |                                                                                     |                                                                                     |
| HCM 2000 Volume to Capacity ratio |                                                                                   |                                                                                   | 0.67                                                                              |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Actuated Cycle Length (s)         |                                                                                   |                                                                                   | 100.0                                                                             |                                                                                   |                                                                                   |                                                                                   | Sum of lost time (s)                                                               |                                                                                     |                                                                                     | 18.6                                                                                |                                                                                     |                                                                                     |
| Intersection Capacity Utilization |                                                                                   |                                                                                   | 115.2%                                                                            |                                                                                   |                                                                                   |                                                                                   | ICU Level of Service                                                               |                                                                                     |                                                                                     | H                                                                                   |                                                                                     |                                                                                     |
| Analysis Period (min)             |                                                                                   |                                                                                   | 15                                                                                |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| <b>c Critical Lane Group</b>      |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |



# HCM Unsignalized Intersection Capacity Analysis

## 2: Broadview Ave & Site Loading Access

Existing AM Peak Hour

|                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
|-----------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
|                                   |  |  |  |  |  |  |
| Movement                          | EBL                                                                               | EBR                                                                               | NBL                                                                               | NBT                                                                               | SBT                                                                               | SBR                                                                               |
| Lane Configurations               |  |                                                                                   |                                                                                   |  |  |                                                                                   |
| Traffic Volume (veh/h)            | 0                                                                                 | 0                                                                                 | 0                                                                                 | 395                                                                               | 390                                                                               | 0                                                                                 |
| Future Volume (Veh/h)             | 0                                                                                 | 0                                                                                 | 0                                                                                 | 395                                                                               | 390                                                                               | 0                                                                                 |
| Sign Control                      | Stop                                                                              |                                                                                   |                                                                                   | Free                                                                              | Free                                                                              |                                                                                   |
| Grade                             | 0%                                                                                |                                                                                   |                                                                                   | 0%                                                                                | 0%                                                                                |                                                                                   |
| Peak Hour Factor                  | 0.91                                                                              | 0.91                                                                              | 0.91                                                                              | 0.91                                                                              | 0.91                                                                              | 0.91                                                                              |
| Hourly flow rate (vph)            | 0                                                                                 | 0                                                                                 | 0                                                                                 | 434                                                                               | 429                                                                               | 0                                                                                 |
| Pedestrians                       | 185                                                                               |                                                                                   |                                                                                   | 5                                                                                 | 5                                                                                 |                                                                                   |
| Lane Width (m)                    | 3.5                                                                               |                                                                                   |                                                                                   | 3.5                                                                               | 3.5                                                                               |                                                                                   |
| Walking Speed (m/s)               | 1.2                                                                               |                                                                                   |                                                                                   | 1.2                                                                               | 1.2                                                                               |                                                                                   |
| Percent Blockage                  | 15                                                                                |                                                                                   |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   |
| Right turn flare (veh)            |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| Median type                       |                                                                                   |                                                                                   |                                                                                   | None                                                                              | None                                                                              |                                                                                   |
| Median storage veh                |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| Upstream signal (m)               |                                                                                   |                                                                                   |                                                                                   | 144                                                                               | 90                                                                                |                                                                                   |
| pX, platoon unblocked             |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| vC, conflicting volume            | 836                                                                               | 404                                                                               | 614                                                                               |                                                                                   |                                                                                   |                                                                                   |
| vC1, stage 1 conf vol             |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| vC2, stage 2 conf vol             |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| vCu, unblocked vol                | 836                                                                               | 404                                                                               | 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                                                                               | 100                                                                               |                                                                                   |                                                                                   |                                                                                   |
| cM capacity (veh/h)               | 262                                                                               | 509                                                                               | 829                                                                               |                                                                                   |                                                                                   |                                                                                   |
| Direction, Lane #                 | EB 1                                                                              | NB 1                                                                              | NB 2                                                                              | SB 1                                                                              | SB 2                                                                              |                                                                                   |
| Volume Total                      | 0                                                                                 | 145                                                                               | 289                                                                               | 286                                                                               | 143                                                                               |                                                                                   |
| Volume Left                       | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                   |
| Volume Right                      | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                   |
| cSH                               | 1700                                                                              | 829                                                                               | 1700                                                                              | 1700                                                                              | 1700                                                                              |                                                                                   |
| Volume to Capacity                | 0.05                                                                              | 0.00                                                                              | 0.17                                                                              | 0.17                                                                              | 0.08                                                                              |                                                                                   |
| Queue Length 95th (m)             | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   |
| Control Delay (s)                 | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   |
| Lane LOS                          | A                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| Approach Delay (s)                | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   |
| Approach LOS                      | A                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| Intersection Summary              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| Average Delay                     |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   |                                                                                   |
| Intersection Capacity Utilization |                                                                                   |                                                                                   | 24.9%                                                                             | ICU Level of Service                                                              |                                                                                   | A                                                                                 |
| Analysis Period (min)             |                                                                                   |                                                                                   | 15                                                                                |                                                                                   |                                                                                   |                                                                                   |

# HCM Unsignalized Intersection Capacity Analysis

## 3: Broadview Ave & Dearbourne Ave

Existing AM Peak Hour

|                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
|-----------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
|                                   |  |  |  |  |  |  |
| Movement                          | WBL                                                                               | WBR                                                                               | NBT                                                                               | NBR                                                                               | SBL                                                                               | SBT                                                                               |
| Lane Configurations               |  |                                                                                   |  |                                                                                   |                                                                                   |  |
| Traffic Volume (veh/h)            | 15                                                                                | 35                                                                                | 360                                                                               | 0                                                                                 | 0                                                                                 | 385                                                                               |
| Future Volume (Veh/h)             | 15                                                                                | 35                                                                                | 360                                                                               | 0                                                                                 | 0                                                                                 | 385                                                                               |
| Sign Control                      | Stop                                                                              |                                                                                   | Free                                                                              |                                                                                   |                                                                                   | Free                                                                              |
| Grade                             | 0%                                                                                |                                                                                   | 0%                                                                                |                                                                                   |                                                                                   | 0%                                                                                |
| Peak Hour Factor                  | 0.90                                                                              | 0.90                                                                              | 0.90                                                                              | 0.90                                                                              | 0.90                                                                              | 0.90                                                                              |
| Hourly flow rate (vph)            | 17                                                                                | 39                                                                                | 400                                                                               | 0                                                                                 | 0                                                                                 | 428                                                                               |
| Pedestrians                       | 185                                                                               |                                                                                   | 15                                                                                |                                                                                   |                                                                                   | 10                                                                                |
| Lane Width (m)                    | 3.5                                                                               |                                                                                   | 3.5                                                                               |                                                                                   |                                                                                   | 3.5                                                                               |
| Walking Speed (m/s)               | 1.2                                                                               |                                                                                   | 1.2                                                                               |                                                                                   |                                                                                   | 1.2                                                                               |
| Percent Blockage                  | 15                                                                                |                                                                                   | 1                                                                                 |                                                                                   |                                                                                   | 1                                                                                 |
| Right turn flare (veh)            |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| Median type                       |                                                                                   |                                                                                   | None                                                                              |                                                                                   |                                                                                   | None                                                                              |
| Median storage veh                |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| Upstream signal (m)               |                                                                                   |                                                                                   | 122                                                                               |                                                                                   |                                                                                   | 112                                                                               |
| pX, platoon unblocked             |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| vC, conflicting volume            | 814                                                                               | 395                                                                               |                                                                                   |                                                                                   | 585                                                                               |                                                                                   |
| vC1, stage 1 conf vol             |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| vC2, stage 2 conf vol             |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| vCu, unblocked vol                | 814                                                                               | 395                                                                               |                                                                                   |                                                                                   | 585                                                                               |                                                                                   |
| tC, single (s)                    | 6.8                                                                               | 7.0                                                                               |                                                                                   |                                                                                   | 4.1                                                                               |                                                                                   |
| tC, 2 stage (s)                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| tF (s)                            | 3.5                                                                               | 3.3                                                                               |                                                                                   |                                                                                   | 2.2                                                                               |                                                                                   |
| p0 queue free %                   | 94                                                                                | 92                                                                                |                                                                                   |                                                                                   | 100                                                                               |                                                                                   |
| cM capacity (veh/h)               | 269                                                                               | 507                                                                               |                                                                                   |                                                                                   | 850                                                                               |                                                                                   |
| Direction, Lane #                 | WB 1                                                                              | NB 1                                                                              | NB 2                                                                              | SB 1                                                                              | SB 2                                                                              |                                                                                   |
| Volume Total                      | 56                                                                                | 200                                                                               | 200                                                                               | 214                                                                               | 214                                                                               |                                                                                   |
| Volume Left                       | 17                                                                                | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                   |
| Volume Right                      | 39                                                                                | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                   |
| cSH                               | 399                                                                               | 1700                                                                              | 1700                                                                              | 1700                                                                              | 1700                                                                              |                                                                                   |
| Volume to Capacity                | 0.14                                                                              | 0.12                                                                              | 0.12                                                                              | 0.13                                                                              | 0.13                                                                              |                                                                                   |
| Queue Length 95th (m)             | 3.9                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   |
| Control Delay (s)                 | 15.5                                                                              | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   |
| Lane LOS                          | C                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| Approach Delay (s)                | 15.5                                                                              | 0.0                                                                               |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   |
| Approach LOS                      | C                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| Intersection Summary              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| Average Delay                     |                                                                                   |                                                                                   | 1.0                                                                               |                                                                                   |                                                                                   |                                                                                   |
| Intersection Capacity Utilization |                                                                                   |                                                                                   | 26.4%                                                                             |                                                                                   | ICU Level of Service                                                              | A                                                                                 |
| Analysis Period (min)             |                                                                                   |                                                                                   | 15                                                                                |                                                                                   |                                                                                   |                                                                                   |



# HCM Unsignalized Intersection Capacity Analysis

## 4: Broadview Ave & North Site Driveway

Existing AM Peak Hour

|                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
|-----------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
|                                   |  |  |  |  |  |  |
| Movement                          | EBL                                                                               | EBR                                                                               | NBL                                                                               | NBT                                                                               | SBT                                                                               | SBR                                                                               |
| Lane Configurations               |                                                                                   |                                                                                   |                                                                                   |  |  |                                                                                   |
| Traffic Volume (veh/h)            | 0                                                                                 | 0                                                                                 | 20                                                                                | 355                                                                               | 360                                                                               | 35                                                                                |
| Future Volume (Veh/h)             | 0                                                                                 | 0                                                                                 | 20                                                                                | 355                                                                               | 360                                                                               | 35                                                                                |
| Sign Control                      | Stop                                                                              |                                                                                   |                                                                                   | Free                                                                              | Free                                                                              |                                                                                   |
| Grade                             | 0%                                                                                |                                                                                   |                                                                                   | 0%                                                                                | 0%                                                                                |                                                                                   |
| Peak Hour Factor                  | 0.87                                                                              | 0.87                                                                              | 0.87                                                                              | 0.87                                                                              | 0.87                                                                              | 0.87                                                                              |
| Hourly flow rate (vph)            | 0                                                                                 | 0                                                                                 | 23                                                                                | 408                                                                               | 414                                                                               | 40                                                                                |
| Pedestrians                       | 140                                                                               |                                                                                   |                                                                                   |                                                                                   | 15                                                                                |                                                                                   |
| Lane Width (m)                    | 0.0                                                                               |                                                                                   |                                                                                   |                                                                                   | 3.5                                                                               |                                                                                   |
| Walking Speed (m/s)               | 1.2                                                                               |                                                                                   |                                                                                   |                                                                                   | 1.2                                                                               |                                                                                   |
| Percent Blockage                  | 0                                                                                 |                                                                                   |                                                                                   |                                                                                   | 1                                                                                 |                                                                                   |
| Right turn flare (veh)            |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| Median type                       |                                                                                   |                                                                                   |                                                                                   | None                                                                              | None                                                                              |                                                                                   |
| Median storage veh                |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| Upstream signal (m)               |                                                                                   |                                                                                   |                                                                                   | 87                                                                                | 146                                                                               |                                                                                   |
| pX, platoon unblocked             |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| vC, conflicting volume            | 839                                                                               | 367                                                                               | 594                                                                               |                                                                                   |                                                                                   |                                                                                   |
| vC1, stage 1 conf vol             |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| vC2, stage 2 conf vol             |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| vCu, unblocked vol                | 839                                                                               | 367                                                                               | 594                                                                               |                                                                                   |                                                                                   |                                                                                   |
| tC, single (s)                    | 8.8                                                                               | 6.9                                                                               | 4.1                                                                               |                                                                                   |                                                                                   |                                                                                   |
| tC, 2 stage (s)                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| tF (s)                            | 4.5                                                                               | 3.3                                                                               | 2.2                                                                               |                                                                                   |                                                                                   |                                                                                   |
| p0 queue free %                   | 100                                                                               | 100                                                                               | 98                                                                                |                                                                                   |                                                                                   |                                                                                   |
| cM capacity (veh/h)               | 160                                                                               | 636                                                                               | 992                                                                               |                                                                                   |                                                                                   |                                                                                   |
| Direction, Lane #                 | NB 1                                                                              | NB 2                                                                              | SB 1                                                                              | SB 2                                                                              |                                                                                   |                                                                                   |
| Volume Total                      | 159                                                                               | 272                                                                               | 276                                                                               | 178                                                                               |                                                                                   |                                                                                   |
| Volume Left                       | 23                                                                                | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                   |                                                                                   |
| Volume Right                      | 0                                                                                 | 0                                                                                 | 0                                                                                 | 40                                                                                |                                                                                   |                                                                                   |
| cSH                               | 992                                                                               | 1700                                                                              | 1700                                                                              | 1700                                                                              |                                                                                   |                                                                                   |
| Volume to Capacity                | 0.02                                                                              | 0.16                                                                              | 0.16                                                                              | 0.10                                                                              |                                                                                   |                                                                                   |
| Queue Length 95th (m)             | 0.6                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   |                                                                                   |
| Control Delay (s)                 | 1.4                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   |                                                                                   |
| Lane LOS                          | A                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| Approach Delay (s)                | 0.5                                                                               |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   |                                                                                   |
| Approach LOS                      |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| Intersection Summary              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| Average Delay                     |                                                                                   |                                                                                   | 0.3                                                                               |                                                                                   |                                                                                   |                                                                                   |
| Intersection Capacity Utilization |                                                                                   |                                                                                   | 28.1%                                                                             | ICU Level of Service                                                              |                                                                                   | A                                                                                 |
| Analysis Period (min)             |                                                                                   |                                                                                   | 15                                                                                |                                                                                   |                                                                                   |                                                                                   |

# HCM Unsignalized Intersection Capacity Analysis5: Broadview Ave & South Site Driveway

Existing AM Peak Hour

|                                   |  |  |  |  |  |  |
|-----------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| Movement                          | EBL                                                                               | EBR                                                                               | NBL                                                                               | NBT                                                                               | SBT                                                                               | SBR                                                                               |
| Lane Configurations               |  |                                                                                   |                                                                                   |  |  |                                                                                   |
| Traffic Volume (veh/h)            | 15                                                                                | 20                                                                                | 0                                                                                 | 355                                                                               | 355                                                                               | 0                                                                                 |
| Future Volume (Veh/h)             | 15                                                                                | 20                                                                                | 0                                                                                 | 355                                                                               | 355                                                                               | 0                                                                                 |
| Sign Control                      | Stop                                                                              |                                                                                   |                                                                                   | Free                                                                              | Free                                                                              |                                                                                   |
| Grade                             | 0%                                                                                |                                                                                   |                                                                                   | 0%                                                                                | 0%                                                                                |                                                                                   |
| Peak Hour Factor                  | 0.88                                                                              | 0.88                                                                              | 0.88                                                                              | 0.88                                                                              | 0.88                                                                              | 0.88                                                                              |
| Hourly flow rate (vph)            | 17                                                                                | 23                                                                                | 0                                                                                 | 403                                                                               | 403                                                                               | 0                                                                                 |
| Pedestrians                       | 110                                                                               |                                                                                   |                                                                                   | 5                                                                                 |                                                                                   |                                                                                   |
| Lane Width (m)                    | 3.5                                                                               |                                                                                   |                                                                                   | 3.5                                                                               |                                                                                   |                                                                                   |
| Walking Speed (m/s)               | 1.2                                                                               |                                                                                   |                                                                                   | 1.2                                                                               |                                                                                   |                                                                                   |
| Percent Blockage                  | 9                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   |
| Right turn flare (veh)            |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| Median type                       |                                                                                   |                                                                                   |                                                                                   | None                                                                              | None                                                                              |                                                                                   |
| Median storage veh                |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| Upstream signal (m)               |                                                                                   |                                                                                   |                                                                                   | 64                                                                                | 169                                                                               |                                                                                   |
| pX, platoon unblocked             |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| vC, conflicting volume            | 714                                                                               | 316                                                                               | 513                                                                               |                                                                                   |                                                                                   |                                                                                   |
| vC1, stage 1 conf vol             |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| vC2, stage 2 conf vol             |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| vCu, unblocked vol                | 714                                                                               | 316                                                                               | 513                                                                               |                                                                                   |                                                                                   |                                                                                   |
| tC, single (s)                    | 6.8                                                                               | 6.9                                                                               | 4.1                                                                               |                                                                                   |                                                                                   |                                                                                   |
| tC, 2 stage (s)                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| tF (s)                            | 3.5                                                                               | 3.3                                                                               | 2.2                                                                               |                                                                                   |                                                                                   |                                                                                   |
| p0 queue free %                   | 95                                                                                | 96                                                                                | 100                                                                               |                                                                                   |                                                                                   |                                                                                   |
| cM capacity (veh/h)               | 337                                                                               | 622                                                                               | 968                                                                               |                                                                                   |                                                                                   |                                                                                   |
| Direction, Lane #                 | EB 1                                                                              | NB 1                                                                              | NB 2                                                                              | SB 1                                                                              | SB 2                                                                              |                                                                                   |
| Volume Total                      | 40                                                                                | 202                                                                               | 202                                                                               | 202                                                                               | 202                                                                               |                                                                                   |
| Volume Left                       | 17                                                                                | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                   |
| Volume Right                      | 23                                                                                | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                   |
| cSH                               | 457                                                                               | 1700                                                                              | 1700                                                                              | 1700                                                                              | 1700                                                                              |                                                                                   |
| Volume to Capacity                | 0.09                                                                              | 0.12                                                                              | 0.12                                                                              | 0.12                                                                              | 0.12                                                                              |                                                                                   |
| Queue Length 95th (m)             | 2.3                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   |
| Control Delay (s)                 | 13.6                                                                              | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   |
| Lane LOS                          | B                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| Approach Delay (s)                | 13.6                                                                              | 0.0                                                                               |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   |
| Approach LOS                      | B                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| <b>Intersection Summary</b>       |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| Average Delay                     |                                                                                   |                                                                                   | 0.6                                                                               |                                                                                   |                                                                                   |                                                                                   |
| Intersection Capacity Utilization |                                                                                   |                                                                                   | 24.8%                                                                             | ICU Level of Service                                                              |                                                                                   | A                                                                                 |
| Analysis Period (min)             |                                                                                   |                                                                                   | 15                                                                                |                                                                                   |                                                                                   |                                                                                   |



# HCM Unsignalized Intersection Capacity Analysis

## 6: Broadview Ave & Fairview Blvd

Existing AM Peak Hour

|                                   |  |  |  |  |  |  |
|-----------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| Movement                          | WBL                                                                               | WBR                                                                               | NBT                                                                               | NBR                                                                               | SBL                                                                               | SBT                                                                               |
| Lane Configurations               |                                                                                   |                                                                                   |  |                                                                                   |                                                                                   |  |
| Traffic Volume (veh/h)            | 0                                                                                 | 0                                                                                 | 360                                                                               | 10                                                                                | 15                                                                                | 360                                                                               |
| Future Volume (Veh/h)             | 0                                                                                 | 0                                                                                 | 360                                                                               | 10                                                                                | 15                                                                                | 360                                                                               |
| Sign Control                      | Stop                                                                              |                                                                                   | Free                                                                              |                                                                                   |                                                                                   | Free                                                                              |
| Grade                             | 0%                                                                                |                                                                                   | 0%                                                                                |                                                                                   |                                                                                   | 0%                                                                                |
| Peak Hour Factor                  | 0.87                                                                              | 0.87                                                                              | 0.87                                                                              | 0.87                                                                              | 0.87                                                                              | 0.87                                                                              |
| Hourly flow rate (vph)            | 0                                                                                 | 0                                                                                 | 414                                                                               | 11                                                                                | 17                                                                                | 414                                                                               |
| Pedestrians                       | 170                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                   | 5                                                                                 |
| Lane Width (m)                    | 0.0                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                   | 3.5                                                                               |
| Walking Speed (m/s)               | 1.2                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                   | 1.2                                                                               |
| Percent Blockage                  | 0                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                   | 0                                                                                 |
| Right turn flare (veh)            |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| Median type                       |                                                                                   |                                                                                   | None                                                                              |                                                                                   |                                                                                   | None                                                                              |
| Median storage veh                |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| Upstream signal (m)               |                                                                                   |                                                                                   | 45                                                                                |                                                                                   |                                                                                   | 189                                                                               |
| pX, platoon unblocked             | 0.99                                                                              | 0.99                                                                              |                                                                                   |                                                                                   | 0.99                                                                              |                                                                                   |
| vC, conflicting volume            | 830                                                                               | 388                                                                               |                                                                                   |                                                                                   | 595                                                                               |                                                                                   |
| vC1, stage 1 conf vol             |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| vC2, stage 2 conf vol             |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| vCu, unblocked vol                | 819                                                                               | 374                                                                               |                                                                                   |                                                                                   | 582                                                                               |                                                                                   |
| 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                                                                               |                                                                                   |                                                                                   | 98                                                                                |                                                                                   |
| cM capacity (veh/h)               | 310                                                                               | 624                                                                               |                                                                                   |                                                                                   | 997                                                                               |                                                                                   |
| Direction, Lane #                 | NB 1                                                                              | NB 2                                                                              | SB 1                                                                              | SB 2                                                                              |                                                                                   |                                                                                   |
| Volume Total                      | 276                                                                               | 149                                                                               | 155                                                                               | 276                                                                               |                                                                                   |                                                                                   |
| Volume Left                       | 0                                                                                 | 0                                                                                 | 17                                                                                | 0                                                                                 |                                                                                   |                                                                                   |
| Volume Right                      | 0                                                                                 | 11                                                                                | 0                                                                                 | 0                                                                                 |                                                                                   |                                                                                   |
| cSH                               | 1700                                                                              | 1700                                                                              | 997                                                                               | 1700                                                                              |                                                                                   |                                                                                   |
| Volume to Capacity                | 0.16                                                                              | 0.09                                                                              | 0.02                                                                              | 0.16                                                                              |                                                                                   |                                                                                   |
| Queue Length 95th (m)             | 0.0                                                                               | 0.0                                                                               | 0.4                                                                               | 0.0                                                                               |                                                                                   |                                                                                   |
| Control Delay (s)                 | 0.0                                                                               | 0.0                                                                               | 1.1                                                                               | 0.0                                                                               |                                                                                   |                                                                                   |
| Lane LOS                          |                                                                                   |                                                                                   | A                                                                                 |                                                                                   |                                                                                   |                                                                                   |
| Approach Delay (s)                | 0.0                                                                               |                                                                                   | 0.4                                                                               |                                                                                   |                                                                                   |                                                                                   |
| Approach LOS                      |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| Intersection Summary              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| Average Delay                     |                                                                                   |                                                                                   | 0.2                                                                               |                                                                                   |                                                                                   |                                                                                   |
| Intersection Capacity Utilization |                                                                                   |                                                                                   | 32.5%                                                                             | ICU Level of Service                                                              | A                                                                                 |                                                                                   |
| Analysis Period (min)             |                                                                                   |                                                                                   | 15                                                                                |                                                                                   |                                                                                   |                                                                                   |

## Queues

### 7: Broadview Ave & PXO

Existing AM Peak Hour

|                        | ↑     | ↓     |      |
|------------------------|-------|-------|------|
| Lane Group             | NBT   | SBT   | Ø9   |
| Lane Configurations    | ↑↑    | ↑↑    |      |
| Traffic Volume (vph)   | 375   | 360   |      |
| Future Volume (vph)    | 375   | 360   |      |
| Lane Group Flow (vph)  | 426   | 409   |      |
| Turn Type              | NA    | NA    |      |
| Protected Phases       | 2     | 6     | 9    |
| Permitted Phases       |       |       |      |
| Detector Phase         | 2     | 6     |      |
| Switch Phase           |       |       |      |
| Minimum Initial (s)    | 5.0   | 5.0   | 5.0  |
| Minimum Split (s)      | 8.0   | 8.0   | 22.5 |
| Total Split (s)        | 60.0  | 60.0  | 50.0 |
| Total Split (%)        | 54.5% | 54.5% | 45%  |
| Yellow Time (s)        | 2.0   | 2.0   | 3.5  |
| All-Red Time (s)       | 1.0   | 1.0   | 1.0  |
| Lost Time Adjust (s)   | -1.0  | -1.0  |      |
| Total Lost Time (s)    | 2.0   | 2.0   |      |
| Lead/Lag               |       |       |      |
| Lead-Lag Optimize?     |       |       |      |
| Recall Mode            | Min   | Min   | None |
| v/c Ratio              | 0.14  | 0.14  |      |
| Control Delay          | 2.3   | 2.3   |      |
| Queue Delay            | 0.0   | 0.0   |      |
| Total Delay            | 2.3   | 2.3   |      |
| Queue Length 50th (m)  | 0.0   | 0.0   |      |
| Queue Length 95th (m)  | 16.6  | 16.1  |      |
| Internal Link Dist (m) | 3.2   | 21.0  |      |
| Turn Bay Length (m)    |       |       |      |
| Base Capacity (vph)    | 3336  | 3245  |      |
| Starvation Cap Reductn | 0     | 0     |      |
| Spillback Cap Reductn  | 0     | 0     |      |
| Storage Cap Reductn    | 0     | 0     |      |
| Reduced v/c Ratio      | 0.13  | 0.13  |      |

#### Intersection Summary

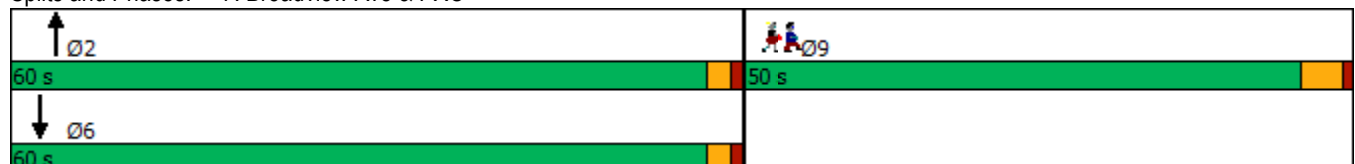
Cycle Length: 110

Actuated Cycle Length: 29.8

Natural Cycle: 40

Control Type: Actuated-Uncoordinated

Splits and Phases: 7: Broadview Ave & PXO





# HCM Signalized Intersection Capacity Analysis

## 7: Broadview Ave & PXO

Existing AM Peak Hour

|                                   |  |  |  |  |  |  |
|-----------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| Movement                          | EBL                                                                               | EBR                                                                               | NBL                                                                               | NBT                                                                               | SBT                                                                               | SBR                                                                               |
| Lane Configurations               |                                                                                   |                                                                                   |                                                                                   | ↑↑                                                                                | ↑↑                                                                                |                                                                                   |
| Traffic Volume (vph)              | 0                                                                                 | 0                                                                                 | 0                                                                                 | 375                                                                               | 360                                                                               | 0                                                                                 |
| Future Volume (vph)               | 0                                                                                 | 0                                                                                 | 0                                                                                 | 375                                                                               | 360                                                                               | 0                                                                                 |
| Ideal Flow (vphpl)                | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              |
| Total Lost time (s)               |                                                                                   |                                                                                   |                                                                                   | 2.0                                                                               | 2.0                                                                               |                                                                                   |
| Lane Util. Factor                 |                                                                                   |                                                                                   |                                                                                   | 0.95                                                                              | 0.95                                                                              |                                                                                   |
| Frt                               |                                                                                   |                                                                                   |                                                                                   | 1.00                                                                              | 1.00                                                                              |                                                                                   |
| Flt Protected                     |                                                                                   |                                                                                   |                                                                                   | 1.00                                                                              | 1.00                                                                              |                                                                                   |
| Satd. Flow (prot)                 |                                                                                   |                                                                                   |                                                                                   | 3336                                                                              | 3245                                                                              |                                                                                   |
| Flt Permitted                     |                                                                                   |                                                                                   |                                                                                   | 1.00                                                                              | 1.00                                                                              |                                                                                   |
| Satd. Flow (perm)                 |                                                                                   |                                                                                   |                                                                                   | 3336                                                                              | 3245                                                                              |                                                                                   |
| Peak-hour factor, PHF             | 0.88                                                                              | 0.88                                                                              | 0.88                                                                              | 0.88                                                                              | 0.88                                                                              | 0.88                                                                              |
| Adj. Flow (vph)                   | 0                                                                                 | 0                                                                                 | 0                                                                                 | 426                                                                               | 409                                                                               | 0                                                                                 |
| RTOR Reduction (vph)              | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 |
| Lane Group Flow (vph)             | 0                                                                                 | 0                                                                                 | 0                                                                                 | 426                                                                               | 409                                                                               | 0                                                                                 |
| Heavy Vehicles (%)                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 7%                                                                                | 10%                                                                               | 0%                                                                                |
| Turn Type                         |                                                                                   |                                                                                   |                                                                                   | NA                                                                                | NA                                                                                |                                                                                   |
| Protected Phases                  |                                                                                   |                                                                                   |                                                                                   | 2                                                                                 | 6                                                                                 |                                                                                   |
| Permitted Phases                  |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| Actuated Green, G (s)             |                                                                                   |                                                                                   |                                                                                   | 23.9                                                                              | 23.9                                                                              |                                                                                   |
| Effective Green, g (s)            |                                                                                   |                                                                                   |                                                                                   | 24.9                                                                              | 24.9                                                                              |                                                                                   |
| Actuated g/C Ratio                |                                                                                   |                                                                                   |                                                                                   | 0.74                                                                              | 0.74                                                                              |                                                                                   |
| Clearance Time (s)                |                                                                                   |                                                                                   |                                                                                   | 3.0                                                                               | 3.0                                                                               |                                                                                   |
| Vehicle Extension (s)             |                                                                                   |                                                                                   |                                                                                   | 3.0                                                                               | 3.0                                                                               |                                                                                   |
| Lane Grp Cap (vph)                |                                                                                   |                                                                                   |                                                                                   | 2479                                                                              | 2411                                                                              |                                                                                   |
| v/s Ratio Prot                    |                                                                                   |                                                                                   |                                                                                   | 0.13                                                                              | 0.13                                                                              |                                                                                   |
| v/s Ratio Perm                    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| v/c Ratio                         |                                                                                   |                                                                                   |                                                                                   | 0.17                                                                              | 0.17                                                                              |                                                                                   |
| Uniform Delay, d1                 |                                                                                   |                                                                                   |                                                                                   | 1.3                                                                               | 1.3                                                                               |                                                                                   |
| Progression Factor                |                                                                                   |                                                                                   |                                                                                   | 1.00                                                                              | 1.00                                                                              |                                                                                   |
| Incremental Delay, d2             |                                                                                   |                                                                                   |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   |
| Delay (s)                         |                                                                                   |                                                                                   |                                                                                   | 1.3                                                                               | 1.3                                                                               |                                                                                   |
| Level of Service                  |                                                                                   |                                                                                   |                                                                                   | A                                                                                 | A                                                                                 |                                                                                   |
| Approach Delay (s)                | 0.0                                                                               |                                                                                   |                                                                                   | 1.3                                                                               | 1.3                                                                               |                                                                                   |
| Approach LOS                      | A                                                                                 |                                                                                   |                                                                                   | A                                                                                 | A                                                                                 |                                                                                   |
| Intersection Summary              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| HCM 2000 Control Delay            |                                                                                   |                                                                                   | 1.3                                                                               | HCM 2000 Level of Service                                                         |                                                                                   | A                                                                                 |
| HCM 2000 Volume to Capacity ratio |                                                                                   |                                                                                   | 0.16                                                                              |                                                                                   |                                                                                   |                                                                                   |
| Actuated Cycle Length (s)         |                                                                                   |                                                                                   | 33.5                                                                              | Sum of lost time (s)                                                              |                                                                                   | 6.5                                                                               |
| Intersection Capacity Utilization |                                                                                   |                                                                                   | 13.7%                                                                             | ICU Level of Service                                                              |                                                                                   | A                                                                                 |
| Analysis Period (min)             |                                                                                   |                                                                                   | 15                                                                                |                                                                                   |                                                                                   |                                                                                   |
| c Critical Lane Group             |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |

# HCM Unsignalized Intersection Capacity Analysis

## 8: Broadview Ave & Wolfrey Ave

Existing AM Peak Hour

|                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
|-----------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
|                                   |  |  |  |  |  |  |
| Movement                          | WBL                                                                               | WBR                                                                               | NBT                                                                               | NBR                                                                               | SBL                                                                               | SBT                                                                               |
| Lane Configurations               |  |                                                                                   |  |                                                                                   |                                                                                   |  |
| Traffic Volume (veh/h)            | 5                                                                                 | 0                                                                                 | 370                                                                               | 5                                                                                 | 0                                                                                 | 355                                                                               |
| Future Volume (Veh/h)             | 5                                                                                 | 0                                                                                 | 370                                                                               | 5                                                                                 | 0                                                                                 | 355                                                                               |
| Sign Control                      | Stop                                                                              |                                                                                   | Free                                                                              |                                                                                   |                                                                                   | Free                                                                              |
| Grade                             | 0%                                                                                |                                                                                   | 0%                                                                                |                                                                                   |                                                                                   | 0%                                                                                |
| Peak Hour Factor                  | 0.88                                                                              | 0.88                                                                              | 0.88                                                                              | 0.88                                                                              | 0.88                                                                              | 0.88                                                                              |
| Hourly flow rate (vph)            | 6                                                                                 | 0                                                                                 | 420                                                                               | 6                                                                                 | 0                                                                                 | 403                                                                               |
| Pedestrians                       | 155                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                   | 140                                                                               |
| Lane Width (m)                    | 3.5                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                   | 3.5                                                                               |
| Walking Speed (m/s)               | 1.2                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                   | 1.2                                                                               |
| Percent Blockage                  | 13                                                                                |                                                                                   |                                                                                   |                                                                                   |                                                                                   | 11                                                                                |
| Right turn flare (veh)            |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| Median type                       |                                                                                   |                                                                                   | None                                                                              |                                                                                   |                                                                                   | None                                                                              |
| Median storage veh                |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| Upstream signal (m)               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   | 27                                                                                |
| pX, platoon unblocked             | 0.98                                                                              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| vC, conflicting volume            | 780                                                                               | 508                                                                               |                                                                                   |                                                                                   | 581                                                                               |                                                                                   |
| vC1, stage 1 conf vol             |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| vC2, stage 2 conf vol             |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| vCu, unblocked vol                | 745                                                                               | 508                                                                               |                                                                                   |                                                                                   | 581                                                                               |                                                                                   |
| tC, single (s)                    | 6.8                                                                               | 6.9                                                                               |                                                                                   |                                                                                   | 4.1                                                                               |                                                                                   |
| tC, 2 stage (s)                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| tF (s)                            | 3.5                                                                               | 3.3                                                                               |                                                                                   |                                                                                   | 2.2                                                                               |                                                                                   |
| p0 queue free %                   | 98                                                                                | 100                                                                               |                                                                                   |                                                                                   | 100                                                                               |                                                                                   |
| cM capacity (veh/h)               | 305                                                                               | 400                                                                               |                                                                                   |                                                                                   | 877                                                                               |                                                                                   |
| Direction, Lane #                 | WB 1                                                                              | NB 1                                                                              | NB 2                                                                              | SB 1                                                                              | SB 2                                                                              |                                                                                   |
| Volume Total                      | 6                                                                                 | 280                                                                               | 146                                                                               | 134                                                                               | 269                                                                               |                                                                                   |
| Volume Left                       | 6                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                   |
| Volume Right                      | 0                                                                                 | 0                                                                                 | 6                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                   |
| cSH                               | 305                                                                               | 1700                                                                              | 1700                                                                              | 877                                                                               | 1700                                                                              |                                                                                   |
| Volume to Capacity                | 0.02                                                                              | 0.16                                                                              | 0.09                                                                              | 0.00                                                                              | 0.16                                                                              |                                                                                   |
| Queue Length 95th (m)             | 0.5                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   |
| Control Delay (s)                 | 17.1                                                                              | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   |
| Lane LOS                          | C                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| Approach Delay (s)                | 17.1                                                                              | 0.0                                                                               |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   |
| Approach LOS                      | C                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| Intersection Summary              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| Average Delay                     |                                                                                   |                                                                                   | 0.1                                                                               |                                                                                   |                                                                                   |                                                                                   |
| Intersection Capacity Utilization |                                                                                   |                                                                                   | 33.2%                                                                             | ICU Level of Service                                                              |                                                                                   | A                                                                                 |
| Analysis Period (min)             |                                                                                   |                                                                                   | 15                                                                                |                                                                                   |                                                                                   |                                                                                   |



# Queues

## 1: Broadview Ave & Danforth Ave

Existing PM Peak Hour

|                        |  |  |  |  |  |  |   |  |  |
|------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group             | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | NBL                                                                               | NBT                                                                                 | SBL                                                                                 | SBT                                                                                 |
| Lane Configurations    |  |  |  |  |  |                                                                                   |  |  |  |
| Traffic Volume (vph)   | 295                                                                               | 525                                                                               | 235                                                                               | 40                                                                                | 330                                                                               | 130                                                                               | 275                                                                                 | 35                                                                                  | 190                                                                                 |
| Future Volume (vph)    | 295                                                                               | 525                                                                               | 235                                                                               | 40                                                                                | 330                                                                               | 130                                                                               | 275                                                                                 | 35                                                                                  | 190                                                                                 |
| Lane Group Flow (vph)  | 307                                                                               | 547                                                                               | 245                                                                               | 42                                                                                | 391                                                                               | 0                                                                                 | 494                                                                                 | 0                                                                                   | 395                                                                                 |
| Turn Type              | pm+pt                                                                             | NA                                                                                | Perm                                                                              | Perm                                                                              | NA                                                                                | pm+pt                                                                             | NA                                                                                  | Perm                                                                                | NA                                                                                  |
| Protected Phases       | 5                                                                                 | 2                                                                                 |                                                                                   |                                                                                   | 6                                                                                 | 7                                                                                 | 4                                                                                   |                                                                                     | 8                                                                                   |
| Permitted Phases       | 2                                                                                 |                                                                                   | 2                                                                                 | 6                                                                                 |                                                                                   | 4                                                                                 |                                                                                     | 8                                                                                   |                                                                                     |
| Detector Phase         | 5                                                                                 | 2                                                                                 | 2                                                                                 | 6                                                                                 | 6                                                                                 | 7                                                                                 | 4                                                                                   | 8                                                                                   | 8                                                                                   |
| Switch Phase           |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)    | 6.0                                                                               | 28.0                                                                              | 28.0                                                                              | 28.0                                                                              | 28.0                                                                              | 6.0                                                                               | 29.0                                                                                | 21.0                                                                                | 21.0                                                                                |
| Minimum Split (s)      | 13.1                                                                              | 35.1                                                                              | 35.1                                                                              | 35.1                                                                              | 35.1                                                                              | 13.5                                                                              | 36.0                                                                                | 36.0                                                                                | 36.0                                                                                |
| Total Split (s)        | 16.0                                                                              | 53.0                                                                              | 53.0                                                                              | 37.0                                                                              | 37.0                                                                              | 14.0                                                                              | 51.0                                                                                | 37.0                                                                                | 37.0                                                                                |
| Total Split (%)        | 15.4%                                                                             | 51.0%                                                                             | 51.0%                                                                             | 35.6%                                                                             | 35.6%                                                                             | 13.5%                                                                             | 49.0%                                                                               | 35.6%                                                                               | 35.6%                                                                               |
| Yellow Time (s)        | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.4                                                                                 | 3.4                                                                                 | 3.4                                                                                 |
| All-Red Time (s)       | 4.1                                                                               | 4.1                                                                               | 4.1                                                                               | 4.1                                                                               | 4.1                                                                               | 4.5                                                                               | 3.6                                                                                 | 3.6                                                                                 | 3.6                                                                                 |
| Lost Time Adjust (s)   | -1.0                                                                              | -1.0                                                                              | -1.0                                                                              | -1.0                                                                              | -1.0                                                                              |                                                                                   | -1.0                                                                                |                                                                                     | -1.0                                                                                |
| Total Lost Time (s)    | 6.1                                                                               | 6.1                                                                               | 6.1                                                                               | 6.1                                                                               | 6.1                                                                               |                                                                                   | 6.0                                                                                 |                                                                                     | 6.0                                                                                 |
| Lead/Lag               | Lead                                                                              |                                                                                   |                                                                                   | Lag                                                                               | Lag                                                                               | Lead                                                                              |                                                                                     | Lag                                                                                 | Lag                                                                                 |
| Lead-Lag Optimize?     | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               | Yes                                                                               | Yes                                                                               |                                                                                     | Yes                                                                                 | Yes                                                                                 |
| Recall Mode            | None                                                                              | C-Min                                                                             | C-Min                                                                             | C-Min                                                                             | C-Min                                                                             | None                                                                              | Min                                                                                 | Min                                                                                 | Min                                                                                 |
| v/c Ratio              | 0.63                                                                              | 0.54                                                                              | 0.41                                                                              | 0.19                                                                              | 0.35                                                                              |                                                                                   | 0.72                                                                                |                                                                                     | 0.44                                                                                |
| Control Delay          | 22.2                                                                              | 19.1                                                                              | 5.1                                                                               | 30.3                                                                              | 27.4                                                                              |                                                                                   | 35.1                                                                                |                                                                                     | 16.0                                                                                |
| Queue Delay            | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                 |                                                                                     | 0.0                                                                                 |
| Total Delay            | 22.2                                                                              | 19.1                                                                              | 5.1                                                                               | 30.3                                                                              | 27.4                                                                              |                                                                                   | 35.1                                                                                |                                                                                     | 16.0                                                                                |
| Queue Length 50th (m)  | 34.2                                                                              | 70.2                                                                              | 1.9                                                                               | 6.6                                                                               | 32.6                                                                              |                                                                                   | 47.2                                                                                |                                                                                     | 19.5                                                                                |
| Queue Length 95th (m)  | #69.7                                                                             | 122.7                                                                             | 18.8                                                                              | 16.7                                                                              | 48.0                                                                              |                                                                                   | 58.5                                                                                |                                                                                     | 28.8                                                                                |
| Internal Link Dist (m) |                                                                                   | 170.8                                                                             |                                                                                   |                                                                                   | 155.0                                                                             |                                                                                   | 66.0                                                                                |                                                                                     | 120.0                                                                               |
| Turn Bay Length (m)    | 65.0                                                                              |                                                                                   |                                                                                   | 35.0                                                                              |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |
| Base Capacity (vph)    | 487                                                                               | 1010                                                                              | 599                                                                               | 228                                                                               | 1135                                                                              |                                                                                   | 866                                                                                 |                                                                                     | 902                                                                                 |
| Starvation Cap Reductn | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                   |                                                                                     | 0                                                                                   |
| Spillback Cap Reductn  | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                   |                                                                                     | 0                                                                                   |
| Storage Cap Reductn    | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                   |                                                                                     | 0                                                                                   |
| Reduced v/c Ratio      | 0.63                                                                              | 0.54                                                                              | 0.41                                                                              | 0.18                                                                              | 0.34                                                                              |                                                                                   | 0.57                                                                                |                                                                                     | 0.44                                                                                |

### Intersection Summary

Cycle Length: 104

Actuated Cycle Length: 104

Offset: 103 (99%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

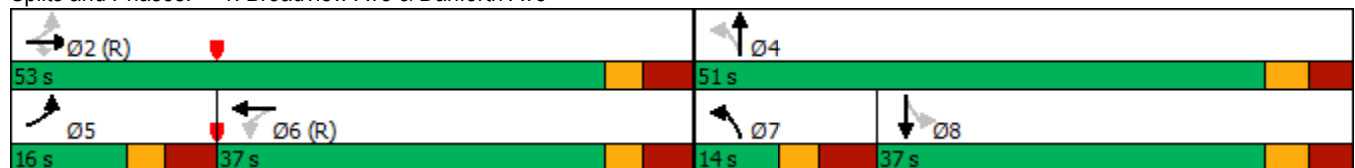
Natural Cycle: 100

Control Type: Actuated-Coordinated

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

Queue shown is maximum after two cycles.

Splits and Phases: 1: Broadview Ave & Danforth Ave



# HCM Signalized Intersection Capacity Analysis

## 1: Broadview Ave & Danforth Ave

Existing PM Peak Hour

|                                   |  |  |  |  |  |  |  |  |  |  |  |  |
|-----------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Movement                          | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations               |  |  |  |  |  |                                                                                   |                                                                                    |  |                                                                                     |                                                                                     |  |  |
| Traffic Volume (vph)              | 295                                                                               | 525                                                                               | 235                                                                               | 40                                                                                | 330                                                                               | 45                                                                                | 130                                                                                | 275                                                                                 | 70                                                                                  | 35                                                                                  | 190                                                                                 | 155                                                                                 |
| Future Volume (vph)               | 295                                                                               | 525                                                                               | 235                                                                               | 40                                                                                | 330                                                                               | 45                                                                                | 130                                                                                | 275                                                                                 | 70                                                                                  | 35                                                                                  | 190                                                                                 | 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                                                                               | 3.5                                                                               | 3.5                                                                                | 3.5                                                                                 | 3.5                                                                                 | 3.5                                                                                 | 3.5                                                                                 | 3.5                                                                                 |
| Total Lost time (s)               | 6.1                                                                               | 6.1                                                                               | 6.1                                                                               | 6.1                                                                               | 6.1                                                                               |                                                                                   |                                                                                    | 6.0                                                                                 |                                                                                     |                                                                                     | 6.0                                                                                 |                                                                                     |
| Lane Util. Factor                 | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 0.95                                                                              |                                                                                   |                                                                                    | 0.95                                                                                |                                                                                     |                                                                                     | 0.95                                                                                |                                                                                     |
| Frpb, ped/bikes                   | 1.00                                                                              | 1.00                                                                              | 0.62                                                                              | 1.00                                                                              | 0.96                                                                              |                                                                                   |                                                                                    | 0.90                                                                                |                                                                                     |                                                                                     | 0.88                                                                                |                                                                                     |
| Flpb, ped/bikes                   | 0.94                                                                              | 1.00                                                                              | 1.00                                                                              | 0.84                                                                              | 1.00                                                                              |                                                                                   |                                                                                    | 0.96                                                                                |                                                                                     |                                                                                     | 0.97                                                                                |                                                                                     |
| Frt                               | 1.00                                                                              | 1.00                                                                              | 0.85                                                                              | 1.00                                                                              | 0.98                                                                              |                                                                                   |                                                                                    | 0.98                                                                                |                                                                                     |                                                                                     | 0.94                                                                                |                                                                                     |
| Flt Protected                     | 0.95                                                                              | 1.00                                                                              | 1.00                                                                              | 0.95                                                                              | 1.00                                                                              |                                                                                   |                                                                                    | 0.99                                                                                |                                                                                     |                                                                                     | 1.00                                                                                |                                                                                     |
| Satd. Flow (prot)                 | 1569                                                                              | 1860                                                                              | 925                                                                               | 1377                                                                              | 3313                                                                              |                                                                                   |                                                                                    | 2771                                                                                |                                                                                     |                                                                                     | 2677                                                                                |                                                                                     |
| Flt Permitted                     | 0.41                                                                              | 1.00                                                                              | 1.00                                                                              | 0.46                                                                              | 1.00                                                                              |                                                                                   |                                                                                    | 0.70                                                                                |                                                                                     |                                                                                     | 0.86                                                                                |                                                                                     |
| Satd. Flow (perm)                 | 672                                                                               | 1860                                                                              | 925                                                                               | 666                                                                               | 3313                                                                              |                                                                                   |                                                                                    | 1972                                                                                |                                                                                     |                                                                                     | 2324                                                                                |                                                                                     |
| Peak-hour factor, PHF             | 0.96                                                                              | 0.96                                                                              | 0.96                                                                              | 0.96                                                                              | 0.96                                                                              | 0.96                                                                              | 0.96                                                                               | 0.96                                                                                | 0.96                                                                                | 0.96                                                                                | 0.96                                                                                | 0.96                                                                                |
| Adj. Flow (vph)                   | 307                                                                               | 547                                                                               | 245                                                                               | 42                                                                                | 344                                                                               | 47                                                                                | 135                                                                                | 286                                                                                 | 73                                                                                  | 36                                                                                  | 198                                                                                 | 161                                                                                 |
| RTOR Reduction (vph)              | 0                                                                                 | 0                                                                                 | 103                                                                               | 0                                                                                 | 10                                                                                | 0                                                                                 | 0                                                                                  | 9                                                                                   | 0                                                                                   | 0                                                                                   | 106                                                                                 | 0                                                                                   |
| Lane Group Flow (vph)             | 307                                                                               | 547                                                                               | 142                                                                               | 42                                                                                | 381                                                                               | 0                                                                                 | 0                                                                                  | 485                                                                                 | 0                                                                                   | 0                                                                                   | 289                                                                                 | 0                                                                                   |
| Confl. Peds. (#/hr)               | 380                                                                               |                                                                                   | 440                                                                               | 440                                                                               |                                                                                   | 380                                                                               | 265                                                                                |                                                                                     | 700                                                                                 | 700                                                                                 |                                                                                     | 265                                                                                 |
| Confl. Bikes (#/hr)               |                                                                                   |                                                                                   | 205                                                                               |                                                                                   |                                                                                   | 130                                                                               |                                                                                    |                                                                                     | 20                                                                                  |                                                                                     |                                                                                     | 10                                                                                  |
| Heavy Vehicles (%)                | 1%                                                                                | 1%                                                                                | 1%                                                                                | 3%                                                                                | 1%                                                                                | 2%                                                                                | 1%                                                                                 | 7%                                                                                  | 1%                                                                                  | 0%                                                                                  | 10%                                                                                 | 1%                                                                                  |
| Bus Blockages (#/hr)              | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                  | 13                                                                                  | 0                                                                                   | 0                                                                                   | 6                                                                                   | 0                                                                                   |
| Turn Type                         | pm+pt                                                                             | NA                                                                                | Perm                                                                              | Perm                                                                              | NA                                                                                |                                                                                   | pm+pt                                                                              | NA                                                                                  |                                                                                     | Perm                                                                                | NA                                                                                  |                                                                                     |
| Protected Phases                  | 5                                                                                 | 2                                                                                 |                                                                                   |                                                                                   | 6                                                                                 |                                                                                   | 7                                                                                  | 4                                                                                   |                                                                                     |                                                                                     | 8                                                                                   |                                                                                     |
| Permitted Phases                  | 2                                                                                 |                                                                                   | 2                                                                                 | 6                                                                                 |                                                                                   |                                                                                   | 4                                                                                  |                                                                                     |                                                                                     | 8                                                                                   |                                                                                     |                                                                                     |
| Actuated Green, G (s)             | 55.5                                                                              | 55.5                                                                              | 55.5                                                                              | 33.8                                                                              | 33.8                                                                              |                                                                                   |                                                                                    | 34.4                                                                                |                                                                                     |                                                                                     | 34.4                                                                                |                                                                                     |
| Effective Green, g (s)            | 56.5                                                                              | 56.5                                                                              | 56.5                                                                              | 34.8                                                                              | 34.8                                                                              |                                                                                   |                                                                                    | 35.4                                                                                |                                                                                     |                                                                                     | 35.4                                                                                |                                                                                     |
| Actuated g/C Ratio                | 0.54                                                                              | 0.54                                                                              | 0.54                                                                              | 0.33                                                                              | 0.33                                                                              |                                                                                   |                                                                                    | 0.34                                                                                |                                                                                     |                                                                                     | 0.34                                                                                |                                                                                     |
| Clearance Time (s)                | 7.1                                                                               | 7.1                                                                               | 7.1                                                                               | 7.1                                                                               | 7.1                                                                               |                                                                                   |                                                                                    | 7.0                                                                                 |                                                                                     |                                                                                     | 7.0                                                                                 |                                                                                     |
| Vehicle Extension (s)             | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               |                                                                                   |                                                                                    | 3.0                                                                                 |                                                                                     |                                                                                     | 3.0                                                                                 |                                                                                     |
| Lane Grp Cap (vph)                | 499                                                                               | 1010                                                                              | 502                                                                               | 222                                                                               | 1108                                                                              |                                                                                   |                                                                                    | 671                                                                                 |                                                                                     |                                                                                     | 791                                                                                 |                                                                                     |
| v/s Ratio Prot                    | c0.09                                                                             | 0.29                                                                              |                                                                                   |                                                                                   | 0.12                                                                              |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| v/s Ratio Perm                    | c0.24                                                                             |                                                                                   | 0.15                                                                              | 0.06                                                                              |                                                                                   |                                                                                   |                                                                                    | c0.25                                                                               |                                                                                     |                                                                                     | 0.12                                                                                |                                                                                     |
| v/c Ratio                         | 0.62                                                                              | 0.54                                                                              | 0.28                                                                              | 0.19                                                                              | 0.34                                                                              |                                                                                   |                                                                                    | 0.72                                                                                |                                                                                     |                                                                                     | 0.37                                                                                |                                                                                     |
| Uniform Delay, d1                 | 14.1                                                                              | 15.4                                                                              | 12.8                                                                              | 24.6                                                                              | 26.0                                                                              |                                                                                   |                                                                                    | 30.0                                                                                |                                                                                     |                                                                                     | 25.8                                                                                |                                                                                     |
| Progression Factor                | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              |                                                                                   |                                                                                    | 1.00                                                                                |                                                                                     |                                                                                     | 1.00                                                                                |                                                                                     |
| Incremental Delay, d2             | 2.3                                                                               | 2.1                                                                               | 1.4                                                                               | 1.9                                                                               | 0.8                                                                               |                                                                                   |                                                                                    | 3.8                                                                                 |                                                                                     |                                                                                     | 0.3                                                                                 |                                                                                     |
| Delay (s)                         | 16.3                                                                              | 17.5                                                                              | 14.2                                                                              | 26.5                                                                              | 26.9                                                                              |                                                                                   |                                                                                    | 33.9                                                                                |                                                                                     |                                                                                     | 26.1                                                                                |                                                                                     |
| Level of Service                  | B                                                                                 | B                                                                                 | B                                                                                 | C                                                                                 | C                                                                                 |                                                                                   |                                                                                    | C                                                                                   |                                                                                     |                                                                                     | C                                                                                   |                                                                                     |
| Approach Delay (s)                |                                                                                   | 16.4                                                                              |                                                                                   |                                                                                   | 26.8                                                                              |                                                                                   |                                                                                    | 33.9                                                                                |                                                                                     |                                                                                     | 26.1                                                                                |                                                                                     |
| Approach LOS                      |                                                                                   | B                                                                                 |                                                                                   |                                                                                   | C                                                                                 |                                                                                   |                                                                                    | C                                                                                   |                                                                                     |                                                                                     | C                                                                                   |                                                                                     |
| <b>Intersection Summary</b>       |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| HCM 2000 Control Delay            |                                                                                   |                                                                                   | 23.4                                                                              |                                                                                   |                                                                                   | HCM 2000 Level of Service                                                         |                                                                                    |                                                                                     |                                                                                     | C                                                                                   |                                                                                     |                                                                                     |
| HCM 2000 Volume to Capacity ratio |                                                                                   |                                                                                   | 0.74                                                                              |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Actuated Cycle Length (s)         |                                                                                   |                                                                                   | 104.0                                                                             |                                                                                   |                                                                                   | Sum of lost time (s)                                                              |                                                                                    |                                                                                     | 24.7                                                                                |                                                                                     |                                                                                     |                                                                                     |
| Intersection Capacity Utilization |                                                                                   |                                                                                   | 119.5%                                                                            |                                                                                   |                                                                                   | ICU Level of Service                                                              |                                                                                    |                                                                                     | H                                                                                   |                                                                                     |                                                                                     |                                                                                     |
| Analysis Period (min)             |                                                                                   |                                                                                   | 15                                                                                |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| <b>c Critical Lane Group</b>      |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |

## HCM Unsignalized Intersection Capacity Analysis

### 2: Broadview Ave & Site Loading Access

Existing PM Peak Hour

|                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
|-----------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
|                                   |  |  |  |  |  |  |
| Movement                          | EBL                                                                               | EBR                                                                               | NBL                                                                               | NBT                                                                               | SBT                                                                               | SBR                                                                               |
| Lane Configurations               |  |                                                                                   |                                                                                   |  |  |                                                                                   |
| Traffic Volume (veh/h)            | 5                                                                                 | 0                                                                                 | 0                                                                                 | 455                                                                               | 460                                                                               | 0                                                                                 |
| Future Volume (Veh/h)             | 5                                                                                 | 0                                                                                 | 0                                                                                 | 455                                                                               | 460                                                                               | 0                                                                                 |
| Sign Control                      | Stop                                                                              |                                                                                   |                                                                                   | Free                                                                              | Free                                                                              |                                                                                   |
| Grade                             | 0%                                                                                |                                                                                   |                                                                                   | 0%                                                                                | 0%                                                                                |                                                                                   |
| Peak Hour Factor                  | 0.91                                                                              | 0.91                                                                              | 0.91                                                                              | 0.91                                                                              | 0.91                                                                              | 0.91                                                                              |
| Hourly flow rate (vph)            | 5                                                                                 | 0                                                                                 | 0                                                                                 | 500                                                                               | 505                                                                               | 0                                                                                 |
| Pedestrians                       | 470                                                                               |                                                                                   |                                                                                   | 25                                                                                | 5                                                                                 |                                                                                   |
| Lane Width (m)                    | 3.5                                                                               |                                                                                   |                                                                                   | 3.5                                                                               | 3.5                                                                               |                                                                                   |
| Walking Speed (m/s)               | 1.2                                                                               |                                                                                   |                                                                                   | 1.2                                                                               | 1.2                                                                               |                                                                                   |
| Percent Blockage                  | 38                                                                                |                                                                                   |                                                                                   | 2                                                                                 | 0                                                                                 |                                                                                   |
| Right turn flare (veh)            |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| Median type                       |                                                                                   |                                                                                   |                                                                                   | None                                                                              | None                                                                              |                                                                                   |
| Median storage veh                |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| Upstream signal (m)               |                                                                                   |                                                                                   |                                                                                   | 144                                                                               | 90                                                                                |                                                                                   |
| pX, platoon unblocked             |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| vC, conflicting volume            | 1230                                                                              | 748                                                                               | 975                                                                               |                                                                                   |                                                                                   |                                                                                   |
| vC1, stage 1 conf vol             |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| vC2, stage 2 conf vol             |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| vCu, unblocked vol                | 1230                                                                              | 748                                                                               | 975                                                                               |                                                                                   |                                                                                   |                                                                                   |
| tC, single (s)                    | 6.8                                                                               | 6.9                                                                               | 4.1                                                                               |                                                                                   |                                                                                   |                                                                                   |
| tC, 2 stage (s)                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| tF (s)                            | 3.5                                                                               | 3.3                                                                               | 2.2                                                                               |                                                                                   |                                                                                   |                                                                                   |
| p0 queue free %                   | 95                                                                                | 100                                                                               | 100                                                                               |                                                                                   |                                                                                   |                                                                                   |
| cM capacity (veh/h)               | 107                                                                               | 218                                                                               | 443                                                                               |                                                                                   |                                                                                   |                                                                                   |
| Direction, Lane #                 | EB 1                                                                              | NB 1                                                                              | NB 2                                                                              | SB 1                                                                              | SB 2                                                                              |                                                                                   |
| Volume Total                      | 5                                                                                 | 167                                                                               | 333                                                                               | 337                                                                               | 168                                                                               |                                                                                   |
| Volume Left                       | 5                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                   |
| Volume Right                      | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                   |
| cSH                               | 107                                                                               | 443                                                                               | 1700                                                                              | 1700                                                                              | 1700                                                                              |                                                                                   |
| Volume to Capacity                | 0.05                                                                              | 0.00                                                                              | 0.20                                                                              | 0.20                                                                              | 0.10                                                                              |                                                                                   |
| Queue Length 95th (m)             | 1.2                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   |
| Control Delay (s)                 | 40.5                                                                              | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   |
| Lane LOS                          | E                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| Approach Delay (s)                | 40.5                                                                              | 0.0                                                                               |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   |
| Approach LOS                      | E                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| Intersection Summary              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| Average Delay                     |                                                                                   |                                                                                   | 0.2                                                                               |                                                                                   |                                                                                   |                                                                                   |
| Intersection Capacity Utilization |                                                                                   |                                                                                   | 29.0%                                                                             | ICU Level of Service                                                              |                                                                                   | A                                                                                 |
| Analysis Period (min)             |                                                                                   |                                                                                   | 15                                                                                |                                                                                   |                                                                                   |                                                                                   |



# HCM Unsignalized Intersection Capacity Analysis

## 3: Broadview Ave & Dearbourne Ave

Existing PM Peak Hour

|                                   |                                                                                   |                                                                                   |                                                                                                                                                                     |                                                                                   |                                                                                   |                                                                                                                                                                     |
|-----------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                   |  |  |                                                                                    |  |  |                                                                                    |
| Movement                          | WBL                                                                               | WBR                                                                               | NBT                                                                                                                                                                 | NBR                                                                               | SBL                                                                               | SBT                                                                                                                                                                 |
| Lane Configurations               |  |                                                                                   |   |                                                                                   |                                                                                   |   |
| Traffic Volume (veh/h)            | 10                                                                                | 20                                                                                | 440                                                                                                                                                                 | 0                                                                                 | 0                                                                                 | 465                                                                                                                                                                 |
| Future Volume (Veh/h)             | 10                                                                                | 20                                                                                | 440                                                                                                                                                                 | 0                                                                                 | 0                                                                                 | 465                                                                                                                                                                 |
| Sign Control                      | Stop                                                                              |                                                                                   | Free                                                                                                                                                                |                                                                                   |                                                                                   | Free                                                                                                                                                                |
| Grade                             | 0%                                                                                |                                                                                   | 0%                                                                                                                                                                  |                                                                                   |                                                                                   | 0%                                                                                                                                                                  |
| Peak Hour Factor                  | 0.91                                                                              | 0.91                                                                              | 0.91                                                                                                                                                                | 0.91                                                                              | 0.91                                                                              | 0.91                                                                                                                                                                |
| Hourly flow rate (vph)            | 11                                                                                | 22                                                                                | 484                                                                                                                                                                 | 0                                                                                 | 0                                                                                 | 511                                                                                                                                                                 |
| Pedestrians                       | 300                                                                               |                                                                                   | 25                                                                                                                                                                  |                                                                                   |                                                                                   | 20                                                                                                                                                                  |
| Lane Width (m)                    | 3.5                                                                               |                                                                                   | 3.5                                                                                                                                                                 |                                                                                   |                                                                                   | 3.5                                                                                                                                                                 |
| Walking Speed (m/s)               | 1.2                                                                               |                                                                                   | 1.2                                                                                                                                                                 |                                                                                   |                                                                                   | 1.2                                                                                                                                                                 |
| Percent Blockage                  | 24                                                                                |                                                                                   | 2                                                                                                                                                                   |                                                                                   |                                                                                   | 2                                                                                                                                                                   |
| Right turn flare (veh)            |                                                                                   |                                                                                   |                                                                                                                                                                     |                                                                                   |                                                                                   |                                                                                                                                                                     |
| Median type                       |                                                                                   |                                                                                   | None                                                                                                                                                                |                                                                                   |                                                                                   | None                                                                                                                                                                |
| Median storage (veh)              |                                                                                   |                                                                                   |                                                                                                                                                                     |                                                                                   |                                                                                   |                                                                                                                                                                     |
| Upstream signal (m)               |                                                                                   |                                                                                   | 122                                                                                                                                                                 |                                                                                   |                                                                                   | 112                                                                                                                                                                 |
| pX, platoon unblocked             |                                                                                   |                                                                                   |                                                                                                                                                                     |                                                                                   |                                                                                   |                                                                                                                                                                     |
| vC, conflicting volume            | 1064                                                                              | 562                                                                               |                                                                                                                                                                     |                                                                                   | 784                                                                               |                                                                                                                                                                     |
| vC1, stage 1 conf vol             |                                                                                   |                                                                                   |                                                                                                                                                                     |                                                                                   |                                                                                   |                                                                                                                                                                     |
| vC2, stage 2 conf vol             |                                                                                   |                                                                                   |                                                                                                                                                                     |                                                                                   |                                                                                   |                                                                                                                                                                     |
| vCu, unblocked vol                | 1064                                                                              | 562                                                                               |                                                                                                                                                                     |                                                                                   | 784                                                                               |                                                                                                                                                                     |
| 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                                                                                | 94                                                                                |                                                                                                                                                                     |                                                                                   | 100                                                                               |                                                                                                                                                                     |
| cM capacity (veh/h)               | 164                                                                               | 354                                                                               |                                                                                                                                                                     |                                                                                   | 638                                                                               |                                                                                                                                                                     |
| Direction, Lane #                 | WB 1                                                                              | NB 1                                                                              | NB 2                                                                                                                                                                | SB 1                                                                              | SB 2                                                                              |                                                                                                                                                                     |
| Volume Total                      | 33                                                                                | 242                                                                               | 242                                                                                                                                                                 | 256                                                                               | 256                                                                               |                                                                                                                                                                     |
| Volume Left                       | 11                                                                                | 0                                                                                 | 0                                                                                                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                                                                                                     |
| Volume Right                      | 22                                                                                | 0                                                                                 | 0                                                                                                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                                                                                                     |
| cSH                               | 255                                                                               | 1700                                                                              | 1700                                                                                                                                                                | 1700                                                                              | 1700                                                                              |                                                                                                                                                                     |
| Volume to Capacity                | 0.13                                                                              | 0.14                                                                              | 0.14                                                                                                                                                                | 0.15                                                                              | 0.15                                                                              |                                                                                                                                                                     |
| Queue Length 95th (m)             | 3.5                                                                               | 0.0                                                                               | 0.0                                                                                                                                                                 | 0.0                                                                               | 0.0                                                                               |                                                                                                                                                                     |
| Control Delay (s)                 | 21.2                                                                              | 0.0                                                                               | 0.0                                                                                                                                                                 | 0.0                                                                               | 0.0                                                                               |                                                                                                                                                                     |
| Lane LOS                          | C                                                                                 |                                                                                   |                                                                                                                                                                     |                                                                                   |                                                                                   |                                                                                                                                                                     |
| Approach Delay (s)                | 21.2                                                                              | 0.0                                                                               |                                                                                                                                                                     | 0.0                                                                               |                                                                                   |                                                                                                                                                                     |
| Approach LOS                      | C                                                                                 |                                                                                   |                                                                                                                                                                     |                                                                                   |                                                                                   |                                                                                                                                                                     |
| Intersection Summary              |                                                                                   |                                                                                   |                                                                                                                                                                     |                                                                                   |                                                                                   |                                                                                                                                                                     |
| Average Delay                     |                                                                                   |                                                                                   | 0.7                                                                                                                                                                 |                                                                                   |                                                                                   |                                                                                                                                                                     |
| Intersection Capacity Utilization |                                                                                   |                                                                                   | 28.2%                                                                                                                                                               | ICU Level of Service                                                              |                                                                                   | A                                                                                                                                                                   |
| Analysis Period (min)             |                                                                                   |                                                                                   | 15                                                                                                                                                                  |                                                                                   |                                                                                   |                                                                                                                                                                     |

# HCM Unsignalized Intersection Capacity Analysis

## 4: Broadview Ave & North Site Driveway

Existing PM Peak Hour

|                                   |  |  |  |  |  |  |
|-----------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| Movement                          | EBL                                                                               | EBR                                                                               | NBL                                                                               | NBT                                                                               | SBT                                                                               | SBR                                                                               |
| Lane Configurations               |                                                                                   |                                                                                   |                                                                                   |  |  |                                                                                   |
| Traffic Volume (veh/h)            | 0                                                                                 | 0                                                                                 | 45                                                                                | 435                                                                               | 425                                                                               | 55                                                                                |
| Future Volume (Veh/h)             | 0                                                                                 | 0                                                                                 | 45                                                                                | 435                                                                               | 425                                                                               | 55                                                                                |
| 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                                                                                 | 48                                                                                | 468                                                                               | 457                                                                               | 59                                                                                |
| Pedestrians                       | 370                                                                               |                                                                                   |                                                                                   | 5                                                                                 | 15                                                                                |                                                                                   |
| Lane Width (m)                    | 0.0                                                                               |                                                                                   |                                                                                   | 3.5                                                                               | 3.5                                                                               |                                                                                   |
| Walking Speed (m/s)               | 1.2                                                                               |                                                                                   |                                                                                   | 1.2                                                                               | 1.2                                                                               |                                                                                   |
| Percent Blockage                  | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 | 1                                                                                 |                                                                                   |
| Right turn flare (veh)            |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| Median type                       |                                                                                   |                                                                                   |                                                                                   | None                                                                              | None                                                                              |                                                                                   |
| Median storage veh                |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| Upstream signal (m)               |                                                                                   |                                                                                   |                                                                                   | 87                                                                                | 146                                                                               |                                                                                   |
| pX, platoon unblocked             |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| vC, conflicting volume            | 1202                                                                              | 633                                                                               | 886                                                                               |                                                                                   |                                                                                   |                                                                                   |
| vC1, stage 1 conf vol             |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| vC2, stage 2 conf vol             |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| vCu, unblocked vol                | 1202                                                                              | 633                                                                               | 886                                                                               |                                                                                   |                                                                                   |                                                                                   |
| 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                                                                               | 94                                                                                |                                                                                   |                                                                                   |                                                                                   |
| cM capacity (veh/h)               | 167                                                                               | 426                                                                               | 773                                                                               |                                                                                   |                                                                                   |                                                                                   |
| Direction, Lane #                 | NB 1                                                                              | NB 2                                                                              | SB 1                                                                              | SB 2                                                                              |                                                                                   |                                                                                   |
| Volume Total                      | 204                                                                               | 312                                                                               | 305                                                                               | 211                                                                               |                                                                                   |                                                                                   |
| Volume Left                       | 48                                                                                | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                   |                                                                                   |
| Volume Right                      | 0                                                                                 | 0                                                                                 | 0                                                                                 | 59                                                                                |                                                                                   |                                                                                   |
| cSH                               | 773                                                                               | 1700                                                                              | 1700                                                                              | 1700                                                                              |                                                                                   |                                                                                   |
| Volume to Capacity                | 0.06                                                                              | 0.18                                                                              | 0.18                                                                              | 0.12                                                                              |                                                                                   |                                                                                   |
| Queue Length 95th (m)             | 1.6                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   |                                                                                   |
| Control Delay (s)                 | 2.9                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   |                                                                                   |
| Lane LOS                          | A                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| Approach Delay (s)                | 1.1                                                                               |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   |                                                                                   |
| Approach LOS                      |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| Intersection Summary              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| Average Delay                     |                                                                                   |                                                                                   | 0.6                                                                               |                                                                                   |                                                                                   |                                                                                   |
| Intersection Capacity Utilization |                                                                                   |                                                                                   | 42.7%                                                                             | ICU Level of Service                                                              |                                                                                   | A                                                                                 |
| Analysis Period (min)             |                                                                                   |                                                                                   | 15                                                                                |                                                                                   |                                                                                   |                                                                                   |

# HCM Unsignalized Intersection Capacity Analysis

## 5: Broadview Ave & South Site Driveway

Existing PM Peak Hour

|                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
|-----------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
|                                   |  |  |  |  |  |  |
| Movement                          | EBL                                                                               | EBR                                                                               | NBL                                                                               | NBT                                                                               | SBT                                                                               | SBR                                                                               |
| Lane Configurations               |  |                                                                                   |                                                                                   |  |  |                                                                                   |
| Traffic Volume (veh/h)            | 30                                                                                | 65                                                                                | 0                                                                                 | 455                                                                               | 420                                                                               | 0                                                                                 |
| Future Volume (Veh/h)             | 30                                                                                | 65                                                                                | 0                                                                                 | 455                                                                               | 420                                                                               | 0                                                                                 |
| 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)            | 32                                                                                | 70                                                                                | 0                                                                                 | 489                                                                               | 452                                                                               | 0                                                                                 |
| Pedestrians                       | 340                                                                               |                                                                                   |                                                                                   | 10                                                                                | 5                                                                                 |                                                                                   |
| Lane Width (m)                    | 3.5                                                                               |                                                                                   |                                                                                   | 3.5                                                                               | 3.5                                                                               |                                                                                   |
| Walking Speed (m/s)               | 1.2                                                                               |                                                                                   |                                                                                   | 1.2                                                                               | 1.2                                                                               |                                                                                   |
| Percent Blockage                  | 28                                                                                |                                                                                   |                                                                                   | 1                                                                                 | 0                                                                                 |                                                                                   |
| Right turn flare (veh)            |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| Median type                       |                                                                                   |                                                                                   |                                                                                   | None                                                                              | None                                                                              |                                                                                   |
| Median storage veh                |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| Upstream signal (m)               |                                                                                   |                                                                                   |                                                                                   | 64                                                                                | 169                                                                               |                                                                                   |
| pX, platoon unblocked             |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| vC, conflicting volume            | 1042                                                                              | 576                                                                               | 792                                                                               |                                                                                   |                                                                                   |                                                                                   |
| vC1, stage 1 conf vol             |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| vC2, stage 2 conf vol             |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| vCu, unblocked vol                | 1042                                                                              | 576                                                                               | 792                                                                               |                                                                                   |                                                                                   |                                                                                   |
| tC, single (s)                    | 6.8                                                                               | 6.9                                                                               | 4.1                                                                               |                                                                                   |                                                                                   |                                                                                   |
| tC, 2 stage (s)                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| tF (s)                            | 3.5                                                                               | 3.3                                                                               | 2.2                                                                               |                                                                                   |                                                                                   |                                                                                   |
| p0 queue free %                   | 81                                                                                | 79                                                                                | 100                                                                               |                                                                                   |                                                                                   |                                                                                   |
| cM capacity (veh/h)               | 165                                                                               | 335                                                                               | 607                                                                               |                                                                                   |                                                                                   |                                                                                   |
| Direction, Lane #                 | EB 1                                                                              | NB 1                                                                              | NB 2                                                                              | SB 1                                                                              | SB 2                                                                              |                                                                                   |
| Volume Total                      | 102                                                                               | 244                                                                               | 244                                                                               | 226                                                                               | 226                                                                               |                                                                                   |
| Volume Left                       | 32                                                                                | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                   |
| Volume Right                      | 70                                                                                | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                   |
| cSH                               | 253                                                                               | 1700                                                                              | 1700                                                                              | 1700                                                                              | 1700                                                                              |                                                                                   |
| Volume to Capacity                | 0.40                                                                              | 0.14                                                                              | 0.14                                                                              | 0.13                                                                              | 0.13                                                                              |                                                                                   |
| Queue Length 95th (m)             | 14.8                                                                              | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   |
| Control Delay (s)                 | 28.5                                                                              | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   |
| Lane LOS                          | D                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| Approach Delay (s)                | 28.5                                                                              | 0.0                                                                               |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   |
| Approach LOS                      | D                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| Intersection Summary              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| Average Delay                     |                                                                                   |                                                                                   | 2.8                                                                               |                                                                                   |                                                                                   |                                                                                   |
| Intersection Capacity Utilization |                                                                                   |                                                                                   | 28.3%                                                                             | ICU Level of Service                                                              |                                                                                   | A                                                                                 |
| Analysis Period (min)             |                                                                                   |                                                                                   | 15                                                                                |                                                                                   |                                                                                   |                                                                                   |



# HCM Unsignalized Intersection Capacity Analysis

## 6: Broadview Ave & Fairview Blvd

Existing PM Peak Hour

|                                   |  |  |  |  |  |  |
|-----------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| Movement                          | WBL                                                                               | WBR                                                                               | NBT                                                                               | NBR                                                                               | SBL                                                                               | SBT                                                                               |
| Lane Configurations               |                                                                                   |                                                                                   |  |                                                                                   |                                                                                   |  |
| Traffic Volume (veh/h)            | 0                                                                                 | 0                                                                                 | 450                                                                               | 15                                                                                | 30                                                                                | 450                                                                               |
| Future Volume (Veh/h)             | 0                                                                                 | 0                                                                                 | 450                                                                               | 15                                                                                | 30                                                                                | 450                                                                               |
| 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                                                                                 | 489                                                                               | 16                                                                                | 33                                                                                | 489                                                                               |
| Pedestrians                       | 275                                                                               |                                                                                   | 5                                                                                 |                                                                                   |                                                                                   | 10                                                                                |
| Lane Width (m)                    | 0.0                                                                               |                                                                                   | 3.5                                                                               |                                                                                   |                                                                                   | 3.5                                                                               |
| Walking Speed (m/s)               | 1.2                                                                               |                                                                                   | 1.2                                                                               |                                                                                   |                                                                                   | 1.2                                                                               |
| Percent Blockage                  | 0                                                                                 |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 1                                                                                 |
| Right turn flare (veh)            |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| Median type                       |                                                                                   |                                                                                   | None                                                                              |                                                                                   |                                                                                   | None                                                                              |
| Median storage veh                |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| Upstream signal (m)               |                                                                                   |                                                                                   | 45                                                                                |                                                                                   |                                                                                   | 189                                                                               |
| pX, platoon unblocked             | 0.98                                                                              | 0.98                                                                              |                                                                                   |                                                                                   | 0.98                                                                              |                                                                                   |
| vC, conflicting volume            | 1088                                                                              | 538                                                                               |                                                                                   |                                                                                   | 780                                                                               |                                                                                   |
| vC1, stage 1 conf vol             |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| vC2, stage 2 conf vol             |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| vCu, unblocked vol                | 1053                                                                              | 493                                                                               |                                                                                   |                                                                                   | 740                                                                               |                                                                                   |
| 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                                                                               |                                                                                   |                                                                                   | 96                                                                                |                                                                                   |
| cM capacity (veh/h)               | 212                                                                               | 514                                                                               |                                                                                   |                                                                                   | 860                                                                               |                                                                                   |
| Direction, Lane #                 | NB 1                                                                              | NB 2                                                                              | SB 1                                                                              | SB 2                                                                              |                                                                                   |                                                                                   |
| Volume Total                      | 326                                                                               | 179                                                                               | 196                                                                               | 326                                                                               |                                                                                   |                                                                                   |
| Volume Left                       | 0                                                                                 | 0                                                                                 | 33                                                                                | 0                                                                                 |                                                                                   |                                                                                   |
| Volume Right                      | 0                                                                                 | 16                                                                                | 0                                                                                 | 0                                                                                 |                                                                                   |                                                                                   |
| cSH                               | 1700                                                                              | 1700                                                                              | 860                                                                               | 1700                                                                              |                                                                                   |                                                                                   |
| Volume to Capacity                | 0.19                                                                              | 0.11                                                                              | 0.04                                                                              | 0.19                                                                              |                                                                                   |                                                                                   |
| Queue Length 95th (m)             | 0.0                                                                               | 0.0                                                                               | 1.0                                                                               | 0.0                                                                               |                                                                                   |                                                                                   |
| Control Delay (s)                 | 0.0                                                                               | 0.0                                                                               | 1.9                                                                               | 0.0                                                                               |                                                                                   |                                                                                   |
| Lane LOS                          |                                                                                   |                                                                                   | A                                                                                 |                                                                                   |                                                                                   |                                                                                   |
| Approach Delay (s)                | 0.0                                                                               |                                                                                   | 0.7                                                                               |                                                                                   |                                                                                   |                                                                                   |
| Approach LOS                      |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| Intersection Summary              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| Average Delay                     |                                                                                   |                                                                                   | 0.4                                                                               |                                                                                   |                                                                                   |                                                                                   |
| Intersection Capacity Utilization |                                                                                   |                                                                                   | 42.8%                                                                             | ICU Level of Service                                                              | A                                                                                 |                                                                                   |
| Analysis Period (min)             |                                                                                   |                                                                                   | 15                                                                                |                                                                                   |                                                                                   |                                                                                   |

## Queues

### 7: Broadview Ave & PXO

Existing PM Peak Hour

|                        | ↑     | ↓     |      |
|------------------------|-------|-------|------|
| Lane Group             | NBT   | SBT   | Ø9   |
| Lane Configurations    | ↑↑    | ↑↑    |      |
| Traffic Volume (vph)   | 465   | 450   |      |
| Future Volume (vph)    | 465   | 450   |      |
| Lane Group Flow (vph)  | 495   | 479   |      |
| Turn Type              | NA    | NA    |      |
| Protected Phases       | 2     | 6     | 9    |
| Permitted Phases       |       |       |      |
| Detector Phase         | 2     | 6     |      |
| Switch Phase           |       |       |      |
| Minimum Initial (s)    | 5.0   | 5.0   | 5.0  |
| Minimum Split (s)      | 8.0   | 8.0   | 22.5 |
| Total Split (s)        | 60.0  | 60.0  | 50.0 |
| Total Split (%)        | 54.5% | 54.5% | 45%  |
| Yellow Time (s)        | 2.0   | 2.0   | 3.5  |
| All-Red Time (s)       | 1.0   | 1.0   | 1.0  |
| Lost Time Adjust (s)   | -1.0  | -1.0  |      |
| Total Lost Time (s)    | 2.0   | 2.0   |      |
| Lead/Lag               |       |       |      |
| Lead-Lag Optimize?     |       |       |      |
| Recall Mode            | Min   | Min   | None |
| v/c Ratio              | 0.16  | 0.16  |      |
| Control Delay          | 2.3   | 2.3   |      |
| Queue Delay            | 0.0   | 0.0   |      |
| Total Delay            | 2.3   | 2.3   |      |
| Queue Length 50th (m)  | 0.0   | 0.0   |      |
| Queue Length 95th (m)  | 19.6  | 19.1  |      |
| Internal Link Dist (m) | 3.2   | 21.0  |      |
| Turn Bay Length (m)    |       |       |      |
| Base Capacity (vph)    | 3433  | 3400  |      |
| Starvation Cap Reductn | 0     | 0     |      |
| Spillback Cap Reductn  | 0     | 0     |      |
| Storage Cap Reductn    | 0     | 0     |      |
| Reduced v/c Ratio      | 0.14  | 0.14  |      |

#### Intersection Summary

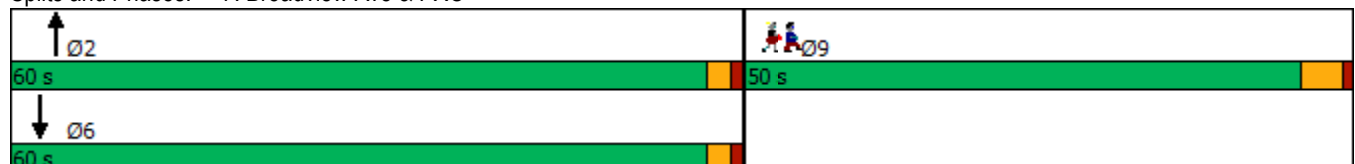
Cycle Length: 110

Actuated Cycle Length: 30.1

Natural Cycle: 40

Control Type: Actuated-Uncoordinated

Splits and Phases: 7: Broadview Ave & PXO



# HCM Signalized Intersection Capacity Analysis

## 7: Broadview Ave & PXO

Existing PM Peak Hour

|                                   |  |      |       |                           |      |      |
|-----------------------------------|-----------------------------------------------------------------------------------|------|-------|---------------------------|------|------|
| Movement                          | EBL                                                                               | EBR  | NBL   | NBT                       | SBT  | SBR  |
| Lane Configurations               |                                                                                   |      |       | ↑↑                        | ↑↑   |      |
| Traffic Volume (vph)              | 0                                                                                 | 0    | 0     | 465                       | 450  | 0    |
| Future Volume (vph)               | 0                                                                                 | 0    | 0     | 465                       | 450  | 0    |
| Ideal Flow (vphpl)                | 1900                                                                              | 1900 | 1900  | 1900                      | 1900 | 1900 |
| Total Lost time (s)               |                                                                                   |      |       | 2.0                       | 2.0  |      |
| Lane Util. Factor                 |                                                                                   |      |       | 0.95                      | 0.95 |      |
| Frt                               |                                                                                   |      |       | 1.00                      | 1.00 |      |
| Flt Protected                     |                                                                                   |      |       | 1.00                      | 1.00 |      |
| Satd. Flow (prot)                 |                                                                                   |      |       | 3433                      | 3400 |      |
| Flt Permitted                     |                                                                                   |      |       | 1.00                      | 1.00 |      |
| Satd. Flow (perm)                 |                                                                                   |      |       | 3433                      | 3400 |      |
| Peak-hour factor, PHF             | 0.94                                                                              | 0.94 | 0.94  | 0.94                      | 0.94 | 0.94 |
| Adj. Flow (vph)                   | 0                                                                                 | 0    | 0     | 495                       | 479  | 0    |
| RTOR Reduction (vph)              | 0                                                                                 | 0    | 0     | 0                         | 0    | 0    |
| Lane Group Flow (vph)             | 0                                                                                 | 0    | 0     | 495                       | 479  | 0    |
| Heavy Vehicles (%)                | 0%                                                                                | 0%   | 0%    | 4%                        | 5%   | 0%   |
| Turn Type                         |                                                                                   |      |       | NA                        | NA   |      |
| Protected Phases                  |                                                                                   |      |       | 2                         | 6    |      |
| Permitted Phases                  |                                                                                   |      |       |                           |      |      |
| Actuated Green, G (s)             |                                                                                   |      |       | 24.2                      | 24.2 |      |
| Effective Green, g (s)            |                                                                                   |      |       | 25.2                      | 25.2 |      |
| Actuated g/C Ratio                |                                                                                   |      |       | 0.75                      | 0.75 |      |
| Clearance Time (s)                |                                                                                   |      |       | 3.0                       | 3.0  |      |
| Vehicle Extension (s)             |                                                                                   |      |       | 3.0                       | 3.0  |      |
| Lane Grp Cap (vph)                |                                                                                   |      |       | 2559                      | 2534 |      |
| v/s Ratio Prot                    |                                                                                   |      |       | c0.14                     | 0.14 |      |
| v/s Ratio Perm                    |                                                                                   |      |       |                           |      |      |
| v/c Ratio                         |                                                                                   |      |       | 0.19                      | 0.19 |      |
| Uniform Delay, d1                 |                                                                                   |      |       | 1.3                       | 1.3  |      |
| Progression Factor                |                                                                                   |      |       | 1.00                      | 1.00 |      |
| Incremental Delay, d2             |                                                                                   |      |       | 0.0                       | 0.0  |      |
| Delay (s)                         |                                                                                   |      |       | 1.3                       | 1.3  |      |
| Level of Service                  |                                                                                   |      |       | A                         | A    |      |
| Approach Delay (s)                | 0.0                                                                               |      |       | 1.3                       | 1.3  |      |
| Approach LOS                      | A                                                                                 |      |       | A                         | A    |      |
| Intersection Summary              |                                                                                   |      |       |                           |      |      |
| HCM 2000 Control Delay            |                                                                                   |      | 1.3   | HCM 2000 Level of Service |      | A    |
| HCM 2000 Volume to Capacity ratio |                                                                                   |      | 0.17  |                           |      |      |
| Actuated Cycle Length (s)         |                                                                                   |      | 33.8  | Sum of lost time (s)      |      | 6.5  |
| Intersection Capacity Utilization |                                                                                   |      | 16.2% | ICU Level of Service      |      | A    |
| Analysis Period (min)             |                                                                                   |      | 15    |                           |      |      |
| c Critical Lane Group             |                                                                                   |      |       |                           |      |      |



# HCM Unsignalized Intersection Capacity Analysis

## 8: Broadview Ave & Wolfrey Ave

Existing PM Peak Hour

|                                   |                                                                                   |                                                                                   |                                                                                                                                                                     |                                                                                   |                                                                                   |                                                                                                                                                                     |
|-----------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                   |  |  |                                                                                    |  |  |                                                                                    |
| Movement                          | WBL                                                                               | WBR                                                                               | NBT                                                                                                                                                                 | NBR                                                                               | SBL                                                                               | SBT                                                                                                                                                                 |
| Lane Configurations               |  |                                                                                   |   |                                                                                   |                                                                                   |   |
| Traffic Volume (veh/h)            | 5                                                                                 | 5                                                                                 | 455                                                                                                                                                                 | 0                                                                                 | 10                                                                                | 440                                                                                                                                                                 |
| Future Volume (Veh/h)             | 5                                                                                 | 5                                                                                 | 455                                                                                                                                                                 | 0                                                                                 | 10                                                                                | 440                                                                                                                                                                 |
| Sign Control                      | Stop                                                                              |                                                                                   | Free                                                                                                                                                                |                                                                                   |                                                                                   | Free                                                                                                                                                                |
| Grade                             | 0%                                                                                |                                                                                   | 0%                                                                                                                                                                  |                                                                                   |                                                                                   | 0%                                                                                                                                                                  |
| Peak Hour Factor                  | 0.94                                                                              | 0.94                                                                              | 0.94                                                                                                                                                                | 0.94                                                                              | 0.94                                                                              | 0.94                                                                                                                                                                |
| Hourly flow rate (vph)            | 5                                                                                 | 5                                                                                 | 484                                                                                                                                                                 | 0                                                                                 | 11                                                                                | 468                                                                                                                                                                 |
| Pedestrians                       | 260                                                                               |                                                                                   | 5                                                                                                                                                                   |                                                                                   |                                                                                   | 150                                                                                                                                                                 |
| Lane Width (m)                    | 3.5                                                                               |                                                                                   | 3.5                                                                                                                                                                 |                                                                                   |                                                                                   | 3.5                                                                                                                                                                 |
| Walking Speed (m/s)               | 1.2                                                                               |                                                                                   | 1.2                                                                                                                                                                 |                                                                                   |                                                                                   | 1.2                                                                                                                                                                 |
| Percent Blockage                  | 21                                                                                |                                                                                   | 0                                                                                                                                                                   |                                                                                   |                                                                                   | 12                                                                                                                                                                  |
| Right turn flare (veh)            |                                                                                   |                                                                                   |                                                                                                                                                                     |                                                                                   |                                                                                   |                                                                                                                                                                     |
| Median type                       |                                                                                   |                                                                                   | None                                                                                                                                                                |                                                                                   |                                                                                   | None                                                                                                                                                                |
| Median storage veh                |                                                                                   |                                                                                   |                                                                                                                                                                     |                                                                                   |                                                                                   |                                                                                                                                                                     |
| Upstream signal (m)               |                                                                                   |                                                                                   |                                                                                                                                                                     |                                                                                   |                                                                                   | 27                                                                                                                                                                  |
| pX, platoon unblocked             | 0.97                                                                              |                                                                                   |                                                                                                                                                                     |                                                                                   |                                                                                   |                                                                                                                                                                     |
| vC, conflicting volume            | 1005                                                                              | 652                                                                               |                                                                                                                                                                     |                                                                                   | 744                                                                               |                                                                                                                                                                     |
| vC1, stage 1 conf vol             |                                                                                   |                                                                                   |                                                                                                                                                                     |                                                                                   |                                                                                   |                                                                                                                                                                     |
| vC2, stage 2 conf vol             |                                                                                   |                                                                                   |                                                                                                                                                                     |                                                                                   |                                                                                   |                                                                                                                                                                     |
| vCu, unblocked vol                | 949                                                                               | 652                                                                               |                                                                                                                                                                     |                                                                                   | 744                                                                               |                                                                                                                                                                     |
| tC, single (s)                    | 6.8                                                                               | 6.9                                                                               |                                                                                                                                                                     |                                                                                   | 4.1                                                                               |                                                                                                                                                                     |
| tC, 2 stage (s)                   |                                                                                   |                                                                                   |                                                                                                                                                                     |                                                                                   |                                                                                   |                                                                                                                                                                     |
| tF (s)                            | 3.5                                                                               | 3.3                                                                               |                                                                                                                                                                     |                                                                                   | 2.2                                                                               |                                                                                                                                                                     |
| p0 queue free %                   | 97                                                                                | 98                                                                                |                                                                                                                                                                     |                                                                                   | 98                                                                                |                                                                                                                                                                     |
| cM capacity (veh/h)               | 197                                                                               | 288                                                                               |                                                                                                                                                                     |                                                                                   | 689                                                                               |                                                                                                                                                                     |
| Direction, Lane #                 | WB 1                                                                              | NB 1                                                                              | NB 2                                                                                                                                                                | SB 1                                                                              | SB 2                                                                              |                                                                                                                                                                     |
| Volume Total                      | 10                                                                                | 323                                                                               | 161                                                                                                                                                                 | 167                                                                               | 312                                                                               |                                                                                                                                                                     |
| Volume Left                       | 5                                                                                 | 0                                                                                 | 0                                                                                                                                                                   | 11                                                                                | 0                                                                                 |                                                                                                                                                                     |
| Volume Right                      | 5                                                                                 | 0                                                                                 | 0                                                                                                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                                                                                                     |
| cSH                               | 234                                                                               | 1700                                                                              | 1700                                                                                                                                                                | 689                                                                               | 1700                                                                              |                                                                                                                                                                     |
| Volume to Capacity                | 0.04                                                                              | 0.19                                                                              | 0.09                                                                                                                                                                | 0.02                                                                              | 0.18                                                                              |                                                                                                                                                                     |
| Queue Length 95th (m)             | 1.1                                                                               | 0.0                                                                               | 0.0                                                                                                                                                                 | 0.4                                                                               | 0.0                                                                               |                                                                                                                                                                     |
| Control Delay (s)                 | 21.1                                                                              | 0.0                                                                               | 0.0                                                                                                                                                                 | 0.8                                                                               | 0.0                                                                               |                                                                                                                                                                     |
| Lane LOS                          | C                                                                                 |                                                                                   |                                                                                                                                                                     | A                                                                                 |                                                                                   |                                                                                                                                                                     |
| Approach Delay (s)                | 21.1                                                                              | 0.0                                                                               |                                                                                                                                                                     | 0.3                                                                               |                                                                                   |                                                                                                                                                                     |
| Approach LOS                      | C                                                                                 |                                                                                   |                                                                                                                                                                     |                                                                                   |                                                                                   |                                                                                                                                                                     |
| Intersection Summary              |                                                                                   |                                                                                   |                                                                                                                                                                     |                                                                                   |                                                                                   |                                                                                                                                                                     |
| Average Delay                     |                                                                                   |                                                                                   | 0.4                                                                                                                                                                 |                                                                                   |                                                                                   |                                                                                                                                                                     |
| Intersection Capacity Utilization |                                                                                   |                                                                                   | 39.3%                                                                                                                                                               | ICU Level of Service                                                              |                                                                                   | A                                                                                                                                                                   |
| Analysis Period (min)             |                                                                                   |                                                                                   | 15                                                                                                                                                                  |                                                                                   |                                                                                   |                                                                                                                                                                     |

# Queues

## 1: Broadview Ave & Danforth Ave

Future Background AM Peak Hour

|                        |  |  |  |  |  |  |   |  |  |
|------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group             | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | NBL                                                                               | NBT                                                                                 | SBL                                                                                 | SBT                                                                                 |
| Lane Configurations    |  |  |  |  |  |  |  |  |  |
| Traffic Volume (vph)   | 100                                                                               | 315                                                                               | 150                                                                               | 35                                                                                | 535                                                                               | 205                                                                               | 170                                                                                 | 15                                                                                  | 220                                                                                 |
| Future Volume (vph)    | 100                                                                               | 315                                                                               | 150                                                                               | 35                                                                                | 535                                                                               | 205                                                                               | 170                                                                                 | 15                                                                                  | 220                                                                                 |
| Lane Group Flow (vph)  | 110                                                                               | 346                                                                               | 165                                                                               | 38                                                                                | 615                                                                               | 225                                                                               | 220                                                                                 | 0                                                                                   | 566                                                                                 |
| Turn Type              | Perm                                                                              | NA                                                                                | Perm                                                                              | Perm                                                                              | NA                                                                                | pm+pt                                                                             | NA                                                                                  | Perm                                                                                | NA                                                                                  |
| Protected Phases       |                                                                                   | 2                                                                                 |                                                                                   |                                                                                   | 6                                                                                 | 7                                                                                 | 4                                                                                   |                                                                                     | 8                                                                                   |
| Permitted Phases       | 2                                                                                 |                                                                                   | 2                                                                                 | 6                                                                                 |                                                                                   | 4                                                                                 |                                                                                     | 8                                                                                   |                                                                                     |
| Detector Phase         | 2                                                                                 | 2                                                                                 | 2                                                                                 | 6                                                                                 | 6                                                                                 | 7                                                                                 | 4                                                                                   | 8                                                                                   | 8                                                                                   |
| Switch Phase           |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)    | 28.0                                                                              | 28.0                                                                              | 28.0                                                                              | 28.0                                                                              | 28.0                                                                              | 6.0                                                                               | 29.0                                                                                | 21.0                                                                                | 21.0                                                                                |
| Minimum Split (s)      | 35.1                                                                              | 35.1                                                                              | 35.1                                                                              | 35.1                                                                              | 35.1                                                                              | 13.5                                                                              | 36.0                                                                                | 36.0                                                                                | 36.0                                                                                |
| Total Split (s)        | 49.0                                                                              | 49.0                                                                              | 49.0                                                                              | 49.0                                                                              | 49.0                                                                              | 14.0                                                                              | 51.0                                                                                | 37.0                                                                                | 37.0                                                                                |
| Total Split (%)        | 49.0%                                                                             | 49.0%                                                                             | 49.0%                                                                             | 49.0%                                                                             | 49.0%                                                                             | 14.0%                                                                             | 51.0%                                                                               | 37.0%                                                                               | 37.0%                                                                               |
| Yellow Time (s)        | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.4                                                                                 | 3.4                                                                                 | 3.4                                                                                 |
| All-Red Time (s)       | 4.1                                                                               | 4.1                                                                               | 4.1                                                                               | 4.1                                                                               | 4.1                                                                               | 4.5                                                                               | 3.6                                                                                 | 3.6                                                                                 | 3.6                                                                                 |
| Lost Time Adjust (s)   | -1.0                                                                              | -1.0                                                                              | -1.0                                                                              | -1.0                                                                              | -1.0                                                                              | -1.0                                                                              | -1.0                                                                                |                                                                                     | -1.0                                                                                |
| Total Lost Time (s)    | 6.1                                                                               | 6.1                                                                               | 6.1                                                                               | 6.1                                                                               | 6.1                                                                               | 6.5                                                                               | 6.0                                                                                 |                                                                                     | 6.0                                                                                 |
| Lead/Lag               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   | Lead                                                                              |                                                                                     | Lag                                                                                 | Lag                                                                                 |
| Lead-Lag Optimize?     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   | Yes                                                                               |                                                                                     | Yes                                                                                 | Yes                                                                                 |
| Recall Mode            | C-Min                                                                             | C-Min                                                                             | C-Min                                                                             | C-Min                                                                             | C-Min                                                                             | None                                                                              | Min                                                                                 | Min                                                                                 | Min                                                                                 |
| v/c Ratio              | 0.58                                                                              | 0.48                                                                              | 0.34                                                                              | 0.16                                                                              | 0.46                                                                              | 0.61                                                                              | 0.33                                                                                |                                                                                     | 0.85                                                                                |
| Control Delay          | 39.0                                                                              | 25.5                                                                              | 5.2                                                                               | 22.0                                                                              | 23.5                                                                              | 26.2                                                                              | 16.6                                                                                |                                                                                     | 45.4                                                                                |
| Queue Delay            | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 |                                                                                     | 0.0                                                                                 |
| Total Delay            | 39.0                                                                              | 25.5                                                                              | 5.2                                                                               | 22.0                                                                              | 23.5                                                                              | 26.2                                                                              | 16.6                                                                                |                                                                                     | 45.4                                                                                |
| Queue Length 50th (m)  | 19.2                                                                              | 57.3                                                                              | 0.0                                                                               | 5.4                                                                               | 52.4                                                                              | 23.3                                                                              | 21.8                                                                                |                                                                                     | 53.4                                                                                |
| Queue Length 95th (m)  | 37.2                                                                              | 74.0                                                                              | 12.4                                                                              | 11.9                                                                              | 59.6                                                                              | #59.4                                                                             | 45.0                                                                                |                                                                                     | 74.2                                                                                |
| Internal Link Dist (m) |                                                                                   | 170.8                                                                             |                                                                                   |                                                                                   | 155.0                                                                             |                                                                                   | 66.0                                                                                |                                                                                     | 120.0                                                                               |
| Turn Bay Length (m)    | 65.0                                                                              |                                                                                   |                                                                                   | 35.0                                                                              |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |
| Base Capacity (vph)    | 206                                                                               | 783                                                                               | 513                                                                               | 265                                                                               | 1471                                                                              | 367                                                                               | 686                                                                                 |                                                                                     | 728                                                                                 |
| Starvation Cap Reductn | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                   |                                                                                     | 0                                                                                   |
| Spillback Cap Reductn  | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                   |                                                                                     | 0                                                                                   |
| Storage Cap Reductn    | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                   |                                                                                     | 0                                                                                   |
| Reduced v/c Ratio      | 0.53                                                                              | 0.44                                                                              | 0.32                                                                              | 0.14                                                                              | 0.42                                                                              | 0.61                                                                              | 0.32                                                                                |                                                                                     | 0.78                                                                                |

### Intersection Summary

Cycle Length: 100

Actuated Cycle Length: 100

Offset: 99 (99%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

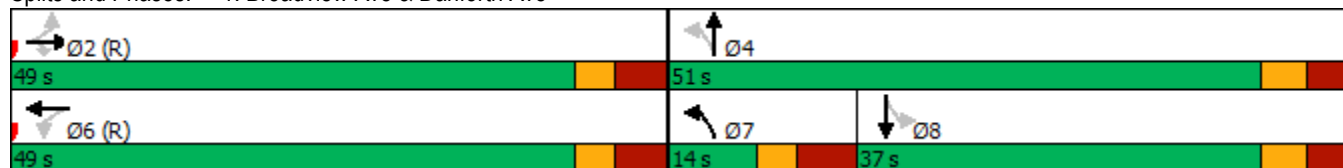
Natural Cycle: 85

Control Type: Actuated-Coordinated

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

Queue shown is maximum after two cycles.

Splits and Phases: 1: Broadview Ave & Danforth Ave



# HCM Signalized Intersection Capacity Analysis

## 1: Broadview Ave & Danforth Ave

Future Background AM Peak Hour

|                                   |  |  |  |  |  |  |   |  |  |  |  |  |
|-----------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Movement                          | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations               |  |  |  |  |  |                                                                                   |  |  |                                                                                     |                                                                                     |  |  |
| Traffic Volume (vph)              | 100                                                                               | 315                                                                               | 150                                                                               | 35                                                                                | 535                                                                               | 25                                                                                | 205                                                                                 | 170                                                                                 | 30                                                                                  | 15                                                                                  | 220                                                                                 | 280                                                                                 |
| Future Volume (vph)               | 100                                                                               | 315                                                                               | 150                                                                               | 35                                                                                | 535                                                                               | 25                                                                                | 205                                                                                 | 170                                                                                 | 30                                                                                  | 15                                                                                  | 220                                                                                 | 280                                                                                 |
| 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                                                                               | 3.5                                                                               | 3.5                                                                                 | 3.5                                                                                 | 3.5                                                                                 | 3.5                                                                                 | 3.5                                                                                 | 3.5                                                                                 |
| Total Lost time (s)               | 6.1                                                                               | 6.1                                                                               | 6.1                                                                               | 6.1                                                                               | 6.1                                                                               |                                                                                   | 6.5                                                                                 | 6.0                                                                                 |                                                                                     |                                                                                     | 6.0                                                                                 |                                                                                     |
| Lane Util. Factor                 | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 0.95                                                                              |                                                                                   | 1.00                                                                                | 1.00                                                                                |                                                                                     |                                                                                     | 0.95                                                                                |                                                                                     |
| Frpb, ped/bikes                   | 1.00                                                                              | 1.00                                                                              | 0.66                                                                              | 1.00                                                                              | 0.97                                                                              |                                                                                   | 1.00                                                                                | 0.91                                                                                |                                                                                     |                                                                                     | 0.82                                                                                |                                                                                     |
| Flpb, ped/bikes                   | 0.78                                                                              | 1.00                                                                              | 1.00                                                                              | 0.82                                                                              | 1.00                                                                              |                                                                                   | 0.98                                                                                | 1.00                                                                                |                                                                                     |                                                                                     | 0.99                                                                                |                                                                                     |
| Frt                               | 1.00                                                                              | 1.00                                                                              | 0.85                                                                              | 1.00                                                                              | 0.99                                                                              |                                                                                   | 1.00                                                                                | 0.98                                                                                |                                                                                     |                                                                                     | 0.92                                                                                |                                                                                     |
| Flt Protected                     | 0.95                                                                              | 1.00                                                                              | 1.00                                                                              | 0.95                                                                              | 1.00                                                                              |                                                                                   | 0.95                                                                                | 1.00                                                                                |                                                                                     |                                                                                     | 1.00                                                                                |                                                                                     |
| Satd. Flow (prot)                 | 1301                                                                              | 1789                                                                              | 959                                                                               | 1309                                                                              | 3353                                                                              |                                                                                   | 1692                                                                                | 1398                                                                                |                                                                                     |                                                                                     | 2426                                                                                |                                                                                     |
| Flt Permitted                     | 0.35                                                                              | 1.00                                                                              | 1.00                                                                              | 0.44                                                                              | 1.00                                                                              |                                                                                   | 0.25                                                                                | 1.00                                                                                |                                                                                     |                                                                                     | 0.94                                                                                |                                                                                     |
| Satd. Flow (perm)                 | 473                                                                               | 1789                                                                              | 959                                                                               | 608                                                                               | 3353                                                                              |                                                                                   | 449                                                                                 | 1398                                                                                |                                                                                     |                                                                                     | 2288                                                                                |                                                                                     |
| Peak-hour factor, PHF             | 0.91                                                                              | 0.91                                                                              | 0.91                                                                              | 0.91                                                                              | 0.91                                                                              | 0.91                                                                              | 0.91                                                                                | 0.91                                                                                | 0.91                                                                                | 0.91                                                                                | 0.91                                                                                | 0.91                                                                                |
| Adj. Flow (vph)                   | 110                                                                               | 346                                                                               | 165                                                                               | 38                                                                                | 588                                                                               | 27                                                                                | 225                                                                                 | 187                                                                                 | 33                                                                                  | 16                                                                                  | 242                                                                                 | 308                                                                                 |
| RTOR Reduction (vph)              | 0                                                                                 | 0                                                                                 | 99                                                                                | 0                                                                                 | 4                                                                                 | 0                                                                                 | 0                                                                                   | 6                                                                                   | 0                                                                                   | 0                                                                                   | 20                                                                                  | 0                                                                                   |
| Lane Group Flow (vph)             | 110                                                                               | 346                                                                               | 66                                                                                | 38                                                                                | 611                                                                               | 0                                                                                 | 225                                                                                 | 214                                                                                 | 0                                                                                   | 0                                                                                   | 546                                                                                 | 0                                                                                   |
| Confl. Peds. (#/hr)               | 535                                                                               |                                                                                   | 435                                                                               | 435                                                                               |                                                                                   | 535                                                                               | 425                                                                                 |                                                                                     | 635                                                                                 | 635                                                                                 |                                                                                     | 425                                                                                 |
| Confl. Bikes (#/hr)               |                                                                                   |                                                                                   | 25                                                                                |                                                                                   |                                                                                   | 185                                                                               |                                                                                     |                                                                                     | 10                                                                                  |                                                                                     |                                                                                     | 15                                                                                  |
| Heavy Vehicles (%)                | 1%                                                                                | 5%                                                                                | 3%                                                                                | 6%                                                                                | 2%                                                                                | 17%                                                                               | 3%                                                                                  | 14%                                                                                 | 6%                                                                                  | 13%                                                                                 | 13%                                                                                 | 3%                                                                                  |
| Bus Blockages (#/hr)              | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                   | 13                                                                                  | 0                                                                                   | 0                                                                                   | 5                                                                                   | 0                                                                                   |
| Turn Type                         | Perm                                                                              | NA                                                                                | Perm                                                                              | Perm                                                                              | NA                                                                                |                                                                                   | pm+pt                                                                               | NA                                                                                  |                                                                                     | Perm                                                                                | NA                                                                                  |                                                                                     |
| Protected Phases                  |                                                                                   | 2                                                                                 |                                                                                   |                                                                                   | 6                                                                                 |                                                                                   | 7                                                                                   | 4                                                                                   |                                                                                     |                                                                                     | 8                                                                                   |                                                                                     |
| Permitted Phases                  | 2                                                                                 |                                                                                   | 2                                                                                 | 6                                                                                 |                                                                                   |                                                                                   | 4                                                                                   |                                                                                     |                                                                                     | 8                                                                                   |                                                                                     |                                                                                     |
| Actuated Green, G (s)             | 39.1                                                                              | 39.1                                                                              | 39.1                                                                              | 39.1                                                                              | 39.1                                                                              |                                                                                   | 46.8                                                                                | 46.8                                                                                |                                                                                     |                                                                                     | 27.1                                                                                |                                                                                     |
| Effective Green, g (s)            | 40.1                                                                              | 40.1                                                                              | 40.1                                                                              | 40.1                                                                              | 40.1                                                                              |                                                                                   | 47.8                                                                                | 47.8                                                                                |                                                                                     |                                                                                     | 28.1                                                                                |                                                                                     |
| Actuated g/C Ratio                | 0.40                                                                              | 0.40                                                                              | 0.40                                                                              | 0.40                                                                              | 0.40                                                                              |                                                                                   | 0.48                                                                                | 0.48                                                                                |                                                                                     |                                                                                     | 0.28                                                                                |                                                                                     |
| Clearance Time (s)                | 7.1                                                                               | 7.1                                                                               | 7.1                                                                               | 7.1                                                                               | 7.1                                                                               |                                                                                   | 7.5                                                                                 | 7.0                                                                                 |                                                                                     |                                                                                     | 7.0                                                                                 |                                                                                     |
| Vehicle Extension (s)             | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                                 | 3.0                                                                                 |                                                                                     |                                                                                     | 3.0                                                                                 |                                                                                     |
| Lane Grp Cap (vph)                | 189                                                                               | 717                                                                               | 384                                                                               | 243                                                                               | 1344                                                                              |                                                                                   | 378                                                                                 | 668                                                                                 |                                                                                     |                                                                                     | 642                                                                                 |                                                                                     |
| v/s Ratio Prot                    |                                                                                   | 0.19                                                                              |                                                                                   |                                                                                   | 0.18                                                                              |                                                                                   | 0.08                                                                                | 0.15                                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| v/s Ratio Perm                    | 0.23                                                                              |                                                                                   | 0.07                                                                              | 0.06                                                                              |                                                                                   |                                                                                   | 0.21                                                                                |                                                                                     |                                                                                     |                                                                                     | 0.24                                                                                |                                                                                     |
| v/c Ratio                         | 0.58                                                                              | 0.48                                                                              | 0.17                                                                              | 0.16                                                                              | 0.45                                                                              |                                                                                   | 0.60                                                                                | 0.32                                                                                |                                                                                     |                                                                                     | 0.85                                                                                |                                                                                     |
| Uniform Delay, d1                 | 23.4                                                                              | 22.2                                                                              | 19.3                                                                              | 19.1                                                                              | 21.9                                                                              |                                                                                   | 17.2                                                                                | 16.1                                                                                |                                                                                     |                                                                                     | 34.0                                                                                |                                                                                     |
| Progression Factor                | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              |                                                                                   | 1.00                                                                                | 1.00                                                                                |                                                                                     |                                                                                     | 1.00                                                                                |                                                                                     |
| Incremental Delay, d2             | 12.4                                                                              | 2.3                                                                               | 1.0                                                                               | 1.4                                                                               | 1.1                                                                               |                                                                                   | 2.5                                                                                 | 0.3                                                                                 |                                                                                     |                                                                                     | 10.5                                                                                |                                                                                     |
| Delay (s)                         | 35.8                                                                              | 24.6                                                                              | 20.2                                                                              | 20.5                                                                              | 23.1                                                                              |                                                                                   | 19.8                                                                                | 16.4                                                                                |                                                                                     |                                                                                     | 44.4                                                                                |                                                                                     |
| Level of Service                  | D                                                                                 | C                                                                                 | C                                                                                 | C                                                                                 | C                                                                                 |                                                                                   | B                                                                                   | B                                                                                   |                                                                                     |                                                                                     | D                                                                                   |                                                                                     |
| Approach Delay (s)                |                                                                                   | 25.4                                                                              |                                                                                   |                                                                                   | 22.9                                                                              |                                                                                   |                                                                                     | 18.1                                                                                |                                                                                     |                                                                                     | 44.4                                                                                |                                                                                     |
| Approach LOS                      |                                                                                   | C                                                                                 |                                                                                   |                                                                                   | C                                                                                 |                                                                                   |                                                                                     | B                                                                                   |                                                                                     |                                                                                     | D                                                                                   |                                                                                     |
| <b>Intersection Summary</b>       |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| HCM 2000 Control Delay            |                                                                                   |                                                                                   | 28.0                                                                              |                                                                                   |                                                                                   | HCM 2000 Level of Service                                                         |                                                                                     |                                                                                     |                                                                                     | C                                                                                   |                                                                                     |                                                                                     |
| HCM 2000 Volume to Capacity ratio |                                                                                   |                                                                                   | 0.68                                                                              |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Actuated Cycle Length (s)         |                                                                                   |                                                                                   | 100.0                                                                             |                                                                                   |                                                                                   | Sum of lost time (s)                                                              |                                                                                     |                                                                                     | 18.6                                                                                |                                                                                     |                                                                                     |                                                                                     |
| Intersection Capacity Utilization |                                                                                   |                                                                                   | 115.2%                                                                            |                                                                                   |                                                                                   | ICU Level of Service                                                              |                                                                                     |                                                                                     | H                                                                                   |                                                                                     |                                                                                     |                                                                                     |
| Analysis Period (min)             |                                                                                   |                                                                                   | 15                                                                                |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| <b>c Critical Lane Group</b>      |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |



## HCM Unsignalized Intersection Capacity Analysis

### 2: Broadview Ave & Site Loading Access

Future Background AM Peak Hour

|                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
|-----------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
|                                   |  |  |  |  |  |  |
| Movement                          | EBL                                                                               | EBR                                                                               | NBL                                                                               | NBT                                                                               | SBT                                                                               | SBR                                                                               |
| Lane Configurations               |  |                                                                                   |                                                                                   |  |  |                                                                                   |
| Traffic Volume (veh/h)            | 0                                                                                 | 0                                                                                 | 0                                                                                 | 400                                                                               | 400                                                                               | 0                                                                                 |
| Future Volume (Veh/h)             | 0                                                                                 | 0                                                                                 | 0                                                                                 | 400                                                                               | 400                                                                               | 0                                                                                 |
| Sign Control                      | Stop                                                                              |                                                                                   |                                                                                   | Free                                                                              | Free                                                                              |                                                                                   |
| Grade                             | 0%                                                                                |                                                                                   |                                                                                   | 0%                                                                                | 0%                                                                                |                                                                                   |
| Peak Hour Factor                  | 0.91                                                                              | 0.91                                                                              | 0.91                                                                              | 0.91                                                                              | 0.91                                                                              | 0.91                                                                              |
| Hourly flow rate (vph)            | 0                                                                                 | 0                                                                                 | 0                                                                                 | 440                                                                               | 440                                                                               | 0                                                                                 |
| Pedestrians                       | 185                                                                               |                                                                                   |                                                                                   | 5                                                                                 | 5                                                                                 |                                                                                   |
| Lane Width (m)                    | 3.5                                                                               |                                                                                   |                                                                                   | 3.5                                                                               | 3.5                                                                               |                                                                                   |
| Walking Speed (m/s)               | 1.2                                                                               |                                                                                   |                                                                                   | 1.2                                                                               | 1.2                                                                               |                                                                                   |
| Percent Blockage                  | 15                                                                                |                                                                                   |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   |
| Right turn flare (veh)            |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| Median type                       |                                                                                   |                                                                                   |                                                                                   | None                                                                              | None                                                                              |                                                                                   |
| Median storage veh                |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| Upstream signal (m)               |                                                                                   |                                                                                   |                                                                                   | 144                                                                               | 90                                                                                |                                                                                   |
| pX, platoon unblocked             |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| vC, conflicting volume            | 850                                                                               | 410                                                                               | 625                                                                               |                                                                                   |                                                                                   |                                                                                   |
| vC1, stage 1 conf vol             |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| vC2, stage 2 conf vol             |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| vCu, unblocked vol                | 850                                                                               | 410                                                                               | 625                                                                               |                                                                                   |                                                                                   |                                                                                   |
| 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)               | 257                                                                               | 505                                                                               | 821                                                                               |                                                                                   |                                                                                   |                                                                                   |
| Direction, Lane #                 | EB 1                                                                              | NB 1                                                                              | NB 2                                                                              | SB 1                                                                              | SB 2                                                                              |                                                                                   |
| Volume Total                      | 0                                                                                 | 147                                                                               | 293                                                                               | 293                                                                               | 147                                                                               |                                                                                   |
| Volume Left                       | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                   |
| Volume Right                      | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                   |
| cSH                               | 1700                                                                              | 821                                                                               | 1700                                                                              | 1700                                                                              | 1700                                                                              |                                                                                   |
| Volume to Capacity                | 0.05                                                                              | 0.00                                                                              | 0.17                                                                              | 0.17                                                                              | 0.09                                                                              |                                                                                   |
| Queue Length 95th (m)             | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   |
| Control Delay (s)                 | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   |
| Lane LOS                          | A                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| Approach Delay (s)                | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   |
| Approach LOS                      | A                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| Intersection Summary              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| Average Delay                     |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   |                                                                                   |
| Intersection Capacity Utilization |                                                                                   |                                                                                   | 24.9%                                                                             | ICU Level of Service                                                              |                                                                                   | A                                                                                 |
| Analysis Period (min)             |                                                                                   |                                                                                   | 15                                                                                |                                                                                   |                                                                                   |                                                                                   |

# HCM Unsignalized Intersection Capacity Analysis

## 3: Broadview Ave & Dearbourne Ave

Future Background AM Peak Hour

|                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
|-----------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
|                                   |  |  |  |  |  |  |
| Movement                          | WBL                                                                               | WBR                                                                               | NBT                                                                               | NBR                                                                               | SBL                                                                               | SBT                                                                               |
| Lane Configurations               |  |                                                                                   |  |                                                                                   |                                                                                   |  |
| Traffic Volume (veh/h)            | 20                                                                                | 40                                                                                | 360                                                                               | 0                                                                                 | 0                                                                                 | 395                                                                               |
| Future Volume (Veh/h)             | 20                                                                                | 40                                                                                | 360                                                                               | 0                                                                                 | 0                                                                                 | 395                                                                               |
| Sign Control                      | Stop                                                                              |                                                                                   | Free                                                                              |                                                                                   |                                                                                   | Free                                                                              |
| Grade                             | 0%                                                                                |                                                                                   | 0%                                                                                |                                                                                   |                                                                                   | 0%                                                                                |
| Peak Hour Factor                  | 0.90                                                                              | 0.90                                                                              | 0.90                                                                              | 0.90                                                                              | 0.90                                                                              | 0.90                                                                              |
| Hourly flow rate (vph)            | 22                                                                                | 44                                                                                | 400                                                                               | 0                                                                                 | 0                                                                                 | 439                                                                               |
| Pedestrians                       | 185                                                                               |                                                                                   | 15                                                                                |                                                                                   |                                                                                   | 10                                                                                |
| Lane Width (m)                    | 3.5                                                                               |                                                                                   | 3.5                                                                               |                                                                                   |                                                                                   | 3.5                                                                               |
| Walking Speed (m/s)               | 1.2                                                                               |                                                                                   | 1.2                                                                               |                                                                                   |                                                                                   | 1.2                                                                               |
| Percent Blockage                  | 15                                                                                |                                                                                   | 1                                                                                 |                                                                                   |                                                                                   | 1                                                                                 |
| Right turn flare (veh)            |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| Median type                       |                                                                                   |                                                                                   | None                                                                              |                                                                                   |                                                                                   | None                                                                              |
| Median storage veh                |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| Upstream signal (m)               |                                                                                   |                                                                                   | 122                                                                               |                                                                                   |                                                                                   | 112                                                                               |
| pX, platoon unblocked             |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| vC, conflicting volume            | 820                                                                               | 395                                                                               |                                                                                   |                                                                                   | 585                                                                               |                                                                                   |
| vC1, stage 1 conf vol             |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| vC2, stage 2 conf vol             |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| vCu, unblocked vol                | 820                                                                               | 395                                                                               |                                                                                   |                                                                                   | 585                                                                               |                                                                                   |
| tC, single (s)                    | 6.8                                                                               | 7.0                                                                               |                                                                                   |                                                                                   | 4.1                                                                               |                                                                                   |
| tC, 2 stage (s)                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| tF (s)                            | 3.5                                                                               | 3.3                                                                               |                                                                                   |                                                                                   | 2.2                                                                               |                                                                                   |
| p0 queue free %                   | 92                                                                                | 91                                                                                |                                                                                   |                                                                                   | 100                                                                               |                                                                                   |
| cM capacity (veh/h)               | 267                                                                               | 507                                                                               |                                                                                   |                                                                                   | 850                                                                               |                                                                                   |
| Direction, Lane #                 | WB 1                                                                              | NB 1                                                                              | NB 2                                                                              | SB 1                                                                              | SB 2                                                                              |                                                                                   |
| Volume Total                      | 66                                                                                | 200                                                                               | 200                                                                               | 220                                                                               | 220                                                                               |                                                                                   |
| Volume Left                       | 22                                                                                | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                   |
| Volume Right                      | 44                                                                                | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                   |
| cSH                               | 390                                                                               | 1700                                                                              | 1700                                                                              | 1700                                                                              | 1700                                                                              |                                                                                   |
| Volume to Capacity                | 0.17                                                                              | 0.12                                                                              | 0.12                                                                              | 0.13                                                                              | 0.13                                                                              |                                                                                   |
| Queue Length 95th (m)             | 4.8                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   |
| Control Delay (s)                 | 16.1                                                                              | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   |
| Lane LOS                          | C                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| Approach Delay (s)                | 16.1                                                                              | 0.0                                                                               |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   |
| Approach LOS                      | C                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| Intersection Summary              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| Average Delay                     |                                                                                   |                                                                                   | 1.2                                                                               |                                                                                   |                                                                                   |                                                                                   |
| Intersection Capacity Utilization |                                                                                   |                                                                                   | 26.8%                                                                             |                                                                                   | ICU Level of Service                                                              | A                                                                                 |
| Analysis Period (min)             |                                                                                   |                                                                                   | 15                                                                                |                                                                                   |                                                                                   |                                                                                   |

# HCM Unsignalized Intersection Capacity Analysis

## 4: Broadview Ave & North Site Driveway

Future Background AM Peak Hour

|                                   |  |  |  |  |  |  |
|-----------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| Movement                          | EBL                                                                               | EBR                                                                               | NBL                                                                               | NBT                                                                               | SBT                                                                               | SBR                                                                               |
| Lane Configurations               |                                                                                   |                                                                                   |                                                                                   |  |  |                                                                                   |
| Traffic Volume (veh/h)            | 0                                                                                 | 0                                                                                 | 20                                                                                | 355                                                                               | 375                                                                               | 35                                                                                |
| Future Volume (Veh/h)             | 0                                                                                 | 0                                                                                 | 20                                                                                | 355                                                                               | 375                                                                               | 35                                                                                |
| Sign Control                      | Stop                                                                              |                                                                                   |                                                                                   | Free                                                                              | Free                                                                              |                                                                                   |
| Grade                             | 0%                                                                                |                                                                                   |                                                                                   | 0%                                                                                | 0%                                                                                |                                                                                   |
| Peak Hour Factor                  | 0.87                                                                              | 0.87                                                                              | 0.87                                                                              | 0.87                                                                              | 0.87                                                                              | 0.87                                                                              |
| Hourly flow rate (vph)            | 0                                                                                 | 0                                                                                 | 23                                                                                | 408                                                                               | 431                                                                               | 40                                                                                |
| Pedestrians                       | 140                                                                               |                                                                                   |                                                                                   |                                                                                   | 15                                                                                |                                                                                   |
| Lane Width (m)                    | 0.0                                                                               |                                                                                   |                                                                                   |                                                                                   | 3.5                                                                               |                                                                                   |
| Walking Speed (m/s)               | 1.2                                                                               |                                                                                   |                                                                                   |                                                                                   | 1.2                                                                               |                                                                                   |
| Percent Blockage                  | 0                                                                                 |                                                                                   |                                                                                   |                                                                                   | 1                                                                                 |                                                                                   |
| Right turn flare (veh)            |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| Median type                       |                                                                                   |                                                                                   |                                                                                   | None                                                                              | None                                                                              |                                                                                   |
| Median storage veh                |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| Upstream signal (m)               |                                                                                   |                                                                                   |                                                                                   | 87                                                                                | 146                                                                               |                                                                                   |
| pX, platoon unblocked             |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| vC, conflicting volume            | 856                                                                               | 376                                                                               | 611                                                                               |                                                                                   |                                                                                   |                                                                                   |
| vC1, stage 1 conf vol             |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| vC2, stage 2 conf vol             |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| vCu, unblocked vol                | 856                                                                               | 376                                                                               | 611                                                                               |                                                                                   |                                                                                   |                                                                                   |
| tC, single (s)                    | 8.8                                                                               | 6.9                                                                               | 4.1                                                                               |                                                                                   |                                                                                   |                                                                                   |
| tC, 2 stage (s)                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| tF (s)                            | 4.5                                                                               | 3.3                                                                               | 2.2                                                                               |                                                                                   |                                                                                   |                                                                                   |
| p0 queue free %                   | 100                                                                               | 100                                                                               | 98                                                                                |                                                                                   |                                                                                   |                                                                                   |
| cM capacity (veh/h)               | 155                                                                               | 628                                                                               | 978                                                                               |                                                                                   |                                                                                   |                                                                                   |
| Direction, Lane #                 | NB 1                                                                              | NB 2                                                                              | SB 1                                                                              | SB 2                                                                              |                                                                                   |                                                                                   |
| Volume Total                      | 159                                                                               | 272                                                                               | 287                                                                               | 184                                                                               |                                                                                   |                                                                                   |
| Volume Left                       | 23                                                                                | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                   |                                                                                   |
| Volume Right                      | 0                                                                                 | 0                                                                                 | 0                                                                                 | 40                                                                                |                                                                                   |                                                                                   |
| cSH                               | 978                                                                               | 1700                                                                              | 1700                                                                              | 1700                                                                              |                                                                                   |                                                                                   |
| Volume to Capacity                | 0.02                                                                              | 0.16                                                                              | 0.17                                                                              | 0.11                                                                              |                                                                                   |                                                                                   |
| Queue Length 95th (m)             | 0.6                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   |                                                                                   |
| Control Delay (s)                 | 1.5                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   |                                                                                   |
| Lane LOS                          | A                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| Approach Delay (s)                | 0.5                                                                               |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   |                                                                                   |
| Approach LOS                      |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| Intersection Summary              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| Average Delay                     |                                                                                   |                                                                                   | 0.3                                                                               |                                                                                   |                                                                                   |                                                                                   |
| Intersection Capacity Utilization |                                                                                   |                                                                                   | 28.1%                                                                             | ICU Level of Service                                                              |                                                                                   | A                                                                                 |
| Analysis Period (min)             |                                                                                   |                                                                                   | 15                                                                                |                                                                                   |                                                                                   |                                                                                   |



# HCM Unsignalized Intersection Capacity Analysis5: Broadview Ave & South Site Driveway

Future Background AM Peak Hour

|                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
|-----------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
|                                   |  |  |  |  |  |  |
| Movement                          | EBL                                                                               | EBR                                                                               | NBL                                                                               | NBT                                                                               | SBT                                                                               | SBR                                                                               |
| Lane Configurations               |  |                                                                                   |                                                                                   |  |  |                                                                                   |
| Traffic Volume (veh/h)            | 15                                                                                | 20                                                                                | 0                                                                                 | 355                                                                               | 370                                                                               | 0                                                                                 |
| Future Volume (Veh/h)             | 15                                                                                | 20                                                                                | 0                                                                                 | 355                                                                               | 370                                                                               | 0                                                                                 |
| Sign Control                      | Stop                                                                              |                                                                                   |                                                                                   | Free                                                                              | Free                                                                              |                                                                                   |
| Grade                             | 0%                                                                                |                                                                                   |                                                                                   | 0%                                                                                | 0%                                                                                |                                                                                   |
| Peak Hour Factor                  | 0.88                                                                              | 0.88                                                                              | 0.88                                                                              | 0.88                                                                              | 0.88                                                                              | 0.88                                                                              |
| Hourly flow rate (vph)            | 17                                                                                | 23                                                                                | 0                                                                                 | 403                                                                               | 420                                                                               | 0                                                                                 |
| Pedestrians                       | 110                                                                               |                                                                                   |                                                                                   | 5                                                                                 |                                                                                   |                                                                                   |
| Lane Width (m)                    | 3.5                                                                               |                                                                                   |                                                                                   | 3.5                                                                               |                                                                                   |                                                                                   |
| Walking Speed (m/s)               | 1.2                                                                               |                                                                                   |                                                                                   | 1.2                                                                               |                                                                                   |                                                                                   |
| Percent Blockage                  | 9                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   |
| Right turn flare (veh)            |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| Median type                       |                                                                                   |                                                                                   |                                                                                   | None                                                                              | None                                                                              |                                                                                   |
| Median storage veh                |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| Upstream signal (m)               |                                                                                   |                                                                                   |                                                                                   | 64                                                                                | 169                                                                               |                                                                                   |
| pX, platoon unblocked             |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| vC, conflicting volume            | 732                                                                               | 325                                                                               | 530                                                                               |                                                                                   |                                                                                   |                                                                                   |
| vC1, stage 1 conf vol             |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| vC2, stage 2 conf vol             |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| vCu, unblocked vol                | 732                                                                               | 325                                                                               | 530                                                                               |                                                                                   |                                                                                   |                                                                                   |
| tC, single (s)                    | 6.8                                                                               | 6.9                                                                               | 4.1                                                                               |                                                                                   |                                                                                   |                                                                                   |
| tC, 2 stage (s)                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| tF (s)                            | 3.5                                                                               | 3.3                                                                               | 2.2                                                                               |                                                                                   |                                                                                   |                                                                                   |
| p0 queue free %                   | 95                                                                                | 96                                                                                | 100                                                                               |                                                                                   |                                                                                   |                                                                                   |
| cM capacity (veh/h)               | 329                                                                               | 614                                                                               | 954                                                                               |                                                                                   |                                                                                   |                                                                                   |
| Direction, Lane #                 | EB 1                                                                              | NB 1                                                                              | NB 2                                                                              | SB 1                                                                              | SB 2                                                                              |                                                                                   |
| Volume Total                      | 40                                                                                | 202                                                                               | 202                                                                               | 210                                                                               | 210                                                                               |                                                                                   |
| Volume Left                       | 17                                                                                | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                   |
| Volume Right                      | 23                                                                                | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                   |
| cSH                               | 449                                                                               | 1700                                                                              | 1700                                                                              | 1700                                                                              | 1700                                                                              |                                                                                   |
| Volume to Capacity                | 0.09                                                                              | 0.12                                                                              | 0.12                                                                              | 0.12                                                                              | 0.12                                                                              |                                                                                   |
| Queue Length 95th (m)             | 2.3                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   |
| Control Delay (s)                 | 13.8                                                                              | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   |
| Lane LOS                          | B                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| Approach Delay (s)                | 13.8                                                                              | 0.0                                                                               |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   |
| Approach LOS                      | B                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| Intersection Summary              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| Average Delay                     |                                                                                   |                                                                                   | 0.6                                                                               |                                                                                   |                                                                                   |                                                                                   |
| Intersection Capacity Utilization |                                                                                   |                                                                                   | 24.8%                                                                             | ICU Level of Service                                                              |                                                                                   | A                                                                                 |
| Analysis Period (min)             |                                                                                   |                                                                                   | 15                                                                                |                                                                                   |                                                                                   |                                                                                   |

# HCM Unsignalized Intersection Capacity Analysis

## 6: Broadview Ave & Fairview Blvd

Future Background AM Peak Hour

|                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
|-----------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
|                                   |  |  |  |  |  |  |
| Movement                          | WBL                                                                               | WBR                                                                               | NBT                                                                               | NBR                                                                               | SBL                                                                               | SBT                                                                               |
| Lane Configurations               |                                                                                   |                                                                                   | ↕↕                                                                                |                                                                                   |                                                                                   | ↕↕                                                                                |
| Traffic Volume (veh/h)            | 0                                                                                 | 0                                                                                 | 360                                                                               | 10                                                                                | 15                                                                                | 375                                                                               |
| Future Volume (Veh/h)             | 0                                                                                 | 0                                                                                 | 360                                                                               | 10                                                                                | 15                                                                                | 375                                                                               |
| Sign Control                      | Stop                                                                              |                                                                                   | Free                                                                              |                                                                                   |                                                                                   | Free                                                                              |
| Grade                             | 0%                                                                                |                                                                                   | 0%                                                                                |                                                                                   |                                                                                   | 0%                                                                                |
| Peak Hour Factor                  | 0.87                                                                              | 0.87                                                                              | 0.87                                                                              | 0.87                                                                              | 0.87                                                                              | 0.87                                                                              |
| Hourly flow rate (vph)            | 0                                                                                 | 0                                                                                 | 414                                                                               | 11                                                                                | 17                                                                                | 431                                                                               |
| Pedestrians                       | 170                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                   | 5                                                                                 |
| Lane Width (m)                    | 0.0                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                   | 3.5                                                                               |
| Walking Speed (m/s)               | 1.2                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                   | 1.2                                                                               |
| Percent Blockage                  | 0                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                   | 0                                                                                 |
| Right turn flare (veh)            |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| Median type                       |                                                                                   |                                                                                   | None                                                                              |                                                                                   |                                                                                   | None                                                                              |
| Median storage veh                |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| Upstream signal (m)               |                                                                                   |                                                                                   | 45                                                                                |                                                                                   |                                                                                   | 189                                                                               |
| pX, platoon unblocked             | 0.99                                                                              | 0.99                                                                              |                                                                                   |                                                                                   | 0.99                                                                              |                                                                                   |
| vC, conflicting volume            | 839                                                                               | 388                                                                               |                                                                                   |                                                                                   | 595                                                                               |                                                                                   |
| vC1, stage 1 conf vol             |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| vC2, stage 2 conf vol             |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| vCu, unblocked vol                | 828                                                                               | 374                                                                               |                                                                                   |                                                                                   | 582                                                                               |                                                                                   |
| 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                                                                               |                                                                                   |                                                                                   | 98                                                                                |                                                                                   |
| cM capacity (veh/h)               | 307                                                                               | 624                                                                               |                                                                                   |                                                                                   | 997                                                                               |                                                                                   |
| Direction, Lane #                 | NB 1                                                                              | NB 2                                                                              | SB 1                                                                              | SB 2                                                                              |                                                                                   |                                                                                   |
| Volume Total                      | 276                                                                               | 149                                                                               | 161                                                                               | 287                                                                               |                                                                                   |                                                                                   |
| Volume Left                       | 0                                                                                 | 0                                                                                 | 17                                                                                | 0                                                                                 |                                                                                   |                                                                                   |
| Volume Right                      | 0                                                                                 | 11                                                                                | 0                                                                                 | 0                                                                                 |                                                                                   |                                                                                   |
| cSH                               | 1700                                                                              | 1700                                                                              | 997                                                                               | 1700                                                                              |                                                                                   |                                                                                   |
| Volume to Capacity                | 0.16                                                                              | 0.09                                                                              | 0.02                                                                              | 0.17                                                                              |                                                                                   |                                                                                   |
| Queue Length 95th (m)             | 0.0                                                                               | 0.0                                                                               | 0.4                                                                               | 0.0                                                                               |                                                                                   |                                                                                   |
| Control Delay (s)                 | 0.0                                                                               | 0.0                                                                               | 1.1                                                                               | 0.0                                                                               |                                                                                   |                                                                                   |
| Lane LOS                          |                                                                                   |                                                                                   | A                                                                                 |                                                                                   |                                                                                   |                                                                                   |
| Approach Delay (s)                | 0.0                                                                               |                                                                                   | 0.4                                                                               |                                                                                   |                                                                                   |                                                                                   |
| Approach LOS                      |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| Intersection Summary              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| Average Delay                     |                                                                                   |                                                                                   | 0.2                                                                               |                                                                                   |                                                                                   |                                                                                   |
| Intersection Capacity Utilization |                                                                                   |                                                                                   | 32.9%                                                                             | ICU Level of Service                                                              |                                                                                   | A                                                                                 |
| Analysis Period (min)             |                                                                                   |                                                                                   | 15                                                                                |                                                                                   |                                                                                   |                                                                                   |

## Queues

### 7: Broadview Ave & PXO

Future Background AM Peak Hour

|                        | ↑     | ↓     |      |
|------------------------|-------|-------|------|
| Lane Group             | NBT   | SBT   | Ø9   |
| Lane Configurations    | ↑↑    | ↑↑    |      |
| Traffic Volume (vph)   | 375   | 375   |      |
| Future Volume (vph)    | 375   | 375   |      |
| Lane Group Flow (vph)  | 426   | 426   |      |
| Turn Type              | NA    | NA    |      |
| Protected Phases       | 2     | 6     | 9    |
| Permitted Phases       |       |       |      |
| Detector Phase         | 2     | 6     |      |
| Switch Phase           |       |       |      |
| Minimum Initial (s)    | 5.0   | 5.0   | 5.0  |
| Minimum Split (s)      | 8.0   | 8.0   | 22.5 |
| Total Split (s)        | 60.0  | 60.0  | 50.0 |
| Total Split (%)        | 54.5% | 54.5% | 45%  |
| Yellow Time (s)        | 2.0   | 2.0   | 3.5  |
| All-Red Time (s)       | 1.0   | 1.0   | 1.0  |
| Lost Time Adjust (s)   | -1.0  | -1.0  |      |
| Total Lost Time (s)    | 2.0   | 2.0   |      |
| Lead/Lag               |       |       |      |
| Lead-Lag Optimize?     |       |       |      |
| Recall Mode            | Min   | Min   | None |
| v/c Ratio              | 0.14  | 0.14  |      |
| Control Delay          | 2.3   | 2.3   |      |
| Queue Delay            | 0.0   | 0.0   |      |
| Total Delay            | 2.3   | 2.3   |      |
| Queue Length 50th (m)  | 0.0   | 0.0   |      |
| Queue Length 95th (m)  | 16.6  | 16.7  |      |
| Internal Link Dist (m) | 3.2   | 21.0  |      |
| Turn Bay Length (m)    |       |       |      |
| Base Capacity (vph)    | 3336  | 3245  |      |
| Starvation Cap Reductn | 0     | 0     |      |
| Spillback Cap Reductn  | 0     | 0     |      |
| Storage Cap Reductn    | 0     | 0     |      |
| Reduced v/c Ratio      | 0.13  | 0.13  |      |

#### Intersection Summary

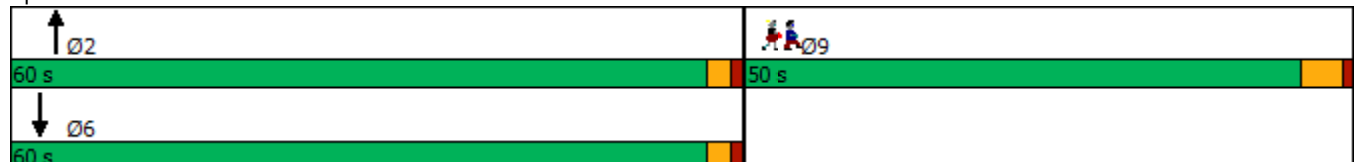
Cycle Length: 110

Actuated Cycle Length: 29.9

Natural Cycle: 40

Control Type: Actuated-Uncoordinated

Splits and Phases: 7: Broadview Ave & PXO





# HCM Signalized Intersection Capacity Analysis

## 7: Broadview Ave & PXO

Future Background AM Peak Hour

|                                   |  |  |  |  |  |  |
|-----------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| Movement                          | EBL                                                                               | EBR                                                                               | NBL                                                                               | NBT                                                                               | SBT                                                                               | SBR                                                                               |
| Lane Configurations               |                                                                                   |                                                                                   |                                                                                   | ↑↑                                                                                | ↑↑                                                                                |                                                                                   |
| Traffic Volume (vph)              | 0                                                                                 | 0                                                                                 | 0                                                                                 | 375                                                                               | 375                                                                               | 0                                                                                 |
| Future Volume (vph)               | 0                                                                                 | 0                                                                                 | 0                                                                                 | 375                                                                               | 375                                                                               | 0                                                                                 |
| Ideal Flow (vphpl)                | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              |
| Total Lost time (s)               |                                                                                   |                                                                                   |                                                                                   | 2.0                                                                               | 2.0                                                                               |                                                                                   |
| Lane Util. Factor                 |                                                                                   |                                                                                   |                                                                                   | 0.95                                                                              | 0.95                                                                              |                                                                                   |
| Frt                               |                                                                                   |                                                                                   |                                                                                   | 1.00                                                                              | 1.00                                                                              |                                                                                   |
| Flt Protected                     |                                                                                   |                                                                                   |                                                                                   | 1.00                                                                              | 1.00                                                                              |                                                                                   |
| Satd. Flow (prot)                 |                                                                                   |                                                                                   |                                                                                   | 3336                                                                              | 3245                                                                              |                                                                                   |
| Flt Permitted                     |                                                                                   |                                                                                   |                                                                                   | 1.00                                                                              | 1.00                                                                              |                                                                                   |
| Satd. Flow (perm)                 |                                                                                   |                                                                                   |                                                                                   | 3336                                                                              | 3245                                                                              |                                                                                   |
| Peak-hour factor, PHF             | 0.88                                                                              | 0.88                                                                              | 0.88                                                                              | 0.88                                                                              | 0.88                                                                              | 0.88                                                                              |
| Adj. Flow (vph)                   | 0                                                                                 | 0                                                                                 | 0                                                                                 | 426                                                                               | 426                                                                               | 0                                                                                 |
| RTOR Reduction (vph)              | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 |
| Lane Group Flow (vph)             | 0                                                                                 | 0                                                                                 | 0                                                                                 | 426                                                                               | 426                                                                               | 0                                                                                 |
| Heavy Vehicles (%)                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 7%                                                                                | 10%                                                                               | 0%                                                                                |
| Turn Type                         |                                                                                   |                                                                                   |                                                                                   | NA                                                                                | NA                                                                                |                                                                                   |
| Protected Phases                  |                                                                                   |                                                                                   |                                                                                   | 2                                                                                 | 6                                                                                 |                                                                                   |
| Permitted Phases                  |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| Actuated Green, G (s)             |                                                                                   |                                                                                   |                                                                                   | 24.0                                                                              | 24.0                                                                              |                                                                                   |
| Effective Green, g (s)            |                                                                                   |                                                                                   |                                                                                   | 25.0                                                                              | 25.0                                                                              |                                                                                   |
| Actuated g/C Ratio                |                                                                                   |                                                                                   |                                                                                   | 0.74                                                                              | 0.74                                                                              |                                                                                   |
| Clearance Time (s)                |                                                                                   |                                                                                   |                                                                                   | 3.0                                                                               | 3.0                                                                               |                                                                                   |
| Vehicle Extension (s)             |                                                                                   |                                                                                   |                                                                                   | 3.0                                                                               | 3.0                                                                               |                                                                                   |
| Lane Grp Cap (vph)                |                                                                                   |                                                                                   |                                                                                   | 2482                                                                              | 2414                                                                              |                                                                                   |
| v/s Ratio Prot                    |                                                                                   |                                                                                   |                                                                                   | 0.13                                                                              | c0.13                                                                             |                                                                                   |
| v/s Ratio Perm                    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| v/c Ratio                         |                                                                                   |                                                                                   |                                                                                   | 0.17                                                                              | 0.18                                                                              |                                                                                   |
| Uniform Delay, d1                 |                                                                                   |                                                                                   |                                                                                   | 1.3                                                                               | 1.3                                                                               |                                                                                   |
| Progression Factor                |                                                                                   |                                                                                   |                                                                                   | 1.00                                                                              | 1.00                                                                              |                                                                                   |
| Incremental Delay, d2             |                                                                                   |                                                                                   |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   |
| Delay (s)                         |                                                                                   |                                                                                   |                                                                                   | 1.3                                                                               | 1.3                                                                               |                                                                                   |
| Level of Service                  |                                                                                   |                                                                                   |                                                                                   | A                                                                                 | A                                                                                 |                                                                                   |
| Approach Delay (s)                | 0.0                                                                               |                                                                                   |                                                                                   | 1.3                                                                               | 1.3                                                                               |                                                                                   |
| Approach LOS                      | A                                                                                 |                                                                                   |                                                                                   | A                                                                                 | A                                                                                 |                                                                                   |
| Intersection Summary              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| HCM 2000 Control Delay            |                                                                                   |                                                                                   | 1.3                                                                               | HCM 2000 Level of Service                                                         |                                                                                   | A                                                                                 |
| HCM 2000 Volume to Capacity ratio |                                                                                   |                                                                                   | 0.16                                                                              |                                                                                   |                                                                                   |                                                                                   |
| Actuated Cycle Length (s)         |                                                                                   |                                                                                   | 33.6                                                                              | Sum of lost time (s)                                                              |                                                                                   | 6.5                                                                               |
| Intersection Capacity Utilization |                                                                                   |                                                                                   | 13.7%                                                                             | ICU Level of Service                                                              |                                                                                   | A                                                                                 |
| Analysis Period (min)             |                                                                                   |                                                                                   | 15                                                                                |                                                                                   |                                                                                   |                                                                                   |
| c Critical Lane Group             |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |

# HCM Unsignalized Intersection Capacity Analysis8: Broadview Ave & Wolfrey Ave

Future Background AM Peak Hour

|                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
|-----------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
|                                   |  |  |  |  |  |  |
| Movement                          | WBL                                                                               | WBR                                                                               | NBT                                                                               | NBR                                                                               | SBL                                                                               | SBT                                                                               |
| Lane Configurations               |  |                                                                                   |  |                                                                                   |                                                                                   |  |
| Traffic Volume (veh/h)            | 5                                                                                 | 0                                                                                 | 370                                                                               | 5                                                                                 | 0                                                                                 | 370                                                                               |
| Future Volume (Veh/h)             | 5                                                                                 | 0                                                                                 | 370                                                                               | 5                                                                                 | 0                                                                                 | 370                                                                               |
| Sign Control                      | Stop                                                                              |                                                                                   | Free                                                                              |                                                                                   |                                                                                   | Free                                                                              |
| Grade                             | 0%                                                                                |                                                                                   | 0%                                                                                |                                                                                   |                                                                                   | 0%                                                                                |
| Peak Hour Factor                  | 0.88                                                                              | 0.88                                                                              | 0.88                                                                              | 0.88                                                                              | 0.88                                                                              | 0.88                                                                              |
| Hourly flow rate (vph)            | 6                                                                                 | 0                                                                                 | 420                                                                               | 6                                                                                 | 0                                                                                 | 420                                                                               |
| Pedestrians                       | 155                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                   | 140                                                                               |
| Lane Width (m)                    | 3.5                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                   | 3.5                                                                               |
| Walking Speed (m/s)               | 1.2                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                   | 1.2                                                                               |
| Percent Blockage                  | 13                                                                                |                                                                                   |                                                                                   |                                                                                   |                                                                                   | 11                                                                                |
| Right turn flare (veh)            |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| Median type                       |                                                                                   |                                                                                   | None                                                                              |                                                                                   |                                                                                   | None                                                                              |
| Median storage (veh)              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| Upstream signal (m)               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   | 27                                                                                |
| pX, platoon unblocked             | 0.98                                                                              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| vC, conflicting volume            | 788                                                                               | 508                                                                               |                                                                                   |                                                                                   | 581                                                                               |                                                                                   |
| vC1, stage 1 conf vol             |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| vC2, stage 2 conf vol             |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| vCu, unblocked vol                | 748                                                                               | 508                                                                               |                                                                                   |                                                                                   | 581                                                                               |                                                                                   |
| tC, single (s)                    | 6.8                                                                               | 6.9                                                                               |                                                                                   |                                                                                   | 4.1                                                                               |                                                                                   |
| tC, 2 stage (s)                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| tF (s)                            | 3.5                                                                               | 3.3                                                                               |                                                                                   |                                                                                   | 2.2                                                                               |                                                                                   |
| p0 queue free %                   | 98                                                                                | 100                                                                               |                                                                                   |                                                                                   | 100                                                                               |                                                                                   |
| cM capacity (veh/h)               | 303                                                                               | 400                                                                               |                                                                                   |                                                                                   | 877                                                                               |                                                                                   |
| Direction, Lane #                 | WB 1                                                                              | NB 1                                                                              | NB 2                                                                              | SB 1                                                                              | SB 2                                                                              |                                                                                   |
| Volume Total                      | 6                                                                                 | 280                                                                               | 146                                                                               | 140                                                                               | 280                                                                               |                                                                                   |
| Volume Left                       | 6                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                   |
| Volume Right                      | 0                                                                                 | 0                                                                                 | 6                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                   |
| cSH                               | 303                                                                               | 1700                                                                              | 1700                                                                              | 877                                                                               | 1700                                                                              |                                                                                   |
| Volume to Capacity                | 0.02                                                                              | 0.16                                                                              | 0.09                                                                              | 0.00                                                                              | 0.16                                                                              |                                                                                   |
| Queue Length 95th (m)             | 0.5                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   |
| Control Delay (s)                 | 17.1                                                                              | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   |
| Lane LOS                          | C                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| Approach Delay (s)                | 17.1                                                                              | 0.0                                                                               |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   |
| Approach LOS                      | C                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| Intersection Summary              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| Average Delay                     |                                                                                   |                                                                                   | 0.1                                                                               |                                                                                   |                                                                                   |                                                                                   |
| Intersection Capacity Utilization |                                                                                   |                                                                                   | 33.2%                                                                             | ICU Level of Service                                                              |                                                                                   | A                                                                                 |
| Analysis Period (min)             |                                                                                   |                                                                                   | 15                                                                                |                                                                                   |                                                                                   |                                                                                   |

# Queues

## 1: Broadview Ave & Danforth Ave

Future Background PM Peak Hour

|                        |  |  |  |  |  |  |   |  |  |
|------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group             | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | NBL                                                                               | NBT                                                                                 | SBL                                                                                 | SBT                                                                                 |
| Lane Configurations    |  |  |  |  |  |                                                                                   |  |                                                                                     |  |
| Traffic Volume (vph)   | 300                                                                               | 525                                                                               | 235                                                                               | 40                                                                                | 330                                                                               | 130                                                                               | 285                                                                                 | 35                                                                                  | 200                                                                                 |
| Future Volume (vph)    | 300                                                                               | 525                                                                               | 235                                                                               | 40                                                                                | 330                                                                               | 130                                                                               | 285                                                                                 | 35                                                                                  | 200                                                                                 |
| Lane Group Flow (vph)  | 313                                                                               | 547                                                                               | 245                                                                               | 42                                                                                | 391                                                                               | 0                                                                                 | 505                                                                                 | 0                                                                                   | 405                                                                                 |
| Turn Type              | pm+pt                                                                             | NA                                                                                | Perm                                                                              | Perm                                                                              | NA                                                                                | pm+pt                                                                             | NA                                                                                  | Perm                                                                                | NA                                                                                  |
| Protected Phases       | 5                                                                                 | 2                                                                                 |                                                                                   |                                                                                   | 6                                                                                 | 7                                                                                 | 4                                                                                   |                                                                                     | 8                                                                                   |
| Permitted Phases       | 2                                                                                 |                                                                                   | 2                                                                                 | 6                                                                                 |                                                                                   | 4                                                                                 |                                                                                     | 8                                                                                   |                                                                                     |
| Detector Phase         | 5                                                                                 | 2                                                                                 | 2                                                                                 | 6                                                                                 | 6                                                                                 | 7                                                                                 | 4                                                                                   | 8                                                                                   | 8                                                                                   |
| Switch Phase           |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)    | 6.0                                                                               | 28.0                                                                              | 28.0                                                                              | 28.0                                                                              | 28.0                                                                              | 6.0                                                                               | 29.0                                                                                | 21.0                                                                                | 21.0                                                                                |
| Minimum Split (s)      | 13.1                                                                              | 35.1                                                                              | 35.1                                                                              | 35.1                                                                              | 35.1                                                                              | 13.5                                                                              | 36.0                                                                                | 36.0                                                                                | 36.0                                                                                |
| Total Split (s)        | 16.0                                                                              | 53.0                                                                              | 53.0                                                                              | 37.0                                                                              | 37.0                                                                              | 14.0                                                                              | 51.0                                                                                | 37.0                                                                                | 37.0                                                                                |
| Total Split (%)        | 15.4%                                                                             | 51.0%                                                                             | 51.0%                                                                             | 35.6%                                                                             | 35.6%                                                                             | 13.5%                                                                             | 49.0%                                                                               | 35.6%                                                                               | 35.6%                                                                               |
| Yellow Time (s)        | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.4                                                                                 | 3.4                                                                                 | 3.4                                                                                 |
| All-Red Time (s)       | 4.1                                                                               | 4.1                                                                               | 4.1                                                                               | 4.1                                                                               | 4.1                                                                               | 4.5                                                                               | 3.6                                                                                 | 3.6                                                                                 | 3.6                                                                                 |
| Lost Time Adjust (s)   | -1.0                                                                              | -1.0                                                                              | -1.0                                                                              | -1.0                                                                              | -1.0                                                                              |                                                                                   | -1.0                                                                                |                                                                                     | -1.0                                                                                |
| Total Lost Time (s)    | 6.1                                                                               | 6.1                                                                               | 6.1                                                                               | 6.1                                                                               | 6.1                                                                               |                                                                                   | 6.0                                                                                 |                                                                                     | 6.0                                                                                 |
| Lead/Lag               | Lead                                                                              |                                                                                   |                                                                                   | Lag                                                                               | Lag                                                                               | Lead                                                                              |                                                                                     | Lag                                                                                 | Lag                                                                                 |
| Lead-Lag Optimize?     | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               | Yes                                                                               | Yes                                                                               |                                                                                     | Yes                                                                                 | Yes                                                                                 |
| Recall Mode            | None                                                                              | C-Min                                                                             | C-Min                                                                             | C-Min                                                                             | C-Min                                                                             | None                                                                              | Min                                                                                 | Min                                                                                 | Min                                                                                 |
| v/c Ratio              | 0.65                                                                              | 0.55                                                                              | 0.41                                                                              | 0.19                                                                              | 0.35                                                                              |                                                                                   | 0.73                                                                                |                                                                                     | 0.45                                                                                |
| Control Delay          | 24.1                                                                              | 19.7                                                                              | 5.3                                                                               | 30.3                                                                              | 27.6                                                                              |                                                                                   | 34.8                                                                                |                                                                                     | 16.6                                                                                |
| Queue Delay            | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                 |                                                                                     | 0.0                                                                                 |
| Total Delay            | 24.1                                                                              | 19.7                                                                              | 5.3                                                                               | 30.3                                                                              | 27.6                                                                              |                                                                                   | 34.8                                                                                |                                                                                     | 16.6                                                                                |
| Queue Length 50th (m)  | 35.7                                                                              | 71.8                                                                              | 2.0                                                                               | 6.7                                                                               | 33.5                                                                              |                                                                                   | 47.9                                                                                |                                                                                     | 21.0                                                                                |
| Queue Length 95th (m)  | #82.0                                                                             | 125.2                                                                             | 19.4                                                                              | 16.5                                                                              | 47.3                                                                              |                                                                                   | 59.0                                                                                |                                                                                     | 30.1                                                                                |
| Internal Link Dist (m) |                                                                                   | 170.8                                                                             |                                                                                   |                                                                                   | 155.0                                                                             |                                                                                   | 66.0                                                                                |                                                                                     | 120.0                                                                               |
| Turn Bay Length (m)    | 65.0                                                                              |                                                                                   |                                                                                   | 35.0                                                                              |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |
| Base Capacity (vph)    | 482                                                                               | 1000                                                                              | 595                                                                               | 225                                                                               | 1118                                                                              |                                                                                   | 866                                                                                 |                                                                                     | 912                                                                                 |
| Starvation Cap Reductn | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                   |                                                                                     | 0                                                                                   |
| Spillback Cap Reductn  | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                   |                                                                                     | 0                                                                                   |
| Storage Cap Reductn    | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                   |                                                                                     | 0                                                                                   |
| Reduced v/c Ratio      | 0.65                                                                              | 0.55                                                                              | 0.41                                                                              | 0.19                                                                              | 0.35                                                                              |                                                                                   | 0.58                                                                                |                                                                                     | 0.44                                                                                |

### Intersection Summary

Cycle Length: 104

Actuated Cycle Length: 104

Offset: 103 (99%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

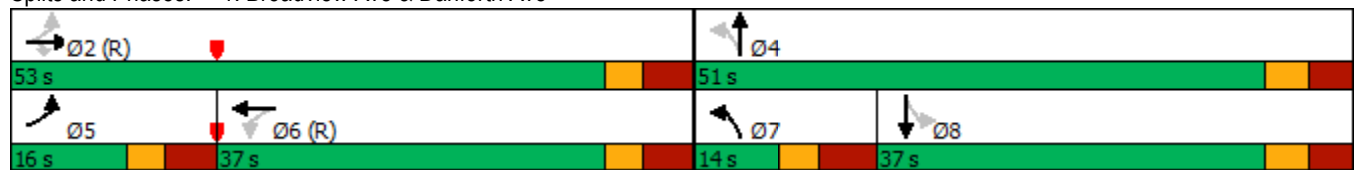
Natural Cycle: 100

Control Type: Actuated-Coordinated

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

Queue shown is maximum after two cycles.

Splits and Phases: 1: Broadview Ave & Danforth Ave





# HCM Signalized Intersection Capacity Analysis

## 1: Broadview Ave & Danforth Ave

Future Background PM Peak Hour

|                                   |  |  |  |  |  |  |  |  |  |  |  |  |
|-----------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Movement                          | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations               |  |  |  |  |  |                                                                                   |                                                                                    |  |                                                                                     |                                                                                     |  |  |
| Traffic Volume (vph)              | 300                                                                               | 525                                                                               | 235                                                                               | 40                                                                                | 330                                                                               | 45                                                                                | 130                                                                                | 285                                                                                 | 70                                                                                  | 35                                                                                  | 200                                                                                 | 155                                                                                 |
| Future Volume (vph)               | 300                                                                               | 525                                                                               | 235                                                                               | 40                                                                                | 330                                                                               | 45                                                                                | 130                                                                                | 285                                                                                 | 70                                                                                  | 35                                                                                  | 200                                                                                 | 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                                                                               | 3.5                                                                               | 3.5                                                                                | 3.5                                                                                 | 3.5                                                                                 | 3.5                                                                                 | 3.5                                                                                 | 3.5                                                                                 |
| Total Lost time (s)               | 6.1                                                                               | 6.1                                                                               | 6.1                                                                               | 6.1                                                                               | 6.1                                                                               |                                                                                   |                                                                                    | 6.0                                                                                 |                                                                                     |                                                                                     | 6.0                                                                                 |                                                                                     |
| Lane Util. Factor                 | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 0.95                                                                              |                                                                                   |                                                                                    | 0.95                                                                                |                                                                                     |                                                                                     | 0.95                                                                                |                                                                                     |
| Frpb, ped/bikes                   | 1.00                                                                              | 1.00                                                                              | 0.62                                                                              | 1.00                                                                              | 0.96                                                                              |                                                                                   |                                                                                    | 0.90                                                                                |                                                                                     |                                                                                     | 0.88                                                                                |                                                                                     |
| Flpb, ped/bikes                   | 0.94                                                                              | 1.00                                                                              | 1.00                                                                              | 0.84                                                                              | 1.00                                                                              |                                                                                   |                                                                                    | 0.96                                                                                |                                                                                     |                                                                                     | 0.97                                                                                |                                                                                     |
| Frt                               | 1.00                                                                              | 1.00                                                                              | 0.85                                                                              | 1.00                                                                              | 0.98                                                                              |                                                                                   |                                                                                    | 0.98                                                                                |                                                                                     |                                                                                     | 0.94                                                                                |                                                                                     |
| Flt Protected                     | 0.95                                                                              | 1.00                                                                              | 1.00                                                                              | 0.95                                                                              | 1.00                                                                              |                                                                                   |                                                                                    | 0.99                                                                                |                                                                                     |                                                                                     | 1.00                                                                                |                                                                                     |
| Satd. Flow (prot)                 | 1569                                                                              | 1860                                                                              | 925                                                                               | 1377                                                                              | 3312                                                                              |                                                                                   |                                                                                    | 2783                                                                                |                                                                                     |                                                                                     | 2691                                                                                |                                                                                     |
| Flt Permitted                     | 0.41                                                                              | 1.00                                                                              | 1.00                                                                              | 0.46                                                                              | 1.00                                                                              |                                                                                   |                                                                                    | 0.70                                                                                |                                                                                     |                                                                                     | 0.86                                                                                |                                                                                     |
| Satd. Flow (perm)                 | 670                                                                               | 1860                                                                              | 925                                                                               | 666                                                                               | 3312                                                                              |                                                                                   |                                                                                    | 1974                                                                                |                                                                                     |                                                                                     | 2337                                                                                |                                                                                     |
| Peak-hour factor, PHF             | 0.96                                                                              | 0.96                                                                              | 0.96                                                                              | 0.96                                                                              | 0.96                                                                              | 0.96                                                                              | 0.96                                                                               | 0.96                                                                                | 0.96                                                                                | 0.96                                                                                | 0.96                                                                                | 0.96                                                                                |
| Adj. Flow (vph)                   | 312                                                                               | 547                                                                               | 245                                                                               | 42                                                                                | 344                                                                               | 47                                                                                | 135                                                                                | 297                                                                                 | 73                                                                                  | 36                                                                                  | 208                                                                                 | 161                                                                                 |
| RTOR Reduction (vph)              | 0                                                                                 | 0                                                                                 | 103                                                                               | 0                                                                                 | 10                                                                                | 0                                                                                 | 0                                                                                  | 9                                                                                   | 0                                                                                   | 0                                                                                   | 100                                                                                 | 0                                                                                   |
| Lane Group Flow (vph)             | 313                                                                               | 547                                                                               | 142                                                                               | 42                                                                                | 381                                                                               | 0                                                                                 | 0                                                                                  | 496                                                                                 | 0                                                                                   | 0                                                                                   | 305                                                                                 | 0                                                                                   |
| Confl. Peds. (#/hr)               | 380                                                                               |                                                                                   | 440                                                                               | 440                                                                               |                                                                                   | 380                                                                               | 265                                                                                |                                                                                     | 700                                                                                 | 700                                                                                 |                                                                                     | 265                                                                                 |
| Confl. Bikes (#/hr)               |                                                                                   |                                                                                   | 205                                                                               |                                                                                   |                                                                                   | 130                                                                               |                                                                                    |                                                                                     | 20                                                                                  |                                                                                     |                                                                                     | 10                                                                                  |
| Heavy Vehicles (%)                | 1%                                                                                | 1%                                                                                | 1%                                                                                | 3%                                                                                | 1%                                                                                | 2%                                                                                | 1%                                                                                 | 7%                                                                                  | 1%                                                                                  | 0%                                                                                  | 10%                                                                                 | 1%                                                                                  |
| Bus Blockages (#/hr)              | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                  | 13                                                                                  | 0                                                                                   | 0                                                                                   | 6                                                                                   | 0                                                                                   |
| Turn Type                         | pm+pt                                                                             | NA                                                                                | Perm                                                                              | Perm                                                                              | NA                                                                                |                                                                                   | pm+pt                                                                              | NA                                                                                  |                                                                                     | Perm                                                                                | NA                                                                                  |                                                                                     |
| Protected Phases                  | 5                                                                                 | 2                                                                                 |                                                                                   |                                                                                   | 6                                                                                 |                                                                                   | 7                                                                                  | 4                                                                                   |                                                                                     |                                                                                     | 8                                                                                   |                                                                                     |
| Permitted Phases                  | 2                                                                                 |                                                                                   | 2                                                                                 | 6                                                                                 |                                                                                   |                                                                                   | 4                                                                                  |                                                                                     |                                                                                     | 8                                                                                   |                                                                                     |                                                                                     |
| Actuated Green, G (s)             | 55.0                                                                              | 55.0                                                                              | 55.0                                                                              | 33.4                                                                              | 33.4                                                                              |                                                                                   |                                                                                    | 34.9                                                                                |                                                                                     |                                                                                     | 34.9                                                                                |                                                                                     |
| Effective Green, g (s)            | 56.0                                                                              | 56.0                                                                              | 56.0                                                                              | 34.4                                                                              | 34.4                                                                              |                                                                                   |                                                                                    | 35.9                                                                                |                                                                                     |                                                                                     | 35.9                                                                                |                                                                                     |
| Actuated g/C Ratio                | 0.54                                                                              | 0.54                                                                              | 0.54                                                                              | 0.33                                                                              | 0.33                                                                              |                                                                                   |                                                                                    | 0.35                                                                                |                                                                                     |                                                                                     | 0.35                                                                                |                                                                                     |
| Clearance Time (s)                | 7.1                                                                               | 7.1                                                                               | 7.1                                                                               | 7.1                                                                               | 7.1                                                                               |                                                                                   |                                                                                    | 7.0                                                                                 |                                                                                     |                                                                                     | 7.0                                                                                 |                                                                                     |
| Vehicle Extension (s)             | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               |                                                                                   |                                                                                    | 3.0                                                                                 |                                                                                     |                                                                                     | 3.0                                                                                 |                                                                                     |
| Lane Grp Cap (vph)                | 494                                                                               | 1001                                                                              | 498                                                                               | 220                                                                               | 1095                                                                              |                                                                                   |                                                                                    | 681                                                                                 |                                                                                     |                                                                                     | 806                                                                                 |                                                                                     |
| v/s Ratio Prot                    | c0.09                                                                             | 0.29                                                                              |                                                                                   |                                                                                   | 0.12                                                                              |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| v/s Ratio Perm                    | c0.25                                                                             |                                                                                   | 0.15                                                                              | 0.06                                                                              |                                                                                   |                                                                                   |                                                                                    | c0.25                                                                               |                                                                                     |                                                                                     | 0.13                                                                                |                                                                                     |
| v/c Ratio                         | 0.63                                                                              | 0.55                                                                              | 0.28                                                                              | 0.19                                                                              | 0.35                                                                              |                                                                                   |                                                                                    | 0.73                                                                                |                                                                                     |                                                                                     | 0.38                                                                                |                                                                                     |
| Uniform Delay, d1                 | 14.4                                                                              | 15.7                                                                              | 13.1                                                                              | 24.9                                                                              | 26.3                                                                              |                                                                                   |                                                                                    | 29.8                                                                                |                                                                                     |                                                                                     | 25.6                                                                                |                                                                                     |
| Progression Factor                | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              |                                                                                   |                                                                                    | 1.00                                                                                |                                                                                     |                                                                                     | 1.00                                                                                |                                                                                     |
| Incremental Delay, d2             | 2.7                                                                               | 2.1                                                                               | 1.4                                                                               | 1.9                                                                               | 0.9                                                                               |                                                                                   |                                                                                    | 3.9                                                                                 |                                                                                     |                                                                                     | 0.3                                                                                 |                                                                                     |
| Delay (s)                         | 17.1                                                                              | 17.8                                                                              | 14.5                                                                              | 26.8                                                                              | 27.2                                                                              |                                                                                   |                                                                                    | 33.7                                                                                |                                                                                     |                                                                                     | 25.9                                                                                |                                                                                     |
| Level of Service                  | B                                                                                 | B                                                                                 | B                                                                                 | C                                                                                 | C                                                                                 |                                                                                   |                                                                                    | C                                                                                   |                                                                                     |                                                                                     | C                                                                                   |                                                                                     |
| Approach Delay (s)                |                                                                                   | 16.9                                                                              |                                                                                   |                                                                                   | 27.2                                                                              |                                                                                   |                                                                                    | 33.7                                                                                |                                                                                     |                                                                                     | 25.9                                                                                |                                                                                     |
| Approach LOS                      |                                                                                   | B                                                                                 |                                                                                   |                                                                                   | C                                                                                 |                                                                                   |                                                                                    | C                                                                                   |                                                                                     |                                                                                     | C                                                                                   |                                                                                     |
| <b>Intersection Summary</b>       |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| HCM 2000 Control Delay            |                                                                                   |                                                                                   | 23.7                                                                              |                                                                                   |                                                                                   | HCM 2000 Level of Service                                                         |                                                                                    |                                                                                     |                                                                                     | C                                                                                   |                                                                                     |                                                                                     |
| HCM 2000 Volume to Capacity ratio |                                                                                   |                                                                                   | 0.76                                                                              |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Actuated Cycle Length (s)         |                                                                                   |                                                                                   | 104.0                                                                             |                                                                                   |                                                                                   | Sum of lost time (s)                                                              |                                                                                    |                                                                                     | 24.7                                                                                |                                                                                     |                                                                                     |                                                                                     |
| Intersection Capacity Utilization |                                                                                   |                                                                                   | 119.5%                                                                            |                                                                                   |                                                                                   | ICU Level of Service                                                              |                                                                                    |                                                                                     | H                                                                                   |                                                                                     |                                                                                     |                                                                                     |
| Analysis Period (min)             |                                                                                   |                                                                                   | 15                                                                                |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| <b>c Critical Lane Group</b>      |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |

## HCM Unsignalized Intersection Capacity Analysis

### 2: Broadview Ave & Site Loading Access

Future Background PM Peak Hour

|                                   |  |  |  |  |  |  |
|-----------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| Movement                          | EBL                                                                               | EBR                                                                               | NBL                                                                               | NBT                                                                               | SBT                                                                               | SBR                                                                               |
| Lane Configurations               |  |                                                                                   |                                                                                   |  |  |                                                                                   |
| Traffic Volume (veh/h)            | 5                                                                                 | 0                                                                                 | 0                                                                                 | 465                                                                               | 470                                                                               | 0                                                                                 |
| Future Volume (Veh/h)             | 5                                                                                 | 0                                                                                 | 0                                                                                 | 465                                                                               | 470                                                                               | 0                                                                                 |
| Sign Control                      | Stop                                                                              |                                                                                   |                                                                                   | Free                                                                              | Free                                                                              |                                                                                   |
| Grade                             | 0%                                                                                |                                                                                   |                                                                                   | 0%                                                                                | 0%                                                                                |                                                                                   |
| Peak Hour Factor                  | 0.91                                                                              | 0.91                                                                              | 0.91                                                                              | 0.91                                                                              | 0.91                                                                              | 0.91                                                                              |
| Hourly flow rate (vph)            | 5                                                                                 | 0                                                                                 | 0                                                                                 | 511                                                                               | 516                                                                               | 0                                                                                 |
| Pedestrians                       | 470                                                                               |                                                                                   |                                                                                   | 25                                                                                | 5                                                                                 |                                                                                   |
| Lane Width (m)                    | 3.5                                                                               |                                                                                   |                                                                                   | 3.5                                                                               | 3.5                                                                               |                                                                                   |
| Walking Speed (m/s)               | 1.2                                                                               |                                                                                   |                                                                                   | 1.2                                                                               | 1.2                                                                               |                                                                                   |
| Percent Blockage                  | 38                                                                                |                                                                                   |                                                                                   | 2                                                                                 | 0                                                                                 |                                                                                   |
| Right turn flare (veh)            |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| Median type                       |                                                                                   |                                                                                   |                                                                                   | None                                                                              | None                                                                              |                                                                                   |
| Median storage veh                |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| Upstream signal (m)               |                                                                                   |                                                                                   |                                                                                   | 144                                                                               | 90                                                                                |                                                                                   |
| pX, platoon unblocked             |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| vC, conflicting volume            | 1246                                                                              | 753                                                                               | 986                                                                               |                                                                                   |                                                                                   |                                                                                   |
| vC1, stage 1 conf vol             |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| vC2, stage 2 conf vol             |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| vCu, unblocked vol                | 1246                                                                              | 753                                                                               | 986                                                                               |                                                                                   |                                                                                   |                                                                                   |
| tC, single (s)                    | 6.8                                                                               | 6.9                                                                               | 4.1                                                                               |                                                                                   |                                                                                   |                                                                                   |
| tC, 2 stage (s)                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| tF (s)                            | 3.5                                                                               | 3.3                                                                               | 2.2                                                                               |                                                                                   |                                                                                   |                                                                                   |
| p0 queue free %                   | 95                                                                                | 100                                                                               | 100                                                                               |                                                                                   |                                                                                   |                                                                                   |
| cM capacity (veh/h)               | 104                                                                               | 216                                                                               | 439                                                                               |                                                                                   |                                                                                   |                                                                                   |
| Direction, Lane #                 | EB 1                                                                              | NB 1                                                                              | NB 2                                                                              | SB 1                                                                              | SB 2                                                                              |                                                                                   |
| Volume Total                      | 5                                                                                 | 170                                                                               | 341                                                                               | 344                                                                               | 172                                                                               |                                                                                   |
| Volume Left                       | 5                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                   |
| Volume Right                      | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                   |
| cSH                               | 104                                                                               | 439                                                                               | 1700                                                                              | 1700                                                                              | 1700                                                                              |                                                                                   |
| Volume to Capacity                | 0.05                                                                              | 0.00                                                                              | 0.20                                                                              | 0.20                                                                              | 0.10                                                                              |                                                                                   |
| Queue Length 95th (m)             | 1.2                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   |
| Control Delay (s)                 | 41.4                                                                              | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   |
| Lane LOS                          | E                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| Approach Delay (s)                | 41.4                                                                              | 0.0                                                                               |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   |
| Approach LOS                      | E                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| <b>Intersection Summary</b>       |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| Average Delay                     |                                                                                   |                                                                                   | 0.2                                                                               |                                                                                   |                                                                                   |                                                                                   |
| Intersection Capacity Utilization |                                                                                   |                                                                                   | 29.0%                                                                             | ICU Level of Service                                                              |                                                                                   | A                                                                                 |
| Analysis Period (min)             |                                                                                   |                                                                                   | 15                                                                                |                                                                                   |                                                                                   |                                                                                   |

# HCM Unsignalized Intersection Capacity Analysis

## 3: Broadview Ave & Dearbourne Ave

Future Background PM Peak Hour

|                                   |                                                                                   |                                                                                   |                                                                                                                                                                     |                                                                                   |                                                                                   |                                                                                                                                                                     |
|-----------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                   |  |  |                                                                                    |  |  |                                                                                    |
| Movement                          | WBL                                                                               | WBR                                                                               | NBT                                                                                                                                                                 | NBR                                                                               | SBL                                                                               | SBT                                                                                                                                                                 |
| Lane Configurations               |  |                                                                                   |   |                                                                                   |                                                                                   |   |
| Traffic Volume (veh/h)            | 15                                                                                | 25                                                                                | 445                                                                                                                                                                 | 0                                                                                 | 0                                                                                 | 475                                                                                                                                                                 |
| Future Volume (Veh/h)             | 15                                                                                | 25                                                                                | 445                                                                                                                                                                 | 0                                                                                 | 0                                                                                 | 475                                                                                                                                                                 |
| Sign Control                      | Stop                                                                              |                                                                                   | Free                                                                                                                                                                |                                                                                   |                                                                                   | Free                                                                                                                                                                |
| Grade                             | 0%                                                                                |                                                                                   | 0%                                                                                                                                                                  |                                                                                   |                                                                                   | 0%                                                                                                                                                                  |
| Peak Hour Factor                  | 0.91                                                                              | 0.91                                                                              | 0.91                                                                                                                                                                | 0.91                                                                              | 0.91                                                                              | 0.91                                                                                                                                                                |
| Hourly flow rate (vph)            | 16                                                                                | 27                                                                                | 489                                                                                                                                                                 | 0                                                                                 | 0                                                                                 | 522                                                                                                                                                                 |
| Pedestrians                       | 300                                                                               |                                                                                   | 25                                                                                                                                                                  |                                                                                   |                                                                                   | 20                                                                                                                                                                  |
| Lane Width (m)                    | 3.5                                                                               |                                                                                   | 3.5                                                                                                                                                                 |                                                                                   |                                                                                   | 3.5                                                                                                                                                                 |
| Walking Speed (m/s)               | 1.2                                                                               |                                                                                   | 1.2                                                                                                                                                                 |                                                                                   |                                                                                   | 1.2                                                                                                                                                                 |
| Percent Blockage                  | 24                                                                                |                                                                                   | 2                                                                                                                                                                   |                                                                                   |                                                                                   | 2                                                                                                                                                                   |
| Right turn flare (veh)            |                                                                                   |                                                                                   |                                                                                                                                                                     |                                                                                   |                                                                                   |                                                                                                                                                                     |
| Median type                       |                                                                                   |                                                                                   | None                                                                                                                                                                |                                                                                   |                                                                                   | None                                                                                                                                                                |
| Median storage veh                |                                                                                   |                                                                                   |                                                                                                                                                                     |                                                                                   |                                                                                   |                                                                                                                                                                     |
| Upstream signal (m)               |                                                                                   |                                                                                   | 122                                                                                                                                                                 |                                                                                   |                                                                                   | 112                                                                                                                                                                 |
| pX, platoon unblocked             |                                                                                   |                                                                                   |                                                                                                                                                                     |                                                                                   |                                                                                   |                                                                                                                                                                     |
| vC, conflicting volume            | 1075                                                                              | 564                                                                               |                                                                                                                                                                     |                                                                                   | 789                                                                               |                                                                                                                                                                     |
| vC1, stage 1 conf vol             |                                                                                   |                                                                                   |                                                                                                                                                                     |                                                                                   |                                                                                   |                                                                                                                                                                     |
| vC2, stage 2 conf vol             |                                                                                   |                                                                                   |                                                                                                                                                                     |                                                                                   |                                                                                   |                                                                                                                                                                     |
| vCu, unblocked vol                | 1075                                                                              | 564                                                                               |                                                                                                                                                                     |                                                                                   | 789                                                                               |                                                                                                                                                                     |
| tC, single (s)                    | 6.8                                                                               | 6.9                                                                               |                                                                                                                                                                     |                                                                                   | 4.1                                                                               |                                                                                                                                                                     |
| tC, 2 stage (s)                   |                                                                                   |                                                                                   |                                                                                                                                                                     |                                                                                   |                                                                                   |                                                                                                                                                                     |
| tF (s)                            | 3.5                                                                               | 3.3                                                                               |                                                                                                                                                                     |                                                                                   | 2.2                                                                               |                                                                                                                                                                     |
| p0 queue free %                   | 90                                                                                | 92                                                                                |                                                                                                                                                                     |                                                                                   | 100                                                                               |                                                                                                                                                                     |
| cM capacity (veh/h)               | 161                                                                               | 353                                                                               |                                                                                                                                                                     |                                                                                   | 636                                                                               |                                                                                                                                                                     |
| Direction, Lane #                 | WB 1                                                                              | NB 1                                                                              | NB 2                                                                                                                                                                | SB 1                                                                              | SB 2                                                                              |                                                                                                                                                                     |
| Volume Total                      | 43                                                                                | 244                                                                               | 244                                                                                                                                                                 | 261                                                                               | 261                                                                               |                                                                                                                                                                     |
| Volume Left                       | 16                                                                                | 0                                                                                 | 0                                                                                                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                                                                                                     |
| Volume Right                      | 27                                                                                | 0                                                                                 | 0                                                                                                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                                                                                                     |
| cSH                               | 245                                                                               | 1700                                                                              | 1700                                                                                                                                                                | 1700                                                                              | 1700                                                                              |                                                                                                                                                                     |
| Volume to Capacity                | 0.18                                                                              | 0.14                                                                              | 0.14                                                                                                                                                                | 0.15                                                                              | 0.15                                                                              |                                                                                                                                                                     |
| Queue Length 95th (m)             | 5.0                                                                               | 0.0                                                                               | 0.0                                                                                                                                                                 | 0.0                                                                               | 0.0                                                                               |                                                                                                                                                                     |
| Control Delay (s)                 | 22.8                                                                              | 0.0                                                                               | 0.0                                                                                                                                                                 | 0.0                                                                               | 0.0                                                                               |                                                                                                                                                                     |
| Lane LOS                          | C                                                                                 |                                                                                   |                                                                                                                                                                     |                                                                                   |                                                                                   |                                                                                                                                                                     |
| Approach Delay (s)                | 22.8                                                                              | 0.0                                                                               |                                                                                                                                                                     | 0.0                                                                               |                                                                                   |                                                                                                                                                                     |
| Approach LOS                      | C                                                                                 |                                                                                   |                                                                                                                                                                     |                                                                                   |                                                                                   |                                                                                                                                                                     |
| Intersection Summary              |                                                                                   |                                                                                   |                                                                                                                                                                     |                                                                                   |                                                                                   |                                                                                                                                                                     |
| Average Delay                     |                                                                                   |                                                                                   | 0.9                                                                                                                                                                 |                                                                                   |                                                                                   |                                                                                                                                                                     |
| Intersection Capacity Utilization |                                                                                   |                                                                                   | 28.3%                                                                                                                                                               | ICU Level of Service                                                              |                                                                                   | A                                                                                                                                                                   |
| Analysis Period (min)             |                                                                                   |                                                                                   | 15                                                                                                                                                                  |                                                                                   |                                                                                   |                                                                                                                                                                     |



# HCM Unsignalized Intersection Capacity Analysis

## 4: Broadview Ave & North Site Driveway

Future Background PM Peak Hour

|                                   |  |  |  |  |  |  |
|-----------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| Movement                          | EBL                                                                               | EBR                                                                               | NBL                                                                               | NBT                                                                               | SBT                                                                               | SBR                                                                               |
| Lane Configurations               |                                                                                   |                                                                                   |                                                                                   |  |  |                                                                                   |
| Traffic Volume (veh/h)            | 0                                                                                 | 0                                                                                 | 45                                                                                | 440                                                                               | 440                                                                               | 55                                                                                |
| Future Volume (Veh/h)             | 0                                                                                 | 0                                                                                 | 45                                                                                | 440                                                                               | 440                                                                               | 55                                                                                |
| 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                                                                                 | 48                                                                                | 473                                                                               | 473                                                                               | 59                                                                                |
| Pedestrians                       | 370                                                                               |                                                                                   |                                                                                   | 5                                                                                 | 15                                                                                |                                                                                   |
| Lane Width (m)                    | 0.0                                                                               |                                                                                   |                                                                                   | 3.5                                                                               | 3.5                                                                               |                                                                                   |
| Walking Speed (m/s)               | 1.2                                                                               |                                                                                   |                                                                                   | 1.2                                                                               | 1.2                                                                               |                                                                                   |
| Percent Blockage                  | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 | 1                                                                                 |                                                                                   |
| Right turn flare (veh)            |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| Median type                       |                                                                                   |                                                                                   |                                                                                   | None                                                                              | None                                                                              |                                                                                   |
| Median storage veh                |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| Upstream signal (m)               |                                                                                   |                                                                                   |                                                                                   | 87                                                                                | 146                                                                               |                                                                                   |
| pX, platoon unblocked             |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| vC, conflicting volume            | 1220                                                                              | 641                                                                               | 902                                                                               |                                                                                   |                                                                                   |                                                                                   |
| vC1, stage 1 conf vol             |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| vC2, stage 2 conf vol             |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| vCu, unblocked vol                | 1220                                                                              | 641                                                                               | 902                                                                               |                                                                                   |                                                                                   |                                                                                   |
| 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                                                                               | 94                                                                                |                                                                                   |                                                                                   |                                                                                   |
| cM capacity (veh/h)               | 162                                                                               | 421                                                                               | 762                                                                               |                                                                                   |                                                                                   |                                                                                   |
| Direction, Lane #                 | NB 1                                                                              | NB 2                                                                              | SB 1                                                                              | SB 2                                                                              |                                                                                   |                                                                                   |
| Volume Total                      | 206                                                                               | 315                                                                               | 315                                                                               | 217                                                                               |                                                                                   |                                                                                   |
| Volume Left                       | 48                                                                                | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                   |                                                                                   |
| Volume Right                      | 0                                                                                 | 0                                                                                 | 0                                                                                 | 59                                                                                |                                                                                   |                                                                                   |
| cSH                               | 762                                                                               | 1700                                                                              | 1700                                                                              | 1700                                                                              |                                                                                   |                                                                                   |
| Volume to Capacity                | 0.06                                                                              | 0.19                                                                              | 0.19                                                                              | 0.13                                                                              |                                                                                   |                                                                                   |
| Queue Length 95th (m)             | 1.6                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   |                                                                                   |
| Control Delay (s)                 | 2.9                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   |                                                                                   |
| Lane LOS                          | A                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| Approach Delay (s)                | 1.1                                                                               |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   |                                                                                   |
| Approach LOS                      |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| Intersection Summary              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| Average Delay                     |                                                                                   |                                                                                   | 0.6                                                                               |                                                                                   |                                                                                   |                                                                                   |
| Intersection Capacity Utilization |                                                                                   |                                                                                   | 43.3%                                                                             | ICU Level of Service                                                              |                                                                                   | A                                                                                 |
| Analysis Period (min)             |                                                                                   |                                                                                   | 15                                                                                |                                                                                   |                                                                                   |                                                                                   |

# HCM Unsignalized Intersection Capacity Analysis5: Broadview Ave & South Site Driveway

Future Background PM Peak Hour

|                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
|-----------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
|                                   |  |  |  |  |  |  |
| Movement                          | EBL                                                                               | EBR                                                                               | NBL                                                                               | NBT                                                                               | SBT                                                                               | SBR                                                                               |
| Lane Configurations               |  |                                                                                   |                                                                                   |  |  |                                                                                   |
| Traffic Volume (veh/h)            | 30                                                                                | 65                                                                                | 0                                                                                 | 460                                                                               | 435                                                                               | 0                                                                                 |
| Future Volume (Veh/h)             | 30                                                                                | 65                                                                                | 0                                                                                 | 460                                                                               | 435                                                                               | 0                                                                                 |
| 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)            | 32                                                                                | 70                                                                                | 0                                                                                 | 495                                                                               | 468                                                                               | 0                                                                                 |
| Pedestrians                       | 340                                                                               |                                                                                   |                                                                                   | 10                                                                                | 5                                                                                 |                                                                                   |
| Lane Width (m)                    | 3.5                                                                               |                                                                                   |                                                                                   | 3.5                                                                               | 3.5                                                                               |                                                                                   |
| Walking Speed (m/s)               | 1.2                                                                               |                                                                                   |                                                                                   | 1.2                                                                               | 1.2                                                                               |                                                                                   |
| Percent Blockage                  | 28                                                                                |                                                                                   |                                                                                   | 1                                                                                 | 0                                                                                 |                                                                                   |
| Right turn flare (veh)            |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| Median type                       |                                                                                   |                                                                                   |                                                                                   | None                                                                              | None                                                                              |                                                                                   |
| Median storage veh                |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| Upstream signal (m)               |                                                                                   |                                                                                   |                                                                                   | 64                                                                                | 169                                                                               |                                                                                   |
| pX, platoon unblocked             |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| vC, conflicting volume            | 1060                                                                              | 584                                                                               | 808                                                                               |                                                                                   |                                                                                   |                                                                                   |
| vC1, stage 1 conf vol             |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| vC2, stage 2 conf vol             |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| vCu, unblocked vol                | 1060                                                                              | 584                                                                               | 808                                                                               |                                                                                   |                                                                                   |                                                                                   |
| tC, single (s)                    | 6.8                                                                               | 6.9                                                                               | 4.1                                                                               |                                                                                   |                                                                                   |                                                                                   |
| tC, 2 stage (s)                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| tF (s)                            | 3.5                                                                               | 3.3                                                                               | 2.2                                                                               |                                                                                   |                                                                                   |                                                                                   |
| p0 queue free %                   | 80                                                                                | 79                                                                                | 100                                                                               |                                                                                   |                                                                                   |                                                                                   |
| cM capacity (veh/h)               | 160                                                                               | 331                                                                               | 599                                                                               |                                                                                   |                                                                                   |                                                                                   |
| Direction, Lane #                 | EB 1                                                                              | NB 1                                                                              | NB 2                                                                              | SB 1                                                                              | SB 2                                                                              |                                                                                   |
| Volume Total                      | 102                                                                               | 248                                                                               | 248                                                                               | 234                                                                               | 234                                                                               |                                                                                   |
| Volume Left                       | 32                                                                                | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                   |
| Volume Right                      | 70                                                                                | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                   |
| cSH                               | 248                                                                               | 1700                                                                              | 1700                                                                              | 1700                                                                              | 1700                                                                              |                                                                                   |
| Volume to Capacity                | 0.41                                                                              | 0.15                                                                              | 0.15                                                                              | 0.14                                                                              | 0.14                                                                              |                                                                                   |
| Queue Length 95th (m)             | 15.2                                                                              | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   |
| Control Delay (s)                 | 29.3                                                                              | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   |
| Lane LOS                          | D                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| Approach Delay (s)                | 29.3                                                                              | 0.0                                                                               |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   |
| Approach LOS                      | D                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| Intersection Summary              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| Average Delay                     |                                                                                   |                                                                                   | 2.8                                                                               |                                                                                   |                                                                                   |                                                                                   |
| Intersection Capacity Utilization |                                                                                   |                                                                                   | 28.3%                                                                             | ICU Level of Service                                                              |                                                                                   | A                                                                                 |
| Analysis Period (min)             |                                                                                   |                                                                                   | 15                                                                                |                                                                                   |                                                                                   |                                                                                   |

# HCM Unsignalized Intersection Capacity Analysis

## 6: Broadview Ave & Fairview Blvd

Future Background PM Peak Hour

|                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
|-----------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
|                                   |  |  |  |  |  |  |
| Movement                          | WBL                                                                               | WBR                                                                               | NBT                                                                               | NBR                                                                               | SBL                                                                               | SBT                                                                               |
| Lane Configurations               |                                                                                   |                                                                                   |  |                                                                                   |                                                                                   |  |
| Traffic Volume (veh/h)            | 0                                                                                 | 0                                                                                 | 455                                                                               | 15                                                                                | 30                                                                                | 465                                                                               |
| Future Volume (Veh/h)             | 0                                                                                 | 0                                                                                 | 455                                                                               | 15                                                                                | 30                                                                                | 465                                                                               |
| 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                                                                                 | 495                                                                               | 16                                                                                | 33                                                                                | 505                                                                               |
| Pedestrians                       | 275                                                                               |                                                                                   | 5                                                                                 |                                                                                   |                                                                                   | 10                                                                                |
| Lane Width (m)                    | 0.0                                                                               |                                                                                   | 3.5                                                                               |                                                                                   |                                                                                   | 3.5                                                                               |
| Walking Speed (m/s)               | 1.2                                                                               |                                                                                   | 1.2                                                                               |                                                                                   |                                                                                   | 1.2                                                                               |
| Percent Blockage                  | 0                                                                                 |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 1                                                                                 |
| Right turn flare (veh)            |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| Median type                       |                                                                                   |                                                                                   | None                                                                              |                                                                                   |                                                                                   | None                                                                              |
| Median storage (veh)              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| Upstream signal (m)               |                                                                                   |                                                                                   | 45                                                                                |                                                                                   |                                                                                   | 189                                                                               |
| pX, platoon unblocked             | 0.98                                                                              | 0.98                                                                              |                                                                                   |                                                                                   | 0.98                                                                              |                                                                                   |
| vC, conflicting volume            | 1102                                                                              | 540                                                                               |                                                                                   |                                                                                   | 786                                                                               |                                                                                   |
| vC1, stage 1 conf vol             |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| vC2, stage 2 conf vol             |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| vCu, unblocked vol                | 1065                                                                              | 494                                                                               |                                                                                   |                                                                                   | 744                                                                               |                                                                                   |
| 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                                                                               |                                                                                   |                                                                                   | 96                                                                                |                                                                                   |
| cM capacity (veh/h)               | 207                                                                               | 512                                                                               |                                                                                   |                                                                                   | 856                                                                               |                                                                                   |
| Direction, Lane #                 | NB 1                                                                              | NB 2                                                                              | SB 1                                                                              | SB 2                                                                              |                                                                                   |                                                                                   |
| Volume Total                      | 330                                                                               | 181                                                                               | 201                                                                               | 337                                                                               |                                                                                   |                                                                                   |
| Volume Left                       | 0                                                                                 | 0                                                                                 | 33                                                                                | 0                                                                                 |                                                                                   |                                                                                   |
| Volume Right                      | 0                                                                                 | 16                                                                                | 0                                                                                 | 0                                                                                 |                                                                                   |                                                                                   |
| cSH                               | 1700                                                                              | 1700                                                                              | 856                                                                               | 1700                                                                              |                                                                                   |                                                                                   |
| Volume to Capacity                | 0.19                                                                              | 0.11                                                                              | 0.04                                                                              | 0.20                                                                              |                                                                                   |                                                                                   |
| Queue Length 95th (m)             | 0.0                                                                               | 0.0                                                                               | 1.0                                                                               | 0.0                                                                               |                                                                                   |                                                                                   |
| Control Delay (s)                 | 0.0                                                                               | 0.0                                                                               | 1.9                                                                               | 0.0                                                                               |                                                                                   |                                                                                   |
| Lane LOS                          |                                                                                   |                                                                                   | A                                                                                 |                                                                                   |                                                                                   |                                                                                   |
| Approach Delay (s)                | 0.0                                                                               |                                                                                   | 0.7                                                                               |                                                                                   |                                                                                   |                                                                                   |
| Approach LOS                      |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| Intersection Summary              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| Average Delay                     |                                                                                   |                                                                                   | 0.4                                                                               |                                                                                   |                                                                                   |                                                                                   |
| Intersection Capacity Utilization |                                                                                   |                                                                                   | 43.2%                                                                             |                                                                                   | ICU Level of Service                                                              | A                                                                                 |
| Analysis Period (min)             |                                                                                   |                                                                                   | 15                                                                                |                                                                                   |                                                                                   |                                                                                   |



## Queues

### 7: Broadview Ave & PXO

Future Background PM Peak Hour

|                        | ↑     | ↓     |      |
|------------------------|-------|-------|------|
| Lane Group             | NBT   | SBT   | Ø9   |
| Lane Configurations    | ↑↑    | ↑↑    |      |
| Traffic Volume (vph)   | 470   | 465   |      |
| Future Volume (vph)    | 470   | 465   |      |
| Lane Group Flow (vph)  | 500   | 495   |      |
| Turn Type              | NA    | NA    |      |
| Protected Phases       | 2     | 6     | 9    |
| Permitted Phases       |       |       |      |
| Detector Phase         | 2     | 6     |      |
| Switch Phase           |       |       |      |
| Minimum Initial (s)    | 5.0   | 5.0   | 5.0  |
| Minimum Split (s)      | 8.0   | 8.0   | 22.5 |
| Total Split (s)        | 60.0  | 60.0  | 50.0 |
| Total Split (%)        | 54.5% | 54.5% | 45%  |
| Yellow Time (s)        | 2.0   | 2.0   | 3.5  |
| All-Red Time (s)       | 1.0   | 1.0   | 1.0  |
| Lost Time Adjust (s)   | -1.0  | -1.0  |      |
| Total Lost Time (s)    | 2.0   | 2.0   |      |
| Lead/Lag               |       |       |      |
| Lead-Lag Optimize?     |       |       |      |
| Recall Mode            | Min   | Min   | None |
| v/c Ratio              | 0.16  | 0.16  |      |
| Control Delay          | 2.3   | 2.3   |      |
| Queue Delay            | 0.0   | 0.0   |      |
| Total Delay            | 2.3   | 2.3   |      |
| Queue Length 50th (m)  | 0.0   | 0.0   |      |
| Queue Length 95th (m)  | 19.8  | 19.6  |      |
| Internal Link Dist (m) | 3.2   | 21.0  |      |
| Turn Bay Length (m)    |       |       |      |
| Base Capacity (vph)    | 3433  | 3400  |      |
| Starvation Cap Reductn | 0     | 0     |      |
| Spillback Cap Reductn  | 0     | 0     |      |
| Storage Cap Reductn    | 0     | 0     |      |
| Reduced v/c Ratio      | 0.15  | 0.15  |      |

#### Intersection Summary

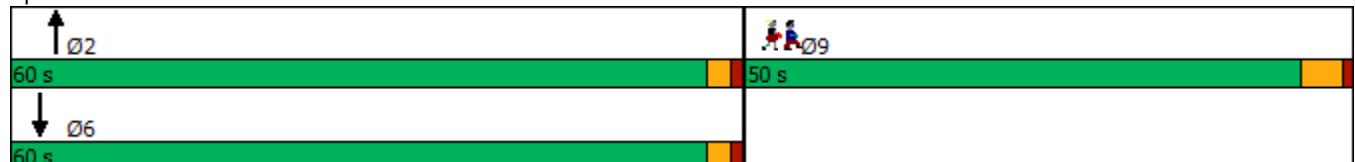
Cycle Length: 110

Actuated Cycle Length: 30.1

Natural Cycle: 40

Control Type: Actuated-Uncoordinated

Splits and Phases: 7: Broadview Ave & PXO



# HCM Signalized Intersection Capacity Analysis

## 7: Broadview Ave & PXO

Future Background PM Peak Hour

|                                   |  |  |  |  |  |  |
|-----------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| Movement                          | EBL                                                                               | EBR                                                                               | NBL                                                                               | NBT                                                                               | SBT                                                                               | SBR                                                                               |
| Lane Configurations               |                                                                                   |                                                                                   |                                                                                   | ↑↑                                                                                | ↑↑                                                                                |                                                                                   |
| Traffic Volume (vph)              | 0                                                                                 | 0                                                                                 | 0                                                                                 | 470                                                                               | 465                                                                               | 0                                                                                 |
| Future Volume (vph)               | 0                                                                                 | 0                                                                                 | 0                                                                                 | 470                                                                               | 465                                                                               | 0                                                                                 |
| Ideal Flow (vphpl)                | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              |
| Total Lost time (s)               |                                                                                   |                                                                                   |                                                                                   | 2.0                                                                               | 2.0                                                                               |                                                                                   |
| Lane Util. Factor                 |                                                                                   |                                                                                   |                                                                                   | 0.95                                                                              | 0.95                                                                              |                                                                                   |
| Frt                               |                                                                                   |                                                                                   |                                                                                   | 1.00                                                                              | 1.00                                                                              |                                                                                   |
| Flt Protected                     |                                                                                   |                                                                                   |                                                                                   | 1.00                                                                              | 1.00                                                                              |                                                                                   |
| Satd. Flow (prot)                 |                                                                                   |                                                                                   |                                                                                   | 3433                                                                              | 3400                                                                              |                                                                                   |
| Flt Permitted                     |                                                                                   |                                                                                   |                                                                                   | 1.00                                                                              | 1.00                                                                              |                                                                                   |
| Satd. Flow (perm)                 |                                                                                   |                                                                                   |                                                                                   | 3433                                                                              | 3400                                                                              |                                                                                   |
| Peak-hour factor, PHF             | 0.94                                                                              | 0.94                                                                              | 0.94                                                                              | 0.94                                                                              | 0.94                                                                              | 0.94                                                                              |
| Adj. Flow (vph)                   | 0                                                                                 | 0                                                                                 | 0                                                                                 | 500                                                                               | 495                                                                               | 0                                                                                 |
| RTOR Reduction (vph)              | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 |
| Lane Group Flow (vph)             | 0                                                                                 | 0                                                                                 | 0                                                                                 | 500                                                                               | 495                                                                               | 0                                                                                 |
| Heavy Vehicles (%)                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 4%                                                                                | 5%                                                                                | 0%                                                                                |
| Turn Type                         |                                                                                   |                                                                                   |                                                                                   | NA                                                                                | NA                                                                                |                                                                                   |
| Protected Phases                  |                                                                                   |                                                                                   |                                                                                   | 2                                                                                 | 6                                                                                 |                                                                                   |
| Permitted Phases                  |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| Actuated Green, G (s)             |                                                                                   |                                                                                   |                                                                                   | 24.3                                                                              | 24.3                                                                              |                                                                                   |
| Effective Green, g (s)            |                                                                                   |                                                                                   |                                                                                   | 25.3                                                                              | 25.3                                                                              |                                                                                   |
| Actuated g/C Ratio                |                                                                                   |                                                                                   |                                                                                   | 0.75                                                                              | 0.75                                                                              |                                                                                   |
| Clearance Time (s)                |                                                                                   |                                                                                   |                                                                                   | 3.0                                                                               | 3.0                                                                               |                                                                                   |
| Vehicle Extension (s)             |                                                                                   |                                                                                   |                                                                                   | 3.0                                                                               | 3.0                                                                               |                                                                                   |
| Lane Grp Cap (vph)                |                                                                                   |                                                                                   |                                                                                   | 2562                                                                              | 2537                                                                              |                                                                                   |
| v/s Ratio Prot                    |                                                                                   |                                                                                   |                                                                                   | c0.15                                                                             | 0.15                                                                              |                                                                                   |
| v/s Ratio Perm                    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| v/c Ratio                         |                                                                                   |                                                                                   |                                                                                   | 0.20                                                                              | 0.20                                                                              |                                                                                   |
| Uniform Delay, d1                 |                                                                                   |                                                                                   |                                                                                   | 1.3                                                                               | 1.3                                                                               |                                                                                   |
| Progression Factor                |                                                                                   |                                                                                   |                                                                                   | 1.00                                                                              | 1.00                                                                              |                                                                                   |
| Incremental Delay, d2             |                                                                                   |                                                                                   |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   |
| Delay (s)                         |                                                                                   |                                                                                   |                                                                                   | 1.3                                                                               | 1.3                                                                               |                                                                                   |
| Level of Service                  |                                                                                   |                                                                                   |                                                                                   | A                                                                                 | A                                                                                 |                                                                                   |
| Approach Delay (s)                | 0.0                                                                               |                                                                                   |                                                                                   | 1.3                                                                               | 1.3                                                                               |                                                                                   |
| Approach LOS                      | A                                                                                 |                                                                                   |                                                                                   | A                                                                                 | A                                                                                 |                                                                                   |
| Intersection Summary              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| HCM 2000 Control Delay            |                                                                                   |                                                                                   | 1.3                                                                               | HCM 2000 Level of Service                                                         |                                                                                   | A                                                                                 |
| HCM 2000 Volume to Capacity ratio |                                                                                   |                                                                                   | 0.18                                                                              |                                                                                   |                                                                                   |                                                                                   |
| Actuated Cycle Length (s)         |                                                                                   |                                                                                   | 33.9                                                                              | Sum of lost time (s)                                                              |                                                                                   | 6.5                                                                               |
| Intersection Capacity Utilization |                                                                                   |                                                                                   | 16.3%                                                                             | ICU Level of Service                                                              |                                                                                   | A                                                                                 |
| Analysis Period (min)             |                                                                                   |                                                                                   | 15                                                                                |                                                                                   |                                                                                   |                                                                                   |
| c Critical Lane Group             |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |

# HCM Unsignalized Intersection Capacity Analysis8: Broadview Ave & Wolfrey Ave

Future Background PM Peak Hour

|                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
|-----------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
|                                   |  |  |  |  |  |  |
| Movement                          | WBL                                                                               | WBR                                                                               | NBT                                                                               | NBR                                                                               | SBL                                                                               | SBT                                                                               |
| Lane Configurations               |  |                                                                                   |  |                                                                                   |                                                                                   |  |
| Traffic Volume (veh/h)            | 5                                                                                 | 5                                                                                 | 460                                                                               | 0                                                                                 | 10                                                                                | 455                                                                               |
| Future Volume (Veh/h)             | 5                                                                                 | 5                                                                                 | 460                                                                               | 0                                                                                 | 10                                                                                | 455                                                                               |
| Sign Control                      | Stop                                                                              |                                                                                   | Free                                                                              |                                                                                   |                                                                                   | Free                                                                              |
| Grade                             | 0%                                                                                |                                                                                   | 0%                                                                                |                                                                                   |                                                                                   | 0%                                                                                |
| Peak Hour Factor                  | 0.94                                                                              | 0.94                                                                              | 0.94                                                                              | 0.94                                                                              | 0.94                                                                              | 0.94                                                                              |
| Hourly flow rate (vph)            | 5                                                                                 | 5                                                                                 | 489                                                                               | 0                                                                                 | 11                                                                                | 484                                                                               |
| Pedestrians                       | 260                                                                               |                                                                                   | 5                                                                                 |                                                                                   |                                                                                   | 150                                                                               |
| Lane Width (m)                    | 3.5                                                                               |                                                                                   | 3.5                                                                               |                                                                                   |                                                                                   | 3.5                                                                               |
| Walking Speed (m/s)               | 1.2                                                                               |                                                                                   | 1.2                                                                               |                                                                                   |                                                                                   | 1.2                                                                               |
| Percent Blockage                  | 21                                                                                |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 12                                                                                |
| Right turn flare (veh)            |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| Median type                       |                                                                                   |                                                                                   | None                                                                              |                                                                                   |                                                                                   | None                                                                              |
| Median storage veh                |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| Upstream signal (m)               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   | 27                                                                                |
| pX, platoon unblocked             | 0.97                                                                              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| vC, conflicting volume            | 1018                                                                              | 654                                                                               |                                                                                   |                                                                                   | 749                                                                               |                                                                                   |
| vC1, stage 1 conf vol             |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| vC2, stage 2 conf vol             |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| vCu, unblocked vol                | 958                                                                               | 654                                                                               |                                                                                   |                                                                                   | 749                                                                               |                                                                                   |
| tC, single (s)                    | 6.8                                                                               | 6.9                                                                               |                                                                                   |                                                                                   | 4.1                                                                               |                                                                                   |
| tC, 2 stage (s)                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| tF (s)                            | 3.5                                                                               | 3.3                                                                               |                                                                                   |                                                                                   | 2.2                                                                               |                                                                                   |
| p0 queue free %                   | 97                                                                                | 98                                                                                |                                                                                   |                                                                                   | 98                                                                                |                                                                                   |
| cM capacity (veh/h)               | 194                                                                               | 287                                                                               |                                                                                   |                                                                                   | 686                                                                               |                                                                                   |
| Direction, Lane #                 | WB 1                                                                              | NB 1                                                                              | NB 2                                                                              | SB 1                                                                              | SB 2                                                                              |                                                                                   |
| Volume Total                      | 10                                                                                | 326                                                                               | 163                                                                               | 172                                                                               | 323                                                                               |                                                                                   |
| Volume Left                       | 5                                                                                 | 0                                                                                 | 0                                                                                 | 11                                                                                | 0                                                                                 |                                                                                   |
| Volume Right                      | 5                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                   |
| cSH                               | 232                                                                               | 1700                                                                              | 1700                                                                              | 686                                                                               | 1700                                                                              |                                                                                   |
| Volume to Capacity                | 0.04                                                                              | 0.19                                                                              | 0.10                                                                              | 0.02                                                                              | 0.19                                                                              |                                                                                   |
| Queue Length 95th (m)             | 1.1                                                                               | 0.0                                                                               | 0.0                                                                               | 0.4                                                                               | 0.0                                                                               |                                                                                   |
| Control Delay (s)                 | 21.2                                                                              | 0.0                                                                               | 0.0                                                                               | 0.8                                                                               | 0.0                                                                               |                                                                                   |
| Lane LOS                          | C                                                                                 |                                                                                   |                                                                                   | A                                                                                 |                                                                                   |                                                                                   |
| Approach Delay (s)                | 21.2                                                                              | 0.0                                                                               |                                                                                   | 0.3                                                                               |                                                                                   |                                                                                   |
| Approach LOS                      | C                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| Intersection Summary              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| Average Delay                     |                                                                                   |                                                                                   | 0.4                                                                               |                                                                                   |                                                                                   |                                                                                   |
| Intersection Capacity Utilization |                                                                                   |                                                                                   | 39.7%                                                                             | ICU Level of Service                                                              |                                                                                   | A                                                                                 |
| Analysis Period (min)             |                                                                                   |                                                                                   | 15                                                                                |                                                                                   |                                                                                   |                                                                                   |



## Queues

### 1: Broadview Ave & Danforth Ave

|                        |  |  |  |  |  |  |   |  |  |
|------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group             | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | NBL                                                                               | NBT                                                                                 | SBL                                                                                 | SBT                                                                                 |
| Lane Configurations    |  |  |  |  |  |  |  |  |  |
| Traffic Volume (vph)   | 100                                                                               | 315                                                                               | 155                                                                               | 30                                                                                | 535                                                                               | 205                                                                               | 170                                                                                 | 15                                                                                  | 210                                                                                 |
| Future Volume (vph)    | 100                                                                               | 315                                                                               | 155                                                                               | 30                                                                                | 535                                                                               | 205                                                                               | 170                                                                                 | 15                                                                                  | 210                                                                                 |
| Lane Group Flow (vph)  | 110                                                                               | 346                                                                               | 170                                                                               | 33                                                                                | 615                                                                               | 225                                                                               | 220                                                                                 | 0                                                                                   | 555                                                                                 |
| Turn Type              | Perm                                                                              | NA                                                                                | Perm                                                                              | Perm                                                                              | NA                                                                                | pm+pt                                                                             | NA                                                                                  | Perm                                                                                | NA                                                                                  |
| Protected Phases       |                                                                                   | 2                                                                                 |                                                                                   |                                                                                   | 6                                                                                 | 7                                                                                 | 4                                                                                   |                                                                                     | 8                                                                                   |
| Permitted Phases       | 2                                                                                 |                                                                                   | 2                                                                                 | 6                                                                                 |                                                                                   | 4                                                                                 |                                                                                     | 8                                                                                   |                                                                                     |
| Detector Phase         | 2                                                                                 | 2                                                                                 | 2                                                                                 | 6                                                                                 | 6                                                                                 | 7                                                                                 | 4                                                                                   | 8                                                                                   | 8                                                                                   |
| Switch Phase           |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)    | 28.0                                                                              | 28.0                                                                              | 28.0                                                                              | 28.0                                                                              | 28.0                                                                              | 6.0                                                                               | 29.0                                                                                | 21.0                                                                                | 21.0                                                                                |
| Minimum Split (s)      | 35.1                                                                              | 35.1                                                                              | 35.1                                                                              | 35.1                                                                              | 35.1                                                                              | 13.5                                                                              | 36.0                                                                                | 36.0                                                                                | 36.0                                                                                |
| Total Split (s)        | 49.0                                                                              | 49.0                                                                              | 49.0                                                                              | 49.0                                                                              | 49.0                                                                              | 14.0                                                                              | 51.0                                                                                | 37.0                                                                                | 37.0                                                                                |
| Total Split (%)        | 49.0%                                                                             | 49.0%                                                                             | 49.0%                                                                             | 49.0%                                                                             | 49.0%                                                                             | 14.0%                                                                             | 51.0%                                                                               | 37.0%                                                                               | 37.0%                                                                               |
| Yellow Time (s)        | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.4                                                                                 | 3.4                                                                                 | 3.4                                                                                 |
| All-Red Time (s)       | 4.1                                                                               | 4.1                                                                               | 4.1                                                                               | 4.1                                                                               | 4.1                                                                               | 4.5                                                                               | 3.6                                                                                 | 3.6                                                                                 | 3.6                                                                                 |
| Lost Time Adjust (s)   | -1.0                                                                              | -1.0                                                                              | -1.0                                                                              | -1.0                                                                              | -1.0                                                                              | -1.0                                                                              | -1.0                                                                                |                                                                                     | -1.0                                                                                |
| Total Lost Time (s)    | 6.1                                                                               | 6.1                                                                               | 6.1                                                                               | 6.1                                                                               | 6.1                                                                               | 6.5                                                                               | 6.0                                                                                 |                                                                                     | 6.0                                                                                 |
| Lead/Lag               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   | Lead                                                                              |                                                                                     | Lag                                                                                 | Lag                                                                                 |
| Lead-Lag Optimize?     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   | Yes                                                                               |                                                                                     | Yes                                                                                 | Yes                                                                                 |
| Recall Mode            | C-Min                                                                             | C-Min                                                                             | C-Min                                                                             | C-Min                                                                             | C-Min                                                                             | None                                                                              | Min                                                                                 | Min                                                                                 | Min                                                                                 |
| v/c Ratio              | 0.58                                                                              | 0.48                                                                              | 0.35                                                                              | 0.14                                                                              | 0.45                                                                              | 0.61                                                                              | 0.33                                                                                |                                                                                     | 0.85                                                                                |
| Control Delay          | 38.6                                                                              | 25.4                                                                              | 5.2                                                                               | 21.4                                                                              | 23.3                                                                              | 26.1                                                                              | 16.7                                                                                |                                                                                     | 44.8                                                                                |
| Queue Delay            | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 |                                                                                     | 0.0                                                                                 |
| Total Delay            | 38.6                                                                              | 25.4                                                                              | 5.2                                                                               | 21.4                                                                              | 23.3                                                                              | 26.1                                                                              | 16.7                                                                                |                                                                                     | 44.8                                                                                |
| Queue Length 50th (m)  | 19.0                                                                              | 56.9                                                                              | 0.0                                                                               | 4.6                                                                               | 52.1                                                                              | 23.5                                                                              | 22.0                                                                                |                                                                                     | 52.3                                                                                |
| Queue Length 95th (m)  | 37.1                                                                              | 74.0                                                                              | 12.5                                                                              | 10.6                                                                              | 59.6                                                                              | #58.8                                                                             | 45.0                                                                                |                                                                                     | 72.5                                                                                |
| Internal Link Dist (m) |                                                                                   | 170.8                                                                             |                                                                                   |                                                                                   | 155.0                                                                             |                                                                                   | 66.0                                                                                |                                                                                     | 120.0                                                                               |
| Turn Bay Length (m)    | 65.0                                                                              |                                                                                   |                                                                                   | 35.0                                                                              |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |
| Base Capacity (vph)    | 206                                                                               | 783                                                                               | 515                                                                               | 266                                                                               | 1472                                                                              | 368                                                                               | 684                                                                                 |                                                                                     | 725                                                                                 |
| Starvation Cap Reductn | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                   |                                                                                     | 0                                                                                   |
| Spillback Cap Reductn  | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                   |                                                                                     | 0                                                                                   |
| Storage Cap Reductn    | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                   |                                                                                     | 0                                                                                   |
| Reduced v/c Ratio      | 0.53                                                                              | 0.44                                                                              | 0.33                                                                              | 0.12                                                                              | 0.42                                                                              | 0.61                                                                              | 0.32                                                                                |                                                                                     | 0.77                                                                                |

#### Intersection Summary

Cycle Length: 100

Actuated Cycle Length: 100

Offset: 99 (99%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

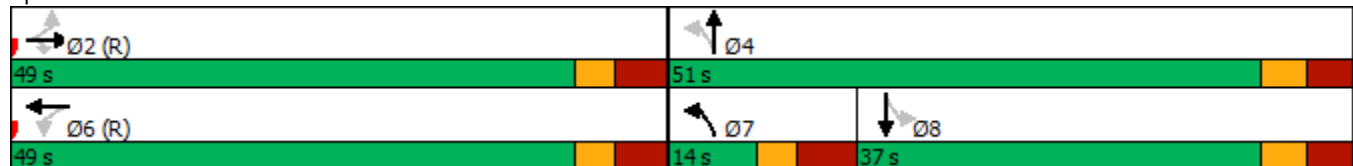
Natural Cycle: 85

Control Type: Actuated-Coordinated

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

Queue shown is maximum after two cycles.

#### Splits and Phases: 1: Broadview Ave & Danforth Ave



# HCM Signalized Intersection Capacity Analysis

## 1: Broadview Ave & Danforth Ave

|                                   |  |  |  |  |  |  |  |  |  |  |  |  |
|-----------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Movement                          | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations               |  |  |  |  |  |                                                                                   |  |  |                                                                                     |                                                                                     |  |  |
| Traffic Volume (vph)              | 100                                                                               | 315                                                                               | 155                                                                               | 30                                                                                | 535                                                                               | 25                                                                                | 205                                                                                | 170                                                                                 | 30                                                                                  | 15                                                                                  | 210                                                                                 | 280                                                                                 |
| Future Volume (vph)               | 100                                                                               | 315                                                                               | 155                                                                               | 30                                                                                | 535                                                                               | 25                                                                                | 205                                                                                | 170                                                                                 | 30                                                                                  | 15                                                                                  | 210                                                                                 | 280                                                                                 |
| 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                                                                               | 3.5                                                                               | 3.5                                                                                | 3.5                                                                                 | 3.5                                                                                 | 3.5                                                                                 | 3.5                                                                                 | 3.5                                                                                 |
| Total Lost time (s)               | 6.1                                                                               | 6.1                                                                               | 6.1                                                                               | 6.1                                                                               | 6.1                                                                               |                                                                                   | 6.5                                                                                | 6.0                                                                                 |                                                                                     |                                                                                     | 6.0                                                                                 |                                                                                     |
| Lane Util. Factor                 | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 0.95                                                                              |                                                                                   | 1.00                                                                               | 1.00                                                                                |                                                                                     |                                                                                     | 0.95                                                                                |                                                                                     |
| Frpb, ped/bikes                   | 1.00                                                                              | 1.00                                                                              | 0.66                                                                              | 1.00                                                                              | 0.97                                                                              |                                                                                   | 1.00                                                                               | 0.91                                                                                |                                                                                     |                                                                                     | 0.81                                                                                |                                                                                     |
| Flpb, ped/bikes                   | 0.78                                                                              | 1.00                                                                              | 1.00                                                                              | 0.82                                                                              | 1.00                                                                              |                                                                                   | 0.98                                                                               | 1.00                                                                                |                                                                                     |                                                                                     | 0.99                                                                                |                                                                                     |
| Frt                               | 1.00                                                                              | 1.00                                                                              | 0.85                                                                              | 1.00                                                                              | 0.99                                                                              |                                                                                   | 1.00                                                                               | 0.98                                                                                |                                                                                     |                                                                                     | 0.92                                                                                |                                                                                     |
| Flt Protected                     | 0.95                                                                              | 1.00                                                                              | 1.00                                                                              | 0.95                                                                              | 1.00                                                                              |                                                                                   | 0.95                                                                               | 1.00                                                                                |                                                                                     |                                                                                     | 1.00                                                                                |                                                                                     |
| Satd. Flow (prot)                 | 1301                                                                              | 1789                                                                              | 959                                                                               | 1309                                                                              | 3353                                                                              |                                                                                   | 1690                                                                               | 1398                                                                                |                                                                                     |                                                                                     | 2413                                                                                |                                                                                     |
| Flt Permitted                     | 0.35                                                                              | 1.00                                                                              | 1.00                                                                              | 0.44                                                                              | 1.00                                                                              |                                                                                   | 0.26                                                                               | 1.00                                                                                |                                                                                     |                                                                                     | 0.94                                                                                |                                                                                     |
| Satd. Flow (perm)                 | 474                                                                               | 1789                                                                              | 959                                                                               | 609                                                                               | 3353                                                                              |                                                                                   | 458                                                                                | 1398                                                                                |                                                                                     |                                                                                     | 2275                                                                                |                                                                                     |
| Peak-hour factor, PHF             | 0.91                                                                              | 0.91                                                                              | 0.91                                                                              | 0.91                                                                              | 0.91                                                                              | 0.91                                                                              | 0.91                                                                               | 0.91                                                                                | 0.91                                                                                | 0.91                                                                                | 0.91                                                                                | 0.91                                                                                |
| Adj. Flow (vph)                   | 110                                                                               | 346                                                                               | 170                                                                               | 33                                                                                | 588                                                                               | 27                                                                                | 225                                                                                | 187                                                                                 | 33                                                                                  | 16                                                                                  | 231                                                                                 | 308                                                                                 |
| RTOR Reduction (vph)              | 0                                                                                 | 0                                                                                 | 101                                                                               | 0                                                                                 | 4                                                                                 | 0                                                                                 | 0                                                                                  | 6                                                                                   | 0                                                                                   | 0                                                                                   | 20                                                                                  | 0                                                                                   |
| Lane Group Flow (vph)             | 110                                                                               | 346                                                                               | 69                                                                                | 33                                                                                | 611                                                                               | 0                                                                                 | 225                                                                                | 214                                                                                 | 0                                                                                   | 0                                                                                   | 535                                                                                 | 0                                                                                   |
| Confl. Peds. (#/hr)               | 535                                                                               |                                                                                   | 435                                                                               | 435                                                                               |                                                                                   | 535                                                                               | 425                                                                                |                                                                                     | 635                                                                                 | 635                                                                                 |                                                                                     | 425                                                                                 |
| Confl. Bikes (#/hr)               |                                                                                   |                                                                                   | 25                                                                                |                                                                                   |                                                                                   | 185                                                                               |                                                                                    |                                                                                     | 10                                                                                  |                                                                                     |                                                                                     | 15                                                                                  |
| Heavy Vehicles (%)                | 1%                                                                                | 5%                                                                                | 3%                                                                                | 6%                                                                                | 2%                                                                                | 17%                                                                               | 3%                                                                                 | 14%                                                                                 | 6%                                                                                  | 13%                                                                                 | 13%                                                                                 | 3%                                                                                  |
| Bus Blockages (#/hr)              | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                  | 13                                                                                  | 0                                                                                   | 0                                                                                   | 5                                                                                   | 0                                                                                   |
| Turn Type                         | Perm                                                                              | NA                                                                                | Perm                                                                              | Perm                                                                              | NA                                                                                |                                                                                   | pm+pt                                                                              | NA                                                                                  |                                                                                     | Perm                                                                                | NA                                                                                  |                                                                                     |
| Protected Phases                  |                                                                                   | 2                                                                                 |                                                                                   |                                                                                   | 6                                                                                 |                                                                                   | 7                                                                                  | 4                                                                                   |                                                                                     |                                                                                     | 8                                                                                   |                                                                                     |
| Permitted Phases                  | 2                                                                                 |                                                                                   | 2                                                                                 | 6                                                                                 |                                                                                   |                                                                                   | 4                                                                                  |                                                                                     |                                                                                     | 8                                                                                   |                                                                                     |                                                                                     |
| Actuated Green, G (s)             | 39.3                                                                              | 39.3                                                                              | 39.3                                                                              | 39.3                                                                              | 39.3                                                                              |                                                                                   | 46.6                                                                               | 46.6                                                                                |                                                                                     |                                                                                     | 26.9                                                                                |                                                                                     |
| Effective Green, g (s)            | 40.3                                                                              | 40.3                                                                              | 40.3                                                                              | 40.3                                                                              | 40.3                                                                              |                                                                                   | 47.6                                                                               | 47.6                                                                                |                                                                                     |                                                                                     | 27.9                                                                                |                                                                                     |
| Actuated g/C Ratio                | 0.40                                                                              | 0.40                                                                              | 0.40                                                                              | 0.40                                                                              | 0.40                                                                              |                                                                                   | 0.48                                                                               | 0.48                                                                                |                                                                                     |                                                                                     | 0.28                                                                                |                                                                                     |
| Clearance Time (s)                | 7.1                                                                               | 7.1                                                                               | 7.1                                                                               | 7.1                                                                               | 7.1                                                                               |                                                                                   | 7.5                                                                                | 7.0                                                                                 |                                                                                     |                                                                                     | 7.0                                                                                 |                                                                                     |
| Vehicle Extension (s)             | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                                | 3.0                                                                                 |                                                                                     |                                                                                     | 3.0                                                                                 |                                                                                     |
| Lane Grp Cap (vph)                | 191                                                                               | 720                                                                               | 386                                                                               | 245                                                                               | 1351                                                                              |                                                                                   | 380                                                                                | 665                                                                                 |                                                                                     |                                                                                     | 634                                                                                 |                                                                                     |
| v/s Ratio Prot                    |                                                                                   | 0.19                                                                              |                                                                                   |                                                                                   | 0.18                                                                              |                                                                                   | 0.08                                                                               | 0.15                                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| v/s Ratio Perm                    | 0.23                                                                              |                                                                                   | 0.07                                                                              | 0.05                                                                              |                                                                                   |                                                                                   | 0.20                                                                               |                                                                                     |                                                                                     |                                                                                     | 0.24                                                                                |                                                                                     |
| v/c Ratio                         | 0.58                                                                              | 0.48                                                                              | 0.18                                                                              | 0.13                                                                              | 0.45                                                                              |                                                                                   | 0.59                                                                               | 0.32                                                                                |                                                                                     |                                                                                     | 0.84                                                                                |                                                                                     |
| Uniform Delay, d1                 | 23.2                                                                              | 22.1                                                                              | 19.2                                                                              | 18.8                                                                              | 21.8                                                                              |                                                                                   | 17.3                                                                               | 16.2                                                                                |                                                                                     |                                                                                     | 34.0                                                                                |                                                                                     |
| Progression Factor                | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              |                                                                                   | 1.00                                                                               | 1.00                                                                                |                                                                                     |                                                                                     | 1.00                                                                                |                                                                                     |
| Incremental Delay, d2             | 12.0                                                                              | 2.3                                                                               | 1.0                                                                               | 1.1                                                                               | 1.1                                                                               |                                                                                   | 2.5                                                                                | 0.3                                                                                 |                                                                                     |                                                                                     | 10.0                                                                                |                                                                                     |
| Delay (s)                         | 35.2                                                                              | 24.4                                                                              | 20.2                                                                              | 20.0                                                                              | 22.9                                                                              |                                                                                   | 19.8                                                                               | 16.5                                                                                |                                                                                     |                                                                                     | 44.0                                                                                |                                                                                     |
| Level of Service                  | D                                                                                 | C                                                                                 | C                                                                                 | B                                                                                 | C                                                                                 |                                                                                   | B                                                                                  | B                                                                                   |                                                                                     |                                                                                     | D                                                                                   |                                                                                     |
| Approach Delay (s)                |                                                                                   | 25.2                                                                              |                                                                                   |                                                                                   | 22.7                                                                              |                                                                                   |                                                                                    | 18.1                                                                                |                                                                                     |                                                                                     | 44.0                                                                                |                                                                                     |
| Approach LOS                      |                                                                                   | C                                                                                 |                                                                                   |                                                                                   | C                                                                                 |                                                                                   |                                                                                    | B                                                                                   |                                                                                     |                                                                                     | D                                                                                   |                                                                                     |
| <b>Intersection Summary</b>       |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| HCM 2000 Control Delay            |                                                                                   |                                                                                   | 27.7                                                                              |                                                                                   |                                                                                   | HCM 2000 Level of Service                                                         |                                                                                    |                                                                                     |                                                                                     | C                                                                                   |                                                                                     |                                                                                     |
| HCM 2000 Volume to Capacity ratio |                                                                                   |                                                                                   | 0.68                                                                              |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Actuated Cycle Length (s)         |                                                                                   |                                                                                   | 100.0                                                                             |                                                                                   |                                                                                   | Sum of lost time (s)                                                              |                                                                                    |                                                                                     | 18.6                                                                                |                                                                                     |                                                                                     |                                                                                     |
| Intersection Capacity Utilization |                                                                                   |                                                                                   | 115.2%                                                                            |                                                                                   |                                                                                   | ICU Level of Service                                                              |                                                                                    |                                                                                     | H                                                                                   |                                                                                     |                                                                                     |                                                                                     |
| Analysis Period (min)             |                                                                                   |                                                                                   | 15                                                                                |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| <b>c Critical Lane Group</b>      |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |

## HCM Unsignalized Intersection Capacity Analysis

### 2: Broadview Ave & Site Loading Access

|                                   |  |  |  |  |  |  |
|-----------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| Movement                          | EBL                                                                               | EBR                                                                               | NBL                                                                               | NBT                                                                               | SBT                                                                               | SBR                                                                               |
| Lane Configurations               |  |                                                                                   |                                                                                   |  |  |                                                                                   |
| Traffic Volume (veh/h)            | 0                                                                                 | 0                                                                                 | 0                                                                                 | 400                                                                               | 390                                                                               | 0                                                                                 |
| Future Volume (Veh/h)             | 0                                                                                 | 0                                                                                 | 0                                                                                 | 400                                                                               | 390                                                                               | 0                                                                                 |
| Sign Control                      | Stop                                                                              |                                                                                   |                                                                                   | Free                                                                              | Free                                                                              |                                                                                   |
| Grade                             | 0%                                                                                |                                                                                   |                                                                                   | 0%                                                                                | 0%                                                                                |                                                                                   |
| Peak Hour Factor                  | 0.91                                                                              | 0.91                                                                              | 0.91                                                                              | 0.91                                                                              | 0.91                                                                              | 0.91                                                                              |
| Hourly flow rate (vph)            | 0                                                                                 | 0                                                                                 | 0                                                                                 | 440                                                                               | 429                                                                               | 0                                                                                 |
| Pedestrians                       | 185                                                                               |                                                                                   |                                                                                   | 5                                                                                 | 5                                                                                 |                                                                                   |
| Lane Width (m)                    | 3.5                                                                               |                                                                                   |                                                                                   | 3.5                                                                               | 3.5                                                                               |                                                                                   |
| Walking Speed (m/s)               | 1.2                                                                               |                                                                                   |                                                                                   | 1.2                                                                               | 1.2                                                                               |                                                                                   |
| Percent Blockage                  | 15                                                                                |                                                                                   |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   |
| Right turn flare (veh)            |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| Median type                       |                                                                                   |                                                                                   |                                                                                   | None                                                                              | None                                                                              |                                                                                   |
| Median storage veh                |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| Upstream signal (m)               |                                                                                   |                                                                                   |                                                                                   | 56                                                                                | 90                                                                                |                                                                                   |
| pX, platoon unblocked             | 0.99                                                                              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| vC, conflicting volume            | 839                                                                               | 404                                                                               | 614                                                                               |                                                                                   |                                                                                   |                                                                                   |
| vC1, stage 1 conf vol             |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| vC2, stage 2 conf vol             |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| vCu, unblocked vol                | 809                                                                               | 404                                                                               | 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                                                                               | 100                                                                               |                                                                                   |                                                                                   |                                                                                   |
| cM capacity (veh/h)               | 269                                                                               | 509                                                                               | 829                                                                               |                                                                                   |                                                                                   |                                                                                   |
| Direction, Lane #                 | EB 1                                                                              | NB 1                                                                              | NB 2                                                                              | SB 1                                                                              | SB 2                                                                              |                                                                                   |
| Volume Total                      | 0                                                                                 | 147                                                                               | 293                                                                               | 286                                                                               | 143                                                                               |                                                                                   |
| Volume Left                       | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                   |
| Volume Right                      | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                   |
| cSH                               | 1700                                                                              | 829                                                                               | 1700                                                                              | 1700                                                                              | 1700                                                                              |                                                                                   |
| Volume to Capacity                | 0.10                                                                              | 0.00                                                                              | 0.17                                                                              | 0.17                                                                              | 0.08                                                                              |                                                                                   |
| Queue Length 95th (m)             | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   |
| Control Delay (s)                 | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   |
| Lane LOS                          | A                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| Approach Delay (s)                | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   |
| Approach LOS                      | A                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| <b>Intersection Summary</b>       |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| Average Delay                     |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   |                                                                                   |
| Intersection Capacity Utilization |                                                                                   |                                                                                   | 24.9%                                                                             | ICU Level of Service                                                              |                                                                                   | A                                                                                 |
| Analysis Period (min)             |                                                                                   |                                                                                   | 15                                                                                |                                                                                   |                                                                                   |                                                                                   |



# HCM Unsignalized Intersection Capacity Analysis

## 3: Broadview Ave & Dearbourne Ave

|                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
|-----------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
|                                   |  |  |  |  |  |  |
| Movement                          | WBL                                                                               | WBR                                                                               | NBT                                                                               | NBR                                                                               | SBL                                                                               | SBT                                                                               |
| Lane Configurations               |  |                                                                                   |  |                                                                                   |                                                                                   |  |
| Traffic Volume (veh/h)            | 20                                                                                | 40                                                                                | 360                                                                               | 0                                                                                 | 0                                                                                 | 385                                                                               |
| Future Volume (Veh/h)             | 20                                                                                | 40                                                                                | 360                                                                               | 0                                                                                 | 0                                                                                 | 385                                                                               |
| Sign Control                      | Stop                                                                              |                                                                                   | Free                                                                              |                                                                                   |                                                                                   | Free                                                                              |
| Grade                             | 0%                                                                                |                                                                                   | 0%                                                                                |                                                                                   |                                                                                   | 0%                                                                                |
| Peak Hour Factor                  | 0.90                                                                              | 0.90                                                                              | 0.90                                                                              | 0.90                                                                              | 0.90                                                                              | 0.90                                                                              |
| Hourly flow rate (vph)            | 22                                                                                | 44                                                                                | 400                                                                               | 0                                                                                 | 0                                                                                 | 428                                                                               |
| Pedestrians                       | 185                                                                               |                                                                                   | 15                                                                                |                                                                                   |                                                                                   | 10                                                                                |
| Lane Width (m)                    | 3.5                                                                               |                                                                                   | 3.5                                                                               |                                                                                   |                                                                                   | 3.5                                                                               |
| Walking Speed (m/s)               | 1.2                                                                               |                                                                                   | 1.2                                                                               |                                                                                   |                                                                                   | 1.2                                                                               |
| Percent Blockage                  | 15                                                                                |                                                                                   | 1                                                                                 |                                                                                   |                                                                                   | 1                                                                                 |
| Right turn flare (veh)            |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| Median type                       |                                                                                   |                                                                                   | None                                                                              |                                                                                   |                                                                                   | None                                                                              |
| Median storage veh                |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| Upstream signal (m)               |                                                                                   |                                                                                   | 34                                                                                |                                                                                   |                                                                                   | 112                                                                               |
| pX, platoon unblocked             | 0.98                                                                              | 0.98                                                                              |                                                                                   |                                                                                   | 0.98                                                                              |                                                                                   |
| vC, conflicting volume            | 814                                                                               | 395                                                                               |                                                                                   |                                                                                   | 585                                                                               |                                                                                   |
| vC1, stage 1 conf vol             |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| vC2, stage 2 conf vol             |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| vCu, unblocked vol                | 773                                                                               | 346                                                                               |                                                                                   |                                                                                   | 540                                                                               |                                                                                   |
| tC, single (s)                    | 6.8                                                                               | 7.0                                                                               |                                                                                   |                                                                                   | 4.1                                                                               |                                                                                   |
| tC, 2 stage (s)                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| tF (s)                            | 3.5                                                                               | 3.3                                                                               |                                                                                   |                                                                                   | 2.2                                                                               |                                                                                   |
| p0 queue free %                   | 92                                                                                | 92                                                                                |                                                                                   |                                                                                   | 100                                                                               |                                                                                   |
| cM capacity (veh/h)               | 280                                                                               | 535                                                                               |                                                                                   |                                                                                   | 867                                                                               |                                                                                   |
| Direction, Lane #                 | WB 1                                                                              | NB 1                                                                              | NB 2                                                                              | SB 1                                                                              | SB 2                                                                              |                                                                                   |
| Volume Total                      | 66                                                                                | 200                                                                               | 200                                                                               | 214                                                                               | 214                                                                               |                                                                                   |
| Volume Left                       | 22                                                                                | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                   |
| Volume Right                      | 44                                                                                | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                   |
| cSH                               | 411                                                                               | 1700                                                                              | 1700                                                                              | 1700                                                                              | 1700                                                                              |                                                                                   |
| Volume to Capacity                | 0.16                                                                              | 0.12                                                                              | 0.12                                                                              | 0.13                                                                              | 0.13                                                                              |                                                                                   |
| Queue Length 95th (m)             | 4.5                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   |
| Control Delay (s)                 | 15.4                                                                              | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   |
| Lane LOS                          | C                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| Approach Delay (s)                | 15.4                                                                              | 0.0                                                                               |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   |
| Approach LOS                      | C                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| Intersection Summary              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| Average Delay                     |                                                                                   |                                                                                   | 1.1                                                                               |                                                                                   |                                                                                   |                                                                                   |
| Intersection Capacity Utilization |                                                                                   |                                                                                   | 26.8%                                                                             |                                                                                   | ICU Level of Service                                                              | A                                                                                 |
| Analysis Period (min)             |                                                                                   |                                                                                   | 15                                                                                |                                                                                   |                                                                                   |                                                                                   |

## Queues

### 4: Broadview Ave & Site Driveway



| Lane Group             | EBL   | NBL   | NBT   | SBT   |
|------------------------|-------|-------|-------|-------|
| Lane Configurations    |       |       |       |       |
| Traffic Volume (vph)   | 15    | 10    | 340   | 375   |
| Future Volume (vph)    | 15    | 10    | 340   | 375   |
| Lane Group Flow (vph)  | 34    | 0     | 402   | 460   |
| Turn Type              | Prot  | Perm  | NA    | NA    |
| Protected Phases       | 4     |       | 2     | 6     |
| Permitted Phases       |       | 2     |       |       |
| Detector Phase         | 4     | 2     | 2     | 6     |
| Switch Phase           |       |       |       |       |
| Minimum Initial (s)    | 5.0   | 5.0   | 5.0   | 5.0   |
| Minimum Split (s)      | 36.0  | 34.0  | 34.0  | 36.0  |
| Total Split (s)        | 39.0  | 65.0  | 65.0  | 65.0  |
| Total Split (%)        | 37.5% | 62.5% | 62.5% | 62.5% |
| Yellow Time (s)        | 3.0   | 3.0   | 3.0   | 3.0   |
| All-Red Time (s)       | 4.0   | 4.0   | 4.0   | 4.0   |
| Lost Time Adjust (s)   | -1.0  |       | -1.0  | -1.0  |
| Total Lost Time (s)    | 6.0   |       | 6.0   | 6.0   |
| Lead/Lag               |       |       |       |       |
| Lead-Lag Optimize?     |       |       |       |       |
| Recall Mode            | None  | C-Min | C-Min | C-Min |
| v/c Ratio              | 0.31  |       | 0.15  | 0.16  |
| Control Delay          | 34.8  |       | 2.1   | 2.1   |
| Queue Delay            | 0.0   |       | 0.3   | 0.0   |
| Total Delay            | 34.8  |       | 2.4   | 2.1   |
| Queue Length 50th (m)  | 3.5   |       | 7.5   | 8.5   |
| Queue Length 95th (m)  | 12.3  |       | 13.1  | 14.6  |
| Internal Link Dist (m) | 42.1  |       | 18.5  | 10.1  |
| Turn Bay Length (m)    |       |       |       |       |
| Base Capacity (vph)    | 373   |       | 2738  | 2802  |
| Starvation Cap Reductn | 0     |       | 1718  | 0     |
| Spillback Cap Reductn  | 0     |       | 0     | 0     |
| Storage Cap Reductn    | 0     |       | 0     | 0     |
| Reduced v/c Ratio      | 0.09  |       | 0.39  | 0.16  |

#### Intersection Summary

Cycle Length: 104

Actuated Cycle Length: 104

Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBT, Start of Green

Natural Cycle: 75

Control Type: Actuated-Coordinated

Splits and Phases: 4: Broadview Ave & Site Driveway



# HCM Signalized Intersection Capacity Analysis

## 4: Broadview Ave & Site Driveway

|                                   |  |      |       |      |                           |      |
|-----------------------------------|-----------------------------------------------------------------------------------|------|-------|------|---------------------------|------|
| Movement                          | EBL                                                                               | EBR  | NBL   | NBT  | SBT                       | SBR  |
| Lane Configurations               | W                                                                                 |      |       | ↑↑   | ↑↑                        |      |
| Traffic Volume (vph)              | 15                                                                                | 15   | 10    | 340  | 375                       | 25   |
| Future Volume (vph)               | 15                                                                                | 15   | 10    | 340  | 375                       | 25   |
| Ideal Flow (vphpl)                | 1900                                                                              | 1900 | 1900  | 1900 | 1900                      | 1900 |
| Total Lost time (s)               | 6.0                                                                               |      |       | 6.0  | 6.0                       |      |
| Lane Util. Factor                 | 1.00                                                                              |      |       | 0.95 | 0.95                      |      |
| Frpb, ped/bikes                   | 1.00                                                                              |      |       | 1.00 | 0.98                      |      |
| Flpb, ped/bikes                   | 1.00                                                                              |      |       | 1.00 | 1.00                      |      |
| Frt                               | 0.93                                                                              |      |       | 1.00 | 0.99                      |      |
| Flt Protected                     | 0.98                                                                              |      |       | 1.00 | 1.00                      |      |
| Satd. Flow (prot)                 | 1140                                                                              |      |       | 3326 | 3205                      |      |
| Flt Permitted                     | 0.98                                                                              |      |       | 0.94 | 1.00                      |      |
| Satd. Flow (perm)                 | 1140                                                                              |      |       | 3133 | 3205                      |      |
| Peak-hour factor, PHF             | 0.87                                                                              | 0.87 | 0.87  | 0.87 | 0.87                      | 0.87 |
| Adj. Flow (vph)                   | 17                                                                                | 17   | 11    | 391  | 431                       | 29   |
| RTOR Reduction (vph)              | 16                                                                                | 0    | 0     | 0    | 2                         | 0    |
| Lane Group Flow (vph)             | 18                                                                                | 0    | 0     | 402  | 458                       | 0    |
| Confl. Peds. (#/hr)               | 15                                                                                |      | 140   |      |                           | 140  |
| Confl. Bikes (#/hr)               |                                                                                   |      |       |      |                           | 25   |
| Heavy Vehicles (%)                | 100%                                                                              | 0%   | 0%    | 7%   | 9%                        | 0%   |
| Turn Type                         | Prot                                                                              |      | Perm  | NA   | NA                        |      |
| Protected Phases                  | 4                                                                                 |      |       | 2    | 6                         |      |
| Permitted Phases                  |                                                                                   |      | 2     |      |                           |      |
| Actuated Green, G (s)             | 5.3                                                                               |      |       | 84.7 | 84.7                      |      |
| Effective Green, g (s)            | 6.3                                                                               |      |       | 85.7 | 85.7                      |      |
| Actuated g/C Ratio                | 0.06                                                                              |      |       | 0.82 | 0.82                      |      |
| Clearance Time (s)                | 7.0                                                                               |      |       | 7.0  | 7.0                       |      |
| Vehicle Extension (s)             | 3.0                                                                               |      |       | 3.0  | 3.0                       |      |
| Lane Grp Cap (vph)                | 69                                                                                |      |       | 2581 | 2641                      |      |
| v/s Ratio Prot                    | c0.02                                                                             |      |       |      | c0.14                     |      |
| v/s Ratio Perm                    |                                                                                   |      |       | 0.13 |                           |      |
| v/c Ratio                         | 0.26                                                                              |      |       | 0.16 | 0.17                      |      |
| Uniform Delay, d1                 | 46.6                                                                              |      |       | 1.8  | 1.9                       |      |
| Progression Factor                | 1.00                                                                              |      |       | 1.00 | 1.00                      |      |
| Incremental Delay, d2             | 2.0                                                                               |      |       | 0.1  | 0.1                       |      |
| Delay (s)                         | 48.6                                                                              |      |       | 2.0  | 2.0                       |      |
| Level of Service                  | D                                                                                 |      |       | A    | A                         |      |
| Approach Delay (s)                | 48.6                                                                              |      |       | 2.0  | 2.0                       |      |
| Approach LOS                      | D                                                                                 |      |       | A    | A                         |      |
| <b>Intersection Summary</b>       |                                                                                   |      |       |      |                           |      |
| HCM 2000 Control Delay            |                                                                                   |      | 3.8   |      | HCM 2000 Level of Service | A    |
| HCM 2000 Volume to Capacity ratio |                                                                                   |      | 0.18  |      |                           |      |
| Actuated Cycle Length (s)         |                                                                                   |      | 104.0 |      | Sum of lost time (s)      | 12.0 |
| Intersection Capacity Utilization |                                                                                   |      | 38.3% |      | ICU Level of Service      | A    |
| Analysis Period (min)             |                                                                                   |      | 15    |      |                           |      |
| c Critical Lane Group             |                                                                                   |      |       |      |                           |      |



# HCM Unsignalized Intersection Capacity Analysis

## 6: Broadview Ave & Fairview Blvd

|                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
|-----------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
|                                   |  |  |  |  |  |  |
| Movement                          | WBL                                                                               | WBR                                                                               | NBT                                                                               | NBR                                                                               | SBL                                                                               | SBT                                                                               |
| Lane Configurations               |                                                                                   |                                                                                   |  |                                                                                   |                                                                                   |  |
| Traffic Volume (veh/h)            | 0                                                                                 | 0                                                                                 | 350                                                                               | 10                                                                                | 15                                                                                | 370                                                                               |
| Future Volume (Veh/h)             | 0                                                                                 | 0                                                                                 | 350                                                                               | 10                                                                                | 15                                                                                | 370                                                                               |
| Sign Control                      | Stop                                                                              |                                                                                   | Free                                                                              |                                                                                   |                                                                                   | Free                                                                              |
| Grade                             | 0%                                                                                |                                                                                   | 0%                                                                                |                                                                                   |                                                                                   | 0%                                                                                |
| Peak Hour Factor                  | 0.87                                                                              | 0.87                                                                              | 0.87                                                                              | 0.87                                                                              | 0.87                                                                              | 0.87                                                                              |
| Hourly flow rate (vph)            | 0                                                                                 | 0                                                                                 | 402                                                                               | 11                                                                                | 17                                                                                | 425                                                                               |
| Pedestrians                       | 170                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                   | 5                                                                                 |
| Lane Width (m)                    | 0.0                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                   | 3.5                                                                               |
| Walking Speed (m/s)               | 1.2                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                   | 1.2                                                                               |
| Percent Blockage                  | 0                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                   | 0                                                                                 |
| Right turn flare (veh)            |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| Median type                       |                                                                                   |                                                                                   | None                                                                              |                                                                                   |                                                                                   | None                                                                              |
| Median storage (veh)              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| Upstream signal (m)               |                                                                                   |                                                                                   | 45                                                                                |                                                                                   |                                                                                   | 42                                                                                |
| pX, platoon unblocked             | 0.98                                                                              | 1.00                                                                              |                                                                                   |                                                                                   | 1.00                                                                              |                                                                                   |
| vC, conflicting volume            | 824                                                                               | 382                                                                               |                                                                                   |                                                                                   | 583                                                                               |                                                                                   |
| vC1, stage 1 conf vol             |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| vC2, stage 2 conf vol             |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| vCu, unblocked vol                | 768                                                                               | 374                                                                               |                                                                                   |                                                                                   | 576                                                                               |                                                                                   |
| 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                                                                               |                                                                                   |                                                                                   | 98                                                                                |                                                                                   |
| cM capacity (veh/h)               | 330                                                                               | 625                                                                               |                                                                                   |                                                                                   | 1005                                                                              |                                                                                   |
| Direction, Lane #                 | NB 1                                                                              | NB 2                                                                              | SB 1                                                                              | SB 2                                                                              |                                                                                   |                                                                                   |
| Volume Total                      | 268                                                                               | 145                                                                               | 159                                                                               | 283                                                                               |                                                                                   |                                                                                   |
| Volume Left                       | 0                                                                                 | 0                                                                                 | 17                                                                                | 0                                                                                 |                                                                                   |                                                                                   |
| Volume Right                      | 0                                                                                 | 11                                                                                | 0                                                                                 | 0                                                                                 |                                                                                   |                                                                                   |
| cSH                               | 1700                                                                              | 1700                                                                              | 1005                                                                              | 1700                                                                              |                                                                                   |                                                                                   |
| Volume to Capacity                | 0.16                                                                              | 0.09                                                                              | 0.02                                                                              | 0.17                                                                              |                                                                                   |                                                                                   |
| Queue Length 95th (m)             | 0.0                                                                               | 0.0                                                                               | 0.4                                                                               | 0.0                                                                               |                                                                                   |                                                                                   |
| Control Delay (s)                 | 0.0                                                                               | 0.0                                                                               | 1.1                                                                               | 0.0                                                                               |                                                                                   |                                                                                   |
| Lane LOS                          |                                                                                   |                                                                                   | A                                                                                 |                                                                                   |                                                                                   |                                                                                   |
| Approach Delay (s)                | 0.0                                                                               |                                                                                   | 0.4                                                                               |                                                                                   |                                                                                   |                                                                                   |
| Approach LOS                      |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| Intersection Summary              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| Average Delay                     |                                                                                   |                                                                                   | 0.2                                                                               |                                                                                   |                                                                                   |                                                                                   |
| Intersection Capacity Utilization |                                                                                   |                                                                                   | 32.7%                                                                             | ICU Level of Service                                                              | A                                                                                 |                                                                                   |
| Analysis Period (min)             |                                                                                   |                                                                                   | 15                                                                                |                                                                                   |                                                                                   |                                                                                   |

## Queues

### 7: Broadview Ave

|                        | ↑     | ↓     |      |
|------------------------|-------|-------|------|
| Lane Group             | NBT   | SBT   | Ø9   |
| Lane Configurations    | ↑↑    | ↑↑    |      |
| Traffic Volume (vph)   | 365   | 370   |      |
| Future Volume (vph)    | 365   | 370   |      |
| Lane Group Flow (vph)  | 415   | 420   |      |
| Turn Type              | NA    | NA    |      |
| Protected Phases       | 2     | 6     | 9    |
| Permitted Phases       |       |       |      |
| Detector Phase         | 2     | 6     |      |
| Switch Phase           |       |       |      |
| Minimum Initial (s)    | 5.0   | 5.0   | 5.0  |
| Minimum Split (s)      | 8.0   | 8.0   | 22.5 |
| Total Split (s)        | 60.0  | 60.0  | 50.0 |
| Total Split (%)        | 54.5% | 54.5% | 45%  |
| Yellow Time (s)        | 2.0   | 2.0   | 3.5  |
| All-Red Time (s)       | 1.0   | 1.0   | 1.0  |
| Lost Time Adjust (s)   | -1.0  | -1.0  |      |
| Total Lost Time (s)    | 2.0   | 2.0   |      |
| Lead/Lag               |       |       |      |
| Lead-Lag Optimize?     |       |       |      |
| Recall Mode            | Min   | Min   | None |
| v/c Ratio              | 0.14  | 0.14  |      |
| Control Delay          | 2.3   | 2.3   |      |
| Queue Delay            | 0.0   | 0.0   |      |
| Total Delay            | 2.3   | 2.3   |      |
| Queue Length 50th (m)  | 0.0   | 0.0   |      |
| Queue Length 95th (m)  | 16.2  | 16.4  |      |
| Internal Link Dist (m) | 3.2   | 21.0  |      |
| Turn Bay Length (m)    |       |       |      |
| Base Capacity (vph)    | 3336  | 3245  |      |
| Starvation Cap Reductn | 0     | 199   |      |
| Spillback Cap Reductn  | 0     | 0     |      |
| Storage Cap Reductn    | 0     | 0     |      |
| Reduced v/c Ratio      | 0.12  | 0.14  |      |

#### Intersection Summary

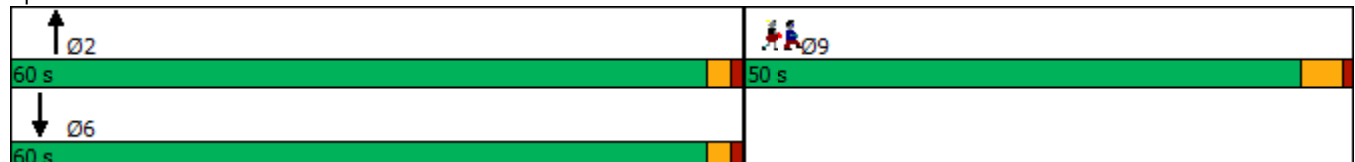
Cycle Length: 110

Actuated Cycle Length: 29.8

Natural Cycle: 40

Control Type: Actuated-Uncoordinated

Splits and Phases: 7: Broadview Ave



# HCM Signalized Intersection Capacity Analysis

## 7: Broadview Ave

|                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
|-----------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
|                                   |  |  |  |  |  |  |
| Movement                          | EBL                                                                               | EBR                                                                               | NBL                                                                               | NBT                                                                               | SBT                                                                               | SBR                                                                               |
| Lane Configurations               |                                                                                   |                                                                                   |                                                                                   | ↑↑                                                                                | ↑↑                                                                                |                                                                                   |
| Traffic Volume (vph)              | 0                                                                                 | 0                                                                                 | 0                                                                                 | 365                                                                               | 370                                                                               | 0                                                                                 |
| Future Volume (vph)               | 0                                                                                 | 0                                                                                 | 0                                                                                 | 365                                                                               | 370                                                                               | 0                                                                                 |
| Ideal Flow (vphpl)                | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              |
| Total Lost time (s)               |                                                                                   |                                                                                   |                                                                                   | 2.0                                                                               | 2.0                                                                               |                                                                                   |
| Lane Util. Factor                 |                                                                                   |                                                                                   |                                                                                   | 0.95                                                                              | 0.95                                                                              |                                                                                   |
| Frt                               |                                                                                   |                                                                                   |                                                                                   | 1.00                                                                              | 1.00                                                                              |                                                                                   |
| Flt Protected                     |                                                                                   |                                                                                   |                                                                                   | 1.00                                                                              | 1.00                                                                              |                                                                                   |
| Satd. Flow (prot)                 |                                                                                   |                                                                                   |                                                                                   | 3336                                                                              | 3245                                                                              |                                                                                   |
| Flt Permitted                     |                                                                                   |                                                                                   |                                                                                   | 1.00                                                                              | 1.00                                                                              |                                                                                   |
| Satd. Flow (perm)                 |                                                                                   |                                                                                   |                                                                                   | 3336                                                                              | 3245                                                                              |                                                                                   |
| Peak-hour factor, PHF             | 0.88                                                                              | 0.88                                                                              | 0.88                                                                              | 0.88                                                                              | 0.88                                                                              | 0.88                                                                              |
| Adj. Flow (vph)                   | 0                                                                                 | 0                                                                                 | 0                                                                                 | 415                                                                               | 420                                                                               | 0                                                                                 |
| RTOR Reduction (vph)              | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 |
| Lane Group Flow (vph)             | 0                                                                                 | 0                                                                                 | 0                                                                                 | 415                                                                               | 420                                                                               | 0                                                                                 |
| Heavy Vehicles (%)                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 7%                                                                                | 10%                                                                               | 0%                                                                                |
| Turn Type                         |                                                                                   |                                                                                   |                                                                                   | NA                                                                                | NA                                                                                |                                                                                   |
| Protected Phases                  |                                                                                   |                                                                                   |                                                                                   | 2                                                                                 | 6                                                                                 |                                                                                   |
| Permitted Phases                  |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| Actuated Green, G (s)             |                                                                                   |                                                                                   |                                                                                   | 24.0                                                                              | 24.0                                                                              |                                                                                   |
| Effective Green, g (s)            |                                                                                   |                                                                                   |                                                                                   | 25.0                                                                              | 25.0                                                                              |                                                                                   |
| Actuated g/C Ratio                |                                                                                   |                                                                                   |                                                                                   | 0.74                                                                              | 0.74                                                                              |                                                                                   |
| Clearance Time (s)                |                                                                                   |                                                                                   |                                                                                   | 3.0                                                                               | 3.0                                                                               |                                                                                   |
| Vehicle Extension (s)             |                                                                                   |                                                                                   |                                                                                   | 3.0                                                                               | 3.0                                                                               |                                                                                   |
| Lane Grp Cap (vph)                |                                                                                   |                                                                                   |                                                                                   | 2482                                                                              | 2414                                                                              |                                                                                   |
| v/s Ratio Prot                    |                                                                                   |                                                                                   |                                                                                   | 0.12                                                                              | c0.13                                                                             |                                                                                   |
| v/s Ratio Perm                    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| v/c Ratio                         |                                                                                   |                                                                                   |                                                                                   | 0.17                                                                              | 0.17                                                                              |                                                                                   |
| Uniform Delay, d1                 |                                                                                   |                                                                                   |                                                                                   | 1.3                                                                               | 1.3                                                                               |                                                                                   |
| Progression Factor                |                                                                                   |                                                                                   |                                                                                   | 1.00                                                                              | 1.00                                                                              |                                                                                   |
| Incremental Delay, d2             |                                                                                   |                                                                                   |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   |
| Delay (s)                         |                                                                                   |                                                                                   |                                                                                   | 1.3                                                                               | 1.3                                                                               |                                                                                   |
| Level of Service                  |                                                                                   |                                                                                   |                                                                                   | A                                                                                 | A                                                                                 |                                                                                   |
| Approach Delay (s)                | 0.0                                                                               |                                                                                   |                                                                                   | 1.3                                                                               | 1.3                                                                               |                                                                                   |
| Approach LOS                      | A                                                                                 |                                                                                   |                                                                                   | A                                                                                 | A                                                                                 |                                                                                   |
| Intersection Summary              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| HCM 2000 Control Delay            |                                                                                   |                                                                                   | 1.3                                                                               | HCM 2000 Level of Service                                                         |                                                                                   | A                                                                                 |
| HCM 2000 Volume to Capacity ratio |                                                                                   |                                                                                   | 0.16                                                                              |                                                                                   |                                                                                   |                                                                                   |
| Actuated Cycle Length (s)         |                                                                                   |                                                                                   | 33.6                                                                              | Sum of lost time (s)                                                              |                                                                                   | 6.5                                                                               |
| Intersection Capacity Utilization |                                                                                   |                                                                                   | 13.6%                                                                             | ICU Level of Service                                                              |                                                                                   | A                                                                                 |
| Analysis Period (min)             |                                                                                   |                                                                                   | 15                                                                                |                                                                                   |                                                                                   |                                                                                   |
| c Critical Lane Group             |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |



# HCM Unsignalized Intersection Capacity Analysis

## 8: Broadview Ave & Wolfrey Ave

|                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
|-----------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
|                                   |  |  |  |  |  |  |
| Movement                          | WBL                                                                               | WBR                                                                               | NBT                                                                               | NBR                                                                               | SBL                                                                               | SBT                                                                               |
| Lane Configurations               |  |                                                                                   |  |                                                                                   |                                                                                   |  |
| Traffic Volume (veh/h)            | 5                                                                                 | 0                                                                                 | 360                                                                               | 5                                                                                 | 0                                                                                 | 365                                                                               |
| Future Volume (Veh/h)             | 5                                                                                 | 0                                                                                 | 360                                                                               | 5                                                                                 | 0                                                                                 | 365                                                                               |
| Sign Control                      | Stop                                                                              |                                                                                   | Free                                                                              |                                                                                   |                                                                                   | Free                                                                              |
| Grade                             | 0%                                                                                |                                                                                   | 0%                                                                                |                                                                                   |                                                                                   | 0%                                                                                |
| Peak Hour Factor                  | 0.88                                                                              | 0.88                                                                              | 0.88                                                                              | 0.88                                                                              | 0.88                                                                              | 0.88                                                                              |
| Hourly flow rate (vph)            | 6                                                                                 | 0                                                                                 | 409                                                                               | 6                                                                                 | 0                                                                                 | 415                                                                               |
| Pedestrians                       | 155                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                   | 140                                                                               |
| Lane Width (m)                    | 3.5                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                   | 3.5                                                                               |
| Walking Speed (m/s)               | 1.2                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                   | 1.2                                                                               |
| Percent Blockage                  | 13                                                                                |                                                                                   |                                                                                   |                                                                                   |                                                                                   | 11                                                                                |
| Right turn flare (veh)            |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| Median type                       |                                                                                   |                                                                                   | None                                                                              |                                                                                   |                                                                                   | None                                                                              |
| Median storage veh                |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| Upstream signal (m)               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   | 27                                                                                |
| pX, platoon unblocked             | 0.98                                                                              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| vC, conflicting volume            | 774                                                                               | 502                                                                               |                                                                                   |                                                                                   | 570                                                                               |                                                                                   |
| vC1, stage 1 conf vol             |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| vC2, stage 2 conf vol             |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| vCu, unblocked vol                | 736                                                                               | 502                                                                               |                                                                                   |                                                                                   | 570                                                                               |                                                                                   |
| tC, single (s)                    | 6.8                                                                               | 6.9                                                                               |                                                                                   |                                                                                   | 4.1                                                                               |                                                                                   |
| tC, 2 stage (s)                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| tF (s)                            | 3.5                                                                               | 3.3                                                                               |                                                                                   |                                                                                   | 2.2                                                                               |                                                                                   |
| p0 queue free %                   | 98                                                                                | 100                                                                               |                                                                                   |                                                                                   | 100                                                                               |                                                                                   |
| cM capacity (veh/h)               | 308                                                                               | 403                                                                               |                                                                                   |                                                                                   | 885                                                                               |                                                                                   |
| Direction, Lane #                 | WB 1                                                                              | NB 1                                                                              | NB 2                                                                              | SB 1                                                                              | SB 2                                                                              |                                                                                   |
| Volume Total                      | 6                                                                                 | 273                                                                               | 142                                                                               | 138                                                                               | 277                                                                               |                                                                                   |
| Volume Left                       | 6                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                   |
| Volume Right                      | 0                                                                                 | 0                                                                                 | 6                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                   |
| cSH                               | 308                                                                               | 1700                                                                              | 1700                                                                              | 885                                                                               | 1700                                                                              |                                                                                   |
| Volume to Capacity                | 0.02                                                                              | 0.16                                                                              | 0.08                                                                              | 0.00                                                                              | 0.16                                                                              |                                                                                   |
| Queue Length 95th (m)             | 0.5                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   |
| Control Delay (s)                 | 16.9                                                                              | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   |
| Lane LOS                          | C                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| Approach Delay (s)                | 16.9                                                                              | 0.0                                                                               |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   |
| Approach LOS                      | C                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| Intersection Summary              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| Average Delay                     |                                                                                   |                                                                                   | 0.1                                                                               |                                                                                   |                                                                                   |                                                                                   |
| Intersection Capacity Utilization |                                                                                   |                                                                                   | 33.2%                                                                             | ICU Level of Service                                                              |                                                                                   | A                                                                                 |
| Analysis Period (min)             |                                                                                   |                                                                                   | 15                                                                                |                                                                                   |                                                                                   |                                                                                   |

# Queues

## 1: Broadview Ave & Danforth Ave

Existing PM Peak Hour

|                        |  |  |  |  |  |  |   |  |  |
|------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group             | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | NBL                                                                               | NBT                                                                                 | SBL                                                                                 | SBT                                                                                 |
| Lane Configurations    |  |  |  |  |  |                                                                                   |  |  |  |
| Traffic Volume (vph)   | 300                                                                               | 525                                                                               | 220                                                                               | 40                                                                                | 330                                                                               | 135                                                                               | 285                                                                                 | 35                                                                                  | 195                                                                                 |
| Future Volume (vph)    | 300                                                                               | 525                                                                               | 220                                                                               | 40                                                                                | 330                                                                               | 135                                                                               | 285                                                                                 | 35                                                                                  | 195                                                                                 |
| Lane Group Flow (vph)  | 313                                                                               | 547                                                                               | 229                                                                               | 42                                                                                | 391                                                                               | 0                                                                                 | 506                                                                                 | 0                                                                                   | 400                                                                                 |
| Turn Type              | pm+pt                                                                             | NA                                                                                | Perm                                                                              | Perm                                                                              | NA                                                                                | pm+pt                                                                             | NA                                                                                  | Perm                                                                                | NA                                                                                  |
| Protected Phases       | 5                                                                                 | 2                                                                                 |                                                                                   |                                                                                   | 6                                                                                 | 7                                                                                 | 4                                                                                   |                                                                                     | 8                                                                                   |
| Permitted Phases       | 2                                                                                 |                                                                                   | 2                                                                                 | 6                                                                                 |                                                                                   | 4                                                                                 |                                                                                     | 8                                                                                   |                                                                                     |
| Detector Phase         | 5                                                                                 | 2                                                                                 | 2                                                                                 | 6                                                                                 | 6                                                                                 | 7                                                                                 | 4                                                                                   | 8                                                                                   | 8                                                                                   |
| Switch Phase           |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)    | 6.0                                                                               | 28.0                                                                              | 28.0                                                                              | 28.0                                                                              | 28.0                                                                              | 6.0                                                                               | 29.0                                                                                | 21.0                                                                                | 21.0                                                                                |
| Minimum Split (s)      | 13.1                                                                              | 35.1                                                                              | 35.1                                                                              | 35.1                                                                              | 35.1                                                                              | 13.5                                                                              | 36.0                                                                                | 36.0                                                                                | 36.0                                                                                |
| Total Split (s)        | 16.0                                                                              | 53.0                                                                              | 53.0                                                                              | 37.0                                                                              | 37.0                                                                              | 14.0                                                                              | 51.0                                                                                | 37.0                                                                                | 37.0                                                                                |
| Total Split (%)        | 15.4%                                                                             | 51.0%                                                                             | 51.0%                                                                             | 35.6%                                                                             | 35.6%                                                                             | 13.5%                                                                             | 49.0%                                                                               | 35.6%                                                                               | 35.6%                                                                               |
| Yellow Time (s)        | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.4                                                                                 | 3.4                                                                                 | 3.4                                                                                 |
| All-Red Time (s)       | 4.1                                                                               | 4.1                                                                               | 4.1                                                                               | 4.1                                                                               | 4.1                                                                               | 4.5                                                                               | 3.6                                                                                 | 3.6                                                                                 | 3.6                                                                                 |
| Lost Time Adjust (s)   | -1.0                                                                              | -1.0                                                                              | -1.0                                                                              | -1.0                                                                              | -1.0                                                                              |                                                                                   | -1.0                                                                                |                                                                                     | -1.0                                                                                |
| Total Lost Time (s)    | 6.1                                                                               | 6.1                                                                               | 6.1                                                                               | 6.1                                                                               | 6.1                                                                               |                                                                                   | 6.0                                                                                 |                                                                                     | 6.0                                                                                 |
| Lead/Lag               | Lead                                                                              |                                                                                   |                                                                                   | Lag                                                                               | Lag                                                                               | Lead                                                                              |                                                                                     | Lag                                                                                 | Lag                                                                                 |
| Lead-Lag Optimize?     | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               | Yes                                                                               | Yes                                                                               |                                                                                     | Yes                                                                                 | Yes                                                                                 |
| Recall Mode            | None                                                                              | C-Min                                                                             | C-Min                                                                             | C-Min                                                                             | C-Min                                                                             | None                                                                              | Min                                                                                 | Min                                                                                 | Min                                                                                 |
| v/c Ratio              | 0.65                                                                              | 0.55                                                                              | 0.38                                                                              | 0.19                                                                              | 0.36                                                                              |                                                                                   | 0.73                                                                                |                                                                                     | 0.44                                                                                |
| Control Delay          | 23.7                                                                              | 19.6                                                                              | 4.5                                                                               | 30.6                                                                              | 27.8                                                                              |                                                                                   | 32.7                                                                                |                                                                                     | 16.0                                                                                |
| Queue Delay            | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                 |                                                                                     | 0.0                                                                                 |
| Total Delay            | 23.7                                                                              | 19.6                                                                              | 4.5                                                                               | 30.6                                                                              | 27.8                                                                              |                                                                                   | 32.7                                                                                |                                                                                     | 16.0                                                                                |
| Queue Length 50th (m)  | 35.6                                                                              | 71.7                                                                              | 0.5                                                                               | 6.7                                                                               | 33.5                                                                              |                                                                                   | 48.4                                                                                |                                                                                     | 19.9                                                                                |
| Queue Length 95th (m)  | #79.4                                                                             | 124.9                                                                             | 15.6                                                                              | 16.7                                                                              | 47.8                                                                              |                                                                                   | 40.1                                                                                |                                                                                     | 29.2                                                                                |
| Internal Link Dist (m) |                                                                                   | 170.8                                                                             |                                                                                   |                                                                                   | 155.0                                                                             |                                                                                   | 66.0                                                                                |                                                                                     | 120.0                                                                               |
| Turn Bay Length (m)    | 65.0                                                                              |                                                                                   |                                                                                   | 35.0                                                                              |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |
| Base Capacity (vph)    | 483                                                                               | 1001                                                                              | 595                                                                               | 225                                                                               | 1118                                                                              |                                                                                   | 871                                                                                 |                                                                                     | 913                                                                                 |
| Starvation Cap Reductn | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                   |                                                                                     | 0                                                                                   |
| Spillback Cap Reductn  | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                   |                                                                                     | 0                                                                                   |
| Storage Cap Reductn    | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                   |                                                                                     | 0                                                                                   |
| Reduced v/c Ratio      | 0.65                                                                              | 0.55                                                                              | 0.38                                                                              | 0.19                                                                              | 0.35                                                                              |                                                                                   | 0.58                                                                                |                                                                                     | 0.44                                                                                |

### Intersection Summary

Cycle Length: 104

Actuated Cycle Length: 104

Offset: 103 (99%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

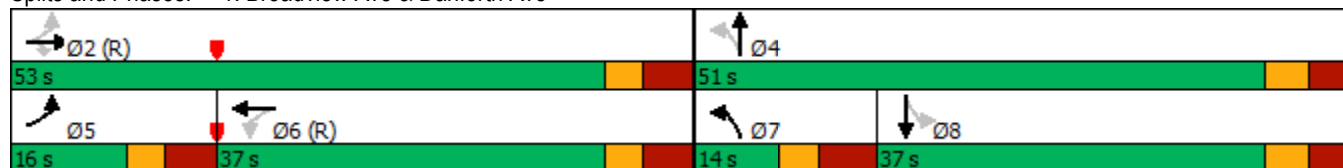
Natural Cycle: 100

Control Type: Actuated-Coordinated

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

Queue shown is maximum after two cycles.

Splits and Phases: 1: Broadview Ave & Danforth Ave



# HCM Signalized Intersection Capacity Analysis

## 1: Broadview Ave & Danforth Ave

Existing PM Peak Hour

|                                   |  |  |  |  |  |  |  |  |  |  |  |  |
|-----------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Movement                          | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations               |  |  |  |  |  |                                                                                   |                                                                                    |  |                                                                                     |                                                                                     |  |                                                                                     |
| Traffic Volume (vph)              | 300                                                                               | 525                                                                               | 220                                                                               | 40                                                                                | 330                                                                               | 45                                                                                | 135                                                                                | 285                                                                                 | 65                                                                                  | 35                                                                                  | 195                                                                                 | 155                                                                                 |
| Future Volume (vph)               | 300                                                                               | 525                                                                               | 220                                                                               | 40                                                                                | 330                                                                               | 45                                                                                | 135                                                                                | 285                                                                                 | 65                                                                                  | 35                                                                                  | 195                                                                                 | 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                                                                               | 3.5                                                                               | 3.5                                                                                | 3.5                                                                                 | 3.5                                                                                 | 3.5                                                                                 | 3.5                                                                                 | 3.5                                                                                 |
| Total Lost time (s)               | 6.1                                                                               | 6.1                                                                               | 6.1                                                                               | 6.1                                                                               | 6.1                                                                               |                                                                                   |                                                                                    | 6.0                                                                                 |                                                                                     |                                                                                     | 6.0                                                                                 |                                                                                     |
| Lane Util. Factor                 | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 0.95                                                                              |                                                                                   |                                                                                    | 0.95                                                                                |                                                                                     |                                                                                     | 0.95                                                                                |                                                                                     |
| Frpb, ped/bikes                   | 1.00                                                                              | 1.00                                                                              | 0.62                                                                              | 1.00                                                                              | 0.96                                                                              |                                                                                   |                                                                                    | 0.91                                                                                |                                                                                     |                                                                                     | 0.88                                                                                |                                                                                     |
| Flpb, ped/bikes                   | 0.94                                                                              | 1.00                                                                              | 1.00                                                                              | 0.84                                                                              | 1.00                                                                              |                                                                                   |                                                                                    | 0.96                                                                                |                                                                                     |                                                                                     | 0.97                                                                                |                                                                                     |
| Frt                               | 1.00                                                                              | 1.00                                                                              | 0.85                                                                              | 1.00                                                                              | 0.98                                                                              |                                                                                   |                                                                                    | 0.98                                                                                |                                                                                     |                                                                                     | 0.94                                                                                |                                                                                     |
| Flt Protected                     | 0.95                                                                              | 1.00                                                                              | 1.00                                                                              | 0.95                                                                              | 1.00                                                                              |                                                                                   |                                                                                    | 0.99                                                                                |                                                                                     |                                                                                     | 1.00                                                                                |                                                                                     |
| Satd. Flow (prot)                 | 1569                                                                              | 1860                                                                              | 925                                                                               | 1377                                                                              | 3312                                                                              |                                                                                   |                                                                                    | 2801                                                                                |                                                                                     |                                                                                     | 2685                                                                                |                                                                                     |
| Flt Permitted                     | 0.40                                                                              | 1.00                                                                              | 1.00                                                                              | 0.46                                                                              | 1.00                                                                              |                                                                                   |                                                                                    | 0.70                                                                                |                                                                                     |                                                                                     | 0.86                                                                                |                                                                                     |
| Satd. Flow (perm)                 | 668                                                                               | 1860                                                                              | 925                                                                               | 666                                                                               | 3312                                                                              |                                                                                   |                                                                                    | 1982                                                                                |                                                                                     |                                                                                     | 2329                                                                                |                                                                                     |
| Peak-hour factor, PHF             | 0.96                                                                              | 0.96                                                                              | 0.96                                                                              | 0.96                                                                              | 0.96                                                                              | 0.96                                                                              | 0.96                                                                               | 0.96                                                                                | 0.96                                                                                | 0.96                                                                                | 0.96                                                                                | 0.96                                                                                |
| Adj. Flow (vph)                   | 312                                                                               | 547                                                                               | 229                                                                               | 42                                                                                | 344                                                                               | 47                                                                                | 141                                                                                | 297                                                                                 | 68                                                                                  | 36                                                                                  | 203                                                                                 | 161                                                                                 |
| RTOR Reduction (vph)              | 0                                                                                 | 0                                                                                 | 103                                                                               | 0                                                                                 | 10                                                                                | 0                                                                                 | 0                                                                                  | 9                                                                                   | 0                                                                                   | 0                                                                                   | 104                                                                                 | 0                                                                                   |
| Lane Group Flow (vph)             | 313                                                                               | 547                                                                               | 126                                                                               | 42                                                                                | 381                                                                               | 0                                                                                 | 0                                                                                  | 497                                                                                 | 0                                                                                   | 0                                                                                   | 296                                                                                 | 0                                                                                   |
| Confl. Peds. (#/hr)               | 380                                                                               |                                                                                   | 440                                                                               | 440                                                                               |                                                                                   | 380                                                                               | 265                                                                                |                                                                                     | 700                                                                                 | 700                                                                                 |                                                                                     | 265                                                                                 |
| Confl. Bikes (#/hr)               |                                                                                   |                                                                                   | 205                                                                               |                                                                                   |                                                                                   | 130                                                                               |                                                                                    |                                                                                     | 20                                                                                  |                                                                                     |                                                                                     | 10                                                                                  |
| Heavy Vehicles (%)                | 1%                                                                                | 1%                                                                                | 1%                                                                                | 3%                                                                                | 1%                                                                                | 2%                                                                                | 1%                                                                                 | 7%                                                                                  | 1%                                                                                  | 0%                                                                                  | 10%                                                                                 | 1%                                                                                  |
| Bus Blockages (#/hr)              | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                  | 13                                                                                  | 0                                                                                   | 0                                                                                   | 6                                                                                   | 0                                                                                   |
| Turn Type                         | pm+pt                                                                             | NA                                                                                | Perm                                                                              | Perm                                                                              | NA                                                                                |                                                                                   | pm+pt                                                                              | NA                                                                                  |                                                                                     | Perm                                                                                | NA                                                                                  |                                                                                     |
| Protected Phases                  | 5                                                                                 | 2                                                                                 |                                                                                   |                                                                                   | 6                                                                                 |                                                                                   | 7                                                                                  | 4                                                                                   |                                                                                     |                                                                                     | 8                                                                                   |                                                                                     |
| Permitted Phases                  | 2                                                                                 |                                                                                   | 2                                                                                 | 6                                                                                 |                                                                                   |                                                                                   | 4                                                                                  |                                                                                     |                                                                                     | 8                                                                                   |                                                                                     |                                                                                     |
| Actuated Green, G (s)             | 55.0                                                                              | 55.0                                                                              | 55.0                                                                              | 33.2                                                                              | 33.2                                                                              |                                                                                   |                                                                                    | 34.9                                                                                |                                                                                     |                                                                                     | 34.9                                                                                |                                                                                     |
| Effective Green, g (s)            | 56.0                                                                              | 56.0                                                                              | 56.0                                                                              | 34.2                                                                              | 34.2                                                                              |                                                                                   |                                                                                    | 35.9                                                                                |                                                                                     |                                                                                     | 35.9                                                                                |                                                                                     |
| Actuated g/C Ratio                | 0.54                                                                              | 0.54                                                                              | 0.54                                                                              | 0.33                                                                              | 0.33                                                                              |                                                                                   |                                                                                    | 0.35                                                                                |                                                                                     |                                                                                     | 0.35                                                                                |                                                                                     |
| Clearance Time (s)                | 7.1                                                                               | 7.1                                                                               | 7.1                                                                               | 7.1                                                                               | 7.1                                                                               |                                                                                   |                                                                                    | 7.0                                                                                 |                                                                                     |                                                                                     | 7.0                                                                                 |                                                                                     |
| Vehicle Extension (s)             | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               |                                                                                   |                                                                                    | 3.0                                                                                 |                                                                                     |                                                                                     | 3.0                                                                                 |                                                                                     |
| Lane Grp Cap (vph)                | 495                                                                               | 1001                                                                              | 498                                                                               | 219                                                                               | 1089                                                                              |                                                                                   |                                                                                    | 684                                                                                 |                                                                                     |                                                                                     | 803                                                                                 |                                                                                     |
| v/s Ratio Prot                    | c0.10                                                                             | 0.29                                                                              |                                                                                   |                                                                                   | 0.12                                                                              |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| v/s Ratio Perm                    | c0.24                                                                             |                                                                                   | 0.14                                                                              | 0.06                                                                              |                                                                                   |                                                                                   |                                                                                    | c0.25                                                                               |                                                                                     |                                                                                     | 0.13                                                                                |                                                                                     |
| v/c Ratio                         | 0.63                                                                              | 0.55                                                                              | 0.25                                                                              | 0.19                                                                              | 0.35                                                                              |                                                                                   |                                                                                    | 0.73                                                                                |                                                                                     |                                                                                     | 0.37                                                                                |                                                                                     |
| Uniform Delay, d1                 | 14.4                                                                              | 15.7                                                                              | 12.8                                                                              | 25.0                                                                              | 26.5                                                                              |                                                                                   |                                                                                    | 29.8                                                                                |                                                                                     |                                                                                     | 25.5                                                                                |                                                                                     |
| Progression Factor                | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              |                                                                                   |                                                                                    | 0.93                                                                                |                                                                                     |                                                                                     | 1.00                                                                                |                                                                                     |
| Incremental Delay, d2             | 2.6                                                                               | 2.1                                                                               | 1.2                                                                               | 1.9                                                                               | 0.9                                                                               |                                                                                   |                                                                                    | 3.8                                                                                 |                                                                                     |                                                                                     | 0.3                                                                                 |                                                                                     |
| Delay (s)                         | 17.1                                                                              | 17.8                                                                              | 14.0                                                                              | 26.9                                                                              | 27.4                                                                              |                                                                                   |                                                                                    | 31.4                                                                                |                                                                                     |                                                                                     | 25.8                                                                                |                                                                                     |
| Level of Service                  | B                                                                                 | B                                                                                 | B                                                                                 | C                                                                                 | C                                                                                 |                                                                                   |                                                                                    | C                                                                                   |                                                                                     |                                                                                     | C                                                                                   |                                                                                     |
| Approach Delay (s)                |                                                                                   | 16.8                                                                              |                                                                                   |                                                                                   | 27.3                                                                              |                                                                                   |                                                                                    | 31.4                                                                                |                                                                                     |                                                                                     | 25.8                                                                                |                                                                                     |
| Approach LOS                      |                                                                                   | B                                                                                 |                                                                                   |                                                                                   | C                                                                                 |                                                                                   |                                                                                    | C                                                                                   |                                                                                     |                                                                                     | C                                                                                   |                                                                                     |
| <b>Intersection Summary</b>       |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| HCM 2000 Control Delay            |                                                                                   |                                                                                   | 23.2                                                                              |                                                                                   |                                                                                   | HCM 2000 Level of Service                                                         |                                                                                    |                                                                                     |                                                                                     | C                                                                                   |                                                                                     |                                                                                     |
| HCM 2000 Volume to Capacity ratio |                                                                                   |                                                                                   | 0.76                                                                              |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Actuated Cycle Length (s)         |                                                                                   |                                                                                   | 104.0                                                                             |                                                                                   |                                                                                   | Sum of lost time (s)                                                              |                                                                                    |                                                                                     | 24.7                                                                                |                                                                                     |                                                                                     |                                                                                     |
| Intersection Capacity Utilization |                                                                                   |                                                                                   | 119.5%                                                                            |                                                                                   |                                                                                   | ICU Level of Service                                                              |                                                                                    |                                                                                     | H                                                                                   |                                                                                     |                                                                                     |                                                                                     |
| Analysis Period (min)             |                                                                                   |                                                                                   | 15                                                                                |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| <b>c Critical Lane Group</b>      |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |



# HCM Unsignalized Intersection Capacity Analysis

## 2: Broadview Ave & Site Loading Access

Existing PM Peak Hour

|                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
|-----------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
|                                   |  |  |  |  |  |  |
| Movement                          | EBL                                                                               | EBR                                                                               | NBL                                                                               | NBT                                                                               | SBT                                                                               | SBR                                                                               |
| Lane Configurations               |  |                                                                                   |                                                                                   |  |  |                                                                                   |
| Traffic Volume (veh/h)            | 10                                                                                | 0                                                                                 | 5                                                                                 | 460                                                                               | 450                                                                               | 0                                                                                 |
| Future Volume (Veh/h)             | 10                                                                                | 0                                                                                 | 5                                                                                 | 460                                                                               | 450                                                                               | 0                                                                                 |
| Sign Control                      | Stop                                                                              |                                                                                   |                                                                                   | Free                                                                              | Free                                                                              |                                                                                   |
| Grade                             | 0%                                                                                |                                                                                   |                                                                                   | 0%                                                                                | 0%                                                                                |                                                                                   |
| Peak Hour Factor                  | 0.91                                                                              | 0.91                                                                              | 0.91                                                                              | 0.91                                                                              | 0.91                                                                              | 0.91                                                                              |
| Hourly flow rate (vph)            | 11                                                                                | 0                                                                                 | 5                                                                                 | 505                                                                               | 495                                                                               | 0                                                                                 |
| Pedestrians                       | 470                                                                               |                                                                                   |                                                                                   | 25                                                                                | 5                                                                                 |                                                                                   |
| Lane Width (m)                    | 3.5                                                                               |                                                                                   |                                                                                   | 3.5                                                                               | 3.5                                                                               |                                                                                   |
| Walking Speed (m/s)               | 1.2                                                                               |                                                                                   |                                                                                   | 1.2                                                                               | 1.2                                                                               |                                                                                   |
| Percent Blockage                  | 38                                                                                |                                                                                   |                                                                                   | 2                                                                                 | 0                                                                                 |                                                                                   |
| Right turn flare (veh)            |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| Median type                       |                                                                                   |                                                                                   |                                                                                   | None                                                                              | None                                                                              |                                                                                   |
| Median storage veh                |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| Upstream signal (m)               |                                                                                   |                                                                                   |                                                                                   | 56                                                                                | 90                                                                                |                                                                                   |
| pX, platoon unblocked             | 0.98                                                                              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| vC, conflicting volume            | 1232                                                                              | 742                                                                               | 965                                                                               |                                                                                   |                                                                                   |                                                                                   |
| vC1, stage 1 conf vol             |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| vC2, stage 2 conf vol             |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| vCu, unblocked vol                | 1193                                                                              | 742                                                                               | 965                                                                               |                                                                                   |                                                                                   |                                                                                   |
| tC, single (s)                    | 6.8                                                                               | 6.9                                                                               | 4.1                                                                               |                                                                                   |                                                                                   |                                                                                   |
| tC, 2 stage (s)                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| tF (s)                            | 3.5                                                                               | 3.3                                                                               | 2.2                                                                               |                                                                                   |                                                                                   |                                                                                   |
| p0 queue free %                   | 90                                                                                | 100                                                                               | 99                                                                                |                                                                                   |                                                                                   |                                                                                   |
| cM capacity (veh/h)               | 109                                                                               | 220                                                                               | 447                                                                               |                                                                                   |                                                                                   |                                                                                   |
| Direction, Lane #                 | EB 1                                                                              | NB 1                                                                              | NB 2                                                                              | SB 1                                                                              | SB 2                                                                              |                                                                                   |
| Volume Total                      | 11                                                                                | 173                                                                               | 337                                                                               | 330                                                                               | 165                                                                               |                                                                                   |
| Volume Left                       | 11                                                                                | 5                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                   |
| Volume Right                      | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                   |
| cSH                               | 109                                                                               | 447                                                                               | 1700                                                                              | 1700                                                                              | 1700                                                                              |                                                                                   |
| Volume to Capacity                | 0.10                                                                              | 0.01                                                                              | 0.20                                                                              | 0.19                                                                              | 0.10                                                                              |                                                                                   |
| Queue Length 95th (m)             | 2.6                                                                               | 0.3                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   |
| Control Delay (s)                 | 41.8                                                                              | 0.5                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   |
| Lane LOS                          | E                                                                                 | A                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| Approach Delay (s)                | 41.8                                                                              | 0.2                                                                               |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   |
| Approach LOS                      | E                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| Intersection Summary              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| Average Delay                     |                                                                                   |                                                                                   | 0.5                                                                               |                                                                                   |                                                                                   |                                                                                   |
| Intersection Capacity Utilization |                                                                                   |                                                                                   | 31.9%                                                                             | ICU Level of Service                                                              |                                                                                   | A                                                                                 |
| Analysis Period (min)             |                                                                                   |                                                                                   | 15                                                                                |                                                                                   |                                                                                   |                                                                                   |

# HCM Unsignalized Intersection Capacity Analysis

## 3: Broadview Ave & Dearbourne Ave

Existing PM Peak Hour

|                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
|-----------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
|                                   |  |  |  |  |  |  |
| Movement                          | WBL                                                                               | WBR                                                                               | NBT                                                                               | NBR                                                                               | SBL                                                                               | SBT                                                                               |
| Lane Configurations               |  |                                                                                   |  |                                                                                   |                                                                                   |  |
| Traffic Volume (veh/h)            | 15                                                                                | 25                                                                                | 445                                                                               | 0                                                                                 | 0                                                                                 | 455                                                                               |
| Future Volume (Veh/h)             | 15                                                                                | 25                                                                                | 445                                                                               | 0                                                                                 | 0                                                                                 | 455                                                                               |
| Sign Control                      | Stop                                                                              |                                                                                   | Free                                                                              |                                                                                   |                                                                                   | Free                                                                              |
| Grade                             | 0%                                                                                |                                                                                   | 0%                                                                                |                                                                                   |                                                                                   | 0%                                                                                |
| Peak Hour Factor                  | 0.91                                                                              | 0.91                                                                              | 0.91                                                                              | 0.91                                                                              | 0.91                                                                              | 0.91                                                                              |
| Hourly flow rate (vph)            | 16                                                                                | 27                                                                                | 489                                                                               | 0                                                                                 | 0                                                                                 | 500                                                                               |
| Pedestrians                       | 300                                                                               |                                                                                   | 25                                                                                |                                                                                   |                                                                                   | 20                                                                                |
| Lane Width (m)                    | 3.5                                                                               |                                                                                   | 3.5                                                                               |                                                                                   |                                                                                   | 3.5                                                                               |
| Walking Speed (m/s)               | 1.2                                                                               |                                                                                   | 1.2                                                                               |                                                                                   |                                                                                   | 1.2                                                                               |
| Percent Blockage                  | 24                                                                                |                                                                                   | 2                                                                                 |                                                                                   |                                                                                   | 2                                                                                 |
| Right turn flare (veh)            |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| Median type                       |                                                                                   |                                                                                   | None                                                                              |                                                                                   |                                                                                   | None                                                                              |
| Median storage veh                |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| Upstream signal (m)               |                                                                                   |                                                                                   | 34                                                                                |                                                                                   |                                                                                   | 112                                                                               |
| pX, platoon unblocked             | 0.97                                                                              | 0.97                                                                              |                                                                                   |                                                                                   | 0.97                                                                              |                                                                                   |
| vC, conflicting volume            | 1064                                                                              | 564                                                                               |                                                                                   |                                                                                   | 789                                                                               |                                                                                   |
| vC1, stage 1 conf vol             |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| vC2, stage 2 conf vol             |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| vCu, unblocked vol                | 1013                                                                              | 501                                                                               |                                                                                   |                                                                                   | 731                                                                               |                                                                                   |
| tC, single (s)                    | 6.8                                                                               | 6.9                                                                               |                                                                                   |                                                                                   | 4.1                                                                               |                                                                                   |
| tC, 2 stage (s)                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| tF (s)                            | 3.5                                                                               | 3.3                                                                               |                                                                                   |                                                                                   | 2.2                                                                               |                                                                                   |
| p0 queue free %                   | 91                                                                                | 93                                                                                |                                                                                   |                                                                                   | 100                                                                               |                                                                                   |
| cM capacity (veh/h)               | 172                                                                               | 378                                                                               |                                                                                   |                                                                                   | 651                                                                               |                                                                                   |
| Direction, Lane #                 | WB 1                                                                              | NB 1                                                                              | NB 2                                                                              | SB 1                                                                              | SB 2                                                                              |                                                                                   |
| Volume Total                      | 43                                                                                | 244                                                                               | 244                                                                               | 250                                                                               | 250                                                                               |                                                                                   |
| Volume Left                       | 16                                                                                | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                   |
| Volume Right                      | 27                                                                                | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                   |
| cSH                               | 262                                                                               | 1700                                                                              | 1700                                                                              | 1700                                                                              | 1700                                                                              |                                                                                   |
| Volume to Capacity                | 0.16                                                                              | 0.14                                                                              | 0.14                                                                              | 0.15                                                                              | 0.15                                                                              |                                                                                   |
| Queue Length 95th (m)             | 4.6                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   |
| Control Delay (s)                 | 21.4                                                                              | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   |
| Lane LOS                          | C                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| Approach Delay (s)                | 21.4                                                                              | 0.0                                                                               |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   |
| Approach LOS                      | C                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| Intersection Summary              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| Average Delay                     |                                                                                   |                                                                                   | 0.9                                                                               |                                                                                   |                                                                                   |                                                                                   |
| Intersection Capacity Utilization |                                                                                   |                                                                                   | 28.3%                                                                             |                                                                                   | ICU Level of Service                                                              | A                                                                                 |
| Analysis Period (min)             |                                                                                   |                                                                                   | 15                                                                                |                                                                                   |                                                                                   |                                                                                   |

## Queues

### 4: Broadview Ave & Site Driveway

Existing PM Peak Hour

|                        |  |  |  |  |
|------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| Lane Group             | EBL                                                                               | NBL                                                                               | NBT                                                                               | SBT                                                                               |
| Lane Configurations    |  |                                                                                   |  |  |
| Traffic Volume (vph)   | 25                                                                                | 30                                                                                | 415                                                                               | 440                                                                               |
| Future Volume (vph)    | 25                                                                                | 30                                                                                | 415                                                                               | 440                                                                               |
| Lane Group Flow (vph)  | 65                                                                                | 0                                                                                 | 478                                                                               | 511                                                                               |
| Turn Type              | Prot                                                                              | Perm                                                                              | NA                                                                                | NA                                                                                |
| Protected Phases       | 4                                                                                 |                                                                                   | 2                                                                                 | 6                                                                                 |
| Permitted Phases       |                                                                                   | 2                                                                                 |                                                                                   |                                                                                   |
| Detector Phase         | 4                                                                                 | 2                                                                                 | 2                                                                                 | 6                                                                                 |
| Switch Phase           |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| Minimum Initial (s)    | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               |
| Minimum Split (s)      | 36.0                                                                              | 34.0                                                                              | 34.0                                                                              | 36.0                                                                              |
| Total Split (s)        | 42.0                                                                              | 62.0                                                                              | 62.0                                                                              | 62.0                                                                              |
| Total Split (%)        | 40.4%                                                                             | 59.6%                                                                             | 59.6%                                                                             | 59.6%                                                                             |
| Yellow Time (s)        | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               |
| All-Red Time (s)       | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               |
| Lost Time Adjust (s)   | -1.0                                                                              |                                                                                   | -1.0                                                                              | -1.0                                                                              |
| Total Lost Time (s)    | 6.0                                                                               |                                                                                   | 6.0                                                                               | 6.0                                                                               |
| Lead/Lag               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| Lead-Lag Optimize?     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| Recall Mode            | None                                                                              | C-Min                                                                             | C-Min                                                                             | C-Min                                                                             |
| v/c Ratio              | 0.38                                                                              |                                                                                   | 0.19                                                                              | 0.19                                                                              |
| Control Delay          | 28.9                                                                              |                                                                                   | 2.5                                                                               | 2.3                                                                               |
| Queue Delay            | 0.0                                                                               |                                                                                   | 0.5                                                                               | 0.0                                                                               |
| Total Delay            | 28.9                                                                              |                                                                                   | 3.1                                                                               | 2.3                                                                               |
| Queue Length 50th (m)  | 5.5                                                                               |                                                                                   | 9.4                                                                               | 8.8                                                                               |
| Queue Length 95th (m)  | 18.4                                                                              |                                                                                   | 16.4                                                                              | 14.5                                                                              |
| Internal Link Dist (m) | 42.1                                                                              |                                                                                   | 18.5                                                                              | 10.1                                                                              |
| Turn Bay Length (m)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| Base Capacity (vph)    | 606                                                                               |                                                                                   | 2514                                                                              | 2687                                                                              |
| Starvation Cap Reductn | 0                                                                                 |                                                                                   | 1563                                                                              | 0                                                                                 |
| Spillback Cap Reductn  | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |
| Storage Cap Reductn    | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |
| Reduced v/c Ratio      | 0.11                                                                              |                                                                                   | 0.50                                                                              | 0.19                                                                              |

#### Intersection Summary

Cycle Length: 104

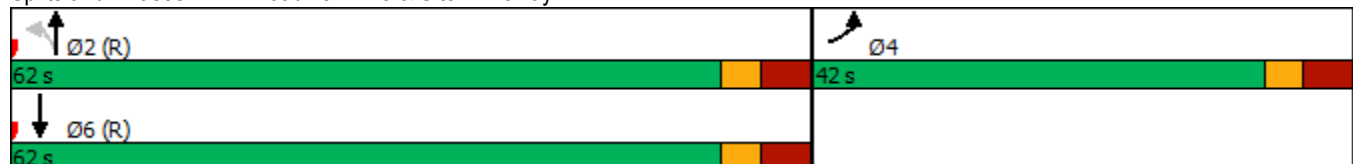
Actuated Cycle Length: 104

Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green

Natural Cycle: 75

Control Type: Actuated-Coordinated

Splits and Phases: 4: Broadview Ave & Site Driveway



# HCM Signalized Intersection Capacity Analysis

## 4: Broadview Ave & Site Driveway

Existing PM Peak Hour

|                                   |  |      |       |       |                           |      |
|-----------------------------------|-----------------------------------------------------------------------------------|------|-------|-------|---------------------------|------|
| Movement                          | EBL                                                                               | EBR  | NBL   | NBT   | SBT                       | SBR  |
| Lane Configurations               | WT                                                                                |      |       | TT    | TT                        |      |
| Traffic Volume (vph)              | 25                                                                                | 35   | 30    | 415   | 440                       | 35   |
| Future Volume (vph)               | 25                                                                                | 35   | 30    | 415   | 440                       | 35   |
| Ideal Flow (vphpl)                | 1900                                                                              | 1900 | 1900  | 1900  | 1900                      | 1900 |
| Total Lost time (s)               | 6.0                                                                               |      |       | 6.0   | 6.0                       |      |
| Lane Util. Factor                 | 1.00                                                                              |      |       | 0.95  | 0.95                      |      |
| Frpb, ped/bikes                   | 0.99                                                                              |      |       | 1.00  | 0.96                      |      |
| Flpb, ped/bikes                   | 1.00                                                                              |      |       | 0.98  | 1.00                      |      |
| Frt                               | 0.92                                                                              |      |       | 1.00  | 0.99                      |      |
| Flt Protected                     | 0.98                                                                              |      |       | 1.00  | 1.00                      |      |
| Satd. Flow (prot)                 | 1678                                                                              |      |       | 3340  | 3206                      |      |
| Flt Permitted                     | 0.98                                                                              |      |       | 0.90  | 1.00                      |      |
| Satd. Flow (perm)                 | 1678                                                                              |      |       | 2999  | 3206                      |      |
| Peak-hour factor, PHF             | 0.93                                                                              | 0.93 | 0.93  | 0.93  | 0.93                      | 0.93 |
| Adj. Flow (vph)                   | 27                                                                                | 38   | 32    | 446   | 473                       | 38   |
| RTOR Reduction (vph)              | 35                                                                                | 0    | 0     | 0     | 2                         | 0    |
| Lane Group Flow (vph)             | 30                                                                                | 0    | 0     | 478   | 509                       | 0    |
| Confl. Peds. (#/hr)               | 15                                                                                | 5    | 370   |       |                           | 370  |
| Confl. Bikes (#/hr)               |                                                                                   |      |       |       |                           | 65   |
| Heavy Vehicles (%)                | 0%                                                                                | 0%   | 0%    | 5%    | 6%                        | 0%   |
| Turn Type                         | Prot                                                                              |      | Perm  | NA    | NA                        |      |
| Protected Phases                  | 4                                                                                 |      |       | 2     | 6                         |      |
| Permitted Phases                  |                                                                                   |      | 2     |       |                           |      |
| Actuated Green, G (s)             | 6.5                                                                               |      |       | 83.5  | 83.5                      |      |
| Effective Green, g (s)            | 7.5                                                                               |      |       | 84.5  | 84.5                      |      |
| Actuated g/C Ratio                | 0.07                                                                              |      |       | 0.81  | 0.81                      |      |
| Clearance Time (s)                | 7.0                                                                               |      |       | 7.0   | 7.0                       |      |
| Vehicle Extension (s)             | 3.0                                                                               |      |       | 3.0   | 3.0                       |      |
| Lane Grp Cap (vph)                | 121                                                                               |      |       | 2436  | 2604                      |      |
| v/s Ratio Prot                    | c0.02                                                                             |      |       |       | 0.16                      |      |
| v/s Ratio Perm                    |                                                                                   |      |       | c0.16 |                           |      |
| v/c Ratio                         | 0.25                                                                              |      |       | 0.20  | 0.20                      |      |
| Uniform Delay, d1                 | 45.6                                                                              |      |       | 2.2   | 2.2                       |      |
| Progression Factor                | 1.00                                                                              |      |       | 1.00  | 0.94                      |      |
| Incremental Delay, d2             | 1.1                                                                               |      |       | 0.2   | 0.2                       |      |
| Delay (s)                         | 46.6                                                                              |      |       | 2.4   | 2.2                       |      |
| Level of Service                  | D                                                                                 |      |       | A     | A                         |      |
| Approach Delay (s)                | 46.6                                                                              |      |       | 2.4   | 2.2                       |      |
| Approach LOS                      | D                                                                                 |      |       | A     | A                         |      |
| <b>Intersection Summary</b>       |                                                                                   |      |       |       |                           |      |
| HCM 2000 Control Delay            |                                                                                   |      | 5.0   |       | HCM 2000 Level of Service | A    |
| HCM 2000 Volume to Capacity ratio |                                                                                   |      | 0.20  |       |                           |      |
| Actuated Cycle Length (s)         |                                                                                   |      | 104.0 |       | Sum of lost time (s)      | 12.0 |
| Intersection Capacity Utilization |                                                                                   |      | 51.5% |       | ICU Level of Service      | A    |
| Analysis Period (min)             |                                                                                   |      | 15    |       |                           |      |
| c Critical Lane Group             |                                                                                   |      |       |       |                           |      |



# HCM Unsignalized Intersection Capacity Analysis

## 6: Broadview Ave & Fairview Blvd

Existing PM Peak Hour

|                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
|-----------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
|                                   |  |  |  |  |  |  |
| Movement                          | WBL                                                                               | WBR                                                                               | NBT                                                                               | NBR                                                                               | SBL                                                                               | SBT                                                                               |
| Lane Configurations               |                                                                                   |                                                                                   |  |                                                                                   |                                                                                   |  |
| Traffic Volume (veh/h)            | 0                                                                                 | 0                                                                                 | 445                                                                               | 15                                                                                | 30                                                                                | 435                                                                               |
| Future Volume (Veh/h)             | 0                                                                                 | 0                                                                                 | 445                                                                               | 15                                                                                | 30                                                                                | 435                                                                               |
| 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                                                                                 | 484                                                                               | 16                                                                                | 33                                                                                | 473                                                                               |
| Pedestrians                       | 275                                                                               |                                                                                   | 5                                                                                 |                                                                                   |                                                                                   | 10                                                                                |
| Lane Width (m)                    | 0.0                                                                               |                                                                                   | 3.5                                                                               |                                                                                   |                                                                                   | 3.5                                                                               |
| Walking Speed (m/s)               | 1.2                                                                               |                                                                                   | 1.2                                                                               |                                                                                   |                                                                                   | 1.2                                                                               |
| Percent Blockage                  | 0                                                                                 |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 1                                                                                 |
| Right turn flare (veh)            |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| Median type                       |                                                                                   |                                                                                   | None                                                                              |                                                                                   |                                                                                   | None                                                                              |
| Median storage veh                |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| Upstream signal (m)               |                                                                                   |                                                                                   | 45                                                                                |                                                                                   |                                                                                   | 42                                                                                |
| pX, platoon unblocked             | 0.98                                                                              | 0.98                                                                              |                                                                                   |                                                                                   | 0.98                                                                              |                                                                                   |
| vC, conflicting volume            | 1074                                                                              | 535                                                                               |                                                                                   |                                                                                   | 775                                                                               |                                                                                   |
| vC1, stage 1 conf vol             |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| vC2, stage 2 conf vol             |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| vCu, unblocked vol                | 961                                                                               | 493                                                                               |                                                                                   |                                                                                   | 737                                                                               |                                                                                   |
| 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                                                                               |                                                                                   |                                                                                   | 96                                                                                |                                                                                   |
| cM capacity (veh/h)               | 242                                                                               | 514                                                                               |                                                                                   |                                                                                   | 863                                                                               |                                                                                   |
| Direction, Lane #                 | NB 1                                                                              | NB 2                                                                              | SB 1                                                                              | SB 2                                                                              |                                                                                   |                                                                                   |
| Volume Total                      | 323                                                                               | 177                                                                               | 191                                                                               | 315                                                                               |                                                                                   |                                                                                   |
| Volume Left                       | 0                                                                                 | 0                                                                                 | 33                                                                                | 0                                                                                 |                                                                                   |                                                                                   |
| Volume Right                      | 0                                                                                 | 16                                                                                | 0                                                                                 | 0                                                                                 |                                                                                   |                                                                                   |
| cSH                               | 1700                                                                              | 1700                                                                              | 863                                                                               | 1700                                                                              |                                                                                   |                                                                                   |
| Volume to Capacity                | 0.19                                                                              | 0.10                                                                              | 0.04                                                                              | 0.19                                                                              |                                                                                   |                                                                                   |
| Queue Length 95th (m)             | 0.0                                                                               | 0.0                                                                               | 1.0                                                                               | 0.0                                                                               |                                                                                   |                                                                                   |
| Control Delay (s)                 | 0.0                                                                               | 0.0                                                                               | 1.9                                                                               | 0.0                                                                               |                                                                                   |                                                                                   |
| Lane LOS                          |                                                                                   |                                                                                   | A                                                                                 |                                                                                   |                                                                                   |                                                                                   |
| Approach Delay (s)                | 0.0                                                                               |                                                                                   | 0.7                                                                               |                                                                                   |                                                                                   |                                                                                   |
| Approach LOS                      |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| Intersection Summary              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| Average Delay                     |                                                                                   |                                                                                   | 0.4                                                                               |                                                                                   |                                                                                   |                                                                                   |
| Intersection Capacity Utilization |                                                                                   |                                                                                   | 42.4%                                                                             |                                                                                   | ICU Level of Service                                                              | A                                                                                 |
| Analysis Period (min)             |                                                                                   |                                                                                   | 15                                                                                |                                                                                   |                                                                                   |                                                                                   |

## Queues

## 7: Broadview Ave

Existing PM Peak Hour

|                        | ↑     | ↓     |      |
|------------------------|-------|-------|------|
| Lane Group             | NBT   | SBT   | Ø9   |
| Lane Configurations    | ↑↑    | ↑↑    |      |
| Traffic Volume (vph)   | 460   | 435   |      |
| Future Volume (vph)    | 460   | 435   |      |
| Lane Group Flow (vph)  | 489   | 463   |      |
| Turn Type              | NA    | NA    |      |
| Protected Phases       | 2     | 6     | 9    |
| Permitted Phases       |       |       |      |
| Detector Phase         | 2     | 6     |      |
| Switch Phase           |       |       |      |
| Minimum Initial (s)    | 5.0   | 5.0   | 5.0  |
| Minimum Split (s)      | 8.0   | 8.0   | 22.5 |
| Total Split (s)        | 60.0  | 60.0  | 50.0 |
| Total Split (%)        | 54.5% | 54.5% | 45%  |
| Yellow Time (s)        | 2.0   | 2.0   | 3.5  |
| All-Red Time (s)       | 1.0   | 1.0   | 1.0  |
| Lost Time Adjust (s)   | -1.0  | -1.0  |      |
| Total Lost Time (s)    | 2.0   | 2.0   |      |
| Lead/Lag               |       |       |      |
| Lead-Lag Optimize?     |       |       |      |
| Recall Mode            | Min   | Min   | None |
| v/c Ratio              | 0.16  | 0.15  |      |
| Control Delay          | 2.3   | 2.3   |      |
| Queue Delay            | 0.0   | 0.0   |      |
| Total Delay            | 2.3   | 2.3   |      |
| Queue Length 50th (m)  | 0.0   | 0.0   |      |
| Queue Length 95th (m)  | 19.4  | 18.4  |      |
| Internal Link Dist (m) | 3.2   | 21.0  |      |
| Turn Bay Length (m)    |       |       |      |
| Base Capacity (vph)    | 3433  | 3400  |      |
| Starvation Cap Reductn | 0     | 227   |      |
| Spillback Cap Reductn  | 0     | 0     |      |
| Storage Cap Reductn    | 0     | 0     |      |
| Reduced v/c Ratio      | 0.14  | 0.15  |      |

## Intersection Summary

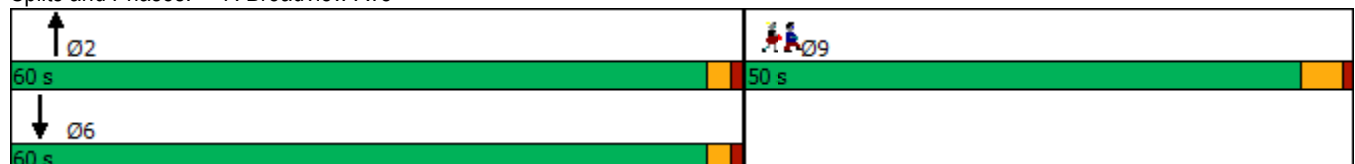
Cycle Length: 110

Actuated Cycle Length: 30

Natural Cycle: 40

Control Type: Actuated-Uncoordinated

Splits and Phases: 7: Broadview Ave



# HCM Signalized Intersection Capacity Analysis

## 7: Broadview Ave

Existing PM Peak Hour

|                                   |  |  |  |  |  |  |
|-----------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| Movement                          | EBL                                                                               | EBR                                                                               | NBL                                                                               | NBT                                                                               | SBT                                                                               | SBR                                                                               |
| Lane Configurations               |                                                                                   |                                                                                   |                                                                                   | ↑↑                                                                                | ↑↑                                                                                |                                                                                   |
| Traffic Volume (vph)              | 0                                                                                 | 0                                                                                 | 0                                                                                 | 460                                                                               | 435                                                                               | 0                                                                                 |
| Future Volume (vph)               | 0                                                                                 | 0                                                                                 | 0                                                                                 | 460                                                                               | 435                                                                               | 0                                                                                 |
| Ideal Flow (vphpl)                | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              |
| Total Lost time (s)               |                                                                                   |                                                                                   |                                                                                   | 2.0                                                                               | 2.0                                                                               |                                                                                   |
| Lane Util. Factor                 |                                                                                   |                                                                                   |                                                                                   | 0.95                                                                              | 0.95                                                                              |                                                                                   |
| Frt                               |                                                                                   |                                                                                   |                                                                                   | 1.00                                                                              | 1.00                                                                              |                                                                                   |
| Flt Protected                     |                                                                                   |                                                                                   |                                                                                   | 1.00                                                                              | 1.00                                                                              |                                                                                   |
| Satd. Flow (prot)                 |                                                                                   |                                                                                   |                                                                                   | 3433                                                                              | 3400                                                                              |                                                                                   |
| Flt Permitted                     |                                                                                   |                                                                                   |                                                                                   | 1.00                                                                              | 1.00                                                                              |                                                                                   |
| Satd. Flow (perm)                 |                                                                                   |                                                                                   |                                                                                   | 3433                                                                              | 3400                                                                              |                                                                                   |
| Peak-hour factor, PHF             | 0.94                                                                              | 0.94                                                                              | 0.94                                                                              | 0.94                                                                              | 0.94                                                                              | 0.94                                                                              |
| Adj. Flow (vph)                   | 0                                                                                 | 0                                                                                 | 0                                                                                 | 489                                                                               | 463                                                                               | 0                                                                                 |
| RTOR Reduction (vph)              | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 |
| Lane Group Flow (vph)             | 0                                                                                 | 0                                                                                 | 0                                                                                 | 489                                                                               | 463                                                                               | 0                                                                                 |
| Heavy Vehicles (%)                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 4%                                                                                | 5%                                                                                | 0%                                                                                |
| Turn Type                         |                                                                                   |                                                                                   |                                                                                   | NA                                                                                | NA                                                                                |                                                                                   |
| Protected Phases                  |                                                                                   |                                                                                   |                                                                                   | 2                                                                                 | 6                                                                                 |                                                                                   |
| Permitted Phases                  |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| Actuated Green, G (s)             |                                                                                   |                                                                                   |                                                                                   | 24.2                                                                              | 24.2                                                                              |                                                                                   |
| Effective Green, g (s)            |                                                                                   |                                                                                   |                                                                                   | 25.2                                                                              | 25.2                                                                              |                                                                                   |
| Actuated g/C Ratio                |                                                                                   |                                                                                   |                                                                                   | 0.75                                                                              | 0.75                                                                              |                                                                                   |
| Clearance Time (s)                |                                                                                   |                                                                                   |                                                                                   | 3.0                                                                               | 3.0                                                                               |                                                                                   |
| Vehicle Extension (s)             |                                                                                   |                                                                                   |                                                                                   | 3.0                                                                               | 3.0                                                                               |                                                                                   |
| Lane Grp Cap (vph)                |                                                                                   |                                                                                   |                                                                                   | 2559                                                                              | 2534                                                                              |                                                                                   |
| v/s Ratio Prot                    |                                                                                   |                                                                                   |                                                                                   | c0.14                                                                             | 0.14                                                                              |                                                                                   |
| v/s Ratio Perm                    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| v/c Ratio                         |                                                                                   |                                                                                   |                                                                                   | 0.19                                                                              | 0.18                                                                              |                                                                                   |
| Uniform Delay, d1                 |                                                                                   |                                                                                   |                                                                                   | 1.3                                                                               | 1.3                                                                               |                                                                                   |
| Progression Factor                |                                                                                   |                                                                                   |                                                                                   | 1.00                                                                              | 1.00                                                                              |                                                                                   |
| Incremental Delay, d2             |                                                                                   |                                                                                   |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   |
| Delay (s)                         |                                                                                   |                                                                                   |                                                                                   | 1.3                                                                               | 1.3                                                                               |                                                                                   |
| Level of Service                  |                                                                                   |                                                                                   |                                                                                   | A                                                                                 | A                                                                                 |                                                                                   |
| Approach Delay (s)                | 0.0                                                                               |                                                                                   |                                                                                   | 1.3                                                                               | 1.3                                                                               |                                                                                   |
| Approach LOS                      | A                                                                                 |                                                                                   |                                                                                   | A                                                                                 | A                                                                                 |                                                                                   |
| Intersection Summary              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| HCM 2000 Control Delay            |                                                                                   |                                                                                   | 1.3                                                                               | HCM 2000 Level of Service                                                         |                                                                                   | A                                                                                 |
| HCM 2000 Volume to Capacity ratio |                                                                                   |                                                                                   | 0.17                                                                              |                                                                                   |                                                                                   |                                                                                   |
| Actuated Cycle Length (s)         |                                                                                   |                                                                                   | 33.8                                                                              | Sum of lost time (s)                                                              |                                                                                   | 6.5                                                                               |
| Intersection Capacity Utilization |                                                                                   |                                                                                   | 16.0%                                                                             | ICU Level of Service                                                              |                                                                                   | A                                                                                 |
| Analysis Period (min)             |                                                                                   |                                                                                   | 15                                                                                |                                                                                   |                                                                                   |                                                                                   |
| c Critical Lane Group             |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |

# HCM Unsignalized Intersection Capacity Analysis

## 8: Broadview Ave & Wolfrey Ave

Existing PM Peak Hour

|                                   |                                                                                   |                                                                                   |                                                                                                                                                                     |                                                                                   |                                                                                   |                                                                                                                                                                     |
|-----------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                   |  |  |                                                                                    |  |  |                                                                                    |
| Movement                          | WBL                                                                               | WBR                                                                               | NBT                                                                                                                                                                 | NBR                                                                               | SBL                                                                               | SBT                                                                                                                                                                 |
| Lane Configurations               |  |                                                                                   |   |                                                                                   |                                                                                   |   |
| Traffic Volume (veh/h)            | 5                                                                                 | 5                                                                                 | 450                                                                                                                                                                 | 0                                                                                 | 10                                                                                | 425                                                                                                                                                                 |
| Future Volume (Veh/h)             | 5                                                                                 | 5                                                                                 | 450                                                                                                                                                                 | 0                                                                                 | 10                                                                                | 425                                                                                                                                                                 |
| Sign Control                      | Stop                                                                              |                                                                                   | Free                                                                                                                                                                |                                                                                   |                                                                                   | Free                                                                                                                                                                |
| Grade                             | 0%                                                                                |                                                                                   | 0%                                                                                                                                                                  |                                                                                   |                                                                                   | 0%                                                                                                                                                                  |
| Peak Hour Factor                  | 0.94                                                                              | 0.94                                                                              | 0.94                                                                                                                                                                | 0.94                                                                              | 0.94                                                                              | 0.94                                                                                                                                                                |
| Hourly flow rate (vph)            | 5                                                                                 | 5                                                                                 | 479                                                                                                                                                                 | 0                                                                                 | 11                                                                                | 452                                                                                                                                                                 |
| Pedestrians                       | 260                                                                               |                                                                                   | 5                                                                                                                                                                   |                                                                                   |                                                                                   | 150                                                                                                                                                                 |
| Lane Width (m)                    | 3.5                                                                               |                                                                                   | 3.5                                                                                                                                                                 |                                                                                   |                                                                                   | 3.5                                                                                                                                                                 |
| Walking Speed (m/s)               | 1.2                                                                               |                                                                                   | 1.2                                                                                                                                                                 |                                                                                   |                                                                                   | 1.2                                                                                                                                                                 |
| Percent Blockage                  | 21                                                                                |                                                                                   | 0                                                                                                                                                                   |                                                                                   |                                                                                   | 12                                                                                                                                                                  |
| Right turn flare (veh)            |                                                                                   |                                                                                   |                                                                                                                                                                     |                                                                                   |                                                                                   |                                                                                                                                                                     |
| Median type                       |                                                                                   |                                                                                   | None                                                                                                                                                                |                                                                                   |                                                                                   | None                                                                                                                                                                |
| Median storage veh                |                                                                                   |                                                                                   |                                                                                                                                                                     |                                                                                   |                                                                                   |                                                                                                                                                                     |
| Upstream signal (m)               |                                                                                   |                                                                                   |                                                                                                                                                                     |                                                                                   |                                                                                   | 27                                                                                                                                                                  |
| pX, platoon unblocked             | 0.98                                                                              |                                                                                   |                                                                                                                                                                     |                                                                                   |                                                                                   |                                                                                                                                                                     |
| vC, conflicting volume            | 992                                                                               | 650                                                                               |                                                                                                                                                                     |                                                                                   | 739                                                                               |                                                                                                                                                                     |
| vC1, stage 1 conf vol             |                                                                                   |                                                                                   |                                                                                                                                                                     |                                                                                   |                                                                                   |                                                                                                                                                                     |
| vC2, stage 2 conf vol             |                                                                                   |                                                                                   |                                                                                                                                                                     |                                                                                   |                                                                                   |                                                                                                                                                                     |
| vCu, unblocked vol                | 941                                                                               | 650                                                                               |                                                                                                                                                                     |                                                                                   | 739                                                                               |                                                                                                                                                                     |
| tC, single (s)                    | 6.8                                                                               | 6.9                                                                               |                                                                                                                                                                     |                                                                                   | 4.1                                                                               |                                                                                                                                                                     |
| tC, 2 stage (s)                   |                                                                                   |                                                                                   |                                                                                                                                                                     |                                                                                   |                                                                                   |                                                                                                                                                                     |
| tF (s)                            | 3.5                                                                               | 3.3                                                                               |                                                                                                                                                                     |                                                                                   | 2.2                                                                               |                                                                                                                                                                     |
| p0 queue free %                   | 98                                                                                | 98                                                                                |                                                                                                                                                                     |                                                                                   | 98                                                                                |                                                                                                                                                                     |
| cM capacity (veh/h)               | 200                                                                               | 289                                                                               |                                                                                                                                                                     |                                                                                   | 692                                                                               |                                                                                                                                                                     |
| Direction, Lane #                 | WB 1                                                                              | NB 1                                                                              | NB 2                                                                                                                                                                | SB 1                                                                              | SB 2                                                                              |                                                                                                                                                                     |
| Volume Total                      | 10                                                                                | 319                                                                               | 160                                                                                                                                                                 | 162                                                                               | 301                                                                               |                                                                                                                                                                     |
| Volume Left                       | 5                                                                                 | 0                                                                                 | 0                                                                                                                                                                   | 11                                                                                | 0                                                                                 |                                                                                                                                                                     |
| Volume Right                      | 5                                                                                 | 0                                                                                 | 0                                                                                                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                                                                                                     |
| cSH                               | 237                                                                               | 1700                                                                              | 1700                                                                                                                                                                | 692                                                                               | 1700                                                                              |                                                                                                                                                                     |
| Volume to Capacity                | 0.04                                                                              | 0.19                                                                              | 0.09                                                                                                                                                                | 0.02                                                                              | 0.18                                                                              |                                                                                                                                                                     |
| Queue Length 95th (m)             | 1.1                                                                               | 0.0                                                                               | 0.0                                                                                                                                                                 | 0.4                                                                               | 0.0                                                                               |                                                                                                                                                                     |
| Control Delay (s)                 | 20.9                                                                              | 0.0                                                                               | 0.0                                                                                                                                                                 | 0.9                                                                               | 0.0                                                                               |                                                                                                                                                                     |
| Lane LOS                          | C                                                                                 |                                                                                   |                                                                                                                                                                     | A                                                                                 |                                                                                   |                                                                                                                                                                     |
| Approach Delay (s)                | 20.9                                                                              | 0.0                                                                               |                                                                                                                                                                     | 0.3                                                                               |                                                                                   |                                                                                                                                                                     |
| Approach LOS                      | C                                                                                 |                                                                                   |                                                                                                                                                                     |                                                                                   |                                                                                   |                                                                                                                                                                     |
| Intersection Summary              |                                                                                   |                                                                                   |                                                                                                                                                                     |                                                                                   |                                                                                   |                                                                                                                                                                     |
| Average Delay                     |                                                                                   |                                                                                   | 0.4                                                                                                                                                                 |                                                                                   |                                                                                   |                                                                                                                                                                     |
| Intersection Capacity Utilization |                                                                                   |                                                                                   | 38.8%                                                                                                                                                               | ICU Level of Service                                                              |                                                                                   | A                                                                                                                                                                   |
| Analysis Period (min)             |                                                                                   |                                                                                   | 15                                                                                                                                                                  |                                                                                   |                                                                                   |                                                                                                                                                                     |



## **Appendix G: Signal Timing Plans**



|                                                                                                                                                                                                                                                                        |             |                                                                    |                 |                 |                   |                       |                                                                                                                                                                                                                                                                                                  |                        |                                                                                                                                                          |                                                                                                                                                                                                                                                                                        |  |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|--------------------------------------------------------------------|-----------------|-----------------|-------------------|-----------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| LOCATION: Danforth Ave & Broadview Ave<br>MODE/COMMENT: SA1 with TSP, 2-Wire Polara APS<br>TCS: 294<br>PREPARED BY / DATE: Lina Elmorshedy/ March 26, 2024<br>CHECKED BY / DATE: Ihtesham Ahmad / March 26, 2024<br>CITY STAFF:<br>IMPLEMENTATION DATE: March 28, 2024 |             |                                                                    |                 |                 |                   |                       | ATO (DISTRICT) / WARD: 1 (Toronto & East York) / 14<br>COMPUTER SYSTEM: TransSuite<br>CONTROLLER / CABINET: Peek ATC-1000 / TS2T1<br>CONFLICT FLASH: Red & Red<br>DESIGN WALK SPEED: 0.9 m/s (FDW based on full crossing @ 1.1 m/s)<br>CHANNEL / DROP: 4008/25<br>FIRMWARE VERSION: 3.018.1.2976 |                        |                                                                                                                                                          | 1 (Toronto & East York) / 14<br>TransSuite<br>Peek ATC-1000 / TS2T1<br>Red & Red<br>0.9 m/s (FDW based on full crossing @ 1.1 m/s)<br>4008/25<br>3.018.1.2976                                                                                                                          |  |
| NEMA Phase                                                                                                                                                                                                                                                             |             | OFF                                                                | AM              | PM              | NIGHT             | WKND                  | TTC Closure                                                                                                                                                                                                                                                                                      | DVP                    | Phase Mode<br>(Fixed/Demanded/Callable)                                                                                                                  | 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 | Times to be Determined                                                                                                                                                                                                                                                                           | Times to be Determined |                                                                                                                                                          |                                                                                                                                                                                                                                                                                        |  |
|                                                                                                                                                                                                                                                                        | Local Plan  | Pattern 1                                                          | Pattern 2       | Pattern 3       | Pattern 4         | Pattern 5             | Pattern 6                                                                                                                                                                                                                                                                                        | Pattern 16             |                                                                                                                                                          |                                                                                                                                                                                                                                                                                        |  |
|                                                                                                                                                                                                                                                                        | Split Table | Split 1                                                            | Split 2         | Split 3         | Split 4           | Split 5               | Split 6                                                                                                                                                                                                                                                                                          | Split 16               |                                                                                                                                                          |                                                                                                                                                                                                                                                                                        |  |
| 1                                                                                                                                                                                                                                                                      |             | WLK<br>FDW<br>MIN<br>MAX1<br>AMB<br>ALR<br>SPLT                    |                 |                 |                   |                       |                                                                                                                                                                                                                                                                                                  |                        |                                                                                                                                                          | Pedestrian Minimums:<br>EWWK = 8 sec, EWFD = 20 sec<br>NSWK = 8 sec, NSFD = 21 sec<br>APS on during full EWWK & NSWK when activated by pushbutton and when no arrows are displayed.<br>Extended Push Activation = 3 sec<br>Left Turn passage = 2 sec<br>See back for TSP Instructions. |  |
| 2                                                                                                                                                                                                                                                                      |             | WLK 8<br>FDW 20<br>MIN 28<br>MAX1 47<br>AMB 3.0<br>ALR 4.1<br>SPLT |                 |                 |                   |                       |                                                                                                                                                                                                                                                                                                  |                        | Fixed<br>Truncation in EWG/EWWK                                                                                                                          | The following grades were used to calculate the AMB intervals:<br>East Leg = 0.0%<br>West Leg = 0.5%<br>North Leg = -1.0%<br>South Leg = 0.9%                                                                                                                                          |  |
| 3                                                                                                                                                                                                                                                                      |             | WLK<br>FDW<br>MIN<br>MAX1<br>AMB<br>ALR<br>SPLT                    |                 |                 |                   |                       |                                                                                                                                                                                                                                                                                                  |                        |                                                                                                                                                          |                                                                                                                                                                                                                                                                                        |  |
| 4                                                                                                                                                                                                                                                                      |             | WLK 8<br>FDW 21<br>MIN 29<br>MAX1 44<br>AMB 3.4<br>ALR 3.6<br>SPLT |                 |                 |                   |                       |                                                                                                                                                                                                                                                                                                  |                        | Fixed<br>POZ activated by Request Loop<br>Transit max. extension of 16 sec in Green/SDW                                                                  |                                                                                                                                                                                                                                                                                        |  |
| 5                                                                                                                                                                                                                                                                      |             | WLK<br>FDW<br>MIN 6<br>MAX1 10<br>AMB 3.0<br>ALR 4.1<br>SPLT       |                 |                 |                   |                       |                                                                                                                                                                                                                                                                                                  |                        | Callable / Extendable by 9m setback loop                                                                                                                 |                                                                                                                                                                                                                                                                                        |  |
| 6                                                                                                                                                                                                                                                                      |             | WLK 8<br>FDW 20<br>MIN 28<br>MAX1 29<br>AMB 3.0<br>ALR 4.1<br>SPLT |                 |                 |                   |                       |                                                                                                                                                                                                                                                                                                  |                        | Fixed<br>Truncation in EWG/EWWK                                                                                                                          |                                                                                                                                                                                                                                                                                        |  |
| 7                                                                                                                                                                                                                                                                      |             | WLK<br>FDW<br>MIN 6<br>MAX1 6<br>AMB 3.0<br>ALR 4.5<br>SPLT        |                 |                 |                   |                       |                                                                                                                                                                                                                                                                                                  |                        | Demanded at all times<br>Callable/Extendable by transit 23:00-06:30 daily.<br>POZ activated by Request Loop<br>Transit max. extension of 16 secs in NBLA |                                                                                                                                                                                                                                                                                        |  |
| 8                                                                                                                                                                                                                                                                      |             | WLK 8<br>FDW 21<br>MIN 29<br>MAX1 30<br>AMB 3.4<br>ALR 3.6<br>SPLT |                 |                 |                   |                       |                                                                                                                                                                                                                                                                                                  |                        | Fixed<br>POZ activated by Request Loop<br>Transit max. extension of 16 sec in Green/SDW                                                                  |                                                                                                                                                                                                                                                                                        |  |
|                                                                                                                                                                                                                                                                        |             | CL<br>OF                                                           | 106<br>91       | 100<br>99       | 104<br>103        | 92<br>91              | 110<br>99                                                                                                                                                                                                                                                                                        | 120<br>1               | 120<br>1                                                                                                                                                 |                                                                                                                                                                                                                                                                                        |  |

NOTES:

LOC:

Danforth Ave & Broadview Ave

MODE:

SA1 with TSP, 2-Wire Polara APS

TCS:

294

OFFSET CORRECTION PARAMETERS

2.3.2 X

O.C.

2.3.4 O.C. Extend / Reduce

(Max. time added & subtracted in sec)

From page 1

[Cycle] [Slop]

OFF

Ø1

Ø2

Ø3

Ø4

Ø5

Ø6

Ø7

Ø8

Split 1

Ext.

--

30

--

--

7

23

--

--

Rdc.

--

5

--

1

4

1

1

--

AM

Split 2

Ext.

--

28

--

--

--

23

--

--

Rdc.

--

5

--

1

--

5

1

--

PM

Split 3

Ext.

--

30

--

--

11

19

--

--

Rdc.

--

5

--

1

3

2

1

--

NIGHT

Split 4

Ext.

--

26

--

--

6

20

--

--

Rdc.

--

5

--

1

--

5

1

--

WKND

Split 5

Ext.

--

32

--

--

7

25

--

--

Rdc.

--

5

--

1

5

--

1

--

TTC

Split 6

Ext.

--

34

--

--

9

25

--

--

Rdc.

--

5

--

1

5

--

1

--

DVP

Split 16

Ext.

--

30

--

--

11

19

--

--

Rdc.

--

3

--

7

1

2

--

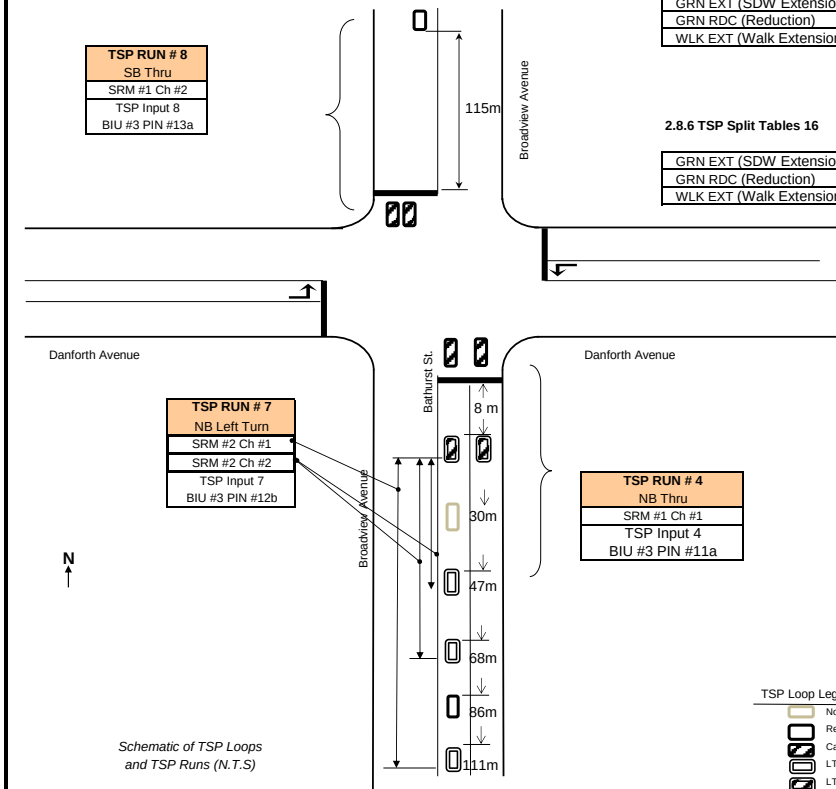
7

Note:

OC Thres and OC Rdc set to values for split balancing purposes.

OC Rdc of Phase 4 & 8 must be limited due to firmware 3.18.1.2976 issues with checks on side street phases where there are long left turn clearances.

**2.1.9.2 Advanced I/O Scripts**  
Input Script 1 "TCS294StreetcarStops"  
Applies a 20-second run delay to TSP run 4 between 01:30 and 05:00 daily to account for the northbound near-side streetcar stop in operation during those times  
Applies a 20-second run delay to TSP run 8 at all times except 07:00-09:00 M-F and 16:00-18:00 to account for the southbound near-side streetcar stop in operation except during those times  
TSP Run status can be monitored on screen 2.1.9.2.1[C]



T.S.P. PARAMETERS

| TSP RUN # 4<br>NB Thru                              | TSP RUN # 8<br>SB Thru         | TSP RUN # 7<br>NBLA |
|-----------------------------------------------------|--------------------------------|---------------------|
| 2.8.2 Transit Run Parameters                        |                                |                     |
| ATC Green Extend Mode<br>(Equivalent TTC Algorithm) | Mode 0<br>B-2 (SDW)            | Mode 0<br>B-2 (SDW) |
| 2.8.3 Transit Action Plan 1 (Used for all Patterns) |                                |                     |
| Run Enable (X = Yes)                                | X                              | X                   |
| Run Config = 1                                      | Recovery = 2 (O.C. with delay) |                     |
| 2.8.4 Transit Run Configuration 1                   |                                |                     |
| Delay / Extend / Fail                               | 0* / 2 / 235                   | 0* / 2 / 235        |
| CALLS (and Extends)                                 | Ø 4/8                          | Ø 7                 |
| Skips                                               | --                             | --                  |
| Reduces (Truncates)                                 | Ø 2/6                          | --                  |

|                          |    |    |    |    |    |    |    |    |
|--------------------------|----|----|----|----|----|----|----|----|
| 2.8.6 TSP Split Tables 1 |    |    |    |    |    |    |    |    |
|                          | Ø1 | Ø2 | Ø3 | Ø4 | Ø5 | Ø6 | Ø7 | Ø8 |
| GRN EXT (SDW Extension)  | -- | -- | -- | 16 | -- | -- | 16 | 16 |
| GRN RDC (Reduction)      | -- | 1  | -- | -- | -- | 1  | -- | -- |
| WLK EXT (Walk Extension) | -- | -- | -- | -- | -- | -- | -- | -- |

|                          |    |    |    |    |    |    |    |    |
|--------------------------|----|----|----|----|----|----|----|----|
| 2.8.6 TSP Split Tables 2 |    |    |    |    |    |    |    |    |
|                          | Ø1 | Ø2 | Ø3 | Ø4 | Ø5 | Ø6 | Ø7 | Ø8 |
| GRN EXT (SDW Extension)  | -- | -- | -- | 16 | -- | -- | 16 | 16 |
| GRN RDC (Reduction)      | -- | 13 | -- | -- | -- | 13 | -- | -- |
| WLK EXT (Walk Extension) | -- | -- | -- | -- | -- | -- | -- | -- |

|                          |    |    |    |    |    |    |    |    |
|--------------------------|----|----|----|----|----|----|----|----|
| 2.8.6 TSP Split Tables 3 |    |    |    |    |    |    |    |    |
|                          | Ø1 | Ø2 | Ø3 | Ø4 | Ø5 | Ø6 | Ø7 | Ø8 |
| GRN EXT (SDW Extension)  | -- | -- | -- | 16 | -- | -- | 16 | 16 |
| GRN RDC (Reduction)      | -- | 1  | -- | -- | -- | 1  | -- | -- |
| WLK EXT (Walk Extension) | -- | -- | -- | -- | -- | -- | -- | -- |

|                          |    |    |    |    |    |    |    |    |
|--------------------------|----|----|----|----|----|----|----|----|
| 2.8.6 TSP Split Tables 4 |    |    |    |    |    |    |    |    |
|                          | Ø1 | Ø2 | Ø3 | Ø4 | Ø5 | Ø6 | Ø7 | Ø8 |
| GRN EXT (SDW Extension)  | -- | -- | -- | 16 | -- | -- | 9  | 16 |
| GRN RDC (Reduction)      | -- | 5  | -- | -- | -- | 5  | -- | -- |
| WLK EXT (Walk Extension) | -- | -- | -- | -- | -- | -- | -- | -- |

|                              |    |    |    |    |    |    |    |    |
|------------------------------|----|----|----|----|----|----|----|----|
| 2.8.6 TSP Split Tables 5 & 6 |    |    |    |    |    |    |    |    |
|                              | Ø1 | Ø2 | Ø3 | Ø4 | Ø5 | Ø6 | Ø7 | Ø8 |
| GRN EXT (SDW Extension)      | -- | -- | -- | 16 | -- | -- | 16 | 16 |
| GRN RDC (Reduction)          | -- | -- | -- | -- | -- | -- | -- | -- |
| WLK EXT (Walk Extension)     | -- | -- | -- | -- | -- | -- | -- | -- |

|                           |    |    |    |    |    |    |    |    |
|---------------------------|----|----|----|----|----|----|----|----|
| 2.8.6 TSP Split Tables 16 |    |    |    |    |    |    |    |    |
|                           | Ø1 | Ø2 | Ø3 | Ø4 | Ø5 | Ø6 | Ø7 | Ø8 |
| GRN EXT (SDW Extension)   | -- | -- | -- | 16 | -- | -- | 16 | 16 |
| GRN RDC (Reduction)       | -- | 3  | -- | -- | -- | 3  | -- | -- |
| WLK EXT (Walk Extension)  | -- | -- | -- | -- | -- | -- | -- | -- |

TSP RUN # 4  
NB Thru

SRM #1 Ch #1

TSP Input #4

BIU #3 PIN #11a

TSP Loop Legend

Not used

Request (Thru)

Cancel (Thru)

LT Request

LT Cancel

Notes:

\*TSP Run 4 and 8 delays emulated by Script 1.

The TSP input will not be shown on the status screen during these delays. TSP

|             |     |      |      |      |
|-------------|-----|------|------|------|
| ATC Mode    | 0   | 2    | 3    | 4    |
| TTC Algor'm | B-2 | A    | C    | D    |
| Extensions  | SDW | Walk | WSDW | WSDW |

TSP SUMMARY

Maximum Green Extensions:

NSG: 16 s Green/SDW

NBLA 16 s Green

Truncation of phases 2 and 6 by TOD Patter