

## Engineering

- Land/Site Development
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## Landscape Architecture

- Streetscapes & Public Amenities
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- Community & Residential
- Commercial & Institutional
- Environmental Restoration

## 2380 Tenth Line Road Transportation Impact Assessment

**Proposed Assisted Living and Retirement Apartment Development  
2380 Tenth Line Road  
Transportation Impact Assessment**

Prepared By:

**NOVATECH**  
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Dated: October 2025  
*Revised: April 2026*

Novatech File: 125079  
Ref: R-2025-090

April 17, 2026

City of Ottawa  
Planning, Development and Building Services Department  
110 Laurier Ave. W., 4<sup>th</sup> Floor,  
Ottawa, Ontario K1P 1J1

**Attention: Mr. John Sevigny**  
**Acting Manager, Development Review East Branch**

Dear Mr. Sevigny:

**Reference: 2380 Tenth Line Road**  
**Transportation Impact Assessment**  
**Novatech File No. 125079**

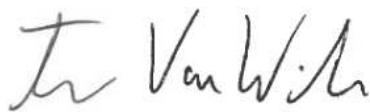
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We are pleased to submit the following Revised Transportation Impact Assessment (TIA), in support of a Site Plan application at 2380 Tenth Line Road, for your review and signoff. The structure and format of this report is in accordance with the City of Ottawa Transportation Impact Assessment Guidelines (June 2023).

If you have any questions or comments regarding this report, please feel free to contact Brad Byvelds, or the undersigned.

Yours truly,

**NOVATECH**



Trevor Van Wiechen, P.Eng.  
Project Engineer | Transportation



## **TIA Plan Reports**

On 14 June 2017, the Council of the City of Ottawa adopted new Transportation Impact Assessment (TIA) Guidelines. In adopting the guidelines, Council established a requirement for those preparing and delivering transportation impact assessments and reports to sign a letter of certification.

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 s/he meets the four criteria listed below.

### **CERTIFICATION**

1. 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;
2. 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;
3. 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
4. I am either a licensed<sup>1</sup> or registered<sup>2</sup> professional in good standing, whose field of expertise [check  appropriate field(s)] is either transportation engineering  or transportation planning .

**1,2 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.**

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Dated at Ottawa this 17 day of April, 2026 .  
(City)

Name: Brad Byvelds  
(Please Print)

Professional Title: P. Eng. - Senior Project Manager

*B. Byvelds*

Signature of Individual certifier that s/he meets the above four criteria

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**TABLE OF CONTENTS**

**1.0 SCREENING.....1**

1.1 INTRODUCTION ..... 1

1.2 PROPOSED DEVELOPMENT ..... 1

1.3 SCREENING FORM ..... 2

**2.0 SCOPING.....2**

2.1 EXISTING CONDITIONS ..... 2

2.1.1 Roadways.....2

2.1.2 Intersections .....3

2.1.3 Driveways .....4

2.1.4 Pedestrian and Cycling Facilities .....4

2.1.5 Transit .....4

2.1.6 Area Traffic Management .....5

2.1.7 Existing Traffic Volumes .....5

2.1.8 Collision Records.....6

2.2 PLANNED CONDITIONS ..... 7

2.2.1 Planned Roadway and Transit Projects .....7

2.2.2 Other Area Developments .....7

2.3 STUDY AREA AND TIME PERIODS ..... 8

2.4 ACCESS DESIGN ..... 8

2.5 DEVELOPMENT-GENERATED TRAVEL DEMAND..... 9

2.5.1 Trip Generation.....9

2.6 TRIP DISTRIBUTION AND ASSIGNMENT ..... 10

2.7 EXEMPTIONS REVIEW..... 11

**3.0 FORECASTING .....12**

3.1 BACKGROUND TRAFFIC ..... 12

3.1.1 Other Area Developments .....12

3.1.2 General Background Growth Rate .....12

3.2 FUTURE TRAFFIC CONDITIONS ..... 12

3.3 DEMAND RATIONALIZATION..... 14

**4.0 ANALYSIS .....14**

4.1 DEVELOPMENT DESIGN ..... 14

4.1.1 Design for Sustainable Modes .....14

4.1.2 Circulation and Access .....14

4.2 PARKING ..... 17

4.3 BOUNDARY STREET DESIGN ..... 17

4.4 TRANSPORTATION DEMAND MANAGEMENT ..... 23

4.4.1 Context for TDM .....23

4.4.2 Need and Opportunity.....23

4.4.3 TDM Program .....23

**5.0 CONCLUSIONS AND RECOMMENDATIONS .....24**

**Figures**

Figure 1: View of the Subject Site ..... 1  
 Figure 2: OC Transpo Bus Stop Locations ..... 5  
 Figure 3: Existing Traffic Volumes ..... 6  
 Figure 4: Site Generated Traffic ..... 10  
 Figure 5: 2027 Background Traffic ..... 12  
 Figure 6: 2032 Background Traffic ..... 13  
 Figure 7: 2027 Total Traffic ..... 13  
 Figure 8: 2032 Total Traffic ..... 13  
 Figure 9: Proposed Signage Plan ..... 15  
 Figure 10: Para-Transpo Bus Entering/Exiting Site ..... 16  
 Figure 11: Passenger Car Entering Site ..... 18  
 Figure 12: LSU Truck Entering the Site ..... 19  
 Figure 13: LSU Truck Exiting the Site ..... 20  
 Figure 14: MSU Truck Entering the Site ..... 21  
 Figure 15: MSU Truck Exiting the Site ..... 22

**Tables**

Table 1: OC Transpo Transit Stops ..... 4  
 Table 2: OC Transpo Route Information ..... 5  
 Table 3: Reported Collisions ..... 6  
 Table 4: Person Trip Generation ..... 9  
 Table 5: TRANS and TOD Mode Share Comparison (Residential)..... 9  
 Table 6: Proposed Development – Peak Hour Trips by Mode Share..... 10  
 Table 7: TIA Exemptions ..... 11  
 Table 8: Parking Requirements ..... 17  
 Table 9: Segment MMLOS Summary..... 17

**Appendices**

- Appendix A: Site Plan
- Appendix B: TIA Screening Form
- Appendix C: OC Transpo Route Maps
- Appendix D: Traffic Count Data
- Appendix E: Collision Records
- Appendix F: Background Reports
- Appendix G: Transportation Demand Management Checklists
- Appendix H: MMLOS Review

## EXECUTIVE SUMMARY

This Transportation Impact Assessment (TIA) has been prepared in support of a Site Plan application for a retirement home development at 2380 Tenth Line Road. The subject site is currently vacant.

The subject site is located in the northwest corner of the Tenth Line Road/Décoeur Drive/Southfield Way intersection and is surrounded by the following:

- The 2370 Tenth Line Road residential development and Brian Coburn Boulevard to the north;
- Tenth Line Road and other residential developments to the east;
- The 2370 Tenth Line Road residential development and Notre-Place Catholic Elementary School to the west; and
- Décoeur Drive and residential developments to the south.

The proposed development includes a 141-unit retirement home. Access to the development is proposed via:

- One inbound only ingress access to Décoeur Drive to facilitate drop-offs to the main entrance and the surface level parking lot;
- One outbound only egress to David Lewis Private from the drop-off to the main entrance and the surface level parking lot; and
- One all-movement access to David Lewis Private to the underground parking lot and loading area.

The proposed development is anticipated to be completed in one phase, with buildout occurring in 2027.

The City of Ottawa's Official Plan locates the subject site within the Suburban (East) Transect, with an 'Evolving Neighbourhood' overlay and a 'Corridor - Minor' designation on Schedule B8.

The conclusions and recommendations of this TIA can be summarized as follows:

### Access Design

- A pick-up/drop-off area and small surface parking lot will be accessed through an ingress on Décoeur Drive and egress on David Lewis Private. Access to the underground parking lot will be provided through an all movement access to David Lewis Private. The inbound only access to Décoeur Drive will be placed roughly mid-block between the signalized intersection at Tenth Line Road/Décoeur Drive/Southfield Way and David Lewis Private.
- The TAC Geometric Design Guide identifies a minimum corner clearance distance of 55m for an access to a collector road downstream from a traffic signal (measured curb to curb). The inbound only access has 43m of corner clearance space to Tenth Line Road. As the access is inbound only and will serve low traffic volumes, this is assumed to be acceptable.
- The TAC Geometric Design Guide identifies a clear throat requirement of 15m for residential developments with 100-200 units (i.e. the ingress to the subject site) and 25m for residential developments with more than 200 units (i.e. David Lewis Private) on a collector road. The proposed inbound only access meets this requirement. However, the clear throat length on David Lewis Private does not meet the TAC requirement. As minimal vehicles will exit the

drop-off/surface parking area, conflicts within the clear throat length along David Lewis Private are anticipated to be infrequent.

- Décoeur Drive does not have horizontal and/or vertical curvatures or objects obstructing sightlines within proximity of the proposed access and David Lewis Private. As such the TAC required sight distance is anticipated to be met at both locations.

### Trip Generation

- The proposed development is estimated to generate 14 person trips (including 8 vehicle trips) during the AM peak hour and 32 person trips (including 19 vehicle trips) during the PM peak hour.

### Development Design

- Concrete pathways will be provided connecting the main building entrances to the Décoeur Drive sidewalk and the Tenth Line Road asphalt multi-use pathway.
- Two exterior bike racks are provided for visitor bike parking between the vehicle parking lot and the main building entrances. Interior bike parking is also provided within the underground parking garage.
- All bus stops discussed in Section 2.1.5 (and shown in **Figure 2**) are within 400m walking distance of the entrances to the proposed development. These stops are served by Routes 30, 234, 618, and 630. A 400m walking distance is equivalent to a five-minute walk, per OC Transpo's service design guidelines.
- In order to encourage the use of sustainable modes, the following 'basic' and 'better' design measures from the City's TDM Infrastructure Checklist will be implemented for the proposed redevelopment:
  - The location of the building entrances will minimize the walking distance to sidewalks and transit stops/stations;
  - Building doors and windows will ensure visibility of pedestrians from the building;
  - Walking routes from the development to nearby transit stops will be safe, direct, and attractive; and
  - Walking routes from the development to nearby transit stops will be secure, visible, lighted, shaded, and wind protected whenever possible.
- The front drop-off area and surface parking lot will function as one-way operation from Décoeur Drive to David Lewis Private. One-way (Rb-21) and Do Not Enter (Rb-19) signage is proposed at the accesses to facilitate the one-way operations.
- The front drop-off lay-by is anticipated to accommodate para-transpo bus. Loading and garbage collection will occur on-site through the rear all movement access on David Lewis Private.
- The inbound vehicular access at Décoeur Drive will form the fire route for the subject site. The fire route is shown on the Site Plan.

### Parking

- The proposed development includes 47 vehicle parking spaces and 36 bicycle parking spaces, meeting the zoning by-law.
- The development proposes one Type A and one Type B accessible parking space, adhering to the City's Traffic and Parking By-law.

### Boundary Street Design

- Both sides of Tenth Line Road do not meet the target PLOS C. To achieve a PLOS C a reduction in operating speed is required on both sides of the road. This is identified for the City's consideration.

- The west side of Tenth Line Road does not meet the target BLOS C. As a MUP achieving a BLOS A is provided on the west side of the road, no mitigation measures are identified.
- Both sides of Décoeur Drive do not meet the target BLOS D. To achieve a BLOS B a reduced posted speed limit of 40km/h is required. This is identified for the City's consideration.
- No target transit level of service has been identified for any boundary street however all boundary streets achieve a TLOS of D.
- Tenth Line Road meets the target truck level of service and no target truck level of service is identified for Décoeur Drive.

*Transportation Demand Management*

- As the proposed modal shares are consistent with the area, the development is anticipated to meet the target auto modal share.
- A review of the City's *TDM Measures Checklist* has been conducted by the proponent, who has committed to providing the following TDM measures within this development:
  - Provide shuttle service for senior homes of lifestyle communities (e.g. scheduled mall or supermarket runs)

Based on the foregoing, the proposed development is recommended from a transportation perspective.

## 1.0 SCREENING

### 1.1 Introduction

This Transportation Impact Assessment (TIA) has been prepared in support of a Site Plan application for a retirement home development at 2380 Tenth Line Road. The subject site is currently vacant.

The subject site is located in the northwest corner of the Tenth Line Road/Décoeur Drive/Southfield Way intersection and is surrounded by the following:

- The 2370 Tenth Line Road residential development and Brian Coburn Boulevard to the north;
- Tenth Line Road and other residential developments to the east;
- The 2370 Tenth Line Road residential development and Notre-Place Catholic Elementary School to the west; and
- Décoeur Drive and residential developments to the south.

An aerial of the vicinity around the subject site is provided in **Figure 1**.

**Figure 1: View of the Subject Site**



### 1.2 Proposed Development

The proposed development includes a 141-unit retirement home. Access to the development is proposed via:

- One inbound only ingress access to Décoeur Drive to facilitate drop-offs to the main entrance and the surface level parking lot;
- One outbound only egress to David Lewis Private from the drop-off to the main entrance and the surface level parking lot; and
- One all-movement access to David Lewis Private to the underground parking lot and loading area.

The proposed development is anticipated to be completed in one phase, with buildout occurring in 2027.

The City of Ottawa's Official Plan locates the subject site within the Suburban (East) Transect, with an 'Evolving Neighbourhood' overlay and a 'Corridor - Minor' designation on Schedule B8.

A copy of the site plan is included in **Appendix A**.

### 1.3 Screening Form

The City's 2023 *TIA Guidelines* identify three triggers for completing a TIA report, including trip generation, location, and safety. The criteria for each trigger are outlined in the City's TIA Screening Form, which is included in **Appendix B**. The trigger results are as follows:

- Trip Generation Trigger – The development is not expected to generate a net additional 60 peak hour person trips; further assessment is **not required** based on this trigger.
- Location Triggers – The location of the development does not trigger any location triggers identified in the *TIA Guidelines*; further assessment is **not required** based on this trigger.
- Safety Triggers – The development proposes access within 150m of the Tenth Line Road/Décoeur Drive/Southfield Way signalized intersection and is within the auxiliary left turn lane associated with the signalized intersection; further assessment is **required** based on this trigger.

## 2.0 SCOPING

### 2.1 Existing Conditions

#### 2.1.1 Roadways

Within the study area Décoeur Drive, Tenth Line Road, and Southfield Way fall under the jurisdiction of the City of Ottawa. Entourage Private and David Lewis Private are privately owned and are part of the residential development at 2370 Tenth Line Road. Tilleuls Private is privately owned and is part of the residential development at 880 Décoeur Drive opposite the site.

Décoeur Drive is an east-west collector roadway extending between Mer Bleue Road and Tenth Line Road. It has an urban two-lane cross section with sidewalks on both sides and a regulatory speed limit of 50km/h.

Southfield Way is an east-west collector roadway extending between Tenth Line Road and Lakeridge Drive. It has an urban two-lane cross section with sidewalks on both sides and a posted speed limit of 50km/h.

Tenth Line Road is a north-south arterial roadway extending between Jeanne-d'Arc Boulevard and Smith Road. Within the study area, it has an urban four-lane divided cross section with a concrete sidewalk on the east side and an asphalt multi-use path on the west side. Tenth Line Road has a posted speed limit of 60km/h and is a truck route allowing full loads.

David Lewis Private is a north-south local private roadway extending between Décoeur Drive and Dashing Private. Within the study area, it has an urban two-lane undivided cross section with a pathway on the west side. David Lewis Private has an unposted regulatory speed limit of 50km/h.

## 2.1.2 Intersections

### Tenth Line Road/Décoeur Drive/Southfield Way

- Four-legged signalized intersection
- Northbound and Southbound Approaches (Tenth Line Road): one left turn lane, two through lanes, one pocket bike lane, and one right turn lane
- Westbound Approach (Southfield Way): one left turn lane and one shared through/right turn lane
- Eastbound Approaches (Décoeur Drive): one left turn lane and one shared through/right turn lane
- Standard crosswalk painting provided on all approaches
- An off-road MUP is provided on the west side of Tenth Line Road, crossing the west leg of the intersection



### Décoeur Drive/David Lewis Private/Tilleuls Private

- Four-legged side street stop control intersection
- Northbound Approaches (Tilleuls Private): one shared all-movement lane
- Southbound Approaches (David Lewis Private): one shared all-movement lane
- Westbound and Eastbound Approaches (Décoeur Drive): one shared all-movement lane



### 2.1.3 Driveways

A review of adjacent driveways along the boundary roads are provided as follows:

#### Tenth Line Road, West Side:

- One driveway to a City of Ottawa facility at 2428 Tenth Line Road
- Entourage Private serving residential development at 2370 Tenth Line Road

#### Décoeur Drive, North Side:

- Two driveways to Notre-Place Catholic Elementary School at 665 Aubépines Drive
- David Lewis Private serving residential development at 2370 Tenth Line Road

#### Southfield Way, North Side:

- Eight driveways to residential buildings at 515 to 533 Southfield Way
- One driveway to townhouse development at 2385 Tenth Line Road

#### David Lewis Private, West Side:

- Parking spaces and laneways to various stacked townhouse units as part of 2370 Tenth Line Road development

#### Tenth Line Road, East Side:

- None

#### Décoeur Drive, South Side:

- Tilleuls Private serving the stacked townhouse development at 880 Décoeur Drive
- One driveway to the Minto Sales Centre at 896B Décoeur Drive

#### Southfield Way, South Side:

- 18 driveways to residential buildings at 500 to 534 Southfield Way

#### David Lewis Private, East Side:

- Parking spaces and laneways to various stacked townhouse units as part of 2370 Tenth Line Road development

### 2.1.4 Pedestrian and Cycling Facilities

Décoeur Drive and Southfield Way have existing sidewalks on both sides of the road throughout the study area. Tenth Line Road has an existing sidewalk on the east side of the road and a two-way paved asphalt multi-use path on the west side of the road. A concrete pathway is provided on the west side of David Lewis Private.

On Tenth Line Road bike lanes are provided on both sides of the road within the study area.

### 2.1.5 Transit

The closest OC Transpo bus stops in the vicinity of the subject site are described in **Table 1** and all bus stops within the vicinity of the study area are shown in **Figure 2**. A summary of various routes which serve the study area is included in **Table 2**. Detailed route information is included in **Appendix C**.

**Table 1: OC Transpo Transit Stops**

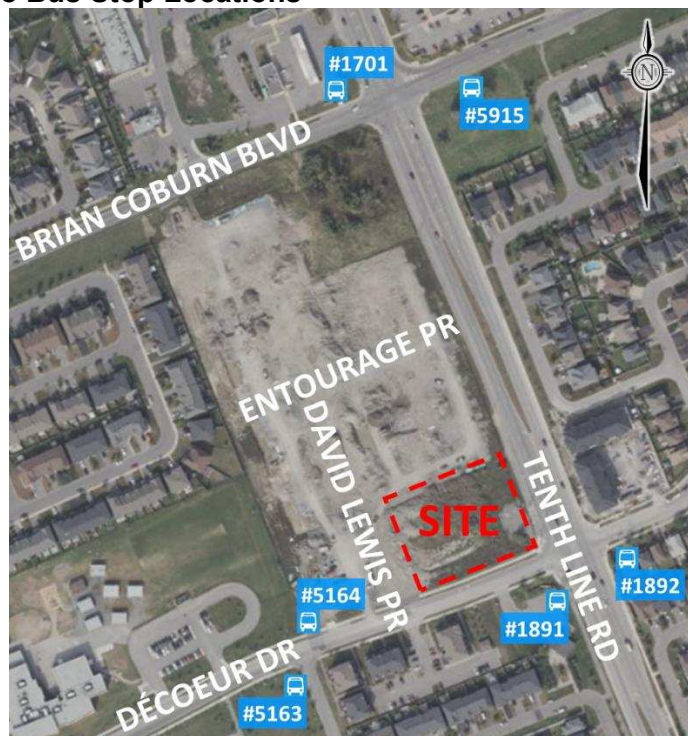
Stop	Location	Routes Served
#1701	Southwest corner of Tenth Line Road/Brian Coburn Boulevard	30, 618, 630
#1891	Southwest corner of Tenth Line Road/Décoeur Drive/Southfield Way	234
#1892	Southeast corner of Tenth Line Road/Décoeur Drive/Southfield Way	234
#5163	Southwest corner of Décoeur Drive/Magnolia Street	234
#5164	Northeast corner of Décoeur Drive/Magnolia Street	234

Stop	Location	Routes Served
#5915	Southeast corner of Tenth Line Road/Brian Coburn Boulevard	30, 618, 630

**Table 2: OC Transpo Route Information**

Route	From ↔ To	Frequency
30	Blair ↔ Millennium	30-minute headways, all-day service, 7-days per week
234	Blair ↔ Tenth Line	30-minute headways, peak periods only in direction of peak travel, Monday to Friday
618	Louis Riel ↔ Millennium	School Route
630	Blair/Colonel By/Gloucester H.S. ↔ Millennium	School Route

**Figure 2: OC Transpo Bus Stop Locations**



**2.1.6 Area Traffic Management**

Décoeur Drive is signed as a traffic calmed neighbourhood. It has a flashing speed display board, and centreline flex posts, as well as pavement markings stating “ÉCOLE / SCHOOL” in vicinity of the Notre-Place Catholic Elementary School.

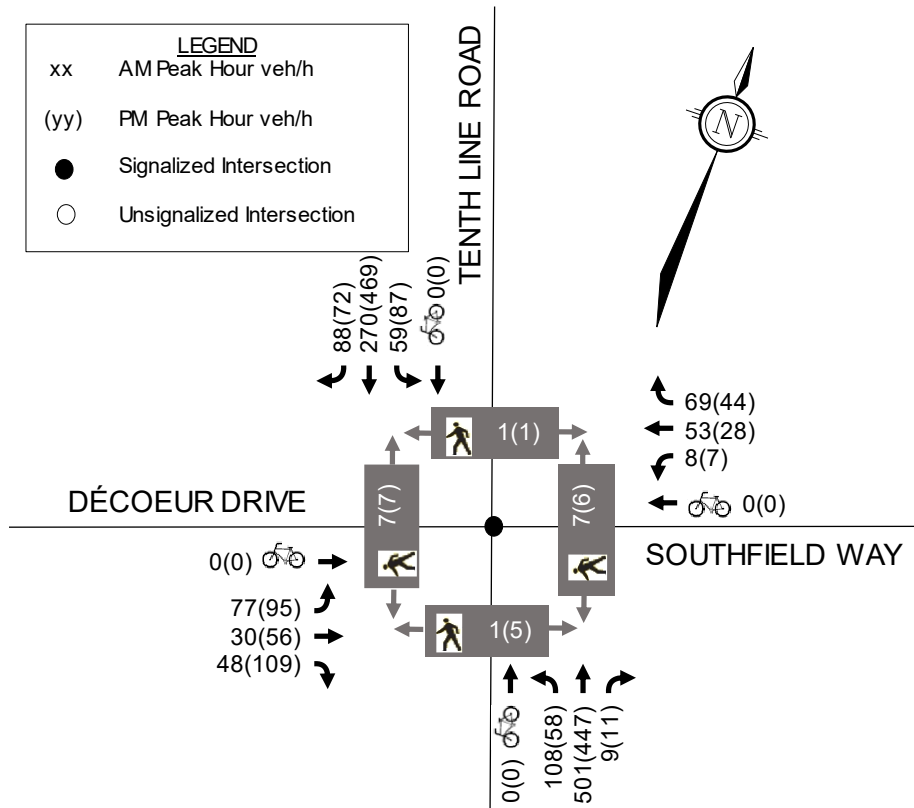
**2.1.7 Existing Traffic Volumes**

Weekday traffic counts were used to determine the existing pedestrian, cyclist, and vehicular traffic volumes at the study area intersections. These counts were completed on the dates listed below:

- Tenth Line Road/Décoeur Drive/Southfield Way February 7, 2023

All traffic count data previously discussed are included in **Appendix D**. Traffic volumes within the study area are shown in **Figure 3**.

**Figure 3: Existing Traffic Volumes**



**2.1.8 Collision Records**

Historical collision data from the last five years was obtained from the City’s Public Works and Service Department for the study area intersections and road segments between intersections. Copies of the collision summary reports are included in **Appendix E**.

The collision data has been evaluated to determine if there are any identifiable collision patterns, defined in the *2023 TIA Guidelines* as ‘more than six collisions in five years’ for any one movement. The number of collisions at each intersection from January 1, 2019 to December 31, 2022 and January 1, 2014 to December 31, 2024 is summarized in **Table 3**.

**Table 3: Reported Collisions**

Location	Impact Types						Total
	Approach	Angle	Rear End	Sideswipe	Turning Mvmt	SMV <sup>(1)</sup> /Other	
Décoeur Drive/Southfield Way/Tenth Line Road	-	4	3	1	4	2	<b>14</b>

1. SMV = Single Motor Vehicle

**Décoeur Drive/Southfield Way/Tenth Line Road**

A total of 14 collisions were reported at this intersection over the last five years, of which there was four angle impacts, three rear-end impacts, one sideswipe impact, four turning movement impacts, and two single vehicle/other impacts. Four collisions resulted in injuries, but none caused fatalities.

None of the collisions involved cyclists and one involved a pedestrian. The collision involving a pedestrian involved a westbound left turning vehicle.

Of the 14 collisions at this location, three of them occurred during rain conditions, one of them occurred during snow conditions, and one of them occurred during freezing rain, for all other collisions weather was not a factor. Additionally, of the 14 collisions, 11 of them occurred during daylight hours.

## 2.2 Planned Conditions

### 2.2.1 Planned Roadway and Transit Projects

The City's 2025 Transportation Master Plan (TMP) Update has been recently completed including the new Capital Infrastructure Plan. The City of Ottawa's 2025 Transportation Master Plan (TMP) update identifies the following projects within the study area:

- Transit Projects
  - Cumberland Transitway (Needs Based Network): Dedicated bus rapid transit with at-grade crossings from Blair Station to Millennium Station
  - Cumberland Transitway (Priority Network): Dedicated bus rapid transit with at-grade crossings from Blair Road to Chapel Hill Station
  - Cumberland Transitway (Priority Network): Dedicated bus rapid transit with at-grade crossings from Chapel Hill Station to Esprit Drive
- Road Projects
  - Brian Coburn Boulevard (Committed): New roadway from Renaud Road to Navan Road and road widening from Mer Bleue Road to Tenth Line Road
  - Brian Coburn Boulevard (Needs Based and Priority Network): Road widening between Navan Road and Mer Bleue Road
- Pedestrian Projects
  - Brian Coburn Boulevard Sidewalk (Later Phase): Sidewalk along Brian Coburn Blvd from Tenth Line Rd to Selene Way pathway.
- Cycling Projects
  - Brian Coburn Boulevard (First Phase): Eastbound multi-use path from Mer Bleue Rd to Portobello Blvd. Westbound bike lane from Montmère Ave to Mer Bleue Rd where feasible.

First Phase Active transportation projects will be implemented over the next 7-10 years. Projects not included in the first phase may be advanced as opportunities arise.

### 2.2.2 Other Area Developments

In proximity of the proposed development, there are multiple developments that are approved, or in the approval process. Other developments in the area include:

- The mixed-use development at 2370 Tenth Line Road. This development proposes 144 stacked townhomes and four low-rise mixed-use buildings with 96 dwelling units and 3,170m<sup>2</sup> of ground floor commercial space. A TIA report was written in December 2021 and the site is expected to be built out by 2026.

Excerpts from relevant transportation studies have been attached in **Appendix F**.

## 2.3 Study Area and Time Periods

The study area intersections will include the Tenth Line Road/Décoeur Drive/Southfield Way intersection and the site access. A boundary street review will be conducted for Tenth Line Road and Décoeur Drive.

## 2.4 Access Design

A pick-up/drop-off area and small surface parking lot will be accessed through an ingress on Décoeur Drive and egress on David Lewis Private. Access to the underground parking lot will be provided through an all movement access to David Lewis Private. The inbound only access to Décoeur Drive will be placed roughly mid-block between the signalized intersection at Tenth Line Road/Décoeur Drive/Southfield Way and David Lewis Private. The proposed accesses have been evaluated using the relevant provisions of the City's *Private Approach By-Law* (PABL), and the Transportation Association of Canada (TAC)'s Geometric Design Guide.

Section 25(1)(a) of the PABL identifies that any frontage of a site with a length of 46 to 150 metres may have a maximum of one two-way approach and two one-way approaches. As one two-way approach and one one-way approach is proposed to the David Lewis Private frontage and one one-way approach is proposed to the Décoeur Drive frontage, these requirements are met.

Section 25(1)(c) and (d) of the PABL identifies a maximum width requirement of 9m for any two-way private approach and 7.5m for any one-way private approach. The proposed all movement access has a width of 6.7m to provide access to the underground parking ramp and loading area. The proposed ingress has a width of 6.0m at the property line. The proposed egress has a width of 6.7m at the property line. The width of the proposed accesses are assumed to be acceptable.

Section 25(1)(m) of the PABL identifies minimum distances between private approaches to the same property and a private approach and the nearest intersecting street line, for properties that abut or are within 46m of an arterial or major collector roadway. For an apartment building development with 20-99 parking spaces, the minimum spacing between accesses is 15m and the minimum distance is 18m to the nearest edge to intersecting ROW. As the proposed inbound only access is approximately 35m from the ROW of Tenth Line Road and there is roughly 55m between the access and David Lewis Private, this requirement is met.

Section 25(1)(u) of the PABL identifies a requirement that any private approach serving a parking area with more than 50 parking spaces shall not have a grade exceeding 2% for the first 9m inside the property line. The proposed access grading adheres to the PABL requirements.

The TAC Geometric Design Guide identifies a minimum corner clearance distance of 55m for an access to a collector road downstream from a traffic signal (measured curb to curb). The inbound only access has 43m of corner clearance space to Tenth Line Road. As the access is inbound only and will serve low traffic volumes, this is assumed to be acceptable.

The TAC Geometric Design Guide identifies a clear throat requirement of 15m for residential developments with 100-200 units (i.e. the ingress to the subject site) and 25m for residential developments with more than 200 units (i.e. David Lewis Private) on a collector road. The proposed inbound only access has a clear throat length of approximately 30m to the nearest parking space or roughly 20m to the drop-off area, meeting this requirement. The clear throat length on David Lewis Private to the proposed surface parking/drop-off area egress is approximately 4m measured from the end of the radius to the access, or 12m from Décoeur Drive to the access. As shown in

Section 2.5.1, the subject site is expected to generate three outbound vehicle trips during the AM peak hour and ten outbound vehicle trips during the PM peak hour. The majority of this traffic will utilize the underground parking ramp. As minimal vehicles will exit the drop-off/surface parking area, conflicts within the clear throat length along David Lewis Private are anticipated to be infrequent.

A review of stopping sight distance (SSD) and intersection sight distance (ISD) requirements at the proposed accesses has been conducted, in accordance with the minimum requirements outlined in TAC’s Geometric Design Guide. For the purposes of this review, a design speed of 60 km/h has been assumed for Décoeur Drive. Therefore, TAC outlines the following SSD and ISD requirements:

- SSD
  - 85m required for Décoeur Drive.
- ISD, looking right to turn left out of access
  - 130m desired for Décoeur Drive.
- ISD, looking left to turn right out of access
  - 110m desired for Décoeur Drive.

Décoeur Drive does not have horizontal and/or vertical curvatures or objects obstructing sightlines within proximity of the proposed access and David Lewis Private. As such the TAC required sight distance is anticipated to be met at both locations.

## 2.5 Development-Generated Travel Demand

### 2.5.1 Trip Generation

The proposed development includes a 6-storey retirement home building with 141 dwelling units.

Trips generated by the proposed development during the weekday AM and PM peak period have been estimated based on the average rate presented in the Institute of Transportation Engineers (ITE) *Trip Generation Manual* (11<sup>th</sup> Edition), specific to a Congregate Care Facility (ITE 253). Person trips were calculated using an ITE Trip to Person Trip factor of 1.28, consistent with the TIA guidelines. Person trips generated by the proposed development are shown in the following table.

**Table 4: Person Trip Generation**

Land Use	ITE Code	Units	AM Peak Hour (pph <sup>(1)</sup> )			PM Peak Hour (pph <sup>(1)</sup> )		
			IN	OUT	TOT	IN	OUT	TOT
Congregate Care	253	141	9	5	14	15	17	32

1. pph: peak person trips per hour

The 2020 TRANS Trip Generation Manual provides modal shares for high-rise multifamily housing developments within Orleans. A summary of the TRANS residential mode shares (average of AM and PM peak, rounded to nearest 5%) is provided in **Table 5**.

**Table 5: TRANS and TOD Mode Share Comparison (Residential)**

	Auto Driver	Auto Passenger	Transit	Cycling	Walking
TRANS	60%	10%	25%	0%	5%

Using the trips generated in **Table 4** and the proposed mode share from **Table 5** trips generated during the peak hour were broken down by modal share in **Table 6**.

**Table 6: Proposed Development – Peak Hour Trips by Mode Share**

Travel Mode	Mode Share	AM Peak Hour			PM Peak Hour		
		IN	OUT	TOT	IN	OUT	TOT
<b>Person Trips</b>		<b>9</b>	<b>5</b>	<b>14</b>	<b>15</b>	<b>17</b>	<b>32</b>
Auto Driver	60%	5	3	8	9	10	19
Auto Passenger	10%	1	0	1	1	2	3
Transit	25%	2	2	4	4	4	8
Cyclist	0%	0	0	0	0	0	0
Pedestrian	5%	1	0	1	1	1	2

From the previous table, the proposed development is estimated to generate 14 person trips (including 8 vehicle trips) during the AM peak hour and 32 person trips (including 19 vehicle trips) during the PM peak hour.

**2.6 Trip Distribution and Assignment**

The distribution of traffic generated by the proposed development has been estimated based on logical trip routing, existing traffic patterns on the roadways within the study area, and previous TIA reports.

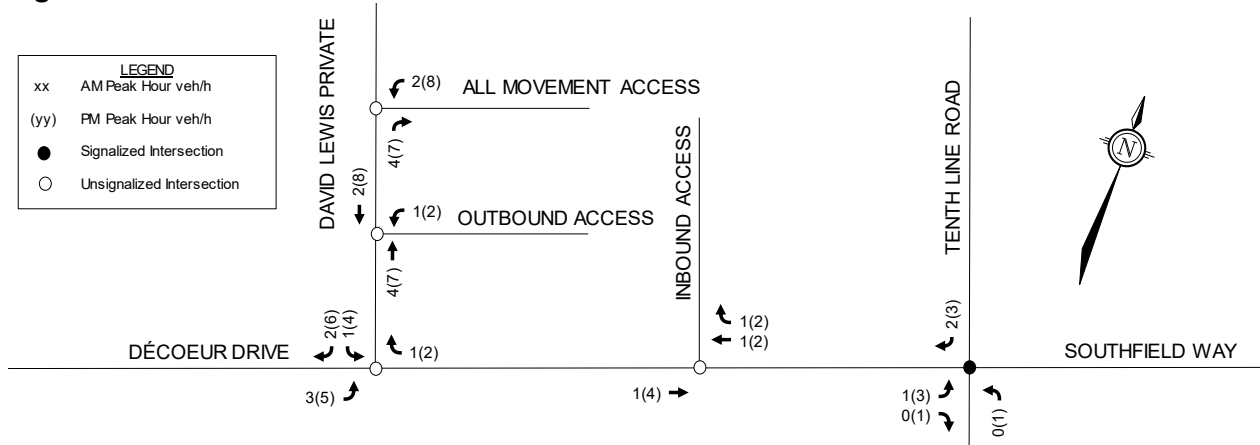
The trip distribution can be described as follows:

- 35% to/from the north via Tenth Line Road;
- 5% to/from the south via Tenth Line Road;
- 60% to/from the west via Décoeur Drive.

The majority of trips generated by the site will use the David Lewis Private two-way access. However, a small portion of drop-off trips will use the eastern ingress/layby and outbound only access to David Lewis Private.

Based on the above, the distribution of site-generated traffic volumes to the study area intersections are shown in **Figure 4**.

**Figure 4: Site Generated Traffic**



## 2.7 Exemptions Review

This module reviews possible exemptions from the final TIA, as outlined in the *2023 Revised TIA Guidelines*. The applicable exemptions for this site are shown in **Table 7**.

**Table 7: TIA Exemptions**

Module	Element	Exemption Criteria	Exemption Status
4.1 Development Design	4.1.2 Circulation and Access	<ul style="list-style-type: none"> <li>Only required for Site Plan and Zoning By-law Applications</li> </ul>	Not Exempt
	4.1.3 New Street Networks	<ul style="list-style-type: none"> <li>Only required for plans of subdivision</li> </ul>	Exempt
4.2 Parking	4.2.1 Parking Supply	<ul style="list-style-type: none"> <li>Only required for Site Plan and Zoning By-law Applications</li> </ul>	Not Exempt
4.6 Neighbourhood Traffic Management	4.6.1 Adjacent Neighbourhoods	<ul style="list-style-type: none"> <li>If the development meets <u>all</u> of the following criteria along the route(s) site generated traffic is expected to utilize between arterial road and the site's access:                             <ol style="list-style-type: none"> <li>Access to a Collector or Local;</li> <li>"Significant sensitive land use presence" exists where there is at least two of the following adjacent to the subject street segment (School, Park, Retirement/Older Adult Facility, Licenced Child Care Centre, Community Centre, or 50% or greater of the property is occupied by residential land uses)</li> <li>Application is for Zoning By-Law Amendment or Draft Plan of Subdivision</li> <li>At least 75 site generated auto trips</li> <li>Site Trip Infiltration expected</li> </ol> </li> </ul>	Exempt
4.7 Transit	4.7.1 Transit Route Capacity	<ul style="list-style-type: none"> <li>Greater than 75 site transit trips</li> </ul>	Exempt
	4.7.2 Transit Priority Requirements	<ul style="list-style-type: none"> <li>Greater than 75 site auto trips</li> </ul>	Exempt
4.8 Network Concept	<i>All elements</i>	<ul style="list-style-type: none"> <li>Only required when proposed development generates more than 200 person-trips during the peak hour in excess of the equivalent volume permitted by the established zoning</li> </ul>	Exempt
4.9 Intersection Design	4.9.1 Intersection Controls	<ul style="list-style-type: none"> <li>Greater than 75 site auto trips</li> </ul>	Exempt
	4.9.2 Intersection Design	<ul style="list-style-type: none"> <li>Greater than 75 site auto trips</li> </ul>	Exempt

Based on the foregoing, the following modules will be included in the TIA report:

- Module 4.1: Development Design
- Module 4.2: Parking
- Module 4.3: Boundary Streets
- Module 4.5: Transportation Demand Management

### 3.0 FORECASTING

#### 3.1 Background Traffic

##### 3.1.1 Other Area Developments

A review of other area development traffic has been conducted, per the developments listed in Section 2.2.2. Traffic generated by these developments have been considered in this analysis and added to the future background traffic volumes, as the development was completed after the most recent available traffic data. Relevant excerpts of the traffic study associated with the development below are included in **Appendix F**.

##### 2370 Tenth Line Road

The residential development is expected to generate 91 and 147 vehicle trips during the AM and PM peak hours, respectively. Full build out is expected by 2026. Site traffic from the development has been added to the 2026 and 2031 background traffic.

##### 3.1.2 General Background Growth Rate

Based on previously approved TIA reports in the study area, a background growth rate of 0.5% has been used for Tenth Line Road.

#### 3.2 Future Traffic Conditions

The figures listed below present the following future traffic conditions:

- Background traffic volumes in 2027 are shown in **Figure 5**;
- Background traffic volumes in 2032 are shown in **Figure 6**;
- Total traffic volumes in 2027 are shown in **Figure 7**; and
- Total traffic volumes in 2032 are shown in **Figure 8**.

**Figure 5: 2027 Background Traffic**

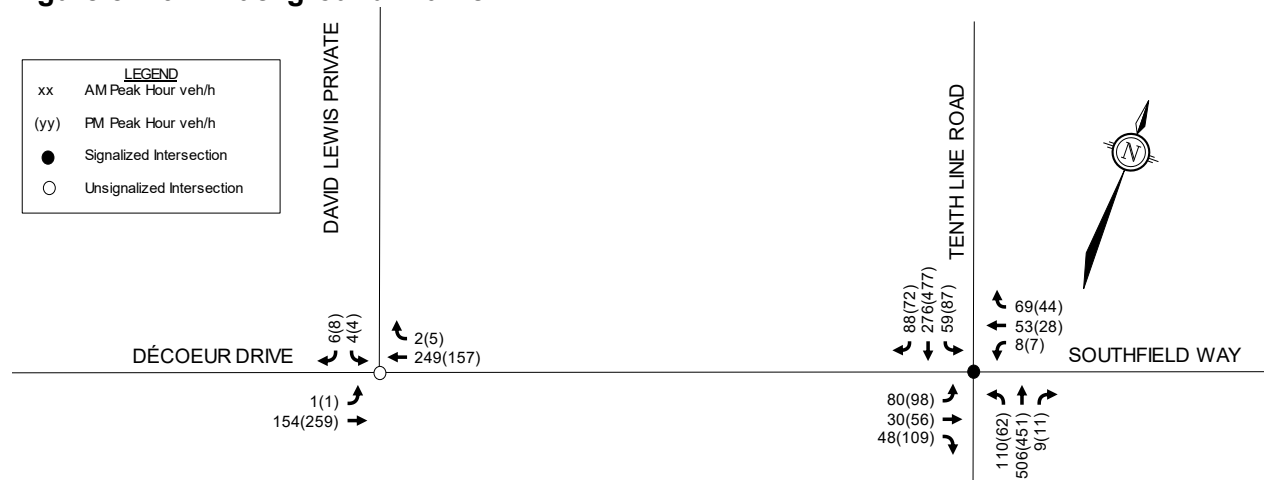


Figure 6: 2032 Background Traffic

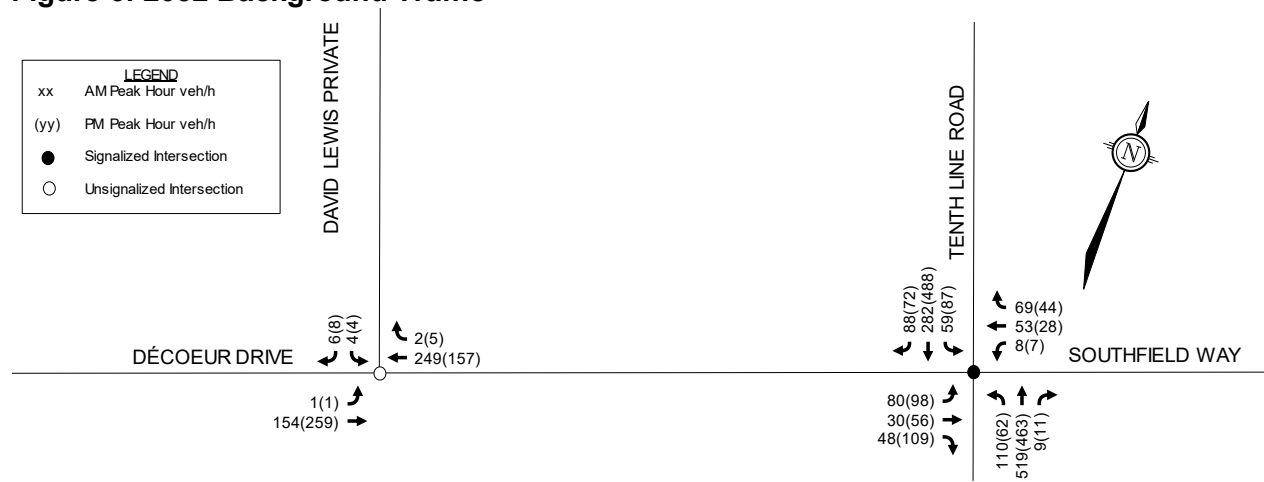


Figure 7: 2027 Total Traffic

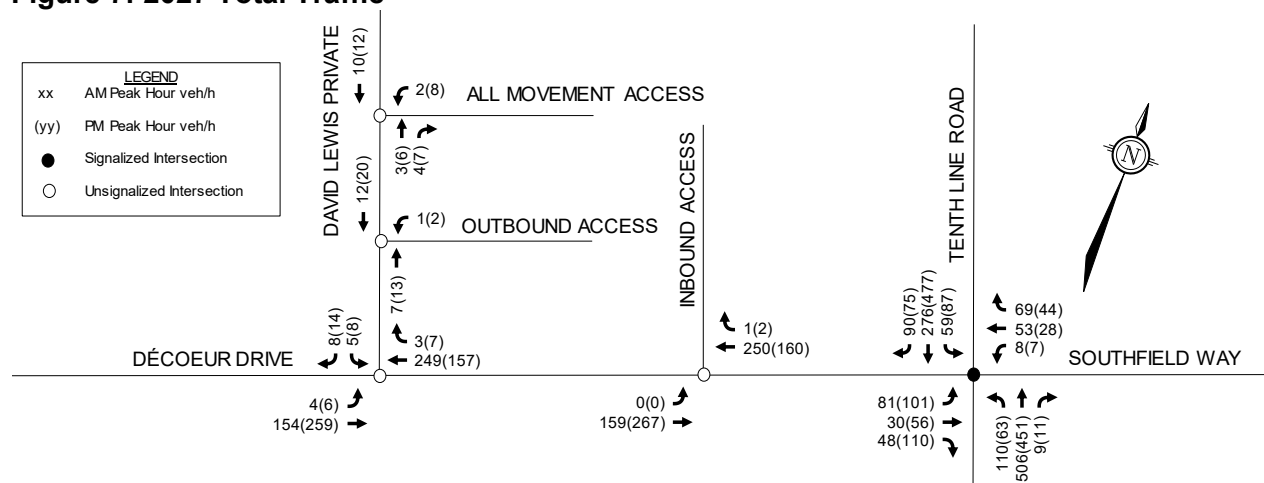
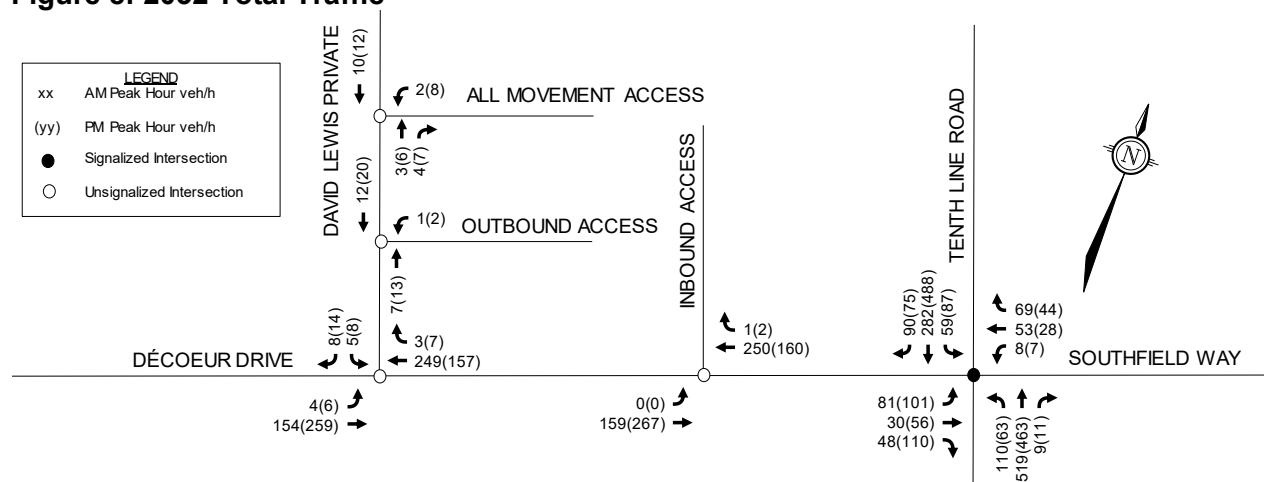


Figure 8: 2032 Total Traffic



### 3.3 Demand Rationalization

As the trip generation trigger is not met, a detailed review of intersection operations within the study area is not required.

## 4.0 ANALYSIS

### 4.1 Development Design

#### 4.1.1 Design for Sustainable Modes

Concrete pathways will be provided connecting the main building entrances to the Décoeur Drive sidewalk and the Tenth Line Road asphalt multi-use pathway.

Two exterior bike racks are provided for visitor bike parking between the vehicle parking lot and the main building entrances. Interior bike parking is also provided within the underground parking garage.

All bus stops discussed in Section 2.1.5 (and shown in **Figure 2**) are within 400m walking distance of the entrances to the proposed development. These stops are served by Routes 30, 234, 618, and 630. A 400m walking distance is equivalent to a five-minute walk, per OC Transpo's service design guidelines.

A review of the City's *Transportation Demand Management (TDM)-Supportive Development Design and Infrastructure Checklist* has been conducted. All required TDM-supportive design and infrastructure measures in the TDM checklist are met. A copy of this checklist is included in **Appendix G**.

In order to encourage the use of sustainable modes, the following 'basic' and 'better' design measures from the City's TDM Infrastructure Checklist will be implemented for the proposed redevelopment:

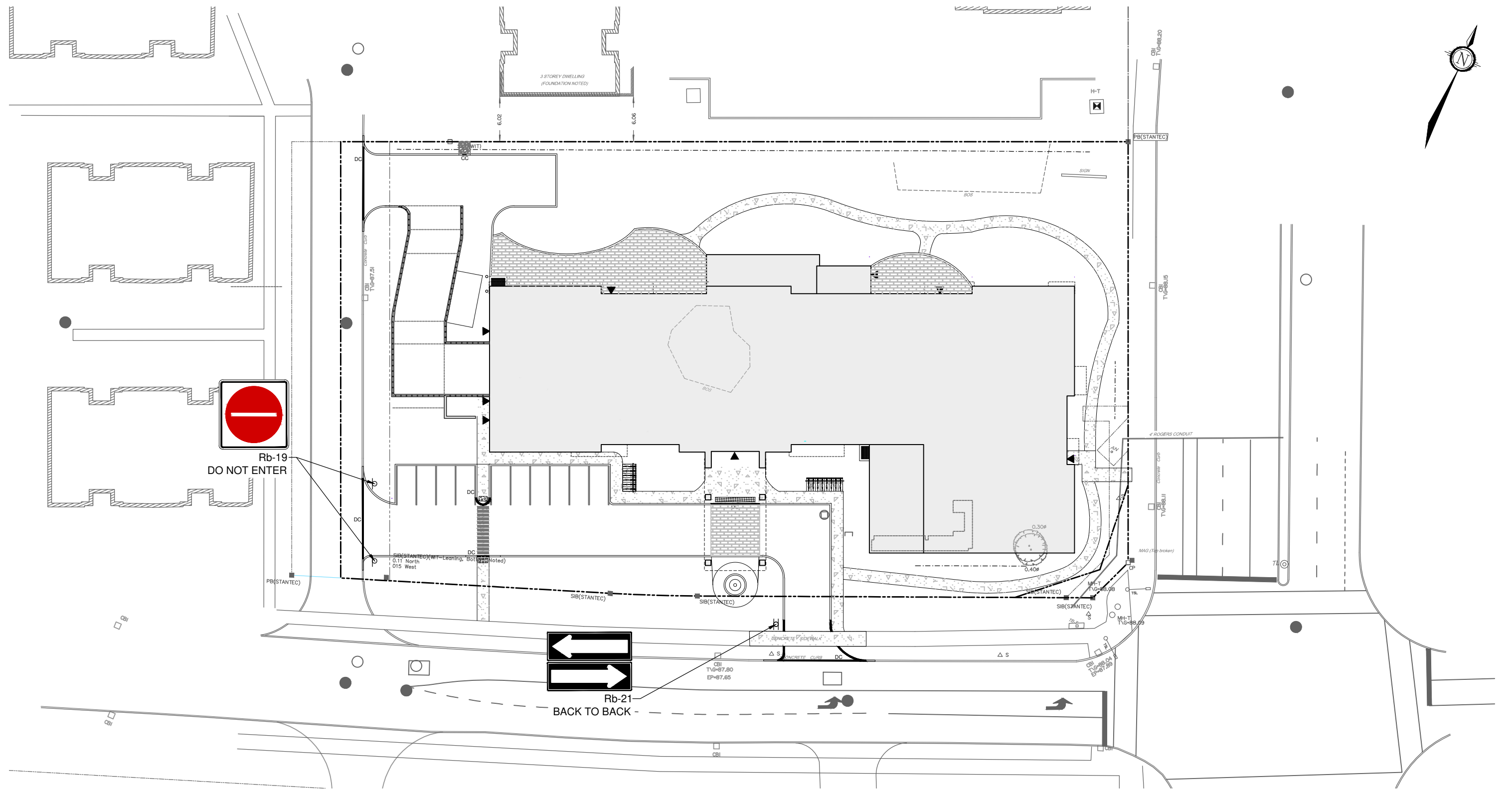
- The location of the building entrances will minimize the walking distance to sidewalks and transit stops/stations;
- Building doors and windows will ensure visibility of pedestrians from the building;
- Walking routes from the development to nearby transit stops will be safe, direct, and attractive; and
- Walking routes from the development to nearby transit stops will be secure, visible, lighted, shaded, and wind protected whenever possible.

#### 4.1.2 Circulation and Access

The front drop-off area and surface parking lot will function as one-way operation from Décoeur Drive to David Lewis Private. One-way (Rb-21) and Do Not Enter (Rb-19) signage is proposed at the accesses to facilitate the one-way operations. The proposed signage plan for the front drop-off lay-by is shown in **Figure 9**.

The front drop-off lay-by is anticipated to accommodate para-transpo bus. Turning movements arriving and departing the front drop-off area are included in **Figure 10**.

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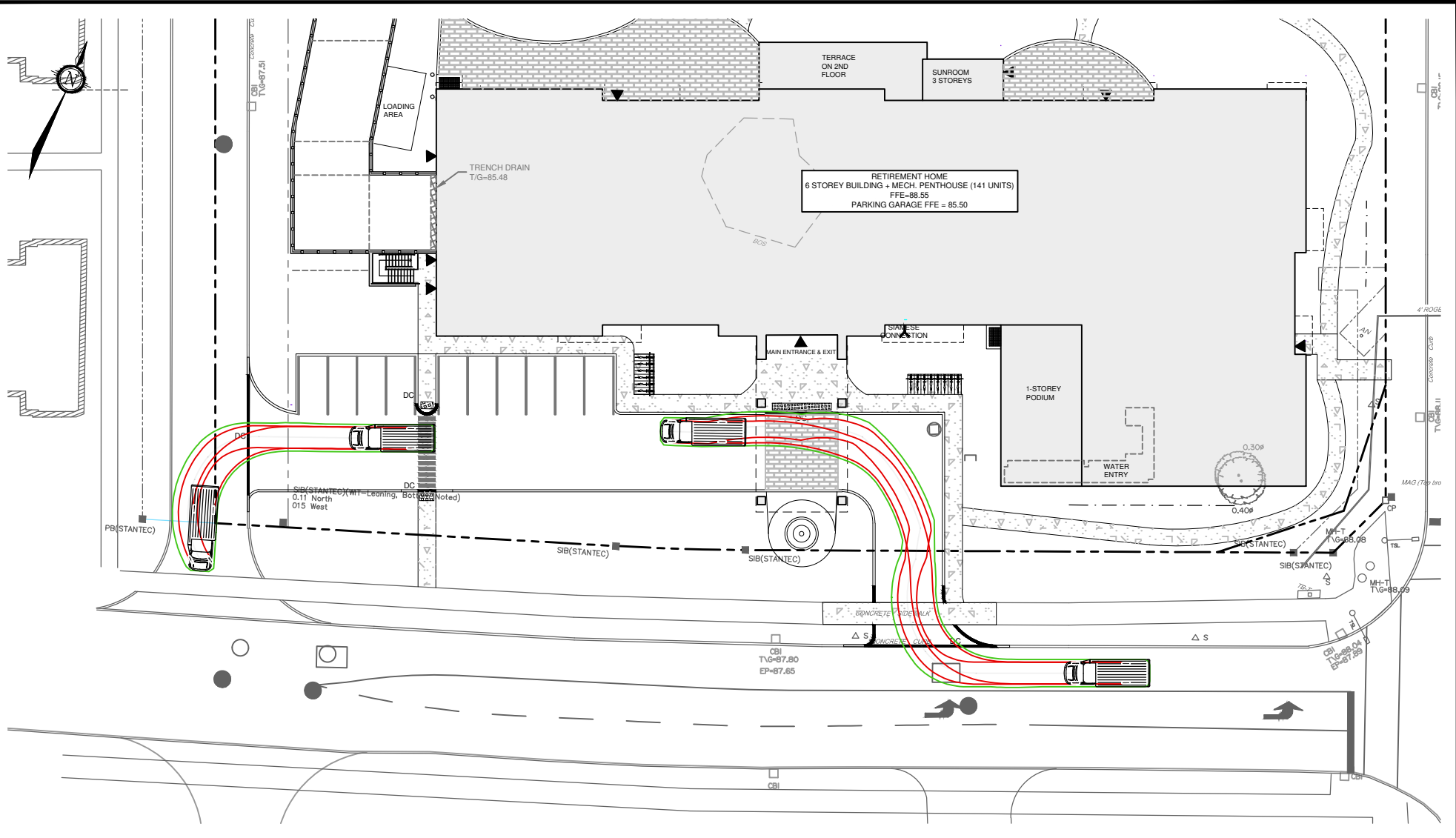
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 Website www.novatech-eng.com

2380 TENTH LINE ROAD

PROPOSED SIGNAGE

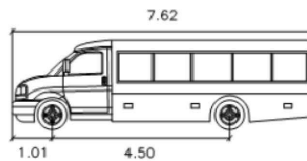
SCALE 1 : 500

DATE MAR 2026 JOB 125079 FIGURE FIGURE 9



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AllStar Chevrolet 4500  
 meters  
 Width : 2.44  
 Track : 1.96  
 Lock to Lock Time : 6.0  
 Steering Angle : 34.2

## 2380 TENTH LINE ROAD

## TURNING MOVEMENT (SHUTTLE BUS)

SCALE 1 : 500

DATE	JOB	FIGURE
MAR 2026	125079	FIGURE 10

Loading and garbage collection will occur on-site through the rear all movement access on David Lewis Private. A review of turning movements for a Medium Single Unit (MSU)/garbage truck, Light Single Unit (LSU) truck, and a passenger car has been completed at the rear access and is included in **Figures 11-15**.

The inbound vehicular access at Décoeur Drive will form the fire route for the subject site. The fire route is shown on the Site Plan.

#### 4.2 Parking

The subject site is located in Area C of Schedule 1 and Area C of Schedule 1A of the City’s ZBL.

An evaluation of the proposed parking versus the requirements are summarized in **Table 8**.

**Table 8: Parking Requirements**

Land Use	Rate	Units/GFA	Required	Provided
<b>Minimum Vehicle Parking Requirements</b>				
Retirement Home	0.25 per dwelling unit	141	35	47
	1 per 100m <sup>2</sup> of medical or personal services	131m <sup>2</sup>	2	
<b>Total</b>			<b>37</b>	<b>47</b>
<b>Minimum Bicycle Parking Requirements</b>				
Retirement Home	0.25 per dwelling unit	141	35	36
<b>Total</b>			<b>35</b>	<b>36</b>

The proposed development includes 47 vehicle parking spaces and 36 bicycle parking spaces, meeting the zoning by-law.

The development proposes 47 parking spaces. For parking lots with 26-50 parking spaces the City’s Traffic and Parking By-law requires one Type A and one Type B accessible parking spaces. The development proposes one Type A and one Type B accessible parking space, meeting the by-law.

#### 4.3 Boundary Street Design

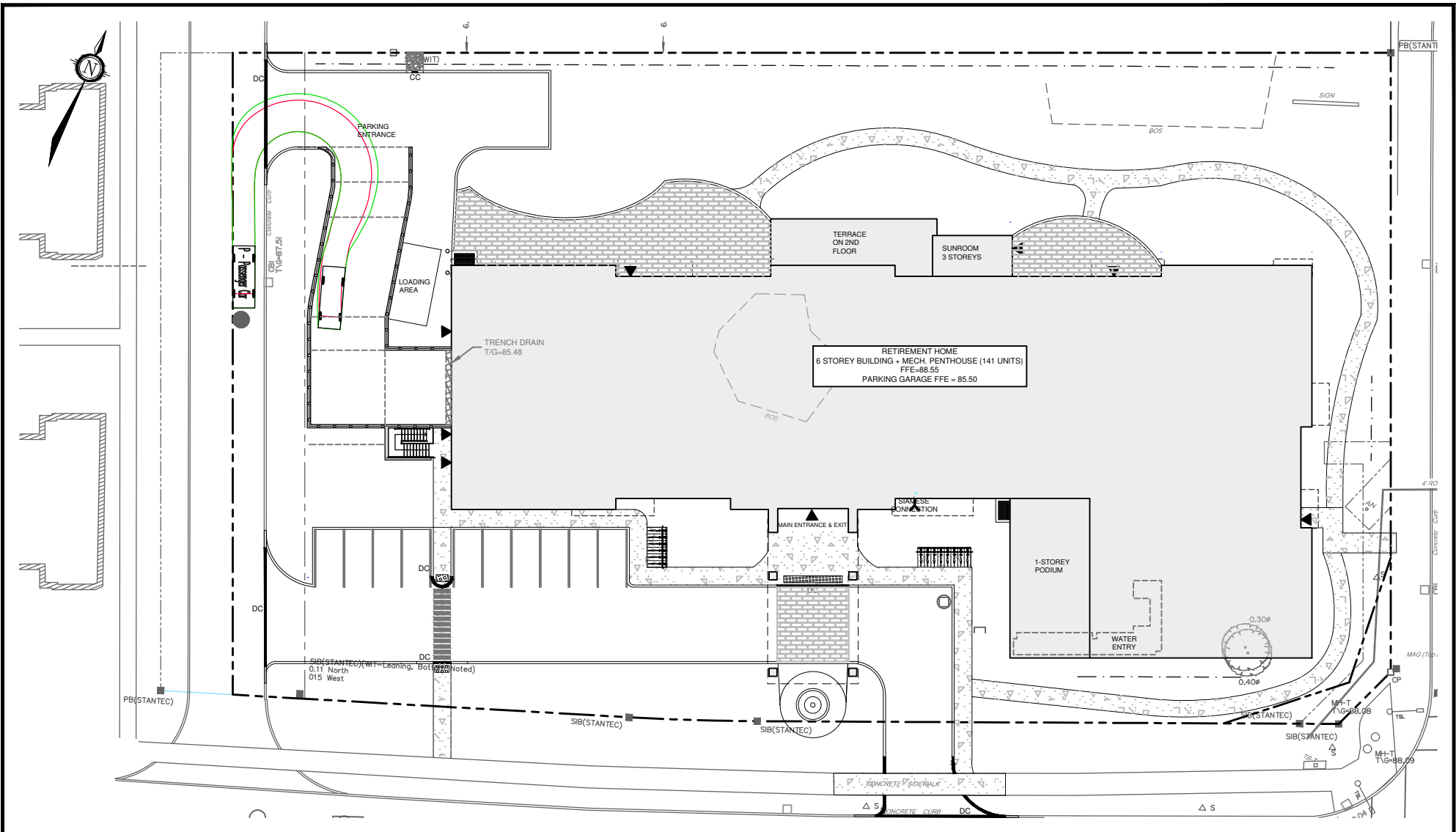
This section provides a review of the boundary streets Décoeur Drive and Tenth Line Road using complete streets principles. The Multi-Modal Level of Service (MMLOS) Guidelines, produced by IBI Group in October 2015, were used to evaluate the levels of service for each alternative mode of transportation on the boundary streets. The subject site is located within a General Urban Area (per Schedule B of the City’s previous Official Plan, which is referenced by the MMLOS Guidelines). Tenth Line Road is designated as an arterial roadway with a spine cycling route per the previous Official Plan and Décoeur Drive is classified as a collector roadway.

A detailed segment MMLOS review of the boundary streets is included in **Appendix H**. A summary of the segment MMLOS analysis is provided below in **Table 9**.

**Table 9: Segment MMLOS Summary**

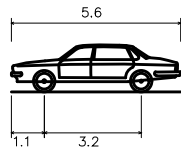
Segment	PLOS		BLOS		TLOS		TKLOS	
	Actual	Target	Actual	Target	Actual	Target	Actual	Target
Tenth Line Road	F	C	E	C	D	-	A	D
Décoeur Drive	A	C	F	D	D	-	C	-

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**P - Passenger Car**  
 Overall Length 5.600m  
 Overall Width 2.000m  
 Overall Body Height 1.555m  
 Min Body Ground Clearance 0.340m  
 Track Width 2.000m  
 Lock-to-lock time 4.00s  
 Curb to Curb Turning Radius 6.300m

## 2380 TENTH LINE ROAD

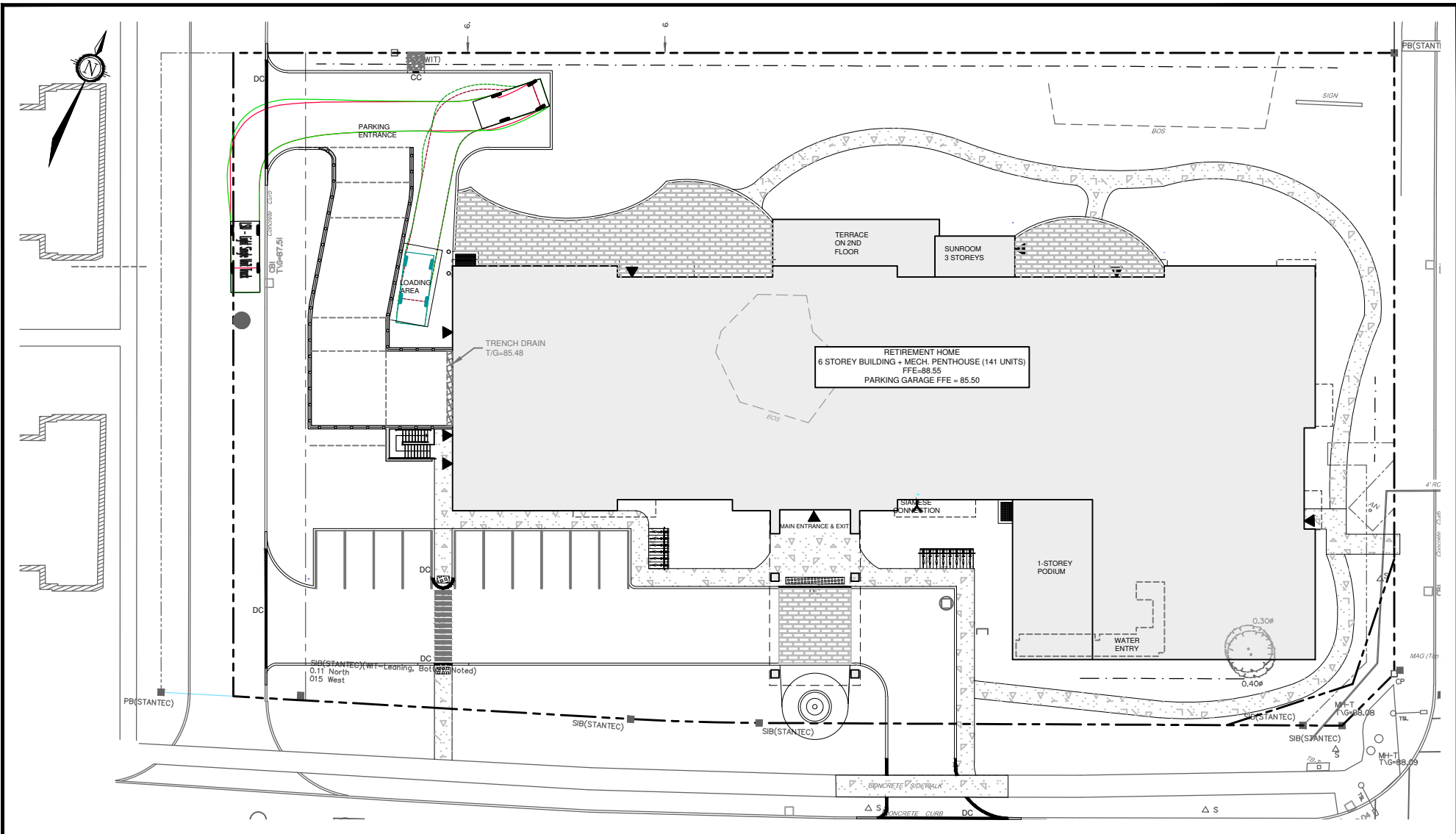
### TURNING MOVEMENT (PASSENGER CAR)

SCALE 1 : 500



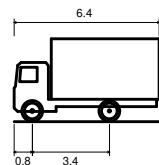
DATE	JOB	FIGURE
FEB 2026	125079	FIGURE 11

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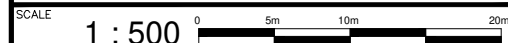


LSU - Light Single Unit Truck

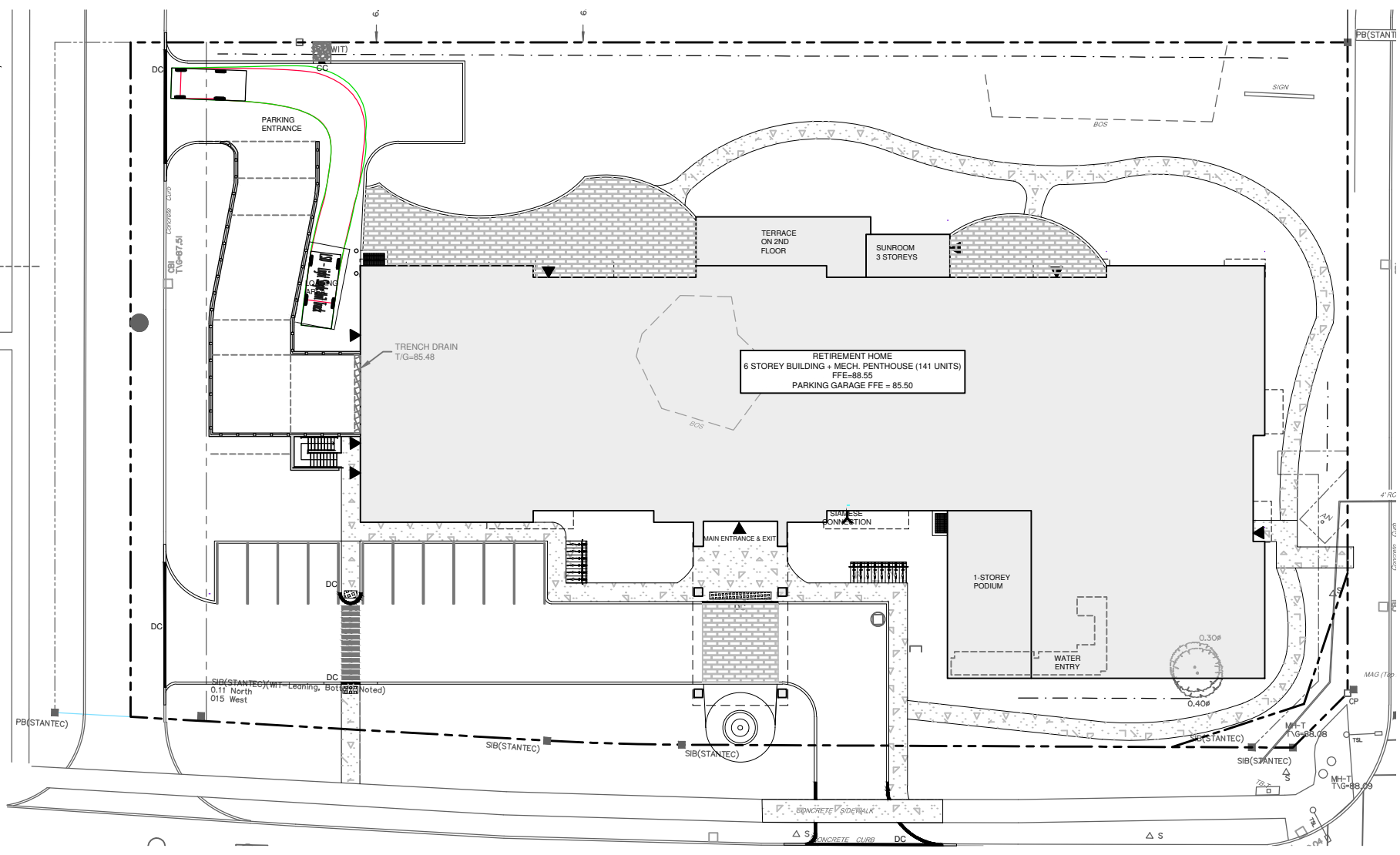
Overall Length	6.400m
Overall Width	2.600m
Overall Body Height	3.650m
Min Body Ground Clearance	0.445m
Track Width	2.600m
Lock-to-lock time	4.00s
Curb to Curb Turning Radius	6.300m

2380 TENTH LINE ROAD

TURNING MOVEMENT  
(LSU)

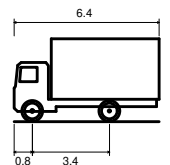


DATE	JOB	FIGURE
FEB 2026	125079	FIGURE 12



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LSU - Light Single Unit Truck

Overall Length	6.400m
Overall Width	2.600m
Overall Body Height	3.650m
Min Body Ground Clearance	0.445m
Track Width	2.600m
Lock-to-lock time	4.00s
Curb to Curb Turning Radius	6.300m

2380 TENTH LINE ROAD

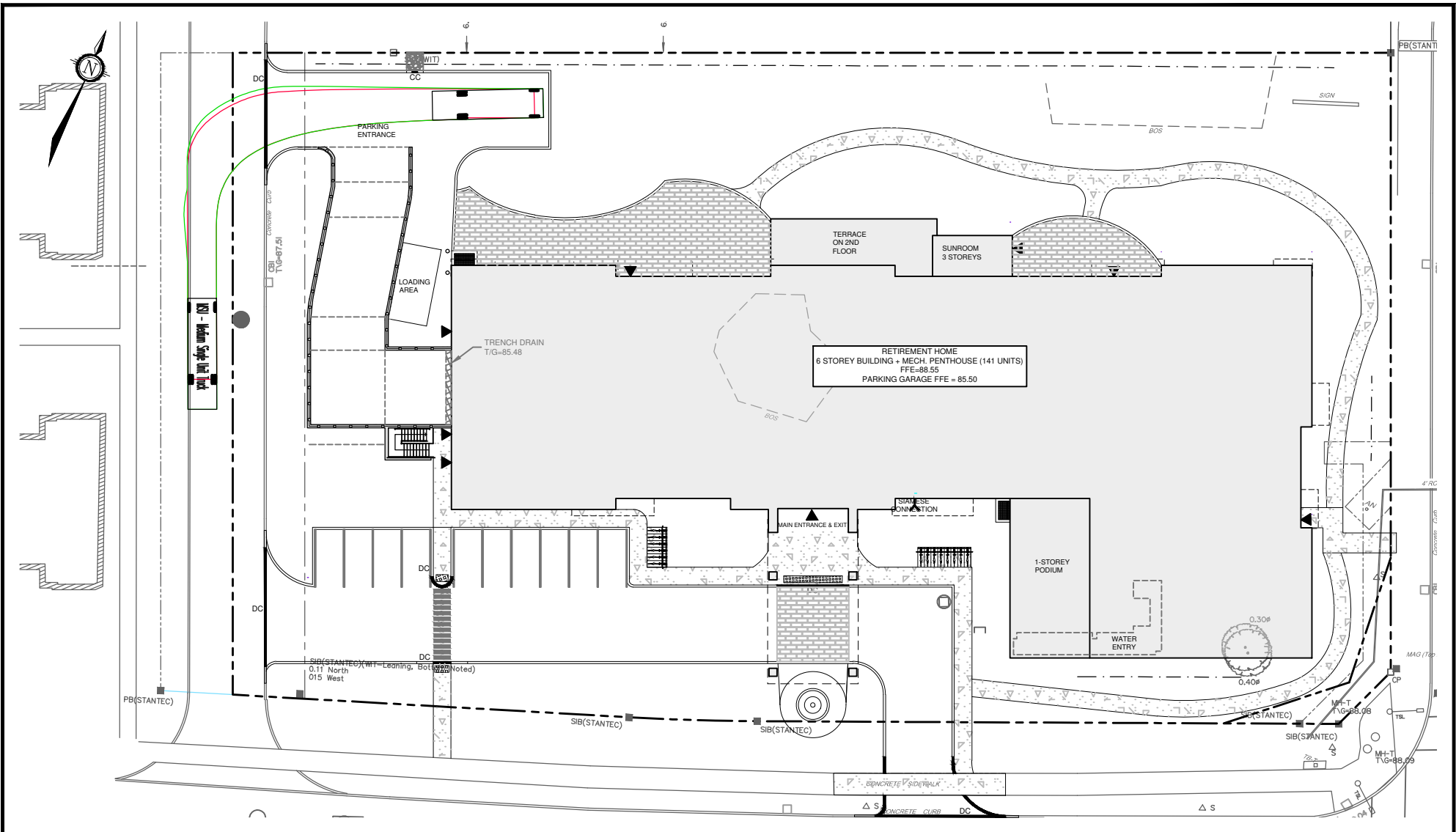
TURNING MOVEMENT  
(LSU)



DATE	JOB	FIGURE
FEB 2026	125079	FIGURE 13

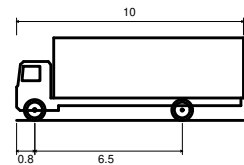
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MSU - Medium Single Unit Truck

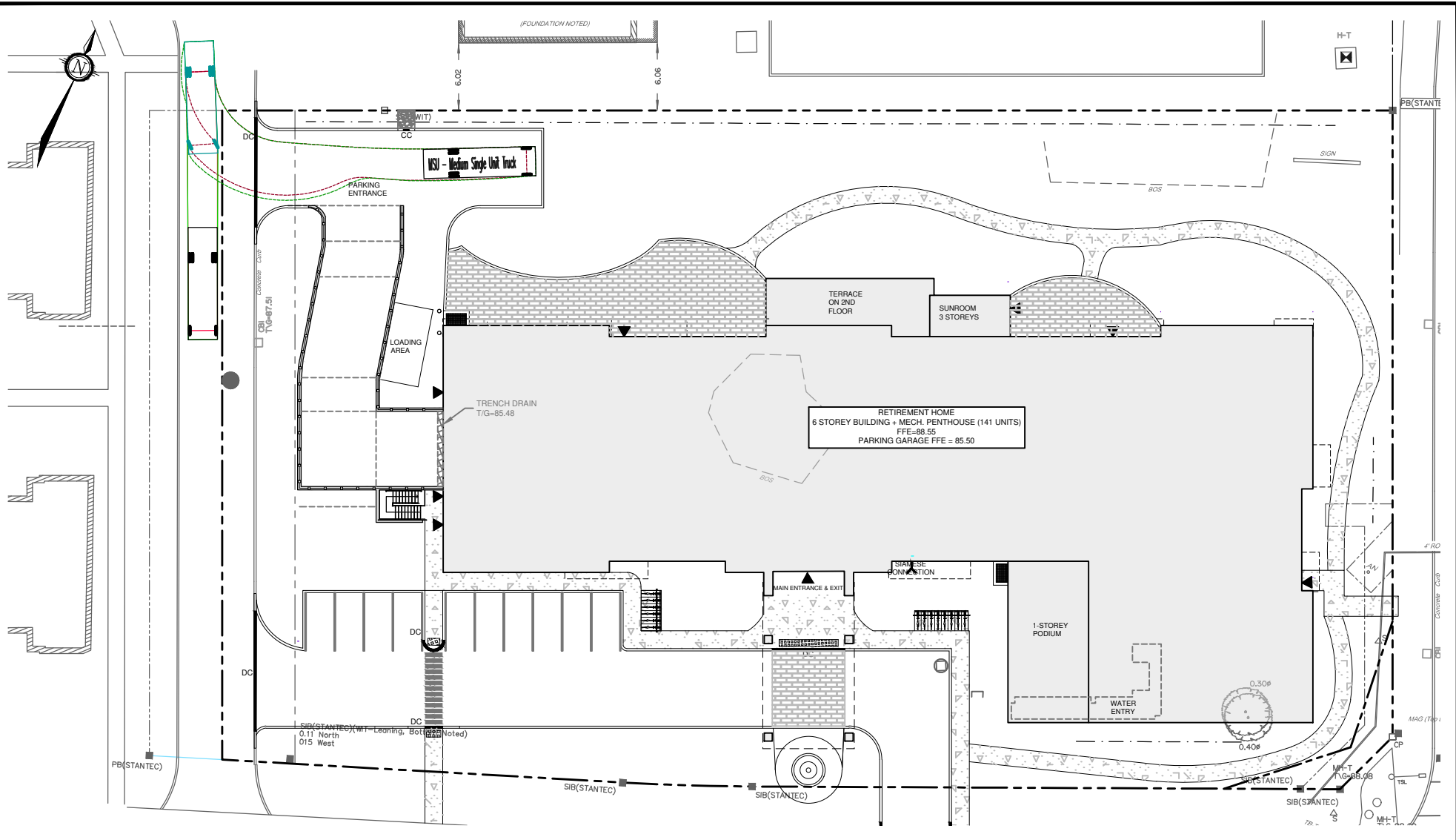
Overall Length	10.000m
Overall Width	2.600m
Overall Body Height	3.650m
Min Body Ground Clearance	0.445m
Track Width	2.600m
Lock-to-lock time	4.00s
Curb to Curb Turning Radius	11.100m

## 2380 TENTH LINE ROAD

### TURNING MOVEMENT (MSU)

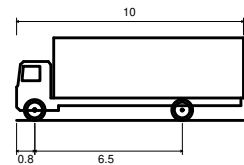


DATE	JOB	FIGURE
FEB 2026	125079	FIGURE 14



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MSU - Medium Single Unit Truck

Overall Length	10.000m
Overall Width	2.600m
Overall Body Height	3.650m
Min Body Ground Clearance	0.445m
Track Width	2.600m
Lock-to-lock time	4.00s
Curb to Curb Turning Radius	11.100m

## 2380 TENTH LINE ROAD

### TURNING MOVEMENT (MSU)



DATE	JOB	FIGURE
FEB 2026	125079	FIGURE 15

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The results of the segment MMLOS analysis can be summarized as follows:

- Tenth Line Road does not meet the target pedestrian level of service (PLOS);
- All boundary streets do not meet the target bicycle level of service (BLOS);
- No target transit level of service (TLOS) has been identified for any boundary street however all boundary streets achieve a TLOS of D; and
- Tenth Line Road meets the target truck level of service (TkLOS).

#### Pedestrian Level of Service

Both sides of Tenth Line Road do not meet the target PLOS C. To achieve a PLOS C a reduction in operating speed is required on both sides of the road. This is identified for the City's consideration.

#### Bicycle Level of Service

The west side of Tenth Line Road does not meet the target BLOS C. As a MUP achieving a BLOS A is provided on the west side of the road, no mitigation measures are identified.

Both sides of Décoeur Drive do not meet the target BLOS D. To achieve a BLOS B a reduced posted speed limit of 40km/h is required. This is identified for the City's consideration.

### **4.4 Transportation Demand Management**

#### **4.4.1 Context for TDM**

The proposed development will consist of 141 dwelling unit retirement home.

#### **4.4.2 Need and Opportunity**

The proposed development is located within the Orleans district.

As described in Section 2.5.1, the proposed modal shares are based on the City's TRANS modal shares for residential developments within the Orleans district. As the proposed modal shares are consistent with the area, the development is anticipated to meet the target auto modal share.

#### **4.4.3 TDM Program**

A review of the City's *TDM Measures Checklist* has been conducted by the proponent, who has committed to providing the following TDM measures within this development:

- Provide shuttle service for senior homes of lifestyle communities (e.g. scheduled mall or supermarket runs)

A copy of the checklist is included in **Appendix G**.

## 5.0 CONCLUSIONS AND RECOMMENDATIONS

Based on the foregoing, the conclusions and recommendations of this TIA can be summarized as follows:

### Access Design

- A pick-up/drop-off area and small surface parking lot will be accessed through an ingress on Décoeur Drive and egress on David Lewis Private. Access to the underground parking lot will be provided through an all movement access to David Lewis Private. The inbound only access to Décoeur Drive will be placed roughly mid-block between the signalized intersection at Tenth Line Road/Décoeur Drive/Southfield Way and David Lewis Private.
- The TAC Geometric Design Guide identifies a minimum corner clearance distance of 55m for an access to a collector road downstream from a traffic signal (measured curb to curb). The inbound only access has 43m of corner clearance space to Tenth Line Road. As the access is inbound only and will serve low traffic volumes, this is assumed to be acceptable.
- The TAC Geometric Design Guide identifies a clear throat requirement of 15m for residential developments with 100-200 units (i.e. the ingress to the subject site) and 25m for residential developments with more than 200 units (i.e. David Lewis Private) on a collector road. The proposed inbound only access meets this requirement. However, the clear throat length on David Lewis Private does not meet the TAC requirement. As minimal vehicles will exit the drop-off/surface parking area, conflicts within the clear throat length along David Lewis Private are anticipated to be infrequent.
- Décoeur Drive does not have horizontal and/or vertical curvatures or objects obstructing sightlines within proximity of the proposed access and David Lewis Private. As such the TAC required sight distance is anticipated to be met at both locations.

### Trip Generation

- The proposed development is estimated to generate 14 person trips (including 8 vehicle trips) during the AM peak hour and 32 person trips (including 19 vehicle trips) during the PM peak hour.

### Development Design

- Concrete pathways will be provided connecting the main building entrances to the Décoeur Drive sidewalk and the Tenth Line Road asphalt multi-use pathway.
- Two exterior bike racks are provided for visitor bike parking between the vehicle parking lot and the main building entrances. Interior bike parking is also provided within the underground parking garage.
- All bus stops discussed in Section 2.1.5 (and shown in **Figure 2**) are within 400m walking distance of the entrances to the proposed development. These stops are served by Routes 30, 234, 618, and 630. A 400m walking distance is equivalent to a five-minute walk, per OC Transpo's service design guidelines.
- In order to encourage the use of sustainable modes, the following 'basic' and 'better' design measures from the City's TDM Infrastructure Checklist will be implemented for the proposed redevelopment:
  - The location of the building entrances will minimize the walking distance to sidewalks and transit stops/stations;
  - Building doors and windows will ensure visibility of pedestrians from the building;
  - Walking routes from the development to nearby transit stops will be safe, direct, and attractive; and

- Walking routes from the development to nearby transit stops will be secure, visible, lighted, shaded, and wind protected whenever possible.
- The front drop-off area and surface parking lot will function as one-way operation from Décoeur Drive to David Lewis Private. One-way (Rb-21) and Do Not Enter (Rb-19) signage is proposed at the accesses to facilitate the one-way operations.
- The front drop-off lay-by is anticipated to accommodate para-transpo bus. Loading and garbage collection will occur on-site through the rear all movement access on David Lewis Private.
- The inbound vehicular access at Décoeur Drive will form the fire route for the subject site. The fire route is shown on the Site Plan.

#### Parking

- The proposed development includes 47 vehicle parking spaces and 36 bicycle parking spaces, meeting the zoning by-law.
- The development proposes one Type A and one Type B accessible parking space, adhering to the City's Traffic and Parking By-law.

#### Boundary Street Design

- Both sides of Tenth Line Road do not meet the target PLOS C. To achieve a PLOS C a reduction in operating speed is required on both sides of the road. This is identified for the City's consideration.
- The west side of Tenth Line Road does not meet the target BLOS C. As a MUP achieving a BLOS A is provided on the west side of the road, no mitigation measures are identified.
- Both sides of Décoeur Drive do not meet the target BLOS D. To achieve a BLOS B a reduced posted speed limit of 40km/h is required. This is identified for the City's consideration.
- No target transit level of service has been identified for any boundary street however all boundary streets achieve a TLOS of D.
- Tenth Line Road meets the target truck level of service and no target truck level of service is identified for Décoeur Drive.

#### Transportation Demand Management

- As the proposed modal shares are consistent with the area, the development is anticipated to meet the target auto modal share.
- A review of the City's *TDM Measures Checklist* has been conducted by the proponent, who has committed to providing the following TDM measures within this development:
  - Provide shuttle service for senior homes of lifestyle communities (e.g. scheduled mall or supermarket runs)

Based on the foregoing, the proposed development is recommended from a transportation perspective.

**NOVATECH**

Prepared by:



Trevor Van Wiechen, P.Eng.  
Project Engineer | Transportation

Reviewed by:



Brad Byvelds, P.Eng.  
Senior Project Manager | Transportation

## **APPENDIX A**

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Site Plan



- FOR EXISTING SITE CONDITIONS, SEE SURVEY PLAN BY ANNIS O'SULLIVAN VOLLEBEK LTD. SUBMITTED SEPARATELY.
  - FOR PROPOSED VEGETATION AND LANDSCAPE INFORMATION, SEE LANDSCAPE ARCHITECTURE PLAN BY JAMES B. LENNOX & ASSOCIATES SUBMITTED SEPARATELY.
  - FOR NEW GRADES AND SITE, SEE CIVIL ENGINEERING PLAN BY NOVATECH, SUBMITTED SEPARATELY.
- NOTE:  
- SNOW STORAGE: SNOW WILL BE HAULED OFF SITE.

**SYMBOL LEGEND**

- UP UTILITY POLE
- △ S SIGN
- DNES DO NOT ENTER SIGN
- R2BS BACK TO BACK SIGN
- EXIT
- ENTRANCE
- EXIT PATH OF TRAVEL
- DEPRESSED CURB
- PAVEMENT MARKING
- TACTILE INDICATOR
- CORNER TRIANGLE

**TIG XXXX TOP OF GATE (SURVEY LEVEL)**

- △ S SIGN
- DNES DO NOT ENTER SIGN
- R2BS BACK TO BACK SIGN

**ZONING BY-LAW 2008-250**  
**GENERAL MIXED-USE ZONE (SECTIONS 187-188)**  
**AREA C SUBURBAN**

ZONING MECHANISM	REQUIRED	PROVIDED
Minimum lot area	N/A	6245.40m <sup>2</sup>
Minimum lot width	N/A	104.50m
Maximum building height (Proposed zoning amendment)	18m	20.50m
Minimum front yard setback (GM 950)	4m	5.80m
Minimum interior side yard setback (GM 950)	4m	7.12m (10th Line R.C.) 19.74m (David Lewis Private)
Minimum rear yard setback (GM 950)	4m	14.97m
Maximum floor space index	2 (total gross floor area / lot area)	1.09 = 6812 / 6245.23
Minimum width of landscaped area	(i) front yard 3.0m (ii) side yard 3.0m (iii) other cases N/A	(i) front yard 3.0m (ii) side yard 7.12m (iii) interior yard 19.74m
Maximum gross leasable floor area (GM 950)	(i) for a lot less than 4 hectares in area 9999m <sup>2</sup>	6539m <sup>2</sup>

**NOTES GÉNÉRALES** General Notes

- Ces documents d'architecture sont la propriété exclusive de NEUF architect(e)s et ne peuvent être utilisés, reproduits ou copiés sans autorisation écrite préalable. / These architectural documents are the exclusive property of NEUF architect(e)s and cannot be used, copied or reproduced without written pre-authorization.
- Les dimensions apparaissant sur ces documents doivent être vérifiées par l'entrepreneur avant le début des travaux. / All dimensions which appear on the documents must be verified by the contractor prior to the commencement of work.
- Veillez avoir l'architecte de toute dimension avant d'entreprendre des travaux. / The architect must be notified of all errors, omissions and discrepancies between these documents and those of the other professionals.
- Les dimensions sur ces documents doivent être lues et mesurées. / The dimensions on these documents must be read and measured.

**MÉCANIQUE / ÉLECTRIQUE** Mechanical / Electrical  
**JAIN**  
7405 East Dabno Crescent, 2nd Floor, Mississauga, ON L5N 9P8  
905.285.9900 jaincorporate.com

**STRUCTURE** Structural  
**Adjeleian Allen Rubeli Limited**  
75 Albert Street, Suite 1005, Ottawa, ON K1P 5E7  
613.232.9188 aar.ca

**ARCHITECTES DE PAYSAGE** Landscape Architect  
**James B. Lennox & Associates**  
Civil, Civil  
2401 Innes Road, Suite 200, Ottawa, ON K2M 1P6  
613.234.9643 jameslennox.com

**Novatech Eng. Consultants Ltd.**  
2401 Innes Road, Suite 200, Ottawa, ON K2M 1P6  
613.234.9643 novatecheng.com

**ARCHITECTES** Architect  
**NEUF architect(e)s Inc.**  
10 Rideau Street, 4th Floor, Ottawa, ON K1N 6J1  
613.234.2724 NEUF.ca

SCEAU / Seal



**NEUF ARCHITECT(E)S**

**SITE STATISTICS**

Number of floors & Building Height	6 storeys + Mechanical Penthouse
Basement G.F.A.	19.95 m <sup>2</sup>
Ground Floor G.F.A.	92.7 m <sup>2</sup>
Lot Coverage	2101.91 m <sup>2</sup> (41.2%)
Ground Parking Area	135.2m <sup>2</sup> (2.7%)
Landscaped Area (Excl. Parking)	2859.60m <sup>2</sup> (56.1%)

**AMENITY**

REQUIRED	PROVIDED
Amenity Area (Part 5 Section 137)	6m <sup>2</sup> x 141 = 846m <sup>2</sup>
	Communal Amenity Area (G.F.A.): 1877 m <sup>2</sup>
	Private Amenity Area (G.F.A.): 317 m <sup>2</sup>

**ZONING AMENITY AREA**

USE	AREA
AMENITY COMMON	1877 m <sup>2</sup>
AMENITY PRIVATE	317 m <sup>2</sup>
TOTAL	2194 m <sup>2</sup>

**ZONING GROSS FLOOR AREA**

USE	AREA
MED/OR PERS. SERVICES	131 m <sup>2</sup>
OFFICE	142 m <sup>2</sup>
RESIDENTIAL	8339 m <sup>2</sup>
TOTAL	8612 m <sup>2</sup>

**UNIT STATISTICS - DÉCOEUR RETIREMENT HOME**

Floor	Assisted Care (Studio)	Assisted Care (1br)	Studio	1br	2br
Ground floor					
2nd floor (AC Memory)	25	5	0	0	0
3rd floor (AC Physical)	24	6	0	0	0
4th floor			8	17	2
5th floor			8	17	2
6th floor			8	17	2
Total (Above Grade)	49	11	24	51	6
Percentage Mix	42.6%			57.4%	
Grand Total	60			81	
Total Dwelling Units	141				

**REQUIRED BARRIER FREE UNITS**

NAME	TOTAL	REQ. BF (15%)
1 BR	51	8
2 BR	6	1
AC-1 BR	11	2
AC-S	49	7
STUDIO	24	4
TOTAL	141	21

**ZONING BY-LAW PARKING REQUIREMENT FOR RETIREMENT HOME**

ZONING MECHANISM	REQUIRED	PROVIDED
Minimum parking space requirement (Part 4 Sections 100-114)	0.25 per unit 0.25 X 141 = 35 1 per 100m <sup>2</sup> of GFA used for medical or personal services 131m <sup>2</sup> = 1 exterior parking	Interior: 37 Regular: 35 Compact: 2 Exterior: 10 Regular: 10
Total: 37		Total: 47

**WASTE MANAGEMENT - PRIVATE PICK-UP FOR HIGH-RISE RESIDENTIAL**

ZONING MECHANISM	REQUIRED	PROVIDED
Garbage	Compacted: 0.053 y <sup>3</sup> per unit (rounded up to the nearest yard) 0.053x141 units= 7.47	3 x 3y <sup>3</sup> bins for garbage
Recycling	FEL GMP Containers: 0.018y <sup>3</sup> per unit (rounded up to the nearest yard) 0.018x141 units=2.53 FEL Fibre Containers: 0.038y <sup>3</sup> per unit (rounded up to the nearest yard) 0.038x141 units=5.36	1 X 3y <sup>3</sup> bin for glass/metal/plastic 2 X 3y <sup>3</sup> bins for fibre
Organics	Group: 240L green containers for every 50 units 141/50 units= 2.82	3 X 240L green containers for organics

**CLARIDGE HOMES**  
**RIVERSTONE**  
RETIREMENT COMMUNITIES

**DÉCOEUR RETIREMENT HOME**  
EMPLACEMENT Location  
2380 Tenth Line Road, Ottawa  
NO PROJECT No.  
13677

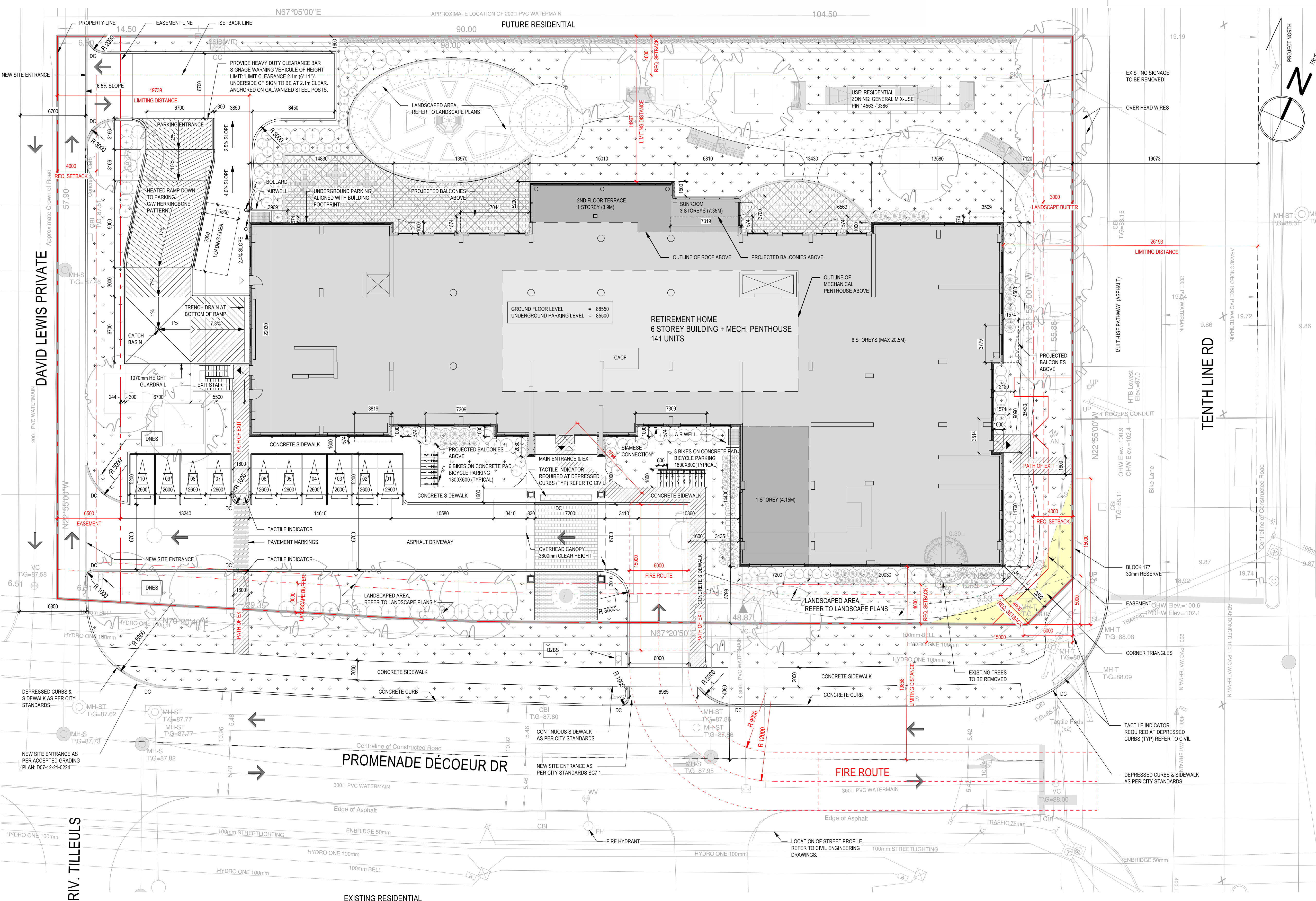
**NO REVISION**

REVISION	DATE (aa-mm-jj)
A	SCHEMATIC REVIEW 2025.03.28
B	SCHEMATIC REVIEW 2025.04.03
C	INTERNAL REVIEW 2025.05.05
D	INTERNAL REVIEW 2025.05.15
E	INTERNAL REVIEW 2025.05.22
F	FOR COORDINATION 2025.06.05
G	FOR COORDINATION 2025.06.20
H	SPA - FOR COORDINATION 2025.07.23
I	SPA - FOR COORDINATION 2025.09.19
J	ISSUED FOR SPA 2025.09.29
K	RE-ISSUED FOR SPA 2026.04.16

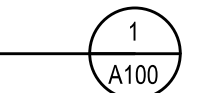
DESIGN PAR Drawn by AA  
DATE (aa-mm-jj) 2025-02-01  
TITRE DU DESSIN Drawing Title  
VERIFIE PAR Checked by CR / PV  
ÉCHELLE Scale As indicated

**SITE PLAN**

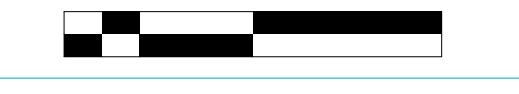
REVISION Revision NO. DESSIN Dwg Number  
**K** **A100**  
XXXXX



**SITE PLAN AT GROUND FLOOR**



0 12 5 10m



## **APPENDIX B**

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TIA Screening Form

City of Ottawa 2017 TIA Guidelines TIA Screening

1. Description of Proposed Development

Municipal Address	2380 Tenth Line
Description of Location	northwest corner of Tenth Line Rd/Décoeur Dr
Land Use Classification	Assisted Living and Seniors Apartment
Development Size (units)	61 Assisted Living Units and 84 Seniors Apartments
Development Size square metre (m <sup>2</sup> )	
Number of Accesses and Locations	Two to Décoeur Dr
Phase of Development	One
Buildout Year	TBD

If available, please attach a sketch of the development or site plan to this form.

2. Trip Generation Trigger

Considering the Development’s Land Use type and Size (as filled out in the previous section), please refer to the Trip Generation Trigger checks below.

Table notes:

1. Table 2, Table 3 & Table 4 TRANS Trip Generation Manual
2. Institute of Transportation Engineers (ITE) Trip Generation Manual 11.1 Ed.

Land Use Type	Minimum Development Size
Single-family homes	60 units
Multi-Use Family (Low-Rise) <sup>1</sup>	90 units
Multi-Use Family (High-Rise) <sup>1</sup>	150 units
Office <sup>2</sup>	1,400 m <sup>2</sup>
Industrial <sup>2</sup>	7,000 m <sup>2</sup>
Fast-food restaurant or coffee shop <sup>2</sup>	110 m <sup>2</sup>
Destination retail <sup>2</sup>	1,800 m <sup>2</sup>
Gas station or convenience market <sup>2</sup>	90 m <sup>2</sup>

If the proposed development size is equal to or greater than the sizes identified above, the Trip Generation Trigger is satisfied.

### 3. Location Triggers

	Yes	No
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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Is the development in a Hub, a Protected Major Transit Station Area (PMTSA), or a Design Priority Area (DPA)? <sup>2</sup>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

If any of the above questions were answered with ‘Yes,’ the Location Trigger is satisfied.

### 4. Safety Triggers

	Yes	No
Are posted speed limits on a boundary street are 80 kilometers per hour (km/h) or greater?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Are there any horizontal/vertical curvatures on a boundary street limits sight lines at a proposed driveway?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Is the proposed driveway within the area of influence of an adjacent traffic signal or roundabout (i.e. within 300 metre [m] of intersection in rural conditions, or within 150 m of intersection in urban/ suburban conditions)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Is the proposed driveway within auxiliary lanes of an intersection?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Does the proposed driveway make use of an existing median break that serves an existing site?	<input type="checkbox"/>	<input checked="" type="checkbox"/>

<sup>2</sup> Hubs are identified in Schedules B1 to B8 of the City of Ottawa Official Plan. PMTSAs are identified in Schedule C1 of the Official Plan. DPAs are identified in Schedule C7A and C7B of the Official. See Chapter 4 for a list of City of Ottawa Planning and Engineering documents that support the completion of TIA.

## Transportation Impact Assessment Guidelines

	Yes	No
Is there is a documented history of traffic operations or safety concerns on the boundary streets within 500 m of the development?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Does the development include a drive-thru facility?	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**If any of the above questions were answered with 'Yes,' the Safety Trigger is satisfied.**

### 5. Summary

Results of Screening	Yes	No
Does the development satisfy the Trip Generation Trigger?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Does the development satisfy the Location Trigger?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Does the development satisfy the Safety Trigger?	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**If none of the triggers are satisfied, the TIA Study is complete. If one or more of the triggers is satisfied, the TIA Study must continue into the next stage (Screening and Scoping).**

## **APPENDIX C**

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OC Transpo Route Maps



# 30

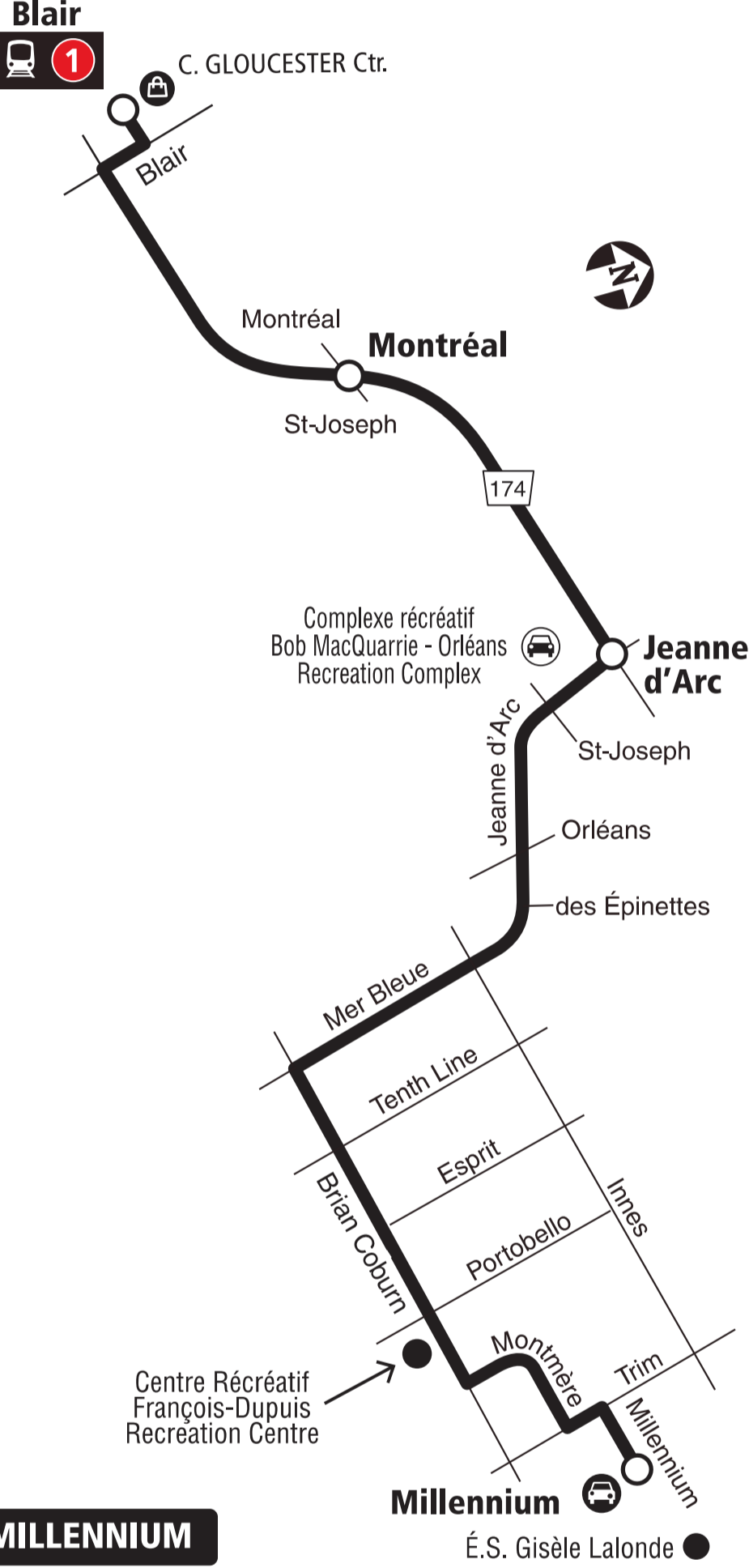
## BLAIR MILLENNIUM

Local

7 days a week / 7 jours par semaine

All day service  
Service toute la journée

### BLAIR



### MILLENNIUM

- Station
  - Park & Ride / Parc relais
  - Shopping Centre / Centre commercial
- 04.2025

2025.04

This route starts on April 27, 2025 when the New Ways to Bus network comes into effect.

Ce circuit sera mis en service le 27 avril 2025, lorsque le réseau L'autobus réinventé entrera en vigueur.



Customer Service / Service à la clientèle . . . . . 613-560-5000

Security / Sécurité . . . . . 613-741-2478



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# 234

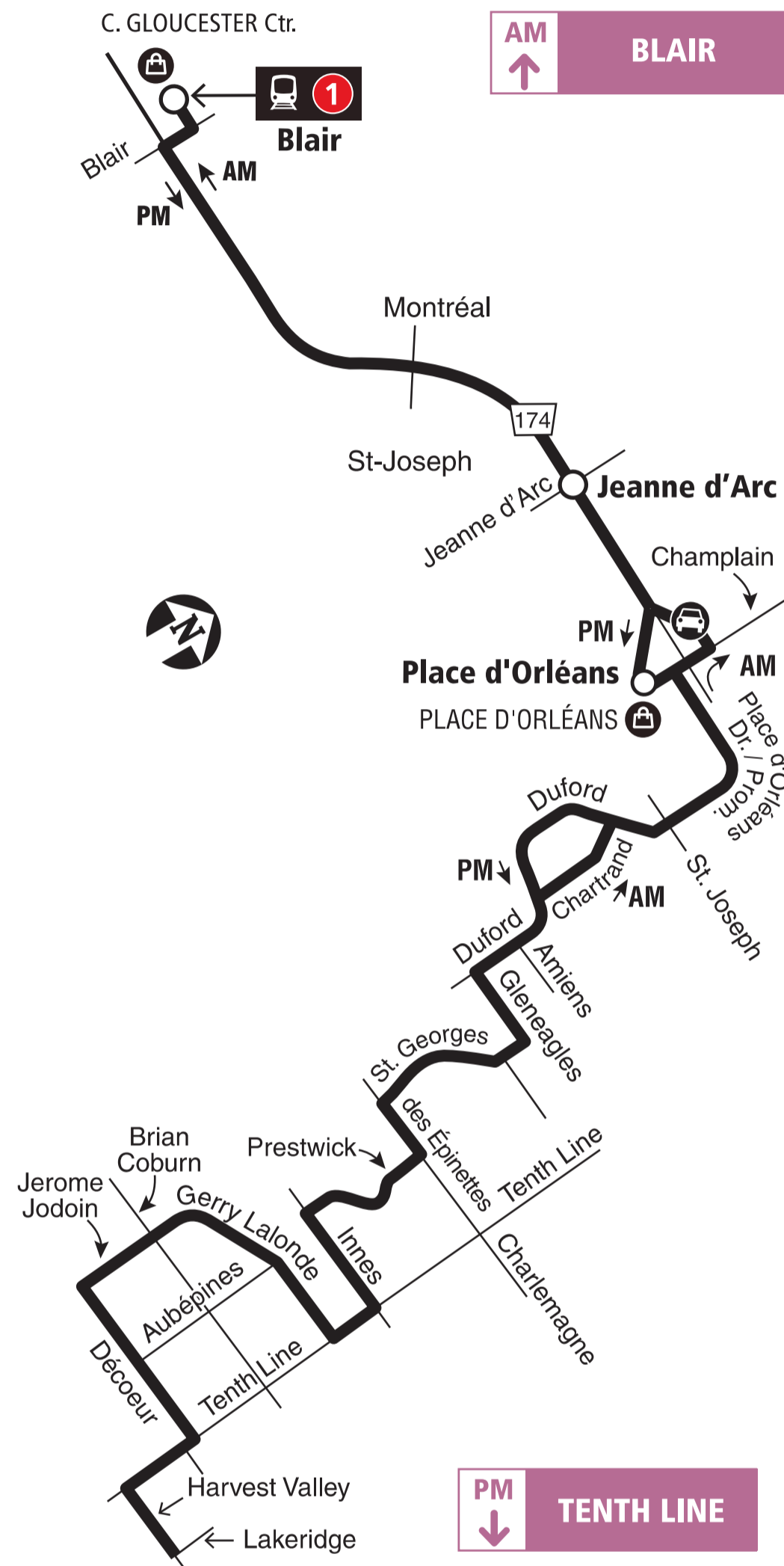
## BLAIR TENTH LINE

### Connexion

**Monday to Friday / Lundi au vendredi**

Peak periods only

Périodes de pointe seulement



04.2025

- Station
- Park & Ride / Parc relais
- Shopping Centre / Centre commercial

2025.04

**This route starts on April 27, 2025** when the New Ways to Bus network comes into effect.

**Ce circuit sera mis en service le 27 avril 2025**, lorsque le réseau L'autobus réinventé entrera en vigueur.

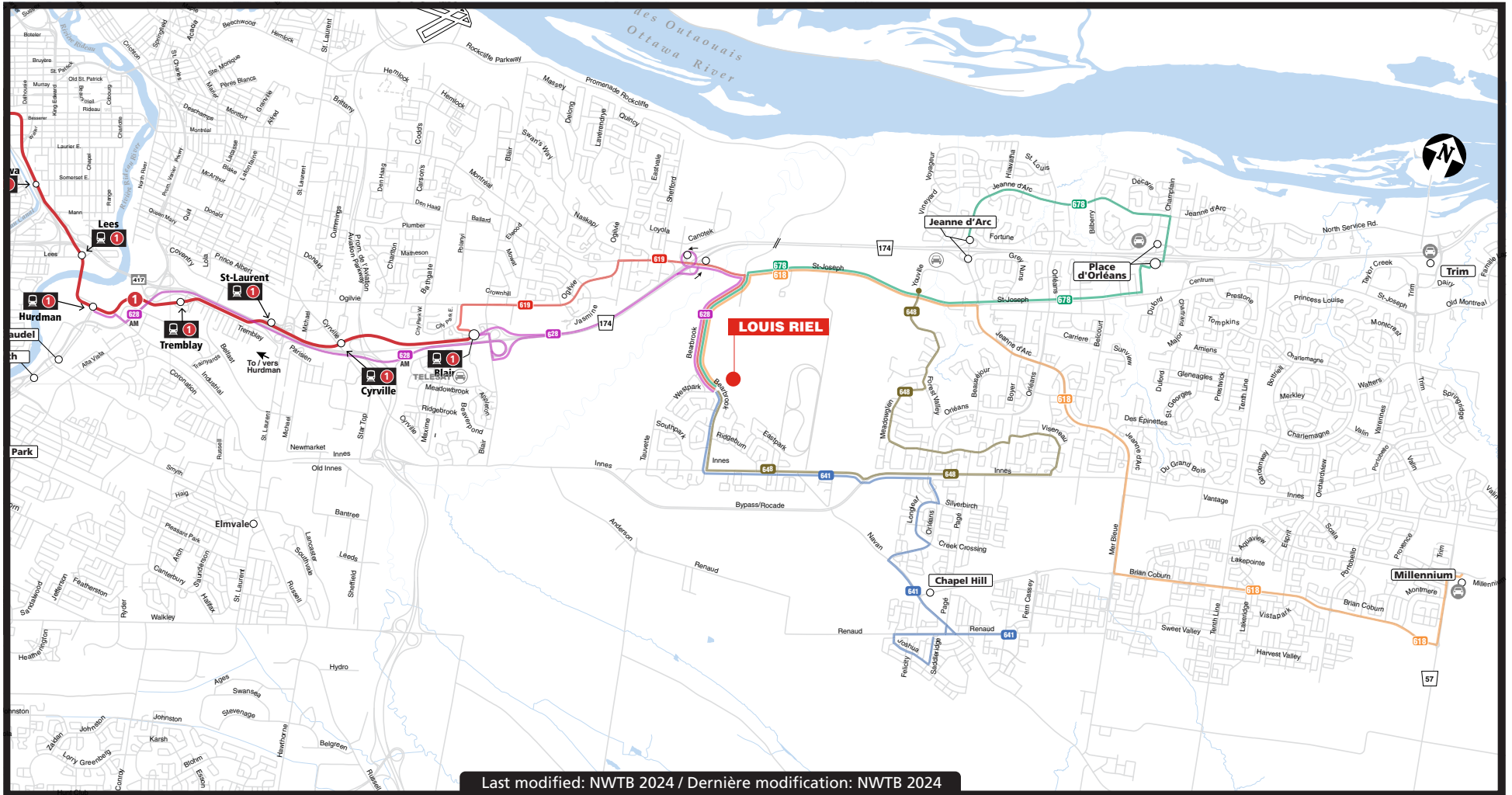
Customer Service / Service à la clientèle . . . . **613-560-5000**

Security / Sécurité . . . . . **613-741-2478**



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## **APPENDIX D**

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### Traffic Count Data

## Turning Movement Count - Study Results

### DECOEUR DR/SOUTHFIELD WAY @ TENTH LINE RD

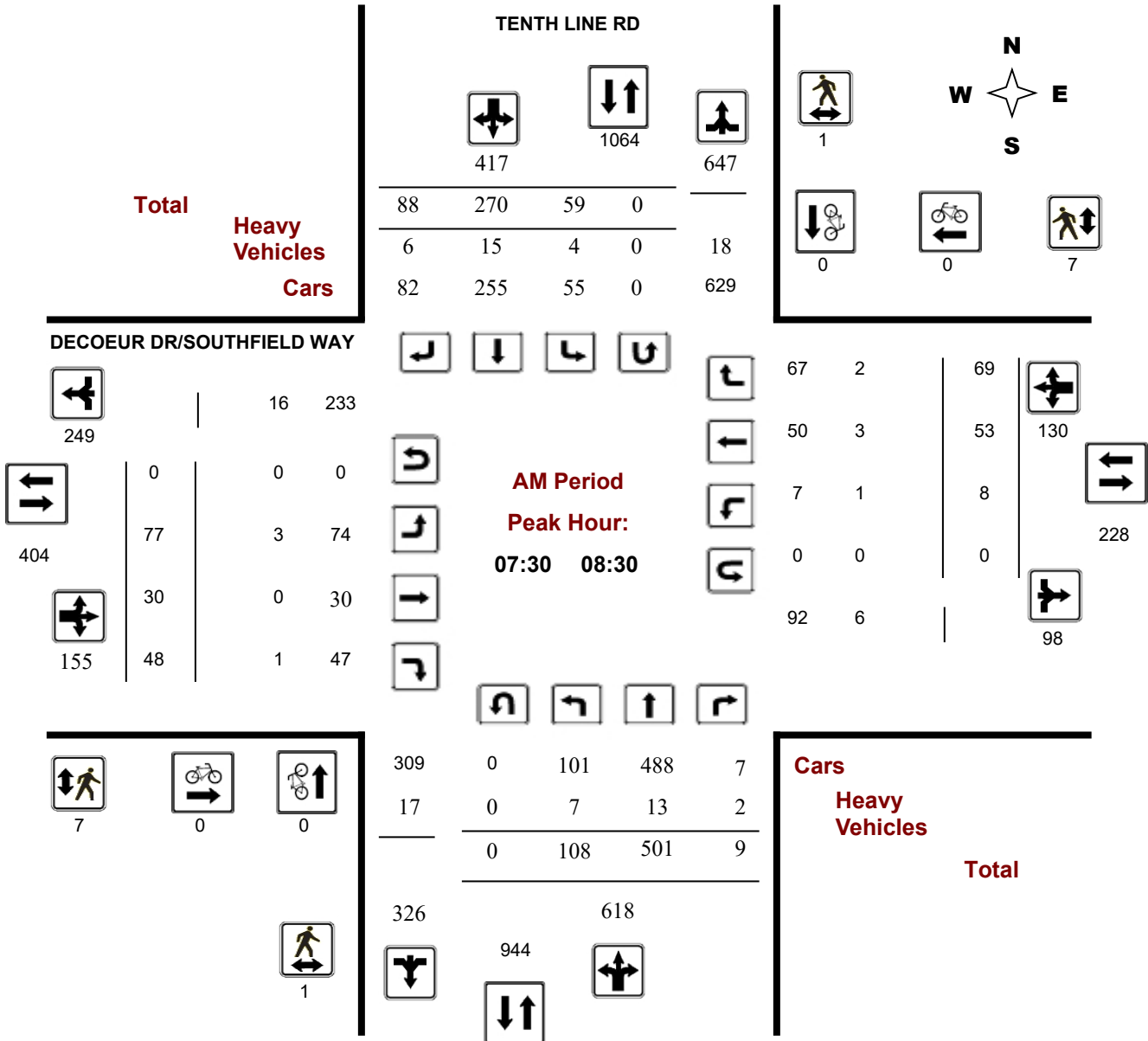
**Survey Date:** Tuesday, February 07, 2023

**WO No:** 40764

**Start Time:** 06:30

**Device:** Miovision

### AM Period Peak Hour Diagram



## Turning Movement Count - Study Results

### DECOEUR DR/SOUTHFIELD WAY @ TENTH LINE RD

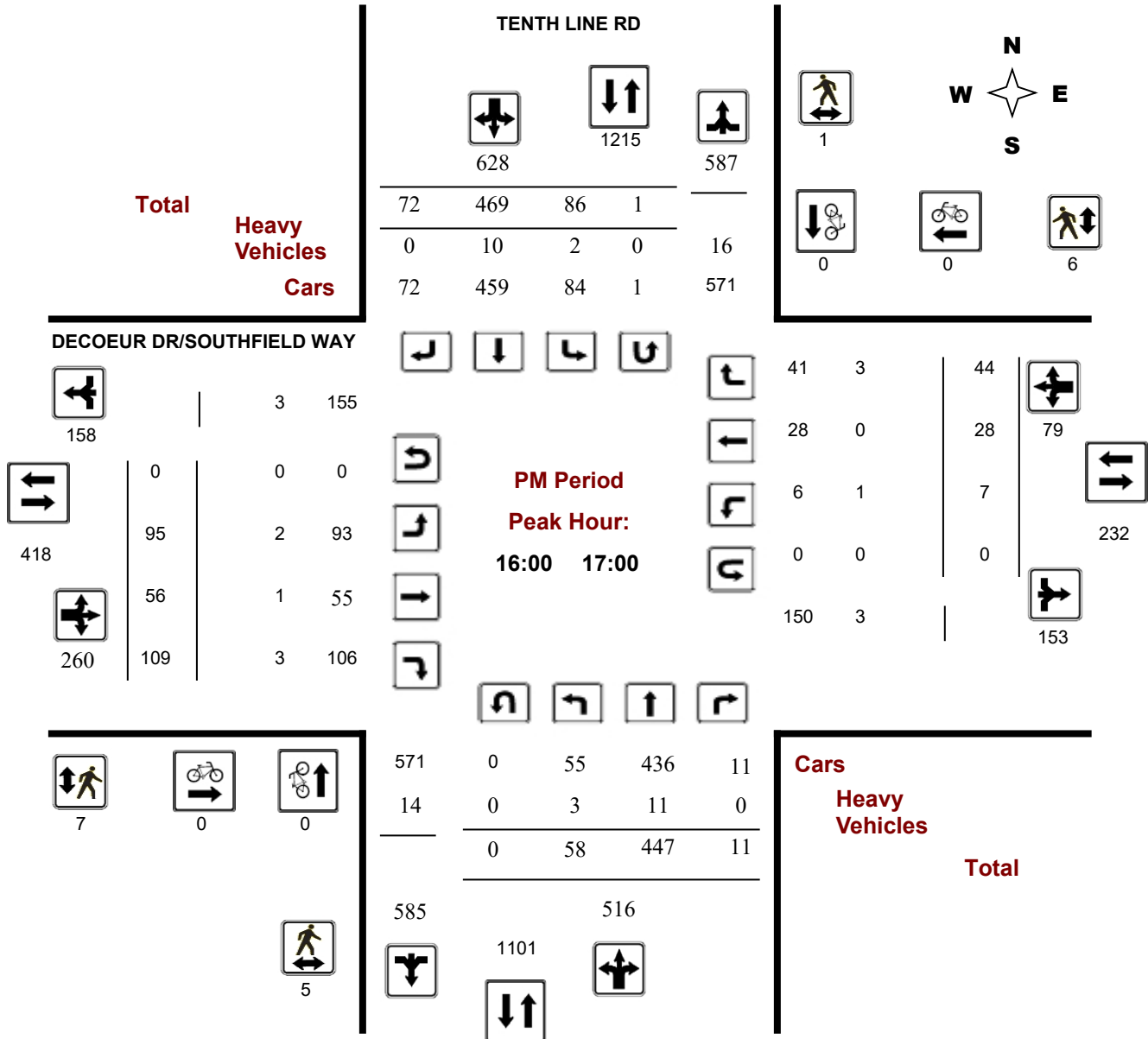
**Survey Date:** Tuesday, February 07, 2023

**WO No:** 40764

**Start Time:** 06:30

**Device:** Miovision

### PM Period Peak Hour Diagram



## **APPENDIX E**

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### Collision Records



# Transportation Services - Traffic Services

## Collision Details Report - Public Version

From: January 1, 2010 To: December 31, 2024

**Location:** DECOEUR DR/SOUTHFIELD WAY @ TENTH LINE RD

**Traffic Control:** Traffic signal

**Total Collisions:** 14

Date/Day/Time	Environment	Impact Type	Classification	Surface Cond'n	Veh. Dir	Vehicle Manoeuver	Vehicle type	First Event	No. Ped
2019-Jan-23, Wed,19:00	Freezing Rain	Turning movement	P.D. only	Ice	North	Turning left	Automobile, station wagon	Other motor vehicle	0
					South	Going ahead	Automobile, station wagon	Other motor vehicle	
2019-Jul-25, Thu,13:32	Clear	Turning movement	P.D. only	Dry	North	Making "U" turn	Automobile, station wagon	Other motor vehicle	0
					South	Going ahead	Automobile, station wagon	Other motor vehicle	
2019-Oct-18, Fri,21:00	Clear	Turning movement	P.D. only	Dry	South	Turning left	Automobile, station wagon	Other motor vehicle	0
					North	Going ahead	Automobile, station wagon	Other motor vehicle	
2020-Mar-06, Fri,08:13	Snow	Rear end	P.D. only	Loose snow	West	Slowing or stopping	Automobile, station wagon	Other motor vehicle	0
					West	Stopped	Automobile, station wagon	Other motor vehicle	
2020-Nov-07, Sat,19:22	Clear	Sideswipe	Non-fatal injury	Dry	North	Unknown	Automobile, station wagon	Other motor vehicle	0
					North	Going ahead	Motorcycle	Other motor vehicle	
2020-Nov-26, Thu,09:19	Rain	SMV other	Non-fatal injury	Wet	West	Turning left	Pick-up truck	Pedestrian	1
2021-Sep-21, Tue,17:30	Clear	Rear end	P.D. only	Dry	North	Unknown	Unknown	Other motor vehicle	0
					North	Stopped	Automobile, station wagon	Other motor vehicle	
2022-Feb-12, Sat,11:00	Rain	Angle	P.D. only	Ice	South	Turning right	Automobile, station wagon	Other motor vehicle	0
					East	Stopped	Pick-up truck	Other motor vehicle	
2022-Mar-25, Fri,15:39	Clear	Angle	Non-fatal injury	Dry	North	Going ahead	Automobile, station wagon	Other motor vehicle	0
					East	Going ahead	Automobile, station wagon	Other motor vehicle	
2024-May-27, Mon,13:35	Rain	Angle	P.D. only	Wet	East	Going ahead	Automobile, station wagon	Other motor vehicle	0
					South	Going ahead	Automobile, station wagon	Other motor vehicle	
2024-Aug-16, Fri,08:00	Clear	Turning movement	P.D. only	Dry	North	Going ahead	Automobile, station wagon	Other motor vehicle	0
					South	Turning left	Automobile, station wagon	Other motor vehicle	
2024-Sep-10, Tue,09:15	Clear	Other	Non-reportable	Dry	West	Stopped	Automobile, station wagon	Other motor vehicle	0
					East	Reversing	Passenger van	Other motor vehicle	



# Transportation Services - Traffic Services

## Collision Details Report - Public Version

From: January 1, 2010 To: December 31, 2024

**Location:** DECOEUR DR/SOUTHFIELD WAY @ TENTH LINE RD

**Traffic Control:** Traffic signal

**Total Collisions:** 14

Date/Day/Time	Environment	Impact Type	Classification	Surface Cond'n	Veh. Dir	Vehicle Manoeuver	Vehicle type	First Event	No. Ped
2024-Nov-06, Wed,08:13	Clear	Angle	Non-fatal injury	Dry	North	Going ahead	Automobile, station wagon	Other motor vehicle	0
					West	Going ahead	Automobile, station wagon	Other motor vehicle	
2024-Dec-06, Fri,08:20	Clear	Rear end	P.D. only	Dry	West	Going ahead	Automobile, station wagon	Other motor vehicle	0
					West	Going ahead	Automobile, station wagon	Other motor vehicle	

## **APPENDIX F**

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Background Reports



Figure 12: New Site Generated Auto Volumes

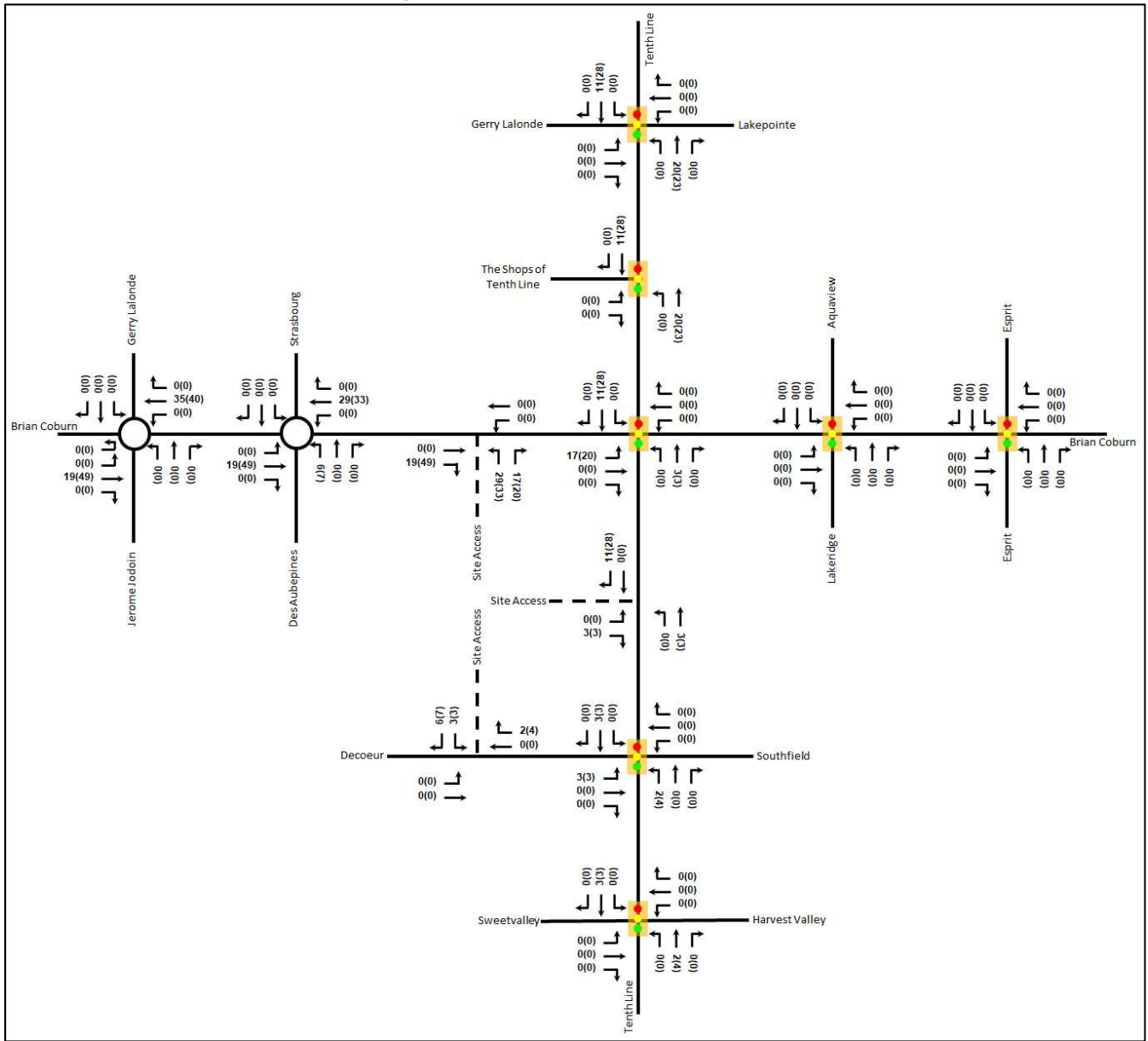
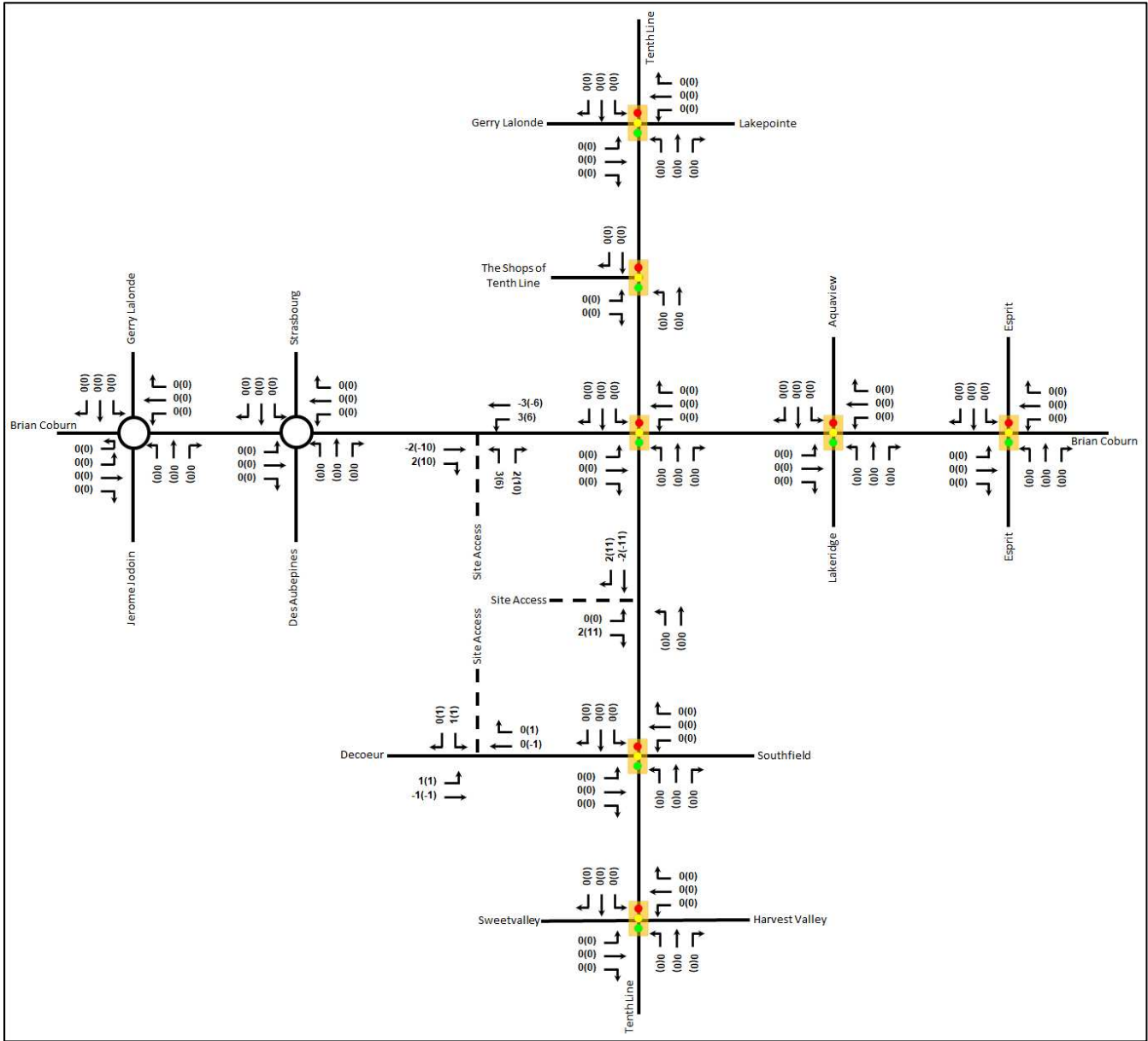


Figure 13: Site Pass-By Auto Volumes



## 6 Background Network Travel Demands

### 6.1 Transportation Network Plans

The transportation network plans were discussed in Section 2.3. The Tenth Line Road widening south of Harvest Valley Avenue is the only confirmed project within the study horizons and these conditions have been incorporated into the analysis.

### 6.2 Background Growth

A review of the background projections from the City's TRANS Regional Model for the 2011 and 2031 horizons was completed to determine the background growth for each of the study area roadways.

## **APPENDIX G**

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### Transportation Demand Management Checklists

**TDM Measures Checklist:**  
*Residential Developments (multi-family, condominium or subdivision)*

<b>Legend</b>	
<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
★	The measure is one of the most dependably effective tools to encourage the use of sustainable modes

<b>TDM measures: Residential developments</b>		<b>Check if proposed &amp; add descriptions</b>
<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 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: <i>Residential developments</i>		Check if proposed & add descriptions
<b>3. TRANSIT</b>		
<b>3.1 Transit information</b>		
BASIC	3.1.1 Display relevant transit schedules and route maps at entrances ( <i>multi-family, condominium</i> )	<input type="checkbox"/>
BETTER	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>		
BASIC ★	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"/>
BETTER	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>		
BETTER ★	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>		
BETTER	3.4.1 Provide shuttle service for seniors homes or lifestyle communities (e.g. scheduled mall or supermarket runs)	<input checked="" type="checkbox"/>
<b>4. CARSHARING &amp; BIKESHARING</b>		
<b>4.1 Bikeshare stations &amp; memberships</b>		
BETTER	4.1.1 Contract with provider to install on-site bikeshare station ( <i>multi-family</i> )	<input type="checkbox"/>
BETTER	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>		
BETTER	4.2.1 Contract with provider to install on-site carshare vehicles and promote their use by residents	<input type="checkbox"/>
BETTER	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>		
BASIC ★	5.1.1 Unbundle parking cost from purchase price ( <i>condominium</i> )	<input type="checkbox"/>
BASIC ★	5.1.2 Unbundle parking cost from monthly rent ( <i>multi-family</i> )	<input type="checkbox"/>

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

<b>Legend</b>	
<b>REQUIRED</b>	The Official Plan or Zoning By-law provides related guidance that must be followed
<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

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 checked="" 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 checked="" 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: <i>Residential developments</i>		Check if completed & add descriptions, explanations 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 ( <i>see 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 ( <i>see 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 ( <i>see 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 checked="" 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: <i>Residential developments</i>		Check if completed & add descriptions, explanations 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 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: <i>Residential developments</i>		Check if completed & add descriptions, explanations or plan/drawing references
<b>4. RIDESHARING</b>		
<b>4.1 Pick-up &amp; drop-off facilities</b>		
<b>BASIC</b>	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 type="checkbox"/>
<b>5. CARSHARING &amp; BIKESHARING</b>		
<b>5.1 Carshare parking spaces</b>		
<b>BETTER</b>	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>		
<b>BETTER</b>	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>		
<b>REQUIRED</b>	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"/>
<b>BASIC</b>	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"/>
<b>BASIC</b>	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"/>
<b>BETTER</b>	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>		
<b>BETTER</b>	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 H**

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MMLOS Review

### Segment MMLOS Analysis

This section provides a review of the boundary streets Tenth Line Road and Décoeur Drive using complete streets principles. The *Multi-Modal Level of Service (MMLOS) Guidelines*, produced by IBI Group in October 2015, were used to evaluate the levels of service for each alternative mode of transportation on Tenth Line Road and Décoeur Drive, based on the targets for areas within 'General Urban Area'. Segments have been analyzed based on existing conditions.

Exhibit 4 of the *MMLOS Guidelines* has been used to evaluate the segment pedestrian level of service (PLOS) of Tenth Line Road and Décoeur Drive. Exhibit 22 suggests a target PLOS C for all roadways within General Urban Areas. The results of the segment PLOS analysis are summarized in **Table 1**.

Exhibit 11 of the *MMLOS Guidelines* has been used to evaluate the segment bicycle level of service (BLOS) of Tenth Line Road and Décoeur Drive. Within General Urban Areas, Exhibit 22 suggests a target BLOS C for roadways with a Spine Route designation (Tenth Line Road) and a target BLOS D elsewhere (Décoeur Drive). The results of the segment BLOS analysis are summarized in **Table 2**.

Exhibit 15 of the *MMLOS Guidelines* has been used to evaluate the segment transit level of service (TLOS) of Tenth Line Road and Décoeur Drive. Within General Urban Areas, Exhibit 22 does not identify a target TLOS for roadways that are not in the City's Transit Priority Network. Despite having no TLOS target, Tenth Line Road and Décoeur Drive have been evaluated for TLOS, as it currently has transit service. The results of the segment TLOS analysis are summarized in **Table 3**.

Exhibit 20 of the *MMLOS Guidelines* has been used to evaluate the segment truck level of service (TkLOS) of Tenth Line Road and Décoeur Drive. Within General Urban Areas, Exhibit 22 suggests a target TkLOS D for arterial roadways with a truck route designation (Tenth Line Road) and no target for collector roadways with no truck route designation (Décoeur Drive). The results of the segment TkLOS analysis are summarized in **Table 4**.

**Table 1: PLOS Segment Analysis**

Sidewalk Width	Boulevard Width	Avg. Daily Curb Lane Traffic Volume	Presence of On-Street Parking	Operating Speed <sup>(1)</sup>	PLOS
<b>Tenth Line Road (east side, Décoeur Drive to Brian Coburn Boulevard)</b>					
> 2.0m	> 2.0m	> 3,000 vpd	No	> 60 km/h	<b>D</b>
<b>Tenth Line Road (west side, Décoeur Drive to Brian Coburn Boulevard)</b>					
> 2.0m	0m	> 3,000 vpd	No	> 60 km/h	<b>F</b>
<b>Décoeur Drive (north side, Tenth Line Road to Aubépines Drive)</b>					
> 2.0m	0.5m to 2m	≤ 3,000 vpd	N/A	60 km/h	A
<b>Décoeur Drive (south side, Tenth Line Road to Aubépines Drive)</b>					
> 2.0m	0.5m to 2m	≤ 3,000 vpd	N/A	60 km/h	A

1. Operating speed taken as the speed limit plus 10 km/h.

Table 2: BLOS Segment Analysis

Road Class	Type of Route	Type of Bikeway	Travel Lanes	Operating Speed	BLOS
<b>Tenth Line Road (east side, Décoeur Drive to Brian Coburn Boulevard)</b>					
Arterial	Spine	Physically Separated	2	> 70 km/h	A
<b>Tenth Line Road (west side, Décoeur Drive to Brian Coburn Boulevard)</b>					
Arterial	Spine	Bike Lane	2	> 70 km/h	E
<b>Décoeur Drive (both sides, Tenth Line Road to Aubépines Drive)</b>					
Collector	None	Mixed Traffic	1	60 km/h	F

Table 3: TLOS Segment Analysis

Facility Type	Exposure to Congestion Delay, Friction, and Incidents			TLOS
	Congestion	Friction	Incident Potential	
<b>Tenth Line Road</b>				
Mixed Traffic; Limited Parking/Driveway Friction	Yes	Low	Medium	D
<b>Décoeur Drive</b>				
Mixed Traffic; Limited Parking/Driveway Friction	Yes	Low	Medium	D

Table 4: TkLOS Segment Analysis

Curb Lane Width	Number of Travel Lanes Per Direction	TkLOS
<b>Tenth Line Road (Décoeur Drive to Brian Coburn Boulevard)</b>		
≤ 3.5m	2	A
<b>Décoeur Drive (Tenth Line Road to Aubépines Drive)</b>		
≤ 3.5m	1	C