

# 210 Clearview Avenue

## Transportation Impact Assessment

Step 1 Screening Report

Step 2 Scoping Report

Step 3 Strategy Report (Rev #1)

Prepared for:

Homestead Land Holdings Limited  
80 Johnson Street  
Kingston, ON, K7L 1X7

Prepared by:



6 Plaza Court  
Ottawa, ON K2H 7W1

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## 1 Screening

This study has been prepared according to the City of Ottawa's 2017 Transportation Impact Assessment (TIA) Guidelines, incorporating the 2023 Revision to Transportation Impact Assessment Guidelines. Accordingly, a Step 1 Screening Form has been prepared and is included as Appendix A, along with the Certification Form for the TIA Study PM. As shown in the Screening Form, a TIA is required, and this study has been prepared to support site plan application.

## 2 Existing and Planned Conditions

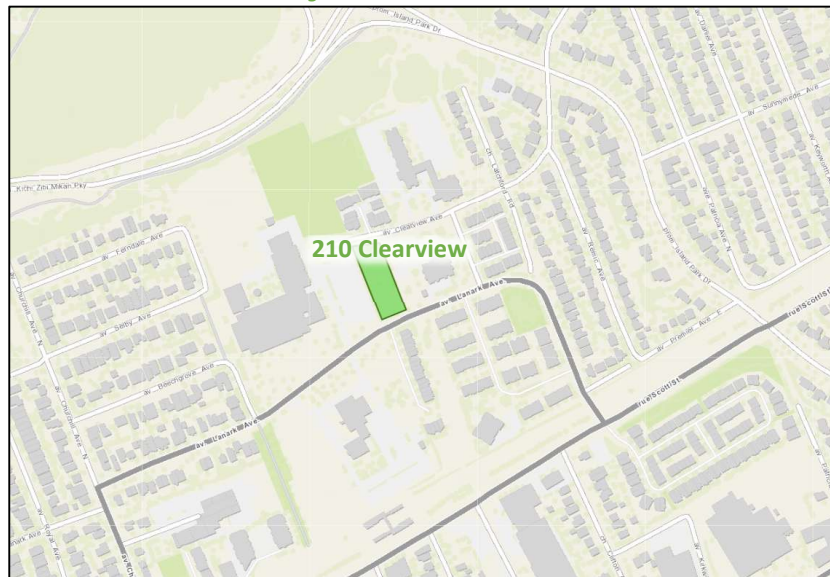
### 2.1 Proposed Development

The planned redevelopment of 210 Clearview Avenue, located on the existing parking lot adjacent to 200 Clearview Avenue, will consist of a 25-storey tower with a four-storey podium, and a total of 187 apartment units. The two existing accesses to the surface parking lot will be converted to an access to the underground parking from Clearview Avenue and the Lanark Avenue access will be to the loading area. A new loop will be created from the existing drive aisle from 200 Clearview Avenue from Ellendale Crescent to connect to Lanark Avenue at a new access. A total of 228 residential vehicle parking spaces, 18 visitor parking spaces, and 190 bike parking spaces are proposed for the new building. Among these parking spaces, a total of ten vehicle parking spaces and six bicycle parking spaces are proposed to be located on the surface, while the remaining spaces are planned for the underground levels. The anticipated full build-out and occupancy horizon is 2027 with construction occurring in a single phase. The site is zoned as Residential Fifth Density Zone (R5C[2909]S216) and located within the Richmond Road/Westboro secondary plan and Richmond Road/Westboro community design plan areas.

There is an existing 26-storey apartment building consists of a total of 224 residential units and currently provides with 210 parking spaces. As part of the redevelopment, all 100 of the existing surface parking spaces will be removed, with only the 110 parking spaces on P1 level remaining.

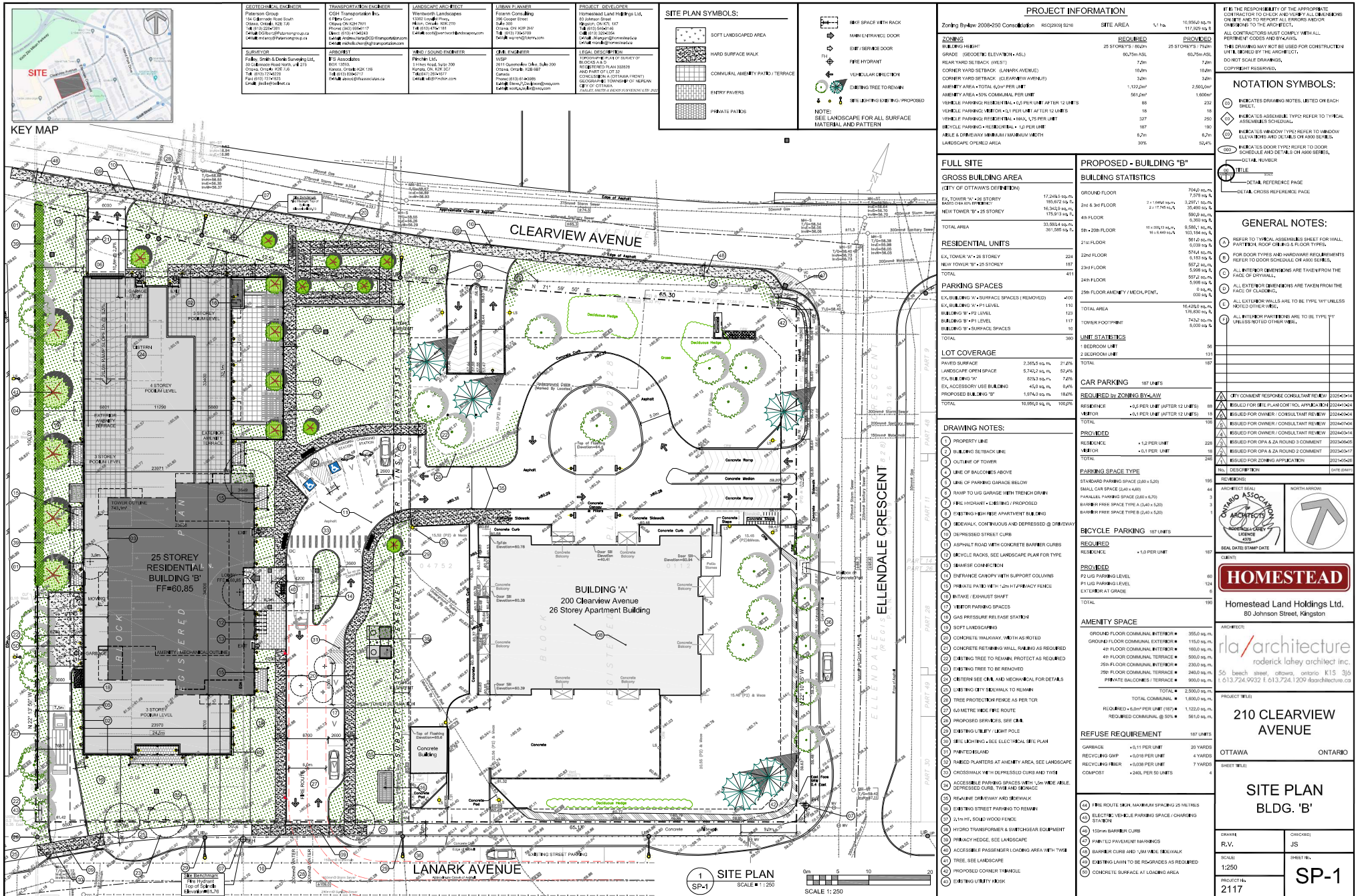
Figure 1 illustrates the study area context. Figure 2 illustrates the proposed concept plan.

Figure 1: Area Context Plan



Source: <http://maps.ottawa.ca/geoOttawa/> Accessed: August 14, 2024





## 2.2 Existing Conditions

### 2.2.1 Area Road Network

*Island Park Drive:* Island Park Drive is a federally owned arterial road with a two-lane urban cross-section. Bike lanes and pathways are provided on both sides of the road. The posted speed limit is 40 km/h, and the existing right-of-way within the study area is 30.5 metres. Commercial trucks are prohibited on Island Park Drive.

*Kichi Zibi Mikan Parkway (Previous Sir John A. Macdonald Parkway):* Kichi Zibi Mikan Parkway is a federally owned arterial road with a divided, four-lane urban cross-section. A pathway is provided on the south side of the roadway within the study area. The posted speed limit is 60km/h east of Island Park Drive and 50 km/h west of Island Park Drive. The existing right-of-way throughout the study area varies along adjacent properties.

*Churchill Avenue:* Churchill Avenue is a City of Ottawa arterial road with a two-lane urban cross-section south of Scott Street, a collector road between Scott Street and Lanark Avenue, and a local road north of Lanark Avenue. Sidewalks are provided on both sides of the roadway south of Lanark Avenue. The unposted speed limit is 50 km/h. Parking is permitted on the east side of the road north of Scott Street and for a maximum of one hour on both sides of the road south of Scott Street from 7 AM to 7 PM. The existing right-of-way within the study area is 21.0 metres. Churchill Avenue south of Scott Street is designated as a truck route.

*Scott Street:* Scott Street is a City of Ottawa arterial road with a three-lane urban cross-section, with an eastbound transit lane to the west of Island Park Drive and a continuous left-turn lane to the east of Island Park Drive. An asphalt path marked as a sidewalk and unidirectional cycle track are provided on both sides of the road between Churchill Avenue and Goldenrod Driveway. The posted speed limit is 50 km/h, and the City-protected right-of-way is 26.0 metres. Scott Street is designated as a truck route.

*Lanark Avenue:* Lanark Avenue is a City of Ottawa collector road with a two-lane urban cross-section. Sidewalks are located on both sides of the roadway. The posted speed limit is 40km/h on school days between 7:00 AM to 9:00 AM and 2:00 PM to 5:00 PM. The existing right-of-way within the study area is 20.5 metres.

*Clearview Avenue:* Clearview Avenue is a City of Ottawa local road with a two-lane urban cross-section east of Ellendale Crescent and a two-lane rural cross-section west of Ellendale Crescent. Sidewalks are present on both sides of the roadway between Ellendale Crescent and Latchford Road, on the north side of the road between Latchford Road and Island Park Drive, and on both sides east of Island Park Drive. The posted speed limit is 40 km/h, and parking is permitted on the south side of the road west of Ellendale Crescent. The existing right-of-way is 20.0 metres.

### 2.2.2 Existing Intersections

The existing signalized area key intersections within 400 metres of the site have been summarized below:

|   |  |
|---|--|
| <p><i>Island Park Drive at Kichi Zibi Mikan Parkway</i></p> | <p>The intersection of Island Park Drive at Kichi Zibi Mikan Parkway is a signalized intersection. Island Park Drive will be considered the north-south roadway. The northbound approach has a through lane, a bike lane, and an auxiliary channelized right-turn lane, and the southbound approach has an auxiliary left-turn lane, a left-turn lane, a through lane, a bike lane, and an auxiliary channelized right-turn lane. The eastbound and the westbound approaches each consist of an auxiliary left-turn lane, two through lanes, and an auxiliary channelized right-turn lane. Northbound left turns are prohibited, and</p> |
|---|--|

an additional westbound right-turn prohibition is included between the channelized right-turn and the intersection.

*Island Park Drive at Clearview Avenue*

The intersection of Island Park Drive and Clearview Avenue is a stop-controlled intersection on the minor approaches of Clearview Avenue. Island Park Drive will be considered the north-south roadway. The northbound and southbound approaches each consists of a shared all-movement lane and a bike lane. The eastbound and westbound approaches each consists of a shared all-movement lane. The vehicles are prohibited from making westbound right-turn and eastbound left-turn movements during weekdays between 3:30 – 6:00 PM. Bicycles are permitted to make these movements, and authorized vehicles are permitted to make eastbound left-turn movement. Trucks are restricted from accessing the east leg. A pedestrian cross-over is provided across Island Park Drive on the north side of the intersection.

*Island Park Drive at Scott Street*

The intersection of Island Park Drive at Scott Street is a signalized intersection. The northbound approach consists of a shared all-movement lane, and the southbound approach consists of an auxiliary left-turn lane and a shared through/right-turn lane. The eastbound approach consists of an auxiliary left-turn lane, a through lane, and a shared bus lane/right-turn lane, and the westbound approach consists of an auxiliary left-turn lane, a through lane, and an auxiliary right-turn lane. A bus stop is located in the eastbound auxiliary right-turn lane and a queue-jump style receiving lane is provided on the east side of the intersection to merge transit into the general travel lane. Bike crossrides are provided for all directions.

*Lanark Avenue at Scott Street*

The intersection of Lanark Avenue at Scott Street is a signalized intersection. The northbound, southbound, and westbound approaches each consists of an auxiliary left-turn lane and a shared through/right-turn lane. The eastbound approach consists of an auxiliary left-turn lane, a through, and a shared bus lane/right-turn lane. No turn restrictions were noted. Bike cross rides are provided for all directions.

*Lanark Avenue at Churchill Avenue*

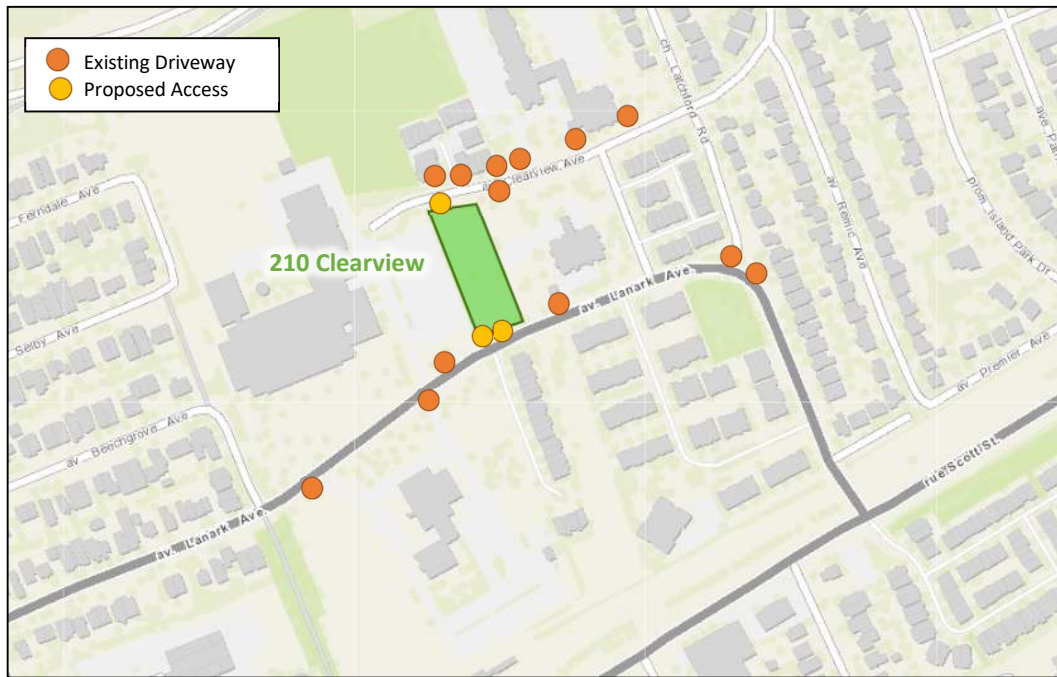
The intersection of Lanark Avenue at Churchill Avenue is an all-way stop-controlled T-intersection. The northbound approach consists of a shared through/right-turn land, and the southbound approach consists of a shared left-turn/through lane. The westbound approach consists of a shared left-turn/right-turn lane. No turn restrictions were noted.

### 2.2.3 Existing Driveways

Within 200 metres of the site accesses, one driveway to a school, two driveways to an office, one driveway to a high-rise building, and two driveways to two dwelling units are located on Lanark Avenue. Four driveways to three high-rise buildings and three driveways to six townhouses are on Clearview Avenue. Figure 3 illustrates the existing driveways.



Figure 3: Existing Driveways



Source: <http://maps.ottawa.ca/geoOttawa/> Accessed: August 16, 2024

#### 2.2.4 Cycling and Pedestrian Facilities

Figure 4 illustrates the pedestrian facilities in the study area and Figure 5 illustrates the cycling facilities.

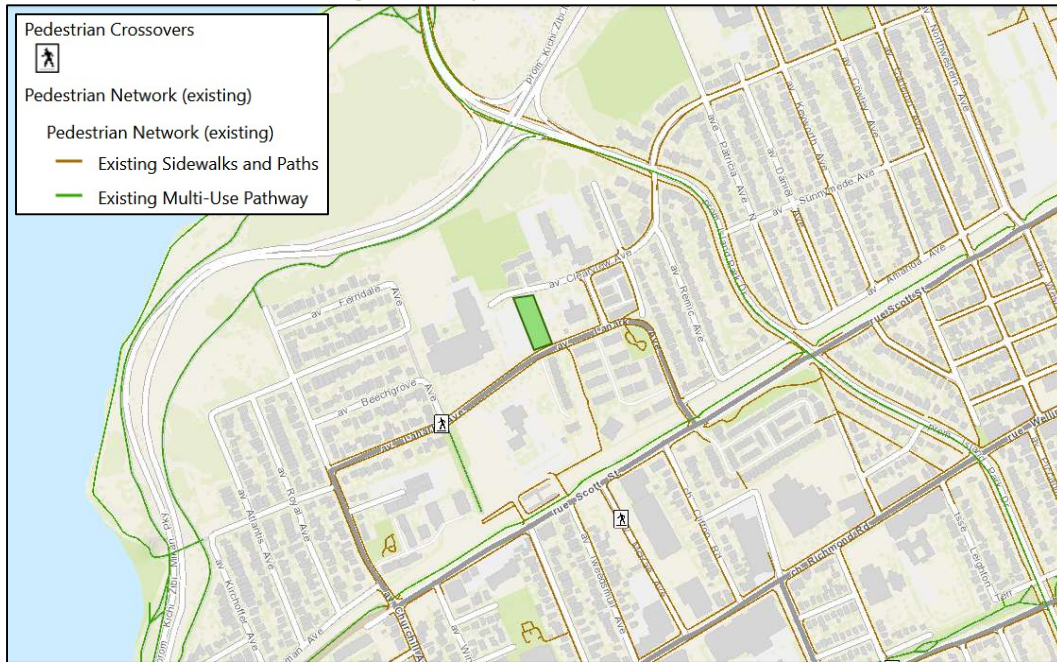
Sidewalks are provided on both sides along Lanark Avenue, Churchill Avenue south of Lanark Avenue, and on the south side along Scott Street. Along Clearview Avenue, sidewalks are presented on both sides between Ellendale Crescent and Latchford Road, on the north side of the road between Latchford Road and Island Park Drive, and on both sides east of Island Park Drive. A pedestrian pathway extends south of Lanark Avenue between the 200 Lanark Avenue and 38 Metropole Private properties, and loops to Westboro Station. Multi use pathways are present on the north side of Scott Street and another connects Lanark Avenue from the Beechgrove Avenue intersection to the Westboro Station.

Pedestrian crossovers are present at the intersections of Beechgrove Avenue at Lanark Avenue and Island Park Drive at Clearview Avenue.

Bike lanes are provided on both sides along Island Park Drive, and Scott Street has a multi-use pathway on the north side and an eastbound cycle track on the south side.

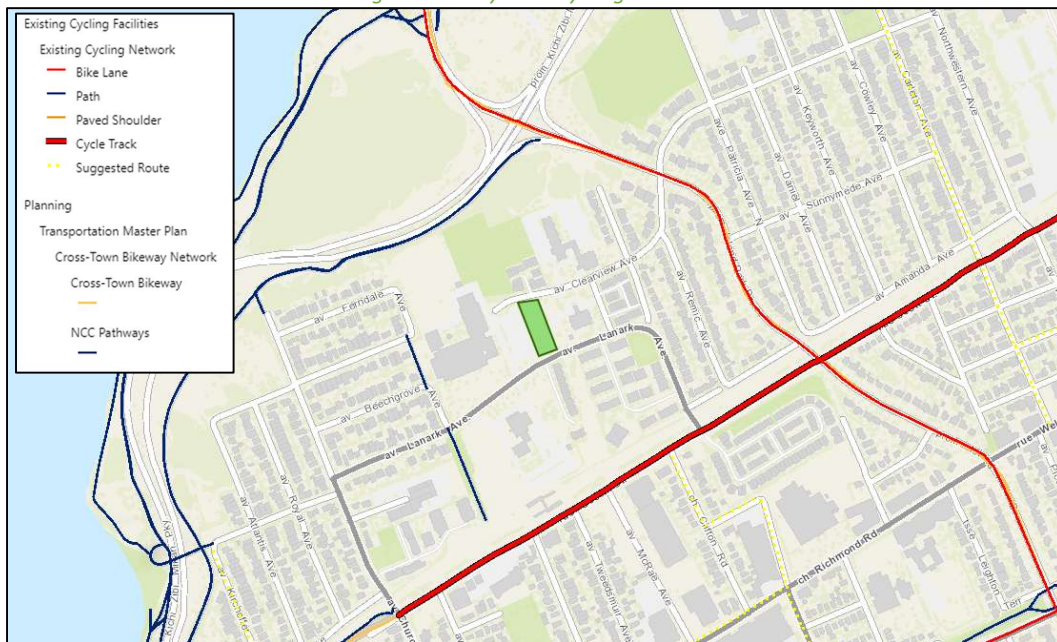
The Transportation Master Plan – Part 1 (2023) identified Island Park Drive and Scott Street as cross-town bikeways and Kichi Zibi Mikan Parkway east of Island Park Drive as NCC Pathway.

Figure 4: Study Area Pedestrian Facilities



Source: <http://maps.ottawa.ca/geoOttawa/> Accessed: August 16, 2024

Figure 5: Study Area Cycling Facilities



Source: <http://maps.ottawa.ca/geoOttawa/> Accessed: August 16, 2024

Pedestrian and cyclist volumes included in study area intersection counts, presented in Section 2.2.7, have been compiled and are illustrated in Figure 6 and Figure 7, respectively.

Figure 6: Existing Pedestrian Volumes

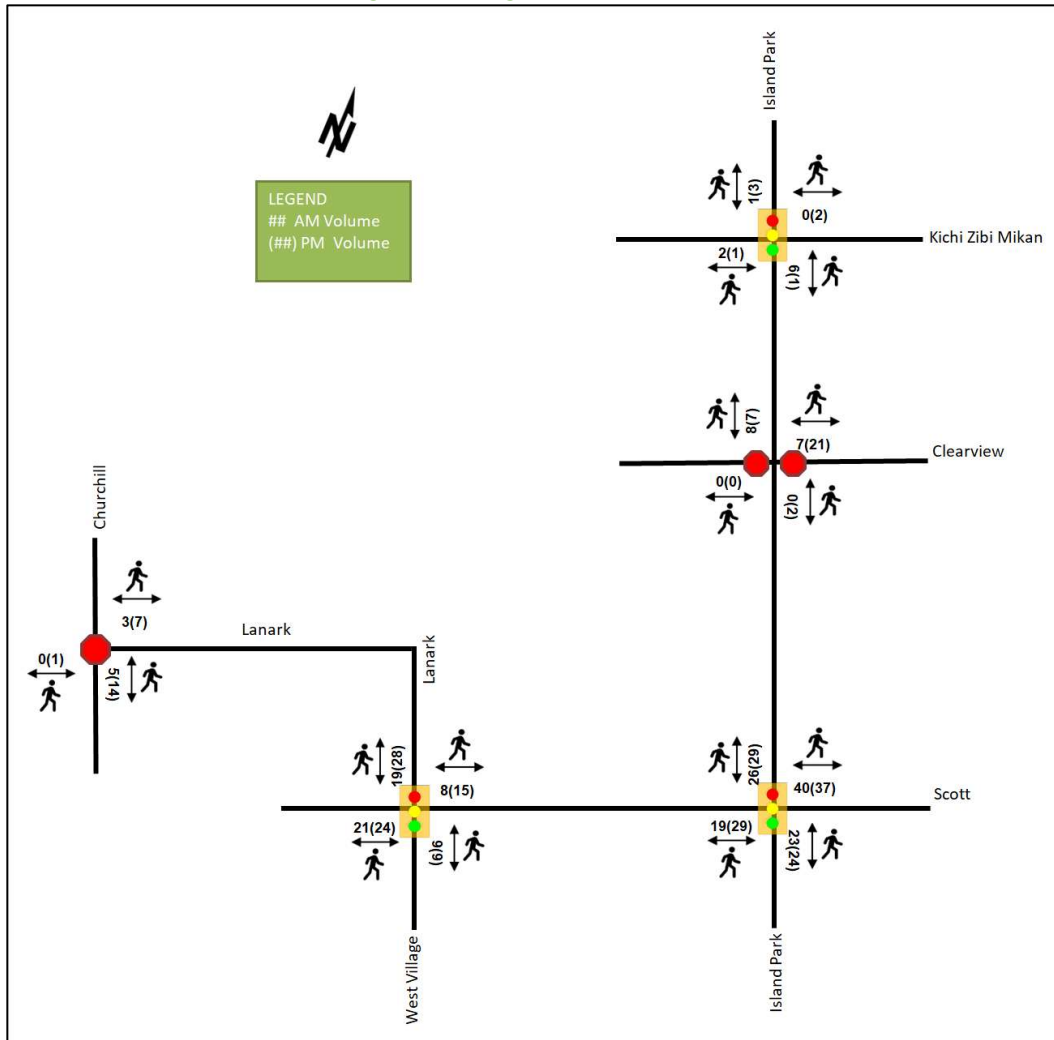
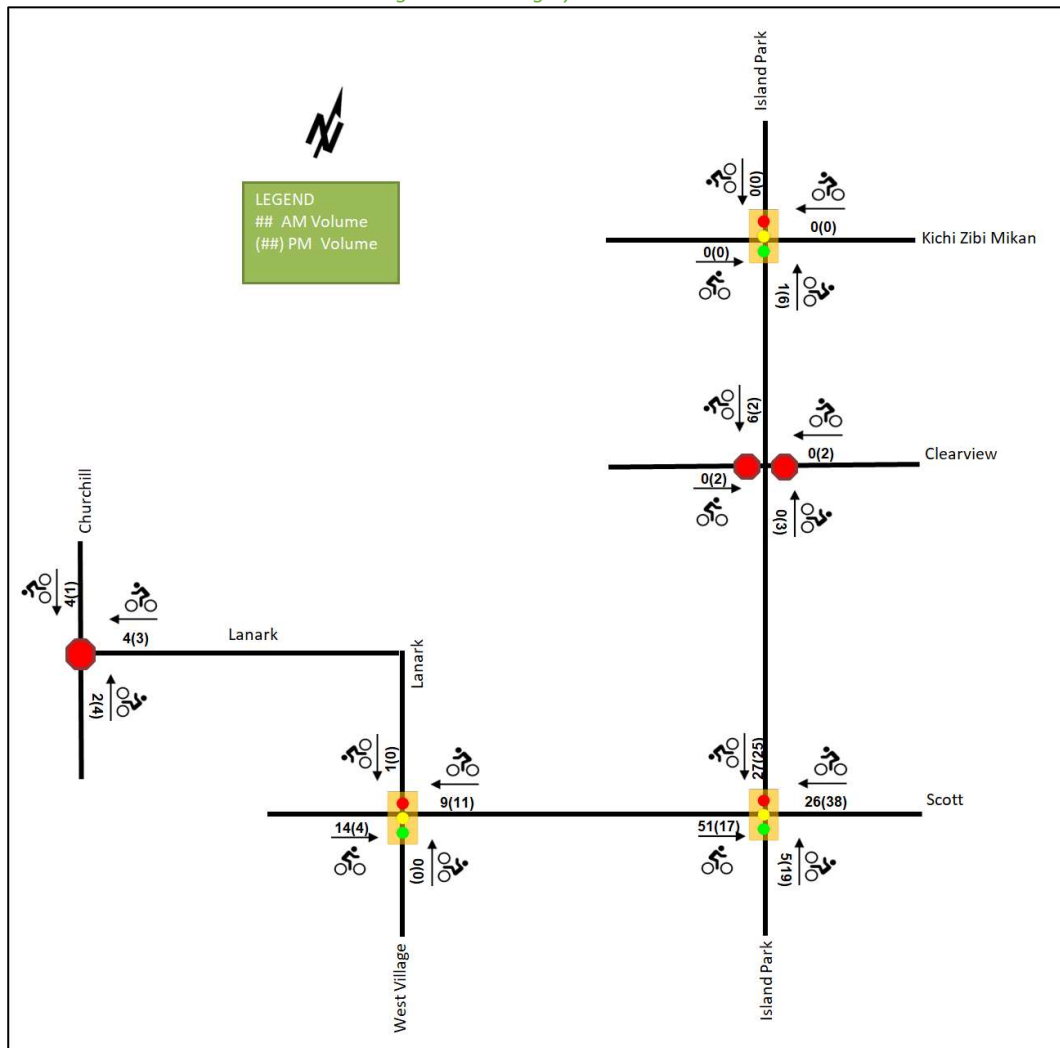


Figure 7: Existing Cyclist Volumes



### 2.2.5 Existing Transit

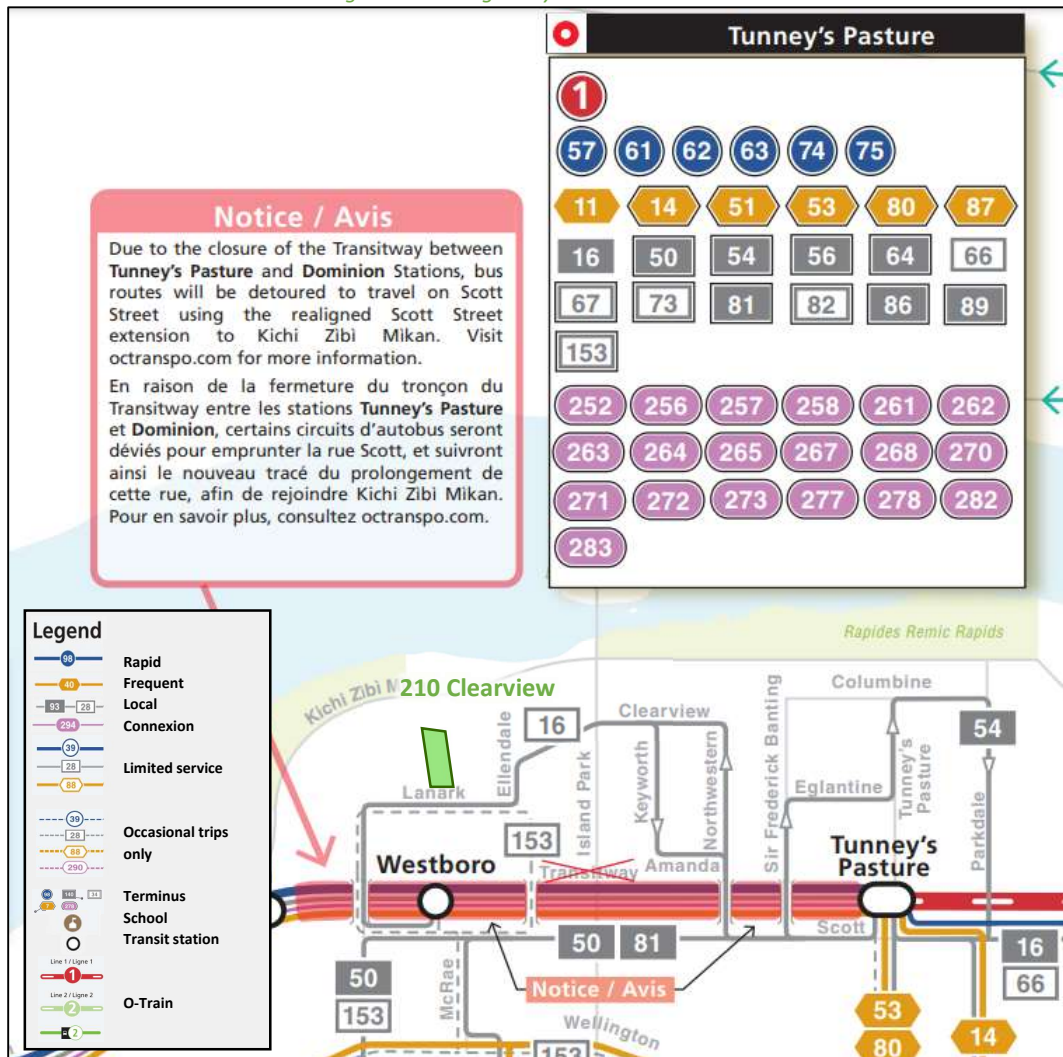
Figure 8 illustrates the transit system map in the study area and Figure 9 illustrates transit stops within 400-metre radius of the site and transit stations within 800-metre radius of the site. All transit information is from August 16, 2024 and is included for general information purposes and context to the surrounding area.

Within the study area, routes #16 and #153 travel along Lanark Avenue. Nearest stops are located at the intersections of Lanark Avenue at Briarway Private and Lanark Avenue at Champlain. The frequency of these routes within proximity of the proposed site based on August 16, 2024 service levels are:

- Route # 16 – 30-minute service all day
- Route # 153 – 2-hour service from 11:00 AM to 7:00 PM



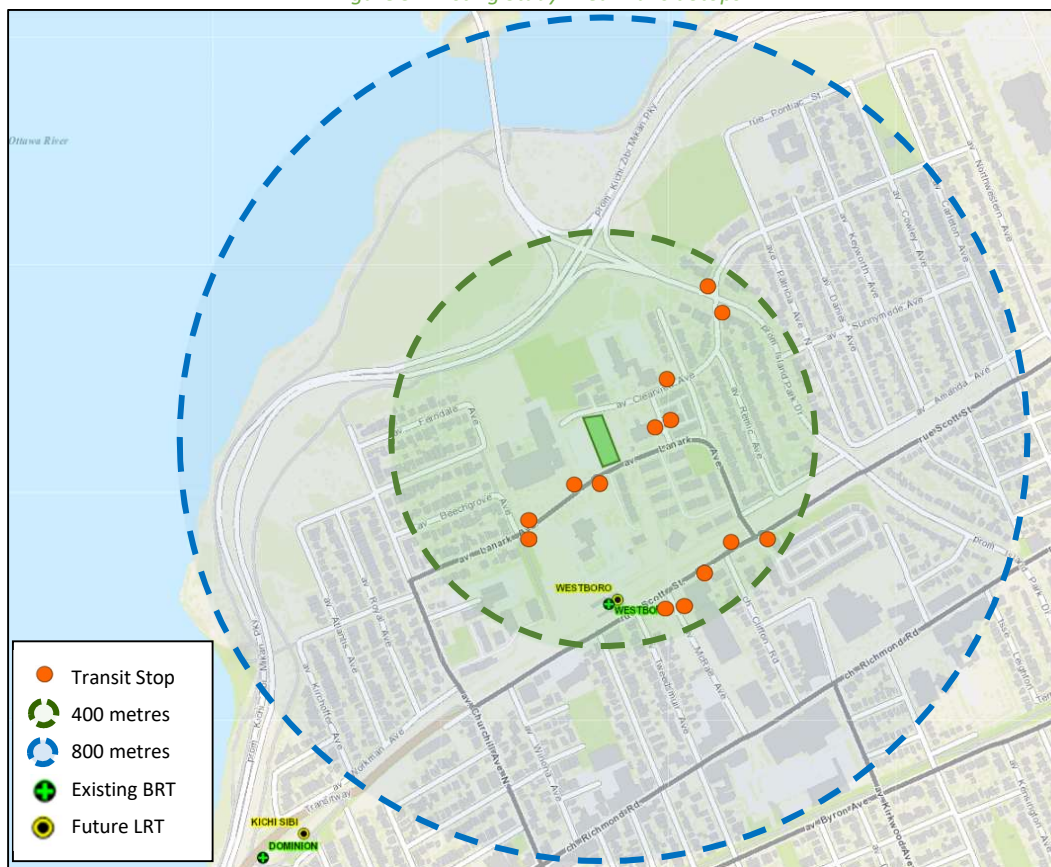
Figure 8: Existing Study Area Transit Service



Source: <http://www.octranspo.com/> Accessed: August 16, 2024



Figure 9: Existing Study Area Transit Stops



Source: <http://www.octranspo.com/> Accessed: August 16, 2024

### 2.2.6 Existing Area Traffic Management Measures

Bulb-outs are provided along Lanark Avenue, along Churchill Avenue south of Lanark Avenue, and at 1950 Scott Street only along Scott Street.

At the Island Park Drive and Clearview Avenue intersection, the vehicles are prohibited from making westbound right-turn and eastbound left-turn movements during weekdays between 3:30 – 6:00 PM. Bicycles are permitted to make these movements, and authorized vehicles are permitted to make eastbound left-turn movements.

Two speed humps are located along Lanark Avenue north of Scott Street.

### 2.2.7 Existing Peak Hour Travel Demand

Existing turning movement counts were acquired from the City of Ottawa for the existing study area intersections. Table 1 summarizes the intersection count dates. As City's request, the existing traffic counts are unbalanced in the existing condition, and discrepancies have been noted along Island Park Drive.

Table 1: Intersection Count Date

| Intersection                                  | Count Date                  |
|---|-----------------------------|
| Island Park Drive at Kichi Zibi Mikan Parkway | Wednesday, August 21, 2024  |
| Island Park Drive at Clearview Avenue         | Tuesday, March 21, 2023     |
| Island Park Drive at Scott Street             | Thursday, October 27, 2022  |
| Lanark Avenue at Scott Street                 | Thursday, November 30, 2023 |
| Lanark Avenue at Churchill Avenue             | Thursday, October 24, 2019  |

Figure 10 illustrates the existing traffic counts and Table 2 summarizes the existing intersection operations. The level of service for signalized intersections is based on volume to capacity ratio (v/c) calculations for individual lane movements and HCM 2000 v/c calculations for the overall intersection, and average delay for unsignalized intersections. Detailed turning movement count data is included in Appendix B and the Synchro worksheets are provided in Appendix C.

Figure 10: Existing Traffic Counts

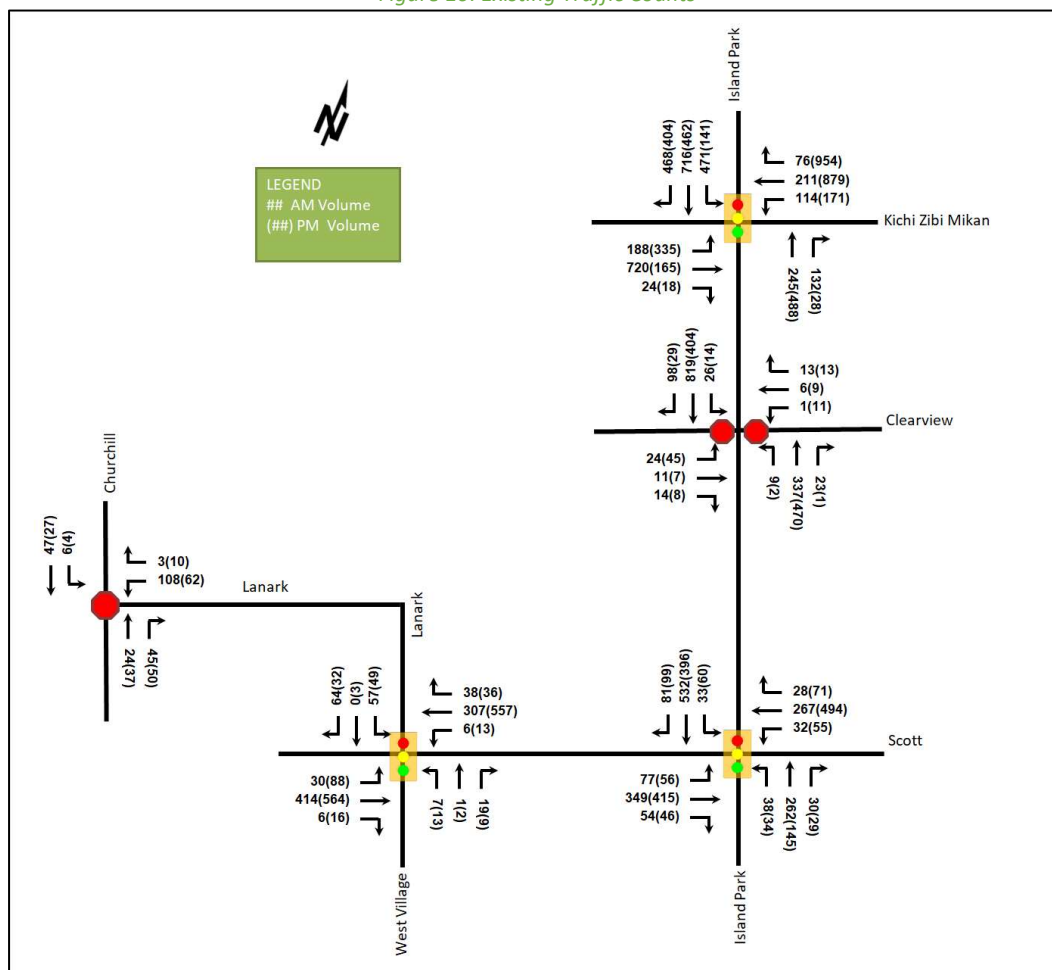


Table 2: Existing Intersection Operations

| Intersection   | Lane    | AM Peak Hour |      |           |                       | PM Peak Hour |      |           |                       |
|--|---------|--------------|------|-----------|-----------------------|--------------|------|-----------|-----------------------|
|  |         | LOS          | V/C  | Delay (s) | Q (95 <sup>th</sup> ) | LOS          | V/C  | Delay (s) | Q (95 <sup>th</sup> ) |
| Island Park Drive at Kichi Zibi Mikan Parkway Signalized | EBL     | F            | 1.99 | 511.5     | #191.5                | F            | 1.09 | 138.2     | #212.5                |
|  | EBT     | D            | 0.82 | 62.5      | #201.4                | A            | 0.16 | 40.6      | 33.6                  |
|  | EBR     | A            | 0.06 | 0.2       | 0.0                   | A            | 0.04 | 0.1       | 0.0                   |
|  | WBL     | F            | 1.21 | 213.7     | #115.7                | A            | 0.56 | 69.7      | 88.4                  |
|  | WBT     | A            | 0.24 | 46.9      | 52.4                  | D            | 0.86 | 62.8      | 196.9                 |
|  | WBR     | A            | 0.17 | 10.1      | 15.2                  | F            | 1.71 | 355.6     | #582.7                |
|  | NBT/R   | D            | 0.87 | 72.1      | 185.0                 | F            | 1.29 | 194.9     | #329.2                |
|  | SBL     | D            | 0.81 | 73.1      | 120.0                 | D            | 0.88 | 121.4     | #50.3                 |
|  | SBT/R   | F            | 1.50 | 258.5     | #739.1                | F            | 1.65 | 335.6     | #563.6                |
|  | Overall | F            | 1.37 | 161.7     | -                     | F            | 1.69 | 214.5     | -                     |

| Intersection   | Lane           | AM Peak Hour |             |             |                       | PM Peak Hour |             |             |                       |
|--|----------------|--------------|-------------|-------------|-----------------------|--------------|-------------|-------------|-----------------------|
|  |                | LOS          | V/C         | Delay (s)   | Q (95 <sup>th</sup> ) | LOS          | V/C         | Delay (s)   | Q (95 <sup>th</sup> ) |
| Island Park Drive at Clearview Avenue<br><i>Unsignalized</i> | EB             | <b>F</b>     | <b>0.44</b> | <b>55.0</b> | <b>14.3</b>           | D            | 0.33        | 31.7        | 10.5                  |
|  | WB             | C            | 0.10        | 23.7        | 2.3                   | C            | 0.15        | 21.7        | 3.8                   |
|  | NB             | B            | 0.02        | 10.4        | 0.0                   | A            | 0.00        | 8.4         | 0.0                   |
|  | SB             | A            | 0.03        | 8.2         | 0.8                   | A            | 0.02        | 8.6         | 0.0                   |
|  | <b>Overall</b> | <b>A</b>     | -           | <b>2.5</b>  | -                     | <b>A</b>     | -           | <b>2.7</b>  | -                     |
| Island Park Drive at Scott Street<br><i>Signalized</i>       | EBL            | A            | 0.34        | 24.5        | 21.1                  | A            | 0.34        | 20.5        | m14.0                 |
|  | EBT            | D            | 0.84        | 43.2        | <b>#114.5</b>         | C            | 0.71        | 26.3        | 112.1                 |
|  | EBR            | A            | 0.12        | 1.3         | 0.9                   | A            | 0.08        | 0.5         | m0.2                  |
|  | WBL            | A            | 0.19        | 26.3        | 12.5                  | A            | 0.25        | 22.3        | 17.3                  |
|  | WBT            | B            | 0.61        | 33.5        | 73.0                  | D            | 0.86        | 41.9        | <b>#155.2</b>         |
|  | WBR            | A            | 0.06        | 0.2         | 0.0                   | A            | 0.13        | 4.0         | 7.3                   |
|  | NB             | A            | 0.54        | 18.1        | 67.0                  | A            | 0.42        | 21.2        | 48.4                  |
|  | SBL            | A            | 0.08        | 11.9        | 8.2                   | A            | 0.15        | 18.0        | 16.1                  |
|  | SBT/R          | C            | 0.76        | 24.4        | 139.3                 | C            | 0.74        | 30.1        | 125.4                 |
|  | <b>Overall</b> | <b>C</b>     | <b>0.79</b> | <b>27.0</b> | -                     | <b>C</b>     | <b>0.80</b> | <b>28.8</b> | -                     |
| Lanark Avenue at Scott Street<br><i>Signalized</i>           | EBL            | A            | 0.05        | 4.1         | 4.2                   | A            | 0.19        | 5.3         | 11.1                  |
|  | EBT/R          | A            | 0.40        | 5.9         | 48.8                  | A            | 0.52        | 7.2         | 75.3                  |
|  | WBL            | A            | 0.01        | 1.7         | m0.2                  | A            | 0.03        | 4.5         | m0.7                  |
|  | WBT/R          | A            | 0.32        | 2.2         | m13.4                 | A            | 0.53        | 5.2         | m38.4                 |
|  | NBL            | A            | 0.05        | 35.6        | 5.3                   | A            | 0.09        | 38.5        | 8.0                   |
|  | NBT/R          | A            | 0.11        | 16.3        | 6.6                   | A            | 0.06        | 22.2        | 5.3                   |
|  | SBL            | A            | 0.40        | 45.0        | 22.5                  | A            | 0.33        | 44.3        | 20.9                  |
|  | SBT/R          | A            | 0.11        | 0.4         | 0.0                   | A            | 0.19        | 16.1        | 9.6                   |
|  | <b>Overall</b> | <b>A</b>     | <b>0.42</b> | <b>6.9</b>  | -                     | <b>A</b>     | <b>0.53</b> | <b>8.1</b>  | -                     |
| Lanark Avenue at Churchill Avenue<br><i>Unsignalized</i>     | WB             | A            | 0.15        | 8.2         | 3.8                   | A            | 0.10        | 7.8         | 2.3                   |
|  | NB             | A            | 0.09        | 7.4         | 2.3                   | A            | 0.10        | 7.2         | 2.3                   |
|  | SB             | A            | 0.07        | 7.6         | 1.5                   | A            | 0.04        | 7.4         | 0.8                   |
|  | <b>Overall</b> | <b>A</b>     | -           | <b>7.8</b>  | -                     | <b>A</b>     | -           | <b>7.5</b>  | -                     |

Notes: Saturation flow rate of 1800 veh/h/lane  
Queue is measured in metres  
Peak Hour Factor = 0.90

Delay = average vehicle delay in seconds  
m = metered queue  
# = volume for the 95th %ile cycle exceeds capacity

During both peak hours, the Island Park Drive at Kichi Zibi Mikan Parkway intersection is over capacity and subject to queuing issues.

At the intersection of Island Park Drive at Kichi Zibi Mikan Parkway, the eastbound through left, westbound left, and southbound shared through/right movements, and overall intersection during the AM peak and eastbound left, westbound right, northbound shared through/right, and southbound shared through/right movements, and overall intersection during the PM peak are over theoretical capacity and may subject to high delays and extended queues. Extended queues may be exhibited on the eastbound through movement during the AM peak and southbound left during the PM peak. High delays are noted on the southbound left during the PM peak.

The delay for eastbound traffic during the AM peak at the intersection of Island Park Drive and Clearview Avenue is noted to be over 50 seconds.

At the intersection of Island Park Drive and Scott Street, extended queues may be exhibited on the eastbound through during the AM peak and westbound share through/right-turn movements during the PM peak. These queues are in the peak direction of travel for these peak hours.

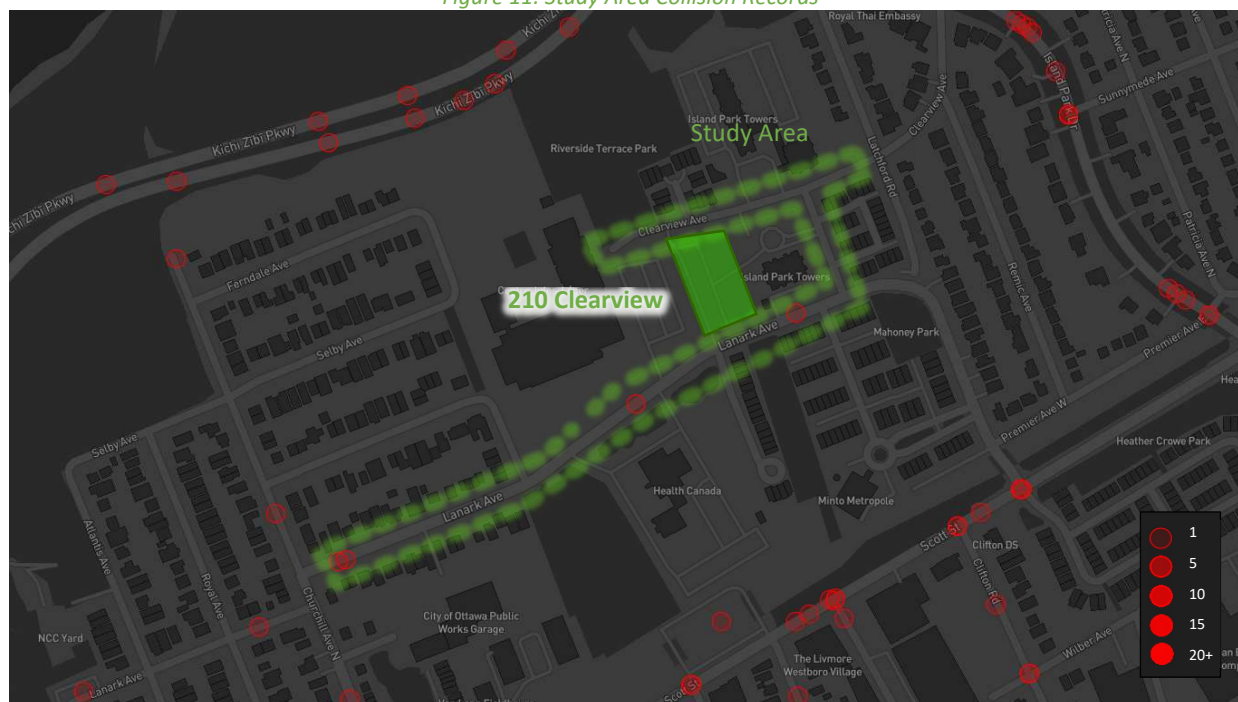
### 2.2.8 Collision Analysis

Collision data have been acquired from the City of Ottawa open data website (data.ottawa.ca) for five years prior to the commencement of this TIA for the surrounding study area road network. Table 3 summarizes the collision types and conditions in the study area, Figure 11 illustrates the intersections and segments analyzed, and Table 4 summarizes the total collisions for each of these locations. Collision data are included in Appendix D.

*Table 3: Study Area Collision Summary, 2018-2022*

| Total Collisions       |                      | Number | %    |
|------------------------|----------------------|--------|------|
|                        |                      | 4      | 100% |
| Classification         | Fatality             | 0      | 0%   |
|                        | Non-Fatal Injury     | 2      | 50%  |
|                        | Property Damage Only | 2      | 50%  |
| Initial Impact Type    | SMV Unattended       | 3      | 75%  |
|                        | Other                | 1      | 25%  |
| Road Surface Condition | Dry                  | 4      | 100% |
| Pedestrian Involved    |                      | 0      | 0%   |
| Cyclists Involved      |                      | 0      | 0%   |

*Figure 11: Study Area Collision Records*



*Table 4: Summary of Collision Locations, 2018-2022*

| Intersections / Segments                         | Number | %    |
|--|--------|------|
|  | 4      | 100% |
| Lanark Ave btwn Beechgrove Ave & Churchill Ave N | 2      | 50%  |
| Lanark Ave btwn Beechgrove Ave & Briarway Priv   | 1      | 25%  |
| Lanark Ave btwn Briarway Priv & Metropole Priv   | 1      | 25%  |

Within the study area, the intersection and segments have a total of four collisions during the 2018-2022 time period with two involving property damage only and two having non-fatal injuries. There are three SMV

Unattended collisions and one other collision type. Due to the low number of collisions in the vicinity of the site, no further collision analysis is required within this study.

## 2.3 Planned Conditions

### 2.3.1 Changes to the Area Transportation Network

#### 2.3.1.1 *Richmond Road/Westboro Community Design Plan (CDP)*

The subject development is within the Richmond Road/Westboro Community Design Plan (CDP) Area. The CDP illustrates green street, two-metre sidewalk and dedicated on-road cycle-lanes or signed cycle route on key local streets and informal pedestrian/cycling links connected to transitway station, local parks, community, and Ottawa River to be incorporated into the development as it redevelops or undergoes rehabilitation. The planned multi-use pathway runs through the Jules-Léger Centre property adjacent to the site. A multi-use pathway connection is provided between Westboro Station and the Kichi Zibi Mikan.

#### 2.3.1.2 *Confederation Line West Extension - Westboro Station*

Westboro station is identified as one of the Confederation Line West extension new stations in the Stage 2 Light Rail Transit (LRT) project and will be converted to accommodate LRT. Additional pedestrian connectivity, bicycle facilities, and a bus staging area will be provided. The anticipated build-out year of the project is 2026.

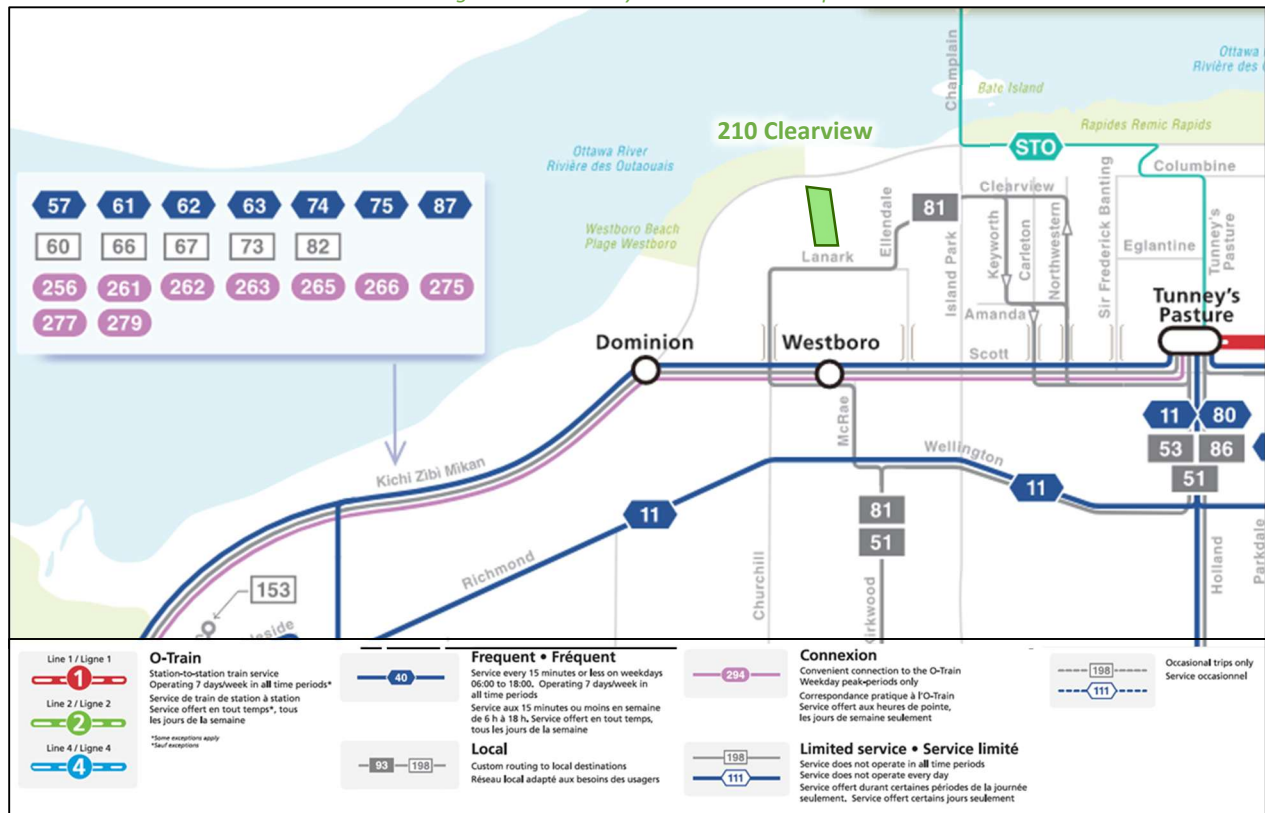
Additionally, as stated by the City of Ottawa, Scott Street between Churchill Avenue and Tunney's Pasture has been used as a Transitway detour during the construction of the Stage 2 Confederation Line West extension. The bus only eastbound lane on Scott Street from Clifton Road to Island Park Drive, and the westbound right-turn lane at Island Park Drive were part of detour plan. It is noted that the westbound right-turn lane at Island Park Drive is to alleviate westbound queues at the intersection. It has been confirmed that the Transitway detour will be removed prior to 2026, including the eastbound bus / right-turn lane and bus receiving lane at the Scott Street / Lanark Avenue intersection as well as the westbound-right turn lane and eastbound bus receiving lane at the Scott Street / Island Park Drive intersection. The proposed detour plan can be found in Appendix E.

#### 2.3.1.3 *OC Transpo New Ways to Bus*

Responding to recent ridership trends and anticipating the upcoming completion of the Stage 2 expansion of LRT service within the City, the OC Transpo bus service is planned to be recalibrated to focus on frequency, local service in neighbourhoods, and connections to key destinations. Route 16 will be replaced by new Route 81 and Route 153 will be shifted off Lanark Avenue. Figure 12 illustrates the new service map.



Figure 12: New Ways to Bus Service Map



Source: [www.octranspo.com](http://www.octranspo.com) Accessed: March 19, 2025

### 2.3.2 Other Study Area Developments

#### 234 Atlantis Avenue and 745 Kichi Zibi Mikan Parkway

The proposed development includes a zoning by-law amendment, which consists of a parking lot, a lookout parking area, modifications to the SJAM Parkway at the Kitchissippi lookout, and an expansion of the existing Westboro Beach Café pavilion into new 14,000 m<sup>2</sup> Pavilion building facility. Due to the small change in the number of parking spots provided and decrease in the size of the proposed building, it is expected not to have any significant impact on the overall network. (exp Services Inc., 2020)

#### 316-322 Clifton Road

The proposed development application includes a site plan application for the construction of 31 dwelling units. The development is anticipated to be built out in 2025. The Screening Form did not identify the need for a full TIA.

#### 70 Richmond Road and 376 Island Park Drive

The proposed development includes a site plan application for the construction of a nine-storey mixed-use building, including 96 residential units and 1,455 ft<sup>2</sup> of ground floor retail. The anticipated built out year was 2023, and it is assumed to be 2025. The trip generation trigger does not meet. (CGH Transportation, 2023)

#### 175 Richmond Road

The proposed development application includes a zoning by-law amendment consist of a six-storey mixed-use building with 104 residential units and 7,525 ft<sup>2</sup> of retail. The development is anticipated to be built out in 2025. Only TIA scoping report is available at this time. (Novatech, 2020)

*295, 299, 301 Ashton Avenue and 2046, 2050 Scott Street*

The proposed development application includes a site plan application for the construction of a 30-storey mixed use residential tower with 353 units and 233 m<sup>2</sup> of ground commercial/office. The anticipated built out year was 2021, and it is assumed to be 2025. The development is anticipated to generate 35 new AM and 35 PM peak hour two-way auto trips. (Parsons, 2021)

*315 Tweedsmuir Avenue and 320 McRae Avenue*

The proposed development includes a zoning by-law amendment and site plan control application to construct a 26-storey mixed-use development containing 325 apartment units, 11 townhouse units, and 820 m<sup>2</sup> (8,826 ft<sup>2</sup>) of commercial space. The anticipated full build-out and occupancy horizon is 2022 and is anticipated to generate 34 new AM and 41 PM peak hour two-way auto trips. (CGH Transportation, 2020)

*2070 Scott Street*

The proposed development includes a zoning by-law amendment and site plan control application to construct a 25-storey mixed-use building with 264 residential units and 5,554 ft<sup>2</sup> of ground floor retail. The anticipated full build-out and occupancy horizon is 2022 and it is anticipated to generate 38 new AM and 35 PM peak hour two-way auto trips. (Stantec, 2019)

*319-327 Richmond Road, 380 Winona Avenue, and 381 Churchill Avenue*

The proposed development application includes a site plan application for the construction of a nine-storey building with 180 apartment units, 18,675 sq. ft. of retail space. The anticipated built out year was 2021, and it is assumed to be 2024. The development is anticipated to generate 21 new AM and 30 PM peak hour two-way auto trips. (CGH Transportation, 2021)

*2006, 2020, and 2026 Scott Street, 314 and 318 Athlone Avenue*

The proposed development application includes a site plan application consist of two 40-storey towers with a total of 856 dwelling units and approximately 3,207 ft<sup>2</sup> of ground-floor commercial space. Phase One includes 392 dwellings and 1,287 ft<sup>2</sup> of commercial space, and Phase Two includes 464 dwellings and 1,920 ft<sup>2</sup> of commercial space. The anticipated buildout of Phase One is 2026 and the buildout of Phase Two is 2029, and the net additional auto trips are anticipated to be 20 AM and -4 PM peak hour two-way auto trips. (Novatech, 2024)

### 3 Study Area and Time Periods

#### 3.1 Study Area

The study area will include the intersections of:

- Island Park Drive at:
  - Kichi Zibi Mikan Parkway
  - Clearview Avenue
  - Scott Street
- Lanark Avenue:
  - Scott Street
  - Churchill Avenue

The boundary road will be Clearview Avenue and Lanark Avenue, and no screenlines are present within proximity to the site.

#### 3.2 Time Periods

As the proposed development is composed entirely of residential units the AM and PM peak hours will be examined.

### 3.3 Horizon Years

The anticipated build-out year is 2027. As a result, the full build-out plus five years horizon year is 2032.

## 4 Development-Generated Travel Demand

### 4.1 Mode Shares

Examining the mode shares recommended in the TRANS Trip Generation Manual (2020) for the subject district, derived from the most recent National Capital Region Origin-Destination survey (OD Survey), the existing average district mode shares by land use for Ottawa West have been summarized in Table 5.

*Table 5: TRANS Trip Generation Manual Recommended Mode Shares – Ottawa West*

| Travel Mode           | Multi-Unit (High-Rise) |             | TOD Area    |
|-----------------------|------------------------|-------------|-------------|
|                       | AM                     | PM          | AM & PM     |
| <b>Auto Driver</b>    | 28%                    | 33%         | 15%         |
| <b>Auto Passenger</b> | 11%                    | 11%         | 5%          |
| <b>Transit</b>        | 41%                    | 26%         | 65%         |
| <b>Cycling</b>        | 3%                     | 7%          | 15%         |
| <b>Walking</b>        | 16%                    | 23%         |             |
| <b>Total</b>          | <b>100%</b>            | <b>100%</b> | <b>100%</b> |

Since the future Westboro LRT station, which is located within a 300-metre linear distance (500-metre walking distance) from the site, is planned to be completed by 2026, a higher transit mode is considered achievable at this location. A 15% shift to transit mode taken from the auto mode is proposed for both peak hours. The proposed modified mode share targets for the development and are summarized in Table 6.

*Table 6: Proposed Development Mode Shares*

| Travel Mode           | Multi-Unit (High-Rise) |             |
|-----------------------|------------------------|-------------|
|                       | AM                     | PM          |
| <b>Auto Driver</b>    | 17%                    | 21%         |
| <b>Auto Passenger</b> | 8%                     | 8%          |
| <b>Transit</b>        | 56%                    | 41%         |
| <b>Cycling</b>        | 3%                     | 7%          |
| <b>Walking</b>        | 16%                    | 23%         |
| <b>Total</b>          | <b>100%</b>            | <b>100%</b> |

### 4.2 Trip Generation

This TIA has been prepared using the vehicle and person trip rates for the residential dwellings using the TRANS Trip Generation Manual (2020). Table 7 summarizes the person trip rates for the proposed residential land uses for each peak period.

*Table 7: Trip Generation Person Trip Rates by Peak Period*

| Land Use                      | Land Use Code     | Peak Period | Person Trip Rates |
|-------------------------------|-------------------|-------------|-------------------|
| <b>Multi-Unit (High-Rise)</b> | 221 & 222 (TRANS) | AM          | 0.80              |
|                               |                   | PM          | 0.90              |

Using the above person trip rates, the total person trip generation has been estimated. Table 8 summarizes the total person trip generation for the residential land uses.



Table 8: Total Person Trip Generation by Peak Period

| Land Use               | Units | AM Peak Period |     |       | PM Peak Period |     |       |
|------------------------|-------|----------------|-----|-------|----------------|-----|-------|
|                        |       | In             | Out | Total | In             | Out | Total |
| Multi-Unit (High-Rise) | 187   | 47             | 104 | 150   | 97             | 71  | 168   |

Using the above mode share targets for a LRT area and the person trip rates, the person trips by mode have been projected. Trip generation by peak hour has been forecasted using the prescribed peak period conversion factors presented in the TRANS Trip Generation Manual (2020) for the residential component. Table 9 summarizes the residential trip generation by mode and peak hour.

Table 9: Trip Generation by Mode

| Travel Mode            |                | AM Peak Hour |           |           |           | PM Peak Hour |           |           |           |
|------------------------|----------------|--------------|-----------|-----------|-----------|--------------|-----------|-----------|-----------|
|                        |                | Mode Share   | In        | Out       | Total     | Mode Share   | In        | Out       | Total     |
| Multi-Unit (High-Rise) | Auto Driver    | 17%          | 4         | 8         | 12        | 21%          | 9         | 6         | 15        |
|                        | Auto Passenger | 8%           | 2         | 4         | 6         | 8%           | 3         | 3         | 6         |
|                        | Transit        | 56%          | 14        | 32        | 46        | 41%          | 19        | 13        | 32        |
|                        | Cycling        | 3%           | 1         | 2         | 3         | 7%           | 3         | 3         | 6         |
|                        | Walking        | 16%          | 4         | 10        | 14        | 23%          | 12        | 8         | 20        |
|                        | <b>Total</b>   | <b>100%</b>  | <b>25</b> | <b>56</b> | <b>81</b> | <b>100%</b>  | <b>46</b> | <b>33</b> | <b>79</b> |

As shown above, a total of 12 AM and 15 PM new peak hour two-way vehicle trips are projected as a result of the proposed development.

#### 4.3 Trip Distribution

To understand the travel patterns of the subject development, the OD Survey has been reviewed to determine the travel for the residential component, and these patterns were applied based on the build-out of Ottawa West. Table 10 below summarizes the distributions.

Table 10: OD Survey Distribution – Ottawa West

| To/From      | Residential % of Trips |
|--------------|------------------------|
| North        | 5%                     |
| South        | 50%                    |
| East         | 40%                    |
| West         | 5%                     |
| <b>Total</b> | <b>100%</b>            |

#### 4.4 Trip Assignment

Using the distribution outlined above, turning movement splits, and access to major transportation infrastructure, the trips generated by the site have been assigned to the study area road network. It is noted that traffic cannot be assigned to the eastbound left-turn movement from Clearview Avenue to Island Park Drive during the PM peak hour, as it is a prohibited movement. As a result, the trip assignment will differ between the AM and PM peak hours. Table 11 and Table 12 summarize the proportional assignment to the study area roadways during the AM peak hour and the PM peak hour, and Figure 13 illustrates the new site generated volumes.

Table 11: Trip Assignment – AM Peak Hour

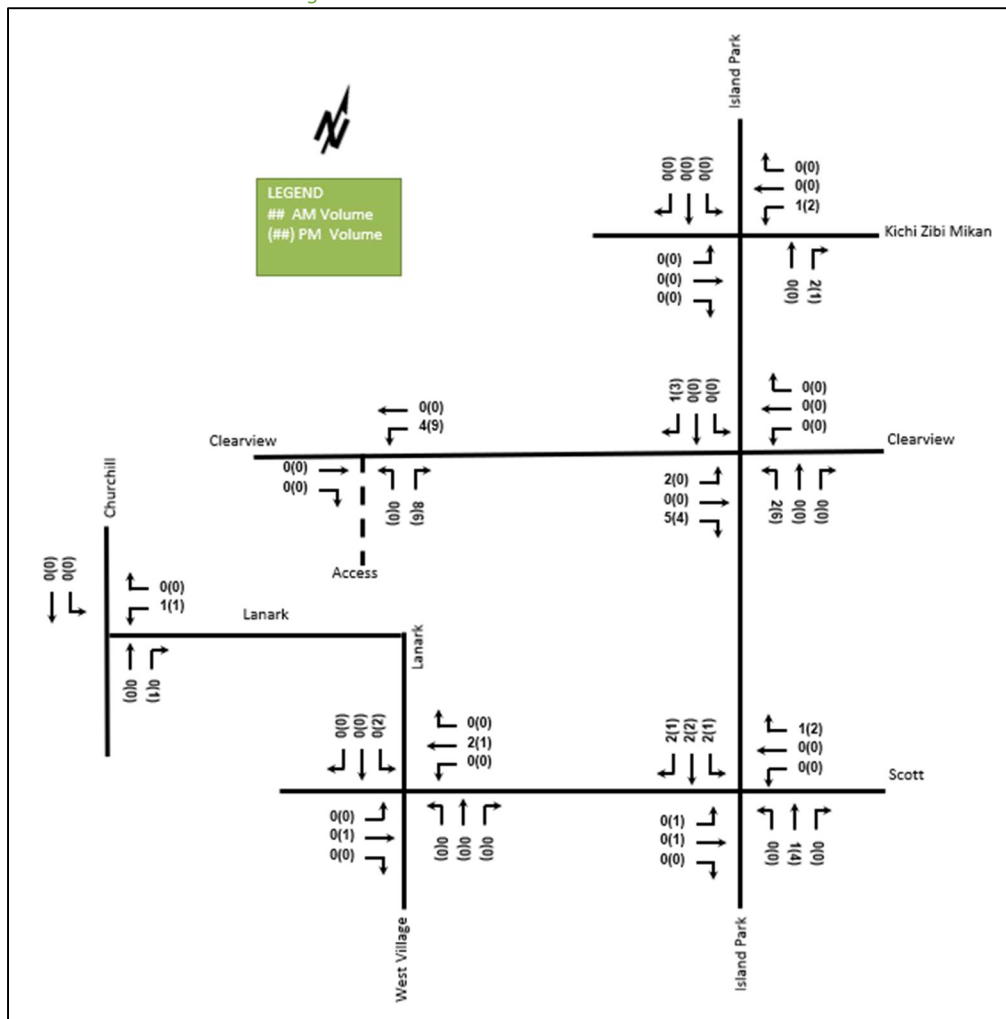
| To/From | Via   |
|---------|---|
| North   | 3% Kichi Zibi Mikan Parkway (E)<br>2% Island Park Drive (N) |
| South   | 30% Island Park Drive (S)<br>20% Churchill Avenue (S)       |

| To/From | Via  |
|---------|--|
| East    | 20% Kichi Zibi Mikan Parkway (E)<br>20% Scott Street (E)                               |
| West    | 2% Churchill Avenue (S)<br>2% Kichi Zibi Mikan Parkway (W)<br>1% Island Park Drive (N) |
| Total   | 100%   |

Table 12: Trip Assignment – PM Peak Hour

| To/From | Inbound Via  | Outbound Via   |
|---------|--|--|
| North   | 3% Kichi Zibi Mikan Parkway (E)<br>2% Island Park Drive (N)                            | 3% Kichi Zibi Mikan Parkway (E)<br>2% Island Park Drive (N)                            |
| South   | 30% Island Park Drive (S)<br>20% Churchill Avenue (S)                                  | 30% Island Park Drive (S)<br>20% Churchill Avenue (S)                                  |
| East    | 20% Kichi Zibi Mikan Parkway (E)<br>20% Scott Street (E)                               | 40% Scott Street (E)   |
| West    | 2% Churchill Avenue (S)<br>2% Kichi Zibi Mikan Parkway (W)<br>1% Island Park Drive (N) | 2% Churchill Avenue (S)<br>2% Kichi Zibi Mikan Parkway (W)<br>1% Island Park Drive (N) |
| Total   | 100%   | 100%   |

Figure 13: New Site Generation Auto Volumes



## 5 Exemption Review

Table 13 summarizes the exemptions for this TIA.

*Table 13: Exemption Review*

| Module                                      | Element                       | Explanation  | Exempt/Required |
|---|-------------------------------|--|-----------------|
| <b>Site Design and TDM</b>                  |                               |  |                 |
| <b>4.1 Development Design</b>               | 4.1.2 Circulation and Access  | Only required for site plan and zoning by-law applications   | Required        |
|   | 4.1.3 New Street Networks     | Only required for plans of subdivision   | Exempt          |
| <b>4.2 Parking</b>                          | 4.2.1 Parking Supply          | Only required for site plan and zoning by-law applications   | Required        |
| <b>4.3 Boundary Street Design</b>           |                               | All applications   | Required        |
| <b>4.5 Transportation Demand Management</b> | All Elements                  | Only required when the development generates more than 60 person-trips   | Required        |
| <b>Network Impact</b>                       |                               |  |                 |
| <b>3.2 Background Network Travel Demand</b> | All Elements                  | Only required when one or more other Network Impact Modules are triggered  | Exempt          |
| <b>3.3 Demand Rationalization</b>           |                               | Only required when one or more other Network Impact Modules are triggered  | Exempt          |
| <b>4.6 Neighbourhood Traffic Calming</b>    | 4.6.1 Adjacent Neighbourhoods | <p>If the development meets all of the following criteria along the route(s) site generated traffic is expected to utilize between an arterial road and the site's access:</p> <ol style="list-style-type: none"> <li>1. Access to Collector or Local;</li> <li>2. "Significant sensitive land use presence" exists, where there is at least two of the following adjacent to the subject street segment: <ul style="list-style-type: none"> <li>• School (within 250m walking distance);</li> <li>• Park;</li> <li>• Retirement / Older Adult Facility (i.e. long-term care and retirement homes);</li> <li>• Licenced Child Care Centre;</li> <li>• Community Centre; or</li> <li>• 50%, or greater, of adjacent property along the route(s) is occupied by residential lands and a minimum of 10 occupied residential units are present on the route.</li> </ul> </li> <li>3. Application is for Zoning By-Law Amendment or Draft Plan of Subdivision;</li> </ol> | Exempt          |

| Module                         | Element                             | Explanation  | Exempt/Required |
|--------------------------------|-------------------------------------|--|-----------------|
|                                |                                     | 4. At least 75 site-generated auto trips;<br>5. Site Trip Infiltration is expected. Site traffic will increase peak hour vehicle volumes along the route by 50% or more. |                 |
| <b>4.7 Transit</b>             | 4.7.1 Transit Route Capacity        | Only required when the development generates more than 75 transit trips  | Exempt          |
|                                | 4.7.2 Transit Priority Requirements | Only required when the development generates more than 75 auto trips   | Exempt          |
| <b>4.8 Network Concept</b>     |                                     | Only required when proposed development generates more than 200 person-trips during the peak hour in excess of equivalent volume permitted by established zoning         | Exempt          |
| <b>4.9 Intersection Design</b> | 4.9.1 Intersection Control          | Only required when the development generates more than 75 auto trips   | Exempt          |
|                                | 4.9.2 Intersection Design           | Only required when the development generates more than 75 auto trips   | Exempt          |

## 6 Development Design

### 6.1 Design for Sustainable Modes

The proposed development is a residential building with a total of 190 bicycle parking spaces including six exterior bike spaces at grade and 184 underground bike parking spaces. A 1.8-metre sidewalk is proposed along both sides of the internal drive aisle to connect to the hard surface around the buildings and existing sidewalks along Lanark Avenue, and to the adjacent building pedestrian connection to Ellendale Crescent. Additionally, the internal sidewalks connect to Clearview Avenue via a 2.0-metre concrete sidewalk. Cyclists will access the underground bicycle parking via the garage ramp or internal elevators.

The existing and proposed sidewalks provide connections from the site to the nearby transit stops and the future Westboro LRT station.

The infrastructure TDM Checklist is provided in Appendix F.

### 6.2 Circulation and Access

Vehicle access to the underground parking is provided via the access on Clearview Avenue. Garbage facilities are located on the west side of the building and move-in trucks and garbage collection are expected to access the site via the western access on Lanark Avenue. Additionally, an access is proposed on Lanark Avenue to access the surface parking and provide the internal connection between Lanark Avenue and Ellendale Crescent.

The fire route is proposed from the access on Lanark Avenue to the island in front of the proposed building.

The garbage truck, move-in truck, and fire truck turning movements can be accommodated on site. The turning templates are provided in Appendix G.

## 7 Parking

### 7.1 Parking Supply

A total of 246 parking spaces are proposed to serve 210 Clearview Avenue, including 228 residential parking spaces and 18 visitor parking spaces. Among these parking spaces, a total of ten vehicle parking spaces are proposed to be located on the surface, 113 spaces on P1, and the remaining 123 spaces on P2.

While the site is located within Area X on Schedule 1A of the parking zoning bylaw, Staff have indicated that the proximity to Westboro Station applies and Section 103 will be discussed. According to the parking zoning by-law, No minimum parking requirement is noted for the site and a maximum parking ratio of 1.75 spaces per unit is permitted. The proposed residential vehicle parking ratio of 1.2 spaces per unit is below the ratio and meets the bylaw requirements.

The site provides 190 bicycle spaces, including six exterior and 184 underground. According to the site-specific zoning by-law requirement, the minimum bicycle requirement is 1.0 spaces per unit, totaling 187 spaces. The proposed bicycle parking exceeds the minimum bicycle parking requirement.

The existing building at 200 Clearview Avenue will reduce to 110 below grade parking spaces and a parking ratio of 0.49 spaces per unit.

## 8 Boundary Street Design

Table 14 summarizes the MMLOS analysis for the boundary streets of Lanark Avenue and Clearview Avenue. The existing and future conditions for both streets will be the same and are considered in one row. The boundary street analysis is based on the land-use designation of “within 300m of a school” due to the proximity of the Jules-Léger Centre. The MMLOS worksheets have been provided in Appendix H.

*Table 14: Boundary Street MMLOS Analysis*

| Segment                 |       | Pedestrian LOS |        | Bicycle LOS |        | Transit LOS |        | Truck LOS |        |
|-------------------------|-------|----------------|--------|-------------|--------|-------------|--------|-----------|--------|
|                         |       | PLOS           | Target | BLOS        | Target | TLOS        | Target | TrLOS     | Target |
| <b>Lanark Avenue</b>    | Ex/Fu | B              | A      | B           | D      | D           | D      | N/A       | N/A    |
| <b>Clearview Avenue</b> | Ex    | <b>F</b>       | A      | B           | D      | N/A         | N/A    | N/A       | N/A    |
|                         | Fu    | <b>B</b>       | A      |             |        |             |        |           |        |

Clearview Avenue does not meet the pedestrian LOS targets due to the lack of a sidewalk along the existing roadway. The additional of the sidewalk along the frontage, linking the internal site connections to Ellendale Crescent will improve the pedestrian LOS to B. If the roadway consistently operates under 30km/h, it would meet the target of A.

Lanark Avenue does not meet the pedestrian LOS target of A due to the boulevard not exceeding 2 metres in width. The target is set particularly high due to the proximity to the school; however, the available right-of-way is limited to support a widening of the boulevard. With the existing on-street parking, the buffer provided to the sidewalk is technically wider than the provided boulevard width, and no improvements are required.

## 9 Transportation Demand Management

### 9.1 Context for TDM

The mode shares used within the TIA represent a shift from auto modes to transit ridership with the future LRT station. Overall, the modal shares are likely to be achieved and supporting TDM measures should be provided.

The subject site is within the Richmond Road/ Westboro Secondary Plan and Richmond Road/ Westboro community design plan areas. The total bedroom count within the development is subject to the final unit breakdown and layout selections by purchasers. No age restrictions are noted.

## 9.2 Need and Opportunity

The subject site has been assumed to rely predominantly on transit ridership with proximity to the future LRT station, and those assumptions have been carried through the analysis. The increase in transit ridership is achievable.

## 9.3 TDM Program

The “suite of post occupancy TDM measures” has been summarized in the TDM checklists for the residential land uses. The checklist is provided in Appendix F. The key TDM measures recommended include:

- Display local area maps with walking and cycling routes, and transit route information and schedules at major entrances
- Provide lighting and landscaping along walking routes between building entrances and streets
- Provide a multimodal travel option information package to new residents
- Contract with providers to install on-site bikeshare (or other micromobility alternatives) and carshare spaces
- Unbundle parking cost from purchase or rental costs

# 10 Access Intersection Design

## 10.1 Location and Design of Access

The two existing accesses to the surface parking lot will be converted to an access to the underground parking from Clearview Avenue and the Lanark Avenue access will be to the loading area. A new loop will be created from the existing drive aisle from Ellendale Crescent to connect to Lanark Avenue at a new access. All accesses are proposed as two-way access. It is noted that two proposed accesses and one existing access for the adjacent building will be on Lanark Avenue. Although total accesses on Lanark Avenue will exceed the private approach by-law maximum number of private approaches permitted, the western proposed access is only for loading purposes, therefore the additional proposed access for loading is considered acceptable.

The access to underground parking on Clearview Avenue is 6.1 metres wide at the property line, and it meets the private approach by-law requirements of a minimum width of 2.4 metres and a maximum width of 9.0 metres. The access to the loading area on Lanark Avenue is 5.9 metres wide at the property line and 9.1 meters wide at the curb line. The general vehicle access on Lanark Avenue is 6.9 meters wide at the property line and 14.3 meters wide at the curb line. The widths of proposed accesses on Lanark Avenue comply with the private approach by-law maximum width requirement at the property line; however, it does not comply at the curb line due to the larger radii required to accommodate larger truck movements.

The distance between two accesses on Lanark Avenue at the curb line is 25.9 metres, and the distance between the general vehicle access on Lanark Avenue and the existing access for the adjacent building is 15.7 metres at the curb line. The distance between two accesses on Clearview Avenue at the curb line is 51.0 metres. All distances meet the private approach by-law minimum distance between a private approach and any other private approach.

The access to underground parking on Clearview Avenue is approximately 110 metres from the intersection with Ellendale Crescent, and the existing access to underground parking in the adjacent building is approximately 45 metres from the same intersection. The existing drive aisle on Ellendale Crescent for the adjacent building is

approximately 20 metres from the intersection with Clearview Avenue. On Lanark Avenue, the general vehicle access is approximately 75 metres from the intersection of Ellendale Crescent, and the existing access for the adjacent building is approximately 50 metres from the same intersection. All accesses exceed the minimum corner clearance of 20 meters for collector roads and 15 meters for local roads as indicated in the TAC.

According to Table 8.9.3 of the TAC Geometric Design Guidelines, for the apartment units between 100 and 200, the minimum throat length requirement is 15 metres for the collector road, and no requirement for the local road. The throat length for the access to underground parking on Clearview Avenue is 13 metres, and it is considered to be sufficient. The throat length for access to the loading area on Lanark Avenue is approximately 28.2 metres, and it meets the TAC requirement. The throat length for the general vehicle access on Lanark Avenue is 5.3 metres, and it does not meet the TAC requirement. As this access is provided for drop-off/pick-up purposes, low volumes are expected for the loop as the primary vehicle accesses are through the underground ramps on Clearview Avenue, the throat length for the access on Lanark Avenue is considered acceptable.

Accesses on Lanark Avenue will comply with the City of Ottawa standard drawing SC7.1.

## 11 Summary of Improvements Indicated and Modifications Options

The following summarizes the analysis and results presented in this TIA report:

### Proposed Site

- The proposed site includes 187 apartment units and a total of 228 residential vehicle parking spaces, 18 visitor parking spaces, and 190 bike parking spaces are proposed
- The existing surface parking lot of 100 parking spaces will be removed
- The two existing accesses to the surface parking lot will be converted to an access to the underground parking from Clearview Avenue and the Lanark Avenue access will be to the loading area
- A new loop will be created from the existing drive aisle from Ellendale Crescent to connect to Lanark Avenue at a new access
- The development is proposed to be completed as a single phase by 2027

### TIA Screening and Exemptions

- The TIA Screening form indicated a full TIA was required due to trip generation
- The exemption review for the TIA did not require new street networks, background network travel demand, demand rationalization, neighbourhood traffic calming, transit review, network concept review, intersection control review or intersection design review

### Existing Conditions

- Island Park Drive and Kichi Zibi Mikan Parkway are federally owned arterial roads, and Churchill Avenue south of Scott Street and Scott Street are City of Ottawa arterial roads within the study area
- Churchill Avenue between Scott Street and Lanark Avenue and Lanark Avenue are City of Ottawa collector roads, and Clearview Avenue is a local road within the study area
- Sidewalks are provided on both sides along Lanark Avenue, Churchill Avenue south of Lanark Avenue, Clearview Avenue between Ellendale Crescent and Latchford Road, and east of Island Park Drive, on the north side of Clearview Avenue between Latchford Road and Island Park Drive, and on the south side of Scott Street

- A pedestrian pathway extends south of Lanark Avenue between the 200 Lanark Avenue and 38 Metropole Private properties, and loops to Westboro Station
- Multi use pathways are present on the north side of Scott Street and another connects Lanark Avenue from the Beechgrove Avenue intersection to the Westboro Station
- Bike lanes are provided on both sides along Island Park Drive, and a cycle track is present on the south side of Scott Street
- Island Park Drive and Scott Street are cross-town bikeways and Kichi Zibi Mikan Parkway east of Island Park Drive is a NCC Pathway in the Transportation Master Plan – Part 1 (2023)
- Within the study area, the intersection and segments have a total of four collisions during the 2018-2022 time period
- No further collision analysis is required within this study due to the low number of collisions in the vicinity of the site
- The Island Park Drive at Kichi Zibi Mikan Parkway intersection is over capacity and subject to queuing issues at the existing condition

#### **Planned Conditions**

- Westboro station, which is identified as one of the Confederation Line West extension new stations in the Stage 2 Light Rail Transit project, will be converted to accommodate LRT in 2026
- The bus-only eastbound lane on Scott Street from Clifton Road to Island Park Drive, and the westbound right-turn lane at Island Park Drive are part of the detour plan will be removed

#### **Development Generated Travel Demand**

- The proposed development is forecasted to produce 81 AM and 79 PM two-way people trips
- Of the forecasted people trips, 12 AM and 15 PM two-way trips will be vehicle trips based on 17% and 21% modal share target
- Of the forecasted trips, 5% are anticipated to travel to the north and west, 50% to the south, and 40% to the east

#### **Development Design**

- The proposed development is a residential building with a total of 190 bicycle parking spaces including six exterior bike spaces at grade and 184 underground bike parking spaces
- A 1.8-metre sidewalk is proposed along both sides of the internal drive aisle to connect to the hard surface around the buildings and existing sidewalks along Lanark Avenue, and to the adjacent building pedestrian connection to Ellendale Crescent
- The existing and proposed sidewalks provide connections from the site to the nearby transit stops and the Westboro station
- The fire route is proposed from the access on Lanark Avenue to the island in front of the proposed building
- The garbage truck, move-in truck, and fire truck turning movements can be accommodated on site

#### **Parking**

- A total of 246 parking spaces are proposed including 228 residential parking spaces and 18 visitor parking spaces as part of the new development
- The proposed residential and visitor vehicle parking spaces are in compliance with the maximum zoning by-law requirements



- The site provides 190 bicycle spaces, including six exterior and 184 underground
- The proposed bicycle parking exceeds the minimum site-specific zoning by-law requirement for bicycle
- The existing parking spaces retained are seven spaces less than the parking zoning by-law requirement

#### **Boundary Street Design**

- Clearview Avenue does not meet the pedestrian LOS targets in the existing conditions due to the lack of a sidewalk
- A sidewalk will be provided between the internal pedestrian connections and Ellendale Crescent and will increase the pedestrian LOS from F to B
- A consistent operating speed of 30 km/h or lower would meet the pedestrian LOS A
- Lanark Avenue does not meet the pedestrian MMLOS targets due to the boulevard width not exceeding 2 metres, and limited right-of-way prevents a boulevard to be constructed
- The existing on-street parking adjacent to the boulevard does provide additional buffer and no improvements are proposed

#### **TDM**

- Supportive TDM measures to be included within the proposed development should include:
  - Display local area maps with walking and cycling routes, and transit route information and schedules at major entrances
  - Provide lighting and landscaping along walking routes between building entrances and streets
  - Provide a multimodal travel option information package to new residents
  - Contract with providers to install on-site bikeshare (or other micromobility alternatives) and carshare spaces
  - Unbundle parking cost from purchase or rental costs

#### **Access Intersection Design**

- The two existing accesses to the surface parking lot will be converted to an access to the underground parking from Clearview Avenue and the Lanark Avenue access will be to the loading area
- A new loop will be created from the existing drive aisle from Ellendale Crescent to connect to Lanark Avenue at a new access
- Although total accesses on Lanark Avenue will exceed the private approach by-law maximum number of private approaches permitted, the western proposed access is only for loading purpose, therefore, the additional proposed access for loading is considered acceptable
- The access to underground parking on Clearview Avenue is 6.1 metres wide measured at the property line, and it meets the private approach by-law minimum and maximum width requirements
- The widths of proposed accesses on Lanark Avenue comply with the private approach by-law maximum width requirement at the property line; however, it does not comply at the curb line due to the larger radii required to accommodate larger truck movements
- All distances meet the private approach by-law minimum distance between a private approach and any other private approach
- All accesses exceed the minimum corner clearance indicated in the TAC
- Although the throat length for the general vehicle access on Lanark Avenue does not meet the TAC requirement, the throat length for the access on Lanark Avenue is considered acceptable given lower volumes are expected

- Accesses on Lanark Avenue will comply with the City of Ottawa standard drawing SC7.1

## 12 Conclusion

It is recommended that, from a transportation perspective, the proposed development applications proceed.

Prepared By:



Yu-Chu Chen  
Transportation Engineering-Intern

Reviewed By:



Andrew Harte, P.Eng.  
Senior Transportation Engineer

# Appendix A

TIA Screening Form and PM Certification Form

City of Ottawa 2023 Revisions to 2017 TIA Guidelines  
Step 1 - Screening Form

Date: 10-Sep-24  
Project Number: 2024-030  
Project Reference: 210 Clearview Avenue

| 1.1 Description of Proposed Development |   |
|---|---|
| Municipal Address                       | 210 Clearview Avenue  |
| Description of Location                 | Ward 15. Rectangular parcel fronting Clearview Avenue and Lanark Avenue |
| Land Use Classification                 | Residential Fifth Density Zone (R5C[2909]S216)                          |
| Development Size                        | 184 Residential Units   |
| Accesses                                | One onto Clearview Avenue and two onto Lanark Avenue                    |
| Phase of Development                    | Single phase  |
| Buildout Year                           | 2027  |
| TIA Requirement                         | Full TIA Required   |

| 1.2 Trip Generation Trigger |                          |
|-----------------------------|--------------------------|
| Land Use Type               | Multi-Family (High-Rise) |
| Development Size            | 184 Units                |
| Trip Generation Trigger     | Yes                      |

| 1.3 Location Triggers  |    |
|--|----|
| Does the development propose a new driveway to a boundary street that is designated as part of the Transit Priority Network, Rapid Transit network or Cross-Town Bikeways? | No |
| Is the development in a Hub, a Protected Major Transit Station Area (PMTSA), or a Design Priority Area (DPA)?  | No |
| Location Trigger   | No |

| 1.4. Safety Triggers  |    |
|---|----|
| Are posted speed limits on a boundary street 80 km/hr or greater?   | No |
| Are there any horizontal/vertical curvatures on a boundary street limits sight lines at a proposed driveway?  | No |
| Is the proposed driveway within the area of influence of an adjacent traffic signal or roundabout (i.e. within 300 m of intersection in rural conditions, or within 150 m of intersection in urban/ suburban conditions)? | No |
| Is the proposed driveway within auxiliary lanes of an intersection?   | No |
| Does the proposed driveway make use of an existing median break that serves an existing site?   | No |
| Is there is a documented history of traffic operations or safety concerns on the boundary streets within 500 m of the development?  | No |
| Does the development include a drive-thru facility?   | No |
| Safety Trigger  | No |



## Certification Form for TIA Study PM

### TIA Plan Reports

On April 14, 2022, the Province's Bill 109 received Royal Assent providing legislative direction to implement the More Homes for Everyone Act, 2022 aiming to increase the supply of a range of housing options to make housing more affordable. Revisions have been made to the TIA guidelines to comply with Bill 109 and streamline the process for applicants and staff.

Individuals submitting TIA reports will be responsible for all aspects of development-related transportation assessment and reporting, and undertaking such work, in accordance and compliance with the City of Ottawa's Official Plan, the Transportation Master Plan and the Transportation Impact Assessment (2017) Guidelines.

By submitting the attached TIA report (and any associated documents) and signing this document, the individual acknowledges that they meet the four criteria listed below.

### CERTIFICATION

I have reviewed and have a sound understanding of the objectives, needs and requirements of the City of Ottawa's Official Plan, Transportation Master Plan and the Transportation Impact Assessment (2017) Guidelines; (Update effective July 2023)

I have a sound knowledge of industry standard practice with respect to the preparation of transportation impact assessment reports, including multi modal level of service review;

I have substantial experience (more than 5 years) in undertaking and delivering transportation impact studies (analysis, reporting and geometric design) with strong background knowledge in transportation planning, engineering or traffic operations; and

I am either a licensed or registered<sup>1</sup> professional in good standing, whose field of expertise

is either transportation engineering

or transportation planning.

<sup>1</sup> License of registration body that oversees the profession is required to have a code of conduct and ethics guidelines that will ensure appropriate conduct and representation for transportation planning and/or transportation engineering works.

Dated at \_\_\_\_\_ this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_.  
(City)

Name :

Professional title:



Signature of individual certifier that s/he/they meet the above criteria

|  |
|--|
| <b>Office Contact Information (Please Print)</b> |
| Address:   |
| City / Postal Code:                              |
| Telephone / Extension:                           |
| Email Address:                                   |

**Stamp**



**Revision Date: June 2023**

# Appendix B

Turning Movement Counts



## Project #24-348 - CGH Transportation

### Intersection Count Report

**Intersection:** Island Park Dr & Kichi Zibi Mikan Pkwy  
**Municipality:** Ottawa  
**Count Date:** Wednesday, Aug 21, 2024  
**Site Code:** 2434800001  
**Count Categories:** Cars, Trucks, Bicycles, Pedestrians  
**Count Period:** 06:30-09:30, 15:00-18:00  
**Weather:** Clear  
**Comments:**



### Traffic Count Summary

**Intersection:** Island Park Dr & Kichi Zibi Mikan Pkwy  
**Site Code:** 2434800001  
**Municipality:** Ottawa  
**Count Date:** Aug 21, 2024

#### Island Park Dr - Traffic Summary

| Hour          | North Approach Totals           |      |       |        |       |      | South Approach Totals           |      |       |        |       |      | Total |
|---------------|---------------------------------|------|-------|--------|-------|------|---------------------------------|------|-------|--------|-------|------|-------|
|               | Includes Cars, Trucks, Bicycles |      |       |        |       |      | Includes Cars, Trucks, Bicycles |      |       |        |       |      |       |
|               | Left                            | Thru | Right | U-Turn | Total | Peds | Left                            | Thru | Right | U-Turn | Total | Peds |       |
| 06:30 - 07:00 | 241                             | 379  | 260   | 0      | 880   | 1    | 0                               | 86   | 20    | 0      | 106   | 0    | 986   |
| 07:00 - 08:00 | 480                             | 767  | 472   | 0      | 1719  | 0    | 0                               | 219  | 87    | 0      | 306   | 1    | 2025  |
| 08:00 - 09:00 | 410                             | 678  | 437   | 0      | 1525  | 0    | 1                               | 272  | 154   | 0      | 427   | 1    | 1952  |
| 09:00 - 09:30 | 150                             | 333  | 183   | 0      | 666   | 0    | 0                               | 145  | 56    | 0      | 201   | 0    | 867   |
| BREAK         |                                 |      |       |        |       |      |                                 |      |       |        |       |      |       |
| 15:00 - 16:00 | 149                             | 419  | 393   | 0      | 961   | 3    | 0                               | 561  | 52    | 0      | 613   | 4    | 1574  |
| 16:00 - 17:00 | 133                             | 448  | 403   | 0      | 984   | 1    | 0                               | 496  | 28    | 0      | 524   | 0    | 1508  |
| 17:00 - 18:00 | 137                             | 481  | 401   | 0      | 1019  | 3    | 0                               | 526  | 21    | 0      | 547   | 2    | 1566  |
| GRAND TOTAL   | 1700                            | 3505 | 2549  | 0      | 7754  | 8    | 1                               | 2305 | 418   | 0      | 2724  | 8    | 10478 |



## Traffic Count Summary

Intersection: Island Park Dr & Kichi Zibi Mikan Pkwy  
Site Code: 2434800001  
Municipality: Ottawa  
Count Date: Aug 21, 2024

### Kichi Zibi Mikan Pkwy - Traffic Summary

| Hour          | East Approach Totals            |      |       |        |       |      | West Approach Totals            |      |       |        |       |      | Total |
|---------------|---------------------------------|------|-------|--------|-------|------|---------------------------------|------|-------|--------|-------|------|-------|
|               | Includes Cars, Trucks, Bicycles |      |       |        |       |      | Includes Cars, Trucks, Bicycles |      |       |        |       |      |       |
|               | Left                            | Thru | Right | U-Turn | Total | Peds | Left                            | Thru | Right | U-Turn | Total | Peds |       |
| 06:30 - 07:00 | 41                              | 79   | 19    | 0      | 139   | 2    | 69                              | 154  | 3     | 0      | 226   | 2    | 365   |
| 07:00 - 08:00 | 92                              | 183  | 68    | 0      | 343   | 5    | 204                             | 564  | 16    | 0      | 784   | 6    | 1127  |
| 08:00 - 09:00 | 138                             | 213  | 84    | 0      | 435   | 3    | 187                             | 697  | 30    | 0      | 914   | 0    | 1349  |
| 09:00 - 09:30 | 51                              | 85   | 32    | 1      | 169   | 0    | 77                              | 217  | 22    | 0      | 316   | 2    | 485   |
| BREAK         |                                 |      |       |        |       |      |                                 |      |       |        |       |      |       |
| 15:00 - 16:00 | 130                             | 841  | 773   | 0      | 1744  | 5    | 346                             | 230  | 20    | 0      | 596   | 4    | 2340  |
| 16:00 - 17:00 | 159                             | 892  | 922   | 0      | 1973  | 0    | 332                             | 172  | 17    | 0      | 521   | 2    | 2494  |
| 17:00 - 18:00 | 168                             | 774  | 844   | 0      | 1786  | 4    | 352                             | 212  | 19    | 0      | 583   | 1    | 2369  |
| GRAND TOTAL   | 779                             | 3067 | 2742  | 1      | 6589  | 19   | 1567                            | 2246 | 127   | 0      | 3940  | 17   | 10529 |

## Traffic Count Data

Intersection: Island Park Dr & Kichi Zibi Mikan Pkwy  
Site Code: 2434800001  
Municipality: Ottawa  
Count Date: Aug 21, 2024

### North Approach - Island Park Dr

| Start Time      | Cars        |             |             |          |             | Trucks    |          |          |          |           | Bicycles |          |          |          |          | Total Peds |
|-----------------|-------------|-------------|-------------|----------|-------------|-----------|----------|----------|----------|-----------|----------|----------|----------|----------|----------|------------|
|                 | ←           | ↑           | →           | ↺        | Total       | ←         | ↑        | →        | ↺        | Total     | ←        | ↑        | →        | ↺        | Total    |            |
| 06:30           | 116         | 193         | 151         | 0        | 460         | 2         | 0        | 0        | 0        | 2         | 0        | 0        | 0        | 0        | 0        | 1          |
| 06:45           | 123         | 186         | 108         | 0        | 417         | 0         | 0        | 1        | 0        | 1         | 0        | 0        | 0        | 0        | 0        | 0          |
| 07:00           | 115         | 186         | 115         | 0        | 416         | 1         | 1        | 0        | 0        | 2         | 0        | 0        | 0        | 0        | 0        | 0          |
| 07:15           | 102         | 190         | 118         | 0        | 410         | 2         | 0        | 0        | 0        | 2         | 0        | 0        | 0        | 0        | 0        | 0          |
| 07:30           | 117         | 207         | 127         | 0        | 451         | 1         | 0        | 0        | 0        | 1         | 0        | 0        | 0        | 0        | 0        | 0          |
| 07:45           | 139         | 183         | 111         | 0        | 433         | 3         | 0        | 1        | 0        | 4         | 0        | 0        | 0        | 0        | 0        | 0          |
| 08:00           | 103         | 174         | 110         | 0        | 387         | 1         | 0        | 0        | 0        | 1         | 0        | 0        | 0        | 0        | 0        | 0          |
| 08:15           | 126         | 185         | 120         | 0        | 431         | 0         | 0        | 0        | 0        | 0         | 0        | 0        | 0        | 0        | 0        | 0          |
| 08:30           | 98          | 173         | 126         | 0        | 397         | 1         | 1        | 0        | 0        | 2         | 0        | 0        | 0        | 0        | 0        | 0          |
| 08:45           | 80          | 145         | 81          | 0        | 306         | 1         | 0        | 0        | 0        | 1         | 0        | 0        | 0        | 0        | 0        | 0          |
| 09:00           | 73          | 165         | 99          | 0        | 337         | 0         | 0        | 0        | 0        | 0         | 0        | 0        | 0        | 0        | 0        | 0          |
| 09:15           | 77          | 168         | 84          | 0        | 329         | 0         | 0        | 0        | 0        | 0         | 0        | 0        | 0        | 0        | 0        | 0          |
| <b>SUBTOTAL</b> | <b>1269</b> | <b>2155</b> | <b>1350</b> | <b>0</b> | <b>4774</b> | <b>12</b> | <b>2</b> | <b>2</b> | <b>0</b> | <b>16</b> | <b>0</b> | <b>0</b> | <b>0</b> | <b>0</b> | <b>0</b> | <b>1</b>   |

### Traffic Count Data

Intersection: Island Park Dr & Kichi Zibi Mikan Pkwy  
Site Code: 2434800001  
Municipality: Ottawa  
Count Date: Aug 21, 2024

#### North Approach - Island Park Dr

| Start Time  | Cars |      |      |   |       | Trucks |   |   |   |       | Bicycles |   |   |   |       | Total Peds |
|-------------|------|------|------|---|-------|--------|---|---|---|-------|----------|---|---|---|-------|------------|
|             | ←    | ↑    | →    | ↺ | Total | ←      | ↑ | → | ↺ | Total | ←        | ↑ | → | ↺ | Total |            |
| 15:00       | 24   | 111  | 81   | 0 | 216   | 1      | 0 | 1 | 0 | 2     | 0        | 0 | 0 | 0 | 0     | 1          |
| 15:15       | 41   | 103  | 108  | 0 | 252   | 3      | 1 | 0 | 0 | 4     | 0        | 0 | 0 | 0 | 0     | 1          |
| 15:30       | 32   | 106  | 109  | 0 | 247   | 0      | 2 | 0 | 0 | 2     | 0        | 0 | 0 | 0 | 0     | 1          |
| 15:45       | 48   | 95   | 94   | 0 | 237   | 0      | 1 | 0 | 0 | 1     | 0        | 0 | 0 | 0 | 0     | 0          |
| 16:00       | 28   | 97   | 97   | 0 | 222   | 0      | 2 | 0 | 0 | 2     | 0        | 0 | 0 | 0 | 0     | 0          |
| 16:15       | 37   | 125  | 90   | 0 | 252   | 2      | 0 | 1 | 0 | 3     | 0        | 0 | 0 | 0 | 0     | 0          |
| 16:30       | 38   | 107  | 105  | 0 | 250   | 1      | 1 | 0 | 0 | 2     | 0        | 0 | 0 | 0 | 0     | 0          |
| 16:45       | 26   | 116  | 109  | 0 | 251   | 1      | 0 | 1 | 0 | 2     | 0        | 0 | 0 | 0 | 0     | 1          |
| 17:00       | 35   | 113  | 97   | 0 | 245   | 1      | 0 | 1 | 0 | 2     | 0        | 0 | 0 | 0 | 0     | 1          |
| 17:15       | 25   | 112  | 90   | 0 | 227   | 0      | 0 | 0 | 0 | 0     | 0        | 0 | 0 | 0 | 0     | 0          |
| 17:30       | 38   | 121  | 104  | 0 | 263   | 1      | 0 | 0 | 0 | 1     | 0        | 0 | 0 | 0 | 0     | 0          |
| 17:45       | 37   | 135  | 109  | 0 | 281   | 0      | 0 | 0 | 0 | 0     | 0        | 0 | 0 | 0 | 0     | 2          |
| SUBTOTAL    | 409  | 1341 | 1193 | 0 | 2943  | 10     | 7 | 4 | 0 | 21    | 0        | 0 | 0 | 0 | 0     | 7          |
| GRAND TOTAL | 1678 | 3496 | 2543 | 0 | 7717  | 22     | 9 | 6 | 0 | 37    | 0        | 0 | 0 | 0 | 0     | 8          |

### Traffic Count Data

Intersection: Island Park Dr & Kichi Zibi Mikan Pkwy  
Site Code: 2434800001  
Municipality: Ottawa  
Count Date: Aug 21, 2024

#### South Approach - Island Park Dr

| Start Time | Cars |     |     |   |       | Trucks |   |   |   |       | Bicycles |   |   |   |       | Total Peds |
|------------|------|-----|-----|---|-------|--------|---|---|---|-------|----------|---|---|---|-------|------------|
|            | ←    | ↑   | →   | ↺ | Total | ←      | ↑ | → | ↺ | Total | ←        | ↑ | → | ↺ | Total |            |
| 06:30      | 0    | 47  | 7   | 0 | 54    | 0      | 0 | 0 | 0 | 0     | 0        | 1 | 0 | 0 | 1     | 0          |
| 06:45      | 0    | 38  | 13  | 0 | 51    | 0      | 0 | 0 | 0 | 0     | 0        | 0 | 0 | 0 | 0     | 0          |
| 07:00      | 0    | 50  | 17  | 0 | 67    | 0      | 1 | 0 | 0 | 1     | 0        | 0 | 0 | 0 | 0     | 0          |
| 07:15      | 0    | 56  | 24  | 0 | 80    | 0      | 1 | 0 | 0 | 1     | 0        | 0 | 0 | 0 | 0     | 0          |
| 07:30      | 0    | 59  | 18  | 0 | 77    | 0      | 0 | 0 | 0 | 0     | 0        | 1 | 0 | 0 | 1     | 0          |
| 07:45      | 0    | 51  | 28  | 0 | 79    | 0      | 0 | 0 | 0 | 0     | 0        | 0 | 0 | 0 | 0     | 1          |
| 08:00      | 1    | 65  | 32  | 0 | 98    | 0      | 1 | 0 | 0 | 1     | 0        | 0 | 0 | 0 | 0     | 0          |
| 08:15      | 0    | 60  | 35  | 0 | 95    | 0      | 0 | 0 | 0 | 0     | 0        | 1 | 0 | 0 | 1     | 1          |
| 08:30      | 0    | 67  | 37  | 0 | 104   | 0      | 0 | 0 | 0 | 0     | 0        | 0 | 0 | 0 | 0     | 0          |
| 08:45      | 0    | 77  | 50  | 0 | 127   | 0      | 1 | 0 | 0 | 1     | 0        | 0 | 0 | 0 | 0     | 0          |
| 09:00      | 0    | 80  | 29  | 0 | 109   | 0      | 1 | 0 | 0 | 1     | 0        | 0 | 0 | 0 | 0     | 0          |
| 09:15      | 0    | 64  | 27  | 0 | 91    | 0      | 0 | 0 | 0 | 0     | 0        | 0 | 0 | 0 | 0     | 0          |
| SUBTOTAL   | 1    | 714 | 317 | 0 | 1032  | 0      | 5 | 0 | 0 | 5     | 0        | 3 | 0 | 0 | 3     | 2          |

### Traffic Count Data

Intersection: Island Park Dr & Kichi Zibi Mikan Pkwy  
Site Code: 2434800001  
Municipality: Ottawa  
Count Date: Aug 21, 2024

#### South Approach - Island Park Dr

| Start Time  | Cars |      |     |   |       | Trucks |   |   |   |       | Bicycles |    |   |   |       | Total Peds |
|-------------|------|------|-----|---|-------|--------|---|---|---|-------|----------|----|---|---|-------|------------|
|             | ←    | ↑    | →   | ↺ | Total | ←      | ↑ | → | ↺ | Total | ←        | ↑  | → | ↺ | Total |            |
| 15:00       | 0    | 150  | 13  | 0 | 163   | 0      | 0 | 1 | 0 | 1     | 0        | 4  | 0 | 0 | 4     | 0          |
| 15:15       | 0    | 136  | 14  | 0 | 150   | 0      | 0 | 0 | 0 | 0     | 0        | 1  | 0 | 0 | 1     | 0          |
| 15:30       | 0    | 140  | 11  | 0 | 151   | 0      | 0 | 0 | 0 | 0     | 0        | 0  | 0 | 0 | 0     | 3          |
| 15:45       | 0    | 128  | 13  | 0 | 141   | 0      | 0 | 0 | 0 | 0     | 0        | 2  | 0 | 0 | 2     | 1          |
| 16:00       | 0    | 126  | 5   | 0 | 131   | 0      | 0 | 0 | 0 | 0     | 0        | 2  | 0 | 0 | 2     | 0          |
| 16:15       | 0    | 124  | 9   | 0 | 133   | 0      | 0 | 0 | 0 | 0     | 0        | 0  | 0 | 0 | 0     | 0          |
| 16:30       | 0    | 117  | 7   | 0 | 124   | 0      | 0 | 0 | 0 | 0     | 0        | 2  | 0 | 0 | 2     | 0          |
| 16:45       | 0    | 122  | 7   | 0 | 129   | 0      | 0 | 0 | 0 | 0     | 0        | 3  | 0 | 0 | 3     | 0          |
| 17:00       | 0    | 125  | 5   | 0 | 130   | 0      | 0 | 0 | 0 | 0     | 0        | 1  | 0 | 0 | 1     | 1          |
| 17:15       | 0    | 130  | 6   | 0 | 136   | 0      | 0 | 0 | 0 | 0     | 0        | 2  | 0 | 0 | 2     | 0          |
| 17:30       | 0    | 128  | 5   | 0 | 133   | 0      | 0 | 0 | 0 | 0     | 0        | 0  | 0 | 0 | 0     | 1          |
| 17:45       | 0    | 138  | 5   | 0 | 143   | 0      | 1 | 0 | 0 | 1     | 0        | 1  | 0 | 0 | 1     | 0          |
| SUBTOTAL    | 0    | 1564 | 100 | 0 | 1664  | 0      | 1 | 1 | 0 | 2     | 0        | 18 | 0 | 0 | 18    | 6          |
| GRAND TOTAL | 1    | 2278 | 417 | 0 | 2696  | 0      | 6 | 1 | 0 | 7     | 0        | 21 | 0 | 0 | 21    | 8          |

### Traffic Count Data

Intersection: Island Park Dr & Kichi Zibi Mikan Pkwy  
Site Code: 2434800001  
Municipality: Ottawa  
Count Date: Aug 21, 2024

#### East Approach - Kichi Zibi Mikan Pkwy

| Start Time | Cars |     |     |   |       | Trucks |   |    |   |       | Bicycles |   |   |   |       | Total Peds |
|------------|------|-----|-----|---|-------|--------|---|----|---|-------|----------|---|---|---|-------|------------|
|            | ←    | ↑   | →   | ↺ | Total | ←      | ↑ | →  | ↺ | Total | ←        | ↑ | → | ↺ | Total |            |
| 06:30      | 21   | 41  | 8   | 0 | 70    | 0      | 0 | 1  | 0 | 1     | 0        | 0 | 0 | 0 | 0     | 2          |
| 06:45      | 20   | 38  | 8   | 0 | 66    | 0      | 0 | 2  | 0 | 2     | 0        | 0 | 0 | 0 | 0     | 0          |
| 07:00      | 18   | 30  | 15  | 0 | 63    | 0      | 1 | 0  | 0 | 1     | 0        | 0 | 0 | 0 | 0     | 1          |
| 07:15      | 35   | 54  | 21  | 0 | 110   | 0      | 1 | 2  | 0 | 3     | 0        | 0 | 0 | 0 | 0     | 0          |
| 07:30      | 21   | 43  | 16  | 0 | 80    | 0      | 1 | 1  | 0 | 2     | 0        | 0 | 0 | 0 | 0     | 1          |
| 07:45      | 18   | 51  | 12  | 0 | 81    | 0      | 2 | 1  | 0 | 3     | 0        | 0 | 0 | 0 | 0     | 3          |
| 08:00      | 24   | 48  | 15  | 0 | 87    | 0      | 0 | 1  | 0 | 1     | 0        | 0 | 0 | 0 | 0     | 0          |
| 08:15      | 32   | 51  | 22  | 0 | 105   | 0      | 0 | 1  | 0 | 1     | 0        | 0 | 0 | 0 | 0     | 2          |
| 08:30      | 40   | 59  | 23  | 0 | 122   | 0      | 0 | 1  | 0 | 1     | 0        | 0 | 0 | 0 | 0     | 1          |
| 08:45      | 40   | 55  | 20  | 0 | 115   | 2      | 0 | 1  | 0 | 3     | 0        | 0 | 0 | 0 | 0     | 0          |
| 09:00      | 24   | 51  | 19  | 0 | 94    | 0      | 0 | 1  | 0 | 1     | 0        | 0 | 0 | 0 | 0     | 0          |
| 09:15      | 27   | 33  | 12  | 1 | 73    | 0      | 1 | 0  | 0 | 1     | 0        | 0 | 0 | 0 | 0     | 0          |
| SUBTOTAL   | 320  | 554 | 191 | 1 | 1066  | 2      | 6 | 12 | 0 | 20    | 0        | 0 | 0 | 0 | 0     | 10         |

### Traffic Count Data

Intersection: Island Park Dr & Kichi Zibi Mikan Pkwy  
Site Code: 2434800001  
Municipality: Ottawa  
Count Date: Aug 21, 2024

#### East Approach - Kichi Zibi Mikan Pkwy

| Start Time  | Cars |      |      |   |       | Trucks |    |    |   |       | Bicycles |   |   |   |       | Total Peds |
|-------------|------|------|------|---|-------|--------|----|----|---|-------|----------|---|---|---|-------|------------|
|             | ←    | ↑    | →    | ↺ | Total | ←      | ↑  | →  | ↺ | Total | ←        | ↑ | → | ↺ | Total |            |
| 15:00       | 26   | 179  | 142  | 0 | 347   | 0      | 0  | 3  | 0 | 3     | 0        | 0 | 0 | 0 | 0     | 0          |
| 15:15       | 37   | 187  | 196  | 0 | 420   | 1      | 0  | 1  | 0 | 2     | 0        | 0 | 0 | 0 | 0     | 2          |
| 15:30       | 33   | 248  | 227  | 0 | 508   | 2      | 0  | 1  | 0 | 3     | 0        | 0 | 0 | 0 | 0     | 3          |
| 15:45       | 31   | 225  | 203  | 0 | 459   | 0      | 2  | 0  | 0 | 2     | 0        | 0 | 0 | 0 | 0     | 0          |
| 16:00       | 33   | 220  | 223  | 0 | 476   | 0      | 0  | 0  | 0 | 0     | 0        | 0 | 0 | 0 | 0     | 0          |
| 16:15       | 41   | 235  | 236  | 0 | 512   | 0      | 0  | 1  | 0 | 1     | 0        | 0 | 0 | 0 | 0     | 0          |
| 16:30       | 41   | 208  | 201  | 0 | 450   | 0      | 1  | 2  | 0 | 3     | 0        | 0 | 0 | 0 | 0     | 0          |
| 16:45       | 44   | 228  | 258  | 0 | 530   | 0      | 0  | 1  | 0 | 1     | 0        | 0 | 0 | 0 | 0     | 0          |
| 17:00       | 45   | 207  | 254  | 0 | 506   | 0      | 0  | 1  | 0 | 1     | 0        | 0 | 0 | 0 | 0     | 1          |
| 17:15       | 35   | 209  | 214  | 0 | 458   | 0      | 1  | 2  | 0 | 3     | 0        | 0 | 0 | 0 | 0     | 2          |
| 17:30       | 47   | 225  | 205  | 0 | 477   | 0      | 0  | 1  | 0 | 1     | 0        | 0 | 0 | 0 | 0     | 1          |
| 17:45       | 41   | 132  | 166  | 0 | 339   | 0      | 0  | 1  | 0 | 1     | 0        | 0 | 0 | 0 | 0     | 0          |
| SUBTOTAL    | 454  | 2503 | 2525 | 0 | 5482  | 3      | 4  | 14 | 0 | 21    | 0        | 0 | 0 | 0 | 0     | 9          |
| GRAND TOTAL | 774  | 3057 | 2716 | 1 | 6548  | 5      | 10 | 26 | 0 | 41    | 0        | 0 | 0 | 0 | 0     | 19         |

### Traffic Count Data

Intersection: Island Park Dr & Kichi Zibi Mikan Pkwy  
Site Code: 2434800001  
Municipality: Ottawa  
Count Date: Aug 21, 2024

#### West Approach - Kichi Zibi Mikan Pkwy

| Start Time | Cars |      |    |   |       | Trucks |   |   |   |       | Bicycles |   |   |   |       | Total Peds |
|------------|------|------|----|---|-------|--------|---|---|---|-------|----------|---|---|---|-------|------------|
|            | ←    | ↑    | →  | ↺ | Total | ←      | ↑ | → | ↺ | Total | ←        | ↑ | → | ↺ | Total |            |
| 06:30      | 28   | 53   | 0  | 0 | 81    | 0      | 0 | 0 | 0 | 0     | 0        | 0 | 0 | 0 | 0     | 2          |
| 06:45      | 41   | 101  | 3  | 0 | 145   | 0      | 0 | 0 | 0 | 0     | 0        | 0 | 0 | 0 | 0     | 0          |
| 07:00      | 35   | 94   | 1  | 0 | 130   | 0      | 0 | 0 | 0 | 0     | 0        | 0 | 0 | 0 | 0     | 2          |
| 07:15      | 53   | 141  | 3  | 0 | 197   | 0      | 0 | 0 | 0 | 0     | 0        | 0 | 0 | 0 | 0     | 2          |
| 07:30      | 69   | 128  | 5  | 0 | 202   | 0      | 2 | 0 | 0 | 2     | 0        | 0 | 0 | 0 | 0     | 1          |
| 07:45      | 47   | 199  | 7  | 0 | 253   | 0      | 0 | 0 | 0 | 0     | 0        | 0 | 0 | 0 | 0     | 1          |
| 08:00      | 41   | 197  | 4  | 0 | 242   | 0      | 0 | 0 | 0 | 0     | 0        | 0 | 0 | 0 | 0     | 0          |
| 08:15      | 48   | 152  | 5  | 0 | 205   | 0      | 1 | 0 | 0 | 1     | 0        | 0 | 0 | 0 | 0     | 0          |
| 08:30      | 51   | 171  | 8  | 0 | 230   | 1      | 0 | 0 | 0 | 1     | 0        | 0 | 0 | 0 | 0     | 0          |
| 08:45      | 46   | 175  | 13 | 0 | 234   | 0      | 1 | 0 | 0 | 1     | 0        | 0 | 0 | 0 | 0     | 0          |
| 09:00      | 41   | 125  | 12 | 0 | 178   | 2      | 1 | 0 | 0 | 3     | 0        | 0 | 0 | 0 | 0     | 1          |
| 09:15      | 33   | 90   | 10 | 0 | 133   | 1      | 1 | 0 | 0 | 2     | 0        | 0 | 0 | 0 | 0     | 1          |
| SUBTOTAL   | 533  | 1626 | 71 | 0 | 2230  | 4      | 6 | 0 | 0 | 10    | 0        | 0 | 0 | 0 | 0     | 10         |

### Traffic Count Data

Intersection: Island Park Dr & Kichi Zibi Mikan Pkwy  
 Site Code: 2434800001  
 Municipality: Ottawa  
 Count Date: Aug 21, 2024

#### West Approach - Kichi Zibi Mikan Pkwy

| Start Time  | Cars |      |     |   | Total | Trucks |   |   |   | Total | Bicycles |   |   |   | Total | Total Peds |
|-------------|------|------|-----|---|-------|--------|---|---|---|-------|----------|---|---|---|-------|------------|
|             | ←    | ↑    | →   | ↻ |       | ←      | ↑ | → | ↻ |       | ←        | ↑ | → | ↻ |       |            |
| 15:00       | 86   | 73   | 4   | 0 | 163   | 0      | 1 | 0 | 0 | 1     | 0        | 0 | 0 | 0 | 0     | 2          |
| 15:15       | 91   | 53   | 6   | 0 | 150   | 1      | 0 | 0 | 0 | 1     | 0        | 0 | 0 | 0 | 0     | 1          |
| 15:30       | 85   | 54   | 5   | 0 | 144   | 2      | 0 | 0 | 0 | 2     | 0        | 0 | 0 | 0 | 0     | 1          |
| 15:45       | 81   | 49   | 5   | 0 | 135   | 0      | 0 | 0 | 0 | 0     | 0        | 0 | 0 | 0 | 0     | 0          |
| 16:00       | 86   | 40   | 5   | 0 | 131   | 1      | 1 | 0 | 0 | 2     | 0        | 0 | 0 | 0 | 0     | 0          |
| 16:15       | 78   | 43   | 4   | 0 | 125   | 1      | 0 | 0 | 0 | 1     | 0        | 0 | 0 | 0 | 0     | 1          |
| 16:30       | 87   | 49   | 4   | 0 | 140   | 0      | 1 | 0 | 0 | 1     | 0        | 0 | 0 | 0 | 0     | 0          |
| 16:45       | 79   | 38   | 4   | 0 | 121   | 0      | 0 | 0 | 0 | 0     | 0        | 0 | 0 | 0 | 0     | 1          |
| 17:00       | 90   | 34   | 6   | 0 | 130   | 0      | 0 | 0 | 0 | 0     | 0        | 0 | 0 | 0 | 0     | 1          |
| 17:15       | 93   | 65   | 7   | 0 | 165   | 0      | 0 | 0 | 0 | 0     | 0        | 0 | 0 | 0 | 0     | 0          |
| 17:30       | 77   | 51   | 2   | 0 | 130   | 0      | 0 | 0 | 0 | 0     | 0        | 0 | 0 | 0 | 0     | 0          |
| 17:45       | 92   | 62   | 4   | 0 | 158   | 0      | 0 | 0 | 0 | 0     | 0        | 0 | 0 | 0 | 0     | 0          |
| SUBTOTAL    | 1025 | 611  | 56  | 0 | 1692  | 5      | 3 | 0 | 0 | 8     | 0        | 0 | 0 | 0 | 0     | 7          |
| GRAND TOTAL | 1558 | 2237 | 127 | 0 | 3922  | 9      | 9 | 0 | 0 | 18    | 0        | 0 | 0 | 0 | 0     | 17         |

### Peak Hour Diagram

**Specified Period**  
 From: 06:30:00  
 To: 09:30:00  
**One Hour Peak**  
 From: 07:45:00  
 To: 08:45:00

**Weather conditions:** Clear

**Intersection:** Island Park Dr & Kichi Zibi Mikan Pkwy  
**Site Code:** 2434800001  
**Count Date:** Aug 21, 2024

#### \*\* Signalized Intersection \*\*

**Major Road:** Kichi Zibi Mikan Pkwy runs E/W

#### North Approach

|        | Out  | In  | Total |
|--------|------|-----|-------|
| Car    | 1648 | 502 | 2150  |
| Truck  | 7    | 6   | 13    |
| Bike   | 0    | 1   | 1     |
| Totals | 1655 | 509 | 2164  |

#### Island Park Dr

|        |     |     |     |   |
|--------|-----|-----|-----|---|
| Car    | 0   | 0   | 0   | 0 |
| Truck  | 1   | 1   | 5   | 0 |
| Bike   | 467 | 715 | 466 | 0 |
| Totals | 468 | 716 | 471 | 0 |

#### East Approach

|        | Out | In   | Total |
|--------|-----|------|-------|
| Car    | 395 | 1317 | 1712  |
| Truck  | 6   | 6    | 12    |
| Bike   | 0   | 0    | 0     |
| Totals | 401 | 1323 | 1724  |

#### Kichi Zibi Mikan Pkwy

|        | Out | In | Total |
|--------|-----|----|-------|
| Car    | 0   | 0  | 0     |
| Truck  | 0   | 1  | 187   |
| Bike   | 0   | 1  | 719   |
| Totals | 0   | 0  | 24    |

Peds: 0



Peds: 2

#### Kichi Zibi Mikan Pkwy

|        | Out | In  | Total |
|--------|-----|-----|-------|
| Car    | 0   | 0   | 0     |
| Truck  | 76  | 72  | 4     |
| Bike   | 211 | 209 | 2     |
| Totals | 114 | 114 | 0     |

#### West Approach

|        | Out | In  | Total |
|--------|-----|-----|-------|
| Car    | 930 | 677 | 1607  |
| Truck  | 2   | 3   | 5     |
| Bike   | 0   | 0   | 0     |
| Totals | 932 | 680 | 1612  |

#### Island Park Dr

|        |   |     |     |   |
|--------|---|-----|-----|---|
| Car    | 1 | 245 | 132 | 0 |
| Truck  | 0 | 1   | 0   | 0 |
| Bike   | 0 | 1   | 0   | 0 |
| Totals | 1 | 245 | 132 | 0 |

#### South Approach

|        | Out | In  | Total |
|--------|-----|-----|-------|
| Car    | 376 | 853 | 1229  |
| Truck  | 1   | 1   | 2     |
| Bike   | 1   | 0   | 1     |
| Totals | 378 | 854 | 1232  |

Car - Cars

Truck - Trucks













Bike - Bicycles

#### Comments

### Peak Hour Summary

Intersection: Island Park Dr & Kichi Zibi Mikan Pkwy  
Site Code: 2434800001  
Count Date: Aug 21, 2024  
Period: 06:30 - 09:30

#### Peak Hour Data (07:45 - 08:45)

|             | North Approach<br>Island Park Dr  |   |   |   | South Approach<br>Island Park Dr  |   |   |      | East Approach<br>Kichi Zibi Mikan Pkwy  |   |   |      | West Approach<br>Kichi Zibi Mikan Pkwy  |   |   |      | Total<br>Vehicles |      |     |      |      |      |     |      |      |
|-------------|---|---|---|---|---|---|---|------|---|---|---|------|---|---|---|------|-------------------|------|-----|------|------|------|-----|------|------|
| Start Time  |  |  |  |   |  |  |  |      |  |  |  |      |  |  |  |      |                   |      |     |      |      |      |     |      |      |
| 07:45       | 142   | 183   | 112   | 0 | 0   | 437   | 0   | 51   | 28  | 0   | 1   | 79   | 18  | 53  | 13  | 0    | 3                 | 84   | 47  | 199  | 7    | 0    | 1   | 253  | 853  |
| 08:00       | 104   | 174   | 110   | 0 | 0   | 388   | 1   | 66   | 32  | 0   | 0   | 99   | 24  | 48  | 16  | 0    | 0                 | 88   | 41  | 197  | 4    | 0    | 0   | 242  | 817  |
| 08:15       | 126   | 185   | 120   | 0 | 0   | 431   | 0   | 61   | 35  | 0   | 1   | 96   | 32  | 51  | 23  | 0    | 2                 | 106  | 48  | 153  | 5    | 0    | 0   | 206  | 839  |
| 08:30       | 99  | 174   | 126   | 0 | 0   | 399   | 0   | 67   | 37  | 0   | 0   | 104  | 40  | 59  | 24  | 0    | 1                 | 123  | 52  | 171  | 8    | 0    | 0   | 231  | 857  |
| Grand Total | 471   | 716   | 468   | 0 | 0   | 1655  | 1   | 245  | 132   | 0   | 2   | 378  | 114   | 211   | 76  | 0    | 6                 | 401  | 188 | 720  | 24   | 0    | 1   | 932  | 3366 |
| Approach %  | 28.5  | 43.3  | 28.3  | 0 | -   | 0.3   | 64.8  | 34.9 | 0   | -   | 28.4  | 52.6 | 19  | 0   | -   | 20.2 | 77.3              | 2.6  | 0   | -    | 5.6  | 21.4 | 0.7 | 0    | 37.7 |
| Totals %    | 14  | 21.3  | 13.9  | 0 | 49.2  | 0   | 7.3   | 3.9  | 0   | 11.2  | 3.4   | 6.3  | 2.3   | 0   | 11.9  | 5.6  | 21.4              | 0.7  | 0   | 37.7 | 5.6  | 21.4 | 0.7 | 0    | 37.7 |
| PHF         | 0.83  | 0.97  | 0.93  | 0 | 0.95  | 0.25  | 0.91  | 0.89 | 0   | 0.91  | 0.71  | 0.89 | 0.79  | 0   | 0.82  | 0.9  | 0.9               | 0.75 | 0   | 0.92 | 0.9  | 0.75 | 0   | 0.92 | 0.98 |
| Cars        | 466   | 715   | 467   | 0 | 1648  | 1   | 243   | 132  | 0   | 376   | 114   | 209  | 72  | 0   | 395   | 187  | 719               | 24   | 0   | 930  | 3349 | 7    | 0   | 1    | 3349 |
| % Cars      | 98.9  | 99.9  | 99.8  | 0 | 99.6  | 100   | 99.2  | 100  | 0   | 99.5  | 100   | 99.1 | 94.7  | 0   | 98.5  | 99.5 | 99.9              | 100  | 0   | 99.8 | 99.5 | 99.9 | 0   | 99.8 | 99.5 |
| Trucks      | 5   | 1   | 1   | 0 | 7   | 0   | 1   | 0    | 0   | 1   | 0   | 2    | 4   | 0   | 6   | 1    | 1                 | 0    | 0   | 2    | 16   | 0    | 0   | 0    | 16   |
| % Trucks    | 1.1   | 0.1   | 0.2   | 0 | 0.4   | 0   | 0.4   | 0    | 0   | 0.3   | 0   | 0.9  | 5.3   | 0   | 1.5   | 0.5  | 0.1               | 0    | 0   | 0.2  | 0.5  | 0    | 0   | 0    | 0.5  |
| Bicycles    | 0   | 0   | 0   | 0 | 0   | 0   | 1   | 0    | 0   | 1   | 0   | 0    | 0   | 0   | 0   | 0    | 0                 | 0    | 0   | 0    | 0    | 0    | 0   | 0    | 1    |
| % Bicycles  | 0   | 0   | 0   | 0 | 0   | 0   | 0.4   | 0    | 0   | 0.3   | 0   | 0    | 0   | 0   | 0   | 0    | 0                 | 0    | 0   | 0    | 0    | 0    | 0   | 0    | 0    |
| Peds        | 0   | -   | -   | - | -   | 2   | -   | -    | -   | 6   | -   | -    | -   | -   | 1   | -    | -                 | -    | -   | 9    | -    | -    | -   | -    | 9    |
| % Peds      | 0   | -   | -   | - | -   | 22.2  | -   | -    | -   | 66.7  | -   | -    | -   | -   | 11.1  | -    | -                 | -    | -   | 2.6  | -    | -    | -   | -    | 2.6  |

### Peak Hour Diagram

**Specified Period**  
From: 15:00:00  
To: 18:00:00

**One Hour Peak**  
From: 16:15:00  
To: 17:15:00

**Intersection:** Island Park Dr & Kichi Zibi Mikan Pkwy  
**Site Code:** 2434800001  
**Count Date:** Aug 21, 2024

**Weather conditions:** Clear

#### \*\* Signalized Intersection \*\*

**Major Road:** Kichi Zibi Mikan Pkwy runs E/W

#### North Approach

| Out         | In          | Total       |
|-------------|-------------|-------------|
| 998         | 1771        | 2769        |
| 9           | 6           | 15          |
| 0           | 6           | 6           |
| <b>1007</b> | <b>1783</b> | <b>2790</b> |

#### Island Park Dr

|               |            |            |            |
|---------------|------------|------------|------------|
| 0             | 0          | 0          | 0          |
| 3             | 1          | 5          | 0          |
| 401           | 461        | 136        | 0          |
| <b>Totals</b> | <b>404</b> | <b>462</b> | <b>141</b> |

#### East Approach

| Out         | In         | Total       |
|-------------|------------|-------------|
| 1998        | 328        | 2326        |
| 6           | 6          | 12          |
| 0           | 0          | 0           |
| <b>2004</b> | <b>334</b> | <b>2338</b> |

#### Kichi Zibi Mikan Pkwy

| Out           | In         | Total      |
|---------------|------------|------------|
| 0             | 0          | 0          |
| 0             | 1          | 334        |
| 0             | 1          | 164        |
| 0             | 0          | 18         |
| <b>Totals</b> | <b>335</b> | <b>165</b> |



#### Kichi Zibi Mikan Pkwy

| Out           | In         | Total      |
|---------------|------------|------------|
| 0             | 0          | 0          |
| 954           | 949        | 5          |
| 879           | 878        | 1          |
| 171           | 171        | 0          |
| <b>Totals</b> | <b>954</b> | <b>879</b> |

#### West Approach

| Out        | In          | Total       |
|------------|-------------|-------------|
| 516        | 1279        | 1795        |
| 2          | 4           | 6           |
| 0          | 0           | 0           |
| <b>518</b> | <b>1283</b> | <b>1801</b> |

|               |          |            |           |
|---------------|----------|------------|-----------|
| 0             | 494      | 28         | 0         |
| 0             | 488      | 28         | 0         |
| 0             | 0        | 0          | 0         |
| 0             | 6        | 0          | 0         |
| <b>Totals</b> | <b>0</b> | <b>494</b> | <b>28</b> |

#### South Approach

| Out        | In         | Total       |
|------------|------------|-------------|
| 516        | 650        | 1166        |
| 0          | 1          | 1           |
| 6          | 0          | 6           |
| <b>522</b> | <b>651</b> | <b>1173</b> |

- Cars

- Trucks













- Bicycles

#### Comments

### Peak Hour Summary

Intersection: Island Park Dr & Kichi Zibi Mikan Pkwy  
Site Code: 2434800001  
Count Date: Aug 21, 2024  
Period: 15:00 - 18:00

### Peak Hour Data (16:15 - 17:15)

|             | North Approach<br>Island Park Dr  |   |   |      |       |      | South Approach<br>Island Park Dr  |   |   |      |       |      | East Approach<br>Kichi Zibi Mikan Pkwy  |   |   |      |       |      | West Approach<br>Kichi Zibi Mikan Pkwy  |   |   |      |       |     | Total<br>Vehicles |   |
|-------------|---|---|---|------|-------|------|---|---|---|------|-------|------|---|---|---|------|-------|------|---|---|---|------|-------|-----|-------------------|---|
| Start Time  |  |  |  | Peds | Total |      |  |  |  | Peds | Total |      |  |  |  | Peds | Total |      |  |  |  | Peds | Total |     |                   |   |
| 16:15       | 39  | 125   | 91  | 0    | 0     | 255  | 0   | 124   | 9   | 0    | 0     | 133  | 41  | 235   | 237   | 0    | 0     | 513  | 79  | 43  | 4   | 0    | 1     | 126 | 1027              |   |
| 16:30       | 39  | 108   | 105   | 0    | 0     | 252  | 0   | 119   | 7   | 0    | 0     | 126  | 41  | 209   | 203   | 0    | 0     | 453  | 87  | 50  | 4   | 0    | 0     | 141 | 972               |   |
| 16:45       | 27  | 116   | 110   | 0    | 1     | 253  | 0   | 125   | 7   | 0    | 0     | 132  | 44  | 228   | 259   | 0    | 0     | 531  | 79  | 38  | 4   | 0    | 1     | 121 | 1037              |   |
| 17:00       | 36  | 113   | 98  | 0    | 1     | 247  | 0   | 126   | 5   | 0    | 1     | 131  | 45  | 207   | 255   | 0    | 1     | 507  | 90  | 34  | 6   | 0    | 1     | 130 | 1015              |   |
| Grand Total | 141   | 462   | 404   | 0    | 2     | 1007 | 0   | 494   | 28  | 0    | 1     | 522  | 171   | 879   | 954   | 0    | 1     | 2004 | 335   | 165   | 18  | 0    | 3     | 518 | 4051              |   |
| Approach %  | 14  | 45.9  | 40.1  | 0    | -     | -    | 0   | 94.6  | 5.4   | 0    | -     | -    | 8.5   | 43.9  | 47.6  | 0    | -     | -    | 64.7  | 31.9  | 3.5   | 0    | -     | -   | -                 | - |
| Totals %    | 3.5   | 11.4  | 10  | 0    | 24.9  | 0    | 12.2  | 0.7   | 0   | 12.9 | 4.2   | 21.7 | 23.5  | 0   | 49.5  | 8.3  | 4.1   | 0.4  | 0   | 12.8  |   |      |       |     |                   |   |
| PHF         | 0.9   | 0.92  | 0.92  | 0    | 0.99  | 0    | 0.98  | 0.78  | 0   | 0.98 | 0.95  | 0.94 | 0.92  | 0   | 0.94  | 0.93 | 0.83  | 0.75 | 0   | 0.92  | 0.98  |      |       |     |                   |   |
| Cars        | 136   | 461   | 401   | 0    | 998   | 0    | 488   | 28  | 0   | 516  | 171   | 878  | 949   | 0   | 1998  | 334  | 164   | 18   | 0   | 516   |   |      |       |     | 4028              |   |
| % Cars      | 96.5  | 99.8  | 99.3  | 0    | 99.1  | 0    | 98.8  | 100   | 0   | 98.9 | 100   | 99.9 | 99.5  | 0   | 99.7  | 99.7 | 99.4  | 100  | 0   | 99.6  |   |      |       |     | 99.4              |   |
| Trucks      | 5   | 1   | 3   | 0    | 9     | 0    | 0   | 0   | 0   | 0    | 0     | 1    | 5   | 0   | 6   | 1    | 1     | 0    | 0   | 2   |   |      |       |     | 17                |   |
| % Trucks    | 3.5   | 0.2   | 0.7   | 0    | 0.9   | 0    | 0   | 0   | 0   | 0    | 0     | 0.1  | 0.5   | 0   | 0.3   | 0.3  | 0.6   | 0    | 0   | 0.4   |   |      |       |     | 0.4               |   |
| Bicycles    | 0   | 0   | 0   | 0    | 0     | 0    | 6   | 0   | 0   | 6    | 0     | 0    | 0   | 0   | 0   | 0    | 0     | 0    | 0   | 0   |   |      |       |     | 6                 |   |
| % Bicycles  | 0   | 0   | 0   | 0    | 0     | 0    | 1.2   | 0   | 0   | 1.1  | 0     | 0    | 0   | 0   | 0   | 0    | 0     | 0    | 0   | 0   |   |      |       |     | 0.1               |   |
| Peds        | 2   | -   | -   | -    | -     | -    | 1   | -   | -   | -    | 1     | -    | -   | -   | -   | -    | -     | -    | -   | 3   |   |      |       |     | 7                 |   |
| % Peds      | 28.6  | -   | -   | -    | -     | -    | 14.3  | -   | -   | -    | 14.3  | -    | -   | -   | -   | -    | -     | -    | -   | 42.9  |   |      |       |     | -                 |   |

## Transportation Services - Traffic Services

### Turning Movement Count - Study Results

#### CLEARVIEW AVE @ ISLAND PARK DR

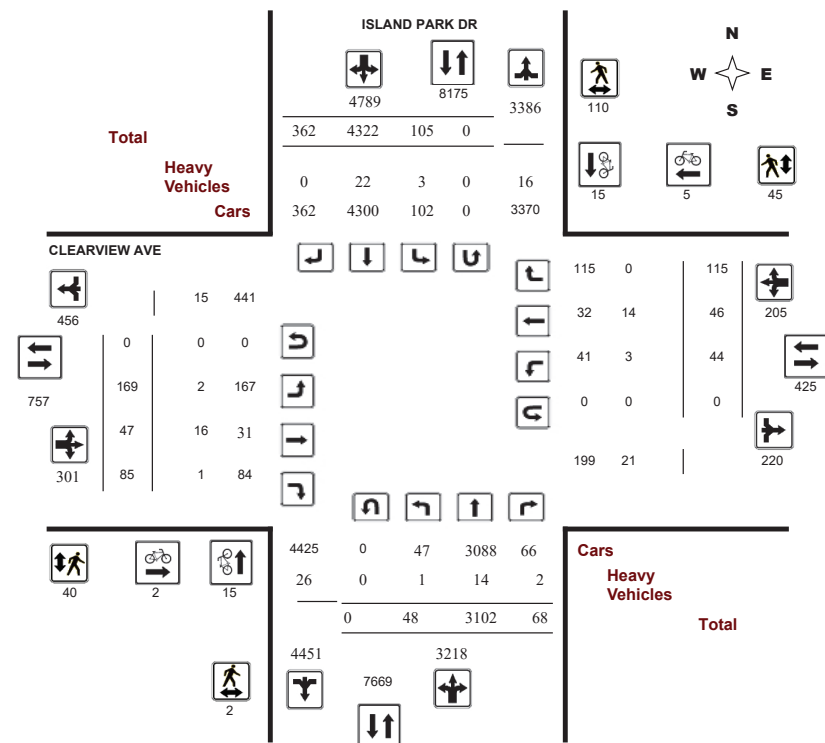
Survey Date: Tuesday, March 21, 2023

WO No: 40857

Start Time: 07:00

Device: Miovision

### Full Study Diagram





## Transportation Services - Traffic Services

### Turning Movement Count - Study Results

#### CLEARVIEW AVE @ ISLAND PARK DR

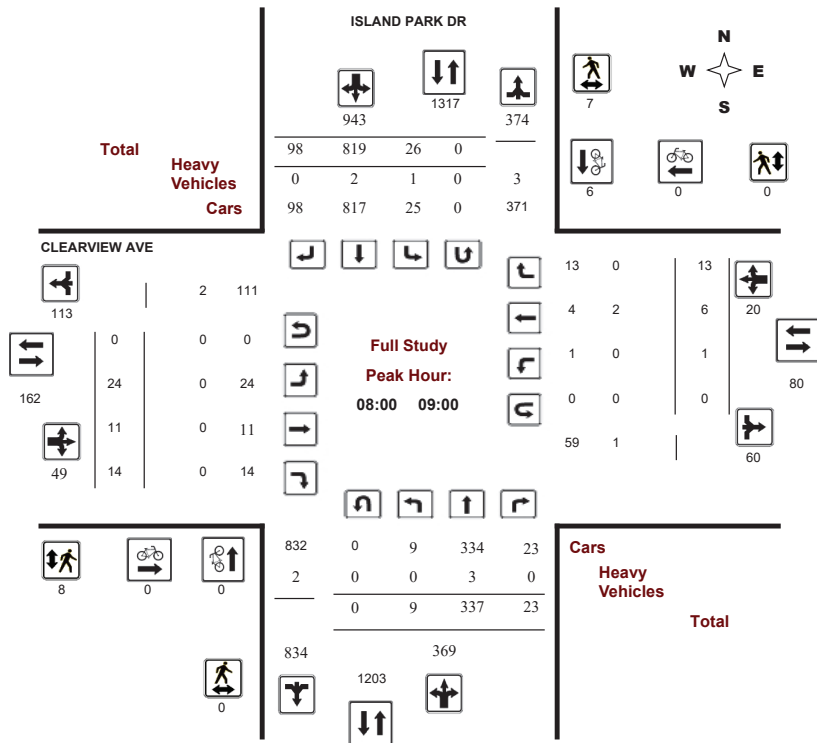
Survey Date: Tuesday, March 21, 2023

Start Time: 07:00

WO No: 40857

Device: Miovision

#### Full Study Peak Hour Diagram



## Transportation Services - Traffic Services

### Turning Movement Count - Peak Hour Diagram

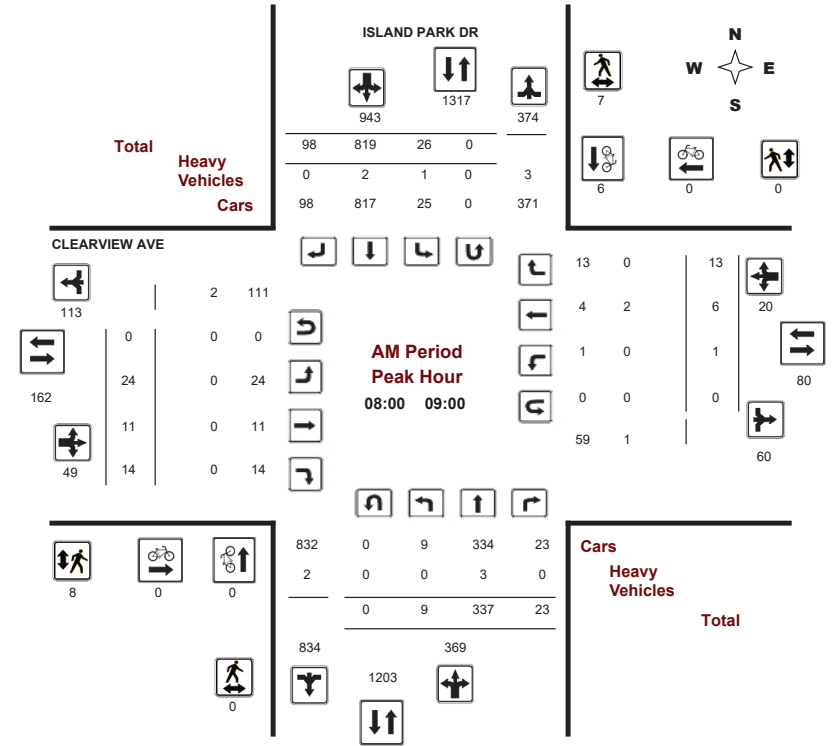
#### CLEARVIEW AVE @ ISLAND PARK DR

Survey Date: Tuesday, March 21, 2023

Start Time: 07:00

WO No: 40857

Device: Miovision



Comments:





## Transportation Services - Traffic Services

### Turning Movement Count - Peak Hour Diagram

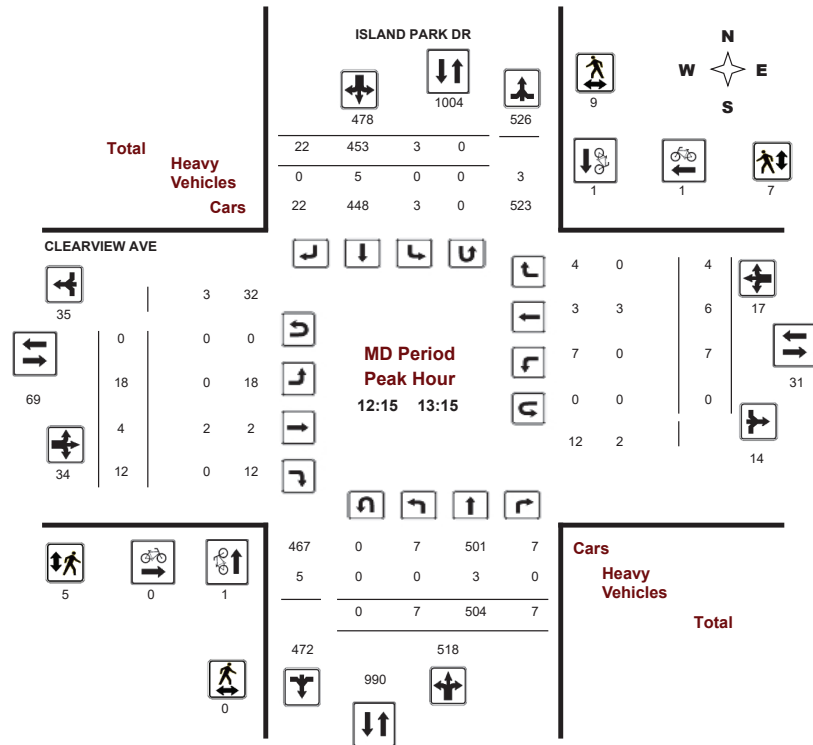
#### CLEARVIEW AVE @ ISLAND PARK DR

Survey Date: Tuesday, March 21, 2023

Start Time: 07:00

WO No: 40857

Device: Miovision



## Transportation Services - Traffic Services

### Turning Movement Count - Peak Hour Diagram

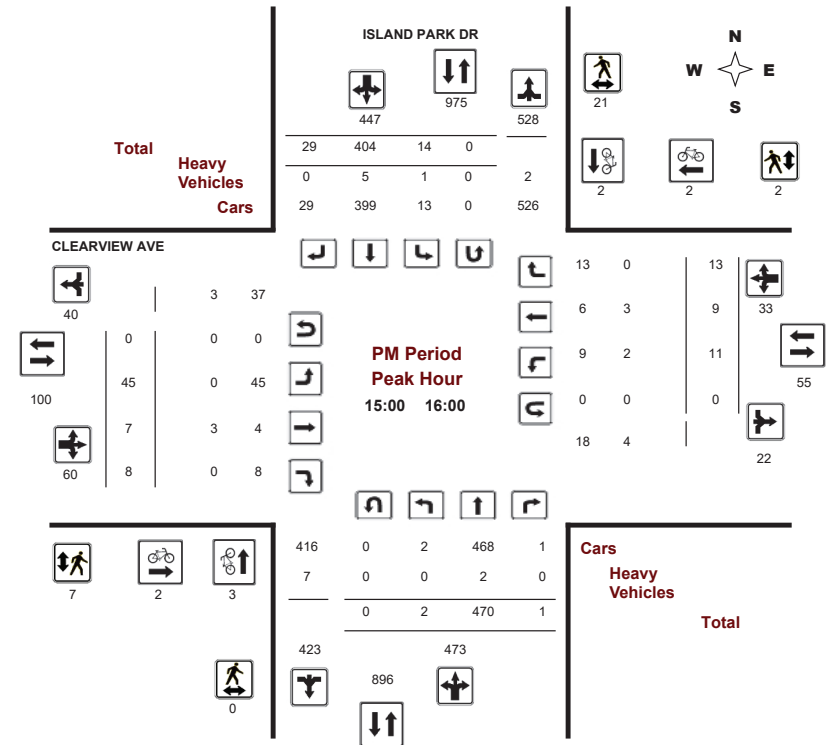
#### CLEARVIEW AVE @ ISLAND PARK DR

Survey Date: Tuesday, March 21, 2023

Start Time: 07:00

WO No: 40857

Device: Miovision





## Transportation Services - Traffic Services

### Turning Movement Count - Study Results

#### CLEARVIEW AVE @ ISLAND PARK DR

**Survey Date:** Tuesday, March 21, 2023

**WO No:** 40857

**Start Time:** 07:00

**Device:** Miovision

#### Full Study Summary (8 HR Standard)

**Survey Date:** Tuesday, March 21, 2023

**Total Observed U-Turns**

**AADT Factor**

Northbound: 0 Southbound: 0

1.00

Eastbound: 0 Westbound: 0

| ISLAND PARK DR   |    |      |     |        |            |       |     |        |         | CLEARVIEW AVE |    |     |        |    |           |     |        |         |             |
|--|----|------|-----|--------|------------|-------|-----|--------|---------|---------------|----|-----|--------|----|-----------|-----|--------|---------|-------------|
| Northbound   |    |      |     |        | Southbound |       |     |        |         | Eastbound     |    |     |        |    | Westbound |     |        |         |             |
| Period   | LT | ST   | RT  | NB TOT | LT         | ST    | RT  | SB TOT | STR TOT | LT            | ST | RT  | EB TOT | LT | ST        | RT  | WB TOT | STR TOT | Grand Total |
| 07:00 08:00  | 6  | 283  | 3   | 292    | 8          | 758   | 58  | 824    | 1116    | 12            | 3  | 7   | 22     | 1  | 1         | 4   | 6      | 28      | 1144        |
| 08:00 09:00  | 9  | 337  | 23  | 369    | 26         | 819   | 98  | 943    | 1312    | 24            | 11 | 14  | 49     | 1  | 6         | 13  | 20     | 69      | 1381        |
| 09:00 10:00  | 10 | 336  | 26  | 372    | 11         | 554   | 50  | 615    | 987     | 18            | 9  | 10  | 37     | 9  | 10        | 13  | 32     | 69      | 1056        |
| 11:30 12:30  | 7  | 478  | 10  | 495    | 7          | 427   | 26  | 460    | 955     | 16            | 3  | 12  | 31     | 9  | 3         | 5   | 17     | 48      | 1003        |
| 12:30 13:30  | 9  | 503  | 4   | 516    | 5          | 429   | 23  | 457    | 973     | 18            | 4  | 10  | 32     | 4  | 4         | 5   | 13     | 45      | 1018        |
| 15:00 16:00  | 2  | 470  | 1   | 473    | 14         | 404   | 29  | 447    | 920     | 45            | 7  | 8   | 60     | 11 | 9         | 13  | 33     | 93      | 1013        |
| 16:00 17:00  | 3  | 339  | 0   | 342    | 13         | 483   | 31  | 527    | 869     | 22            | 5  | 7   | 34     | 4  | 5         | 19  | 28     | 62      | 931         |
| 17:00 18:00  | 2  | 356  | 1   | 359    | 21         | 448   | 47  | 516    | 875     | 14            | 5  | 17  | 36     | 5  | 8         | 43  | 56     | 92      | 967         |
| Sub Total  | 48 | 3102 | 68  | 3218   | 105        | 4322  | 362 | 4789   | 8007    | 169           | 47 | 85  | 301    | 44 | 46        | 115 | 205    | 506     | 8513        |
| U Turns  | 0  |      |     |        | 0          |       |     |        | 0       | 0             |    |     |        | 0  |           |     |        | 0       | 0           |
| Total  | 48 | 3102 | 68  | 3218   | 105        | 4322  | 362 | 4789   | 8007    | 169           | 47 | 85  | 301    | 44 | 46        | 115 | 205    | 506     | 8513        |
| EQ 12Hr  | 67 | 4312 | 95  | 4473   | 146        | 6008  | 503 | 6657   | 11130   | 235           | 65 | 118 | 418    | 61 | 64        | 160 | 285    | 703     | 11833       |
| Note: These values are calculated by multiplying the totals by the appropriate expansion factor. 1.39                |    |      |     |        |            |       |     |        |         |               |    |     |        |    |           |     |        |         |             |
| AVG 12Hr   | 67 | 4312 | 95  | 4473   | 146        | 7870  | 659 | 6657   | 11130   | 235           | 65 | 118 | 418    | 61 | 64        | 160 | 285    | 703     | 11833       |
| Note: These volumes are calculated by multiplying the Equivalent 12 hr. totals by the AADT factor. 1.00              |    |      |     |        |            |       |     |        |         |               |    |     |        |    |           |     |        |         |             |
| AVG 24Hr   | 88 | 5649 | 124 | 5860   | 191        | 10310 | 863 | 8721   | 14580   | 308           | 85 | 155 | 548    | 80 | 84        | 210 | 373    | 921     | 15501       |
| Note: These volumes are calculated by multiplying the Average Daily 12 hr. totals by 12 to 24 expansion factor. 1.31 |    |      |     |        |            |       |     |        |         |               |    |     |        |    |           |     |        |         |             |
| Note: U-Turns provided for approach totals. Refer to 'U-Turn' Report for specific breakdown.                         |    |      |     |        |            |       |     |        |         |               |    |     |        |    |           |     |        |         |             |



## Transportation Services - Traffic Services

### Turning Movement Count - Study Results

#### CLEARVIEW AVE @ ISLAND PARK DR

**Survey Date:** Tuesday, March 21, 2023

**WO No:** 40857

**Start Time:** 07:00

**Device:** Miovision

#### Full Study 15 Minute Increments

| ISLAND PARK DR |    |      |    |       |            |      |     |       |         | CLEARVIEW AVE |    |    |       |    |           |     |       |         |             |
|----------------|----|------|----|-------|------------|------|-----|-------|---------|---------------|----|----|-------|----|-----------|-----|-------|---------|-------------|
| Northbound     |    |      |    |       | Southbound |      |     |       |         | Eastbound     |    |    |       |    | Westbound |     |       |         |             |
| Time Period    | LT | ST   | RT | N TOT | LT         | ST   | RT  | S TOT | STR TOT | LT            | ST | RT | E TOT | LT | ST        | RT  | W TOT | STR TOT | Grand Total |
| 15:30 15:45    | 0  | 104  | 0  | 104   | 4          | 98   | 10  | 112   | 216     | 8             | 2  | 2  | 12    | 0  | 0         | 3   | 3     | 15      | 231         |
| 15:45 16:00    | 0  | 100  | 0  | 100   | 4          | 93   | 5   | 102   | 202     | 4             | 2  | 0  | 6     | 8  | 5         | 6   | 19    | 25      | 227         |
| 16:00 16:15    | 0  | 84   | 0  | 84    | 2          | 104  | 8   | 114   | 198     | 2             | 1  | 2  | 5     | 0  | 0         | 1   | 1     | 6       | 204         |
| 16:15 16:30    | 1  | 95   | 0  | 96    | 3          | 128  | 6   | 137   | 233     | 8             | 1  | 2  | 11    | 2  | 3         | 3   | 8     | 19      | 252         |
| 16:30 16:45    | 1  | 86   | 0  | 87    | 1          | 119  | 10  | 130   | 217     | 7             | 0  | 2  | 9     | 1  | 1         | 6   | 8     | 17      | 234         |
| 17:15 17:30    | 0  | 82   | 0  | 82    | 8          | 119  | 12  | 139   | 221     | 4             | 0  | 5  | 9     | 1  | 3         | 10  | 14    | 23      | 244         |
| 17:30 17:45    | 1  | 91   | 0  | 92    | 4          | 122  | 18  | 144   | 236     | 4             | 0  | 2  | 6     | 1  | 1         | 7   | 9     | 15      | 251         |
| 17:45 18:00    | 1  | 96   | 1  | 98    | 6          | 110  | 8   | 124   | 222     | 5             | 3  | 4  | 12    | 1  | 3         | 13  | 17    | 29      | 251         |
| 15:15 15:30    | 1  | 113  | 1  | 115   | 4          | 128  | 6   | 138   | 253     | 25            | 1  | 4  | 30    | 0  | 4         | 1   | 5     | 35      | 288         |
| 09:00 09:15    | 1  | 82   | 17 | 100   | 6          | 154  | 22  | 182   | 282     | 4             | 5  | 1  | 10    | 6  | 4         | 5   | 15    | 25      | 307         |
| 16:45 17:00    | 1  | 74   | 0  | 75    | 7          | 132  | 7   | 146   | 221     | 5             | 3  | 1  | 9     | 1  | 1         | 9   | 11    | 20      | 241         |
| 17:00 17:15    | 0  | 87   | 0  | 87    | 3          | 97   | 9   | 109   | 196     | 1             | 2  | 6  | 9     | 2  | 1         | 13  | 16    | 25      | 221         |
| 07:00 07:15    | 0  | 76   | 0  | 76    | 0          | 176  | 10  | 186   | 262     | 3             | 1  | 3  | 7     | 1  | 0         | 0   | 1     | 8       | 270         |
| 07:15 07:30    | 3  | 70   | 0  | 73    | 0          | 220  | 19  | 239   | 312     | 4             | 1  | 0  | 5     | 0  | 1         | 1   | 2     | 7       | 319         |
| 07:30 07:45    | 2  | 66   | 2  | 70    | 2          | 190  | 13  | 205   | 275     | 1             | 0  | 1  | 2     | 0  | 0         | 1   | 1     | 3       | 278         |
| 07:45 08:00    | 1  | 71   | 1  | 73    | 6          | 172  | 16  | 194   | 267     | 4             | 1  | 3  | 8     | 0  | 0         | 2   | 2     | 10      | 277         |
| 08:00 08:15    | 3  | 92   | 4  | 99    | 5          | 191  | 20  | 216   | 315     | 6             | 2  | 1  | 9     | 0  | 1         | 1   | 2     | 11      | 326         |
| 08:15 08:30    | 2  | 88   | 6  | 96    | 6          | 215  | 23  | 244   | 340     | 2             | 3  | 5  | 10    | 1  | 2         | 5   | 8     | 18      | 358         |
| 08:30 08:45    | 1  | 68   | 5  | 74    | 11         | 207  | 29  | 247   | 321     | 8             | 4  | 4  | 16    | 0  | 3         | 4   | 7     | 23      | 344         |
| 08:45 09:00    | 3  | 89   | 8  | 100   | 4          | 206  | 26  | 236   | 336     | 8             | 2  | 4  | 14    | 0  | 0         | 3   | 3     | 17      | 353         |
| 09:15 09:30    | 4  | 88   | 3  | 95    | 2          | 147  | 15  | 164   | 259     | 4             | 3  | 3  | 10    | 2  | 5         | 7   | 14    | 24      | 283         |
| 11:30 11:45    | 2  | 119  | 2  | 123   | 2          | 106  | 8   | 116   | 239     | 3             | 0  | 0  | 3     | 2  | 1         | 1   | 4     | 7       | 246         |
| 11:45 12:00    | 1  | 118  | 2  | 121   | 2          | 98   | 6   | 106   | 227     | 5             | 2  | 4  | 11    | 3  | 0         | 1   | 4     | 15      | 242         |
| 12:00 12:15    | 4  | 108  | 1  | 113   | 2          | 104  | 7   | 113   | 226     | 4             | 0  | 4  | 8     | 1  | 0         | 2   | 3     | 11      | 237         |
| 12:15 12:30    | 0  | 133  | 5  | 138   | 1          | 119  | 5   | 125   | 263     | 4             | 1  | 4  | 9     | 3  | 2         | 1   | 6     | 15      | 278         |
| 12:30 12:45    | 1  | 132  | 1  | 134   | 0          | 101  | 9   | 110   | 244     | 7             | 1  | 3  | 11    | 2  | 2         | 1   | 5     | 16      | 260         |
| 12:45 13:00    | 1  | 114  | 0  | 115   | 1          | 120  | 3   | 124   | 239     | 5             | 2  | 2  | 9     | 1  | 1         | 2   | 4     | 13      | 252         |
| 13:00 13:15    | 5  | 125  | 1  | 131   | 1          | 113  | 5   | 119   | 250     | 2             | 0  | 3  | 5     | 1  | 1         | 0   | 2     | 7       | 257         |
| 13:15 13:30    | 2  | 132  | 2  | 136   | 3          | 95   | 6   | 104   | 240     | 4             | 1  | 2  | 7     | 0  | 0         | 2   | 2     | 9       | 249         |
| 15:00 15:15    | 1  | 153  | 0  | 154   | 2          | 85   | 8   | 95    | 249     | 8             | 2  | 2  | 12    | 3  | 0         | 3   | 6     | 18      | 267         |
| 09:45 10:00    | 4  | 82   | 2  | 88    | 2          | 131  | 9   | 142   | 230     | 3             | 1  | 4  | 8     | 0  | 0         | 0   | 0     | 8       | 238         |
| 09:30 09:45    | 1  | 84   | 4  | 89    | 1          | 122  | 4   | 127   | 216     | 7             | 0  | 2  | 9     | 1  | 1         | 1   | 3     | 12      | 228         |
| Total:         | 48 | 3102 | 68 | 3218  | 105        | 4322 | 362 | 4789  | 8007    | 169           | 47 | 85 | 301   | 44 | 46        | 115 | 205   | 506     | 8,513       |

Note: U-Turns are included in Totals.



## Transportation Services - Traffic Services

### Turning Movement Count - Study Results

#### CLEARVIEW AVE @ ISLAND PARK DR

**Survey Date:** Tuesday, March 21, 2023

**WO No:** 40857

**Start Time:** 07:00

**Device:** Miovision

#### Full Study Cyclist Volume

| Time Period | ISLAND PARK DR |            |              | CLEARVIEW AVE |           |              | Grand Total |
|-------------|----------------|------------|--------------|---------------|-----------|--------------|-------------|
|             | Northbound     | Southbound | Street Total | Eastbound     | Westbound | Street Total |             |
| 15:30 15:45 | 0              | 0          | 0            | 1             | 1         | 2            | 2           |
| 15:45 16:00 | 2              | 0          | 2            | 0             | 0         | 0            | 2           |
| 16:00 16:15 | 0              | 0          | 0            | 0             | 1         | 1            | 1           |
| 16:15 16:30 | 0              | 0          | 0            | 0             | 0         | 0            | 0           |
| 16:30 16:45 | 2              | 0          | 2            | 0             | 1         | 1            | 3           |
| 17:15 17:30 | 2              | 0          | 2            | 0             | 0         | 0            | 2           |
| 17:30 17:45 | 1              | 0          | 1            | 0             | 0         | 0            | 1           |
| 17:45 18:00 | 2              | 0          | 2            | 0             | 0         | 0            | 2           |
| 15:15 15:30 | 0              | 1          | 1            | 1             | 1         | 2            | 3           |
| 09:00 09:15 | 0              | 1          | 1            | 0             | 0         | 0            | 1           |
| 16:45 17:00 | 1              | 1          | 2            | 0             | 0         | 0            | 2           |
| 17:00 17:15 | 1              | 0          | 1            | 0             | 0         | 0            | 1           |
| 07:00 07:15 | 0              | 1          | 1            | 0             | 0         | 0            | 1           |
| 07:15 07:30 | 0              | 1          | 1            | 0             | 0         | 0            | 1           |
| 07:30 07:45 | 0              | 2          | 2            | 0             | 0         | 0            | 2           |
| 07:45 08:00 | 1              | 0          | 1            | 0             | 0         | 0            | 1           |
| 08:00 08:15 | 0              | 1          | 1            | 0             | 0         | 0            | 1           |
| 08:15 08:30 | 0              | 1          | 1            | 0             | 0         | 0            | 1           |
| 08:30 08:45 | 0              | 2          | 2            | 0             | 0         | 0            | 2           |
| 08:45 09:00 | 0              | 2          | 2            | 0             | 0         | 0            | 2           |
| 09:15 09:30 | 0              | 0          | 0            | 0             | 0         | 0            | 0           |
| 11:30 11:45 | 0              | 0          | 0            | 0             | 0         | 0            | 0           |
| 11:45 12:00 | 1              | 0          | 1            | 0             | 0         | 0            | 1           |
| 12:00 12:15 | 0              | 0          | 0            | 0             | 0         | 0            | 0           |
| 12:15 12:30 | 0              | 0          | 0            | 0             | 0         | 0            | 0           |
| 12:30 12:45 | 1              | 1          | 2            | 0             | 0         | 0            | 2           |
| 12:45 13:00 | 0              | 0          | 0            | 0             | 1         | 1            | 1           |
| 13:00 13:15 | 0              | 0          | 0            | 0             | 0         | 0            | 0           |
| 13:15 13:30 | 0              | 0          | 0            | 0             | 0         | 0            | 0           |
| 15:00 15:15 | 1              | 1          | 2            | 0             | 0         | 0            | 2           |
| 09:45 10:00 | 0              | 0          | 0            | 0             | 0         | 0            | 0           |
| 09:30 09:45 | 0              | 0          | 0            | 0             | 0         | 0            | 0           |
| Total       | 15             | 15         | 30           | 2             | 5         | 7            | 37          |



## Transportation Services - Traffic Services

### Turning Movement Count - Study Results

#### CLEARVIEW AVE @ ISLAND PARK DR

**Survey Date:** Tuesday, March 21, 2023

**WO No:** 40857

**Start Time:** 07:00

**Device:** Miovision

#### Full Study Pedestrian Volume

| Time Period | ISLAND PARK DR                   |                                  |       | CLEARVIEW AVE                    |                                  |       | Grand Total |
|-------------|----------------------------------|----------------------------------|-------|----------------------------------|----------------------------------|-------|-------------|
|             | NB Approach<br>(E or W Crossing) | SB Approach<br>(E or W Crossing) | Total | EB Approach<br>(N or S Crossing) | WB Approach<br>(N or S Crossing) | Total |             |
| 15:30 15:45 | 0                                | 5                                | 5     | 2                                | 0                                | 2     | 7           |
| 15:45 16:00 | 0                                | 14                               | 14    | 2                                | 0                                | 2     | 16          |
| 16:00 16:15 | 1                                | 2                                | 3     | 0                                | 3                                | 3     | 6           |
| 16:15 16:30 | 0                                | 6                                | 6     | 3                                | 4                                | 7     | 13          |
| 16:30 16:45 | 0                                | 7                                | 7     | 4                                | 3                                | 7     | 14          |
| 17:15 17:30 | 1                                | 2                                | 3     | 0                                | 0                                | 0     | 3           |
| 17:30 17:45 | 0                                | 3                                | 3     | 3                                | 4                                | 7     | 10          |
| 17:45 18:00 | 0                                | 4                                | 4     | 1                                | 6                                | 7     | 11          |
| 15:15 15:30 | 0                                | 2                                | 2     | 1                                | 0                                | 1     | 3           |
| 09:00 09:15 | 0                                | 18                               | 18    | 3                                | 0                                | 3     | 21          |
| 16:45 17:00 | 0                                | 5                                | 5     | 1                                | 2                                | 3     | 8           |
| 17:00 17:15 | 0                                | 6                                | 6     | 0                                | 4                                | 4     | 10          |
| 07:00 07:15 | 0                                | 0                                | 0     | 0                                | 2                                | 2     | 2           |
| 07:15 07:30 | 0                                | 2                                | 2     | 0                                | 0                                | 0     | 2           |
| 07:30 07:45 | 0                                | 0                                | 0     | 1                                | 0                                | 1     | 1           |
| 07:45 08:00 | 0                                | 3                                | 3     | 0                                | 2                                | 2     | 5           |
| 08:00 08:15 | 0                                | 0                                | 0     | 4                                | 0                                | 4     | 4           |
| 08:15 08:30 | 0                                | 4                                | 4     | 2                                | 0                                | 2     | 6           |
| 08:30 08:45 | 0                                | 3                                | 3     | 1                                | 0                                | 1     | 4           |
| 08:45 09:00 | 0                                | 0                                | 0     | 1                                | 0                                | 1     | 1           |
| 09:15 09:30 | 0                                | 7                                | 7     | 1                                | 0                                | 1     | 8           |
| 11:30 11:45 | 0                                | 0                                | 0     | 0                                | 1                                | 1     | 1           |
| 11:45 12:00 | 0                                | 1                                | 1     | 1                                | 0                                | 1     | 2           |
| 12:00 12:15 | 0                                | 2                                | 2     | 0                                | 3                                | 3     | 5           |
| 12:15 12:30 | 0                                | 4                                | 4     | 2                                | 1                                | 3     | 7           |
| 12:30 12:45 | 0                                | 1                                | 1     | 0                                | 4                                | 4     | 5           |
| 12:45 13:00 | 0                                | 4                                | 4     | 0                                | 2                                | 2     | 6           |
| 13:00 13:15 | 0                                | 0                                | 0     | 3                                | 0                                | 3     | 3           |
| 13:15 13:30 | 0                                | 3                                | 3     | 1                                | 1                                | 2     | 5           |
| 15:00 15:15 | 0                                | 0                                | 0     | 2                                | 2                                | 4     | 4           |
| 09:45 10:00 | 0                                | 1                                | 1     | 0                                | 0                                | 0     | 1           |
| 09:30 09:45 | 0                                | 1                                | 1     | 1                                | 1                                | 2     | 3           |
| Total       | 2                                | 110                              | 112   | 40                               | 45                               | 85    | 197         |



## Transportation Services - Traffic Services

### Turning Movement Count - Study Results

#### CLEARVIEW AVE @ ISLAND PARK DR

Survey Date: Tuesday, March 21, 2023

WO No: 40857

Start Time: 07:00

Device: Miovision

### Full Study Heavy Vehicles

| ISLAND PARK DR |       |    |    |       |            |    |    |       |         | CLEARVIEW AVE |    |    |       |    |           |    |       |         |             |    |  |
|----------------|-------|----|----|-------|------------|----|----|-------|---------|---------------|----|----|-------|----|-----------|----|-------|---------|-------------|----|--|
| Northbound     |       |    |    |       | Southbound |    |    |       |         | Eastbound     |    |    |       |    | Westbound |    |       |         |             |    |  |
| Time Period    | LT    | ST | RT | N TOT | LT         | ST | RT | S TOT | STR TOT | LT            | ST | RT | E TOT | LT | ST        | RT | W TOT | STR TOT | Grand Total |    |  |
| 15:30          | 15:45 | 0  | 0  | 0     | 0          | 1  | 3  | 0     | 4       | 4             | 0  | 0  | 0     | 0  | 0         | 0  | 0     | 0       | 4           |    |  |
| 15:45          | 16:00 | 0  | 1  | 0     | 0          | 1  | 0  | 0     | 0       | 0             | 1  | 0  | 1     | 0  | 1         | 2  | 2     | 0       | 4           |    |  |
| 16:00          | 16:15 | 0  | 0  | 0     | 0          | 0  | 0  | 0     | 0       | 0             | 0  | 1  | 0     | 1  | 0         | 0  | 0     | 0       | 1           |    |  |
| 16:15          | 16:30 | 0  | 1  | 0     | 1          | 0  | 1  | 0     | 1       | 2             | 0  | 1  | 0     | 1  | 0         | 1  | 0     | 1       | 2           |    |  |
| 16:30          | 16:45 | 0  | 0  | 0     | 0          | 0  | 0  | 0     | 0       | 0             | 1  | 0  | 0     | 1  | 0         | 0  | 0     | 0       | 1           |    |  |
| 17:15          | 17:30 | 0  | 1  | 0     | 1          | 0  | 0  | 0     | 0       | 1             | 0  | 0  | 0     | 0  | 0         | 1  | 0     | 1       | 1           |    |  |
| 17:30          | 17:45 | 0  | 0  | 0     | 0          | 0  | 0  | 0     | 0       | 0             | 0  | 0  | 0     | 0  | 0         | 0  | 0     | 0       | 0           |    |  |
| 17:45          | 18:00 | 0  | 0  | 0     | 0          | 0  | 0  | 0     | 0       | 0             | 0  | 1  | 0     | 1  | 0         | 1  | 0     | 1       | 2           |    |  |
| 15:15          | 15:30 | 0  | 1  | 0     | 1          | 0  | 1  | 0     | 1       | 2             | 0  | 1  | 0     | 1  | 0         | 1  | 0     | 1       | 2           |    |  |
| 09:00          | 09:15 | 0  | 1  | 1     | 2          | 0  | 1  | 0     | 1       | 3             | 0  | 0  | 0     | 0  | 1         | 0  | 0     | 1       | 1           |    |  |
| 16:45          | 17:00 | 0  | 0  | 0     | 0          | 0  | 0  | 0     | 0       | 0             | 0  | 1  | 0     | 1  | 0         | 1  | 0     | 1       | 2           |    |  |
| 17:00          | 17:15 | 0  | 0  | 0     | 0          | 0  | 2  | 0     | 2       | 2             | 0  | 1  | 0     | 1  | 0         | 0  | 0     | 0       | 1           |    |  |
| 07:00          | 07:15 | 0  | 0  | 0     | 0          | 0  | 0  | 0     | 0       | 0             | 0  | 0  | 0     | 0  | 0         | 0  | 0     | 0       | 0           |    |  |
| 07:15          | 07:30 | 1  | 0  | 0     | 1          | 0  | 2  | 0     | 2       | 3             | 0  | 1  | 0     | 1  | 0         | 0  | 0     | 0       | 1           |    |  |
| 07:30          | 07:45 | 0  | 0  | 1     | 1          | 0  | 0  | 0     | 0       | 1             | 0  | 0  | 0     | 0  | 0         | 0  | 0     | 0       | 1           |    |  |
| 07:45          | 08:00 | 0  | 0  | 0     | 0          | 0  | 0  | 0     | 0       | 0             | 0  | 0  | 1     | 0  | 0         | 0  | 0     | 1       | 1           |    |  |
| 08:00          | 08:15 | 0  | 0  | 0     | 0          | 0  | 0  | 0     | 0       | 0             | 0  | 0  | 0     | 0  | 0         | 0  | 0     | 0       | 0           |    |  |
| 08:15          | 08:30 | 0  | 0  | 0     | 0          | 0  | 1  | 0     | 1       | 1             | 0  | 0  | 0     | 0  | 2         | 0  | 2     | 2       | 3           |    |  |
| 08:30          | 08:45 | 0  | 2  | 0     | 2          | 1  | 1  | 0     | 2       | 4             | 0  | 0  | 0     | 0  | 0         | 0  | 0     | 0       | 4           |    |  |
| 08:45          | 09:00 | 0  | 1  | 0     | 1          | 0  | 0  | 0     | 0       | 1             | 0  | 0  | 0     | 0  | 0         | 0  | 0     | 0       | 1           |    |  |
| 09:15          | 09:30 | 0  | 0  | 0     | 0          | 0  | 0  | 0     | 0       | 0             | 0  | 1  | 0     | 1  | 0         | 1  | 0     | 1       | 2           |    |  |
| 11:30          | 11:45 | 0  | 0  | 0     | 0          | 0  | 0  | 0     | 0       | 0             | 0  | 0  | 0     | 0  | 0         | 1  | 0     | 1       | 1           |    |  |
| 11:45          | 12:00 | 0  | 2  | 0     | 2          | 1  | 2  | 0     | 3       | 5             | 1  | 1  | 1     | 3  | 0         | 0  | 0     | 0       | 3           |    |  |
| 12:00          | 12:15 | 0  | 0  | 0     | 0          | 0  | 0  | 0     | 0       | 0             | 0  | 0  | 0     | 0  | 0         | 0  | 0     | 0       | 0           |    |  |
| 12:15          | 12:30 | 0  | 1  | 0     | 1          | 0  | 0  | 0     | 0       | 1             | 0  | 1  | 0     | 1  | 0         | 1  | 0     | 1       | 2           |    |  |
| 12:30          | 12:45 | 0  | 0  | 0     | 0          | 0  | 3  | 0     | 3       | 3             | 0  | 0  | 0     | 0  | 1         | 0  | 1     | 1       | 4           |    |  |
| 12:45          | 13:00 | 0  | 0  | 0     | 0          | 0  | 0  | 0     | 0       | 0             | 0  | 0  | 1     | 0  | 1         | 0  | 0     | 1       | 1           |    |  |
| 13:00          | 13:15 | 0  | 2  | 0     | 2          | 0  | 2  | 0     | 2       | 4             | 0  | 0  | 0     | 0  | 0         | 1  | 0     | 1       | 1           |    |  |
| 13:15          | 13:30 | 0  | 0  | 0     | 0          | 0  | 2  | 0     | 2       | 2             | 0  | 1  | 0     | 1  | 0         | 0  | 0     | 0       | 1           |    |  |
| 15:00          | 15:15 | 0  | 0  | 0     | 0          | 0  | 1  | 0     | 1       | 1             | 0  | 1  | 0     | 1  | 0         | 0  | 0     | 0       | 1           |    |  |
| 09:45          | 10:00 | 0  | 0  | 0     | 0          | 0  | 0  | 0     | 0       | 0             | 0  | 1  | 0     | 1  | 0         | 0  | 0     | 0       | 1           |    |  |
| 09:30          | 09:45 | 0  | 1  | 0     | 1          | 0  | 0  | 0     | 0       | 1             | 0  | 0  | 0     | 0  | 0         | 0  | 0     | 0       | 1           |    |  |
| Total: None    |       | 1  | 14 | 2     | 17         | 3  | 22 | 0     | 25      | 42            | 2  | 16 | 1     | 19 | 3         | 14 | 0     | 17      | 36          |    |  |
|                |       |    |    |       |            |    |    |       |         |               |    |    |       |    |           |    |       |         |             | 78 |  |



## Transportation Services - Traffic Services

### Turning Movement Count - Study Results

#### CLEARVIEW AVE @ ISLAND PARK DR

Survey Date: Tuesday, March 21, 2023

WO No: 40857

Start Time: 07:00

Device: Miovision

### Full Study 15 Minute U-Turn Total

|             |       | ISLAND PARK DR |  |              |  | CLEARVIEW AVE |  |              |  |       |  |
|-------------|-------|----------------|--|--------------|--|---------------|--|--------------|--|-------|--|
|             |       | Northbound     |  | Southbound   |  | Eastbound     |  | Westbound    |  |       |  |
| Time Period |       | U-Turn Total   |  | U-Turn Total |  | U-Turn Total  |  | U-Turn Total |  | Total |  |
| 15:30       | 15:45 | 0              |  | 0            |  | 0             |  | 0            |  | 0     |  |
| 15:45       | 16:00 | 0              |  | 0            |  | 0             |  | 0            |  | 0     |  |
| 16:00       | 16:15 | 0              |  | 0            |  | 0             |  | 0            |  | 0     |  |
| 16:15       | 16:30 | 0              |  | 0            |  | 0             |  | 0            |  | 0     |  |
| 16:30       | 16:45 | 0              |  | 0            |  | 0             |  | 0            |  | 0     |  |
| 17:15       | 17:30 | 0              |  | 0            |  | 0             |  | 0            |  | 0     |  |
| 17:30       | 17:45 | 0              |  | 0            |  | 0             |  | 0            |  | 0     |  |
| 17:45       | 18:00 | 0              |  | 0            |  | 0             |  | 0            |  | 0     |  |
| 15:15       | 15:30 | 0              |  | 0            |  | 0             |  | 0            |  | 0     |  |
| 09:00       | 09:15 | 0              |  | 0            |  | 0             |  | 0            |  | 0     |  |
| 16:45       | 17:00 | 0              |  | 0            |  | 0             |  | 0            |  | 0     |  |
| 17:00       | 17:15 | 0              |  | 0            |  | 0             |  | 0            |  | 0     |  |
| 07:00       | 07:15 | 0              |  | 0            |  | 0             |  | 0            |  | 0     |  |
| 07:15       | 07:30 | 0              |  | 0            |  | 0             |  | 0            |  | 0     |  |
| 07:30       | 07:45 | 0              |  | 0            |  | 0             |  | 0            |  | 0     |  |
| 07:45       | 08:00 | 0              |  | 0            |  | 0             |  | 0            |  | 0     |  |
| 08:00       | 08:15 | 0              |  | 0            |  | 0             |  | 0            |  | 0     |  |
| 08:15       | 08:30 | 0              |  | 0            |  | 0             |  | 0            |  | 0     |  |
| 08:30       | 08:45 | 0              |  | 0            |  | 0             |  | 0            |  | 0     |  |
| 08:45       | 09:00 | 0              |  | 0            |  | 0             |  | 0            |  | 0     |  |
| 09:15       | 09:30 | 0              |  | 0            |  | 0             |  | 0            |  | 0     |  |
| 11:30       | 11:45 | 0              |  | 0            |  | 0             |  | 0            |  | 0     |  |
| 11:45       | 12:00 | 0              |  | 0            |  | 0             |  | 0            |  | 0     |  |
| 12:00       | 12:15 | 0              |  | 0            |  | 0             |  | 0            |  | 0     |  |
| 12:15       | 12:30 | 0              |  | 0            |  | 0             |  | 0            |  | 0     |  |
| 12:30       | 12:45 | 0              |  | 0            |  | 0             |  | 0            |  | 0     |  |
| 12:45       | 13:00 | 0              |  | 0            |  | 0             |  | 0            |  | 0     |  |
| 13:00       | 13:15 | 0              |  | 0            |  | 0             |  | 0            |  | 0     |  |
| 13:15       | 13:30 | 0              |  | 0            |  | 0             |  | 0            |  | 0     |  |
| 15:00       | 15:15 | 0              |  | 0            |  | 0             |  | 0            |  | 0     |  |
| 09:45       | 10:00 | 0              |  | 0            |  | 0             |  | 0            |  | 0     |  |
| 09:30       | 09:45 | 0              |  | 0            |  | 0             |  | 0            |  | 0     |  |
| Total       |       | 0              |  | 0            |  | 0             |  | 0            |  | 0     |  |



## Transportation Services - Traffic Services

### Turning Movement Count - Study Results

#### ISLAND PARK DR @ SCOTT ST

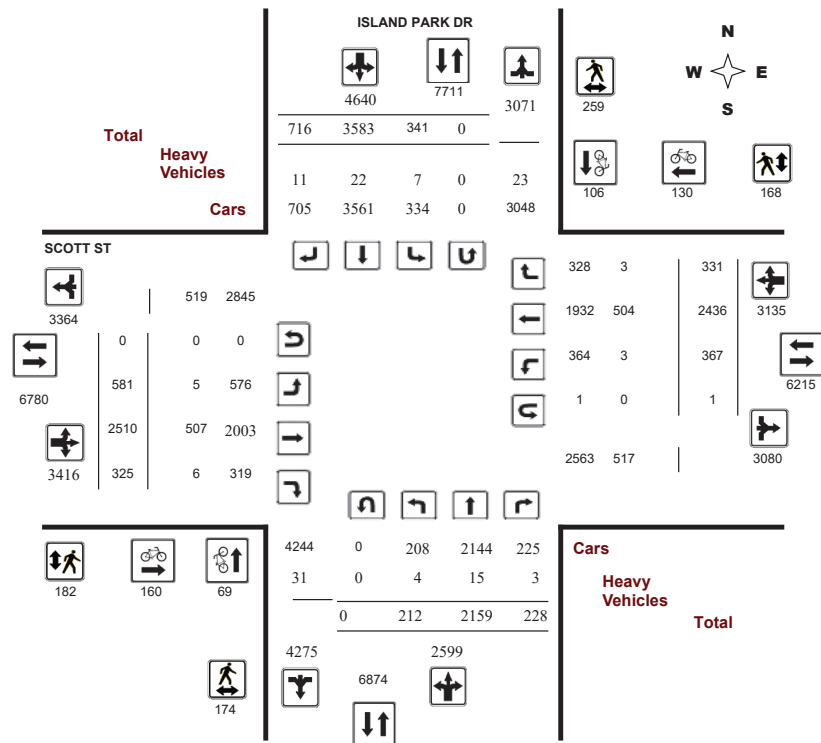
Survey Date: Thursday, October 27, 2022

WO No: 40675

Start Time: 07:00

Device: Miovision

#### Full Study Diagram



## Transportation Services - Traffic Services

### Turning Movement Count - Study Results

#### ISLAND PARK DR @ SCOTT ST

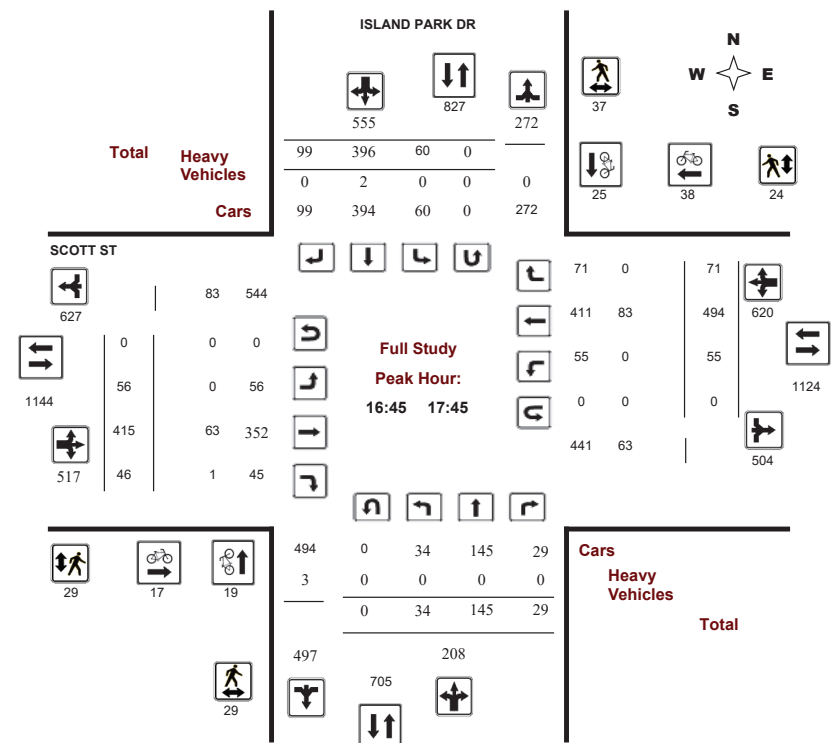
Survey Date: Thursday, October 27, 2022

WO No: 40675

Start Time: 07:00

Device: Miovision

#### Full Study Peak Hour Diagram





## Transportation Services - Traffic Services

### Turning Movement Count - Peak Hour Diagram

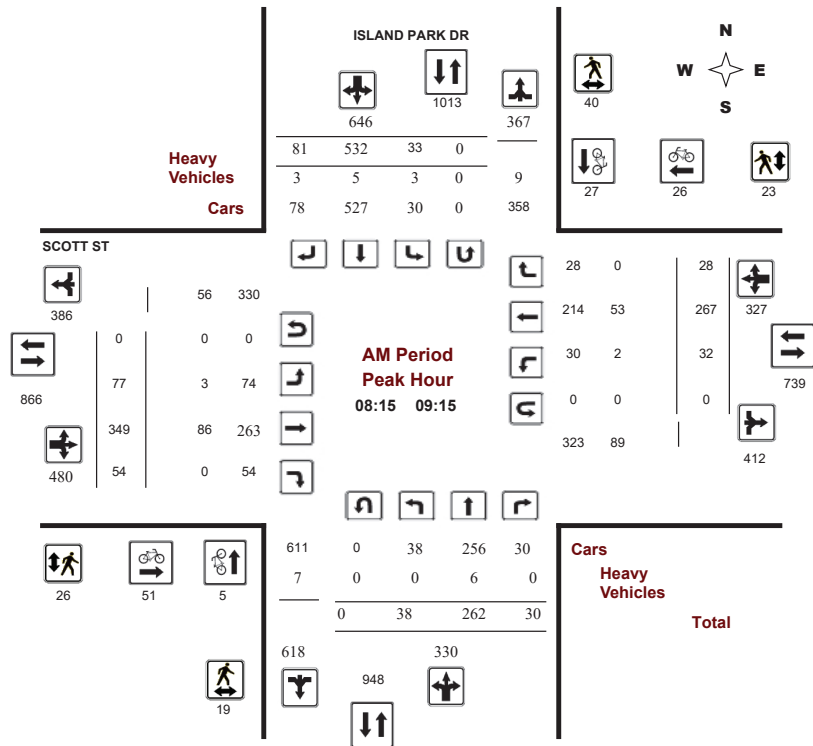
#### ISLAND PARK DR @ SCOTT ST

Survey Date: Thursday, October 27, 2022

Start Time: 07:00

WO No: 40675

Device: Miovision



Comments



## Transportation Services - Traffic Services

### Turning Movement Count - Peak Hour Diagram

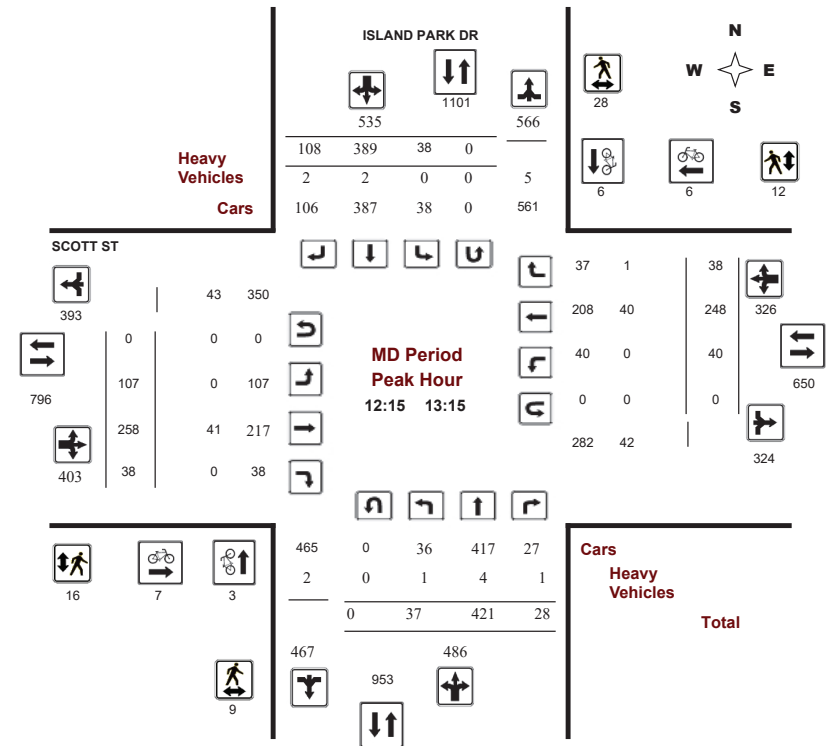
#### ISLAND PARK DR @ SCOTT ST

Survey Date: Thursday, October 27, 2022

Start Time: 07:00

WO No: 40675

Device: Miovision



Comments

### Turning Movement Count - Peak Hour Diagram

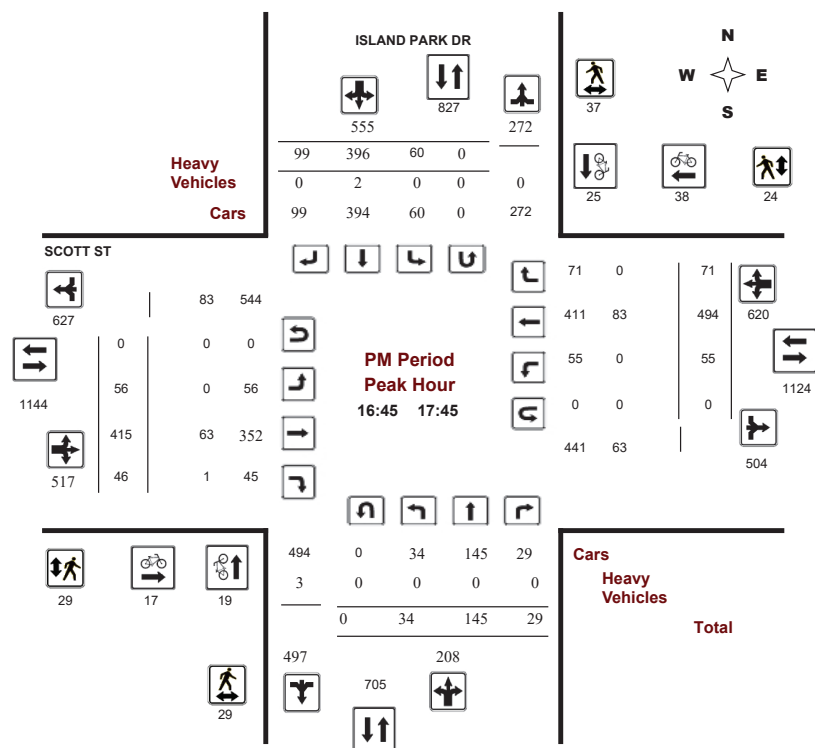
ISLAND PARK DR @ SCOTT ST

**Survey Date:** Thursday, October 27, 2022

**Start Time:** 07:00

**WO No:** 40675

Device: Miovision



### Comments

## Turning Movement Count - Study Results

ISLAND PARK DR @ SCOTT ST

**Survey Date:** Thursday, October 27, 2022

**Start Time:** 07:00

WO No: 40675

Device: Miovision

### Full Study Summary (8 HR Standard)

**Survey Date:** Thursday, October 27, 2022

### Total Observed U-Turns

|             |   |             |   |
|-------------|---|-------------|---|
| Northbound: | 0 | Southbound: | 0 |
| Eastbound:  | 0 | Westbound:  | 1 |

**AADT Factor**

.90

| ISLAND PARK DR   |     |      |     |            |     |      |      |           |         | SCOTT ST |      |           |        |     |      |     |        |         |             | STR TOT |  | Grand Total |  |
|--|-----|------|-----|------------|-----|------|------|-----------|---------|----------|------|-----------|--------|-----|------|-----|--------|---------|-------------|---------|--|-------------|--|
| Northbound   |     |      |     | Southbound |     |      |      | Eastbound |         |          |      | Westbound |        |     |      |     |        |         |             |         |  |             |  |
| Period   | LT  | ST   | RT  | NB TOT     | LT  | ST   | RT   | SB TOT    | STR TOT | LT       | ST   | RT        | EB TOT | LT  | ST   | RT  | WB TOT | STR TOT | Grand Total |         |  |             |  |
| 07:00 08:00  | 20  | 241  | 31  | 292        | 37  | 604  | 77   | 718       | 1010    | 48       | 248  | 27        | 323    | 32  | 187  | 17  | 236    | 559     | 1569        |         |  |             |  |
| 08:00 09:00  | 35  | 237  | 32  | 304        | 32  | 531  | 76   | 639       | 943     | 76       | 340  | 51        | 467    | 33  | 256  | 26  | 315    | 782     | 1725        |         |  |             |  |
| 09:00 10:00  | 22  | 328  | 22  | 372        | 40  | 508  | 88   | 636       | 1008    | 75       | 267  | 50        | 392    | 24  | 228  | 39  | 291    | 683     | 1691        |         |  |             |  |
| 11:30 12:30  | 29  | 378  | 19  | 426        | 47  | 406  | 111  | 564       | 990     | 87       | 247  | 41        | 375    | 35  | 257  | 39  | 331    | 706     | 1696        |         |  |             |  |
| 12:30 13:30  | 41  | 406  | 26  | 473        | 35  | 370  | 93   | 498       | 971     | 98       | 245  | 30        | 373    | 41  | 228  | 44  | 313    | 686     | 1657        |         |  |             |  |
| 15:00 16:00  | 15  | 261  | 45  | 321        | 43  | 371  | 71   | 485       | 806     | 76       | 341  | 41        | 458    | 69  | 345  | 43  | 457    | 915     | 1721        |         |  |             |  |
| 16:00 17:00  | 24  | 164  | 28  | 216        | 41  | 409  | 97   | 547       | 763     | 64       | 388  | 34        | 486    | 76  | 448  | 70  | 594    | 1080    | 1843        |         |  |             |  |
| 17:00 18:00  | 26  | 144  | 25  | 195        | 66  | 384  | 103  | 553       | 748     | 57       | 434  | 51        | 542    | 57  | 487  | 53  | 597    | 1139    | 1887        |         |  |             |  |
| Sub Total  | 212 | 2159 | 228 | 2599       | 341 | 3583 | 716  | 4640      | 7239    | 581      | 2510 | 325       | 3416   | 367 | 2436 | 331 | 3134   | 6550    | 13789       |         |  |             |  |
| U Turns  |     |      |     | 0          |     |      |      | 0         | 0       |          |      |           | 0      |     |      |     | 1      | 1       | 1           |         |  |             |  |
| Total  | 212 | 2159 | 228 | 2599       | 341 | 3583 | 716  | 4640      | 7239    | 581      | 2510 | 325       | 3416   | 367 | 2436 | 331 | 3135   | 6551    | 13790       |         |  |             |  |
| EQ 12Hr  | 295 | 3001 | 317 | 3613       | 474 | 4980 | 995  | 6450      | 10062   | 808      | 3489 | 452       | 4748   | 510 | 3386 | 460 | 4358   | 9106    | 19168       |         |  |             |  |
| Note: These values are calculated by multiplying the totals by the appropriate expansion factor.   |     |      |     |            |     |      |      |           |         |          |      |           | 1.39   |     |      |     |        |         |             |         |  |             |  |
| AVG 12Hr   | 266 | 2701 | 285 | 3252       | 427 | 5872 | 1173 | 5805      | 9056    | 727      | 3140 | 407       | 4273   | 459 | 3047 | 414 | 3922   | 8195    | 17251       |         |  |             |  |
| Note: These volumes are calculated by multiplying the Equivalent 12 hr. totals by the AADT factor. |     |      |     |            |     |      |      |           |         |          |      |           | .90    |     |      |     |        |         |             |         |  |             |  |
| AVG 24Hr   | 348 | 3538 | 373 | 4260       | 559 | 7692 | 1537 | 7605      | 11863   | 952      | 4113 | 533       | 5598   | 601 | 3992 | 542 | 5138   | 10735   | 22599       |         |  |             |  |

Note: These values are calculated by multiplying the totals by the appropriate expansion factor.

1.39

|                 |     |      |     |             |     |      |      |             |             |     |     |
|-----------------|-----|------|-----|-------------|-----|------|------|-------------|-------------|-----|-----|
| <b>AVG 12Hr</b> | 266 | 2701 | 285 | <b>3252</b> | 427 | 5872 | 1173 | <b>5805</b> | <b>9056</b> | 727 | 314 |
|-----------------|-----|------|-----|-------------|-----|------|------|-------------|-------------|-----|-----|

73 459

Note: These volumes are calculated by multiplying the Average Daily 12 hr. totals by 12 to 24 expansion factor.

1.31

Note: U-Turns provided for approach totals. Refer to 'U-Turn' Report for specific breakdown.



## Transportation Services - Traffic Services

### Turning Movement Count - Study Results

#### ISLAND PARK DR @ SCOTT ST

Survey Date: Thursday, October 27, 2022

WO No: 40675

Start Time: 07:00

Device: Miovision

### Full Study 15 Minute Increments

| ISLAND PARK DR |    |     |      |       |            |     |      |       |         | SCOTT ST  |     |      |       |      |           |      |       |         |             |        |
|----------------|----|-----|------|-------|------------|-----|------|-------|---------|-----------|-----|------|-------|------|-----------|------|-------|---------|-------------|--------|
| Northbound     |    |     |      |       | Southbound |     |      |       |         | Eastbound |     |      |       |      | Westbound |      |       |         |             |        |
| Time Period    | LT | ST  | RT   | N TOT | LT         | ST  | RT   | S TOT | STR TOT | LT        | ST  | RT   | E TOT | LT   | ST        | RT   | W TOT | STR TOT | Grand Total |        |
| 07:00 07:15    | 3  | 46  | 4    | 53    | 9          | 163 | 14   | 186   | 239     | 8         | 50  | 3    | 61    | 5    | 39        | 2    | 47    | 108     | 347         |        |
| 07:15 07:30    | 4  | 63  | 2    | 69    | 4          | 150 | 19   | 173   | 242     | 9         | 47  | 10   | 66    | 5    | 28        | 4    | 37    | 103     | 345         |        |
| 07:30 07:45    | 9  | 63  | 8    | 80    | 9          | 149 | 23   | 181   | 261     | 14        | 52  | 3    | 69    | 10   | 50        | 5    | 65    | 134     | 395         |        |
| 07:45 08:00    | 4  | 69  | 17   | 90    | 15         | 142 | 21   | 178   | 268     | 17        | 99  | 11   | 127   | 12   | 70        | 6    | 88    | 215     | 483         |        |
| 08:00 08:15    | 6  | 72  | 6    | 84    | 9          | 142 | 16   | 167   | 251     | 17        | 82  | 12   | 111   | 10   | 40        | 8    | 58    | 169     | 420         |        |
| 08:15 08:30    | 4  | 61  | 7    | 72    | 4          | 146 | 14   | 164   | 236     | 23        | 90  | 10   | 123   | 7    | 78        | 5    | 90    | 213     | 449         |        |
| 08:30 08:45    | 13 | 50  | 13   | 76    | 12         | 124 | 19   | 155   | 231     | 20        | 79  | 14   | 113   | 10   | 63        | 5    | 78    | 191     | 422         |        |
| 08:45 09:00    | 12 | 54  | 6    | 72    | 7          | 119 | 27   | 153   | 225     | 16        | 89  | 15   | 120   | 6    | 75        | 8    | 89    | 209     | 434         |        |
| 09:00 09:15    | 9  | 97  | 4    | 110   | 10         | 143 | 21   | 174   | 284     | 18        | 91  | 15   | 124   | 9    | 51        | 10   | 70    | 194     | 478         |        |
| 09:15 09:30    | 4  | 73  | 7    | 84    | 13         | 122 | 26   | 161   | 245     | 26        | 64  | 10   | 100   | 3    | 59        | 10   | 72    | 172     | 417         |        |
| 09:30 09:45    | 4  | 82  | 3    | 89    | 10         | 122 | 22   | 154   | 243     | 20        | 51  | 12   | 83    | 6    | 70        | 11   | 87    | 170     | 413         |        |
| 09:45 10:00    | 5  | 76  | 8    | 89    | 7          | 121 | 19   | 147   | 236     | 11        | 61  | 13   | 85    | 6    | 48        | 8    | 62    | 147     | 383         |        |
| 11:30 11:45    | 7  | 95  | 2    | 104   | 11         | 126 | 21   | 158   | 262     | 19        | 64  | 10   | 93    | 6    | 48        | 9    | 63    | 156     | 418         |        |
| 11:45 12:00    | 12 | 88  | 4    | 104   | 10         | 87  | 24   | 121   | 225     | 24        | 56  | 6    | 86    | 6    | 64        | 15   | 85    | 171     | 396         |        |
| 12:00 12:15    | 4  | 94  | 5    | 103   | 13         | 92  | 32   | 137   | 240     | 14        | 53  | 9    | 76    | 11   | 72        | 6    | 89    | 165     | 405         |        |
| 12:15 12:30    | 6  | 101 | 8    | 115   | 13         | 101 | 34   | 148   | 263     | 30        | 74  | 16   | 120   | 12   | 73        | 9    | 94    | 214     | 477         |        |
| 12:30 12:45    | 13 | 93  | 12   | 118   | 11         | 100 | 21   | 132   | 250     | 27        | 68  | 8    | 103   | 10   | 63        | 14   | 87    | 190     | 440         |        |
| 12:45 13:00    | 11 | 126 | 5    | 142   | 4          | 94  | 27   | 125   | 267     | 24        | 62  | 7    | 93    | 9    | 48        | 8    | 65    | 158     | 425         |        |
| 13:00 13:15    | 7  | 101 | 3    | 111   | 10         | 94  | 26   | 130   | 241     | 26        | 54  | 7    | 87    | 9    | 64        | 7    | 80    | 167     | 408         |        |
| 13:15 13:30    | 10 | 86  | 6    | 102   | 10         | 82  | 19   | 111   | 213     | 21        | 61  | 8    | 90    | 13   | 53        | 15   | 81    | 171     | 384         |        |
| 15:00 15:15    | 2  | 110 | 8    | 120   | 7          | 99  | 16   | 122   | 242     | 29        | 66  | 12   | 107   | 14   | 69        | 13   | 96    | 203     | 445         |        |
| 15:15 15:30    | 5  | 63  | 15   | 83    | 10         | 98  | 18   | 126   | 209     | 24        | 82  | 14   | 120   | 11   | 81        | 10   | 102   | 222     | 431         |        |
| 15:30 15:45    | 2  | 54  | 14   | 70    | 12         | 82  | 15   | 109   | 179     | 15        | 104 | 9    | 128   | 21   | 104       | 11   | 136   | 264     | 443         |        |
| 15:45 16:00    | 6  | 34  | 8    | 48    | 14         | 92  | 22   | 128   | 176     | 8         | 89  | 6    | 103   | 23   | 91        | 9    | 123   | 226     | 402         |        |
| 16:00 16:15    | 8  | 42  | 8    | 58    | 8          | 93  | 21   | 122   | 180     | 17        | 89  | 8    | 114   | 25   | 114       | 13   | 152   | 266     | 446         |        |
| 16:15 16:30    | 1  | 47  | 2    | 50    | 10         | 101 | 23   | 134   | 184     | 18        | 95  | 6    | 119   | 19   | 113       | 17   | 149   | 268     | 452         |        |
| 16:30 16:45    | 4  | 40  | 6    | 50    | 12         | 103 | 25   | 140   | 190     | 15        | 111 | 11   | 137   | 19   | 94        | 17   | 130   | 267     | 457         |        |
| 16:45 17:00    | 11 | 35  | 12   | 58    | 11         | 112 | 28   | 151   | 209     | 14        | 93  | 9    | 116   | 13   | 127       | 23   | 163   | 279     | 488         |        |
| 17:00 17:15    | 2  | 35  | 4    | 41    | 11         | 96  | 25   | 132   | 173     | 14        | 107 | 16   | 137   | 16   | 130       | 14   | 160   | 297     | 470         |        |
| 17:15 17:30    | 13 | 36  | 6    | 55    | 20         | 84  | 22   | 126   | 181     | 17        | 106 | 10   | 133   | 13   | 111       | 20   | 144   | 277     | 458         |        |
| 17:30 17:45    | 8  | 39  | 7    | 54    | 18         | 104 | 24   | 146   | 200     | 11        | 109 | 11   | 131   | 13   | 126       | 14   | 153   | 284     | 484         |        |
| 17:45 18:00    | 3  | 34  | 8    | 45    | 17         | 100 | 32   | 149   | 194     | 15        | 112 | 14   | 141   | 15   | 120       | 5    | 140   | 281     | 475         |        |
| Total:         |    | 212 | 2159 | 228   | 2599       | 341 | 3583 | 716   | 4640    | 7239      | 581 | 2510 | 325   | 3416 | 367       | 2436 | 331   | 3135    | 6551        | 13,790 |

Note: U-Turns are included in Totals.



## Transportation Services - Traffic Services

### Turning Movement Count - Study Results

#### ISLAND PARK DR @ SCOTT ST

Survey Date: Thursday, October 27, 2022

WO No: 40675

Start Time: 07:00

Device: Miovision

### Full Study Cyclist Volume

| ISLAND PARK DR |            |  |            |              |           |  | SCOTT ST  |              |             |  |  |  |  |
|----------------|------------|--|------------|--------------|-----------|--|-----------|--------------|-------------|--|--|--|--|
| Time Period    | Northbound |  | Southbound | Street Total | Eastbound |  | Westbound | Street Total | Grand Total |  |  |  |  |
| 07:00 07:15    | 2          |  | 1          | 3            | 1         |  | 1         | 2            | 5           |  |  |  |  |
| 07:15 07:30    | 2          |  | 1          | 3            | 2         |  | 1         | 3            | 6           |  |  |  |  |
| 07:30 07:45    | 2          |  | 2          | 4            | 6         |  | 1         | 7            | 11          |  |  |  |  |
| 07:45 08:00    | 4          |  | 8          | 12           | 11        |  | 6         | 17           | 29          |  |  |  |  |
| 08:00 08:15    | 1          |  | 6          | 7            | 9         |  | 4         | 13           | 20          |  |  |  |  |
| 08:15 08:30    | 1          |  | 9          | 10           | 15        |  | 1         | 16           | 26          |  |  |  |  |
| 08:30 08:45    | 1          |  | 10         | 11           | 15        |  | 6         | 21           | 32          |  |  |  |  |
| 08:45 09:00    | 2          |  | 3          | 5            | 13        |  | 14        | 27           | 32          |  |  |  |  |
| 09:00 09:15    | 1          |  | 5          | 6            | 8         |  | 5         | 13           | 19          |  |  |  |  |
| 09:15 09:30    | 0          |  | 2          | 2            | 7         |  | 1         | 8            | 10          |  |  |  |  |
| 09:30 09:45    | 0          |  | 4          | 4            | 3         |  | 1         | 4            | 8           |  |  |  |  |
| 09:45 10:00    | 3          |  | 1          | 4            | 1         |  | 2         | 3            | 7           |  |  |  |  |
| 11:30 11:45    | 0          |  | 0          | 0            | 1         |  | 2         | 3            | 3           |  |  |  |  |
| 11:45 12:00    | 3          |  | 1          | 4            | 3         |  | 3         | 6            | 10          |  |  |  |  |
| 12:00 12:15    | 1          |  | 2          | 3            | 2         |  | 2         | 4            | 7           |  |  |  |  |
| 12:15 12:30    | 2          |  | 1          | 3            | 3         |  | 3         | 6            | 9           |  |  |  |  |
| 12:30 12:45    | 0          |  | 2          | 2            | 1         |  | 0         | 1            | 3           |  |  |  |  |
| 12:45 13:00    | 0          |  | 2          | 2            | 2         |  | 1         | 3            | 5           |  |  |  |  |
| 13:00 13:15    | 1          |  | 1          | 2            | 1         |  | 2         | 3            | 5           |  |  |  |  |
| 13:15 13:30    | 0          |  | 3          | 3            | 2         |  | 4         | 6            | 9           |  |  |  |  |
| 15:00 15:15    | 0          |  | 2          | 2            | 5         |  | 0         | 5            | 7           |  |  |  |  |
| 15:15 15:30    | 2          |  | 1          | 3            | 5         |  | 3         | 8            | 11          |  |  |  |  |
| 15:30 15:45    | 10         |  | 1          | 11           | 8         |  | 5         | 13           | 24          |  |  |  |  |
| 15:45 16:00    | 1          |  | 0          | 1            | 1         |  | 4         | 5            | 6           |  |  |  |  |
| 16:00 16:15    | 1          |  | 5          | 6            | 7         |  | 5         | 12           | 18          |  |  |  |  |
| 16:15 16:30    | 7          |  | 2          | 9            | 4         |  | 7         | 11           | 20          |  |  |  |  |
| 16:30 16:45    | 0          |  | 4          | 4            | 2         |  | 6         | 8            | 12          |  |  |  |  |
| 16:45 17:00    | 4          |  | 12         | 16           | 3         |  | 12        | 15           | 31          |  |  |  |  |
| 17:00 17:15    | 5          |  | 4          | 9            | 10        |  | 14        | 24           | 33          |  |  |  |  |
| 17:15 17:30    | 7          |  | 7          | 14           | 3         |  | 8         | 11           | 25          |  |  |  |  |
| 17:30 17:45    | 3          |  | 2          | 5            | 1         |  | 4         | 5            | 10          |  |  |  |  |
| 17:45 18:00    | 3          |  | 2          | 5            | 5         |  | 2         | 7            | 12          |  |  |  |  |
| Total          | 69         |  | 106        | 175          | 160       |  | 130       | 290          | 465         |  |  |  |  |





## Transportation Services - Traffic Services

### Turning Movement Count - Study Results

#### ISLAND PARK DR @ SCOTT ST

**Survey Date:** Thursday, October 27, 2022

**WO No:** 40675

**Start Time:** 07:00

**Device:** Miovision

#### Full Study Pedestrian Volume

| ISLAND PARK DR |                                  |                                  |       | SCOTT ST                         |                                  |       |             |
|----------------|----------------------------------|----------------------------------|-------|----------------------------------|----------------------------------|-------|-------------|
| Time Period    | NB Approach<br>(E or W Crossing) | SB Approach<br>(E or W Crossing) | Total | EB Approach<br>(N or S Crossing) | WB Approach<br>(N or S Crossing) | Total | Grand Total |
| 07:00 07:15    | 3                                | 7                                | 10    | 2                                | 3                                | 5     | 15          |
| 07:15 07:30    | 2                                | 8                                | 10    | 4                                | 4                                | 8     | 18          |
| 07:30 07:45    | 1                                | 4                                | 5     | 4                                | 1                                | 5     | 10          |
| 07:45 08:00    | 19                               | 4                                | 23    | 11                               | 14                               | 25    | 48          |
| 08:00 08:15    | 7                                | 9                                | 16    | 12                               | 5                                | 17    | 33          |
| 08:15 08:30    | 5                                | 15                               | 20    | 12                               | 5                                | 17    | 37          |
| 08:30 08:45    | 4                                | 11                               | 15    | 8                                | 9                                | 17    | 32          |
| 08:45 09:00    | 8                                | 10                               | 18    | 1                                | 5                                | 6     | 24          |
| 09:00 09:15    | 2                                | 4                                | 6     | 5                                | 4                                | 9     | 15          |
| 09:15 09:30    | 2                                | 15                               | 17    | 4                                | 3                                | 7     | 24          |
| 09:30 09:45    | 1                                | 2                                | 3     | 2                                | 1                                | 3     | 6           |
| 09:45 10:00    | 5                                | 6                                | 11    | 4                                | 6                                | 10    | 21          |
| 11:30 11:45    | 4                                | 8                                | 12    | 5                                | 8                                | 13    | 25          |
| 11:45 12:00    | 3                                | 1                                | 4     | 1                                | 1                                | 2     | 6           |
| 12:00 12:15    | 3                                | 4                                | 7     | 3                                | 2                                | 5     | 12          |
| 12:15 12:30    | 1                                | 9                                | 10    | 3                                | 1                                | 4     | 14          |
| 12:30 12:45    | 3                                | 6                                | 9     | 6                                | 4                                | 10    | 19          |
| 12:45 13:00    | 4                                | 5                                | 9     | 3                                | 3                                | 6     | 15          |
| 13:00 13:15    | 1                                | 8                                | 9     | 4                                | 4                                | 8     | 17          |
| 13:15 13:30    | 7                                | 3                                | 10    | 6                                | 4                                | 10    | 20          |
| 15:00 15:15    | 5                                | 7                                | 12    | 3                                | 7                                | 10    | 22          |
| 15:15 15:30    | 7                                | 7                                | 14    | 4                                | 10                               | 14    | 28          |
| 15:30 15:45    | 6                                | 11                               | 17    | 4                                | 7                                | 11    | 28          |
| 15:45 16:00    | 7                                | 11                               | 18    | 5                                | 9                                | 14    | 32          |
| 16:00 16:15    | 11                               | 10                               | 21    | 11                               | 3                                | 14    | 35          |
| 16:15 16:30    | 11                               | 10                               | 21    | 7                                | 5                                | 12    | 33          |
| 16:30 16:45    | 5                                | 19                               | 24    | 15                               | 3                                | 18    | 42          |
| 16:45 17:00    | 9                                | 13                               | 22    | 8                                | 10                               | 18    | 40          |
| 17:00 17:15    | 8                                | 10                               | 18    | 7                                | 2                                | 9     | 27          |
| 17:15 17:30    | 10                               | 8                                | 18    | 10                               | 9                                | 19    | 37          |
| 17:30 17:45    | 2                                | 6                                | 8     | 4                                | 3                                | 7     | 15          |
| 17:45 18:00    | 8                                | 8                                | 16    | 4                                | 13                               | 17    | 33          |
| Total .....    | 174                              | 259                              | 433   | 182                              | 168                              | 350   | 783         |



## Transportation Services - Traffic Services

### Turning Movement Count - Study Results

#### ISLAND PARK DR @ SCOTT ST

**Survey Date:** Thursday, October 27, 2022

**WO No:** 40675

**Start Time:** 07:00

**Device:** Miovision

#### Full Study Heavy Vehicles

| ISLAND PARK DR |    |    |    |            |    |    |    |           |            | SCOTT ST |     |           |          |    |     |    |          |            |                |
|----------------|----|----|----|------------|----|----|----|-----------|------------|----------|-----|-----------|----------|----|-----|----|----------|------------|----------------|
| Northbound     |    |    |    | Southbound |    |    |    | Eastbound |            |          |     | Westbound |          |    |     |    |          |            |                |
| Time Period    | LT | ST | RT | N<br>TOT   | LT | ST | RT | S<br>TOT  | STR<br>TOT | LT       | ST  | RT        | E<br>TOT | LT | ST  | RT | W<br>TOT | STR<br>TOT | Grand<br>Total |
| 07:00 07:15    | 0  | 0  | 0  | 1          | 0  | 1  | 0  | 1         | 2          | 0        | 25  | 0         | 45       | 0  | 20  | 0  | 45       | 90         | 46             |
| 07:15 07:30    | 0  | 0  | 0  | 1          | 0  | 0  | 0  | 1         | 2          | 0        | 18  | 1         | 30       | 0  | 11  | 1  | 30       | 60         | 31             |
| 07:30 07:45    | 0  | 0  | 0  | 0          | 0  | 0  | 1  | 1         | 1          | 0        | 22  | 0         | 43       | 0  | 20  | 0  | 42       | 85         | 43             |
| 07:45 08:00    | 0  | 0  | 1  | 2          | 1  | 0  | 0  | 1         | 3          | 0        | 22  | 1         | 43       | 0  | 20  | 0  | 44       | 87         | 45             |
| 08:00 08:15    | 0  | 2  | 0  | 2          | 0  | 0  | 0  | 2         | 4          | 0        | 22  | 0         | 38       | 0  | 16  | 0  | 38       | 76         | 40             |
| 08:15 08:30    | 0  | 1  | 0  | 3          | 0  | 2  | 1  | 5         | 8          | 1        | 20  | 0         | 39       | 0  | 17  | 0  | 37       | 76         | 42             |
| 08:30 08:45    | 0  | 2  | 0  | 3          | 1  | 1  | 1  | 6         | 9          | 1        | 19  | 0         | 35       | 0  | 14  | 0  | 34       | 69         | 39             |
| 08:45 09:00    | 0  | 1  | 0  | 3          | 0  | 1  | 1  | 4         | 7          | 1        | 24  | 0         | 40       | 1  | 14  | 0  | 39       | 79         | 43             |
| 09:00 09:15    | 0  | 2  | 0  | 4          | 2  | 1  | 0  | 5         | 9          | 0        | 23  | 0         | 31       | 1  | 8   | 0  | 34       | 65         | 37             |
| 09:15 09:30    | 1  | 0  | 0  | 3          | 0  | 2  | 0  | 2         | 5          | 0        | 16  | 0         | 30       | 0  | 13  | 0  | 29       | 59         | 32             |
| 09:30 09:45    | 0  | 0  | 0  | 2          | 0  | 1  | 0  | 1         | 3          | 0        | 17  | 1         | 32       | 0  | 14  | 0  | 31       | 63         | 33             |
| 09:45 10:00    | 0  | 1  | 0  | 1          | 0  | 0  | 1  | 3         | 4          | 0        | 10  | 0         | 24       | 0  | 13  | 1  | 24       | 48         | 26             |
| 11:30 11:45    | 0  | 1  | 0  | 2          | 0  | 0  | 0  | 1         | 3          | 0        | 8   | 1         | 18       | 0  | 9   | 0  | 17       | 35         | 19             |
| 11:45 12:00    | 0  | 0  | 0  | 2          | 1  | 1  | 0  | 3         | 5          | 1        | 11  | 1         | 24       | 0  | 11  | 0  | 23       | 47         | 26             |
| 12:00 12:15    | 0  | 0  | 0  | 0          | 0  | 0  | 1  | 1         | 1          | 0        | 13  | 0         | 26       | 0  | 12  | 0  | 25       | 51         | 26             |
| 12:15 12:30    | 0  | 0  | 0  | 1          | 0  | 1  | 0  | 1         | 2          | 0        | 10  | 0         | 20       | 0  | 10  | 0  | 20       | 40         | 21             |
| 12:30 12:45    | 0  | 1  | 1  | 3          | 0  | 1  | 0  | 2         | 5          | 0        | 8   | 0         | 20       | 0  | 12  | 0  | 21       | 41         | 23             |
| 12:45 13:00    | 0  | 2  | 0  | 2          | 0  | 0  | 2  | 4         | 6          | 0        | 10  | 0         | 21       | 0  | 9   | 0  | 19       | 40         | 23             |
| 13:00 13:15    | 1  | 1  | 0  | 2          | 0  | 0  | 0  | 2         | 4          | 0        | 13  | 0         | 23       | 0  | 9   | 1  | 23       | 46         | 25             |
| 13:15 13:30    | 2  | 0  | 0  | 3          | 0  | 1  | 1  | 2         | 5          | 0        | 11  | 0         | 22       | 0  | 8   | 0  | 19       | 41         | 23             |
| 15:00 15:15    | 0  | 0  | 0  | 1          | 0  | 1  | 1  | 3         | 4          | 1        | 11  | 0         | 34       | 0  | 21  | 0  | 32       | 66         | 35             |
| 15:15 15:30    | 0  | 0  | 0  | 1          | 0  | 1  | 0  | 1         | 2          | 0        | 10  | 0         | 29       | 0  | 19  | 0  | 29       | 58         | 30             |
| 15:30 15:45    | 0  | 0  | 1  | 2          | 1  | 0  | 0  | 1         | 3          | 0        | 11  | 0         | 35       | 1  | 24  | 0  | 38       | 73         | 38             |
| 15:45 16:00    | 0  | 0  | 0  | 1          | 0  | 1  | 0  | 1         | 2          | 0        | 18  | 0         | 30       | 0  | 12  | 0  | 30       | 60         | 31             |
| 16:00 16:15    | 0  | 0  | 0  | 0          | 0  | 0  | 0  | 0         | 0          | 0        | 17  | 0         | 40       | 0  | 23  | 0  | 40       | 80         | 40             |
| 16:15 16:30    | 0  | 1  | 0  | 4          | 0  | 3  | 1  | 5         | 9          | 0        | 15  | 0         | 35       | 0  | 19  | 0  | 34       | 69         | 39             |
| 16:30 16:45    | 0  | 0  | 0  | 1          | 0  | 1  | 0  | 1         | 2          | 0        | 28  | 0         | 52       | 0  | 24  | 0  | 52       | 104        | 53             |
| 16:45 17:00    | 0  | 0  | 0  | 2          | 0  | 2  | 0  | 2         | 4          | 0        | 18  | 0         | 33       | 0  | 15  | 0  | 33       | 66         | 35             |
| 17:00 17:15    | 0  | 0  | 0  | 0          | 0  | 0  | 0  | 0         | 0          | 0        | 14  | 0         | 38       | 0  | 24  | 0  | 38       | 76         | 38             |
| 17:15 17:30    | 0  | 0  | 0  | 0          | 0  | 0  | 0  | 0         | 0          | 0        | 18  | 0         | 44       | 0  | 26  | 0  | 44       | 88         | 44             |
| 17:30 17:45    | 0  | 0  | 0  | 1          | 0  | 0  | 0  | 0         | 1          | 0        | 13  | 1         | 32       | 0  | 18  | 0  | 31       | 63         | 32             |
| 17:45 18:00    | 0  | 0  | 0  | 0          | 1  | 0  | 0  | 1         | 1          | 0        | 12  | 0         | 31       | 0  | 19  | 0  | 32       | 63         | 32             |
| Total: None    | 4  | 15 | 3  | 53         | 7  | 22 | 11 | 63        | 116        | 5        | 507 | 6         | 1037     | 3  | 504 | 3  | 1027     | 2064       | 1,090          |



## Transportation Services - Traffic Services

### Turning Movement Count - Study Results

#### ISLAND PARK DR @ SCOTT ST

Survey Date: Thursday, October 27, 2022

WO No: 40675

Start Time: 07:00

Device: Miovision

#### Full Study 15 Minute U-Turn Total

ISLAND PARK DR SCOTT ST

| Time Period |       | Northbound<br>U-Turn Total | Southbound<br>U-Turn Total | Eastbound<br>U-Turn Total | Westbound<br>U-Turn Total | Total |
|-------------|-------|----------------------------|----------------------------|---------------------------|---------------------------|-------|
| 07:00       | 07:15 | 0                          | 0                          | 0                         | 1                         | 1     |
| 07:15       | 07:30 | 0                          | 0                          | 0                         | 0                         | 0     |
| 07:30       | 07:45 | 0                          | 0                          | 0                         | 0                         | 0     |
| 07:45       | 08:00 | 0                          | 0                          | 0                         | 0                         | 0     |
| 08:00       | 08:15 | 0                          | 0                          | 0                         | 0                         | 0     |
| 08:15       | 08:30 | 0                          | 0                          | 0                         | 0                         | 0     |
| 08:30       | 08:45 | 0                          | 0                          | 0                         | 0                         | 0     |
| 08:45       | 09:00 | 0                          | 0                          | 0                         | 0                         | 0     |
| 09:00       | 09:15 | 0                          | 0                          | 0                         | 0                         | 0     |
| 09:15       | 09:30 | 0                          | 0                          | 0                         | 0                         | 0     |
| 09:30       | 09:45 | 0                          | 0                          | 0                         | 0                         | 0     |
| 09:45       | 10:00 | 0                          | 0                          | 0                         | 0                         | 0     |
| 11:30       | 11:45 | 0                          | 0                          | 0                         | 0                         | 0     |
| 11:45       | 12:00 | 0                          | 0                          | 0                         | 0                         | 0     |
| 12:00       | 12:15 | 0                          | 0                          | 0                         | 0                         | 0     |
| 12:15       | 12:30 | 0                          | 0                          | 0                         | 0                         | 0     |
| 12:30       | 12:45 | 0                          | 0                          | 0                         | 0                         | 0     |
| 12:45       | 13:00 | 0                          | 0                          | 0                         | 0                         | 0     |
| 13:00       | 13:15 | 0                          | 0                          | 0                         | 0                         | 0     |
| 13:15       | 13:30 | 0                          | 0                          | 0                         | 0                         | 0     |
| 15:00       | 15:15 | 0                          | 0                          | 0                         | 0                         | 0     |
| 15:15       | 15:30 | 0                          | 0                          | 0                         | 0                         | 0     |
| 15:30       | 15:45 | 0                          | 0                          | 0                         | 0                         | 0     |
| 15:45       | 16:00 | 0                          | 0                          | 0                         | 0                         | 0     |
| 16:00       | 16:15 | 0                          | 0                          | 0                         | 0                         | 0     |
| 16:15       | 16:30 | 0                          | 0                          | 0                         | 0                         | 0     |
| 16:30       | 16:45 | 0                          | 0                          | 0                         | 0                         | 0     |
| 16:45       | 17:00 | 0                          | 0                          | 0                         | 0                         | 0     |
| 17:00       | 17:15 | 0                          | 0                          | 0                         | 0                         | 0     |
| 17:15       | 17:30 | 0                          | 0                          | 0                         | 0                         | 0     |
| 17:30       | 17:45 | 0                          | 0                          | 0                         | 0                         | 0     |
| 17:45       | 18:00 | 0                          | 0                          | 0                         | 0                         | 0     |
| Total       |       | 0                          | 0                          | 0                         | 1                         | 1     |



## Transportation Services - Traffic Services

### Turning Movement Count - Study Results

#### LANARK AVE/WEST VILLAGE PRIV @ SCOTT ST

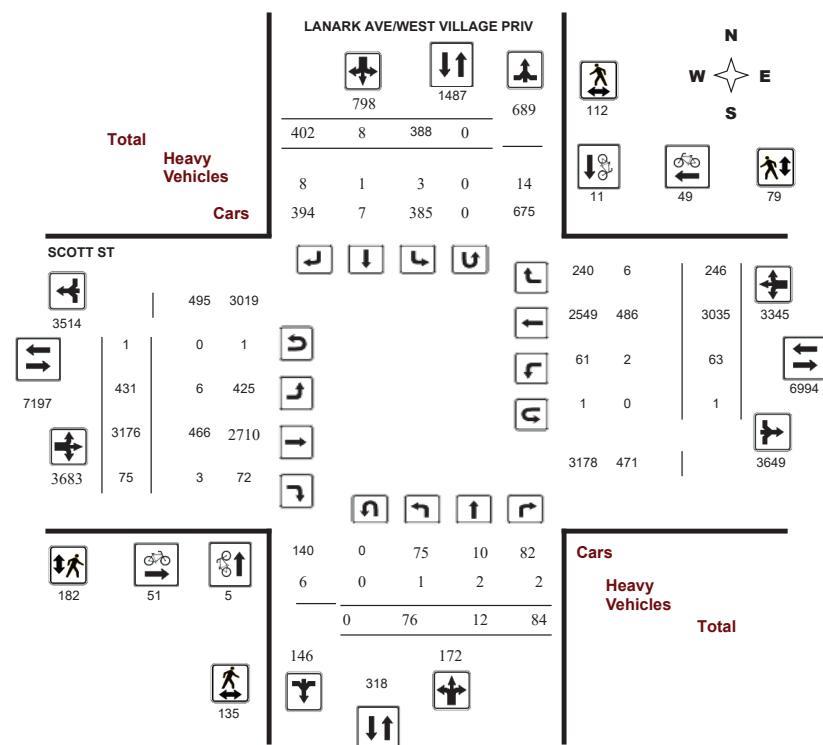
Survey Date: Thursday, November 30, 2023

WO No: 41268

Start Time: 07:00

Device: Miovision

#### Full Study Diagram





## Transportation Services - Traffic Services

### Turning Movement Count - Study Results

#### LANARK AVE/WEST VILLAGE PRIV @ SCOTT ST

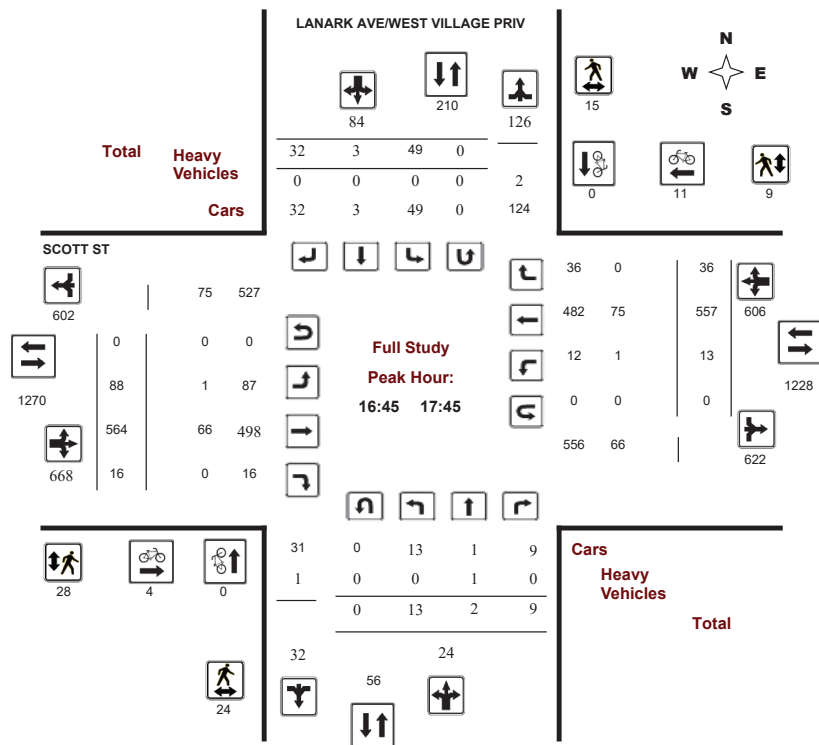
Survey Date: Thursday, November 30, 2023

WO No: 41268

Start Time: 07:00

Device: Miovision

#### Full Study Peak Hour Diagram



## Transportation Services - Traffic Services

### Turning Movement Count - Peak Hour Diagram

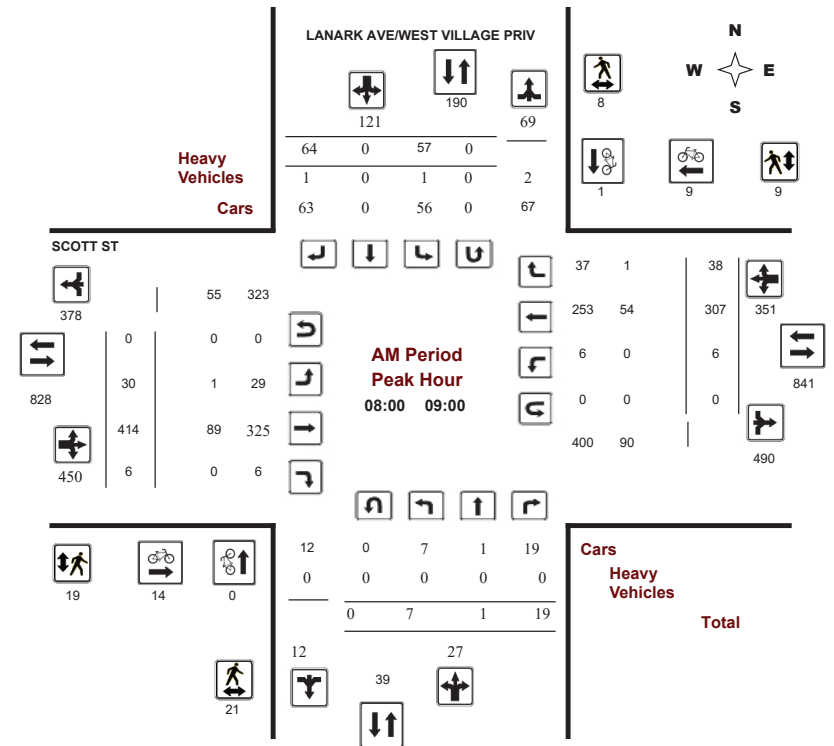
#### LANARK AVE/WEST VILLAGE PRIV @ SCOTT ST

Survey Date: Thursday, November 30, 2023

WO No: 41268

Start Time: 07:00

Device: Miovision





## Transportation Services - Traffic Services

### Turning Movement Count - Peak Hour Diagram

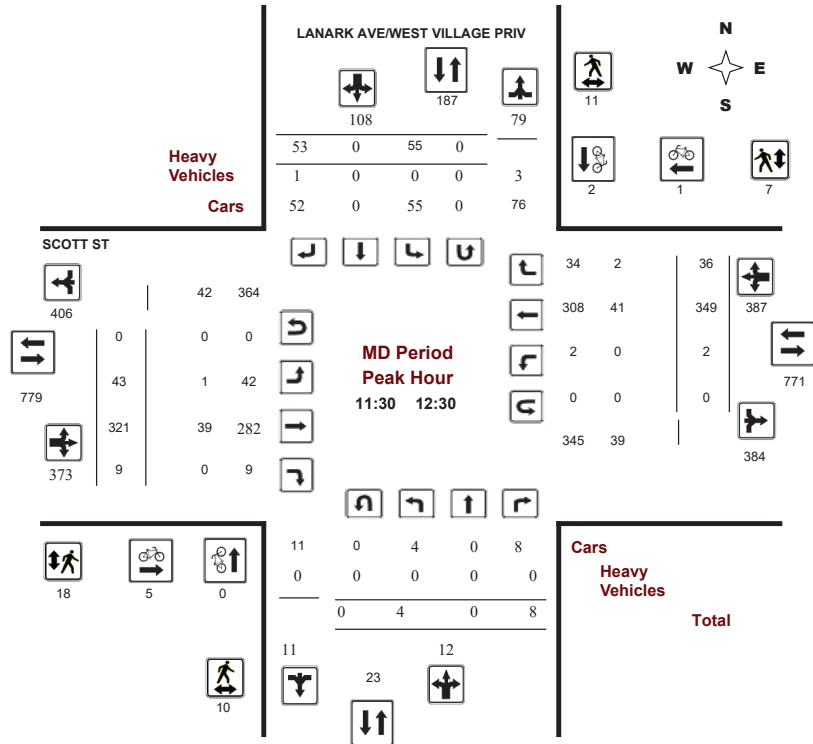
#### LANARK AVE/WEST VILLAGE PRIV @ SCOTT ST

Survey Date: Thursday, November 30, 2023

Start Time: 07:00

WO No: 41268

Device: Miovision



## Transportation Services - Traffic Services

### Turning Movement Count - Peak Hour Diagram

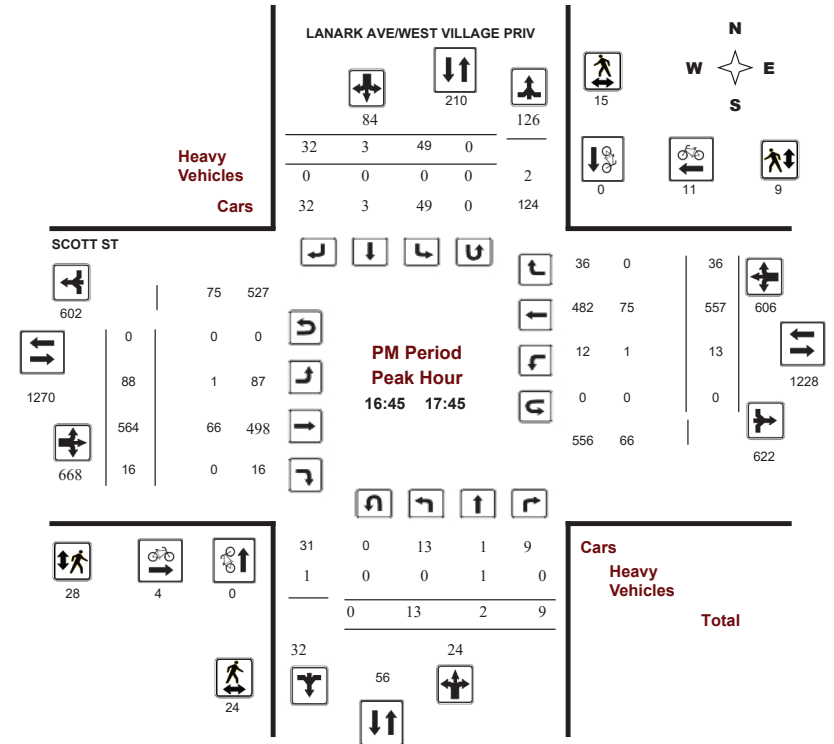
#### LANARK AVE/WEST VILLAGE PRIV @ SCOTT ST

Survey Date: Thursday, November 30, 2023

Start Time: 07:00

WO No: 41268

Device: Miovision





## Transportation Services - Traffic Services

### Turning Movement Count - Study Results

#### LANARK AVE/WEST VILLAGE PRIV @ SCOTT ST

**Survey Date:** Thursday, November 30, 2023

**WO No:** 41268

**Start Time:** 07:00

**Device:** Miovision

### Full Study Summary (8 HR Standard)

**Survey Date:** Thursday, November 30, 2023

**Total Observed U-Turns**

**AADT Factor**

Northbound: 0 Southbound: 0

Eastbound: 1 Westbound: 1

| LANARK AVE/WEST VILLAGE PRIV  |     |    |     |        |            |    |     |        |         | SCOTT ST  |      |     |        |     |           |     |        |         |             |
|---|-----|----|-----|--------|------------|----|-----|--------|---------|-----------|------|-----|--------|-----|-----------|-----|--------|---------|-------------|
| Northbound  |     |    |     |        | Southbound |    |     |        |         | Eastbound |      |     |        |     | Westbound |     |        |         |             |
| Period  | LT  | ST | RT  | NB TOT | LT         | ST | RT  | SB TOT | STR TOT | LT        | ST   | RT  | EB TOT | LT  | ST        | RT  | WB TOT | STR TOT | Grand Total |
| 07:00 08:00   | 11  | 0  | 10  | 21     | 50         | 0  | 71  | 121    | 142     | 17        | 283  | 1   | 301    | 5   | 249       | 12  | 266    | 567     | 709         |
| 08:00 09:00   | 7   | 1  | 19  | 27     | 57         | 0  | 64  | 121    | 148     | 30        | 414  | 6   | 450    | 6   | 307       | 38  | 351    | 801     | 949         |
| 09:00 10:00   | 12  | 0  | 8   | 20     | 40         | 0  | 46  | 86     | 106     | 27        | 296  | 5   | 328    | 9   | 297       | 19  | 325    | 653     | 759         |
| 11:30 12:30   | 4   | 0  | 8   | 12     | 55         | 0  | 53  | 108    | 120     | 43        | 321  | 9   | 373    | 2   | 349       | 36  | 387    | 760     | 880         |
| 12:30 13:30   | 4   | 1  | 4   | 9      | 36         | 1  | 47  | 84     | 93      | 56        | 329  | 9   | 394    | 6   | 292       | 37  | 335    | 729     | 822         |
| 15:00 16:00   | 9   | 7  | 18  | 34     | 62         | 2  | 46  | 110    | 144     | 82        | 517  | 11  | 610    | 12  | 476       | 36  | 524    | 1134    | 1278        |
| 16:00 17:00   | 11  | 2  | 11  | 24     | 49         | 3  | 35  | 87     | 111     | 90        | 478  | 13  | 581    | 13  | 540       | 30  | 583    | 1164    | 1275        |
| 17:00 18:00   | 18  | 1  | 6   | 25     | 39         | 2  | 40  | 81     | 106     | 86        | 538  | 21  | 645    | 10  | 525       | 38  | 573    | 1218    | 1324        |
| Sub Total   | 76  | 12 | 84  | 172    | 388        | 8  | 402 | 798    | 970     | 431       | 3176 | 75  | 3682   | 63  | 3035      | 246 | 3344   | 7026    | 7996        |
| U Turns   | 0   |    |     |        | 0          |    |     |        | 0       | 1         |      |     |        | 1   |           |     |        | 2       | 2           |
| Total   | 76  | 12 | 84  | 172    | 388        | 8  | 402 | 798    | 970     | 431       | 3176 | 75  | 3683   | 63  | 3035      | 246 | 3345   | 7028    | 7998        |
| EQ 12Hr   | 106 | 17 | 117 | 239    | 539        | 11 | 559 | 1109   | 1348    | 599       | 4415 | 104 | 5119   | 88  | 4219      | 342 | 4650   | 9769    | 11117       |
| Note: These values are calculated by multiplying the totals by the appropriate expansion factor.                |     |    |     |        |            |    |     |        |         | 1.39      |      |     |        |     |           |     |        |         |             |
| AVG 12Hr  | 95  | 15 | 105 | 215    | 485        | 13 | 659 | 998    | 1213    | 539       | 3974 | 94  | 4607   | 79  | 3797      | 308 | 4185   | 8792    | 10005       |
| Note: These volumes are calculated by multiplying the Equivalent 12 hr. totals by the AADT factor.              |     |    |     |        |            |    |     |        |         | .90       |      |     |        |     |           |     |        |         |             |
| AVG 24Hr  | 124 | 20 | 138 | 282    | 635        | 17 | 863 | 1307   | 1589    | 706       | 5206 | 123 | 6035   | 103 | 4974      | 403 | 5482   | 11518   | 13107       |
| Note: These volumes are calculated by multiplying the Average Daily 12 hr. totals by 12 to 24 expansion factor. |     |    |     |        |            |    |     |        |         | 1.31      |      |     |        |     |           |     |        |         |             |
| Note: U-Turns provided for approach totals. Refer to 'U-Turn' Report for specific breakdown.                    |     |    |     |        |            |    |     |        |         |           |      |     |        |     |           |     |        |         |             |



## Transportation Services - Traffic Services

### Turning Movement Count - Study Results

#### LANARK AVE/WEST VILLAGE PRIV @ SCOTT ST

**Survey Date:** Thursday, November 30, 2023

**WO No:** 41268

**Start Time:** 07:00

**Device:** Miovision

### Full Study 15 Minute Increments

| LANARK AVE/WEST VILLAGE PRIV |    |    |    |       |            |    |     |       |         | SCOTT ST  |      |    |       |    |           |     |       |         |             |
|------------------------------|----|----|----|-------|------------|----|-----|-------|---------|-----------|------|----|-------|----|-----------|-----|-------|---------|-------------|
| Northbound                   |    |    |    |       | Southbound |    |     |       |         | Eastbound |      |    |       |    | Westbound |     |       |         |             |
| Time Period                  | LT | ST | RT | N TOT | LT         | ST | RT  | S TOT | STR TOT | LT        | ST   | RT | E TOT | LT | ST        | RT  | W TOT | STR TOT | Grand Total |
| 07:00 07:15                  | 2  | 0  | 0  | 2     | 9          | 0  | 8   | 17    | 19      | 4         | 66   | 0  | 70    | 0  | 50        | 1   | 51    | 121     | 140         |
| 07:15 07:30                  | 1  | 0  | 3  | 4     | 11         | 0  | 20  | 31    | 35      | 4         | 64   | 1  | 69    | 1  | 49        | 2   | 52    | 121     | 156         |
| 07:30 07:45                  | 5  | 0  | 4  | 9     | 16         | 0  | 16  | 32    | 41      | 5         | 70   | 0  | 75    | 1  | 69        | 7   | 77    | 152     | 193         |
| 07:45 08:00                  | 3  | 0  | 3  | 6     | 14         | 0  | 27  | 41    | 47      | 4         | 83   | 0  | 87    | 3  | 81        | 2   | 86    | 173     | 220         |
| 08:00 08:15                  | 3  | 0  | 5  | 8     | 10         | 0  | 14  | 24    | 32      | 7         | 111  | 1  | 119   | 0  | 68        | 12  | 80    | 199     | 231         |
| 08:15 08:30                  | 0  | 1  | 4  | 5     | 16         | 0  | 17  | 33    | 38      | 9         | 117  | 3  | 129   | 4  | 68        | 8   | 80    | 209     | 247         |
| 08:30 08:45                  | 1  | 0  | 4  | 5     | 9          | 0  | 10  | 19    | 24      | 7         | 102  | 2  | 111   | 0  | 80        | 12  | 92    | 203     | 227         |
| 08:45 09:00                  | 3  | 0  | 6  | 9     | 22         | 0  | 23  | 45    | 54      | 7         | 84   | 0  | 91    | 2  | 91        | 6   | 99    | 190     | 244         |
| 09:00 09:15                  | 1  | 0  | 1  | 2     | 14         | 0  | 12  | 26    | 28      | 12        | 104  | 2  | 118   | 5  | 72        | 7   | 84    | 202     | 230         |
| 09:15 09:30                  | 3  | 0  | 3  | 6     | 9          | 0  | 12  | 21    | 27      | 10        | 74   | 2  | 86    | 2  | 85        | 7   | 94    | 180     | 207         |
| 09:30 09:45                  | 5  | 0  | 0  | 5     | 6          | 0  | 14  | 20    | 25      | 4         | 63   | 1  | 68    | 0  | 72        | 2   | 74    | 142     | 167         |
| 09:45 10:00                  | 3  | 0  | 4  | 7     | 11         | 0  | 8   | 19    | 26      | 1         | 55   | 0  | 56    | 2  | 68        | 3   | 73    | 129     | 155         |
| 11:30 11:45                  | 2  | 0  | 2  | 4     | 14         | 0  | 11  | 25    | 29      | 9         | 85   | 4  | 98    | 0  | 90        | 10  | 100   | 198     | 227         |
| 11:45 12:00                  | 1  | 0  | 3  | 4     | 13         | 0  | 12  | 25    | 29      | 10        | 80   | 1  | 91    | 0  | 105       | 8   | 113   | 204     | 233         |
| 12:00 12:15                  | 0  | 0  | 2  | 2     | 16         | 0  | 14  | 30    | 32      | 11        | 70   | 2  | 83    | 2  | 76        | 8   | 86    | 169     | 201         |
| 12:15 12:30                  | 1  | 0  | 1  | 2     | 12         | 0  | 16  | 28    | 30      | 13        | 86   | 2  | 101   | 0  | 78        | 10  | 88    | 189     | 219         |
| 12:30 12:45                  | 1  | 1  | 1  | 3     | 9          | 1  | 12  | 22    | 25      | 15        | 82   | 2  | 99    | 3  | 82        | 7   | 92    | 191     | 216         |
| 12:45 13:00                  | 1  | 0  | 0  | 1     | 13         | 0  | 10  | 23    | 24      | 21        | 84   | 1  | 106   | 0  | 75        | 15  | 90    | 196     | 220         |
| 13:00 13:15                  | 1  | 0  | 2  | 3     | 10         | 0  | 12  | 22    | 25      | 11        | 83   | 2  | 96    | 2  | 75        | 9   | 86    | 182     | 207         |
| 13:15 13:30                  | 1  | 0  | 1  | 2     | 4          | 0  | 13  | 17    | 19      | 9         | 80   | 4  | 93    | 1  | 60        | 6   | 67    | 160     | 179         |
| 15:00 15:15                  | 3  | 2  | 3  | 8     | 12         | 1  | 8   | 21    | 29      | 19        | 118  | 1  | 138   | 4  | 104       | 9   | 117   | 255     | 284         |
| 15:15 15:30                  | 1  | 3  | 5  | 9     | 19         | 1  | 17  | 37    | 46      | 24        | 121  | 3  | 148   | 3  | 123       | 14  | 141   | 289     | 335         |
| 15:30 15:45                  | 4  | 2  | 5  | 11    | 17         | 0  | 11  | 28    | 39      | 17        | 145  | 3  | 165   | 2  | 115       | 5   | 122   | 287     | 326         |
| 15:45 16:00                  | 1  | 0  | 5  | 6     | 14         | 0  | 10  | 24    | 30      | 22        | 133  | 4  | 159   | 3  | 134       | 8   | 145   | 304     | 334         |
| 16:00 16:15                  | 2  | 0  | 0  | 2     | 10         | 0  | 15  | 25    | 27      | 19        | 113  | 4  | 136   | 3  | 133       | 8   | 144   | 280     | 307         |
| 16:15 16:30                  | 4  | 0  | 3  | 7     | 12         | 0  | 7   | 19    | 26      | 22        | 125  | 4  | 152   | 1  | 128       | 9   | 138   | 290     | 316         |
| 16:30 16:45                  | 4  | 0  | 3  | 7     | 12         | 2  | 9   | 23    | 30      | 29        | 103  | 2  | 134   | 4  | 131       | 5   | 140   | 274     | 304         |
| 16:45 17:00                  | 1  | 2  | 5  | 8     | 15         | 1  | 4   | 20    | 28      | 20        | 137  | 3  | 160   | 5  | 148       | 8   | 161   | 321     | 349         |
| 17:00 17:15                  | 3  | 0  | 2  | 5     | 9          | 0  | 11  | 20    | 25      | 20        | 148  | 1  | 169   | 3  | 153       | 4   | 160   | 329     | 354         |
| 17:15 17:30                  | 6  | 0  | 2  | 8     | 12         | 2  | 10  | 24    | 32      | 26        | 148  | 6  | 180   | 2  | 136       | 16  | 154   | 334     | 366         |
| 17:30 17:45                  | 3  | 0  | 0  | 3     | 13         | 0  | 7   | 20    | 23      | 22        | 131  | 6  | 159   | 3  | 120       | 8   | 131   | 290     | 313         |
| 17:45 18:00                  | 6  | 1  | 2  | 9     | 5          | 0  | 12  | 17    | 26      | 18        | 111  | 8  | 137   | 2  | 116       | 10  | 128   | 265     | 291         |
| Total:                       | 76 | 12 | 84 | 172   | 388        | 8  | 402 | 798   | 970     | 431       | 3176 | 75 | 3683  | 63 | 3035      | 246 | 3345  | 7028    | 7998        |

Note: U-Turns are included in Totals.



## Transportation Services - Traffic Services

### Turning Movement Count - Study Results

#### LANARK AVE/WEST VILLAGE PRIV @ SCOTT ST

**Survey Date:** Thursday, November 30, 2023

**WO No:** 41268

**Start Time:** 07:00

**Device:** Miovision

#### Full Study Cyclist Volume

| LANARK AVE/WEST VILLAGE PRIV |            |            |              | SCOTT ST  |           |              |             |
|------------------------------|------------|------------|--------------|-----------|-----------|--------------|-------------|
| Time Period                  | Northbound | Southbound | Street Total | Eastbound | Westbound | Street Total | Grand Total |
| 07:00 07:15                  | 0          | 0          | 0            | 1         | 0         | 1            | 1           |
| 07:15 07:30                  | 0          | 0          | 0            | 2         | 0         | 2            | 2           |
| 07:30 07:45                  | 0          | 0          | 0            | 1         | 2         | 3            | 3           |
| 07:45 08:00                  | 0          | 2          | 2            | 3         | 0         | 3            | 5           |
| 08:00 08:15                  | 0          | 0          | 0            | 1         | 1         | 2            | 2           |
| 08:15 08:30                  | 0          | 0          | 0            | 4         | 3         | 7            | 7           |
| 08:30 08:45                  | 0          | 0          | 0            | 7         | 4         | 11           | 11          |
| 08:45 09:00                  | 0          | 1          | 1            | 2         | 1         | 3            | 4           |
| 09:00 09:15                  | 0          | 0          | 0            | 1         | 0         | 1            | 1           |
| 09:15 09:30                  | 0          | 0          | 0            | 0         | 1         | 1            | 1           |
| 09:30 09:45                  | 0          | 0          | 0            | 0         | 0         | 0            | 0           |
| 09:45 10:00                  | 0          | 0          | 0            | 2         | 1         | 3            | 3           |
| 11:30 11:45                  | 0          | 1          | 1            | 2         | 0         | 2            | 3           |
| 11:45 12:00                  | 0          | 1          | 1            | 3         | 0         | 3            | 4           |
| 12:00 12:15                  | 0          | 0          | 0            | 0         | 0         | 0            | 0           |
| 12:15 12:30                  | 0          | 0          | 0            | 0         | 1         | 1            | 1           |
| 12:30 12:45                  | 0          | 1          | 1            | 1         | 2         | 3            | 4           |
| 12:45 13:00                  | 0          | 0          | 0            | 0         | 0         | 0            | 0           |
| 13:00 13:15                  | 1          | 0          | 1            | 1         | 2         | 3            | 4           |
| 13:15 13:30                  | 0          | 0          | 0            | 2         | 0         | 2            | 2           |
| 15:00 15:15                  | 0          | 1          | 1            | 4         | 2         | 6            | 7           |
| 15:15 15:30                  | 3          | 0          | 3            | 1         | 1         | 2            | 5           |
| 15:30 15:45                  | 0          | 1          | 1            | 2         | 2         | 4            | 5           |
| 15:45 16:00                  | 0          | 0          | 0            | 2         | 1         | 3            | 3           |
| 16:00 16:15                  | 0          | 0          | 0            | 0         | 3         | 3            | 3           |
| 16:15 16:30                  | 1          | 2          | 3            | 2         | 4         | 6            | 9           |
| 16:30 16:45                  | 0          | 0          | 0            | 2         | 3         | 5            | 5           |
| 16:45 17:00                  | 0          | 0          | 0            | 3         | 1         | 4            | 4           |
| 17:00 17:15                  | 0          | 0          | 0            | 1         | 4         | 5            | 5           |
| 17:15 17:30                  | 0          | 0          | 0            | 0         | 2         | 2            | 2           |
| 17:30 17:45                  | 0          | 0          | 0            | 0         | 4         | 4            | 4           |
| 17:45 18:00                  | 0          | 1          | 1            | 1         | 4         | 5            | 6           |
| Total                        | 5          | 11         | 16           | 51        | 49        | 100          | 116         |



## Transportation Services - Traffic Services

### Turning Movement Count - Study Results

#### LANARK AVE/WEST VILLAGE PRIV @ SCOTT ST

**Survey Date:** Thursday, November 30, 2023

**WO No:** 41268

**Start Time:** 07:00

**Device:** Miovision

#### Full Study Pedestrian Volume

| LANARK AVE/WEST VILLAGE PRIV |                                  |                                  |       | SCOTT ST                         |                                  |       |             |
|------------------------------|----------------------------------|----------------------------------|-------|----------------------------------|----------------------------------|-------|-------------|
| Time Period                  | NB Approach<br>(E or W Crossing) | SB Approach<br>(E or W Crossing) | Total | EB Approach<br>(N or S Crossing) | WB Approach<br>(N or S Crossing) | Total | Grand Total |
| 07:00 07:15                  | 1                                | 1                                | 2     | 0                                | 0                                | 0     | 2           |
| 07:15 07:30                  | 2                                | 4                                | 6     | 2                                | 1                                | 3     | 9           |
| 07:30 07:45                  | 4                                | 6                                | 10    | 5                                | 0                                | 5     | 15          |
| 07:45 08:00                  | 6                                | 4                                | 10    | 7                                | 6                                | 13    | 23          |
| 08:00 08:15                  | 6                                | 2                                | 8     | 1                                | 6                                | 7     | 15          |
| 08:15 08:30                  | 4                                | 3                                | 7     | 9                                | 2                                | 11    | 18          |
| 08:30 08:45                  | 4                                | 3                                | 7     | 2                                | 1                                | 3     | 10          |
| 08:45 09:00                  | 7                                | 0                                | 7     | 7                                | 0                                | 7     | 14          |
| 09:00 09:15                  | 2                                | 2                                | 4     | 1                                | 1                                | 2     | 6           |
| 09:15 09:30                  | 5                                | 0                                | 5     | 3                                | 3                                | 6     | 11          |
| 09:30 09:45                  | 4                                | 1                                | 5     | 4                                | 2                                | 6     | 11          |
| 09:45 10:00                  | 2                                | 1                                | 3     | 5                                | 0                                | 5     | 8           |
| 11:30 11:45                  | 1                                | 3                                | 4     | 4                                | 3                                | 7     | 11          |
| 11:45 12:00                  | 0                                | 3                                | 3     | 6                                | 0                                | 6     | 9           |
| 12:00 12:15                  | 4                                | 4                                | 8     | 3                                | 1                                | 4     | 12          |
| 12:15 12:30                  | 5                                | 1                                | 6     | 5                                | 3                                | 8     | 14          |
| 12:30 12:45                  | 2                                | 4                                | 6     | 6                                | 3                                | 9     | 15          |
| 12:45 13:00                  | 4                                | 5                                | 9     | 9                                | 3                                | 12    | 21          |
| 13:00 13:15                  | 3                                | 5                                | 8     | 7                                | 0                                | 7     | 15          |
| 13:15 13:30                  | 5                                | 5                                | 10    | 13                               | 1                                | 14    | 24          |
| 15:00 15:15                  | 5                                | 2                                | 7     | 5                                | 7                                | 12    | 19          |
| 15:15 15:30                  | 3                                | 3                                | 6     | 5                                | 0                                | 5     | 11          |
| 15:30 15:45                  | 6                                | 4                                | 10    | 10                               | 8                                | 18    | 28          |
| 15:45 16:00                  | 5                                | 4                                | 9     | 7                                | 6                                | 13    | 22          |
| 16:00 16:15                  | 3                                | 8                                | 11    | 5                                | 6                                | 11    | 22          |
| 16:15 16:30                  | 10                               | 3                                | 13    | 8                                | 3                                | 11    | 24          |
| 16:30 16:45                  | 3                                | 10                               | 13    | 11                               | 3                                | 14    | 27          |
| 16:45 17:00                  | 6                                | 4                                | 10    | 14                               | 1                                | 15    | 25          |
| 17:00 17:15                  | 3                                | 3                                | 6     | 2                                | 2                                | 4     | 10          |
| 17:15 17:30                  | 11                               | 5                                | 16    | 7                                | 4                                | 11    | 27          |
| 17:30 17:45                  | 4                                | 3                                | 7     | 5                                | 2                                | 7     | 14          |
| 17:45 18:00                  | 5                                | 6                                | 11    | 4                                | 1                                | 5     | 16          |
| Total                        | 135                              | 112                              | 247   | 182                              | 79                               | 261   | 508         |



## Transportation Services - Traffic Services

### Turning Movement Count - Study Results

#### LANARK AVE/WEST VILLAGE PRIV @ SCOTT ST

**Survey Date:** Thursday, November 30, 2023

**WO No:** 41268

**Start Time:** 07:00

**Device:** Miovision

### Full Study Heavy Vehicles

| LANARK AVE/WEST VILLAGE PRIV |    |    |    |       |            |    |    |       |         |           |     | SCOTT ST |       |           |     |    |       |         |             |    |  |  |  |
|------------------------------|----|----|----|-------|------------|----|----|-------|---------|-----------|-----|----------|-------|-----------|-----|----|-------|---------|-------------|----|--|--|--|
| Northbound                   |    |    |    |       | Southbound |    |    |       |         | Eastbound |     |          |       | Westbound |     |    |       |         |             |    |  |  |  |
| Time Period                  | LT | ST | RT | N TOT | LT         | ST | RT | S TOT | STR TOT | LT        | ST  | RT       | E TOT | LT        | ST  | RT | W TOT | STR TOT | Grand Total |    |  |  |  |
| 07:00 07:15                  | 0  | 0  | 0  | 0     | 0          | 0  | 0  | 0     | 1       | 1         | 1   | 26       | 0     | 44        | 0   | 17 | 0     | 43      | 87          | 44 |  |  |  |
| 07:15 07:30                  | 0  | 0  | 0  | 0     | 0          | 0  | 0  | 0     | 0       | 0         | 0   | 22       | 0     | 34        | 0   | 12 | 0     | 34      | 68          | 34 |  |  |  |
| 07:30 07:45                  | 0  | 0  | 0  | 0     | 0          | 0  | 0  | 0     | 0       | 0         | 0   | 20       | 0     | 38        | 0   | 18 | 0     | 38      | 76          | 38 |  |  |  |
| 07:45 08:00                  | 0  | 0  | 0  | 0     | 0          | 0  | 0  | 0     | 0       | 0         | 0   | 17       | 0     | 37        | 0   | 20 | 0     | 37      | 74          | 37 |  |  |  |
| 08:00 08:15                  | 0  | 0  | 0  | 0     | 0          | 0  | 0  | 0     | 1       | 1         | 0   | 19       | 0     | 32        | 0   | 13 | 1     | 33      | 65          | 33 |  |  |  |
| 08:15 08:30                  | 0  | 0  | 0  | 0     | 1          | 0  | 1  | 2     | 2       | 0         | 28  | 0        | 46    | 0         | 17  | 0  | 46    | 92      | 47          |    |  |  |  |
| 08:30 08:45                  | 0  | 0  | 0  | 0     | 0          | 0  | 0  | 0     | 1       | 1         | 1   | 19       | 0     | 30        | 0   | 10 | 0     | 29      | 59          | 30 |  |  |  |
| 08:45 09:00                  | 0  | 0  | 0  | 0     | 0          | 0  | 0  | 0     | 0       | 0         | 0   | 23       | 0     | 37        | 0   | 14 | 0     | 37      | 74          | 37 |  |  |  |
| 09:00 09:15                  | 0  | 0  | 0  | 0     | 0          | 0  | 0  | 1     | 1       | 1         | 0   | 23       | 0     | 34        | 0   | 10 | 0     | 33      | 67          | 34 |  |  |  |
| 09:15 09:30                  | 0  | 0  | 0  | 0     | 0          | 0  | 0  | 0     | 0       | 0         | 0   | 13       | 0     | 28        | 0   | 15 | 0     | 28      | 56          | 28 |  |  |  |
| 09:30 09:45                  | 0  | 0  | 0  | 0     | 0          | 0  | 0  | 0     | 0       | 0         | 0   | 11       | 0     | 26        | 0   | 15 | 0     | 26      | 52          | 26 |  |  |  |
| 09:45 10:00                  | 0  | 0  | 0  | 0     | 0          | 0  | 0  | 0     | 0       | 0         | 0   | 10       | 0     | 22        | 0   | 12 | 0     | 22      | 44          | 22 |  |  |  |
| 11:30 11:45                  | 0  | 0  | 0  | 0     | 0          | 0  | 0  | 0     | 1       | 1         | 0   | 11       | 0     | 21        | 0   | 10 | 1     | 22      | 43          | 22 |  |  |  |
| 11:45 12:00                  | 0  | 0  | 0  | 0     | 0          | 0  | 0  | 0     | 0       | 0         | 0   | 9        | 0     | 25        | 0   | 16 | 0     | 25      | 50          | 25 |  |  |  |
| 12:00 12:15                  | 0  | 0  | 0  | 0     | 0          | 0  | 0  | 0     | 1       | 1         | 1   | 9        | 0     | 18        | 0   | 8  | 0     | 17      | 35          | 18 |  |  |  |
| 12:15 12:30                  | 0  | 0  | 0  | 0     | 0          | 0  | 1  | 2     | 2       | 0         | 10  | 0        | 18    | 0         | 7   | 1  | 18    | 36      | 19          |    |  |  |  |
| 12:30 12:45                  | 0  | 0  | 1  | 2     | 0          | 1  | 1  | 2     | 4       | 0         | 7   | 0        | 17    | 0         | 9   | 0  | 17    | 34      | 19          |    |  |  |  |
| 12:45 13:00                  | 0  | 0  | 0  | 0     | 0          | 0  | 1  | 1     | 1       | 0         | 11  | 0        | 22    | 0         | 10  | 0  | 21    | 43      | 22          |    |  |  |  |
| 13:00 13:15                  | 0  | 0  | 0  | 0     | 0          | 0  | 1  | 3     | 3       | 1         | 8   | 0        | 22    | 0         | 12  | 1  | 21    | 43      | 23          |    |  |  |  |
| 13:15 13:30                  | 0  | 0  | 0  | 0     | 0          | 0  | 0  | 0     | 0       | 0         | 0   | 14       | 0     | 19        | 0   | 5  | 0     | 19      | 38          | 19 |  |  |  |
| 15:00 15:15                  | 0  | 0  | 0  | 2     | 1          | 0  | 0  | 2     | 4       | 1         | 4   | 1        | 23    | 1         | 17  | 0  | 23    | 46      | 25          |    |  |  |  |
| 15:15 15:30                  | 0  | 1  | 0  | 1     | 1          | 0  | 0  | 2     | 3       | 0         | 2   | 0        | 17    | 0         | 15  | 0  | 18    | 35      | 19          |    |  |  |  |
| 15:30 15:45                  | 0  | 0  | 0  | 0     | 0          | 0  | 0  | 0     | 0       | 0         | 13  | 0        | 39    | 0         | 26  | 0  | 39    | 78      | 39          |    |  |  |  |
| 15:45 16:00                  | 0  | 0  | 0  | 0     | 0          | 0  | 0  | 0     | 0       | 0         | 17  | 0        | 39    | 0         | 22  | 0  | 39    | 78      | 39          |    |  |  |  |
| 16:00 16:15                  | 0  | 0  | 0  | 0     | 0          | 0  | 1  | 2     | 2       | 0         | 17  | 0        | 40    | 0         | 22  | 1  | 40    | 80      | 41          |    |  |  |  |
| 16:15 16:30                  | 1  | 0  | 0  | 2     | 0          | 0  | 0  | 0     | 2       | 0         | 14  | 1        | 31    | 0         | 15  | 0  | 29    | 60      | 31          |    |  |  |  |
| 16:30 16:45                  | 0  | 0  | 0  | 0     | 0          | 0  | 1  | 1     | 1       | 0         | 10  | 0        | 37    | 0         | 26  | 0  | 36    | 73      | 37          |    |  |  |  |
| 16:45 17:00                  | 0  | 1  | 0  | 1     | 0          | 0  | 0  | 1     | 2       | 0         | 17  | 0        | 33    | 0         | 16  | 0  | 33    | 66      | 34          |    |  |  |  |
| 17:00 17:15                  | 0  | 0  | 0  | 0     | 0          | 0  | 0  | 0     | 0       | 0         | 18  | 0        | 39    | 0         | 21  | 0  | 39    | 78      | 39          |    |  |  |  |
| 17:15 17:30                  | 0  | 0  | 0  | 0     | 0          | 0  | 0  | 1     | 1       | 1         | 15  | 0        | 38    | 0         | 22  | 0  | 37    | 75      | 38          |    |  |  |  |
| 17:30 17:45                  | 0  | 0  | 0  | 1     | 0          | 0  | 0  | 0     | 1       | 0         | 16  | 0        | 32    | 1         | 16  | 0  | 33    | 65      | 33          |    |  |  |  |
| 17:45 18:00                  | 0  | 0  | 1  | 2     | 0          | 0  | 0  | 1     | 3       | 0         | 13  | 1        | 32    | 0         | 18  | 1  | 33    | 65      | 34          |    |  |  |  |
| Total: None                  | 1  | 2  | 2  | 11    | 3          | 1  | 8  | 26    | 37      | 6         | 466 | 3        | 970   | 2         | 486 | 6  | 965   | 1935    | 986         |    |  |  |  |



## Transportation Services - Traffic Services

### Turning Movement Count - Study Results

#### LANARK AVE/WEST VILLAGE PRIV @ SCOTT ST

**Survey Date:** Thursday, November 30, 2023

**WO No:** 41268

**Start Time:** 07:00

**Device:** Miovision

### Full Study 15 Minute U-Turn Total

| LANARK AVE/WEST VILLAGE PRIV |       |                            |                            |                           |                           | SCOTT ST |  |  |  |  |  |
|------------------------------|-------|----------------------------|----------------------------|---------------------------|---------------------------|----------|--|--|--|--|--|
| Time Period                  |       | Northbound<br>U-Turn Total | Southbound<br>U-Turn Total | Eastbound<br>U-Turn Total | Westbound<br>U-Turn Total | Total    |  |  |  |  |  |
| 07:00                        | 07:15 | 0                          | 0                          | 0                         | 0                         | 0        |  |  |  |  |  |
| 07:15                        | 07:30 | 0                          | 0                          | 0                         | 0                         | 0        |  |  |  |  |  |
| 07:30                        | 07:45 | 0                          | 0                          | 0                         | 0                         | 0        |  |  |  |  |  |
| 07:45                        | 08:00 | 0                          | 0                          | 0                         | 0                         | 0        |  |  |  |  |  |
| 08:00                        | 08:15 | 0                          | 0                          | 0                         | 0                         | 0        |  |  |  |  |  |
| 08:15                        | 08:30 | 0                          | 0                          | 0                         | 0                         | 0        |  |  |  |  |  |
| 08:30                        | 08:45 | 0                          | 0                          | 0                         | 0                         | 0        |  |  |  |  |  |
| 08:45                        | 09:00 | 0                          | 0                          | 0                         | 0                         | 0        |  |  |  |  |  |
| 09:00                        | 09:15 | 0                          | 0                          | 0                         | 0                         | 0        |  |  |  |  |  |
| 09:15                        | 09:30 | 0                          | 0                          | 0                         | 0                         | 0        |  |  |  |  |  |
| 09:30                        | 09:45 | 0                          | 0                          | 0                         | 0                         | 0        |  |  |  |  |  |
| 09:45                        | 10:00 | 0                          | 0                          | 0                         | 0                         | 0        |  |  |  |  |  |
| 11:30                        | 11:45 | 0                          | 0                          | 0                         | 0                         | 0        |  |  |  |  |  |
| 11:45                        | 12:00 | 0                          | 0                          | 0                         | 0                         | 0        |  |  |  |  |  |
| 12:00                        | 12:15 | 0                          | 0                          | 0                         | 0                         | 0        |  |  |  |  |  |
| 12:15                        | 12:30 | 0                          | 0                          | 0                         | 0                         | 0        |  |  |  |  |  |
| 12:30                        | 12:45 | 0                          | 0                          | 0                         | 0                         | 0        |  |  |  |  |  |
| 12:45                        | 13:00 | 0                          | 0                          | 0                         | 0                         | 0        |  |  |  |  |  |
| 13:00                        | 13:15 | 0                          | 0                          | 0                         | 0                         | 0        |  |  |  |  |  |
| 13:15                        | 13:30 | 0                          | 0                          | 0                         | 0                         | 0        |  |  |  |  |  |
| 15:00                        | 15:15 | 0                          | 0                          | 0                         | 0                         | 0        |  |  |  |  |  |
| 15:15                        | 15:30 | 0                          | 0                          | 0                         | 1                         | 1        |  |  |  |  |  |
| 15:30                        | 15:45 | 0                          | 0                          | 0                         | 0                         | 0        |  |  |  |  |  |
| 15:45                        | 16:00 | 0                          | 0                          | 0                         | 0                         | 0        |  |  |  |  |  |
| 16:00                        | 16:15 | 0                          | 0                          | 0                         | 0                         | 0        |  |  |  |  |  |
| 16:15                        | 16:30 | 0                          | 0                          | 1                         | 0                         | 1        |  |  |  |  |  |
| 16:30                        | 16:45 | 0                          | 0                          | 0                         | 0                         | 0        |  |  |  |  |  |
| 16:45                        | 17:00 | 0                          | 0                          | 0                         | 0                         | 0        |  |  |  |  |  |
| 17:00                        | 17:15 | 0                          | 0                          | 0                         | 0                         | 0        |  |  |  |  |  |
| 17:15                        | 17:30 | 0                          | 0                          | 0                         | 0                         | 0        |  |  |  |  |  |
| 17:30                        | 17:45 | 0                          | 0                          | 0                         | 0                         | 0        |  |  |  |  |  |
| 17:45                        | 18:00 | 0                          | 0                          | 0                         | 0                         | 0        |  |  |  |  |  |
| Total                        |       | 0                          | 0                          | 1                         | 1                         | 2        |  |  |  |  |  |





## Transportation Services - Traffic Services

### Turning Movement Count - Study Results

#### CHURCHILL AVE @ LANARK AVE

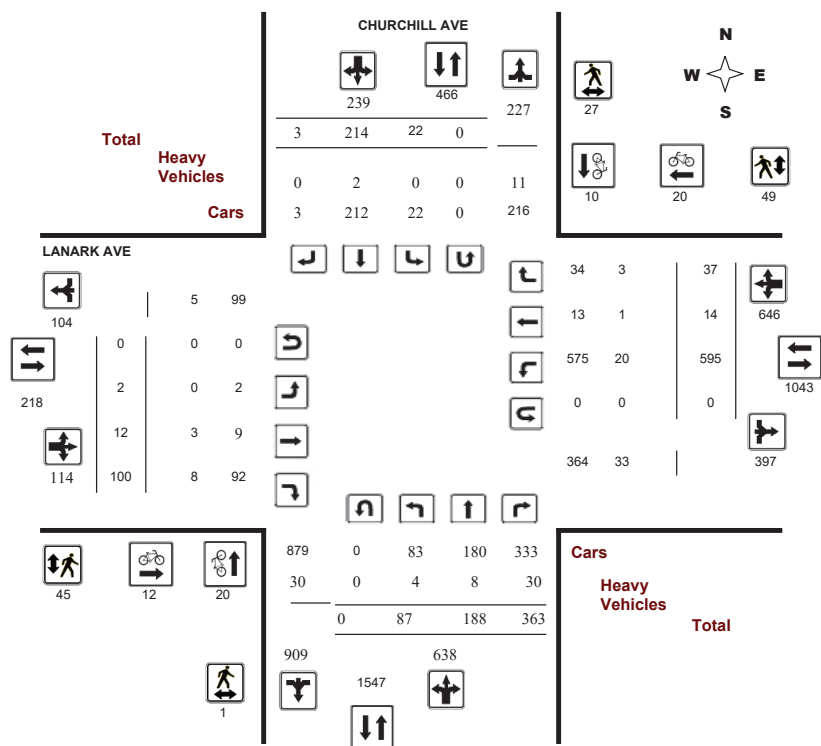
Survey Date: Thursday, October 24, 2019

Start Time: 07:00

WO No: 38900

Device: Miovision

#### Full Study Diagram



## Transportation Services - Traffic Services

### Turning Movement Count - Study Results

#### CHURCHILL AVE @ LANARK AVE

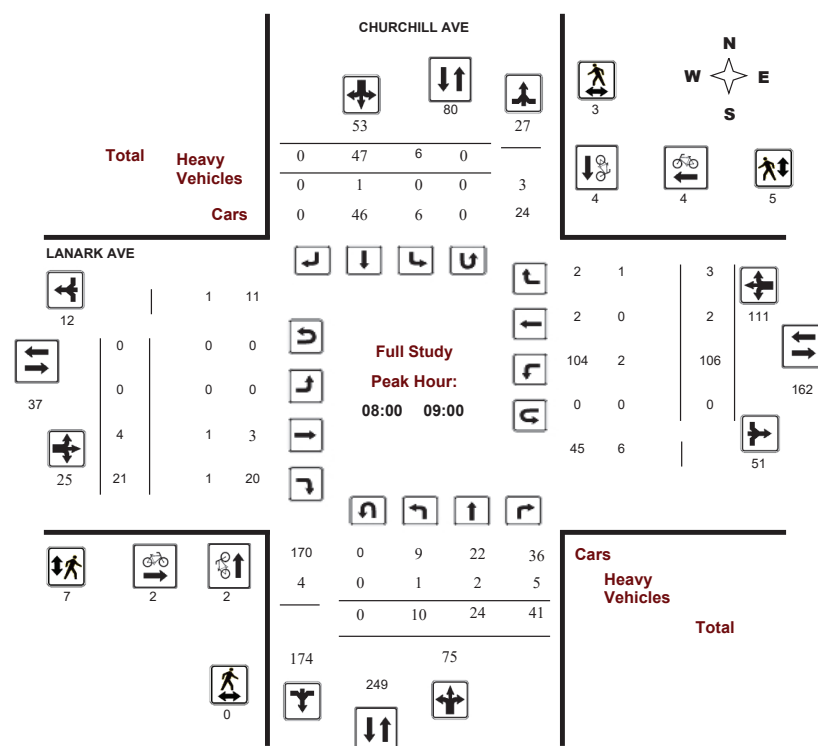
Survey Date: Thursday, October 24, 2019

Start Time: 07:00

WO No: 38900

Device: Miovision

#### Full Study Peak Hour Diagram





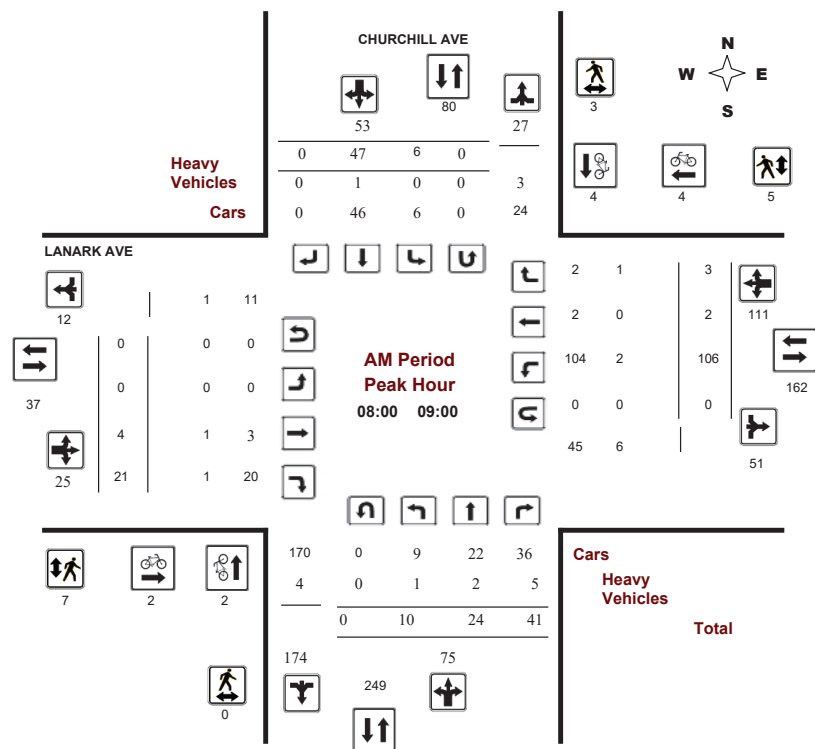
Transportation Services - Traffic Services  
Turning Movement Count - Peak Hour Diagram  
CHURCHILL AVE @ LANARK AVE

Survey Date: Thursday, October 24, 2019

Start Time: 07:00

WO No: 38900

Device: Miovision



Comments



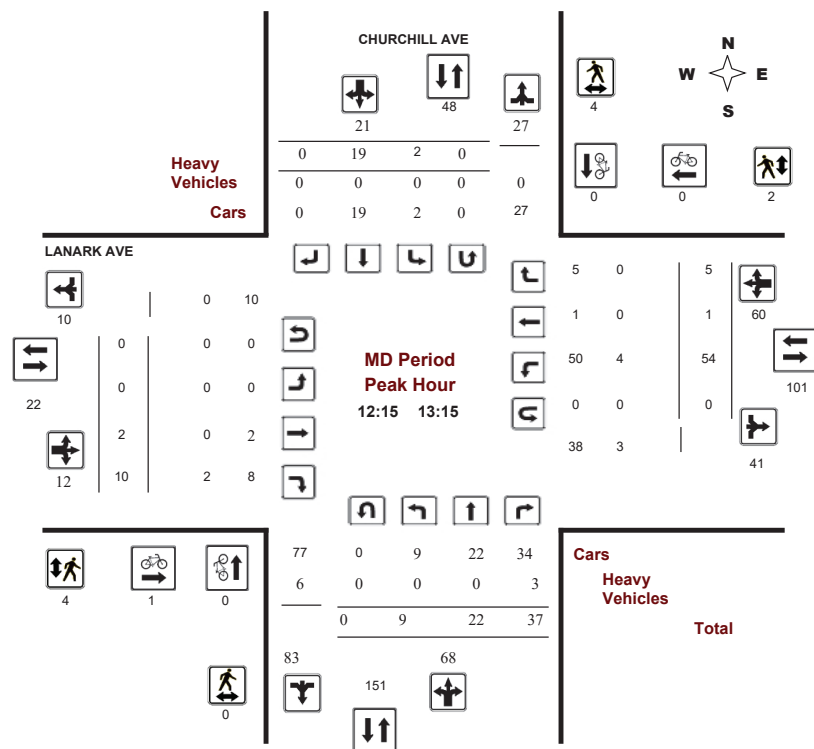
Transportation Services - Traffic Services  
Turning Movement Count - Peak Hour Diagram  
CHURCHILL AVE @ LANARK AVE

Survey Date: Thursday, October 24, 2019

Start Time: 07:00

WO No: 38900

Device: Miovision



Comments



## Transportation Services - Traffic Services

### Turning Movement Count - Peak Hour Diagram

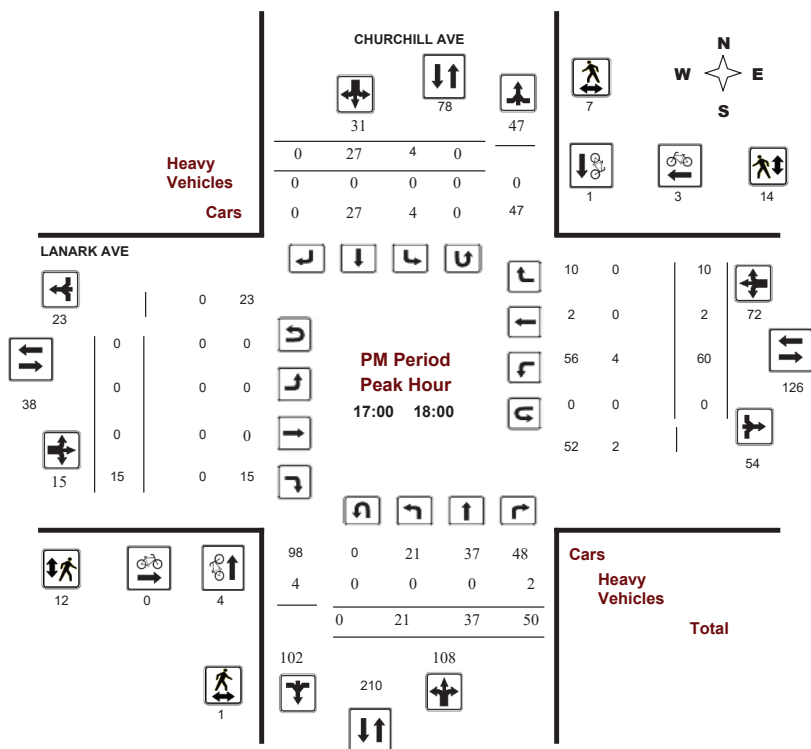
#### CHURCHILL AVE @ LANARK AVE

**Survey Date:** Thursday, October 24, 2019

**Start Time:** 07:00

**WO No:** 38900

**Device:** Miovision



Comments



## Transportation Services - Traffic Services

### Turning Movement Count - Study Results

#### CHURCHILL AVE @ LANARK AVE

**Survey Date:** Thursday, October 24, 2019

**Start Time:** 07:00

**WO No:** 38900

**Device:** Miovision

### Full Study Summary (8 HR Standard)

**Survey Date:** Thursday, October 24, 2019

**Total Observed U-Turns**

**AADT Factor**

Northbound: 0 Southbound: 0  
Eastbound: 0 Westbound: 0

.90

| CHURCHILL AVE  |            |     |     |        |            |     |    |        |         | LANARK AVE |    |     |        |           |    |    |        |         |             |  |  |
|--|------------|-----|-----|--------|------------|-----|----|--------|---------|------------|----|-----|--------|-----------|----|----|--------|---------|-------------|--|--|
| Period   | Northbound |     |     |        | Southbound |     |    |        | STR TOT | Eastbound  |    |     |        | Westbound |    |    |        | STR TOT | Grand Total |  |  |
|  | LT         | ST  | RT  | NB TOT | LT         | ST  | RT | SB TOT |         | LT         | ST | RT  | EB TOT | LT        | ST | RT | WB TOT |         |             |  |  |
| 07:00-08:00  | 6          | 16  | 42  | 64     | 3          | 24  | 1  | 28     | 92      | 0          | 2  | 10  | 12     | 111       | 0  | 2  | 113    | 125     | 217         |  |  |
| 08:00-09:00  | 10         | 24  | 41  | 75     | 6          | 47  | 0  | 53     | 128     | 0          | 4  | 21  | 25     | 106       | 2  | 3  | 111    | 136     | 264         |  |  |
| 09:00-10:00  | 7          | 21  | 44  | 72     | 4          | 22  | 1  | 27     | 99      | 1          | 1  | 12  | 14     | 100       | 0  | 2  | 102    | 116     | 215         |  |  |
| 11:30-12:30  | 13         | 21  | 29  | 63     | 2          | 19  | 1  | 22     | 85      | 1          | 0  | 7   | 8      | 47        | 3  | 2  | 52     | 60      | 145         |  |  |
| 12:30-13:30  | 6          | 22  | 37  | 65     | 1          | 15  | 0  | 16     | 81      | 0          | 2  | 12  | 14     | 54        | 1  | 7  | 62     | 76      | 157         |  |  |
| 15:00-16:00  | 8          | 20  | 64  | 92     | 1          | 26  | 0  | 27     | 119     | 0          | 3  | 13  | 16     | 62        | 3  | 7  | 72     | 88      | 207         |  |  |
| 16:00-17:00  | 16         | 27  | 56  | 99     | 1          | 34  | 0  | 35     | 134     | 0          | 0  | 10  | 10     | 55        | 3  | 4  | 62     | 72      | 206         |  |  |
| 17:00-18:00  | 21         | 37  | 50  | 108    | 4          | 27  | 0  | 31     | 139     | 0          | 0  | 15  | 15     | 60        | 2  | 10 | 72     | 87      | 226         |  |  |
| Sub Total  | 87         | 188 | 363 | 638    | 22         | 214 | 3  | 239    | 877     | 2          | 12 | 100 | 114    | 595       | 14 | 37 | 646    | 760     | 1637        |  |  |
| U Turns  | 0          |     |     | 0      | 0          |     |    | 0      | 0       | 0          |    |     | 0      | 0         |    |    | 0      | 0       | 0           |  |  |
| Total  | 87         | 188 | 363 | 638    | 22         | 214 | 3  | 239    | 877     | 2          | 12 | 100 | 114    | 595       | 14 | 37 | 646    | 760     | 1637        |  |  |
| EQ 12Hr  | 121        | 261 | 505 | 887    | 31         | 297 | 4  | 332    | 1219    | 3          | 17 | 139 | 159    | 827       | 19 | 51 | 897    | 1056    | 2275        |  |  |
| Note: These values are calculated by multiplying the totals by the appropriate expansion factor.   |            |     |     |        |            |     |    |        |         |            |    |     |        | 1.39      |    |    |        |         |             |  |  |
| AVG 12Hr   | 109        | 235 | 454 | 798    | 28         | 267 | 4  | 299    | 1097    | 3          | 15 | 125 | 143    | 744       | 17 | 46 | 807    | 950     | 2047        |  |  |
| Note: These volumes are calculated by multiplying the Equivalent 12 hr. totals by the AADT factor. |            |     |     |        |            |     |    |        |         |            |    |     |        | .90       |    |    |        |         |             |  |  |
| AVG 24Hr   | 143        | 308 | 595 | 1046   | 37         | 350 | 5  | 392    | 1438    | 4          | 20 | 164 | 188    | 975       | 22 | 60 | 1057   | 1245    | 2683        |  |  |

Note: These volumes are calculated by multiplying the Average Daily 12 hr. totals by 12 to 24 expansion factor.

Note: U-Turns provided for approach totals. Refer to 'U-Turn' Report for specific breakdown.



## Transportation Services - Traffic Services

### Turning Movement Count - Study Results

#### CHURCHILL AVE @ LANARK AVE

**Survey Date:** Thursday, October 24, 2019

**WO No:** 38900

**Start Time:** 07:00

**Device:** Miovision

### Full Study 15 Minute Increments

| CHURCHILL AVE |       |    |     |       |            |    |     |       |         |           | LANARK AVE |    |       |     |           |    |       |         |             |       |  |
|---------------|-------|----|-----|-------|------------|----|-----|-------|---------|-----------|------------|----|-------|-----|-----------|----|-------|---------|-------------|-------|--|
| Northbound    |       |    |     |       | Southbound |    |     |       |         | Eastbound |            |    |       |     | Westbound |    |       |         |             |       |  |
| Time Period   | LT    | ST | RT  | N TOT | LT         | ST | RT  | S TOT | STR TOT | LT        | ST         | RT | E TOT | LT  | ST        | RT | W TOT | STR TOT | Grand Total |       |  |
| 07:00         | 07:15 | 3  | 2   | 6     | 11         | 1  | 3   | 0     | 4       | 15        | 0          | 0  | 1     | 1   | 22        | 0  | 0     | 22      | 23          | 38    |  |
| 07:15         | 07:30 | 0  | 3   | 12    | 15         | 0  | 3   | 0     | 3       | 18        | 0          | 1  | 4     | 5   | 28        | 0  | 1     | 29      | 34          | 52    |  |
| 07:30         | 07:45 | 2  | 6   | 12    | 20         | 1  | 12  | 0     | 13      | 33        | 0          | 0  | 2     | 2   | 18        | 0  | 1     | 19      | 21          | 54    |  |
| 07:45         | 08:00 | 1  | 5   | 12    | 18         | 1  | 6   | 1     | 8       | 26        | 0          | 1  | 3     | 4   | 43        | 0  | 0     | 43      | 47          | 73    |  |
| 08:00         | 08:15 | 5  | 4   | 11    | 20         | 2  | 12  | 0     | 14      | 34        | 0          | 2  | 9     | 11  | 18        | 0  | 1     | 19      | 30          | 64    |  |
| 08:15         | 08:30 | 1  | 5   | 11    | 17         | 2  | 7   | 0     | 9       | 26        | 0          | 1  | 3     | 4   | 27        | 2  | 1     | 30      | 34          | 60    |  |
| 08:30         | 08:45 | 1  | 8   | 9     | 18         | 2  | 13  | 0     | 15      | 33        | 0          | 0  | 3     | 3   | 23        | 0  | 1     | 24      | 27          | 60    |  |
| 08:45         | 09:00 | 3  | 7   | 10    | 20         | 0  | 15  | 0     | 15      | 35        | 0          | 1  | 6     | 7   | 38        | 0  | 0     | 38      | 45          | 80    |  |
| 09:00         | 09:15 | 1  | 8   | 12    | 21         | 1  | 7   | 1     | 9       | 30        | 0          | 1  | 2     | 3   | 26        | 0  | 0     | 26      | 29          | 59    |  |
| 09:15         | 09:30 | 2  | 4   | 13    | 19         | 1  | 2   | 0     | 3       | 22        | 0          | 0  | 5     | 5   | 30        | 0  | 1     | 31      | 36          | 58    |  |
| 09:30         | 09:45 | 3  | 7   | 10    | 20         | 1  | 8   | 0     | 9       | 29        | 1          | 0  | 3     | 4   | 24        | 0  | 1     | 25      | 29          | 58    |  |
| 09:45         | 10:00 | 1  | 2   | 9     | 12         | 1  | 5   | 0     | 6       | 18        | 0          | 0  | 2     | 2   | 20        | 0  | 0     | 20      | 22          | 40    |  |
| 11:30         | 11:45 | 3  | 6   | 9     | 18         | 1  | 2   | 1     | 4       | 22        | 0          | 0  | 2     | 2   | 7         | 1  | 0     | 8       | 10          | 32    |  |
| 11:45         | 12:00 | 1  | 3   | 7     | 11         | 0  | 5   | 0     | 5       | 16        | 1          | 0  | 2     | 3   | 15        | 1  | 1     | 17      | 20          | 36    |  |
| 12:00         | 12:15 | 4  | 3   | 4     | 11         | 0  | 4   | 0     | 4       | 15        | 0          | 0  | 3     | 3   | 12        | 1  | 1     | 14      | 17          | 32    |  |
| 12:15         | 12:30 | 5  | 9   | 9     | 23         | 1  | 8   | 0     | 9       | 32        | 0          | 0  | 0     | 0   | 13        | 0  | 0     | 13      | 13          | 45    |  |
| 12:30         | 12:45 | 1  | 4   | 7     | 12         | 0  | 3   | 0     | 3       | 15        | 0          | 0  | 2     | 2   | 15        | 0  | 1     | 16      | 18          | 33    |  |
| 12:45         | 13:00 | 0  | 4   | 11    | 15         | 1  | 3   | 0     | 4       | 19        | 0          | 2  | 5     | 7   | 12        | 0  | 3     | 15      | 22          | 41    |  |
| 13:00         | 13:15 | 3  | 5   | 10    | 18         | 0  | 5   | 0     | 5       | 23        | 0          | 0  | 3     | 3   | 14        | 1  | 1     | 16      | 19          | 42    |  |
| 13:15         | 13:30 | 2  | 9   | 9     | 20         | 0  | 4   | 0     | 4       | 24        | 0          | 0  | 2     | 2   | 13        | 0  | 2     | 15      | 17          | 41    |  |
| 15:00         | 15:15 | 4  | 6   | 18    | 28         | 1  | 4   | 0     | 5       | 33        | 0          | 3  | 5     | 8   | 9         | 1  | 0     | 10      | 18          | 51    |  |
| 15:15         | 15:30 | 0  | 4   | 22    | 26         | 0  | 12  | 0     | 12      | 38        | 0          | 0  | 3     | 3   | 20        | 1  | 3     | 24      | 27          | 65    |  |
| 15:30         | 15:45 | 2  | 3   | 14    | 19         | 0  | 6   | 0     | 6       | 25        | 0          | 0  | 2     | 2   | 18        | 1  | 1     | 20      | 22          | 47    |  |
| 15:45         | 16:00 | 2  | 7   | 10    | 19         | 0  | 4   | 0     | 4       | 23        | 0          | 0  | 3     | 3   | 15        | 0  | 3     | 18      | 21          | 44    |  |
| 16:00         | 16:15 | 4  | 9   | 12    | 25         | 0  | 9   | 0     | 9       | 34        | 0          | 0  | 3     | 3   | 9         | 2  | 2     | 13      | 16          | 50    |  |
| 16:15         | 16:30 | 3  | 8   | 15    | 26         | 0  | 16  | 0     | 16      | 42        | 0          | 0  | 3     | 3   | 13        | 0  | 0     | 13      | 16          | 58    |  |
| 16:30         | 16:45 | 4  | 5   | 15    | 24         | 0  | 8   | 0     | 8       | 32        | 0          | 0  | 2     | 2   | 21        | 1  | 1     | 23      | 25          | 57    |  |
| 16:45         | 17:00 | 5  | 5   | 14    | 24         | 1  | 1   | 0     | 2       | 26        | 0          | 0  | 2     | 2   | 12        | 0  | 1     | 13      | 15          | 41    |  |
| 17:00         | 17:15 | 5  | 5   | 12    | 22         | 0  | 3   | 0     | 3       | 25        | 0          | 0  | 1     | 1   | 14        | 0  | 1     | 15      | 16          | 41    |  |
| 17:15         | 17:30 | 7  | 17  | 11    | 35         | 2  | 8   | 0     | 10      | 45        | 0          | 0  | 6     | 6   | 16        | 0  | 5     | 21      | 27          | 72    |  |
| 17:30         | 17:45 | 3  | 7   | 15    | 25         | 0  | 11  | 0     | 11      | 36        | 0          | 0  | 4     | 4   | 12        | 0  | 3     | 15      | 19          | 55    |  |
| 17:45         | 18:00 | 6  | 8   | 12    | 26         | 2  | 5   | 0     | 7       | 33        | 0          | 0  | 4     | 4   | 18        | 2  | 1     | 21      | 25          | 58    |  |
| Total:        |       | 87 | 188 | 363   | 638        | 22 | 214 | 3     | 239     | 877       | 2          | 12 | 100   | 114 | 595       | 14 | 37    | 646     | 877         | 1,637 |  |

Note: U-Turns are included in Totals.



## Transportation Services - Traffic Services

### Turning Movement Count - Study Results

#### CHURCHILL AVE @ LANARK AVE

**Survey Date:** Thursday, October 24, 2019

**WO No:** 38900

**Start Time:** 07:00

**Device:** Miovision

### Full Study Cyclist Volume

|             |       | CHURCHILL AVE |            |              | LANARK AVE |           |              |  |    |
|-------------|-------|---------------|------------|--------------|------------|-----------|--------------|--|----|
|             |       | Northbound    | Southbound | Street Total | Eastbound  | Westbound | Street Total |  |    |
| Time Period |       |               |            |              |            |           |              |  |    |
| 07:00       | 07:15 | 0             | 0          | 0            | 0          | 0         | 0            |  | 0  |
| 07:15       | 07:30 | 0             | 1          | 1            | 0          | 0         | 0            |  | 1  |
| 07:30       | 07:45 | 2             | 1          | 3            | 0          | 1         | 1            |  | 4  |
| 07:45       | 08:00 | 0             | 1          | 1            | 1          | 3         | 4            |  | 5  |
| 08:00       | 08:15 | 0             | 0          | 0            | 0          | 2         | 2            |  | 2  |
| 08:15       | 08:30 | 1             | 2          | 3            | 2          | 0         | 2            |  | 5  |
| 08:30       | 08:45 | 1             | 0          | 1            | 0          | 2         | 2            |  | 3  |
| 08:45       | 09:00 | 0             | 2          | 2            | 0          | 0         | 0            |  | 2  |
| 09:00       | 09:15 | 0             | 0          | 0            | 1          | 1         | 2            |  | 2  |
| 09:15       | 09:30 | 0             | 0          | 0            | 1          | 0         | 1            |  | 1  |
| 09:30       | 09:45 | 1             | 0          | 1            | 0          | 0         | 0            |  | 1  |
| 09:45       | 10:00 | 0             | 0          | 0            | 0          | 0         | 0            |  | 0  |
| 11:30       | 11:45 | 0             | 0          | 0            | 0          | 1         | 1            |  | 1  |
| 11:45       | 12:00 | 0             | 0          | 0            | 0          | 0         | 0            |  | 0  |
| 12:00       | 12:15 | 0             | 0          | 0            | 0          | 0         | 0            |  | 0  |
| 12:15       | 12:30 | 0             | 0          | 0            | 0          | 0         | 0            |  | 0  |
| 12:30       | 12:45 | 0             | 0          | 0            | 0          | 0         | 0            |  | 0  |
| 12:45       | 13:00 | 0             | 0          | 0            | 1          | 0         | 1            |  | 1  |
| 13:00       | 13:15 | 0             | 0          | 0            | 0          | 0         | 0            |  | 0  |
| 13:15       | 13:30 | 0             | 0          | 0            | 1          | 0         | 1            |  | 1  |
| 15:00       | 15:15 | 0             | 0          | 0            | 1          | 1         | 2            |  | 2  |
| 15:15       | 15:30 | 4             | 1          | 5            | 0          | 1         | 1            |  | 6  |
| 15:30       | 15:45 | 0             | 0          | 0            | 1          | 3         | 4            |  | 4  |
| 15:45       | 16:00 | 3             | 0          | 3            | 1          | 0         | 1            |  | 4  |
| 16:00       | 16:15 | 2             | 0          | 2            | 0          | 0         | 0            |  | 2  |
| 16:15       | 16:30 | 1             | 1          | 2            | 1          | 0         | 1            |  | 3  |
| 16:30       | 16:45 | 0             | 0          | 0            | 0          | 0         | 0            |  | 0  |
| 16:45       | 17:00 | 1             | 0          | 1            | 1          | 2         | 3            |  | 4  |
| 17:00       | 17:15 | 1             | 0          | 1            | 0          | 1         | 1            |  | 2  |
| 17:15       | 17:30 | 1             | 0          | 1            | 0          | 0         | 0            |  | 1  |
| 17:30       | 17:45 | 0             | 0          | 0            | 0          | 2         | 2            |  | 2  |
| 17:45       | 18:00 | 2             | 1          | 3            | 0          | 0         | 0            |  | 3  |
| Total       |       | 20            | 10         | 30           | 12         | 20        | 32           |  | 62 |



## Transportation Services - Traffic Services

### Turning Movement Count - Study Results

#### CHURCHILL AVE @ LANARK AVE

Survey Date: Thursday, October 24, 2019

WO No: 38900

Start Time: 07:00

Device: Miovision

#### Full Study Pedestrian Volume

CHURCHILL AVE LANARK AVE

| Time Period | NB Approach<br>(E or W Crossing) | SB Approach<br>(E or W Crossing) | Total | EB Approach<br>(N or S Crossing) | WB Approach<br>(N or S Crossing) | Total | Grand Total |
|-------------|----------------------------------|----------------------------------|-------|----------------------------------|----------------------------------|-------|-------------|
| 07:00 07:15 | 0                                | 1                                | 1     | 0                                | 0                                | 0     | 1           |
| 07:15 07:30 | 0                                | 0                                | 0     | 1                                | 1                                | 2     | 2           |
| 07:30 07:45 | 0                                | 0                                | 0     | 1                                | 2                                | 3     | 3           |
| 07:45 08:00 | 0                                | 2                                | 2     | 5                                | 2                                | 7     | 9           |
| 08:00 08:15 | 0                                | 0                                | 0     | 3                                | 1                                | 4     | 4           |
| 08:15 08:30 | 0                                | 1                                | 1     | 4                                | 0                                | 4     | 5           |
| 08:30 08:45 | 0                                | 2                                | 2     | 0                                | 0                                | 0     | 2           |
| 08:45 09:00 | 0                                | 0                                | 0     | 0                                | 4                                | 4     | 4           |
| 09:00 09:15 | 0                                | 0                                | 0     | 0                                | 1                                | 1     | 1           |
| 09:15 09:30 | 0                                | 0                                | 0     | 1                                | 0                                | 1     | 1           |
| 09:30 09:45 | 0                                | 2                                | 2     | 0                                | 1                                | 1     | 3           |
| 09:45 10:00 | 0                                | 1                                | 1     | 1                                | 0                                | 1     | 2           |
| 11:30 11:45 | 0                                | 1                                | 1     | 0                                | 1                                | 1     | 2           |
| 11:45 12:00 | 0                                | 0                                | 0     | 0                                | 0                                | 0     | 0           |
| 12:00 12:15 | 0                                | 0                                | 0     | 2                                | 0                                | 2     | 2           |
| 12:15 12:30 | 0                                | 0                                | 0     | 0                                | 0                                | 0     | 0           |
| 12:30 12:45 | 0                                | 1                                | 1     | 2                                | 0                                | 2     | 3           |
| 12:45 13:00 | 0                                | 0                                | 0     | 1                                | 0                                | 1     | 1           |
| 13:00 13:15 | 0                                | 3                                | 3     | 1                                | 2                                | 3     | 6           |
| 13:15 13:30 | 0                                | 0                                | 0     | 1                                | 1                                | 2     | 2           |
| 15:00 15:15 | 0                                | 0                                | 0     | 0                                | 0                                | 0     | 0           |
| 15:15 15:30 | 0                                | 1                                | 1     | 0                                | 2                                | 2     | 3           |
| 15:30 15:45 | 0                                | 1                                | 1     | 1                                | 2                                | 3     | 4           |
| 15:45 16:00 | 0                                | 2                                | 2     | 0                                | 2                                | 2     | 4           |
| 16:00 16:15 | 0                                | 1                                | 1     | 1                                | 8                                | 9     | 10          |
| 16:15 16:30 | 0                                | 1                                | 1     | 5                                | 1                                | 6     | 7           |
| 16:30 16:45 | 0                                | 0                                | 0     | 1                                | 3                                | 4     | 4           |
| 16:45 17:00 | 0                                | 0                                | 0     | 2                                | 1                                | 3     | 3           |
| 17:00 17:15 | 0                                | 2                                | 2     | 1                                | 1                                | 2     | 4           |
| 17:15 17:30 | 0                                | 1                                | 1     | 7                                | 3                                | 10    | 11          |
| 17:30 17:45 | 1                                | 4                                | 5     | 1                                | 7                                | 8     | 13          |
| 17:45 18:00 | 0                                | 0                                | 0     | 3                                | 3                                | 6     | 6           |
| Total ..... | 1                                | 27                               | 28    | 45                               | 49                               | 94    | 122         |



## Transportation Services - Traffic Services

### Turning Movement Count - Study Results

#### CHURCHILL AVE @ LANARK AVE

Survey Date: Thursday, October 24, 2019

WO No: 38900

Start Time: 07:00

Device: Miovision

#### Full Study Heavy Vehicles

CHURCHILL AVE LANARK AVE

| Time Period | Northbound |    |    |       | Southbound |    |    |       | Eastbound |    |    |    | Westbound |    |    |    | Grand Total |       |         |    |
|-------------|------------|----|----|-------|------------|----|----|-------|-----------|----|----|----|-----------|----|----|----|-------------|-------|---------|----|
|             | LT         | ST | RT | N TOT | LT         | ST | RT | S TOT | STR TOT   | LT | ST | RT | E TOT     | LT | ST | RT |             | W TOT | STR TOT |    |
| 07:00       | 07:15      | 0  | 0  | 0     | 0          | 0  | 0  | 0     | 0         | 0  | 0  | 0  | 0         | 0  | 0  | 0  | 0           | 0     | 0       |    |
| 07:15       | 07:30      | 0  | 1  | 2     | 3          | 0  | 0  | 0     | 0         | 3  | 0  | 1  | 0         | 1  | 1  | 0  | 1           | 2     | 3       | 6  |
| 07:30       | 07:45      | 1  | 0  | 1     | 2          | 0  | 0  | 0     | 0         | 2  | 0  | 0  | 0         | 0  | 0  | 0  | 0           | 0     | 2       |    |
| 07:45       | 08:00      | 0  | 0  | 2     | 2          | 0  | 0  | 0     | 0         | 2  | 0  | 0  | 0         | 0  | 1  | 0  | 0           | 1     | 1       | 3  |
| 08:00       | 08:15      | 0  | 0  | 0     | 0          | 0  | 0  | 0     | 0         | 0  | 0  | 0  | 0         | 0  | 0  | 0  | 1           | 1     | 1       | 1  |
| 08:15       | 08:30      | 1  | 0  | 2     | 3          | 0  | 1  | 0     | 1         | 4  | 0  | 0  | 0         | 0  | 1  | 0  | 0           | 1     | 1       | 5  |
| 08:30       | 08:45      | 0  | 0  | 1     | 1          | 0  | 0  | 0     | 0         | 1  | 0  | 0  | 0         | 0  | 1  | 0  | 0           | 1     | 1       | 2  |
| 08:45       | 09:00      | 0  | 2  | 2     | 4          | 0  | 0  | 0     | 0         | 4  | 0  | 1  | 1         | 2  | 0  | 0  | 0           | 0     | 2       | 6  |
| 09:00       | 09:15      | 0  | 2  | 0     | 2          | 0  | 0  | 0     | 0         | 2  | 0  | 0  | 0         | 1  | 1  | 0  | 0           | 0     | 1       | 3  |
| 09:15       | 09:30      | 0  | 0  | 2     | 2          | 0  | 0  | 0     | 0         | 2  | 0  | 0  | 0         | 0  | 1  | 0  | 0           | 1     | 1       | 3  |
| 09:30       | 09:45      | 1  | 0  | 0     | 1          | 0  | 0  | 0     | 0         | 1  | 0  | 0  | 0         | 0  | 0  | 0  | 0           | 0     | 0       | 1  |
| 09:45       | 10:00      | 0  | 0  | 1     | 1          | 0  | 0  | 0     | 0         | 1  | 0  | 0  | 0         | 0  | 1  | 0  | 0           | 1     | 1       | 2  |
| 11:30       | 11:45      | 0  | 2  | 0     | 2          | 0  | 0  | 0     | 0         | 2  | 0  | 0  | 0         | 0  | 0  | 1  | 0           | 1     | 1       | 3  |
| 11:45       | 12:00      | 0  | 0  | 2     | 2          | 0  | 0  | 0     | 0         | 2  | 0  | 0  | 0         | 0  | 1  | 0  | 0           | 1     | 1       | 3  |
| 12:00       | 12:15      | 0  | 0  | 1     | 1          | 0  | 0  | 0     | 0         | 1  | 0  | 0  | 0         | 0  | 0  | 0  | 0           | 0     | 0       | 1  |
| 12:15       | 12:30      | 0  | 0  | 1     | 1          | 0  | 0  | 0     | 0         | 1  | 0  | 0  | 0         | 0  | 2  | 0  | 0           | 2     | 2       | 3  |
| 12:30       | 12:45      | 0  | 0  | 1     | 1          | 0  | 0  | 0     | 0         | 1  | 0  | 0  | 0         | 0  | 0  | 0  | 0           | 0     | 0       | 1  |
| 12:45       | 13:00      | 0  | 0  | 1     | 1          | 0  | 0  | 0     | 0         | 1  | 0  | 0  | 1         | 1  | 2  | 0  | 0           | 2     | 3       | 4  |
| 13:00       | 13:15      | 0  | 0  | 0     | 0          | 0  | 0  | 0     | 0         | 0  | 0  | 0  | 1         | 1  | 0  | 0  | 0           | 0     | 1       | 1  |
| 13:15       | 13:30      | 0  | 0  | 1     | 1          | 0  | 0  | 0     | 0         | 1  | 0  | 0  | 0         | 0  | 1  | 0  | 0           | 1     | 1       | 2  |
| 15:00       | 15:15      | 0  | 0  | 1     | 1          | 0  | 0  | 0     | 0         | 1  | 0  | 1  | 1         | 2  | 1  | 0  | 0           | 1     | 3       | 4  |
| 15:15       | 15:30      | 0  | 0  | 1     | 1          | 0  | 1  | 0     | 1         | 2  | 0  | 0  | 0         | 0  | 1  | 0  | 0           | 1     | 1       | 3  |
| 15:30       | 15:45      | 0  | 0  | 1     | 1          | 0  | 0  | 0     | 0         | 1  | 0  | 0  | 1         | 1  | 0  | 0  | 0           | 0     | 1       | 2  |
| 15:45       | 16:00      | 0  | 0  | 0     | 0          | 0  | 0  | 0     | 0         | 0  | 0  | 0  | 1         | 1  | 1  | 0  | 1           | 2     | 3       | 3  |
| 16:00       | 16:15      | 0  | 1  | 1     | 2          | 0  | 0  | 0     | 0         | 2  | 0  | 0  | 1         | 1  | 0  | 0  | 0           | 0     | 1       | 3  |
| 16:15       | 16:30      | 1  | 0  | 2     | 3          | 0  | 0  | 0     | 0         | 3  | 0  | 0  | 0         | 0  | 0  | 0  | 0           | 0     | 0       | 3  |
| 16:30       | 16:45      | 0  | 0  | 2     | 2          | 0  | 0  | 0     | 0         | 2  | 0  | 0  | 0         | 0  | 1  | 0  | 0           | 1     | 1       | 3  |
| 16:45       | 17:00      | 0  | 0  | 0     | 0          | 0  | 0  | 0     | 0         | 0  | 0  | 0  | 0         | 0  | 0  | 0  | 0           | 0     | 0       | 0  |
| 17:00       | 17:15      | 0  | 0  | 1     | 1          | 0  | 0  | 0     | 0         | 1  | 0  | 0  | 0         | 0  | 1  | 0  | 0           | 1     | 1       | 2  |
| 17:15       | 17:30      | 0  | 0  | 0     | 0          | 0  | 0  | 0     | 0         | 0  | 0  | 0  | 0         | 0  | 2  | 0  | 0           | 2     | 2       | 2  |
| 17:30       | 17:45      | 0  | 0  | 1     | 1          | 0  | 0  | 0     | 0         | 1  | 0  | 0  | 0         | 0  | 0  | 0  | 0           | 0     | 0       | 1  |
| 17:45       | 18:00      | 0  | 0  | 0     | 0          | 0  | 0  | 0     | 0         | 0  | 0  | 0  | 0         | 0  | 1  | 0  | 0           | 1     | 1       | 1  |
| Total: None |            | 4  | 8  | 30    | 42         | 0  | 2  | 0     | 2         | 44 | 0  | 3  | 8         | 11 | 20 | 1  | 3           | 24    | 35      | 79 |



## Transportation Services - Traffic Services

### Turning Movement Count - Study Results

#### CHURCHILL AVE @ LANARK AVE

**Survey Date:** Thursday, October 24, 2019

**WO No:** 38900

**Start Time:** 07:00

**Device:** Miovision

#### Full Study 15 Minute U-Turn Total

##### CHURCHILL AVE

##### LANARK AVE

| Time Period |       | Northbound<br>U-Turn Total | Southbound<br>U-Turn Total | Eastbound<br>U-Turn Total | Westbound<br>U-Turn Total | Total |
|-------------|-------|----------------------------|----------------------------|---------------------------|---------------------------|-------|
| 07:00       | 07:15 | 0                          | 0                          | 0                         | 0                         | 0     |
| 07:15       | 07:30 | 0                          | 0                          | 0                         | 0                         | 0     |
| 07:30       | 07:45 | 0                          | 0                          | 0                         | 0                         | 0     |
| 07:45       | 08:00 | 0                          | 0                          | 0                         | 0                         | 0     |
| 08:00       | 08:15 | 0                          | 0                          | 0                         | 0                         | 0     |
| 08:15       | 08:30 | 0                          | 0                          | 0                         | 0                         | 0     |
| 08:30       | 08:45 | 0                          | 0                          | 0                         | 0                         | 0     |
| 08:45       | 09:00 | 0                          | 0                          | 0                         | 0                         | 0     |
| 09:00       | 09:15 | 0                          | 0                          | 0                         | 0                         | 0     |
| 09:15       | 09:30 | 0                          | 0                          | 0                         | 0                         | 0     |
| 09:30       | 09:45 | 0                          | 0                          | 0                         | 0                         | 0     |
| 09:45       | 10:00 | 0                          | 0                          | 0                         | 0                         | 0     |
| 11:30       | 11:45 | 0                          | 0                          | 0                         | 0                         | 0     |
| 11:45       | 12:00 | 0                          | 0                          | 0                         | 0                         | 0     |
| 12:00       | 12:15 | 0                          | 0                          | 0                         | 0                         | 0     |
| 12:15       | 12:30 | 0                          | 0                          | 0                         | 0                         | 0     |
| 12:30       | 12:45 | 0                          | 0                          | 0                         | 0                         | 0     |
| 12:45       | 13:00 | 0                          | 0                          | 0                         | 0                         | 0     |
| 13:00       | 13:15 | 0                          | 0                          | 0                         | 0                         | 0     |
| 13:15       | 13:30 | 0                          | 0                          | 0                         | 0                         | 0     |
| 15:00       | 15:15 | 0                          | 0                          | 0                         | 0                         | 0     |
| 15:15       | 15:30 | 0                          | 0                          | 0                         | 0                         | 0     |
| 15:30       | 15:45 | 0                          | 0                          | 0                         | 0                         | 0     |
| 15:45       | 16:00 | 0                          | 0                          | 0                         | 0                         | 0     |
| 16:00       | 16:15 | 0                          | 0                          | 0                         | 0                         | 0     |
| 16:15       | 16:30 | 0                          | 0                          | 0                         | 0                         | 0     |
| 16:30       | 16:45 | 0                          | 0                          | 0                         | 0                         | 0     |
| 16:45       | 17:00 | 0                          | 0                          | 0                         | 0                         | 0     |
| 17:00       | 17:15 | 0                          | 0                          | 0                         | 0                         | 0     |
| 17:15       | 17:30 | 0                          | 0                          | 0                         | 0                         | 0     |
| 17:30       | 17:45 | 0                          | 0                          | 0                         | 0                         | 0     |
| 17:45       | 18:00 | 0                          | 0                          | 0                         | 0                         | 0     |
| Total       |       | 0                          | 0                          | 0                         | 0                         | 0     |

# Appendix C

Synchro Intersection Worksheets – Existing Conditions



Lanes, Volumes, Timings  
1: Island Park & Kichi Zibi Mikan

Existing  
AM Peak Hour

| Lane Group             | EBL    | EBT    | EBR   | WBL    | WBT   | WBR   | NBL | NBT   | NBR  | SBL   | SBT    | SBR |
|------------------------|--------|--------|-------|--------|-------|-------|-----|-------|------|-------|--------|-----|
| Lane Configurations    | ↔      | ↔      | ↔     | ↔      | ↔     | ↔     |     | ↔     | ↔    | ↔     | ↔      | ↔   |
| Traffic Volume (vph)   | 188    | 720    | 24    | 114    | 211   | 76    | 0   | 245   | 132  | 471   | 716    | 468 |
| Future Volume (vph)    | 188    | 720    | 24    | 114    | 211   | 76    | 0   | 245   | 132  | 471   | 716    | 468 |
| Satd. Flow (prot)      | 1658   | 3316   | 1483  | 1658   | 3316  | 1441  | 0   | 1647  | 0    | 3216  | 1633   | 0   |
| Flt Permitted          | 0.950  |        |       | 0.950  |       |       |     |       |      | 0.950 |        |     |
| Satd. Flow (perm)      | 1658   | 3316   | 1441  | 1653   | 3316  | 1441  | 0   | 1647  | 0    | 3168  | 1633   | 0   |
| Satd. Flow (RTOR)      |        |        | 81    |        |       | 84    |     | 14    |      |       | 30     |     |
| Lane Group Flow (vph)  | 209    | 800    | 27    | 127    | 234   | 84    | 0   | 419   | 0    | 523   | 1316   | 0   |
| Turn Type              | Prot   | NA     | Perm  | Prot   | NA    | Perm  | NA  | NA    | Prot | NA    | NA     |     |
| Protected Phases       | 9      | 2      |       | 13     | 6     |       |     | 16    |      | 15    | 12     |     |
| Permitted Phases       |        |        | 2     |        |       | 6     |     |       |      |       |        |     |
| Detector Phase         | 9      | 2      | 2     | 13     | 6     | 6     |     | 16    |      | 15    | 12     |     |
| Switch Phase           |        |        |       |        |       |       |     |       |      |       |        |     |
| Minimum Initial (s)    | 5.0    | 15.0   | 15.0  | 5.0    | 15.0  | 15.0  |     | 10.0  |      | 5.0   | 10.0   |     |
| Minimum Split (s)      | 10.6   | 30.1   | 30.1  | 10.6   | 30.1  | 30.1  |     | 29.1  |      | 11.5  | 29.1   |     |
| Total Split (s)        | 15.6   | 56.1   | 56.1  | 15.6   | 26.1  | 26.1  |     | 76.1  |      | 56.5  | 26.1   |     |
| Total Split (%)        | 7.6%   | 27.5%  | 27.5% | 7.6%   | 12.8% | 12.8% |     | 37.2% |      | 27.7% | 12.8%  |     |
| Yellow Time (s)        | 3.7    | 3.7    | 3.7   | 3.7    | 3.7   | 3.7   |     | 3.7   |      | 3.7   | 3.7    |     |
| All-Red Time (s)       | 1.9    | 2.4    | 2.4   | 1.9    | 2.4   | 2.4   |     | 2.4   |      | 2.8   | 2.4    |     |
| Lost Time Adjust (s)   | 0.0    | 0.0    | 0.0   | 0.0    | 0.0   | 0.0   |     | 0.0   |      | 0.0   | 0.0    |     |
| Total Lost Time (s)    | 5.6    | 6.1    | 6.1   | 5.6    | 6.1   | 6.1   |     | 6.1   |      | 6.5   | 6.1    |     |
| Lead/Lag               |        |        |       |        |       |       |     | Lag   |      | Lead  |        |     |
| Lead-Lag Optimize?     |        |        |       |        |       |       |     | Yes   |      | Yes   |        |     |
| Recall Mode            | None   | Min    | Min   | None   | Min   | Min   |     | None  |      | None  |        |     |
| Act Effct Green (s)    | 10.2   | 47.2   | 47.2  | 10.2   | 47.2  | 47.2  |     | 46.3  |      | 32.4  | 85.4   |     |
| Actuated g/C Ratio     | 0.06   | 0.29   | 0.29  | 0.06   | 0.29  | 0.29  |     | 0.29  |      | 0.20  | 0.53   |     |
| v/c Ratio              | 1.99   | 0.82   | 0.06  | 1.21   | 0.24  | 0.17  |     | 0.87  |      | 0.81  | 1.50   |     |
| Control Delay          | 511.5  | 62.5   | 0.2   | 213.7  | 46.9  | 10.1  |     | 72.1  |      | 73.1  | 258.5  |     |
| Queue Delay            | 0.0    | 0.0    | 0.0   | 0.0    | 0.0   | 0.0   |     | 0.0   |      | 0.0   | 0.0    |     |
| Total Delay            | 511.5  | 62.5   | 0.2   | 213.7  | 46.9  | 10.1  |     | 72.1  |      | 73.1  | 258.5  |     |
| LOS                    | F      | E      | A     | F      | D     | B     |     | E     |      | E     | F      |     |
| Approach Delay         |        | 151.5  |       |        | 87.6  |       |     | 72.1  |      |       | 205.8  |     |
| Approach LOS           |        | F      |       |        | F     |       |     | E     |      |       | F      |     |
| Queue Length 50th (m)  | ~105.6 | 124.5  | 0.0   | ~50.8  | 29.7  | 0.0   |     | 126.4 |      | 84.4  | ~589.7 |     |
| Queue Length 95th (m)  | #191.5 | #201.4 | 0.0   | #115.7 | 52.4  | 15.2  |     | 185.0 |      | 120.0 | #739.1 |     |
| Internal Link Dist (m) |        | 762.8  |       |        | 208.9 |       |     | 249.0 |      |       | 166.2  |     |
| Turn Bay Length (m)    | 104.5  |        | 88.0  | 89.6   |       |       |     |       |      | 80.0  |        |     |
| Base Capacity (vph)    | 105    | 1052   | 512   | 105    | 1052  | 514   |     | 739   |      | 1021  | 1315   |     |
| Starvation Cap Reductn | 0      | 0      | 0     | 0      | 0     | 0     |     | 0     |      | 0     | 0      |     |
| Spillback Cap Reductn  | 0      | 0      | 0     | 0      | 0     | 0     |     | 0     |      | 0     | 0      |     |
| Storage Cap Reductn    | 0      | 0      | 0     | 0      | 0     | 0     |     | 0     |      | 0     | 0      |     |
| Reduced v/c Ratio      | 1.99   | 0.76   | 0.05  | 1.21   | 0.22  | 0.16  |     | 0.57  |      | 0.51  | 1.00   |     |

Intersection Summary

Cycle Length: 204.3  
Actuated Cycle Length: 161  
Natural Cycle: 145  
Control Type: Actuated-Uncoordinated  
Maximum v/c Ratio: 1.99

Scenario 1 210 Clearview Avenue 11:59 pm 09/04/2024 Existing

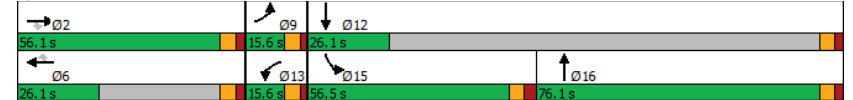
Synchro 11 Report  
Page 1

Lanes, Volumes, Timings  
1: Island Park & Kichi Zibi Mikan

Existing  
AM Peak Hour

|   |                        |
|---|------------------------|
| Intersection Signal Delay: 161.7                                | Intersection LOS: F    |
| Intersection Capacity Utilization 112.5%                        | ICU Level of Service H |
| Analysis Period (min) 15  |                        |
| ~ Volume exceeds capacity, queue is theoretically infinite.     |                        |
| Queue shown is maximum after two cycles.                        |                        |
| # 95th percentile volume exceeds capacity, queue may be longer. |                        |
| Queue shown is maximum after two cycles.                        |                        |

Splits and Phases: 1: Island Park & Kichi Zibi Mikan



Scenario 1 210 Clearview Avenue 11:59 pm 09/04/2024 Existing

Synchro 11 Report  
Page 2

HCM 2010 TWSC  
2: Island Park & Clearview

Existing  
AM Peak Hour

| Intersection             |               |       |        |       |        |       |        |      |      |       |      |      |
|--------------------------|---------------|-------|--------|-------|--------|-------|--------|------|------|-------|------|------|
| Int Delay, s/veh         | 2.5           |       |        |       |        |       |        |      |      |       |      |      |
| Movement                 | EBL           | EBT   | EBR    | WBL   | WBT    | WBR   | NBL    | NBT  | NBR  | SBL   | SBT  | SBR  |
| Lane Configurations      | <div>⬅➡</div> |       |        |       |        |       |        |      |      |       |      |      |
| Traffic Vol, veh/h       | 24            | 11    | 14     | 1     | 6      | 13    | 9      | 337  | 23   | 26    | 819  | 98   |
| Future Vol, veh/h        | 24            | 11    | 14     | 1     | 6      | 13    | 9      | 337  | 23   | 26    | 819  | 98   |
| Conflicting Peds, #/hr   | 7             | 0     | 0      | 0     | 0      | 7     | 8      | 0    | 0    | 0     | 0    | 8    |
| Sign Control             | Stop          | Stop  | Stop   | Stop  | Stop   | Free  | Free   | Free | Free | Free  | Free | Free |
| RT Channelized           | -             | -     | None   | -     | -      | None  | -      | -    | None | -     | -    | None |
| Storage Length           | -             | -     | -      | -     | -      | -     | -      | -    | -    | -     | -    | -    |
| Veh in Median Storage, # | -             | 0     | -      | -     | 0      | -     | -      | 0    | -    | -     | 0    | -    |
| Grade, %                 | -             | 0     | -      | -     | 0      | -     | -      | 0    | -    | -     | 0    | -    |
| Peak Hour Factor         | 90            | 90    | 90     | 90    | 90     | 90    | 90     | 90   | 90   | 90    | 90   | 90   |
| Heavy Vehicles, %        | 2             | 2     | 2      | 2     | 33     | 2     | 2      | 2    | 2    | 4     | 2    | 2    |
| Mvmt Flow                | 27            | 12    | 16     | 1     | 7      | 14    | 10     | 374  | 26   | 29    | 910  | 109  |
|                          |               |       |        |       |        |       |        |      |      |       |      |      |
| Major/Minor              | Minor2        |       | Minor1 |       | Major1 |       | Major2 |      |      |       |      |      |
| Conflicting Flow All     | 1456          | 1451  | 973    | 1444  | 1492   | 394   | 1027   | 0    | 0    | 400   | 0    | 0    |
| Stage 1                  | 1031          | 1031  | -      | 407   | 407    | -     | -      | -    | -    | -     | -    | -    |
| Stage 2                  | 425           | 420   | -      | 1037  | 1085   | -     | -      | -    | -    | -     | -    | -    |
| Critical Hdwy            | 7.12          | 6.52  | 6.22   | 7.12  | 6.83   | 6.22  | 4.12   | -    | -    | 4.14  | -    | -    |
| Critical Hdwy Stg 1      | 6.12          | 5.52  | -      | 6.12  | 5.83   | -     | -      | -    | -    | -     | -    | -    |
| Critical Hdwy Stg 2      | 6.12          | 5.52  | -      | 6.12  | 5.83   | -     | -      | -    | -    | -     | -    | -    |
| Follow-up Hdwy           | 3.518         | 4.018 | 3.318  | 3.518 | 4.297  | 3.318 | 2.218  | -    | -    | 2.236 | -    | -    |
| Pot Cap-1 Maneuver       | 108           | 131   | 306    | 110   | 106    | 655   | 676    | -    | -    | 1148  | -    | -    |
| Stage 1                  | 281           | 310   | -      | 621   | 547    | -     | -      | -    | -    | -     | -    | -    |
| Stage 2                  | 607           | 589   | -      | 279   | 258    | -     | -      | -    | -    | -     | -    | -    |
| Platoon blocked, %       | <div>-</div>  |       |        |       |        |       |        |      |      |       |      |      |
| Mov Cap-1 Maneuver       | 93            | 120   | 304    | 91    | 97     | 651   | 672    | -    | -    | 1148  | -    | -    |
| Mov Cap-2 Maneuver       | 93            | 120   | -      | 91    | 97     | -     | -      | -    | -    | -     | -    | -    |
| Stage 1                  | 274           | 290   | -      | 609   | 537    | -     | -      | -    | -    | -     | -    | -    |
| Stage 2                  | 572           | 578   | -      | 238   | 241    | -     | -      | -    | -    | -     | -    | -    |
|                          |               |       |        |       |        |       |        |      |      |       |      |      |
| Approach                 | EB            |       | WB     |       | NB     |       | SB     |      |      |       |      |      |
| HCM Control Delay, s     | 55            |       | 23.7   |       | 0.3    |       | 0.2    |      |      |       |      |      |
| HCM LOS                  | F             |       | C      |       |        |       |        |      |      |       |      |      |
|                          |               |       |        |       |        |       |        |      |      |       |      |      |
| Minor Lane/Major Mvmt    | NBL           | NBT   | NBR    | EBLn1 | WBLn1  | SBL   | SBT    | SBR  |      |       |      |      |
| Capacity (veh/h)         | 672           | -     | -      | 124   | 215    | 1148  | -      | -    |      |       |      |      |
| HCM Lane V/C Ratio       | 0.015         | -     | -      | 0.439 | 0.103  | 0.025 | -      | -    |      |       |      |      |
| HCM Control Delay (s)    | 10.4          | 0     | -      | 55    | 23.7   | 8.2   | 0      | -    |      |       |      |      |
| HCM Lane LOS             | B             | A     | -      | F     | C      | A     | A      | -    |      |       |      |      |
| HCM 95th %tile Q(veh)    | 0             | -     | -      | 1.9   | 0.3    | 0.1   | -      | -    |      |       |      |      |

Scenario 1 210 Clearview Avenue 11:59 pm 09/04/2024 Existing

Synchro 11 Report  
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Lanes, Volumes, Timings  
3: Island Park & Scott

Existing  
AM Peak Hour

| Lane Group                 | EBL   | EBT   | EBR   | WBL   | WBT   | WBR   | NBL   | NBT   | NBR   | SBL   | SBT   | SBR   |
|----------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Lane Configurations        |       |       |       |       |       |       |       |       |       |       |       |       |
| Traffic Volume (vph)       | 77    | 349   | 54    | 32    | 267   | 28    | 38    | 262   | 30    | 33    | 532   | 81    |
| Future Volume (vph)        | 77    | 349   | 54    | 32    | 267   | 28    | 38    | 262   | 30    | 33    | 532   | 81    |
| Ideal Flow (vphpl)         | 1800  | 1800  | 1800  | 1800  | 1800  | 1800  | 1800  | 1800  | 1800  | 1800  | 1800  | 1800  |
| Storage Length (m)         | 58.7  |       | 29.5  | 250.0 |       | 36.5  | 0.0   |       | 0.0   | 36.5  |       | 0.0   |
| Storage Lanes              | 1     |       | 1     | 1     |       | 1     | 0     |       | 0     | 1     |       | 0     |
| Taper Length (m)           | 30.0  |       |       | 30.0  |       |       | 30.0  |       |       | 30.0  |       |       |
| Lane Util. Factor          | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  |
| Ped Bike Factor            | 0.95  |       | 0.87  | 0.98  |       | 0.86  |       | 0.99  |       | 0.98  |       | 0.99  |
| Frt                        |       |       | 0.850 |       |       | 0.850 |       | 0.988 |       | 0.980 |       |       |
| Flt Protected              | 0.950 |       |       | 0.950 |       |       |       | 0.994 |       | 0.950 |       |       |
| Satd. Flow (prot)          | 1626  | 1424  | 1483  | 1595  | 1483  | 1483  | 0     | 1704  | 0     | 1551  | 1688  | 0     |
| Flt Permitted              | 0.473 |       |       | 0.351 |       |       |       | 0.753 |       | 0.527 |       |       |
| Satd. Flow (perm)          | 770   | 1424  | 1292  | 579   | 1483  | 1279  | 0     | 1289  | 0     | 842   | 1688  | 0     |
| Right Turn on Red          |       |       | Yes   |       |       | Yes   |       |       | Yes   |       |       | Yes   |
| Satd. Flow (RTOR)          |       |       | 92    |       |       | 92    |       | 8     |       | 12    |       |       |
| Link Speed (k/h)           |       | 50    |       |       | 50    |       |       | 50    |       | 50    |       |       |
| Link Distance (m)          |       | 235.2 |       |       | 290.0 |       |       | 328.9 |       | 439.7 |       |       |
| Travel Time (s)            |       | 16.9  |       |       | 20.9  |       |       | 23.7  |       | 31.7  |       |       |
| Confl. Peds. (#/hr)        | 40    |       | 19    | 19    |       | 40    | 26    |       | 23    | 23    |       | 26    |
| Confl. Bikes (#/hr)        |       |       | 51    |       |       | 26    |       | 5     |       |       |       | 27    |
| Peak Hour Factor           | 0.90  | 0.90  | 0.90  | 0.90  | 0.90  | 0.90  | 0.90  | 0.90  | 0.90  | 0.90  | 0.90  | 0.90  |
| Heavy Vehicles (%)         | 4%    | 25%   | 2%    | 6%    | 20%   | 2%    | 2%    | 2%    | 2%    | 9%    | 2%    | 4%    |
| Adj. Flow (vph)            | 86    | 388   | 60    | 36    | 297   | 31    | 42    | 291   | 33    | 37    | 591   | 90    |
| Shared Lane Traffic (%)    |       |       |       |       |       |       |       |       |       |       |       |       |
| Lane Group Flow (vph)      | 86    | 388   | 60    | 36    | 297   | 31    | 0     | 366   | 0     | 37    | 681   | 0     |
| Enter Blocked Intersection | No    | No    | No    | No    | No    | No    | No    | No    | No    | No    | No    | No    |
| Lane Alignment             | Left  | Left  | Right | Left  | Left  | Right | Left  | Left  | Right | Left  | Left  | Right |
| Median Width(m)            |       | 3.5   |       |       | 3.5   |       |       | 3.5   |       |       | 3.5   |       |
| Link Offset(m)             |       | 0.0   |       |       | 0.0   |       |       | 0.0   |       |       | 0.0   |       |
| Crosswalk Width(m)         |       | 3.0   |       |       | 3.0   |       |       | 3.0   |       |       | 3.0   |       |
| Two way Left Turn Lane     |       |       |       |       |       |       |       |       |       |       |       |       |
| Headway Factor             | 1.09  | 1.09  | 1.09  | 1.09  | 1.09  | 1.09  | 1.09  | 1.09  | 1.09  | 1.09  | 1.09  | 1.09  |
| Turning Speed (k/h)        | 25    |       | 15    | 25    |       | 15    | 25    |       | 15    | 25    |       | 15    |
| Number of Detectors        | 1     | 2     | 1     | 1     | 2     | 1     | 1     | 2     |       | 1     | 2     |       |
| Detector Template          | Left  | Thru  | Right | Left  | Thru  | Right | Left  | Thru  |       | Left  | Thru  |       |
| Leading Detector (m)       | 2.0   | 10.0  | 2.0   | 2.0   | 10.0  | 2.0   | 2.0   | 10.0  |       | 2.0   | 10.0  |       |
| Trailing Detector (m)      | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |       | 0.0   | 0.0   |       |
| Detector 1 Position(m)     | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |       | 0.0   | 0.0   |       |
| Detector 1 Size(m)         | 2.0   | 0.6   | 2.0   | 2.0   | 0.6   | 2.0   | 2.0   | 0.6   |       | 2.0   | 0.6   |       |
| Detector 1 Type            | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex |       | Cl+Ex | Cl+Ex |       |
| Detector 1 Channel         |       |       |       |       |       |       |       |       |       |       |       |       |
| Detector 1 Extend (s)      | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |       | 0.0   | 0.0   |       |
| Detector 1 Queue (s)       | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |       | 0.0   | 0.0   |       |
| Detector 1 Delay (s)       | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |       | 0.0   | 0.0   |       |
| Detector 2 Position(m)     |       | 9.4   |       |       | 9.4   |       |       | 9.4   |       |       | 9.4   |       |
| Detector 2 Size(m)         |       | 0.6   |       |       | 0.6   |       |       | 0.6   |       |       | 0.6   |       |
| Detector 2 Type            |       | Cl+Ex |       |       | Cl+Ex |       |       | Cl+Ex |       |       | Cl+Ex |       |
| Detector 2 Channel         |       |       |       |       |       |       |       |       |       |       |       |       |

Scenario 1 210 Clearview Avenue Existing  
MC

Synchro 11 Report  
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Lanes, Volumes, Timings  
3: Island Park & Scott

Existing  
AM Peak Hour

|                         | EBL   | EBT   | EBR   | WBL   | WBT   | WBR   | NBL   | NBT   | NBR | SBL   | SBT   | SBR |
|-------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-----|-------|-------|-----|
| Lane Group              |       |       |       |       |       |       |       |       |     |       |       |     |
| Detector 2 Extend (s)   |       | 0.0   |       |       | 0.0   |       |       | 0.0   |     |       | 0.0   |     |
| Turn Type               | Perm  | NA    | Perm  | Perm  | NA    | Perm  | Perm  | NA    |     | Perm  | NA    |     |
| Protected Phases        |       | 4     |       |       | 8     |       |       | 2     |     |       | 6     |     |
| Permitted Phases        | 4     |       | 4     | 8     |       | 8     | 2     |       |     | 6     |       |     |
| Detector Phase          | 4     | 4     | 4     | 8     | 8     | 8     | 2     | 2     |     | 6     | 6     |     |
| Switch Phase            |       |       |       |       |       |       |       |       |     |       |       |     |
| Minimum Initial (s)     | 10.0  | 10.0  | 10.0  | 10.0  | 10.0  | 10.0  | 10.0  | 10.0  |     | 10.0  | 10.0  |     |
| Minimum Split (s)       | 29.0  | 29.0  | 29.0  | 29.0  | 29.0  | 29.0  | 34.0  | 34.0  |     | 37.0  | 37.0  |     |
| Total Split (s)         | 32.0  | 32.0  | 32.0  | 32.0  | 32.0  | 32.0  | 57.0  | 57.0  |     | 57.0  | 57.0  |     |
| Total Split (%)         | 33.7% | 33.7% | 33.7% | 33.7% | 33.7% | 33.7% | 60.0% | 60.0% |     | 60.0% | 60.0% |     |
| Maximum Green (s)       | 25.0  | 25.0  | 25.0  | 25.0  | 25.0  | 25.0  | 50.0  | 50.0  |     | 50.0  | 50.0  |     |
| Yellow Time (s)         | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   |     | 3.0   | 3.0   |     |
| All-Red Time (s)        | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   |     | 4.0   | 4.0   |     |
| Lost Time Adjust (s)    | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |       | 0.0   |     | 0.0   | 0.0   |     |
| Total Lost Time (s)     | 7.0   | 7.0   | 7.0   | 7.0   | 7.0   | 7.0   |       | 7.0   |     | 7.0   | 7.0   |     |
| Lead/Lag                | Lag   | Lag   | Lag   | Lag   | Lag   | Lag   |       |       |     |       |       |     |
| Lead-Lag Optimize?      | Yes   | Yes   | Yes   | Yes   | Yes   | Yes   |       |       |     |       |       |     |
| Vehicle Extension (s)   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   |       |     | 3.0   | 3.0   |     |
| Recall Mode             | Max   | Max   | Max   | Max   | Max   | Max   | C-Max | C-Max |     | C-Max | C-Max |     |
| Walk Time (s)           | 7.0   | 7.0   | 7.0   | 7.0   | 7.0   | 7.0   | 12.0  | 12.0  |     | 15.0  | 15.0  |     |
| Flash Dont Walk (s)     | 15.0  | 15.0  | 15.0  | 15.0  | 15.0  | 15.0  | 15.0  | 15.0  |     | 15.0  | 15.0  |     |
| Pedestrian Calls (#/hr) | 19    | 19    | 19    | 40    | 40    | 40    | 23    | 23    |     | 26    | 26    |     |
| Act Effct Green (s)     | 31.0  | 31.0  | 31.0  | 31.0  | 31.0  | 31.0  |       | 50.0  |     | 50.0  | 50.0  |     |
| Actuated g/C Ratio      | 0.33  | 0.33  | 0.33  | 0.33  | 0.33  | 0.33  |       | 0.53  |     | 0.53  | 0.53  |     |
| v/c Ratio               | 0.34  | 0.84  | 0.12  | 0.19  | 0.61  | 0.06  |       | 0.54  |     | 0.08  | 0.76  |     |
| Control Delay           | 24.5  | 43.2  | 1.3   | 26.3  | 33.5  | 0.2   |       | 18.1  |     | 11.9  | 24.4  |     |
| Queue Delay             | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |       | 0.0   |     | 0.0   | 0.0   |     |
| Total Delay             | 24.5  | 43.2  | 1.3   | 26.3  | 33.5  | 0.2   |       | 18.1  |     | 11.9  | 24.4  |     |
| LOS                     | C     | D     | A     | C     | C     | A     |       | B     |     | B     | C     |     |
| Approach Delay          |       | 35.5  |       |       | 30.0  |       |       | 18.1  |     |       | 23.7  |     |
| Approach LOS            |       | D     |       |       | C     |       |       | B     |     |       | C     |     |

Intersection Summary

Area Type: Other

Cycle Length: 95

Actuated Cycle Length: 95

Offset: 38 (40%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green

Natural Cycle: 80

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.84

Intersection Signal Delay: 27.0

Intersection LOS: C

Intersection Capacity Utilization 96.0%

ICU Level of Service F

Analysis Period (min) 15

Splits and Phases: 3: Island Park & Scott



Scenario 1 210 Clearview Avenue Existing  
MC

Synchro 11 Report  
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Lanes, Volumes, Timings  
3: Island Park & Scott

Existing  
AM Peak Hour

| Lane Group              | Ø3   | Ø7   |
|-------------------------|------|------|
| Detector 2 Extend (s)   |      |      |
| Turn Type               |      |      |
| Protected Phases        | 3    | 7    |
| Permitted Phases        |      |      |
| Detector Phase          |      |      |
| Switch Phase            |      |      |
| Minimum Initial (s)     | 1.0  | 1.0  |
| Minimum Split (s)       | 5.0  | 5.0  |
| Total Split (s)         | 6.0  | 6.0  |
| Total Split (%)         | 6%   | 6%   |
| Maximum Green (s)       | 2.0  | 2.0  |
| Yellow Time (s)         | 2.0  | 2.0  |
| All-Red Time (s)        | 2.0  | 2.0  |
| Lost Time Adjust (s)    |      |      |
| Total Lost Time (s)     |      |      |
| Lead/Lag                | Lead | Lead |
| Lead-Lag Optimize?      | Yes  | Yes  |
| Vehicle Extension (s)   | 3.0  | 3.0  |
| Recall Mode             | None | None |
| Walk Time (s)           |      |      |
| Flash Dont Walk (s)     |      |      |
| Pedestrian Calls (#/hr) |      |      |
| Act Effct Green (s)     |      |      |
| Actuated g/C Ratio      |      |      |
| v/c Ratio               |      |      |
| Control Delay           |      |      |
| Queue Delay             |      |      |
| Total Delay             |      |      |
| LOS                     |      |      |
| Approach Delay          |      |      |
| Approach LOS            |      |      |

Intersection Summary

Scenario 1 210 Clearview Avenue Existing  
MC

Synchro 11 Report  
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Lanes, Volumes, Timings  
4: West Village/Lanark & Scott

Existing  
AM Peak Hour

|   | EBL   | EBT   | EBR | WBL   | WBT   | WBR | NBL   | NBT   | NBR | SBL   | SBT   | SBR |
|---|-------|-------|-----|-------|-------|-----|-------|-------|-----|-------|-------|-----|
| Lane Group  | EBL   | EBT   | EBR | WBL   | WBT   | WBR | NBL   | NBT   | NBR | SBL   | SBT   | SBR |
| Lane Configurations   | ←     | ←     | ←   | ←     | ←     | ←   | ←     | ←     | ←   | ←     | ←     | ←   |
| Traffic Volume (vph)  | 30    | 414   | 6   | 6     | 307   | 38  | 7     | 1     | 19  | 57    | 0     | 64  |
| Future Volume (vph)   | 30    | 414   | 6   | 6     | 307   | 38  | 7     | 1     | 19  | 57    | 0     | 64  |
| Satd. Flow (prot)   | 1642  | 1470  | 0   | 1658  | 1498  | 0   | 1658  | 1427  | 0   | 1658  | 1364  | 0   |
| Flt Permitted   | 0.535 |       |     | 0.485 |       |     | 0.711 |       |     | 0.743 |       |     |
| Satd. Flow (perm)   | 916   | 1470  | 0   | 829   | 1498  | 0   | 1173  | 1427  | 0   | 1261  | 1364  | 0   |
| Satd. Flow (RTOR)   |       | 2     |     |       | 12    |     |       | 21    |     |       | 523   |     |
| Lane Group Flow (vph)   | 33    | 467   | 0   | 7     | 383   | 0   | 8     | 22    | 0   | 63    | 71    | 0   |
| Turn Type   | Perm  | NA    |     | Perm  | NA    |     | Perm  | NA    |     | Perm  | NA    |     |
| Protected Phases  |       | 2     |     |       | 6     |     |       | 4     |     |       | 8     |     |
| Permitted Phases  | 2     |       |     | 6     |       |     | 4     |       |     | 8     |       |     |
| Detector Phase  | 2     | 2     |     | 6     | 6     |     | 4     | 4     |     | 8     | 8     |     |
| Switch Phase  |       |       |     |       |       |     |       |       |     |       |       |     |
| Minimum Initial (s)   | 10.0  | 10.0  |     | 10.0  | 10.0  |     | 10.0  | 10.0  |     | 10.0  | 10.0  |     |
| Minimum Split (s)   | 28.6  | 28.6  |     | 28.6  | 28.6  |     | 22.2  | 22.2  |     | 22.2  | 22.2  |     |
| Total Split (s)   | 66.0  | 66.0  |     | 66.0  | 66.0  |     | 29.0  | 29.0  |     | 29.0  | 29.0  |     |
| Total Split (%)   | 69.5% | 69.5% |     | 69.5% | 69.5% |     | 30.5% | 30.5% |     | 30.5% | 30.5% |     |
| Yellow Time (s)   | 3.3   | 3.3   |     | 3.3   | 3.3   |     | 3.3   | 3.3   |     | 3.3   | 3.3   |     |
| All-Red Time (s)  | 3.3   | 3.3   |     | 3.3   | 3.3   |     | 2.9   | 2.9   |     | 2.9   | 2.9   |     |
| Lost Time Adjust (s)  | 0.0   | 0.0   |     | 0.0   | 0.0   |     | 0.0   | 0.0   |     | 0.0   | 0.0   |     |
| Total Lost Time (s)   | 6.6   | 6.6   |     | 6.6   | 6.6   |     | 6.2   | 6.2   |     | 6.2   | 6.2   |     |
| Lead/Lag  |       |       |     |       |       |     |       |       |     |       |       |     |
| Lead-Lag Optimize?  |       |       |     |       |       |     |       |       |     |       |       |     |
| Recall Mode   | C-Max | C-Max |     | C-Max | C-Max |     | None  | None  |     | None  | None  |     |
| Act Effct Green (s)   | 74.7  | 74.7  |     | 74.7  | 74.7  |     | 12.0  | 12.0  |     | 12.0  | 12.0  |     |
| Actuated g/C Ratio  | 0.79  | 0.79  |     | 0.79  | 0.79  |     | 0.13  | 0.13  |     | 0.13  | 0.13  |     |
| v/c Ratio   | 0.05  | 0.40  |     | 0.01  | 0.32  |     | 0.05  | 0.11  |     | 0.40  | 0.11  |     |
| Control Delay   | 4.1   | 5.9   |     | 1.7   | 2.2   |     | 35.6  | 16.3  |     | 45.0  | 0.4   |     |
| Queue Delay   | 0.0   | 0.0   |     | 0.0   | 0.0   |     | 0.0   | 0.0   |     | 0.0   | 0.0   |     |
| Total Delay   | 4.1   | 5.9   |     | 1.7   | 2.2   |     | 35.6  | 16.3  |     | 45.0  | 0.4   |     |
| LOS   | A     | A     |     | A     | A     |     | D     | B     |     | D     | A     |     |
| Approach Delay  |       | 5.8   |     |       | 2.2   |     |       | 21.4  |     |       | 21.3  |     |
| Approach LOS  |       | A     |     |       | A     |     |       | C     |     |       | C     |     |
| Queue Length 50th (m)   | 1.2   | 24.3  |     | 0.1   | 8.7   |     | 1.4   | 0.2   |     | 11.1  | 0.0   |     |
| Queue Length 95th (m)   | 4.2   | 48.8  |     | m0.2  | m13.4 |     | 5.3   | 6.6   |     | 22.5  | 0.0   |     |
| Internal Link Dist (m)  |       | 332.8 |     |       | 211.2 |     |       | 80.9  |     |       | 82.5  |     |
| Turn Bay Length (m)   | 36.5  |       |     | 42.0  |       |     | 18.0  |       |     | 18.0  |       |     |
| Base Capacity (vph)   | 720   | 1157  |     | 652   | 1181  |     | 281   | 358   |     | 302   | 724   |     |
| Starvation Cap Reductn  | 0     | 0     |     | 0     | 0     |     | 0     | 0     |     | 0     | 0     |     |
| Spillback Cap Reductn   | 0     | 0     |     | 0     | 0     |     | 0     | 0     |     | 0     | 0     |     |
| Storage Cap Reductn   | 0     | 0     |     | 0     | 0     |     | 0     | 0     |     | 0     | 0     |     |
| Reduced v/c Ratio   | 0.05  | 0.40  |     | 0.01  | 0.32  |     | 0.03  | 0.06  |     | 0.21  | 0.10  |     |
| Intersection Summary  |       |       |     |       |       |     |       |       |     |       |       |     |
| Cycle Length: 95  |       |       |     |       |       |     |       |       |     |       |       |     |
| Actuated Cycle Length: 95   |       |       |     |       |       |     |       |       |     |       |       |     |
| Offset: 83 (87%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green |       |       |     |       |       |     |       |       |     |       |       |     |
| Natural Cycle: 55   |       |       |     |       |       |     |       |       |     |       |       |     |
| Control Type: Actuated-Coordinated                                      |       |       |     |       |       |     |       |       |     |       |       |     |

Scenario 1 210 Clearview Avenue 11:59 pm 09/04/2024 Existing

Synchro 11 Report  
Page 8

Lanes, Volumes, Timings  
4: West Village/Lanark & Scott

Existing  
AM Peak Hour

|   |                        |
|---|------------------------|
| Maximum v/c Ratio: 0.40   |                        |
| Intersection Signal Delay: 6.9                                    | Intersection LOS: A    |
| Intersection Capacity Utilization 48.2%                           | ICU Level of Service A |
| Analysis Period (min) 15  |                        |
| m Volume for 95th percentile queue is metered by upstream signal. |                        |

Splits and Phases: 4: West Village/Lanark & Scott



Scenario 1 210 Clearview Avenue 11:59 pm 09/04/2024 Existing

Synchro 11 Report  
Page 9

HCM 2010 AWSC  
5: Churchill & Lanark

Existing  
AM Peak Hour

| Intersection               |      |      |      |      |      |      |
|----------------------------|------|------|------|------|------|------|
| Intersection Delay, s/veh  | 7.8  |      |      |      |      |      |
| Intersection LOS           | A    |      |      |      |      |      |
| Movement                   | WBL  | WBR  | NBT  | NBR  | SBL  | SBT  |
| Lane Configurations        | W    |      | T    |      | T    |      |
| Traffic Vol, veh/h         | 108  | 3    | 24   | 45   | 6    | 47   |
| Future Vol, veh/h          | 108  | 3    | 24   | 45   | 6    | 47   |
| Peak Hour Factor           | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 |
| Heavy Vehicles, %          | 2    | 33   | 8    | 13   | 2    | 2    |
| Mvmt Flow                  | 120  | 3    | 27   | 50   | 7    | 52   |
| Number of Lanes            | 1    | 0    | 1    | 0    | 0    | 1    |
| Approach                   | WB   | NB   |      | SB   |      |      |
| Opposing Approach          |      | SB   |      | NB   |      |      |
| Opposing Lanes             | 0    | 1    |      | 1    |      |      |
| Conflicting Approach Left  | NB   |      |      | WB   |      |      |
| Conflicting Lanes Left     | 1    | 0    |      | 1    |      |      |
| Conflicting Approach Right | SB   | WB   |      |      |      |      |
| Conflicting Lanes Right    | 1    | 1    |      | 0    |      |      |
| HCM Control Delay          | 8.2  | 7.4  |      | 7.6  |      |      |
| HCM LOS                    | A    | A    |      | A    |      |      |

| Lane                   | NBLn1 | WBLn1 | SBLn1 |
|------------------------|-------|-------|-------|
| Vol Left, %            | 0%    | 97%   | 11%   |
| Vol Thru, %            | 35%   | 0%    | 89%   |
| Vol Right, %           | 65%   | 3%    | 0%    |
| Sign Control           | Stop  | Stop  | Stop  |
| Traffic Vol by Lane    | 69    | 111   | 53    |
| LT Vol                 | 0     | 108   | 6     |
| Through Vol            | 24    | 0     | 47    |
| RT Vol                 | 45    | 3     | 0     |
| Lane Flow Rate         | 77    | 123   | 59    |
| Geometry Grp           | 1     | 1     | 1     |
| Degree of Util (X)     | 0.083 | 0.149 | 0.069 |
| Departure Headway (Hd) | 3.907 | 4.345 | 4.234 |
| Convergence, Y/N       | Yes   | Yes   | Yes   |
| Cap                    | 902   | 819   | 833   |
| Service Time           | 1.999 | 2.406 | 2.325 |
| HCM Lane V/C Ratio     | 0.085 | 0.15  | 0.071 |
| HCM Control Delay      | 7.4   | 8.2   | 7.6   |
| HCM Lane LOS           | A     | A     | A     |
| HCM 95th-tile Q        | 0.3   | 0.5   | 0.2   |

Lanes, Volumes, Timings  
1: Island Park & Kichi Zibi Mikan

Existing  
PM Peak Hour

| Lane Group             | EBL    | EBT   | EBR   | WBL   | WBT   | WBR    | NBL | NBT    | NBR | SBL   | SBT    | SBR |
|------------------------|--------|-------|-------|-------|-------|--------|-----|--------|-----|-------|--------|-----|
| Lane Configurations    | ←      | ↑↑    | →     | ←     | ↑↑    | →      |     | ↑      |     | ←     | ↑      | →   |
| Traffic Volume (vph)   | 335    | 165   | 18    | 171   | 879   | 954    | 0   | 488    | 28  | 141   | 462    | 404 |
| Future Volume (vph)    | 335    | 165   | 18    | 171   | 879   | 954    | 0   | 488    | 28  | 141   | 462    | 404 |
| Satd. Flow (prot)      | 1658   | 3316  | 1483  | 1658  | 3316  | 1483   | 0   | 1731   | 0   | 3154  | 1609   | 0   |
| Fit Permitted          | 0.950  |       |       | 0.950 |       |        |     |        |     | 0.950 |        |     |
| Satd. Flow (perm)      | 1655   | 3316  | 1448  | 1653  | 3316  | 1443   | 0   | 1731   | 0   | 3149  | 1609   | 0   |
| Satd. Flow (RTOR)      |        |       | 95    |       |       | 191    |     | 2      |     |       | 28     |     |
| Lane Group Flow (vph)  | 372    | 183   | 20    | 190   | 977   | 1060   | 0   | 573    | 0   | 157   | 962    | 0   |
| Turn Type              | Prot   | NA    | Perm  | Prot  | NA    | Perm   |     | NA     |     | Prot  | NA     |     |
| Protected Phases       | 9      | 2     | 2     | 13    | 6     | 6      |     | 16     |     | 15    | 12     |     |
| Permitted Phases       |        |       | 2     |       |       | 6      |     |        |     |       |        |     |
| Detector Phase         | 9      | 2     | 2     | 13    | 6     | 6      |     | 16     |     | 15    | 12     |     |
| Switch Phase           |        |       |       |       |       |        |     |        |     |       |        |     |
| Minimum Initial (s)    | 5.0    | 15.0  | 15.0  | 5.0   | 15.0  | 15.0   |     | 10.0   |     | 5.0   | 10.0   |     |
| Minimum Split (s)      | 20.6   | 30.1  | 30.1  | 20.6  | 30.1  | 30.1   |     | 29.1   |     | 11.5  | 29.1   |     |
| Total Split (s)        | 41.6   | 51.1  | 51.1  | 41.6  | 66.1  | 66.1   |     | 51.1   |     | 16.5  | 66.1   |     |
| Total Split (%)        | 23.7%  | 29.2% | 29.2% | 23.7% | 37.7% | 37.7%  |     | 29.2%  |     | 9.4%  | 37.7%  |     |
| Yellow Time (s)        | 3.7    | 3.7   | 3.7   | 3.7   | 3.7   | 3.7    |     | 3.7    |     | 3.7   | 3.7    |     |
| All-Red Time (s)       | 1.9    | 2.4   | 2.4   | 1.9   | 2.4   | 2.4    |     | 2.4    |     | 2.8   | 2.4    |     |
| Lost Time Adjust (s)   | 0.0    | 0.0   | 0.0   | 0.0   | 0.0   | 0.0    |     | 0.0    |     | 0.0   | 0.0    |     |
| Total Lost Time (s)    | 5.6    | 6.1   | 6.1   | 5.6   | 6.1   | 6.1    |     | 6.1    |     | 6.5   | 6.1    |     |
| Lead/Lag               |        |       |       |       |       |        |     | Lag    |     | Lead  |        |     |
| Lead-Lag Optimize?     |        |       |       |       |       |        |     | Yes    |     | Yes   |        |     |
| Recall Mode            | None   | None  | None  | None  | None  | None   |     | None   |     | None  | None   |     |
| Act Effct Green (s)    | 36.0   | 60.0  | 60.0  | 36.0  | 60.0  | 60.0   |     | 45.0   |     | 10.0  | 61.5   |     |
| Actuated g/C Ratio     | 0.21   | 0.34  | 0.34  | 0.21  | 0.34  | 0.34   |     | 0.26   |     | 0.06  | 0.35   |     |
| v/c Ratio              | 1.09   | 0.16  | 0.04  | 0.56  | 0.86  | 1.71   |     | 1.29   |     | 0.88  | 1.65   |     |
| Control Delay          | 138.2  | 40.6  | 0.1   | 69.7  | 62.8  | 355.6  |     | 194.9  |     | 121.4 | 335.6  |     |
| Queue Delay            | 0.0    | 0.0   | 0.0   | 0.0   | 0.0   | 0.0    |     | 0.0    |     | 0.0   | 0.0    |     |
| Total Delay            | 138.2  | 40.6  | 0.1   | 69.7  | 62.8  | 355.6  |     | 194.9  |     | 121.4 | 335.6  |     |
| LOS                    | F      | D     | A     | E     | E     | F      |     | F      |     | F     | F      |     |
| Approach Delay         | 102.4  |       |       | 202.8 |       |        |     | 194.9  |     | 305.5 |        |     |
| Approach LOS           | F      |       |       | F     |       |        |     | F      |     | F     |        |     |
| Queue Length 50th (m)  | ~146.0 | 23.5  | 0.0   | 60.4  | 168.2 | ~500.0 |     | ~253.8 |     | 28.6  | ~481.7 |     |
| Queue Length 95th (m)  | #212.5 | 33.6  | 0.0   | 88.4  | 196.9 | #582.7 |     | #329.2 |     | #50.3 | #563.6 |     |
| Internal Link Dist (m) | 750.5  |       |       | 213.6 |       |        |     | 249.0  |     | 157.2 |        |     |
| Turn Bay Length (m)    | 104.5  |       | 88.0  | 89.6  |       |        |     |        |     | 80.0  |        |     |
| Base Capacity (vph)    | 340    | 1134  | 558   | 340   | 1134  | 619    |     | 445    |     | 179   | 582    |     |
| Starvation Cap Reductn | 0      | 0     | 0     | 0     | 0     | 0      |     | 0      |     | 0     | 0      |     |
| Spillback Cap Reductn  | 0      | 0     | 0     | 0     | 0     | 0      |     | 0      |     | 0     | 0      |     |
| Storage Cap Reductn    | 0      | 0     | 0     | 0     | 0     | 0      |     | 0      |     | 0     | 0      |     |
| Reduced v/c Ratio      | 1.09   | 0.16  | 0.04  | 0.56  | 0.86  | 1.71   |     | 1.29   |     | 0.88  | 1.65   |     |

| Intersection Summary   |                        |
|------------------------|------------------------|
| Cycle Length:          | 175.3                  |
| Actuated Cycle Length: | 175.3                  |
| Natural Cycle:         | 145                    |
| Control Type:          | Actuated-Uncoordinated |
| Maximum v/c Ratio:     | 1.71                   |

Lanes, Volumes, Timings  
1: Island Park & Kichi Zibi Mikan

Existing  
PM Peak Hour

|   |                        |
|---|------------------------|
| Intersection Signal Delay: 214.5  | Intersection LOS: F    |
| Intersection Capacity Utilization 125.9%  | ICU Level of Service H |
| Analysis Period (min) 15  |                        |
| ~ Volume exceeds capacity, queue is theoretically infinite.<br>Queue shown is maximum after two cycles.     |                        |
| # 95th percentile volume exceeds capacity, queue may be longer.<br>Queue shown is maximum after two cycles. |                        |

Splits and Phases: 1: Island Park & Kichi Zibi Mikan

|        |        |        |
|--------|--------|--------|
| → Ø2   | ↘ Ø9   | ↓ Ø12  |
| 51.1 s | 41.6 s | 66.1 s |
| ← Ø6   | ↙ Ø13  | ↘ Ø15  |
| 66.1 s | 41.6 s | 16.5 s |
|        |        | ↑ Ø16  |
|        |        | 51.1 s |

HCM 2010 TWSC  
2: Island Park & Clearview

Existing  
PM Peak Hour

| Intersection             |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh         | 2.7  |      |      |      |      |      |      |      |      |      |      |      |
| Movement                 | EBL  | EBT  | EBR  | WBL  | WBT  | WBR  | NBL  | NBT  | NBR  | SBL  | SBT  | SBR  |
| Lane Configurations      |      | ↕    |      |      | ↕    |      |      | ↕    |      |      | ↕    |      |
| Traffic Vol, veh/h       | 45   | 7    | 8    | 11   | 9    | 13   | 2    | 470  | 1    | 14   | 404  | 29   |
| Future Vol, veh/h        | 45   | 7    | 8    | 11   | 9    | 13   | 2    | 470  | 1    | 14   | 404  | 29   |
| Conflicting Peds, #/hr   | 21   | 0    | 0    | 0    | 0    | 21   | 7    | 0    | 2    | 2    | 0    | 7    |
| Sign Control             | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized           | -    | -    | None | -    | -    | None | -    | -    | None | -    | -    | None |
| Storage Length           | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    |
| Veh in Median Storage, # | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    |
| Grade, %                 | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    |
| Peak Hour Factor         | 90   | 90   | 90   | 90   | 90   | 90   | 90   | 90   | 90   | 90   | 90   | 90   |
| Heavy Vehicles, %        | 2    | 43   | 2    | 18   | 33   | 2    | 2    | 2    | 2    | 7    | 2    | 2    |
| Mvmt Flow                | 50   | 8    | 9    | 12   | 10   | 14   | 2    | 522  | 1    | 16   | 449  | 32   |

| Major/Minor          | Minor2 | Minor1 | Major1 | Major2 |
|----------------------|--------|--------|--------|--------|
| Conflicting Flow All | 1064   | 1033   | 472    | 1035   |
| Stage 1              | 504    | 504    | -      | 529    |
| Stage 2              | 560    | 529    | -      | 506    |
| Critical Hdwy        | 7.12   | 6.93   | 6.22   | 7.28   |
| Critical Hdwy Stg 1  | 6.12   | 5.93   | -      | 6.28   |
| Critical Hdwy Stg 2  | 6.12   | 5.93   | -      | 6.28   |
| Follow-up Hdwy       | 3.518  | 4.387  | 3.318  | 3.662  |
| Pot Cap-1 Maneuver   | 201    | 198    | 592    | 196    |
| Stage 1              | 550    | 479    | -      | 505    |
| Stage 2              | 513    | 466    | -      | 520    |
| Platoon blocked, %   | -      | -      | -      | -      |
| Mov Cap-1 Maneuver   | 180    | 192    | 589    | 183    |
| Mov Cap-2 Maneuver   | 180    | 192    | -      | 183    |
| Stage 1              | 546    | 466    | -      | 502    |
| Stage 2              | 479    | 464    | -      | 493    |























| Approach             | EB   | WB   | NB | SB  |
|----------------------|------|------|----|-----|
| HCM Control Delay, s | 31.7 | 21.7 | 0  | 0.3 |
| HCM LOS              | D    | C    |    |     |

| Minor Lane/Major Mvmt | NBL   | NBT | NBR | EBLn1WBLn1 | SBL   | SBT   | SBR |
|-----------------------|-------|-----|-----|------------|-------|-------|-----|
| Capacity (veh/h)      | 1069  | -   | -   | 200        | 252   | 1015  | -   |
| HCM Lane V/C Ratio    | 0.002 | -   | -   | 0.333      | 0.146 | 0.015 | -   |
| HCM Control Delay (s) | 8.4   | 0   | -   | 31.7       | 21.7  | 8.6   | 0   |
| HCM Lane LOS          | A     | A   | -   | D          | C     | A     | A   |
| HCM 95th %tile Q(veh) | 0     | -   | -   | 1.4        | 0.5   | 0     | -   |

### Lanes, Volumes, Timings

#### 3: Island Park & Scott













Existing  
PM Peak Hour

|                            |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Group                 | EBL   | EBT   | EBR   | WBL   | WBT   | WBR   | NBL   | NBT   | NBR   | SBL   | SBT   | SBR   |
| Lane Configurations        |  |  |  |  |  |  |   |  |   |  |  |  |
| Traffic Volume (vph)       | 56  | 415   | 46  | 55  | 494   | 71  | 34  | 145   | 29  | 60  | 396   | 99  |
| Future Volume (vph)        | 56  | 415   | 46  | 55  | 494   | 71  | 34  | 145   | 29  | 60  | 396   | 99  |
| Ideal Flow (vphpl)         | 1800  | 1800  | 1800  | 1800  | 1800  | 1800  | 1800  | 1800  | 1800  | 1800  | 1800  | 1800  |
| Storage Length (m)         | 58.7  |   | 29.5  | 250.0   |   | 36.5  | 0.0   |   | 0.0   | 36.5  |   | 0.0   |
| Storage Lanes              | 1   |   | 1   | 1   |   | 1   | 0   |   | 0   | 1   |   | 0   |
| Taper Length (m)           | 15.0  |   |   | 15.0  |   |   | 15.0  |   |   | 15.0  |   |   |
| Lane Util. Factor          | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  |
| Ped Bike Factor            | 0.98  |   | 0.90  | 0.98  |   | 0.86  |   | 0.99  |   | 0.97  | 0.98  |   |
| Frt                        |   |   | 0.850   |   |   | 0.850   |   | 0.981   |   |   | 0.970   |   |
| Flt Protected              | 0.950   |   |   | 0.950   |   |   |   | 0.992   |   | 0.950   |   |   |
| Satd. Flow (prot)          | 1658  | 1548  | 1483  | 1658  | 1521  | 1483  | 0   | 1680  | 0   | 1658  | 1661  | 0   |
| Flt Permitted              | 0.257   |   |   | 0.344   |   |   |   | 0.738   |   | 0.608   |   |   |
| Satd. Flow (perm)          | 439   | 1548  | 1334  | 587   | 1521  | 1278  | 0   | 1246  | 0   | 1029  | 1661  | 0   |
| Right Turn on Red          |   |   | Yes   |   |   | Yes   |   |   | Yes   |   |   | Yes   |
| Satd. Flow (RTOR)          |   |   | 87  |   |   | 87  |   | 10  |   |   | 16  |   |
| Link Speed (k/h)           |   | 50  |   |   | 50  |   |   | 50  |   |   | 50  |   |
| Link Distance (m)          |   | 241.8   |   |   | 297.2   |   |   | 328.9   |   |   | 441.3   |   |
| Travel Time (s)            |   | 17.4  |   |   | 21.4  |   |   | 23.7  |   |   | 31.8  |   |
| Confl. Peds. (#/hr)        | 37  |   | 29  | 29  |   | 37  | 29  |   | 24  | 24  |   | 29  |
| Confl. Bikes (#/hr)        |   |   | 17  |   |   | 38  |   |   | 19  |   |   | 25  |
| Peak Hour Factor           | 0.90  | 0.90  | 0.90  | 0.90  | 0.90  | 0.90  | 0.90  | 0.90  | 0.90  | 0.90  | 0.90  | 0.90  |
| Heavy Vehicles (%)         | 2%  | 15%   | 2%  | 2%  | 17%   | 2%  | 2%  | 2%  | 2%  | 2%  | 2%  | 2%  |
| Adj. Flow (vph)            | 62  | 461   | 51  | 61  | 549   | 79  | 38  | 161   | 32  | 67  | 440   | 110   |
| Shared Lane Traffic (%)    |   |   |   |   |   |   |   |   |   |   |   |   |
| Lane Group Flow (vph)      | 62  | 461   | 51  | 61  | 549   | 79  | 0   | 231   | 0   | 67  | 550   | 0   |
| Enter Blocked Intersection | No  | No  | No  | No  | No  | No  | No  | No  | No  | No  | No  | No  |
| Lane Alignment             | Left  | Left  | Right   | Left  | Left  | Right   | Left  | Left  | Right   | Left  | Left  | Right   |
| Median Width(m)            |   | 3.5   |   |   | 3.5   |   |   | 3.5   |   |   | 3.5   |   |
| Link Offset(m)             |   | 0.0   |   |   | 0.0   |   |   | 0.0   |   |   | 0.0   |   |
| Crosswalk Width(m)         |   | 3.0   |   |   | 3.0   |   |   | 3.0   |   |   | 3.0   |   |
| Two way Left Turn Lane     |   |   |   |   |   |   |   |   |   |   |   |   |
| Headway Factor             | 1.09  | 1.09  | 1.09  | 1.09  | 1.09  | 1.09  | 1.09  | 1.09  | 1.09  | 1.09  | 1.09  | 1.09  |
| Turning Speed (k/h)        | 25  |   | 15  | 25  |   | 15  | 25  |   | 15  | 25  |   | 15  |
| Number of Detectors        | 1   | 2   | 1   | 1   | 2   | 1   | 1   | 2   |   | 1   | 2   |   |
| Detector Template          | Left  | Thru  | Right   | Left  | Thru  | Right   | Left  | Thru  |   | Left  | Thru  |   |
| Leading Detector (m)       | 2.0   | 10.0  | 2.0   | 2.0   | 10.0  | 2.0   | 2.0   | 10.0  |   | 2.0   | 10.0  |   |
| Trailing Detector (m)      | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |   | 0.0   | 0.0   |   |
| Detector 1 Position(m)     | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |   | 0.0   | 0.0   |   |
| Detector 1 Size(m)         | 2.0   | 0.6   | 2.0   | 2.0   | 0.6   | 2.0   | 2.0   | 0.6   |   | 2.0   | 0.6   |   |
| Detector 1 Type            | Cl+Ex   | Cl+Ex   | Cl+Ex   | Cl+Ex   | Cl+Ex   | Cl+Ex   | Cl+Ex   | Cl+Ex   |   | Cl+Ex   | Cl+Ex   |   |
| Detector 1 Channel         |   |   |   |   |   |   |   |   |   |   |   |   |
| Detector 1 Extend (s)      | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |   | 0.0   | 0.0   |   |
| Detector 1 Queue (s)       | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |   | 0.0   | 0.0   |   |
| Detector 1 Delay (s)       | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |   | 0.0   | 0.0   |   |
| Detector 2 Position(m)     |   | 9.4   |   |   | 9.4   |   |   | 9.4   |   |   | 9.4   |   |
| Detector 2 Size(m)         |   | 0.6   |   |   | 0.6   |   |   | 0.6   |   |   | 0.6   |   |
| Detector 2 Type            |   | Cl+Ex   |   |   | Cl+Ex   |   |   | Cl+Ex   |   |   | Cl+Ex   |   |
| Detector 2 Channel         |   |   |   |   |   |   |   |   |   |   |   |   |

### Lanes, Volumes, Timings

#### 3: Island Park & Scott

Existing  
PM Peak Hour

|                         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Group              | EBL   | EBT   | EBR   | WBL   | WBT   | WBR   | NBL   | NBT   | NBR   | SBL   | SBT   | SBR   |
| Detector 2 Extend (s)   |   | 0.0   |   |   | 0.0   |   |   | 0.0   |   |   | 0.0   |   |
| Turn Type               | Perm  | NA  | Perm  | Perm  | NA  | Perm  | Perm  | NA  |   | Perm  | NA  |   |
| Protected Phases        |   | 4   |   |   | 8   |   |   | 2   |   |   | 6   |   |
| Permitted Phases        | 4   |   | 4   | 8   |   | 8   | 2   |   |   | 6   |   |   |
| Detector Phase          | 4   | 4   | 4   | 8   | 8   | 8   | 2   | 2   |   | 6   | 6   |   |
| Switch Phase            |   |   |   |   |   |   |   |   |   |   |   |   |
| Minimum Initial (s)     | 10.0  | 10.0  | 10.0  | 10.0  | 10.0  | 10.0  | 10.0  | 10.0  |   | 10.0  | 10.0  |   |
| Minimum Split (s)       | 29.0  | 29.0  | 29.0  | 29.0  | 29.0  | 29.0  | 34.0  | 34.0  |   | 34.0  | 34.0  |   |
| Total Split (s)         | 43.0  | 43.0  | 43.0  | 43.0  | 43.0  | 43.0  | 51.0  | 51.0  |   | 51.0  | 51.0  |   |
| Total Split (%)         | 43.0%   | 43.0%   | 43.0%   | 43.0%   | 43.0%   | 43.0%   | 51.0%   | 51.0%   |   | 51.0%   | 51.0%   |   |
| Maximum Green (s)       | 36.0  | 36.0  | 36.0  | 36.0  | 36.0  | 36.0  | 44.0  | 44.0  |   | 44.0  | 44.0  |   |
| Yellow Time (s)         | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   |   | 3.0   | 3.0   |   |
| All-Red Time (s)        | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   |   | 4.0   | 4.0   |   |
| Lost Time Adjust (s)    | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |   | 0.0   | 0.0   |   |
| Total Lost Time (s)     | 7.0   | 7.0   | 7.0   | 7.0   | 7.0   | 7.0   | 7.0   | 7.0   |   | 7.0   | 7.0   |   |
| Lead/Lag                | Lag   | Lag   | Lag   | Lag   | Lag   | Lag   |   |   |   |   |   |   |
| Lead-Lag Optimize?      | Yes   | Yes   | Yes   | Yes   | Yes   | Yes   |   |   |   |   |   |   |
| Vehicle Extension (s)   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   |   | 3.0   | 3.0   |   |
| Recall Mode             | Max   | Max   | Max   | Max   | Max   | Max   | C-Max   | C-Max   |   | C-Max   | C-Max   |   |
| Walk Time (s)           | 7.0   | 7.0   | 7.0   | 7.0   | 7.0   | 7.0   | 12.0  | 12.0  |   | 12.0  | 12.0  |   |
| Flash Dont Walk (s)     | 15.0  | 15.0  | 15.0  | 15.0  | 15.0  | 15.0  | 15.0  | 15.0  |   | 15.0  | 15.0  |   |
| Pedestrian Calls (#/hr) | 29  | 29  | 29  | 37  | 37  | 37  | 24  | 24  |   | 29  | 29  |   |
| Act Effct Green (s)     | 42.0  | 42.0  | 42.0  | 42.0  | 42.0  | 42.0  | 42.0  | 42.0  |   | 44.0  | 44.0  |   |
| Actuated g/C Ratio      | 0.42  | 0.42  | 0.42  | 0.42  | 0.42  | 0.42  |   | 0.44  |   | 0.44  | 0.44  |   |
| v/c Ratio               | 0.34  | 0.71  | 0.08  | 0.25  | 0.86  | 0.13  |   | 0.42  |   | 0.15  | 0.74  |   |
| Control Delay           | 20.5  | 26.3  | 0.5   | 22.3  | 41.9  | 4.0   |   | 21.2  |   | 18.0  | 30.1  |   |
| Queue Delay             | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |   | 0.0   |   | 0.0   | 0.0   |   |
| Total Delay             | 20.5  | 26.3  | 0.5   | 22.3  | 41.9  | 4.0   |   | 21.2  |   | 18.0  | 30.1  |   |
| LOS                     | C   | C   | A   | C   | D   | A   |   | C   |   | B   | C   |   |
| Approach Delay          |   | 23.3  |   |   | 35.8  |   |   | 21.2  |   |   | 28.8  |   |
| Approach LOS            |   | C   |   |   | D   |   |   | C   |   |   | C   |   |
| Queue Length 50th (m)   | 5.2   | 75.1  | 0.2   | 7.5   | 94.4  | 0.0   |   | 28.5  |   | 7.6   | 84.1  |   |
| Queue Length 95th (m)   | m14.0   | 112.1   | m0.2  | 17.3  | #155.2  | 7.3   |   | 48.4  |   | 16.1  | 125.4   |   |
| Internal Link Dist (m)  |   | 217.8   |   |   | 273.2   |   |   | 304.9   |   |   | 417.3   |   |
| Turn Bay Length (m)     | 58.7  |   | 29.5  | 250.0   |   | 36.5  |   |   |   | 36.5  |   |   |
| Base Capacity (vph)     | 184   | 650   | 610   | 246   | 638   | 587   |   | 553   |   | 452   | 739   |   |
| Starvation Cap Reductn  | 0   | 0   | 0   | 0   | 0   | 0   |   | 0   |   | 0   | 0   |   |
| Spillback Cap Reductn   | 0   | 0   | 0   | 0   | 0   | 0   |   | 0   |   | 0   | 0   |   |
| Storage Cap Reductn     | 0   | 0   | 0   | 0   | 0   | 0   |   | 0   |   | 0   | 0   |   |
| Reduced v/c Ratio       | 0.34  | 0.71  | 0.08  | 0.25  | 0.86  | 0.13  |   | 0.42  |   | 0.15  | 0.74  |   |

### Intersection Summary

Area Type: Other

Cycle Length: 100

Actuated Cycle Length: 100

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

Natural Cycle: 80

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.86

Lanes, Volumes, Timings  
3: Island Park & Scott

Existing  
PM Peak Hour

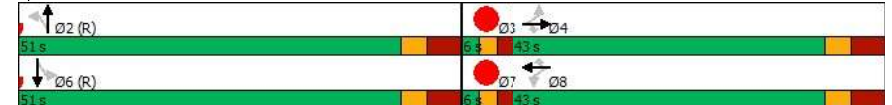
| Lane Group              | Ø3   | Ø7   |
|-------------------------|------|------|
| Detector 2 Extend (s)   |      |      |
| Turn Type               |      |      |
| Protected Phases        | 3    | 7    |
| Permitted Phases        |      |      |
| Detector Phase          |      |      |
| Switch Phase            |      |      |
| Minimum Initial (s)     | 1.0  | 1.0  |
| Minimum Split (s)       | 5.0  | 5.0  |
| Total Split (s)         | 6.0  | 6.0  |
| Total Split (%)         | 6%   | 6%   |
| Maximum Green (s)       | 2.0  | 2.0  |
| Yellow Time (s)         | 2.0  | 2.0  |
| All-Red Time (s)        | 2.0  | 2.0  |
| Lost Time Adjust (s)    |      |      |
| Total Lost Time (s)     |      |      |
| Lead/Lag                | Lead | Lead |
| Lead-Lag Optimize?      | Yes  | Yes  |
| Vehicle Extension (s)   | 3.0  | 3.0  |
| Recall Mode             | None | None |
| Walk Time (s)           |      |      |
| Flash Dont Walk (s)     |      |      |
| Pedestrian Calls (#/hr) |      |      |
| Act Effct Green (s)     |      |      |
| Actuated g/C Ratio      |      |      |
| v/c Ratio               |      |      |
| Control Delay           |      |      |
| Queue Delay             |      |      |
| Total Delay             |      |      |
| LOS                     |      |      |
| Approach Delay          |      |      |
| Approach LOS            |      |      |
| Queue Length 50th (m)   |      |      |
| Queue Length 95th (m)   |      |      |
| Internal Link Dist (m)  |      |      |
| Turn Bay Length (m)     |      |      |
| Base Capacity (vph)     |      |      |
| Starvation Cap Reductn  |      |      |
| Spillback Cap Reductn   |      |      |
| Storage Cap Reductn     |      |      |
| Reduced v/c Ratio       |      |      |
| Intersection Summary    |      |      |

Lanes, Volumes, Timings  
3: Island Park & Scott

Existing  
PM Peak Hour

|   |                        |
|---|------------------------|
| Intersection Signal Delay: 28.8                                   | Intersection LOS: C    |
| Intersection Capacity Utilization 94.8%                           | ICU Level of Service F |
| Analysis Period (min) 15  |                        |
| # 95th percentile volume exceeds capacity, queue may be longer.   |                        |
| Queue shown is maximum after two cycles.                          |                        |
| m Volume for 95th percentile queue is metered by upstream signal. |                        |

Splits and Phases: 3: Island Park & Scott





## Lanes, Volumes, Timings

## 4: West Village/Lanark &amp; Scott

## Existing

PM Peak Hour

|                        | EBL   | EBT   | EBR | WBL   | WBT   | WBR | NBL   | NBT   | NBR | SBL   | SBT   | SBR |
|------------------------|-------|-------|-----|-------|-------|-----|-------|-------|-----|-------|-------|-----|
| Lane Configurations    |       |       |     |       |       |     |       |       |     |       |       |     |
| Traffic Volume (vph)   | 88    | 564   | 16  | 13    | 557   | 36  | 13    | 2     | 9   | 49    | 3     | 32  |
| Future Volume (vph)    | 88    | 564   | 16  | 13    | 557   | 36  | 13    | 2     | 9   | 49    | 3     | 32  |
| Satd. Flow (prot)      | 1658  | 1584  | 0   | 1566  | 1565  | 0   | 1658  | 1358  | 0   | 1658  | 1349  | 0   |
| Flt Permitted          | 0.376 |       |     | 0.383 |       |     | 0.732 |       |     | 0.750 |       |     |
| Satd. Flow (perm)      | 650   | 1584  | 0   | 621   | 1565  | 0   | 1164  | 1358  | 0   | 1270  | 1349  | 0   |
| Satd. Flow (RTOR)      |       | 3     |     |       | 7     |     |       | 10    |     |       | 36    |     |
| Lane Group Flow (vph)  | 98    | 645   | 0   | 14    | 659   | 0   | 14    | 12    | 0   | 54    | 39    | 0   |
| Turn Type              | Perm  | NA    |     | Perm  | NA    |     | Perm  | NA    |     | Perm  | NA    |     |
| Protected Phases       |       | 2     |     |       | 6     |     |       | 4     |     |       | 8     |     |
| Permitted Phases       | 2     |       |     | 6     |       |     | 4     |       |     | 8     |       |     |
| Detector Phase         | 2     | 2     |     | 6     | 6     |     | 4     | 4     |     | 8     | 8     |     |
| Switch Phase           |       |       |     |       |       |     |       |       |     |       |       |     |
| Minimum Initial (s)    | 10.0  | 10.0  |     | 10.0  | 10.0  |     | 10.0  | 10.0  |     | 10.0  | 10.0  |     |
| Minimum Split (s)      | 28.6  | 28.6  |     | 28.6  | 28.6  |     | 21.2  | 21.2  |     | 21.2  | 21.2  |     |
| Total Split (s)        | 71.0  | 71.0  |     | 71.0  | 71.0  |     | 29.0  | 29.0  |     | 29.0  | 29.0  |     |
| Total Split (%)        | 71.0% | 71.0% |     | 71.0% | 71.0% |     | 29.0% | 29.0% |     | 29.0% | 29.0% |     |
| Yellow Time (s)        | 3.3   | 3.3   |     | 3.3   | 3.3   |     | 3.3   | 3.3   |     | 3.3   | 3.3   |     |
| All-Red Time (s)       | 3.3   | 3.3   |     | 3.3   | 3.3   |     | 2.9   | 2.9   |     | 2.9   | 2.9   |     |
| Lost Time Adjust (s)   | 0.0   | 0.0   |     | 0.0   | 0.0   |     | 0.0   | 0.0   |     | 0.0   | 0.0   |     |
| Total Lost Time (s)    | 6.6   | 6.6   |     | 6.6   | 6.6   |     | 6.2   | 6.2   |     | 6.2   | 6.2   |     |
| Lead/Lag               |       |       |     |       |       |     |       |       |     |       |       |     |
| Lead-Lag Optimize?     |       |       |     |       |       |     |       |       |     |       |       |     |
| Recall Mode            | C-Max | C-Max |     | C-Max | C-Max |     | None  | None  |     | None  | None  |     |
| Act Effct Green (s)    | 78.8  | 78.8  |     | 78.8  | 78.8  |     | 13.0  | 13.0  |     | 13.0  | 13.0  |     |
| Actuated g/C Ratio     | 0.79  | 0.79  |     | 0.79  | 0.79  |     | 0.13  | 0.13  |     | 0.13  | 0.13  |     |
| v/c Ratio              | 0.19  | 0.52  |     | 0.03  | 0.53  |     | 0.09  | 0.06  |     | 0.33  | 0.19  |     |
| Control Delay          | 5.3   | 7.2   |     | 4.5   | 5.2   |     | 38.5  | 22.2  |     | 44.3  | 16.1  |     |
| Queue Delay            | 0.0   | 0.0   |     | 0.0   | 0.0   |     | 0.0   | 0.0   |     | 0.0   | 0.0   |     |
| Total Delay            | 5.3   | 7.2   |     | 4.5   | 5.2   |     | 38.5  | 22.2  |     | 44.3  | 16.1  |     |
| LOS                    | A     | A     |     | A     | A     |     | D     | C     |     | D     | B     |     |
| Approach Delay         |       | 7.0   |     |       | 5.2   |     |       | 30.9  |     |       | 32.5  |     |
| Approach LOS           |       | A     |     |       | A     |     |       | C     |     |       | C     |     |
| Queue Length 50th (m)  | 5.3   | 49.9  |     | 0.6   | 38.1  |     | 2.4   | 0.3   |     | 9.4   | 0.5   |     |
| Queue Length 95th (m)  | 11.1  | 75.3  |     | m0.7  | m38.4 |     | 8.0   | 5.3   |     | 20.9  | 9.6   |     |
| Internal Link Dist (m) |       | 332.8 |     |       | 217.8 |     |       | 81.9  |     |       | 75.1  |     |
| Turn Bay Length (m)    | 36.5  |       |     | 42.0  |       |     | 18.0  |       |     | 18.0  |       |     |
| Base Capacity (vph)    | 512   | 1248  |     | 489   | 1233  |     | 265   | 317   |     | 289   | 335   |     |
| 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      | 0.19  | 0.52  |     | 0.03  | 0.53  |     | 0.05  | 0.04  |     | 0.19  | 0.12  |     |

## Intersection Summary

Cycle Length: 100

Actuated Cycle Length: 100

Offset: 40 (40%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Natural Cycle: 60

Control Type: Actuated-Coordinated

Scenario 1 210 Clearview Avenue 11:59 pm 09/04/2024 Existing

Synchro 11 Report  
Page 8

## Lanes, Volumes, Timings

## 4: West Village/Lanark &amp; Scott

## Existing

PM Peak Hour

Maximum v/c Ratio: 0.53

Intersection Signal Delay: 8.1

Intersection LOS: A

Intersection Capacity Utilization 69.2%

ICU Level of Service C

Analysis Period (min) 15

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

Splits and Phases: 4: West Village/Lanark &amp; Scott






Scenario 1 210 Clearview Avenue 11:59 pm 09/04/2024 Existing

Synchro 11 Report  
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HCM 2010 AWSC  
5: Churchill & Lanark

Existing  
PM Peak Hour

| Intersection               |   |       |   |      |      |   |
|----------------------------|---|-------|---|------|------|---|
| Intersection Delay, s/veh  | 7.5   |       |   |      |      |   |
| Intersection LOS           | A   |       |   |      |      |   |
|                            |   |       |   |      |      |   |
| Movement                   | WBL   | WBR   | NBT   | NBR  | SBL  | SBT   |
| Lane Configurations        |  |       |  |      |      |  |
| Traffic Vol, veh/h         | 62  | 10    | 37  | 50   | 4    | 27  |
| Future Vol, veh/h          | 62  | 10    | 37  | 50   | 4    | 27  |
| Peak Hour Factor           | 0.90  | 0.90  | 0.90  | 0.90 | 0.90 | 0.90  |
| Heavy Vehicles, %          | 6   | 2     | 2   | 4    | 2    | 2   |
| Mvmt Flow                  | 69  | 11    | 41  | 56   | 4    | 30  |
| Number of Lanes            | 1   | 0     | 1   | 0    | 0    | 1   |
| Approach                   | WB  |       | NB  |      | SB   |   |
| Opposing Approach          |   |       | SB  |      | NB   |   |
| Opposing Lanes             | 0   |       | 1   |      | 1    |   |
| Conflicting Approach Left  | NB  |       |   |      | WB   |   |
| Conflicting Lanes Left     | 1   |       | 0   |      | 1    |   |
| Conflicting Approach Right | SB  |       | WB  |      |      |   |
| Conflicting Lanes Right    | 1   |       | 1   |      | 0    |   |
| HCM Control Delay          | 7.8   |       | 7.2   |      | 7.4  |   |
| HCM LOS                    | A   |       | A   |      | A    |   |
|                            |   |       |   |      |      |   |
| Lane                       | NBLn1   | WBLn1 | SBLn1   |      |      |   |
| Vol Left, %                | 0%  | 86%   | 13%   |      |      |   |
| Vol Thru, %                | 43%   | 0%    | 87%   |      |      |   |
| Vol Right, %               | 57%   | 14%   | 0%  |      |      |   |
| Sign Control               | Stop  | Stop  | Stop  |      |      |   |
| Traffic Vol by Lane        | 87  | 72    | 31  |      |      |   |
| LT Vol                     | 0   | 62    | 4   |      |      |   |
| Through Vol                | 37  | 0     | 27  |      |      |   |
| RT Vol                     | 50  | 10    | 0   |      |      |   |
| Lane Flow Rate             | 97  | 80    | 34  |      |      |   |
| Geometry Grp               | 1   | 1     | 1   |      |      |   |
| Degree of Util (X)         | 0.101   | 0.096 | 0.04  |      |      |   |
| Departure Headway (Hd)     | 3.755   | 4.318 | 4.174   |      |      |   |
| Convergence, Y/N           | Yes   | Yes   | Yes   |      |      |   |
| Cap                        | 945   | 826   | 850   |      |      |   |
| Service Time               | 1.813   | 2.364 | 2.238   |      |      |   |
| HCM Lane V/C Ratio         | 0.103   | 0.097 | 0.04  |      |      |   |
| HCM Control Delay          | 7.2   | 7.8   | 7.4   |      |      |   |
| HCM Lane LOS               | A   | A     | A   |      |      |   |
| HCM 95th-tile Q            | 0.3   | 0.3   | 0.1   |      |      |   |

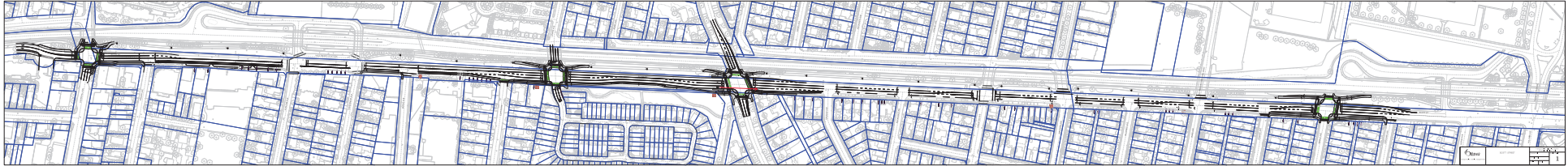
# Appendix D

Collision Data

| Accident Date | Accident Year | Accident Time | Location  | Environment Condition | Light         | Traffic Control | Traffic Control Condition | Classification Of Accident | Initial Impact Type         | Road Surface Condition | # Vehicles | # Motorcycles | # Bicycles | # Pedestrians |
|---------------|---------------|---------------|---|-----------------------|---------------|-----------------|---------------------------|----------------------------|-----------------------------|------------------------|------------|---------------|------------|---------------|
| 1/14/2019     | 2019          | 10:53         | LANARK AVE btwn BEECHGROVE AVE & BRIARWAY PRIV ( _4TZ067)   | 01 - Clear            | 01 - Daylight | 10 - No control | 0                         | 03 - P.D. only             | 06 - SMV unattended vehicle | 01 - Dry               | 0          | 0             | 0          | 0             |
| 11/29/2021    | 2021          | 18:20         | LANARK AVE btwn BEECHGROVE AVE & CHURCHILL AVE N ( _3ZA025) | 01 - Clear            | 07 - Dark     | 10 - No control | 0                         | 03 - P.D. only             | 06 - SMV unattended vehicle | 01 - Dry               | 0          | 0             | 0          | 0             |
| 6/2/2022      | 2022          | 12:38         | LANARK AVE btwn BEECHGROVE AVE & CHURCHILL AVE N ( _3ZA025) | 01 - Clear            | 01 - Daylight | 10 - No control | 0                         | 02 - Non-fatal injury      | 99 - Other                  | 01 - Dry               | 0          | 0             | 0          | 0             |
| 7/28/2019     | 2019          | 19:11         | LANARK AVE btwn BRIARWAY PRIV & METROPOLE PRIV ( _4TZ09Y)   | 01 - Clear            | 01 - Daylight | 10 - No control | 0                         | 02 - Non-fatal injury      | 06 - SMV unattended vehicle | 01 - Dry               | 0          | 0             | 0          | 0             |

# Appendix E

Scott Street Bus Detour and Cycling Concept



# Appendix F

TDM Checklist

## TDM Measures Checklist:

*Residential Developments (multi-family, condominium or subdivision)*

| Legend        |  |
|---------------|--|
| <b>BASIC</b>  | The measure is generally feasible and effective, and in most cases would benefit the development and its users |
| <b>BETTER</b> | The measure could maximize support for users of sustainable modes, and optimize development performance        |
| <b>★</b>      | The measure is one of the most dependably effective tools to encourage the use of sustainable modes            |

| TDM measures: Residential developments                              |   | Check if proposed & add descriptions |
|---|---|--------------------------------------|
| <b>1. TDM PROGRAM MANAGEMENT</b>                                    |   |                                      |
| <b>1.1 Program coordinator</b>                                      |   |                                      |
| <b>BASIC ★</b>  | 1.1.1 Designate an internal coordinator, or contract with an external coordinator   | <input type="checkbox"/>             |
| <b>1.2 Travel surveys</b>   |   |                                      |
| <b>BETTER</b>   | 1.2.1 Conduct periodic surveys to identify travel-related behaviours, attitudes, challenges and solutions, and to track progress              | <input type="checkbox"/>             |
| <b>2. WALKING AND CYCLING</b>                                       |   |                                      |
| <b>2.1 Information on walking/cycling routes &amp; destinations</b> |   |                                      |
| <b>BASIC</b>  | 2.1.1 Display local area maps with walking/cycling access routes and key destinations at major entrances ( <i>multi-family, condominium</i> ) | <input checked="" type="checkbox"/>  |
| <b>2.2 Bicycle skills training</b>                                  |   |                                      |
| <b>BETTER</b>   | 2.2.1 Offer on-site cycling courses for residents, or subsidize off-site courses  | <input type="checkbox"/>             |

| TDM measures: Residential developments          |  | Check if proposed & add descriptions |
|---|--|--------------------------------------|
| <b>3. TRANSIT</b>                               |  |                                      |
| <b>3.1 Transit information</b>                  |  |                                      |
| <b>BASIC</b>                                    | 3.1.1 Display relevant transit schedules and route maps at entrances ( <i>multi-family, condominium</i> )  | <input checked="" type="checkbox"/>  |
| <b>BETTER</b>                                   | 3.1.2 Provide real-time arrival information display at entrances ( <i>multi-family, condominium</i> )  | <input type="checkbox"/>             |
| <b>3.2 Transit fare incentives</b>              |  |                                      |
| <b>BASIC ★</b>                                  | 3.2.1 Offer PRESTO cards preloaded with one monthly transit pass on residence purchase/move-in, to encourage residents to use transit            | <input type="checkbox"/>             |
| <b>BETTER</b>                                   | 3.2.2 Offer at least one year of free monthly transit passes on residence purchase/move-in   | <input type="checkbox"/>             |
| <b>3.3 Enhanced public transit service</b>      |  |                                      |
| <b>BETTER ★</b>                                 | 3.3.1 Contract with OC Transpo to provide early transit services until regular services are warranted by occupancy levels ( <i>subdivision</i> ) | <input type="checkbox"/>             |
| <b>3.4 Private transit service</b>              |  |                                      |
| <b>BETTER</b>                                   | 3.4.1 Provide shuttle service for seniors homes or lifestyle communities (e.g. scheduled mall or supermarket runs)                               | <input type="checkbox"/>             |
| <b>4. CARSHARING &amp; BIKESHARING</b>          |  |                                      |
| <b>4.1 Bikeshare stations &amp; memberships</b> |  |                                      |
| <b>BETTER</b>                                   | 4.1.1 Contract with provider to install on-site bikeshare station ( <i>multi-family</i> )  | <input checked="" type="checkbox"/>  |
| <b>BETTER</b>                                   | 4.1.2 Provide residents with bikeshare memberships, either free or subsidized ( <i>multi-family</i> )  | <input type="checkbox"/>             |
| <b>4.2 Carshare vehicles &amp; memberships</b>  |  |                                      |
| <b>BETTER</b>                                   | 4.2.1 Contract with provider to install on-site carshare vehicles and promote their use by residents   | <input checked="" type="checkbox"/>  |
| <b>BETTER</b>                                   | 4.2.2 Provide residents with carshare memberships, either free or subsidized   | <input type="checkbox"/>             |
| <b>5. PARKING</b>                               |  |                                      |
| <b>5.1 Priced parking</b>                       |  |                                      |
| <b>BASIC ★</b>                                  | 5.1.1 Unbundle parking cost from purchase price ( <i>condominium</i> )   | <input checked="" type="checkbox"/>  |
| <b>BASIC ★</b>                                  | 5.1.2 Unbundle parking cost from monthly rent ( <i>multi-family</i> )  | <input checked="" type="checkbox"/>  |



| TDM measures: <i>Residential developments</i> |   | Check if proposed & add descriptions |
|---|---|--------------------------------------|
| <b>6. TDM MARKETING &amp; COMMUNICATIONS</b>  |   |                                      |
| <b>6.1 Multimodal travel information</b>      |   |                                      |
| BASIC ★                                       | 6.1.1 Provide a multimodal travel option information package to new residents | <input checked="" type="checkbox"/>  |
| <b>6.2 Personalized trip planning</b>         |   |                                      |
| BETTER ★                                      | 6.2.1 Offer personalized trip planning to new residents                       | <input type="checkbox"/>             |

**TDM-Supportive Development Design and Infrastructure Checklist:**  
*Residential Developments (multi-family or condominium)*

| Legend   |  |
|----------|--|
| REQUIRED | The Official Plan or Zoning By-law provides related guidance that must be followed                             |
| BASIC    | The measure is generally feasible and effective, and in most cases would benefit the development and its users |
| BETTER   | The measure could maximize support for users of sustainable modes, and optimize development performance        |

| TDM-supportive design & infrastructure measures: <i>Residential developments</i> |   | Check if completed & add descriptions, explanations or plan/drawing references |
|--|---|--|
| <b>1. WALKING &amp; CYCLING: ROUTES</b>  |   |  |
| <b>1.1 Building location &amp; access points</b>                                 |   |  |
| BASIC  | 1.1.1 Locate building close to the street, and do not locate parking areas between the street and building entrances  | <input type="checkbox"/>   |
| BASIC  | 1.1.2 Locate building entrances in order to minimize walking distances to sidewalks and transit stops/stations  | <input type="checkbox"/>   |
| BASIC  | 1.1.3 Locate building doors and windows to ensure visibility of pedestrians from the building, for their security and comfort   | <input type="checkbox"/>   |
| <b>1.2 Facilities for walking &amp; cycling</b>                                  |   |  |
| REQUIRED   | 1.2.1 Provide convenient, direct access to stations or major stops along rapid transit routes within 600 metres; minimize walking distances from buildings to rapid transit; provide pedestrian-friendly, weather-protected (where possible) environment between rapid transit accesses and building entrances; ensure quality linkages from sidewalks through building entrances to integrated stops/stations ( <i>see Official Plan policy 4.3.3</i> )  | <input checked="" type="checkbox"/>  |
| REQUIRED   | 1.2.2 Provide safe, direct and attractive pedestrian access from public sidewalks to building entrances through such measures as: reducing distances between public sidewalks and major building entrances; providing walkways from public streets to major building entrances; within a site, providing walkways along the front of adjoining buildings, between adjacent buildings, and connecting areas where people may congregate, such as courtyards and transit stops; and providing weather protection through canopies, colonnades, and other design elements wherever possible ( <i>see Official Plan policy 4.3.12</i> ) | <input checked="" type="checkbox"/>  |

| TDM-supportive design & infrastructure measures:<br><i>Residential developments</i> |   | Check if completed &<br>add descriptions, explanations<br>or plan/drawing references |
|---|---|--|
| REQUIRED  | 1.2.3 Provide sidewalks of smooth, well-drained walking surfaces of contrasting materials or treatments to differentiate pedestrian areas from vehicle areas, and provide marked pedestrian crosswalks at intersection sidewalks (see <i>Official Plan policy 4.3.10</i> )  | <input checked="" type="checkbox"/>  |
| REQUIRED  | 1.2.4 Make sidewalks and open space areas easily accessible through features such as gradual grade transition, depressed curbs at street corners and convenient access to extra-wide parking spaces and ramps (see <i>Official Plan policy 4.3.10</i> )   | <input checked="" type="checkbox"/>  |
| REQUIRED  | 1.2.5 Include adequately spaced inter-block/street cycling and pedestrian connections to facilitate travel by active transportation. Provide links to the existing or planned network of public sidewalks, multi-use pathways and on-road cycle routes. Where public sidewalks and multi-use pathways intersect with roads, consider providing traffic control devices to give priority to cyclists and pedestrians (see <i>Official Plan policy 4.3.11</i> ) | <input checked="" type="checkbox"/>  |
| BASIC   | 1.2.6 Provide safe, direct and attractive walking routes from building entrances to nearby transit stops  | <input checked="" type="checkbox"/>  |
| BASIC   | 1.2.7 Ensure that walking routes to transit stops are secure, visible, lighted, shaded and wind-protected wherever possible   | <input type="checkbox"/>   |
| BASIC   | 1.2.8 Design roads used for access or circulation by cyclists using a target operating speed of no more than 30 km/h, or provide a separated cycling facility   | <input type="checkbox"/>   |
| <b>1.3 Amenities for walking &amp; cycling</b>                                      |   |  |
| BASIC   | 1.3.1 Provide lighting, landscaping and benches along walking and cycling routes between building entrances and streets, sidewalks and trails   | <input type="checkbox"/>   |
| BASIC   | 1.3.2 Provide wayfinding signage for site access (where required, e.g. when multiple buildings or entrances exist) and egress (where warranted, such as when directions to reach transit stops/stations, trails or other common destinations are not obvious)   | <input type="checkbox"/>   |

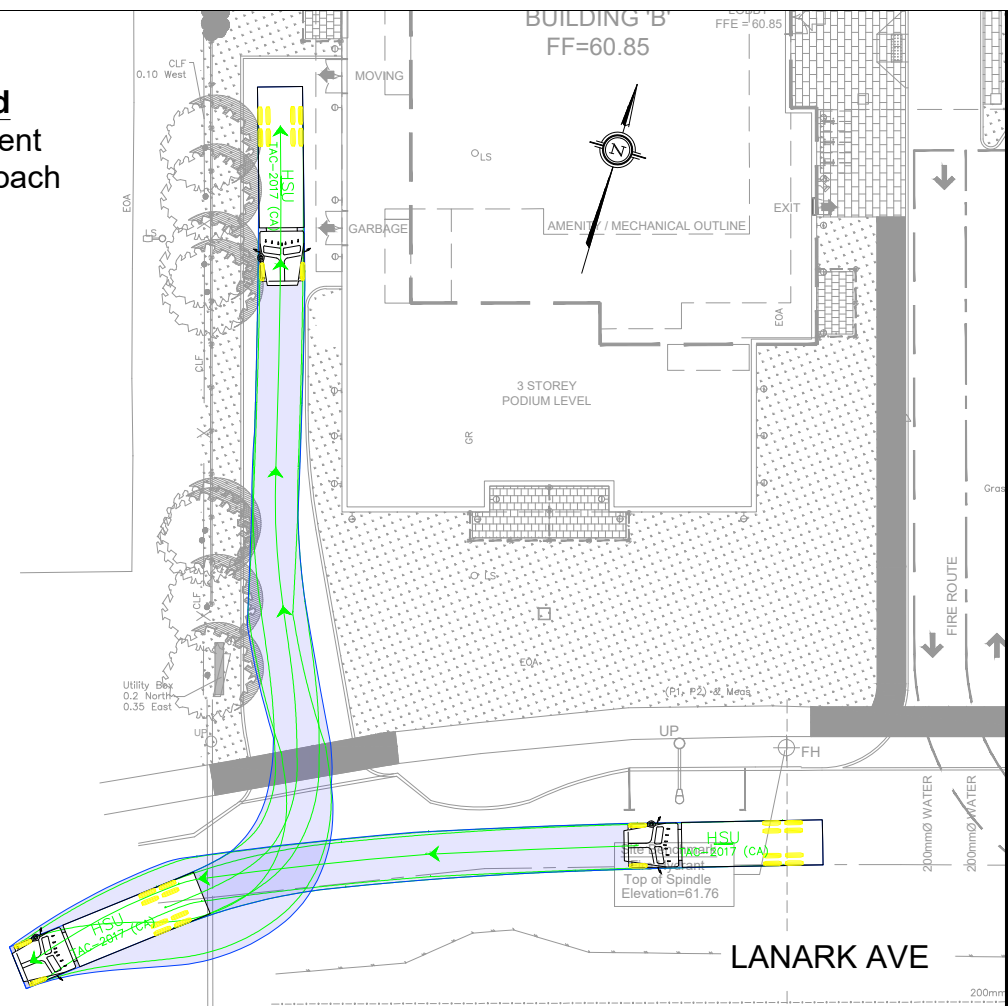
| TDM-supportive design & infrastructure measures:<br><i>Residential developments</i> |  | Check if completed &<br>add descriptions, explanations<br>or plan/drawing references |
|---|--|--|
| <b>2. WALKING &amp; CYCLING: END-OF-TRIP FACILITIES</b>                             |  |  |
| <b>2.1 Bicycle parking</b>  |  |  |
| REQUIRED  | 2.1.1 Provide bicycle parking in highly visible and lighted areas, sheltered from the weather wherever possible (see <i>Official Plan policy 4.3.6</i> )   | <input checked="" type="checkbox"/>  |
| REQUIRED  | 2.1.2 Provide the number of bicycle parking spaces specified for various land uses in different parts of Ottawa; provide convenient access to main entrances or well-used areas (see <i>Zoning By-law Section 111</i> )  | <input checked="" type="checkbox"/>  |
| REQUIRED  | 2.1.3 Ensure that bicycle parking spaces and access aisles meet minimum dimensions; that no more than 50% of spaces are vertical spaces; and that parking racks are securely anchored (see <i>Zoning By-law Section 111</i> )  | <input checked="" type="checkbox"/>  |
| BASIC   | 2.1.4 Provide bicycle parking spaces equivalent to the expected number of resident-owned bicycles, plus the expected peak number of visitor cyclists   | <input type="checkbox"/>   |
| <b>2.2 Secure bicycle parking</b>   |  |  |
| REQUIRED  | 2.2.1 Where more than 50 bicycle parking spaces are provided for a single residential building, locate at least 25% of spaces within a building/structure, a secure area (e.g. supervised parking lot or enclosure) or bicycle lockers (see <i>Zoning By-law Section 111</i> ) | <input checked="" type="checkbox"/>  |
| BETTER  | 2.2.2 Provide secure bicycle parking spaces equivalent to at least the number of units at condominiums or multi-family residential developments  | <input type="checkbox"/>   |
| <b>2.3 Bicycle repair station</b>   |  |  |
| BETTER  | 2.3.1 Provide a permanent bike repair station, with commonly used tools and an air pump, adjacent to the main bicycle parking area (or secure bicycle parking area, if provided)   | <input type="checkbox"/>   |
| <b>3. TRANSIT</b>   |  |  |
| <b>3.1 Customer amenities</b>   |  |  |
| BASIC   | 3.1.1 Provide shelters, lighting and benches at any on-site transit stops  | <input type="checkbox"/>   |
| BASIC   | 3.1.2 Where the site abuts an off-site transit stop and insufficient space exists for a transit shelter in the public right-of-way, protect land for a shelter and/or install a shelter  | <input type="checkbox"/>   |
| BETTER  | 3.1.3 Provide a secure and comfortable interior waiting area by integrating any on-site transit stops into the building  | <input type="checkbox"/>   |

| TDM-supportive design & infrastructure measures:<br><i>Residential developments</i> |   | Check if completed &<br>add descriptions, explanations<br>or plan/drawing references |
|---|---|--|
| <b>4. RIDESHARING</b>   |   |  |
| <b>4.1 Pick-up &amp; drop-off facilities</b>  |   |  |
| BASIC   | 4.1.1 Provide a designated area for carpool drivers (plus taxis and ride-hailing services) to drop off or pick up passengers without using fire lanes or other no-stopping zones  | <input checked="" type="checkbox"/>  |
| <b>5. CARSHARING &amp; BIKESHARING</b>  |   |  |
| <b>5.1 Carshare parking spaces</b>  |   |  |
| BETTER  | 5.1.1 Provide up to three carshare parking spaces in an R3, R4 or R5 Zone for specified residential uses ( <i>see Zoning By-law Section 94</i> )  | <input type="checkbox"/>   |
| <b>5.2 Bikeshare station location</b>   |   |  |
| BETTER  | 5.2.1 Provide a designated bikeshare station area near a major building entrance, preferably lighted and sheltered with a direct walkway connection   | <input type="checkbox"/>   |
| <b>6. PARKING</b>   |   |  |
| <b>6.1 Number of parking spaces</b>   |   |  |
| REQUIRED  | 6.1.1 Do not provide more parking than permitted by zoning, nor less than required by zoning, unless a variance is being applied for  | <input checked="" type="checkbox"/>  |
| BASIC   | 6.1.2 Provide parking for long-term and short-term users that is consistent with mode share targets, considering the potential for visitors to use off-site public parking  | <input type="checkbox"/>   |
| BASIC   | 6.1.3 Where a site features more than one use, provide shared parking and reduce the cumulative number of parking spaces accordingly ( <i>see Zoning By-law Section 104</i> )   | <input type="checkbox"/>   |
| BETTER  | 6.1.4 Reduce the minimum number of parking spaces required by zoning by one space for each 13 square metres of gross floor area provided as shower rooms, change rooms, locker rooms and other facilities for cyclists in conjunction with bicycle parking ( <i>see Zoning By-law Section 111</i> ) | <input type="checkbox"/>   |
| <b>6.2 Separate long-term &amp; short-term parking areas</b>                        |   |  |
| BETTER  | 6.2.1 Provide separate areas for short-term and long-term parking (using signage or physical barriers) to permit access controls and simplify enforcement (i.e. to discourage residents from parking in visitor spaces, and vice versa)   | <input type="checkbox"/>   |

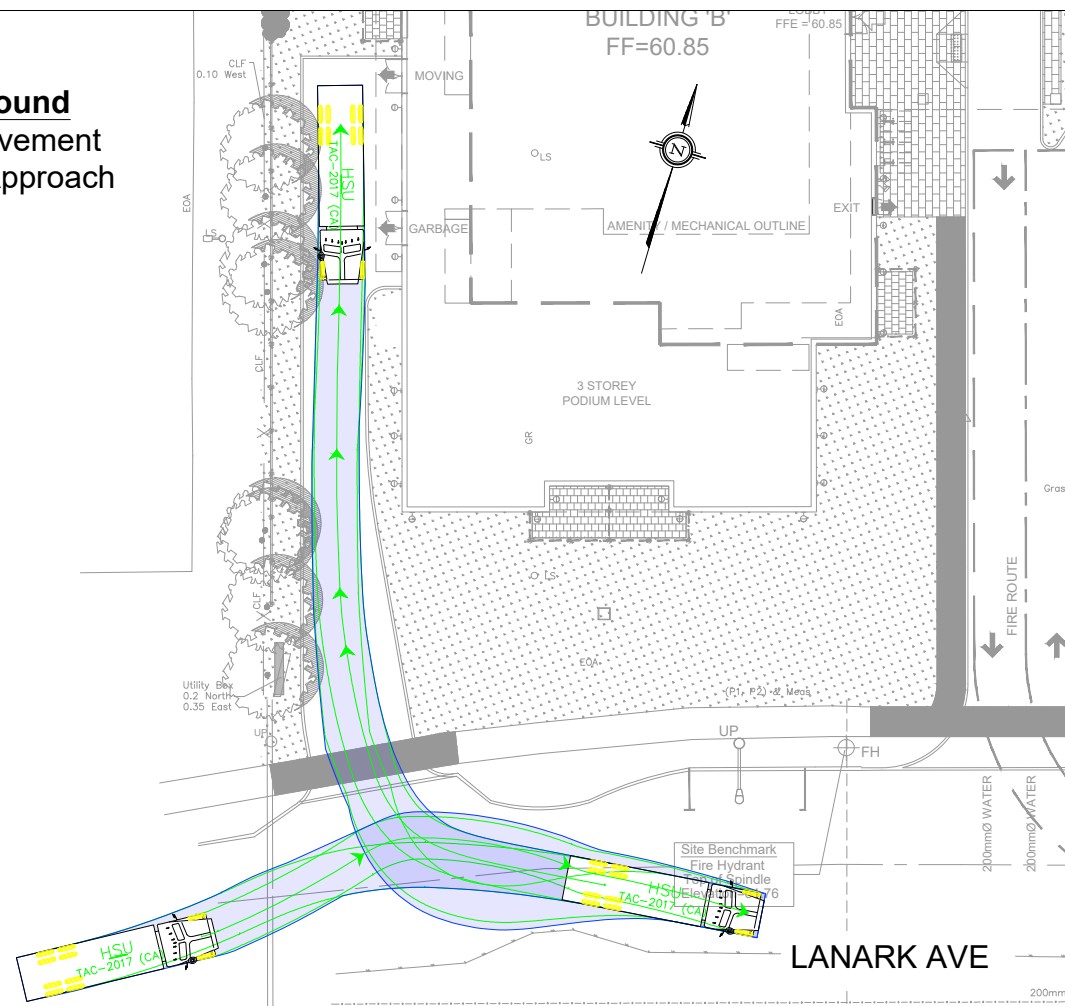
# Appendix G

Turning Templates

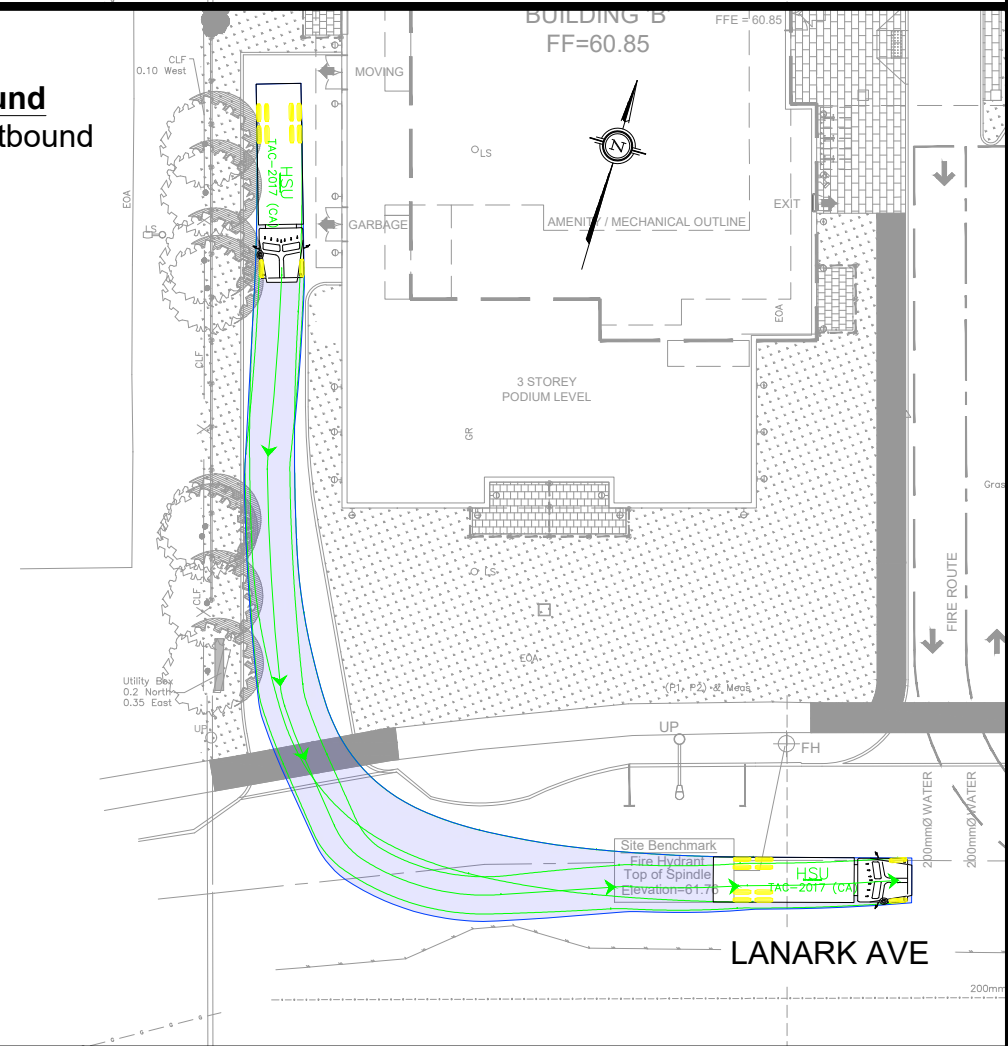
HSU Inbound  
Loading Movement  
Westbound Approach



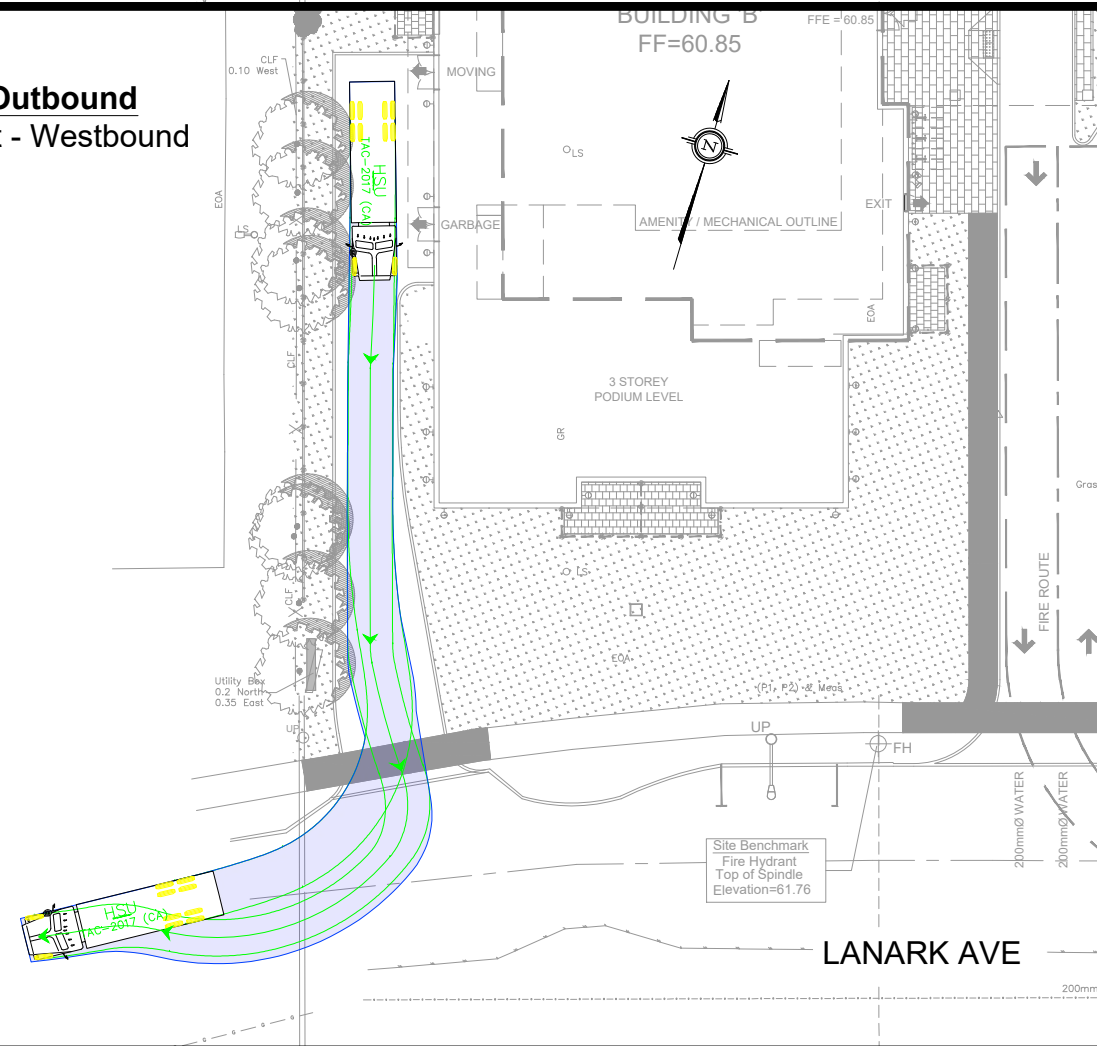
HSU Inbound  
Loading Movement  
Eastbound Approach



HSU Outbound  
Movement - Eastbound

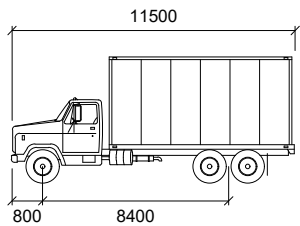
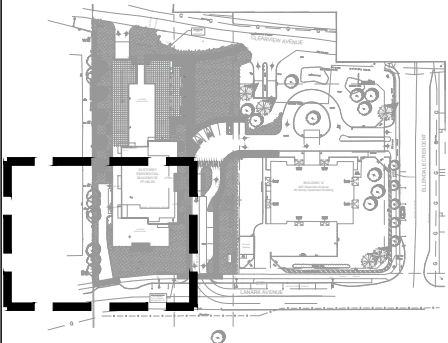


HSU Outbound  
Movement - Westbound



Notes:

Key Plan:



HSU

mm  
Width : 2600  
Track : 2600  
Lock to Lock Time : 6.0  
Steering Angle : 40.0

|         |                    |     |            |
|---------|--------------------|-----|------------|
| 02      | Issued for Review: | AN  | 2024-09-13 |
| REV:    | DESCRIPTION:       | BY: | DATE:      |
| STATUS: |                    |     |            |



CGH Transportation  
6 Plaza Court  
Ottawa, ON  
K2H 7W1  
(343) 999-9117

CLIENT: Homestead Land Holdings

ARCHITECT:

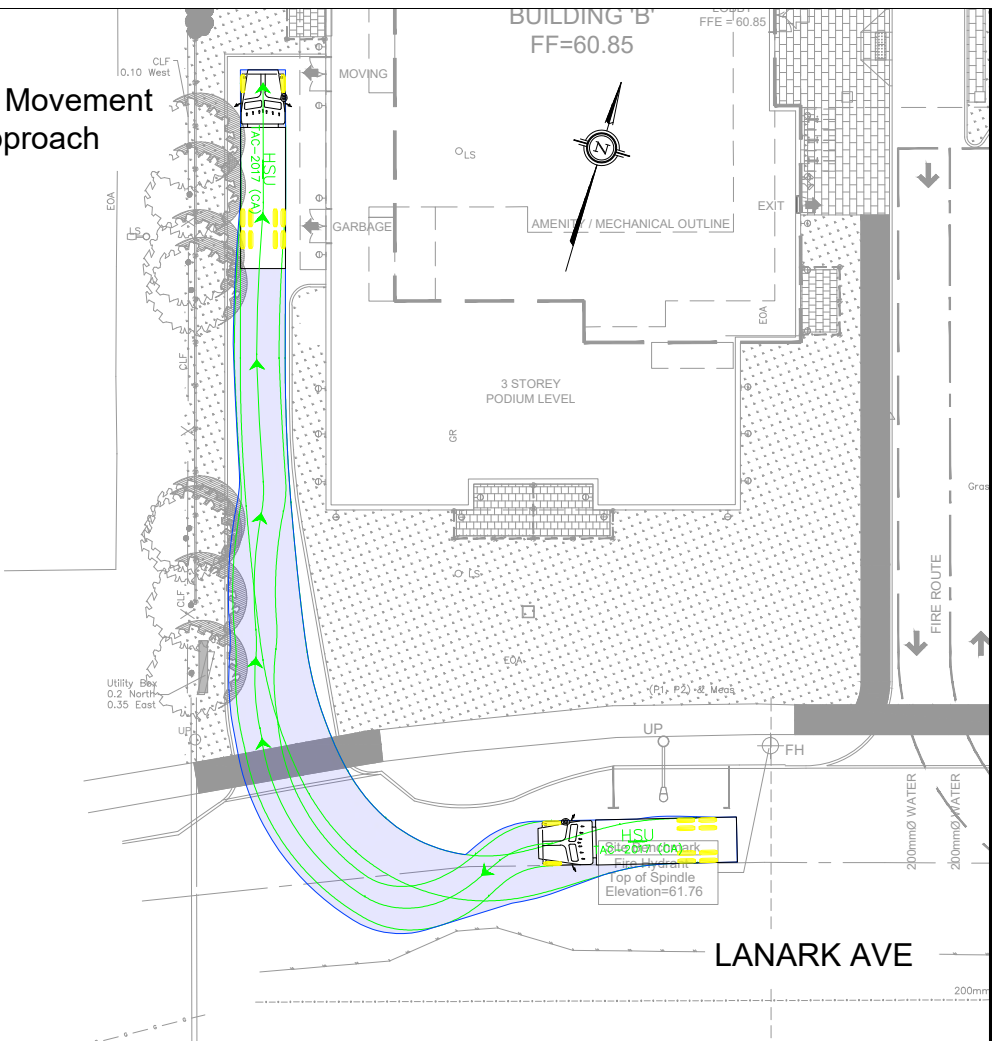
SITE:  
210 Clearview Ave

TITLE: Turning Movement Analysis  
HSU Turning Movements

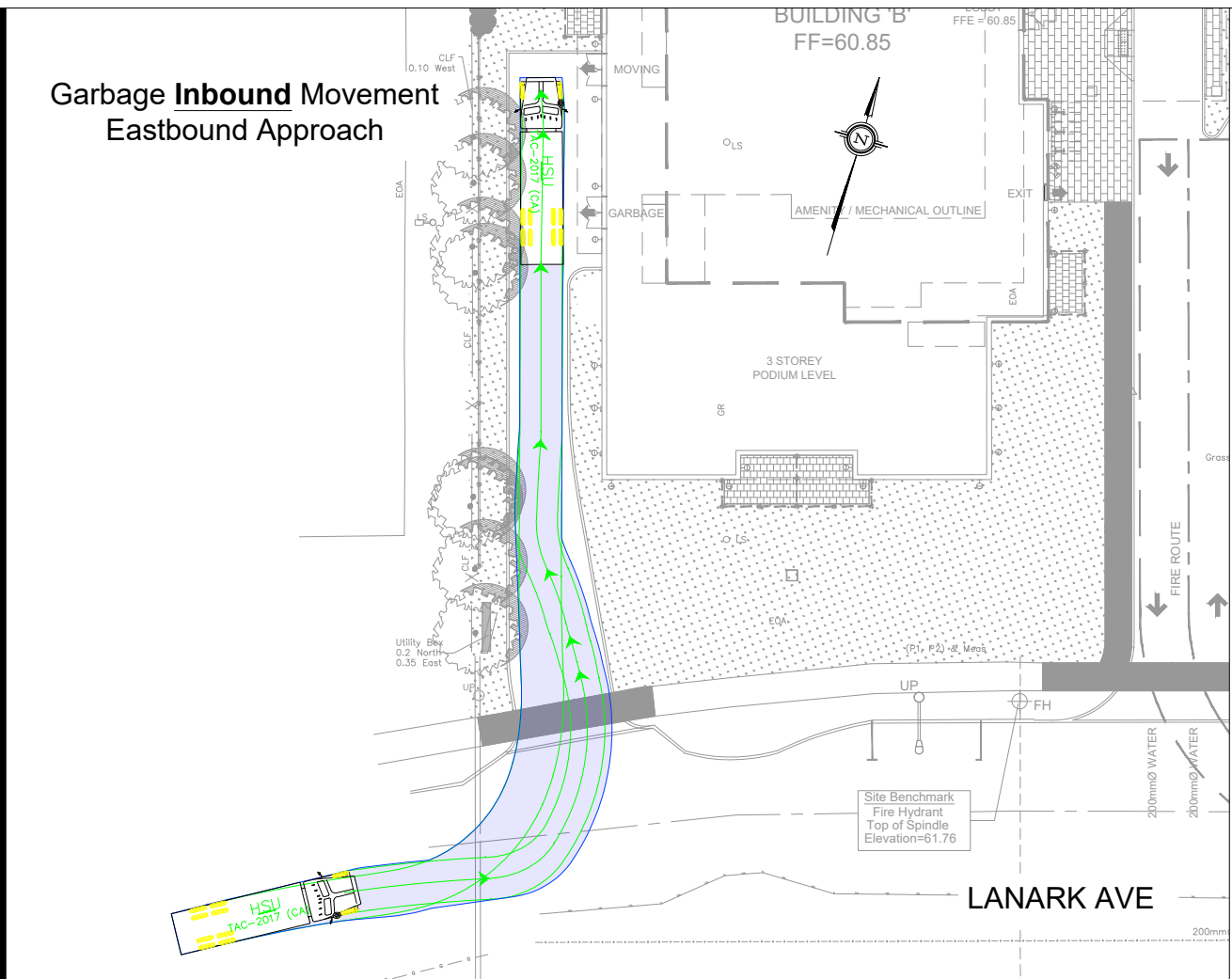
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| PROJECT NO:<br>2024-030 | DRAWING NO:<br>001  | REVISION:<br>02 |                |



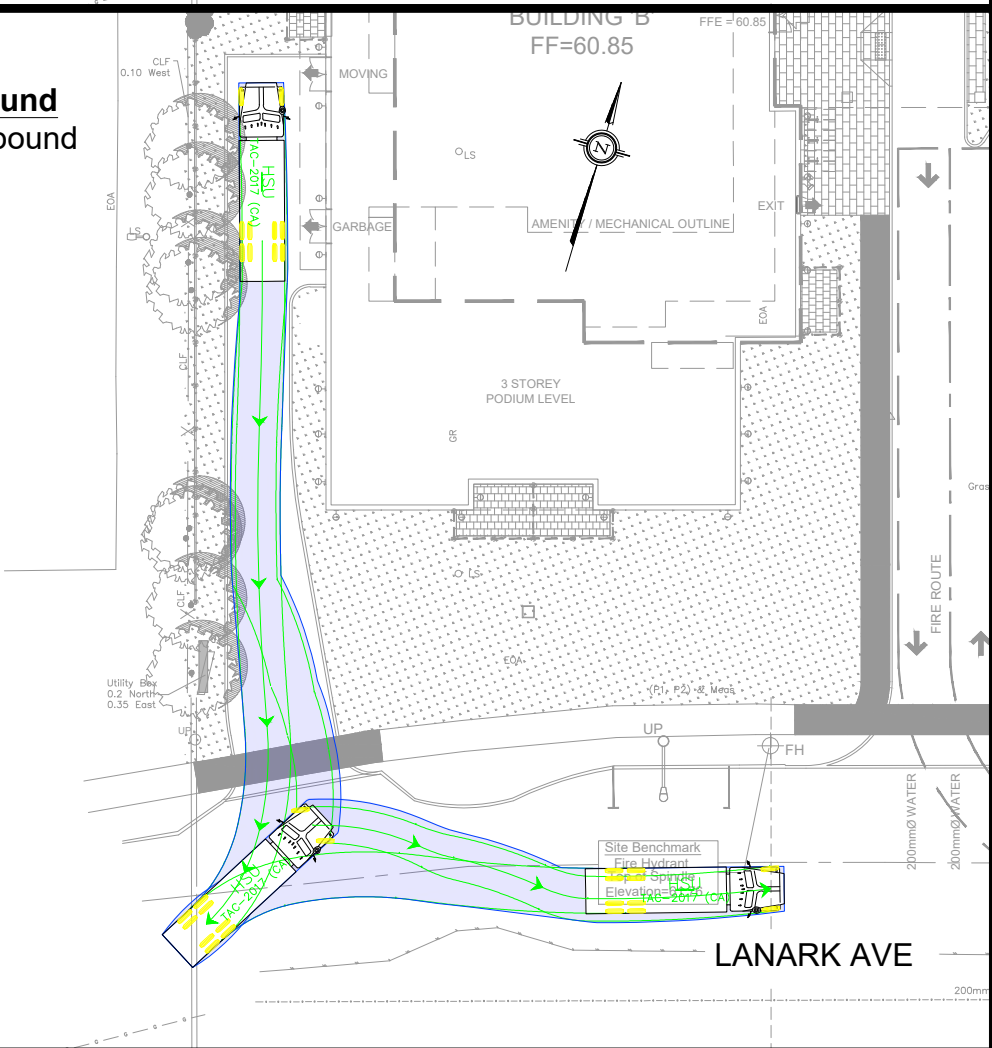
Garbage **Inbound** Movement  
Westbound Approach



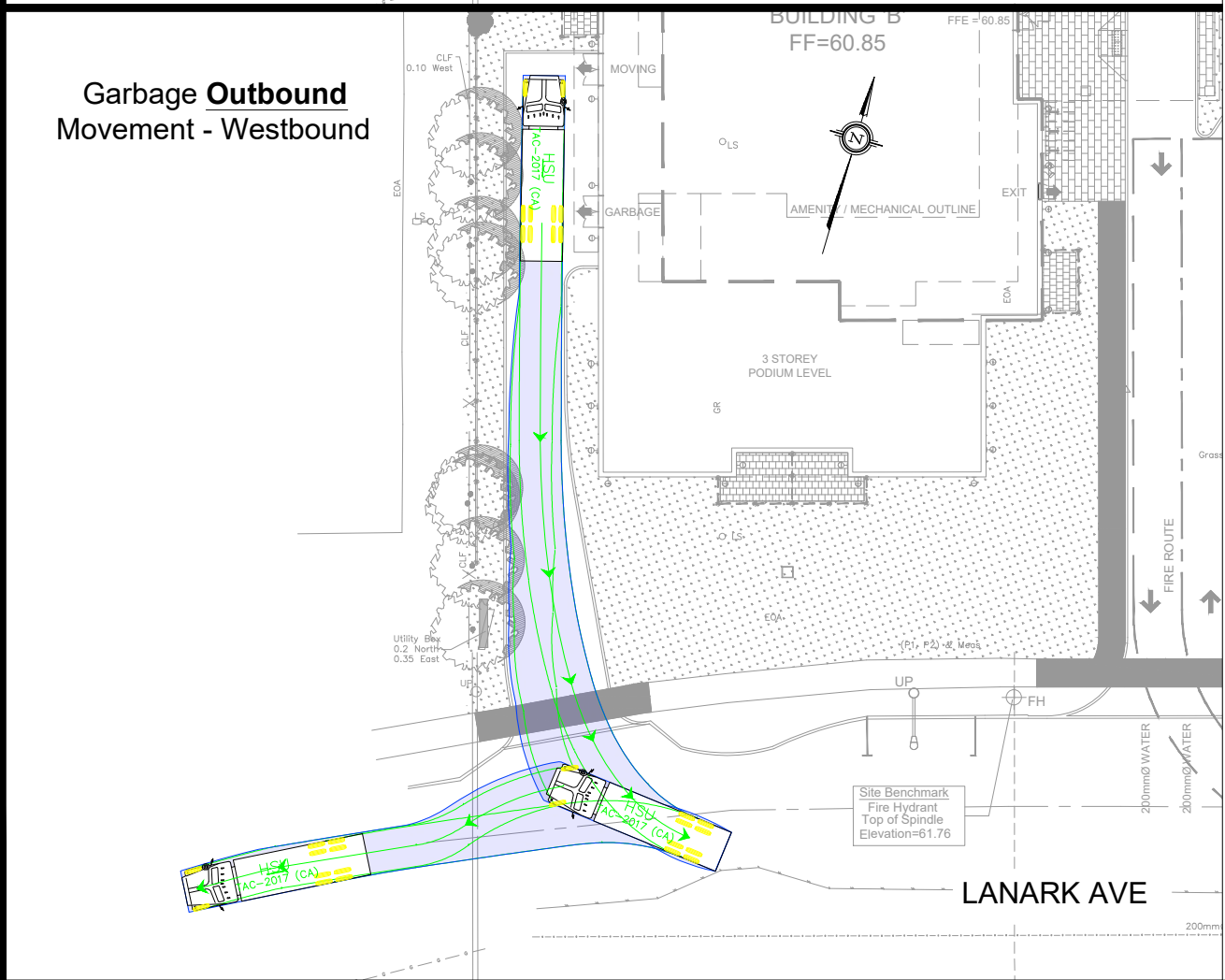
Garbage **Inbound** Movement  
Eastbound Approach



Garbage **Outbound** Movement - Eastbound

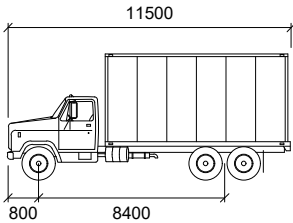
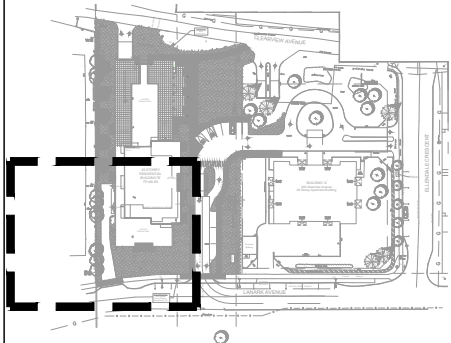


Garbage **Outbound** Movement - Westbound



Notes:

Key Plan:



HSU

mm  
Width : 2600  
Track : 2600  
Lock to Lock Time : 6.0  
Steering Angle : 40.0

|         |                    |     |            |
|---------|--------------------|-----|------------|
| 02      | Issued for Review: | AN  | 2024-09-13 |
| REV:    | DESCRIPTION:       | BY: | DATE:      |
| STATUS: |                    |     |            |



CGH Transportation  
6 Plaza Court  
Ottawa, ON  
K2H 7W1  
(343) 999-9117

CLIENT: Homestead Land Holdings

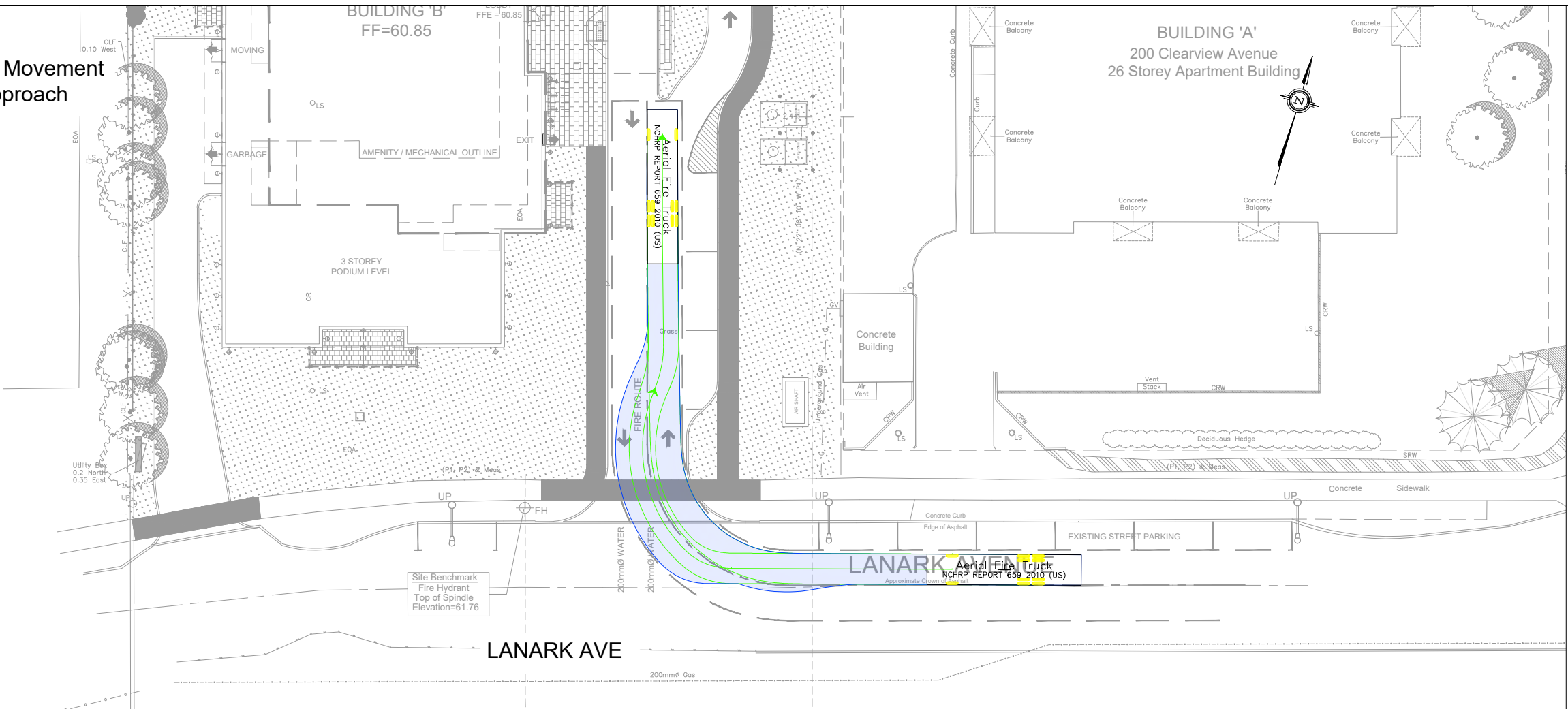
ARCHITECT:

SITE:  
210 Clearview Ave

TITLE: Turning Movement Analysis  
Garbage Turning Movements

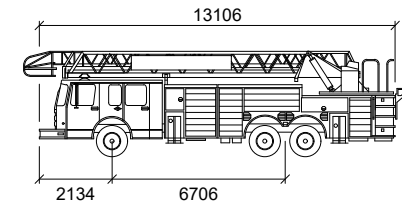
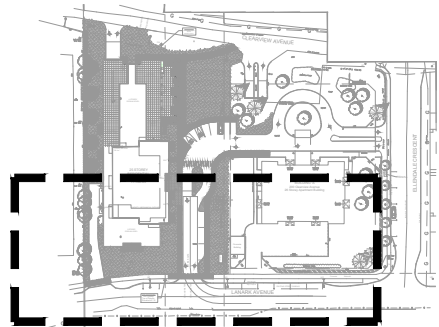
|                         |                     |                 |                |
|-------------------------|---------------------|-----------------|----------------|
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| PROJECT NO:<br>2024-030 | DRAWING NO:<br>002  | REVISION:<br>02 |                |

Garbage **Inbound** Movement  
Westbound Approach



Notes:

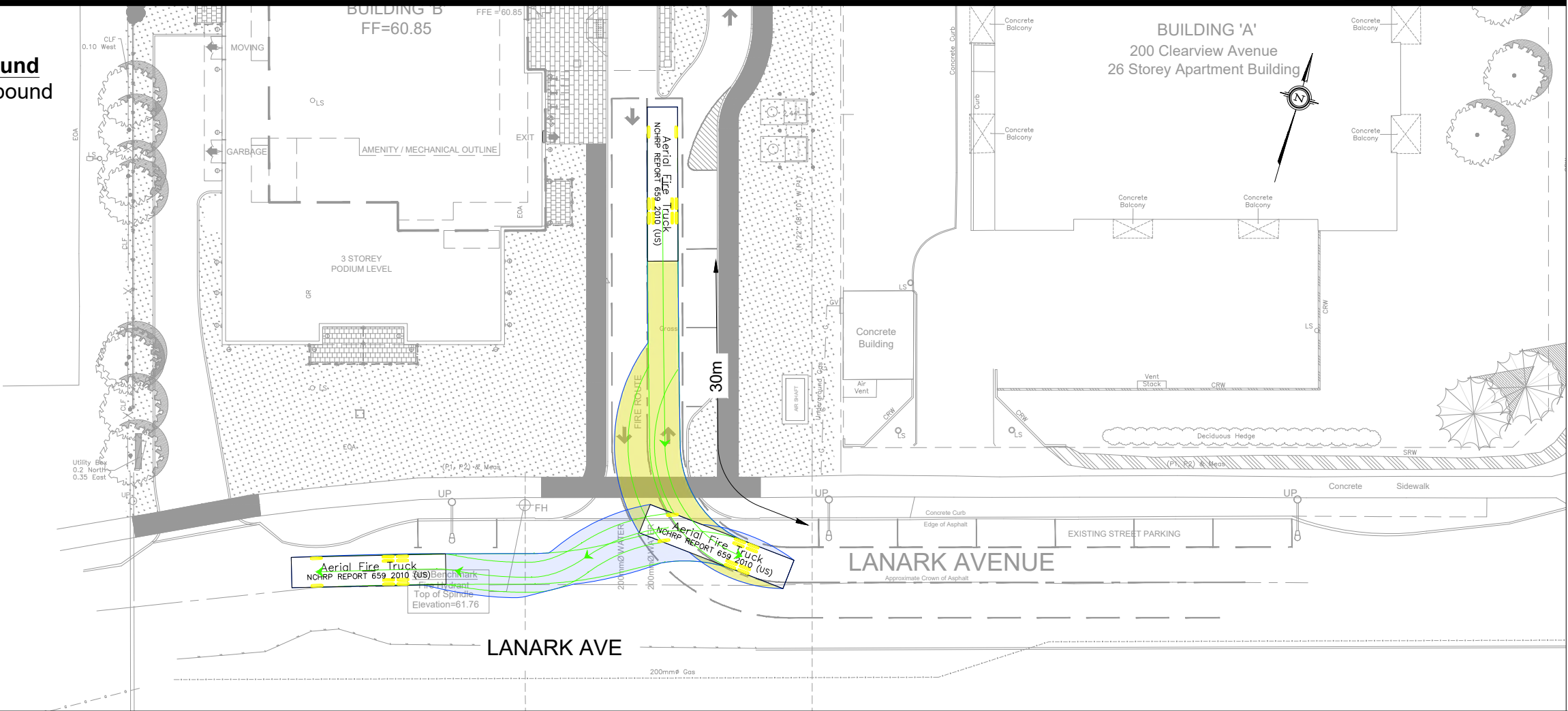
Key Plan:



Aerial Fire Truck

|                   |        |
|-------------------|--------|
|                   | mm     |
| Width             | : 2591 |
| Track             | : 2591 |
| Lock to Lock Time | : 6.0  |
| Steering Angle    | : 33.3 |

Garbage **Outbound** Movement - Eastbound



|         |                    |     |            |
|---------|--------------------|-----|------------|
| 02      | Issued for Review: | AN  | 2024-09-13 |
| REV:    | DESCRIPTION:       | BY: | DATE:      |
| STATUS: |                    |     |            |



CGH Transportation

6 Plaza Court  
Ottawa, ON  
K2H 7W1  
(343) 999-9117

CLIENT: Homestead Land Holdings

ARCHITECT:

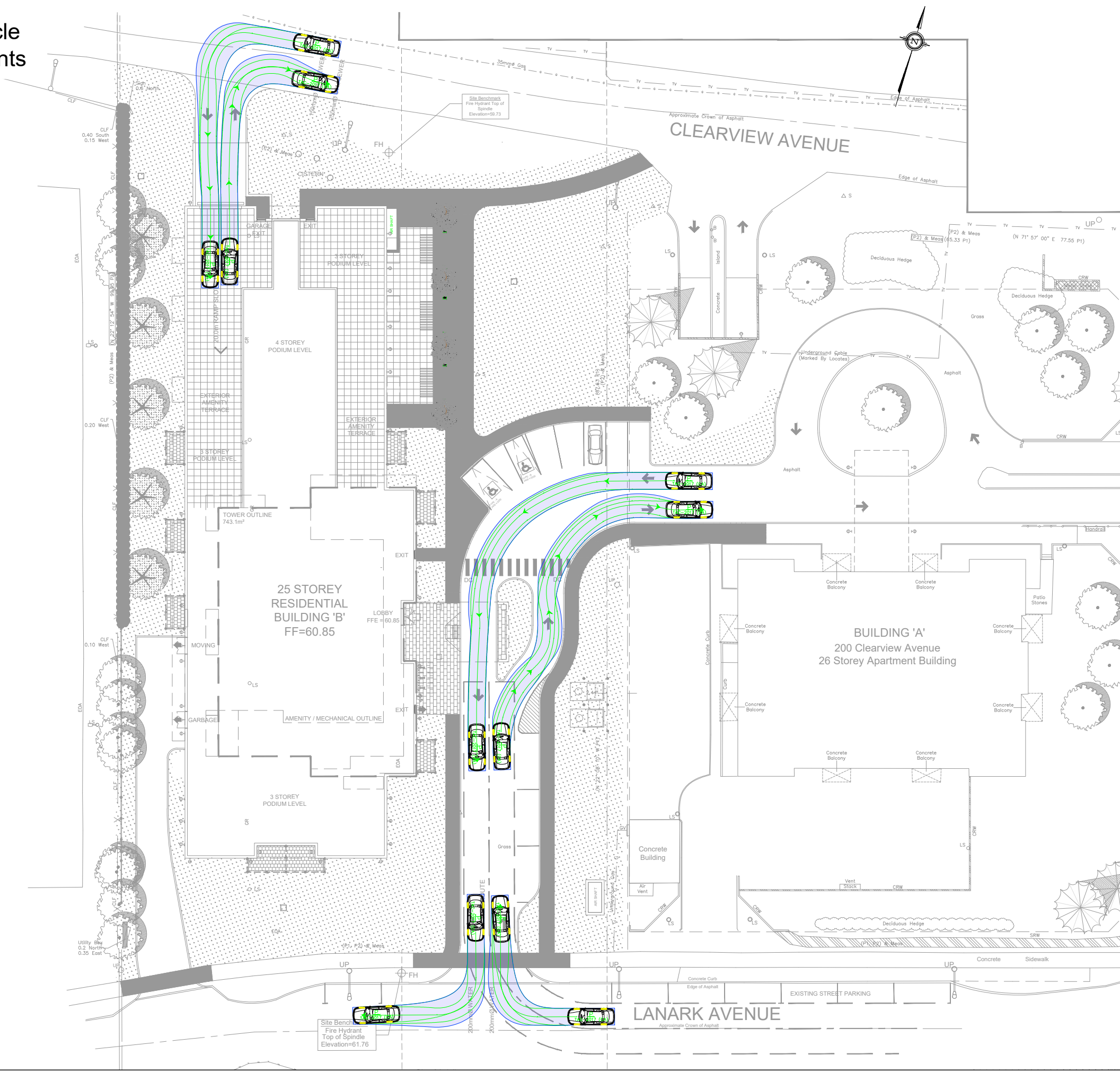
SITE:  
210 Clearview Ave

TITLE: Turning Movement Analysis  
Fire Turning Movements

|                         |                     |                 |                |
|-------------------------|---------------------|-----------------|----------------|
| SCALE AT A3:<br>NTS     | DATE:<br>2024-09-13 | DRAWN:<br>AN    | CHECKED:<br>AH |
| PROJECT NO:<br>2024-030 | DRAWING NO:<br>003  | REVISION:<br>02 |                |



Passenger Vehicle  
Turning Movements



Notes:

Key Plan:

5600

1100

3200

P

Width : 2000

Track : 2000

Lock to Lock Time : 6.0

Steering Angle : 35.9

|         |                    |     |            |
|---------|--------------------|-----|------------|
| 02      | Issued for Review: | AN  | 2024-09-13 |
| REV:    | DESCRIPTION:       | BY: | DATE:      |
| STATUS: |                    |     |            |

G

CGH Transportation  
6 Plaza Court  
Ottawa, ON  
K2H 7W1  
(343) 999-9117

CLIENT: Homestead Land Holdings

ARCHITECT:

SITE:  
210 Clearview Ave

TITLE: Turning Movement Analysis  
Tac P Turning Movements

|                         |                     |                 |                |
|-------------------------|---------------------|-----------------|----------------|
| SCALE AT A3:<br>NTS     | DATE:<br>2024-09-13 | DRAWN:<br>AN    | CHECKED:<br>AH |
| PROJECT NO:<br>2024-030 | DRAWING NO:<br>004  | REVISION:<br>02 |                |



# Appendix H

MMLOS Analysis

# Multi-Modal Level of Service - Segments Form

|            |                        |         |            |
|------------|------------------------|---------|------------|
| Consultant | CGH Transportation Inc | Project | 2024-030   |
| Scenario   | Existing/Future        | Date    | 2025-03-21 |
| Comments   |                        |         |            |
|            |                        |         |            |

| SEGMENTS   |   |   | Lanark Avenue       | Clearview Avenue    | Section         |
|------------|---|---|---------------------|---------------------|-----------------|
|            |   |   | Ex/Fu               | Ex                  | Fu              |
| Pedestrian | Sidewalk Width                            | - | 1.8 m               | no sidewalk         | 1.8 m           |
|            | Boulevard Width                           |   | 0.5 - 2 m           | n/a                 | < 0.5 m         |
|            | Avg Daily Curb Lane Traffic Volume        |   | ≤ 3000              | ≤ 3000              | ≤ 3000          |
|            | Operating Speed                           |   | > 30 to 50 km/h     | > 30 to 50 km/h     | > 30 to 50 km/h |
|            | On-Street Parking                         |   | yes                 | yes                 | yes             |
|            | Exposure to Traffic PLoS                  |   | B                   | F                   | B               |
|            | Effective Sidewalk Width                  |   |                     |                     |                 |
|            | Pedestrian Volume                         |   |                     |                     |                 |
|            | Crowding PLoS                             |   | -                   | -                   | -               |
|            | Level of Service                          |   | -                   | -                   | -               |
| Bicycle    | Type of Cycling Facility                  | - | Mixed Traffic       | Mixed Traffic       |                 |
|            | Number of Travel Lanes                    |   | ≤ 2 (no centreline) | ≤ 2 (no centreline) |                 |
|            | Operating Speed                           |   | >40 to <50 km/h     | >40 to <50 km/h     |                 |
|            | # of Lanes & Operating Speed LoS          |   | B                   | B                   | -               |
|            | Bike Lane (+ Parking Lane) Width          |   |                     |                     |                 |
|            | Bike Lane Width LoS                       |   | -                   | -                   | -               |
|            | Bike Lane Blockages                       |   |                     |                     |                 |
|            | Blockage LoS                              |   | -                   | -                   | -               |
|            | Median Refuge Width (no median = < 1.8 m) |   |                     |                     |                 |
|            | No. of Lanes at Unsignalized Crossing     |   |                     |                     |                 |
|            | Sidestreet Operating Speed                |   |                     |                     |                 |
|            | Unsignalized Crossing - Lowest LoS        |   | -                   | -                   | -               |
|            | Level of Service                          |   | -                   | -                   | -               |
| Transit    | Facility Type                             | D | Mixed Traffic       |                     |                 |
|            | Friction or Ratio Transit:Posted Speed    |   | Vt/Vp ≥ 0.8         |                     |                 |
|            | Level of Service                          |   | D                   | -                   | -               |
| Truck      | Truck Lane Width                          | - |                     |                     |                 |
|            | Travel Lanes per Direction                |   |                     |                     |                 |
|            | Level of Service                          |   | -                   | -                   | -               |