



New Leitrim Catholic Elementary School (CECCE)

TIA Step 3 Report – Strategy

DRAFT

December 2025

New Leitrim Catholic Elementary School (CECCE)

TIA Step 3 Strategy

prepared for:

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TIA STEP 3 – STRATEGY REPORT

Parsons has been retained by Conseil des Ecoles Catholiques du Centre-Est (CECCE) to prepare a TIA in support of a Site Plan Control Application (SPA) for a proposed new French Elementary School development located at the municipal address of 3290 Findlay Creek Drive, Ottawa ON. This document follows the TIA process as outlined in the City of Ottawa Transportation Impact Assessment (TIA) Guidelines (2017). The following report represents Step 3 – Strategy Report.

1.0 SCREENING FORM

The screening form confirmed the need for a TIA Report based on the Trip Generation trigger, given that the proposed development will produce more than 60 people trips. None of the other triggers were met. The Screening Form and Site Plan have been provided in **Appendix A**.

2.0 SCOPING REPORT

2.1. Existing and Planned Conditions

2.1.1. Proposed Development

The proposed development currently sits on vacant land located at the south-west corner of the Trident Mews/Findlay Creek intersection. It is zoned R4Z and I1A, which allows either residential uses or institutional uses such as this proposed elementary school. The site context is illustrated in **Figure 1**.

The development will consist of a new elementary school with an anticipated population of 410 students at buildout with potential capacity to add an additional 185 students using 8 reserved spaces for portables. The main permanent school structure will have 18 classrooms within a 2,560 m² building, while the 8 temporary portable extension classrooms would provide an additional 492 m² of gross floor area. A 303 m² daycare is also proposed which will have a capacity for approximately 50 children. The assumed buildout year is 2027.

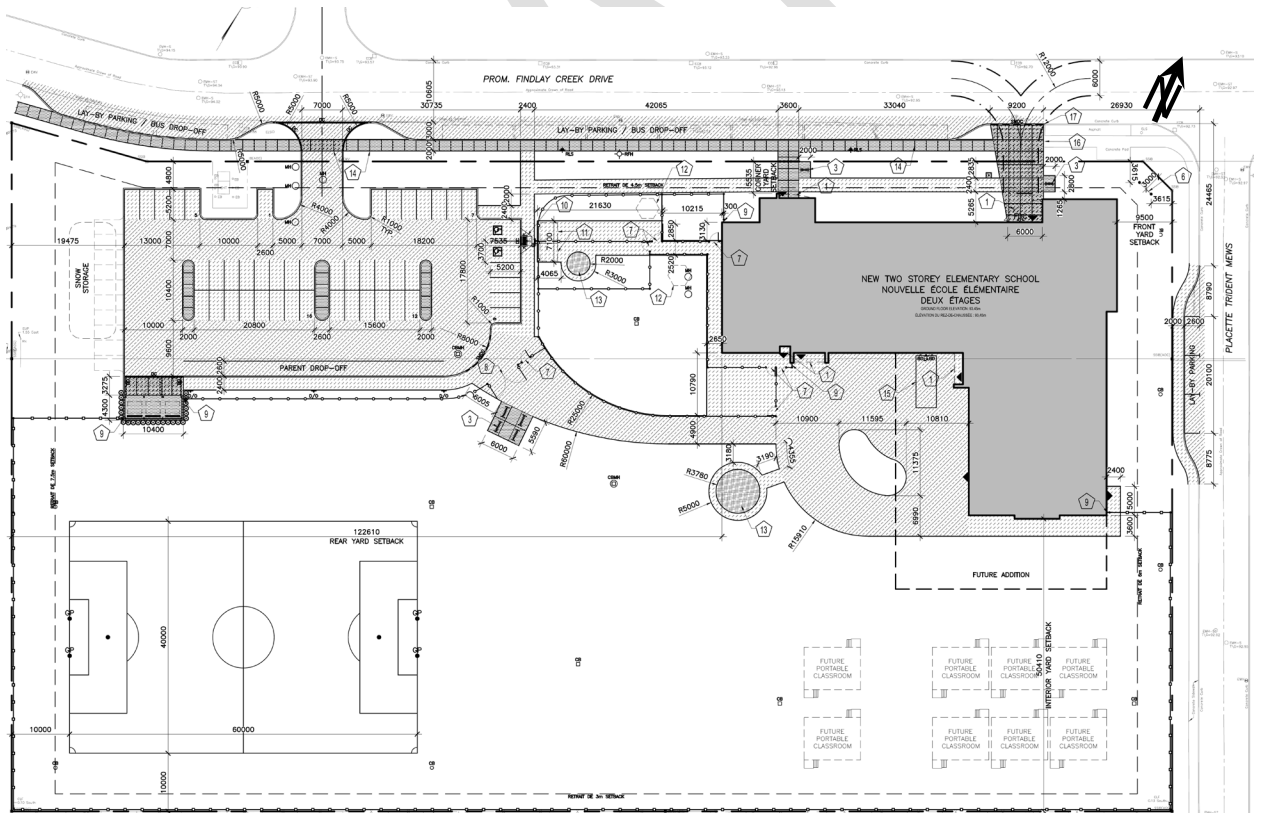
The proposed plan provides a new fourth leg to the Kugagami/Findlay Creek intersection, creating a new full movement access into the school site. Three (3) layby areas are proposed for the elementary school, two (2) on the south side of Findlay Creek, which provides space for nine (9) school buses and another layby area along Trident Mews, which provides three (3) drop-off/pick-up spaces for cars.

The site proposes 47 vehicle parking spaces with a potential 10 vehicle parking space addition, all located on surface level accessed via the main driveway forming the southern leg of the Kugagami/Findlay Creek intersection. The site also intends to provide 42 bike parking spaces located outdoors. A drop-off area internal to the site is proposed on the southern edge of the parking lot and a garbage pad has been proposed on the south-western corner of the parking lot. The site plan has been illustrated in **Figure 2** with a high-quality image in **Appendix A**.

Figure 1: Local Context



Figure 2: Proposed Site Plan (Nov 2025)



2.1.2. Existing Conditions

Area Road Network

A description for each road within the study area included in the TIA has been provided below.

Bank St is a north-south arterial roadway which extends from Wellington St in the north (continues as MacKenzie Dr) to beyond city limits to the south, approaching the St. Lawrence River. Within the study area, the roadway consists of a two-lane cross section (though it is currently being widened and urbanized to a four-lane cross section from south of Leitrim Rd to south of Blais Rd with new 2m sidewalks, dedicated cycling facilities and five fully protected intersections). According to the Official Plan Schedule C16, the protected right-of-way is 44.5m. Currently, Bank St is under construction, and the posted speed limit is 50km/h (prior to construction the posted speed limit was 70km/h).

Findlay Creek Dr is an east-west collector roadway which extends from Highgarden Terrace in the east to Albion Rd in the west. Within the study area, the roadway consists of a two-lane cross section. The posted speed limit is 50km/h.

Trident Mews is a north-south local roadway which extends from Shuttleworth Dr in the south to Findlay Creek Dr in the north. Within the study area, the roadway consists of a two-lane cross section. The unposted speed limit is assumed 50km/h.

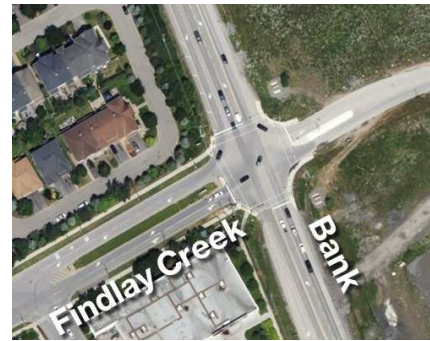
Kugagami Rd is a north-south local roadway which extends from Findlay Creek Dr in the south to Alvarez Ln in the north. Within the study area, the roadway consists of a two-lane cross section. The unposted speed limit is assumed 50km/h.

Existing Study Area Intersections

The following provides a description of study area intersections:

Bank/Findlay Creek

The Bank/Findlay Creek intersection is a four-legged signalized intersection. The eastbound, westbound and northbound movements consist of a left-turn lane and a shared through-right lane. The west approach has two receiving lanes. The southbound movement consists of a left-turn lane, a right-turn lane and a through lane. This intersection is currently under construction as part of Bank St widening and reconstruction project (more details in **Section 2.1.3**). All movements are permitted at this location.



Kugagami/Findlay Creek

The Kugagami/Findlay Creek intersection is a three-legged intersection with STOP control on Kugagami Rd. All approaches are configured as a single shared lane. The main access for this site is proposed as the fourth leg to this intersection. All movements are permitted at this location.



Trident Mews/Findlay Creek

The Trident Mews/Findlay Creek intersection is a three-legged intersection with STOP control on Trident Mews. All approaches are configured as a single shared lane. All movements are permitted at this location.



Existing Driveways to Adjacent Developments

There are only minor driveway accesses within the areas of influence of the site, all which serve either detached or semi-detached townhomes with private driveways. There are approximately 7 driveways on the east side of Kugagami Rd, 12 driveways on the north side of Findlay Creek Dr between Kugagami Rd and Trident Mews, and 21 driveways on the east side of Trident Mews between Frindlay Creek Dr and Longworth Ave.

Existing Area Traffic Management Measures

There were no traffic calming measures identified within the study area.

Existing Pedestrian/Cycling Network

Within the study area, Findlay Creek Dr provides a 2.0m sidewalk on both sides of the road west of Bank St and east of Trident Mews. Between Bank St and Trident Mews, a 2.0m sidewalk is provided on the north side of the road only. Sidewalk will be provided south of Findlay Creek Dr fronting the proposed site and it is anticipated that as developments progress further west, a south side sidewalk will also be provided to Bank St. Bank St provides a 2.0m sidewalk on the east side of the road south of Findlay Creek, new sidewalks on both sides of the Bank St will be provided once the road reconstruction and widening is complete. Trident Mews provides a 2.0m sidewalk on the west side of the road. Kugagami Rd does not have any sidewalk facilities.

The existing cycling network provides little infrastructure within the study area. Bank St is currently under construction south of Leitrim Rd to south of Blais Rd, which will provide protected cycling facilities once completed. None of the study roads are part of the Crosstown Bikeway Network (March 1, 2023)¹ from the new TMP.

Transit Network

The transit network (New Ways to Bus) for the study area is illustrated in **Figure 3** with **Figure 4**, demonstrating the bus stop locations near to the site.

The following description of OC Transpo routes within 600m walking distance from the proposed site reflect the current transit operations:

- **Route #93 (Rotary <-> Leitrim):** Identified by OC Transpo as “local”, this route operates on custom schedules, with headways of approximately 30-minutes during the day. This route provides connectivity to the Trillium LRT Line at Leitrim Station and serves the local community. Bus stops for this route are available adjacent to the site for eastbound route (bus stop #3990) and for westbound direction near to the Bank/Findlay Creek intersection (bus stop #3284, located approximately 275m walking distance from the proposed site).
- **Routes #304 (Billings Bridge <-> Metcalfe-Greely):** Provides special, limited service to destinations such as Osgoode Community Center, the Town of Greely and the Town of Metcalfe. This bus route does not operate daily. Bus stops for this route are available on both sides of Bank St, north of Bank/Findlay Creek intersection, approximately 450m walking distance from the proposed site (stops #1063 and #1062).

¹ [Crosstown Bikeway Network, March 1, 2023](#)

Figure 3: Area Transit Network

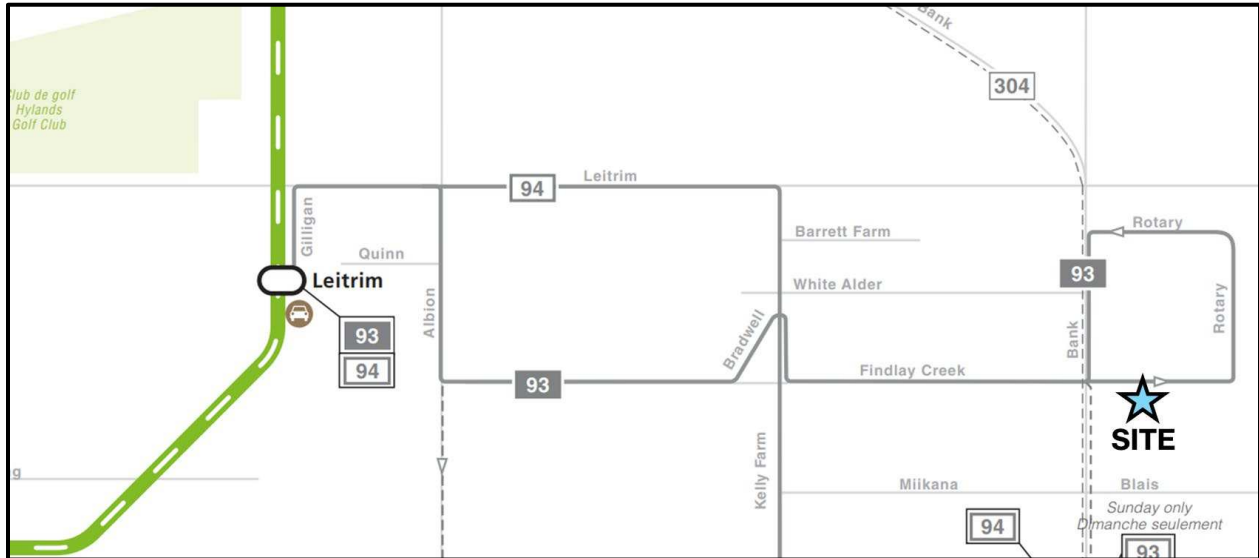


Figure 4: Bus Stop Locations



Peak Hour Travel Demands

Traffic count data was obtained from the City of Ottawa and from Parsons field observations. The vehicle traffic volumes at study area intersections are illustrated in **Figure 5** and active transportation volumes in **Figure 6**, with raw traffic count data provided in **Appendix B**. Note that the 2023 counts at Bank/Findlay Creek were compared to 2019 and showed a significant reduction in volumes, particularly in the PM peak hour. For a more conservative analysis, the 2019 traffic count was used for all approaches except for traffic turning to and from the east leg which has recently been constructed and has higher traffic volumes on that approach. The southern leg at Kugagami Rd was seen to have heavy vehicle activity likely associated with ongoing construction. Active transportation volumes may reflect lower at Bank/Findlay Creek due to the winter count performed.

Figure 5: Existing Peak Hour Vehicle Traffic Volumes

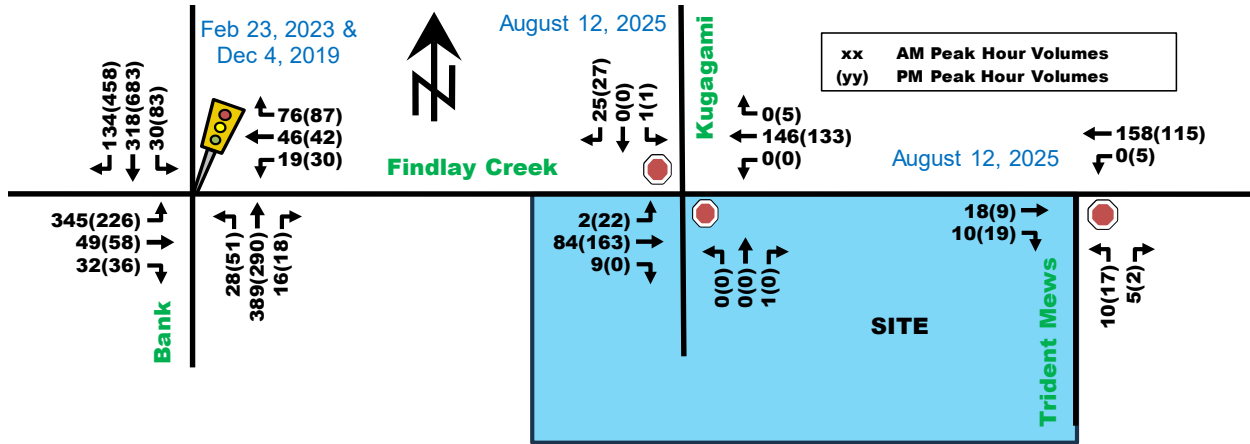
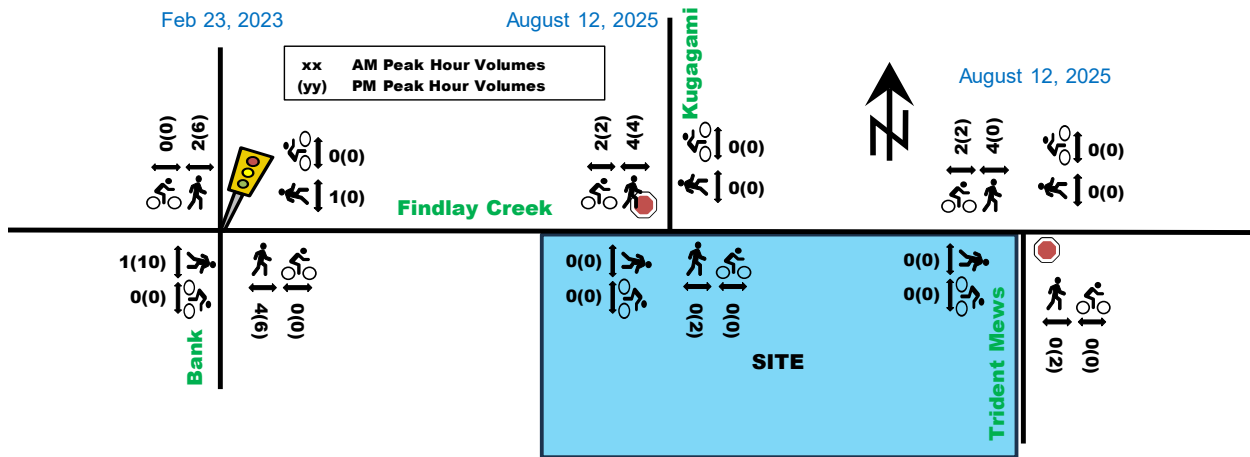


Figure 6: Existing Pedestrian and Cyclists Peak Hour Volumes



Existing Road Safety Conditions

A five-year collision history data (2018-2022, inclusive) was obtained from the City of Ottawa Open Data for the study area intersections (see **Table 2**) and road segments (see **Table 3**) within the study area. The data was analyzed as an initial screening. Detailed collision analysis has been provided in **Appendix C**. Upon analyzing the collision data, the total number of collisions observed within the study area was determined to be 26 collisions within the past five years. Of the collisions, 8 (31%) resulted in property-damage-only (PDO), while the remaining incidents (18 or 69%) resulted in non-fatal injury collisions. There were no fatal collisions recorded within the study area. While this shows a relatively medium to high propensity for non-fatal injuries, the quantity of collisions is quite low, so a further review will be performed below.

Table 1: Collision Summary by Type and Severity

Classification of Accident	Rear End	Turning Movement	Sideswipe	Angle	Approaching	SMV Other	SMV Unattended	Other	Total
Property-Damage-Only (PDO)	13	1	0	2	0	0	1	1	18 (69%)
Non-fatal injury	2	4	0	1	0	1	0	0	8 (31%)
Fatal Incidents	0	0	0	0	0	0	0	0	0 (0%)
Total	15 (58%)	5 (19%)	0 (0%)	3 (12%)	0 (0%)	1 (4%)	1 (4%)	1 (4%)	26 (100%)

Table 2 summarizes the collision history by intersection, including the total number of collisions, percent causing injury, number of collisions with vulnerable road users, and the most frequent collision type. Similarly, the mid-block collisions are summarized in **Table 3**.

Table 2: Collision Summary at Study Area Intersections, Vulnerable Road Users

Intersection Location with Findlay Creek	# Collisions in 5 Years	% Causing Injury	# Collisions with AT	Most frequent type of collision and % of total collision
Bank/Findlay Creek	24	33%		Rear End (63%)
Kugagami/Findlay Creek	0	-	0	-
Trident Mews/Findlay Creek	0	-	0	-

Table 3: Collision Summary at Study Area Mid-Block Locations

Midblock Location	# Collisions in 5 Years	Length of Segment	% Causing Injury	# Collisions with AT	Most frequent type of collision and % of total collision at that location
On Findlay Creek	1	310m	0%	0	Other (100%)
On Trident Mews	1	150m	0%	0	Single Vehicle (100%)

In review of intersection patterns fronting and surrounding the site, only the Bank/Findlay Creek intersection recorded collisions. Almost two thirds of collisions resulted from rear end type collisions. Turning movements and angle collision made up 34% of remaining collisions at Bank/Findlay Creek. Once Bank St gets widened, some of the turning movements will become fully protected and will reduce the likelihood of this type of collisions and likely reduce the frequency of injury causing collisions.

There were no collisions with vulnerable users.

2.1.3. Planned Conditions

Future Transportation Network Changes

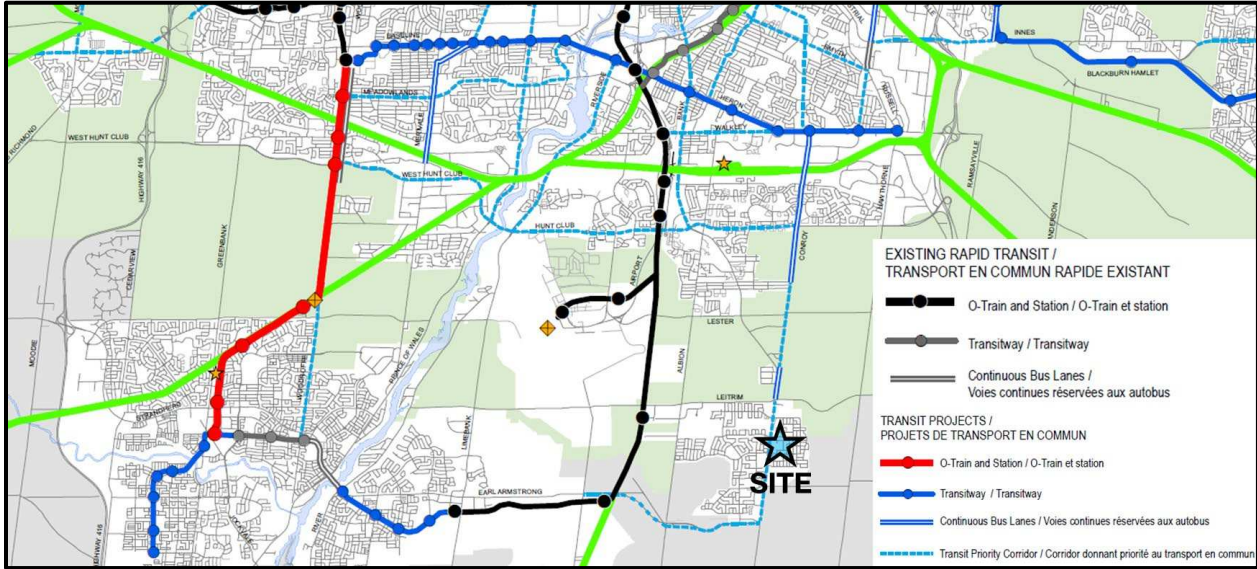
Leitrim Community Design Plan (CDP – 2003 Onwards)

The Leitrim CDP places a large focus on building a community with good connection to transit and walking, offering mixed-use centers, higher density residential and employment opportunities. Within the plan, Bank St and Albion Rd are recommended to be widened. Bank St (south of Leitrim to south of Blais Rd) is under construction and currently being widened to 4-lane cross-section. Barrett Farm Dr would connect to Bank St to form a fourth leg with Rotary Way intersection once the Bank St reconstruction and widening is complete. Kelly Farm Dr has already been extended to Leitrim Rd and is planned to be extended further south to the future Earl Armstrong Extension.

Official Plan and Transportation Master Plan (2021 and 2025)

Within the Official Plan, Bank St is designated as a mainstreet corridor within the study area. The surrounding area is also labelled as an “evolving neighbourhood”. Phase 2 of the new Transportation Master Plan (TMP) was approved on July 24, 2025, which identifies Bank St as a transit priority corridor within the “Needs Based Transit Network” and “Transit Network Priority” within the study area. The priority network shows continuous bus lanes from Leitrim to the Conroy split, where it then continues as transit priority. This transit priority would link to the future transitway on Walkley Rd to the north and to the Leitrim LRT station to the southwest as shown in **Figure 7**. No plans for this future transit priority corridor were found, and construction of this transit priority corridor is not forecasted within the study horizon years.

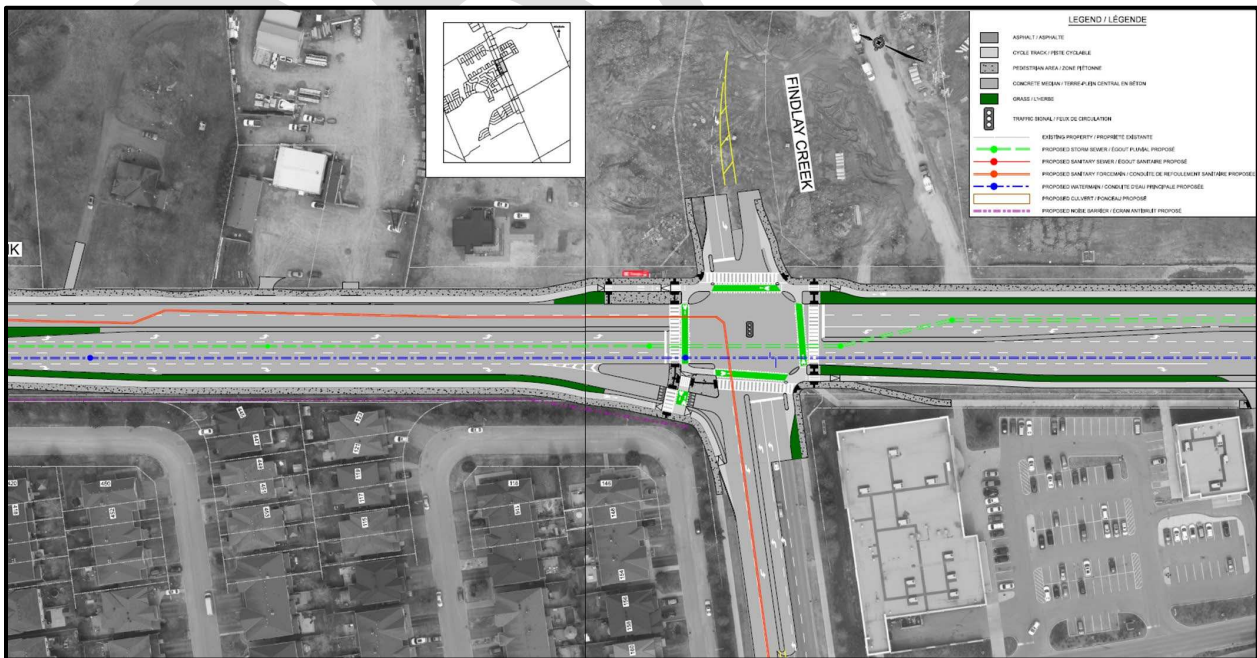
Figure 7: TMP Transit Network Priority



The pedestrian priority network shows Meadowlilly Rd getting new sidewalk facilities. The cycling priority network shows anticipated improvements in the coming years with Bank St between Leitrim Rd and Orville Kemp St and also Findlay Creek from Bank St to Albion Rd getting new cycling facilities. In addition to this, the Bank St reconstruction and widening project from Arena Pl to just south of Blais Rd/Miikana Rd proposes new sidewalks on both sides of the road plus protected uni-directional cycle-tracks on each side of the road as shown in **Figure 8**. The new intersection of Bank/Findlay Creek will get crossrides on all approaches. The ultimate urban cycling network identifies Bank St and Findlay Creek as part of the cycling network with future minor proposed cycling network routes within the local community.

The new intersection of Bank/Findlay Creek will also include a new eastbound left-turn lane (dual left-turn lanes), a smart channel southbound right-turn lane, and two through lanes for the north-south movements.

Figure 8: Bank St Widening (Intersection of Bank St/Findlay Creek Dr)



The July 2025 TMP update identified a few road extensions and widenings proposed, as well as committed projects within the “Needs Based Road Network” and the “Priority Road Network”. Some of the extensions and widenings within Findlay Creek which may influence future traffic routes and distributions have been illustrated in **Figure 9** for the new TMP Schedule D4 Road Network and **Figure 10** for the Road Network Priority include:

Road Network Priority

- The reconstruction and widening of Bank St from Arena Pl to just south of Blais Rd/Miikana Rd which is already under construction.
- A future widening of Bank St from just south of Blais Rd/Miikana Rd to future Earl Armstrong Rd extension.
- The extension of Earl Armstrong Rd from High Rd to Bank St following the southern extent of the Findlay Creek community.
- The widening of Earl Armstrong Rd from Bowesville Rd to Limebank Rd.

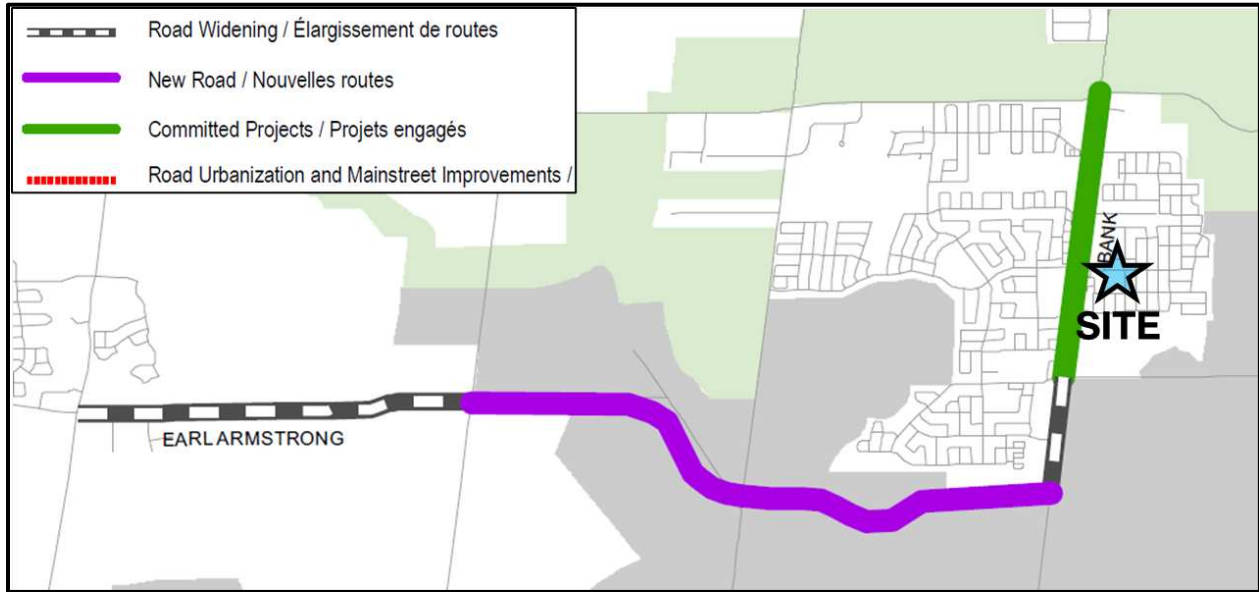
Road Network Needs Based

- The widening of Leitrim Rd from Bank St to just west of Kelly Farm Dr.
- A new road extending from the western edge of the widened Leitrim Rd, back to Leitrim Rd west of Limebank Rd. This extension is part of the Leitrim Rd realignment and widening project, with a completed EA in 2018.
- The widening of the Airport Parkway from where it currently narrows from a 4-lane cross-section to a 2-lane cross-section in conjunction with Lester Rd and Albion Rd as far south as Leitrim Rd.

Figure 9: July 2025 TMP – Schedule D4 Urban Road Network



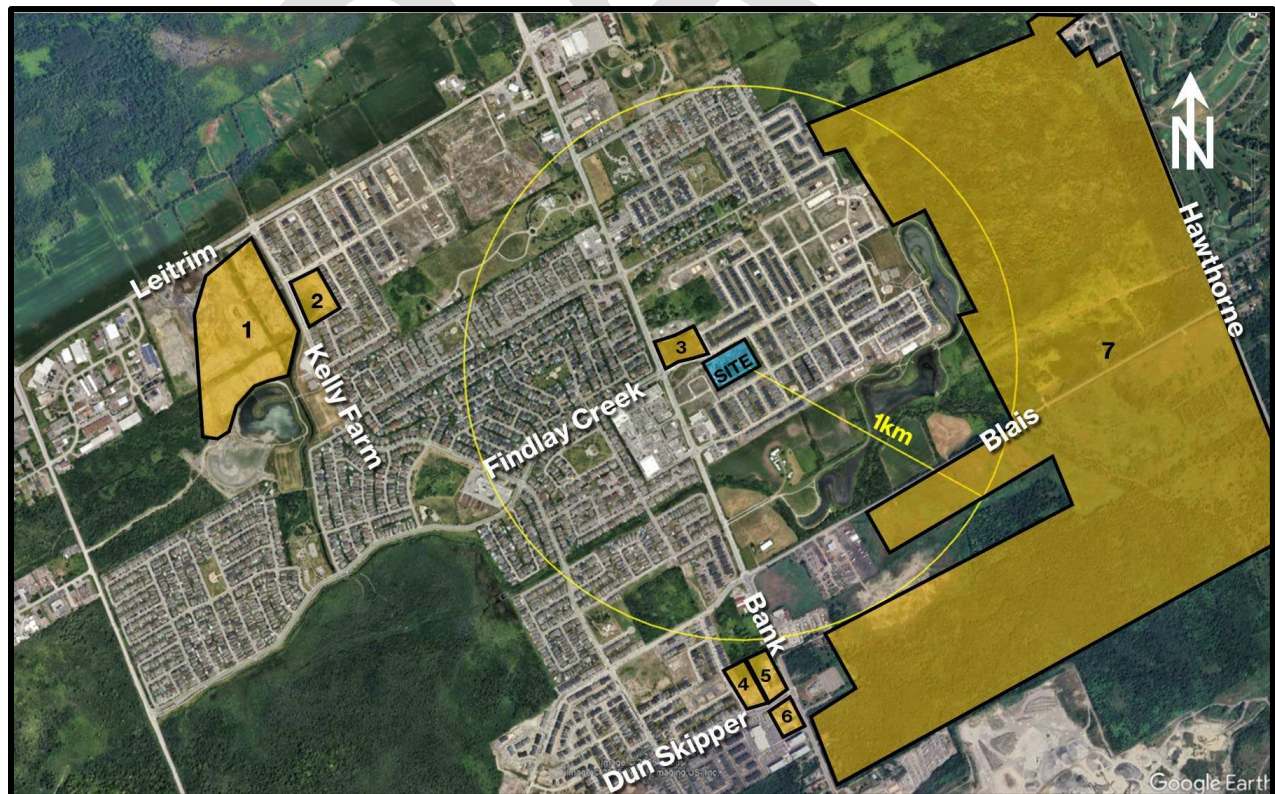
Figure 10: Priority Road Network – New TMP (July 2025)



Other Area Developments

The following section outlines adjacent developments in the general area that were considered in the TIA. The criteria for inclusion of other area developments are either approved developments or developments that have an active planning application that are generally within a 1-km radius of the subject site. **Figure 11** illustrates the location and relative size of relevant developments within the 1km radius of the proposed development.

Figure 11: Other Area Developments



1) Findlay Creek Phase 5 (Tartan)

A residential plan of subdivision, consisting of approximately 170 single homes and 219 townhomes. No TIA was found, and the site is beyond 1km radius.

2) 3955 Kelly Farm

A new elementary school is being proposed with a total 630 student capacity by full buildout. The anticipated buildout year for the development is 2027. Based on the TIA prepared by WSP on February 12, 2025, the development is expected to generate an increase of 170 and 75 veh/h during the morning and afternoon peak hours, respectively.

3) 4781 Bank St

Eight blocks of stacked apartments are proposed, consisting of 96 new units. A transportation brief noted that a TIA was not triggered.

4) 150 Dun Skipper Dr (Residential Development)

Two 6-storey residential buildings are proposed, consisting of approximately 237 units. The anticipated buildout year for the development is 2027. Based on the TIA prepared by Novatech in January 2025, the development is expected to generate an increase of 55 veh/h during the morning and afternoon peak hours.

5) 150 Dun Skipper Dr (Commercial Development)

Four single-story retail units are proposed consisting of a 32,700 ft² supermarket and 25,600 ft² retail space. Based on the TIA prepared by Novatech in October 2024, the development is expected to generate an increase of up to 344 veh/h during the afternoon peak hour. The TIA did not forecast morning peak hour trips as it is anticipated to be negligible.

6) 155 Dun Skipper Dr

A 9-storey residential building for seniors is proposed, consisting of approximately 125 rooms and a retail plaza on ground floor. Based on the TIA prepared by Arcadis on December 12, 2024, the development is expected to generate an increase of 70 and 140 veh/h during the morning and afternoon peak hours, respectively.

7) Leitrim East Lands

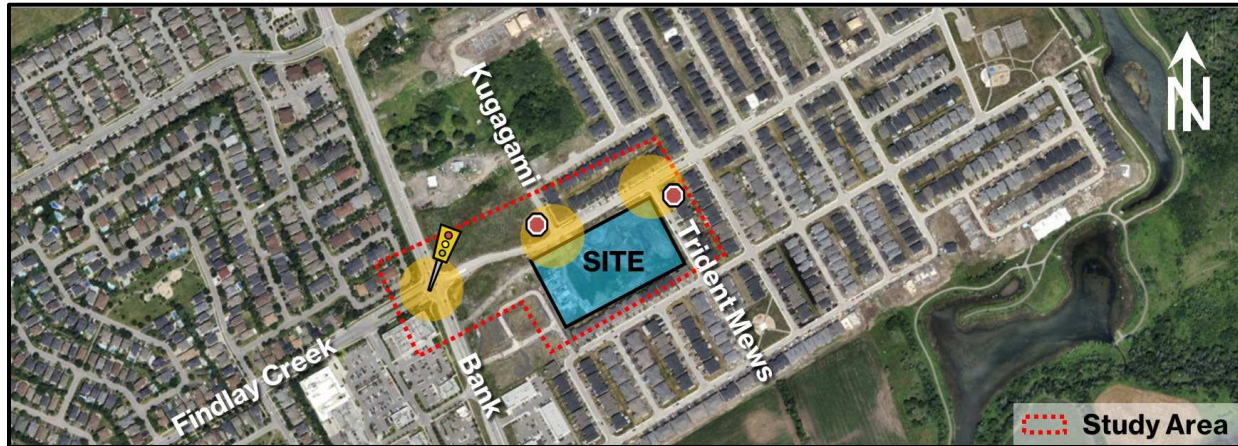
A residential plan of subdivision, consisting of approximately 4,700 dwelling units has been proposed as part of an Official Plan Amendment. Based on the TIA prepared by Stantec on June 23, 2025, the development, once fully build-out, is expected to generate an increase of 1,885 and 2,060 veh/h during the morning and afternoon peak hours, respectively. The build-out of the Leitrim East Lands are expected to be beyond the horizon year of this TIA.

2.2. Study Area and Time Periods

For the purposes of this report, the proposed development is assumed to be fully constructed by 2027. The full buildout scenario and five-years after development buildout will be analyzed, 2027 and 2032. The future horizon years analyzed will use the weekday morning and afternoon peak hour traffic volumes. Proposed study area intersections are listed below and illustrated in **Figure 12**.

- Bank/Findlay Creek
- Kugagami/Site Access/Findlay Creek
- Trident Mews/Findlay Creek

Figure 12: Study Area and Intersections to be Analyzed



2.3. Exemption Review

The following modules/elements of the TIA process provided in **Table 4** are recommended to be exempt in the subsequent steps of the TIA process, based on the City’s TIA guidelines and the subject site:

Table 4: Exemptions Review Summary

Module	Element	Exemption Consideration
4.1 Development Design	4.1.3 New Street Network	Only required for plans of subdivision
4.6 Neighbourhood Traffic Calming	All Elements	Does not meet criterial #3
4.7 Transit	4.7.1 Transit Route Capacity	It is understood that the school will provide its own buses
4.8 Network Concept	All Elements	Only required for ZBLA applications

3.0 FORECASTING

3.1. Development Generated Travel Demand

3.1.1. Trip Generation Sources

The trip generation for the proposed elementary school and daycare land uses will be based on the ITE Trip Generation Manual, version 11. For the purpose of this assessment, the school maximum potential including the 8 future portables will be calculated. The trip rates are summarized in **Table 5** below. It is noteworthy that the PM peak hour of the street will be used, which traditional occurs after the school dismissal time. During the PM peak of the generator (likely around 14:30 to 15:30 time period), traffic will be lower on the adjacent streets. A check of the shoulder hours in the PM confirmed a notable drop in traffic outside of the 16:00-17:00 peak and therefore, using the PM peak hour of the street would analyze the most conservative scenario. The AM peak hour of the street normally coincides with the peak hour of a school.

Table 5: Proposed Development Trip Rates

Land Use	Data Source	Trip Rates	
		AM Peak	PM Peak
Elementary School	ITE 520	$T = 0.74(x)$	$T = 0.16(x)$
Daycare Center	ITE 565	$T = 0.66(x) + 8.42;$	$\ln(T) = 0.87\ln(x) + 0.29;$

Note: T = Average Vehicle Trip Ends; x = number of daycare spaces

The total number of person trips per hour generated by the proposed land uses are calculated by multiplying the vehicle trip rates from **Table 5** by 1.28 factor, as per the ITE Trip Generation Manual to account for typical

North American auto occupancy, transit use and non-motorized mode. The resulting person trips per peak hour shown in **Table 6** below.

Table 6: Peak Hour Person Trip Generation

Land Use	Number of Child Spaces	AM Peak Person Trips	PM Peak Person Trips
Elementary School	595	564	122
Daycare Center	50	53	51

The proposed elementary school land use is anticipated to generate a total of approximately 565 and 120 person trips during the morning and afternoon peak hours, while the daycare segment is anticipated to generate a total of approximately 55 and 50 person trips during the morning and afternoon peak hours, respectively. **Table 7** provides the mode share percentages obtained from the 2020 TRANS Trip Generation Manual specific to “elementary schools” as outlined in Section 6.1 of the manual. Note that the school bus is anticipated to depart before the PM peak hour of the street and thus bus trips are anticipated to be negligible during the PM peak hour of adjacent street.

Table 7: Existing and Proposed Weekday Peak Hour Mode Share Breakdown

Travel Mode	TRANS 2020 Mode Share	Proposed Mode Share for School AM	Proposed Mode Share for Daycare AM & PM	Rationale
	AM & PM	(PM)		
Auto Based Trips	22%	30% (75%)	70%	Includes parent drop-offs using vehicles and staff driving to/from work.
School Bus	48%	50% (0%)	0%	Understood that students will be provided with school buses. Staff taking transit to work considered negligible. The school and daycare will likely attract children who live nearby and could be dropped off by parents on foot or by biking.
Transit	6%	0% (0%)	0%	
Cycling	2%	5% (5%)	5%	
Walking	20%	15% (20%)	25%	
Other	2%	0%	0%	Blended with other mode shares.
Total Person Trips	100%	100%	100%	-

The total peak hour person trips in **Table 6** are then divided into different travel modes using the proposed mode shares shown above in **Table 7**. The resultant trips per mode share for the elementary school and the daycare have been summarized in **Table 8**, and **Table 9** respectively, with a combined trip generation provided in **Table 10**. Note that it is estimated based on other elementary schools that a ratio of approximately 12 pupils per staff (teachers, admin, janitorial, etc.) is common practice.

Table 8: Elementary School Peak Hour Trips Generated – AM / PM Peak Hours

Travel Mode	Mode Share AM (PM)	AM Peak (Person Trips/hr)			PM Peak (Person Trips/hr)		
		In	Out	Total	In	Out	Total
Total Auto Trips	30% (75%)	92	78	170	42	50	92
<i>Auto Driver (Staff)</i> ₁	10% (35%)	35	21	56	18	26	44
<i>Auto Passenger (Parent drop-off)</i> ₂	20% (40%)	57	57	114	24	24	48
School Bus	50% (0%)	152	130	282	0	0	0
Cycling	5% (5%)	15	13	28	3	3	6
Walking	15% (20%)	45	39	84	11	13	24
Total Person Trips	100% (100%)	304	260	564	56	66	122

1. The mode share for staff driving equates to almost 100% of staff driving to the site based on the total person trips for this school. The number of staff (~50) for this site was estimated based on similar sites.
2. Parent pick-up/drop-off is assumed to occur within the same hour, resulting in an equal in/out trip distribution.

Table 9: Daycare Peak Hour Trips Generated – AM / PM Peak Hours

Travel Mode	Mode Share AM & PM	AM Peak (Person Trips/hr)			PM Peak (Person Trips/hr)		
		In	Out	Total	In	Out	Total
Total Auto Trips	70%	20	18	38	17	20	37
<i>Auto Driver (Staff)</i> ₁	20%	7	5	12	4	7	11
<i>Auto Passenger (Parent drop-off)</i> ₂	50%	13	13	26	13	13	26
School Bus	0%	0	0	0	0	0	0
Cycling	5%	1	1	2	1	1	2
Walking	25%	7	6	13	5	7	12
Total Person Trips	100%	28	25	53	23	28	51

1. The mode share for staff driving equates to almost 100% of staff driving to the site based on the total person trips for this daycare. In Ontario, the minimum ratio of staff required to children is 1:5 for daycare.
 2. Parent pick-up/drop-off is assumed to occur within the same hour, resulting in an equal in/out trip distribution.

Table 10: Combined Site Trips Generated – AM / PM Peak Hours

Travel Mode	AM Peak (Person Trips/hr)			PM Peak (Person Trips/hr)		
	In	Out	Total	In	Out	Total
Total Auto Trips	112	96	208	59	70	129
<i>Auto Driver (Staff)</i>	42	26	68	22	33	55
<i>Auto Passenger (Parent drop-off)</i>	70	70	140	37	37	74
School Bus	152	130	282	0	0	0
Cycling	16	14	30	4	4	8
Walking	52	45	97	16	20	36
Total Person Trips	332	285	617	79	94	173

The proposed development is anticipated to generate approximately 615 total person trips during the AM peak hour and 175 total person trips during the PM peak hour (with a larger proportion of outbound trips occurring prior to the PM peak hour of the road, mostly by school bus trips. Note that from other school site observations, it has been noted that the AM peak hours are more condensed arrival/departures while the PM peak of the generator is more spread out within hours proceeding the bell, including some students and various staff who linger for longer, be it for after school activities or programs). The site-generated vehicle trips are broken down as follows:

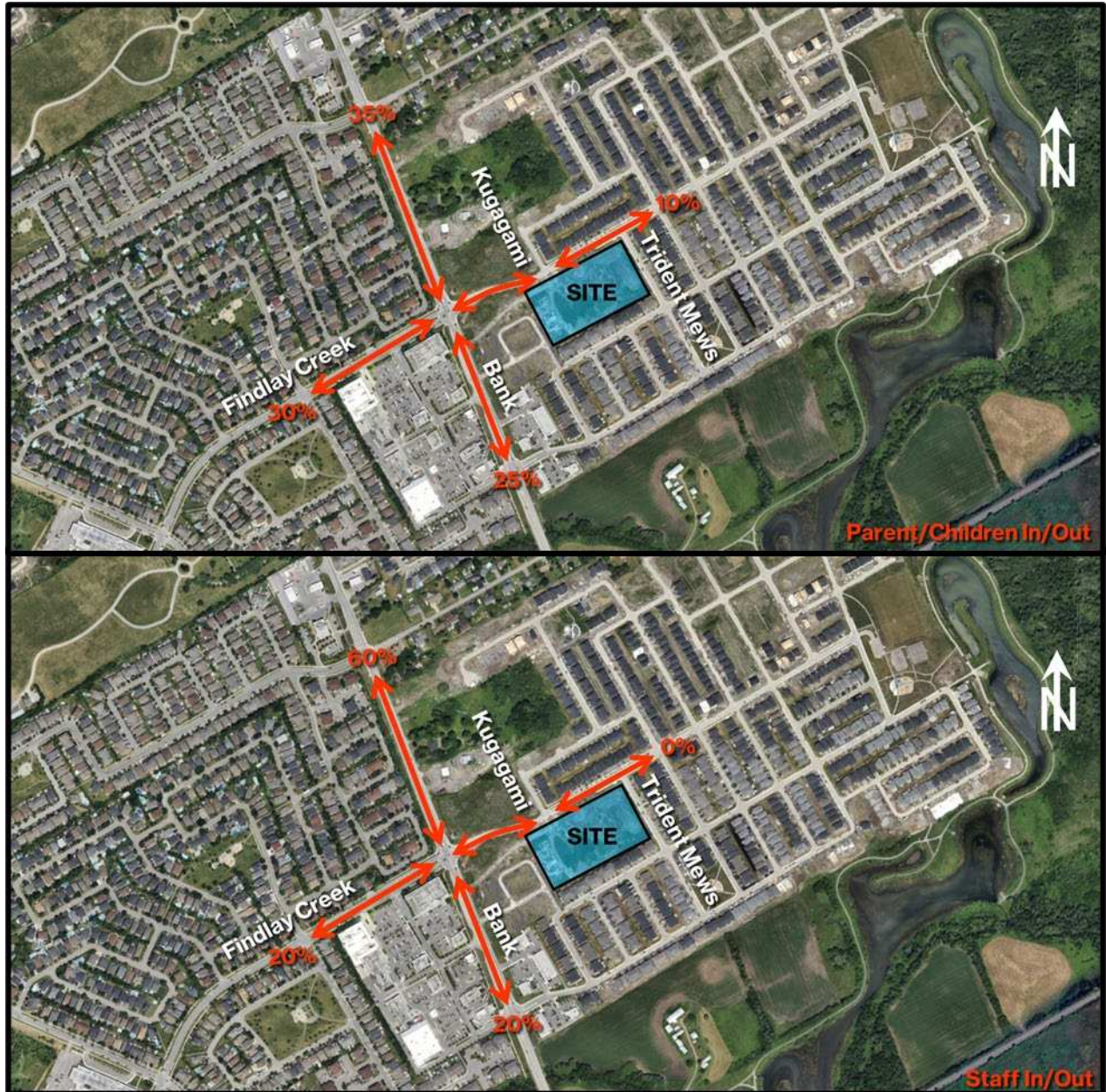
- Approximately 70 and 55 primary vehicle trips (staff) during the AM and PM peak hours of the adjacent street, respectively.
- Approximately 140 and 75 pick-up and drop-off trips during the AM and PM peak hours of the adjacent street, respectively.

There are approximately 280 students who are expected to take school bus during the AM peak hour of the street. School bus trips are anticipated to be negligible during the PM peak hour of adjacent street. It is anticipated that the proposed site would generate approximately 130 and 45 active transportation trips during the AM and PM peak hours of the adjacent street, respectively.

3.1.2. Trip Distribution and Assignment

Since the development is an elementary school and a daycare, it is assumed that most student and pupil trips will be from the local community, while some teachers and staff trips may come from further. Based on the OD Mode Share Survey, existing traffic counts and the location of adjacent arterial roadways and neighborhoods, the distribution of site-generated traffic volumes has been illustrated in **Figure 13**.

Figure 13: Site Generated Vehicle Traffic Percent Distribution



The anticipated ‘new’ auto trips for the proposed development from **Table 8** and **Table 9** were then assigned to the road network with the distributions shown above in **Figure 13**, differentiating the anticipated trip distributions for both the parent/student and staff populations.

Figure 14: Parent/Student Site-Generated Traffic Using Custom Mode Shares

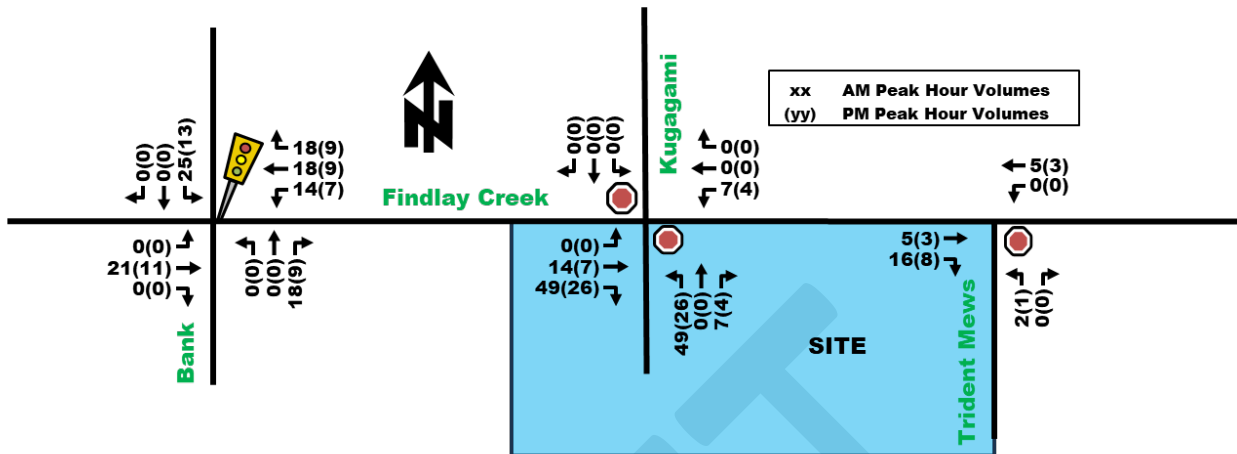


Figure 15: Staff Site-Generated Traffic

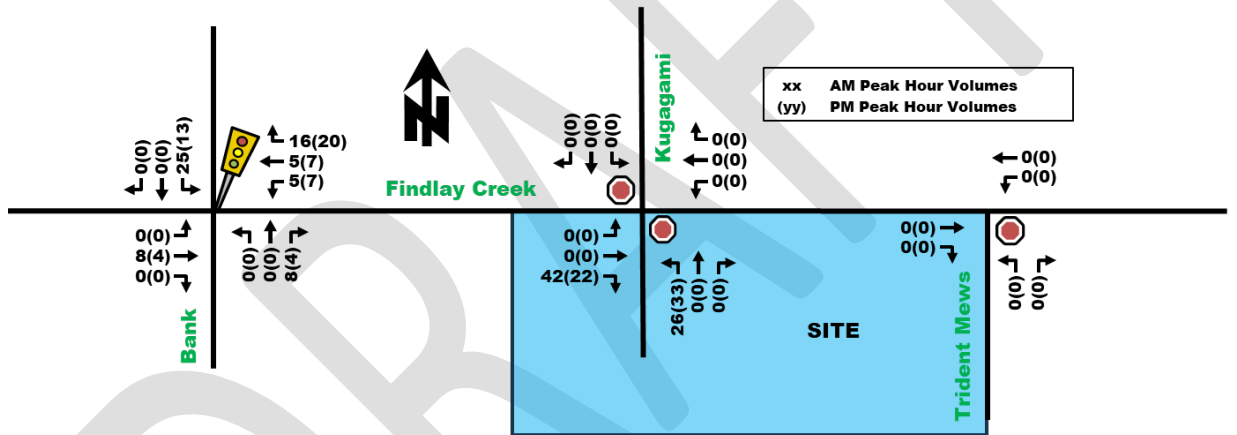
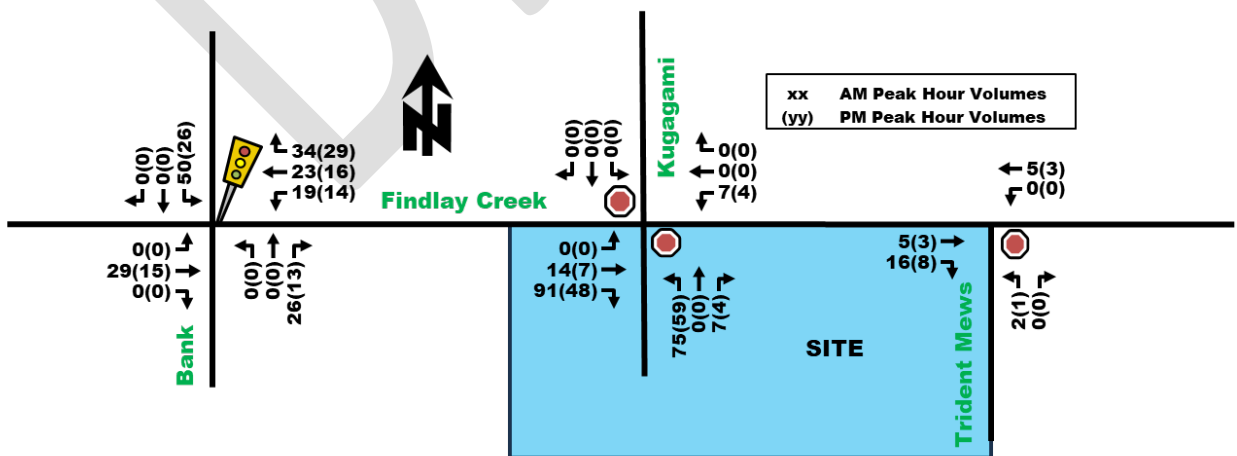


Figure 16: Total Site-Generated Trips



3.2. Background Network Traffic

3.2.1. Transportation Network Plans

Refer to **Section 2.1.3: Planned Conditions**.

3.2.2. Background Growth and Other Area Developments

As described in **Section 2.1.3**, there are various new developments proposed within Findlay Creek community. The TRANS Model between 2022 and 2046 (provided in **Appendix D**) estimates that Bank St will have an approximate annual growth rate of 4.0% northbound and 1.5% southbound. While Findlay Creek Dr will have an annual growth rate of 1.5% eastbound and westbound, west of Bank St. However, this growth considers timelines well beyond our study horizon years and acknowledges road realignments, extensions and widening which are likely not going to be implemented within our study horizon years.

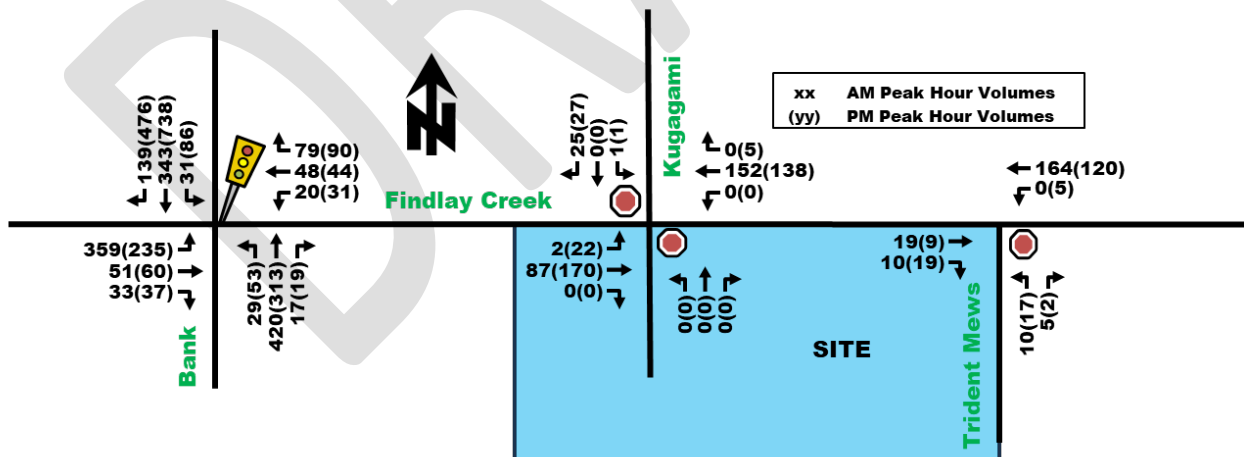
To account for shorter term growth (build-out 2027), including developments such as 4781 Bank St, 150 and 155 Dun Skipper and any other developments within the study area, a 2% annual growth rate on Bank St and 1% growth rate on Findlay Creek Dr was applied.

For the longer-term condition (5 year beyond buildout - 2032), portion of the forecasted trips (25%)² from the Leitrim East Lands were layered on top of the background growth rates to develop the 2032 background traffic volumes.

3.2.3. Future Background Volumes

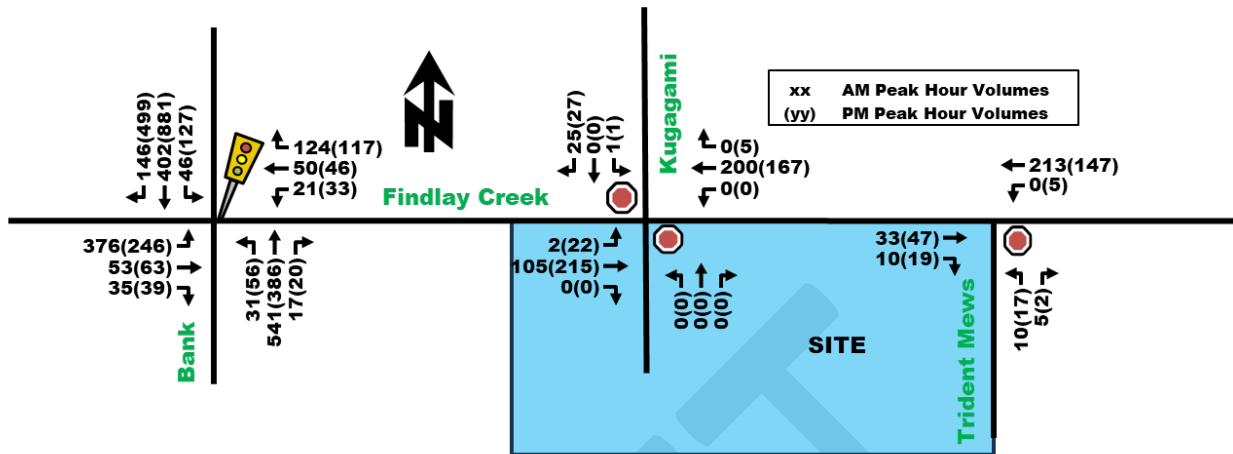
The resultant background volumes have been provided in **Figure 17** and **Figure 18** for the 2027 and 2032 horizon years respectively.

Figure 17: Future Background Traffic Volumes – 2027 Horizon



² The full build-out of the Leitrim East Lands are expected to be well beyond this TIA's future horizon years (likely closer to 2046 horizon year). Therefore, for the purpose of this analysis and to be conservative, 25% of the development and associated traffic was assumed by 2032 horizon year.

Figure 18: Future Background Traffic Volumes – 2032 Horizon



3.3. Demand Rationalization

The suburbs of Leitrim and Findlay Creek have been rapidly growing over the past few years. To account for this rapid growth, a conservative annual growth rate has been considered and applied to background volumes, consisting of a 2% annual growth rate on Bank St and 1% growth rate on Findlay Creek Dr. In addition, portion (25%) of the trip generation forecasted for the Leitrim East Lands located east of the new school have been layered on individually, on top of the annual growth rate. As the Leitrim/Findlay Creek community continues to expand, it is forecasted that further improvements to transit will be provided as highlighted within the Leitrim Community Design Plan, possibly lessening the forecasted increase in vehicular trips in exchange for other modes of transportation.

Bank St is currently being reconstructed and widened which will increase its available capacity and better support the growing community. Based on the forecasted trips to be generated by this site, the study area intersections are forecasted to have sufficient capacity to accommodate the new school.

The total projected 2027 and 2032 traffic volumes are calculated by superimposing the site-generated traffic in Figure 16, onto the background traffic in Figure 17 and Figure 18. The total projected 2027 and 2032 traffic volumes are illustrated in Figure 19 and Figure 20, respectively.

Figure 19: Total Projected 2027 Traffic Volumes

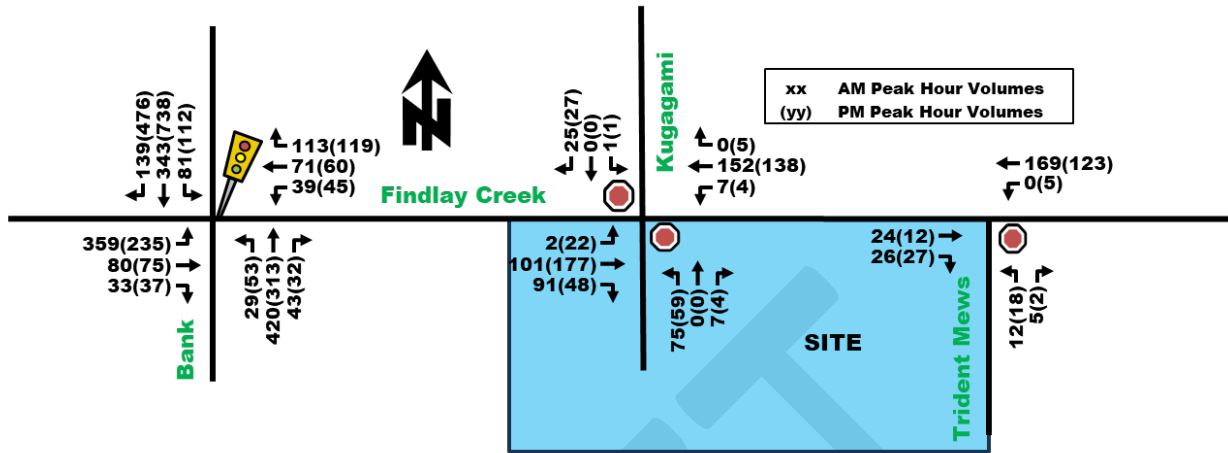
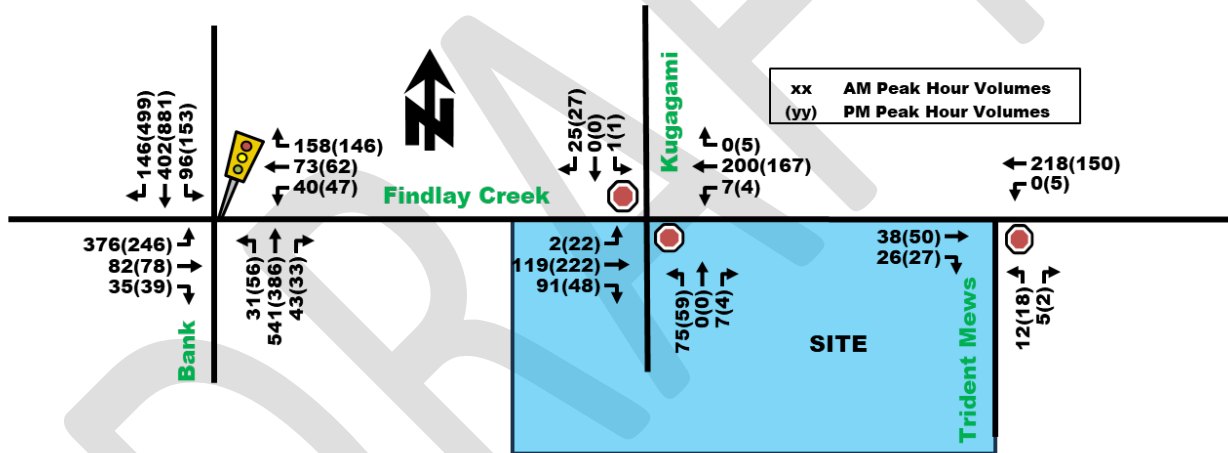


Figure 20: Total Projected 2032 Traffic Volumes



4.0 ANALYSIS

4.1. Development Design

4.1.1. Design for Sustainable Modes

To accommodate the future travel demands, the site proposes certain areas be reserved for specific modes of transportation. The site accesses to/from the parking lot will be reserved for staff parking, pick-up/drop-off activity and municipal services only, with an additional lay-by for pick-up/drop-off activity along the west side of Trident Mews. The proposed lay-bys along Findlay Creek Dr will accommodate the school bus waiting areas, where the depressed curb leading to the main entrance will be kept clear as it is a fire route. The following subsections will discuss these conditions in more detail.

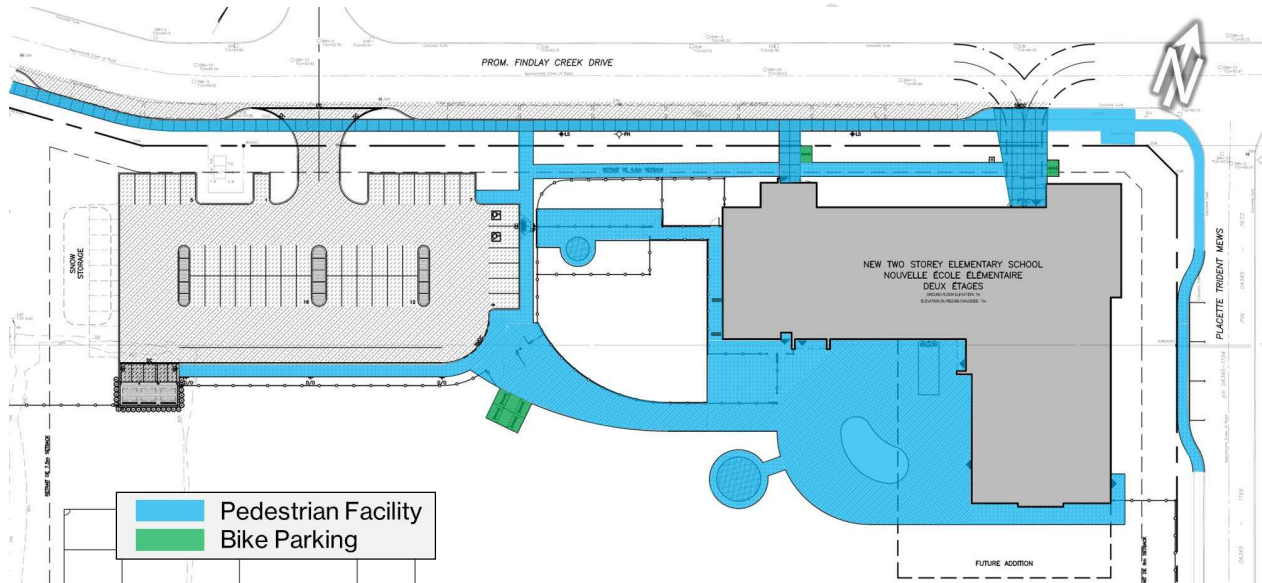
Pedestrian/Cycling Routes and Facilities

CECCE is proposing a series of facilities internal to the site which connect to the existing concrete sidewalk along Findlay Creek Dr. Students taking the bus would alight within the lay-bys designated for school buses along

Findlay Creek Dr, providing separation from parent pick-up/drop-off activity and general-purpose traffic. The designated parent pick-up/drop-off is located along the southern boundary of the proposed parking lot, connecting to internal pedestrian facilities that provide direct paths to building entrances and the playground. Additional pick-up/drop-off activity will occur along the west side of Trident Mews, where a proposed concrete sidewalk will be provided that connects to new and existing pedestrian facilities leading to building entrances.

The bike parking spaces have been proposed throughout the site, where approximately 32 spaces will be provided adjacent to the rear-yard entrance and approximately 10 spaces located along the building frontage on Findlay Creek Dr.

Figure 21: Future and Existing Active Transportation Facilities



Location of School Bus Service

Based on Section 3.1.1, an estimated 280 ‘new’ school bus student trips are forecasted by full buildout. School buses are normally classified into four different types as summarized in Table 11.

Table 11: Typical School Bus Types and Capacity

Bus Type	Type A	Type B	Type C	Type D
Example Image				
Passenger Capacity ¹	16-20	20-30	60-72	72-90
Typical Length ²	13 to 17.5 ft	10.8 to 21.7 ft	20.9 to 38.9 ft	27.3 to 39.11 ft
1. https://www.rtoinsider.com/57015-ny-school-bus-electrification-road-map/ 2. https://slideplayer.com/slide/15235762/				

Based on the latest site plan, it is anticipated that the school will operate up to 9 Type C school buses, providing a capacity for up to 648 students. This anticipated maximum available capacity well exceeds the required forecasted 280 school bus student trips.

Buses will utilize the designated lay-by areas, ensuring that there are no conflicts with parent pick-up/drop-off or staff vehicle activity. Appropriate signage will be installed to ensure these school bus designated areas are not obstructed by other modes of transportation.

4.1.2. Circulation and Access

The proposed development includes a new two-way, all-movement access point that will serve as the southern extension of the Findlay Creek/Kugagami intersection. This access will lead to a small parking area, a designated parent pick-up/drop-off zone, and the garbage collection site, all arranged within a single two-way loop design. Garbage trucks are expected to navigate the site in a counterclockwise direction, by directly accessing the bins in the southwest corner of the lot before exiting the site by continuing forward.

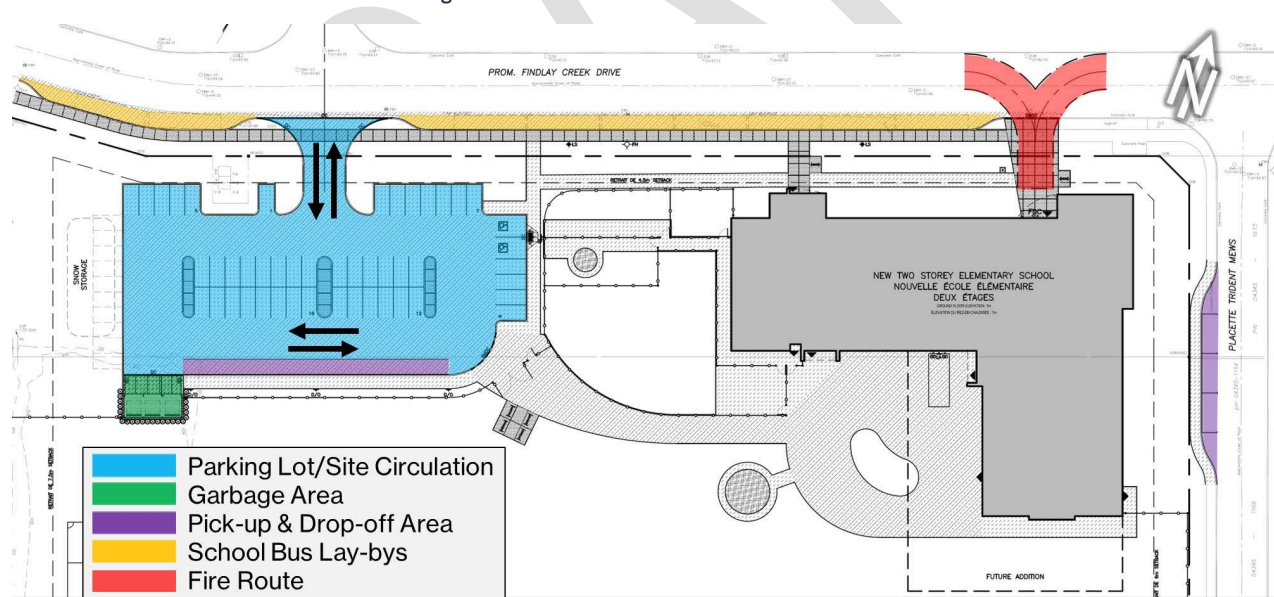
The fire route is planned to connect directly to the school's main entrance, featuring a depressed curb to allow fire trucks to drive up onto the pedestrian area for direct access. Appropriate signage will be in place to prevent any blockage along the route. **Figure 22** illustrates the proposed internal site circulation and the designated areas for different types of vehicles accessing the site.

The bulk of the parent pick-up/drop-off activity is anticipated to take place in the designated area along the southern boundary of the internal site circulation and parking lot. Vehicles are expected to enter the site in a counterclockwise direction, complete pick-up/drop-off activities, and proceed forward before exiting the site. Additionally, three 15-minute maximum parking spaces have been provided in a lay-by along the site frontage on Trident Mews, intended to accommodate delivery vehicles and short-term parent pick-up/drop-off.

School buses will need to approach the designated lay-bys along Findlay Creek in the eastbound direction. Buses are anticipated to exit the site either by continuing eastbound along Findlay Creek or turning right on Trident Mews if headed westbound.

The accesses, proposed garbage pick-up and fire route have been checked and verified to accommodate the appropriate design vehicles. Turning templates have been provided in **Appendix E**.

Figure 22: Site Circulation and Access Locations



4.1.3. New Streets Network

Exempt – Refer to **Table 4** in **Section 2.3**

4.2. Parking

The following parking analysis reflects the minimum number of parking rates and spaces required based on the City of Ottawa Zoning By-Law for developments located in Area D on Schedule 1A. **Table 12** summarizes the

minimum vehicle and bicycle parking rates from Part 4, Parking, Queueing and Loading Provisions parking by-law, referenced from Tables 101, 102, and 111A.

Table 12: Required Vehicle and Bicycle Parking Spaces

Land Use	GFA / Number of Classrooms	Vehicle Parking Rates	Vehicle Spaces		Bicycles		
		Base Rate	Min Required Spaces	Proposed Spaces	Base Rate	Min Required	Proposed Spaces
Daycare (N30)	303m ²	2/100m ²	7	-	1 per 250m ²	2	-
Elementary School (N81)	26	1.5/Class	39	-	1 per 100m ²	31	-
Total	-	-	46	47	-	33	42
1 - total site GFA proposed at 3,355 squared meters, 3052							

As shown above in **Table 12**, the site is meeting the minimum required vehicle parking and exceeding minimum bike parking requirements by approximately 20%. Bike parking is proposed outdoors in bike parking racks. Additionally, there will be a total of 2 Type 'A' accessible parking spaces on site which meet the minimum requirement of one space.

4.3. Boundary Street Design

4.3.1. Conceptual Design of Lay-bys

A roadway modification approval (RMA) is required to support the proposed lay-bys along both Findlay Creek and Trident Mews. Two lay-bys are proposed along Findlay Creek for school buses on each side of the proposed access: one 30m lay-by on the west side and a 90m lay-by on the east side providing capacity for two and seven school buses, respectively. The lay-by along Trident Mews is approximately 20m in length, providing capacity for approximately three short-term parking spaces. The lay-by areas for school buses on Findlay Creek Dr are proposed to be approximately 3m while the lay-by on Trident Mews is approximately 2.6m wide from the curblines. The RMA conceptual drawings are provided in **Appendix E**. A formal RMA report with cost estimates will be provided once the City has had the chance to review the conceptual design plan.

4.3.2. MMLoS Segment Analysis

For the purpose of this analysis, the New 2025 MMLoS Tool has been adopted by the city and will be used for this report.

Existing & Future Conditions

The boundary streets to the proposed development are Findlay Creek Dr (east of Bank Street) and Trident Mews.

- *Findlay Creek Dr:*
 - 1 vehicle travel lane in each direction
 - 2.0m sidewalk on north side of road during both existing and future conditions, no sidewalk on south side of road during existing conditions and a proposed 2.0m sidewalk on the south side.
 - No cycling facilities and not part of the Crosstown Bikeway Network
 - Less than 3,000 curb lane vehicles per day during existing conditions and greater than 3000 curb lane vehicles per day on the southside
 - Posted speed 50km/h
 - Classified as a collector roadway
 - Transit route 93 operates along this segment
 - Located in the Outer Urban or Suburban policy area and within 300m of a school in future conditions.

- **Trident Mews:**
 - 1 vehicle travel lane in each direction
 - 2.0m concrete sidewalk on the west side of road no sidewalk on the east side
 - No cycling facilities and not part of the Crosstown Bikeway Network
 - Less than 3,000 curb lane vehicles per day
 - Posted speed 50km/h
 - Classified as a local roadway
 - No transit route operates in this segment
 - Located in the Outer Urban or Suburban policy area and within 300m of a school in future conditions.

Multi-modal Level of Service analysis for the subject road segments adjacent to the site is summarized in **Table 13** with detail analysis provided in **Appendix F**. Note that the truck level of service is no longer calculated but rather confirmed as part of the geometrics checks and truck turning templates.

Table 13: MMLoS – Boundary Street Segments Existing and Future Conditions

Road Segment	Level of Service – Existing (Future)							
	Pedestrian		Bicycle		Transit		Public Realm	
	PLoS	Target	BLoS	Target	TLoS	Target	PR	Target
Findlay Creek Dr (North Side)	B(B)	C(B)	D(D)	C(C)	-	N/A	C(C)	C(C)
Findlay Creek Dr (South Side)	-(B)	N/A(B)	D(D)	C(C)	B(C)	E(E)	D(C)	C(C)
Trident Mews (West Side)	B(B)	C(B)	D(D)	C(C)	-	N/A	B(B)	C(C)
Trident Mews (East Side)	-(-)	N/A(N/A)	D(D)	C(C)	-	N/A	D(D)	C(C)

Pedestrian

The pedestrian level of service (PLoS) targets were met for all road segments where PLoS targets exist. PLoS targets do not apply where no pedestrian facilities are present so long as the TMP sidewalk or MUP policy is met (i.e. whether sidewalks are required on one or both sides of the road depending on the context of the segment).

Bicycle

All the bicycle level of service (BLoS) targets were not met. Findlay Creek Dr and Trident Mews were below the targets due to the shared operating space of cyclists and auto-vehicles during both existing and future conditions.

Transit

Only Findlay Creek Dr has transit services along the boundary segments, and the transit level of service (TLoS) was met.

Public Realm

The public realm analysis showed acceptable overall street health and attractiveness due to the presence of some pedestrian facilities with outer boulevards providing space for vegetation. Existing conditions resulted in lower scores, particularly along the south side of Findlay Creek Dr due to the lack of existing pedestrian facilities. Trident Mews has no boulevards or pedestrian facilities for both existing and future conditions. Findlay Creek Dr also has a transit route operating along the southern segment.

4.4. Access Intersection Design

Former sections 4.4.2 (Access Control) and 4.4.3 (Access Design) have been moved to Section 4.9.1 and 4.9.2 as per the revised TIA Guidelines, June 2023.

4.4.1. Location and Design of Access

Vehicle Access and Circulation

The site proposes one new two-way access along Findlay Creek Dr directly across from Kugagami Rd as the new southern leg of the intersection. The access has been designed with an approximate 7.0m wide driveway with flaring at the road edge to accommodate garbage truck turning movements. Signage or driveway markings are encouraged within the parking lot to promote proper circulation for pick-up/drop-off activity. The access location was selected to prevent atypical intersection alignments or undesirable offsets to the existing Findlay Creek Dr/Kugagami Rd intersection.

Findlay Creek Dr Street Access Throat Length

The Transportation Association of Canada (TAC) *Geometric Design Guide for Canadian Roads*, Chapter 8 (Access) provides guidelines for clear throat length. These guidelines apply to private approaches on arterial and collector roads. As Findlay Creek Dr is classified as a collector roadway, these guidelines are applicable to this site however, TAC does not provide specific guidance for desired throat lengths for schools. It recommends a throat length measuring anywhere between 8m and up to 40m for a variety of land uses that access a collector roadway, varying based on the size of the development. The proposed two-way access will provide access to 47 parking spaces, which is considered a small parking lot. The proposed site plan includes an approximate 8.5m throat length from Findlay Creek Dr to the proposed parking lot, meeting the estimated minimum throat length outlined in the TAC Geometric Design Guide.

Private Approach By-law

The Private Approach By-Law requirements for the City of Ottawa were reviewed, with the following observations:

- The site has two frontages (approximately 200m and 110m long) which permits having the proposed two-way private approach.
- The site is not adjacent to any major collector roads or arterial roads, thus exempting section 25(m).
- The distance between the proposed accesses and the adjacent property lines meets the required 3m separation.
- The private approach exceeds 9m in width which is not in compliance with Section 25(c), but is deemed acceptable given the access needs to accommodate garbage truck turning movements.
- The grade of the private approach is to not exceed 2% within the private property for a distance of 6m to the curb line (Section 25(u)). No major grades are proposed within the site.

The access designs are in conformance with the City of Ottawa Private Approach By-law 2003-447. The access on Findlay Creek Dr crosses a sidewalk and is to be constructed as per City of Ottawa Standard Detail SC7.1.

4.5. Transportation Demand Management

4.5.1. Context for TDM

Based on the type of development, it is assumed that most trips generated by the proposed site will be students and staff entering the site in the AM peak hour and exiting the proposed site in the PM peak hour to return home. **Section 3.1.1** and **3.1.2** describe how many trips are anticipated per travel mode.

4.5.2. TDM Program

The TDM infrastructure checklist and TDM Measures are attached as **Appendix G**.

TDM Supportive Development Design and Infrastructure Checklist (Non-Residential):

- Ten (10) out of the ten (10) “required” measures have been satisfied.
- At least eight (8) of sixteen (16) “basic” measures related to walking, cycling, transit and parking have been satisfied or are not applicable.
- One (1) of the of the eleven (11) candidate “better” measures are also proposed or are non-applicable.

TDM Measures Checklist (Non-Residential):

- Five (5) out of ten (10) “basic” measures related to walking, cycling, transit, parking and TDM marketing have been satisfied or are not applicable. One (1) of those, which have been designated by an asterisk (*), are considered by the City to be some of the most dependably effective tools to encourage sustainable travel modes. The proposed site is expected to offer the following TDM measures:
 - *Designate an internal coordinator or contract with external coordinator
 - Display walking and cycling information at major entrances.
 - Display relevant transit schedules and route maps at entrances
 - Provide online links to OC Transpo information
 - Provide a multimodal travel option information package for new/relocating employees and students
- Two (2) out of twenty-six (26) “better” measures related to walking, cycling, transit, parking and TDM marketing have been satisfied or are not applicable. The proposed site is expected to offer the following TDM measures:
 - Students receive fully subsidized school bus transportation.
 - Provide a vanpooling service for students.

4.5.3. Need and Opportunity

Given the concentrated arrival and departure times before and after the school bell, the site is a great candidate for transit-oriented transportation. The school board (OCSB) provides bus transit services to all students, which provides a large incentive for students to travel to and from the school for free. The site is accessible via active transportation facilities and is a recommended mode of transportation for those who live near the school or along the existing facilities. The site offers additional bike parking racks for those who wish to bike.

4.6. Neighbourhood Traffic Management

Exempt – Refer to **Table 4** in **Section 2.3**

4.7. Transit

4.7.1. Route Capacity

Exempt – Refer to **Table 4** in **Section 2.3**

4.7.2. Transit Priority

Given the absence of any additional transit demand and presence of only one local regularly operating local route, it is expected that the addition of the new development driveway and increase in site-generated traffic will have a negligible impact on transit delays.

4.8. Review of Network Concept

Exempt – Refer to **Table 4** in **Section 2.3**

4.9. Intersection Design

4.9.1. Intersection and Site Access Control

As previously mentioned, the proposed site access will serve as the new southern leg of the Findlay Creek/Kugagami intersection. The access is anticipated to be stop-controlled on the approach, mirroring the north leg and providing consistency throughout the intersection.

4.9.2. Intersection Design

Multi-Modal Level of Service

The New 2025 MMLoS Tool has been adopted by the city, and it will be used for this report. Only signalized intersections are considered for the intersection Level of Service measures in the MMLoS Guidelines. Note that truck level of service has been removed and rather tested as part of the truck turning checks. The MMLoS analysis is summarized in **Table 14**, with detailed analyses provided in **Appendix F**.

Table 14: MMLoS –Signalized Intersections – Existing (Future)

Intersection	Level of Service					
	Pedestrian		Bicycle		Transit	
	PLoS	Target	BLoS	Target	TLoS	Target
Bank/Findlay Creek	B (C)	B	E (A)	C	B (B)	E

Pedestrian

- The Bank/Findlay Creek intersection met the pedestrian LoS scores for existing conditions but did not for future conditions. This is primarily due to the added number of lanes in the future design, resulting in longer crossing distances for pedestrians.

Bicycle

- The bicycle LoS scores were not met for existing conditions but were met for future conditions. The future intersection design includes the addition of bicycle crossrides on all legs with protected corner left-turn treatment types.

Transit

- The transit target LoS is met for both existing and future conditions.

Existing Conditions

The existing traffic volumes were illustrated in **Figure 5** with projected traffic operation outputs in **Table 15**. The detailed Synchro results can be found in **Appendix H**.

Table 15: Existing Intersection Performance

Intersection	Weekday AM Peak (PM Peak)					
	Critical Movement			Intersection		
	LoS	max. v/c or avg. delay (s)	Movement	Delay (s)	LoS	v/c
Bank/Findlay Creek	D(D)	0.81(0.86)	EBL(EBL)	23.6(19.4)	A(B)	0.57(0.64)
Findlay Creek/Kugagami	A(A)	9.3(9.3)	SB(SB)	1.0(1.2)	A(A)	-
Findlay Creek/Trident Mews	A(A)	9.3(9.4)	NB(NB)	0.7(1.3)	A(A)	-

Note: Analysis of signalized intersections assumes a PHF of 0.90 and a saturation flow rate of 1800 veh/h/lane.

As seen in **Table 15**, the study area intersections all operate within City of Ottawa acceptable performance standards, operating with a LoS of ‘B’ or better. Similarly, the critical movements for each intersection operate

within acceptable limits with LoS scores of ‘D’ or better. No significant queuing was observed during either peak hour.

Background Conditions 2032

Since the 2032 background traffic conditions represent worst-case scenario and the intersection layouts remain unchanged between the 2027 and 2032 background horizon year volumes, only the 2032 scenario was analyzed. Due to lane geometry changes at the Bank / Findlay Creek intersection, signal timings were adjusted and optimized for this scenario. The future projected 2032 background volumes were illustrated in **Figure 18** with projected traffic operation outputs in **Table 16**. The detailed Synchro results can be found in **Appendix H**.

Table 16: 2032 Background Intersection Performance

Intersection	Weekday AM Peak (PM Peak)					
	Critical Movement			Intersection		
	LoS	max. v/c or avg. delay (s)	Movement	Delay (s)	LoS	v/c
Bank/Findlay Creek	C(B)	0.71(0.63)	EBL(EBL)	23.2(17.8)	A(A)	0.47(0.53)
Findlay Creek/Kugagami	A(A)	9.5(9.4)	SB(SB)	0.8(1.0)	A(A)	-
Findlay Creek/Trident Mews	A(A)	9.5(9.7)	NB(NB)	0.5(0.9)	A(A)	-

Note: Analysis of signalized intersections assumes a PHF of 1.00 and a saturation flow rate of 1800 veh/h/lane.

Table 16 illustrates that the intersections within the study area continue to function within acceptable operational standards, with improvements to the Bank/Findlay Creek intersection compared to existing conditions. Most critical movements experience negligible variations, except for the eastbound left movement at Bank/Findlay Creek, which has improved to a LoS ‘C’ and LoS ‘B’ in the morning and afternoon peak hours respectively. This can be attributed to the intersection configuration changes associated with the Bank Street reconstruction and widening such as the additional eastbound left-turn lane, southbound through-lane and northbound through-lane.

Future Conditions 2032 – Full Buildout + 5 Years

The 2032 future conditions represent the most critical of the two horizon year scenarios, therefore only the 2032 scenario was analyzed. Signal timings were optimized for this scenario. The future projected 2032 volumes were illustrated in **Figure 20** with projected traffic operation outputs in **Table 17**. The detailed Synchro results can be found in **Appendix H**.

Table 17: 2032 Full Build-out Intersection Performance

Intersection	Weekday AM Peak (PM Peak)					
	Critical Movement			Intersection		
	LoS	max. v/c or avg. delay (s)	Movement	Delay (s)	LoS	v/c
Bank/Findlay Creek	C(C)	0.75(0.73)	WBT(WBT)	26.1(20.1)	A(A)	0.52(0.56)
Findlay Creek/Kugagami-Site Access	B(B)	12.5(13.5)	NB(NB)	2.6(2.4)	A(A)	-
Findlay Creek/Trident Mews	A(A)	9.7(9.8)	NB(NB)	0.6(0.9)	A(A)	-

Note: Analysis of signalized intersections assumes a PHF of 1.00 and a saturation flow rate of 1800 veh/h/lane.

Table 17 illustrates that the study area intersections continue to function within overall acceptable standards, operating at a LoS ‘A’ or better. All critical movements continue to operate within acceptable standards with LOS ‘C’ or better.

5.0 FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

Based on the results summarized herein the following findings and recommendations are provided:

Existing Conditions

- The site is currently a vacant lot bounded by Findlay Creek Dr in the north and Trident Mews to the east.
- Local route #93 is the only bus route operating along the development boundary streets with the nearest stop along the development frontage on Findlay Creek. Limited-service route #304 operates along Bank St, approximately 450m from the site.
- Bank St widening and reconstruction is currently on-going and will include a full reconstruction of the Bank/Findlay Creek intersection once completed.
- All study area intersections currently operate at a LoS 'B' or better, with critical movements operating at a LoS 'D' or better.

Proposed Development

- CECCE school board is proposing a new elementary school and daycare with an anticipated capacity for 595 students, 50 children and 50 staff.
- The plan proposes adding 18 new permanent classrooms, space for 8 future portable classrooms and a 303m² day care.
- A custom trip generation and mode shares were developed based on the ITE Trip Generation Manual and first principles, using projected site statistics such as student population and staff population to inform the applied mode shares. The analysis forecasted a total increase of up to 208 'new' vehicle trips consisting of up to 68 staff trips and up to 140 parent pick-up/drop-off trips during the peak hours. Furthermore, an increase of up to 282 school bus trips and 130 active transportation trips during the peak hours are forecasted.
- The site meets the parking bylaw requirements, providing the minimum required vehicle parking and exceeding minimum bike parking requirements by approximately 20%.
- The site proposes one new two-way access that functions as the new southern leg of the Findlay Creek/Kugagami intersection.
- The site proposes three new lay-bys along the development's boundary streets, two along Findlay Creek Dr that are 30m and 90m in length and one along Trident Mews that is 20m. The proposed lay-bys require submission of an RMA.
 - The site will provide space for up to 9 Type C school buses within the proposed lay-bys along Findlay Creek Dr. The forecasted 280 student trips using school buses are within the maximum available capacity of 648 students.
 - The lay-by on Trident Mews will provide three short-term spaces that are aimed at serving delivery vehicles and short-term parent pick-up/drop-off.
- The designated parent pick-up/drop-off location is proposed along the southern boundary of the site circulation. The west side of Trident Mews is also anticipated to experience parent pick-up/drop-off activity.
- The site provides notable TDM measures and infrastructure for a school. Specifically, the site provides all students with free school bus transportation to encourage them to arrive by bus.

Future Conditions

- Other area developments were acknowledged within this report and layered onto background volumes.
- The Bank Street reconstruction and widening was assumed to be fully constructed by the developments 2027 horizon year.
- The MMLoS road segment analysis surrounding the proposed site showed that all of the pedestrian and transit level of service targets were either met or not applicable due to the lack of pedestrian facilities or transit routes along some segments. All bicycle targets were not met primarily due to the shared operating space of cyclists and auto-vehicles.

- The MMLOS intersections (for Bank St/Findlay Creek Dr) analysis showed that the bicycle and transit level of service targets were met. The added number of vehicle lanes increases the crossing distances for pedestrians resulting in the pedestrian scores falling below targets.
- Study area intersections during the full build-out 2032 horizon year operate at an overall LoS 'A' or better, with critical movements operating at LoS 'C' or better.

Based on the preceding report, the proposed elementary school and daycare are recommended from a transportation perspective.

Prepared By:

Reviewed By:

Jordan Terada, E.I.T.
Transportation Analyst

Arman Matti, P.Eng.
Senior Transportation Engineer

DRAFT

Appendix A:

TIA Screening Form and Site Plan

City of Ottawa 2017 TIA Guidelines

Date

August 16 2025

TIA Screening Form

Project

New Leirtrim Catholic HS

Project Number

10029

Results of Screening	Yes/No
Development Satisfies the Trip Generation Trigger	Yes
Development Satisfies the Location Trigger	No
Development Satisfies the Safety Trigger	No

Module 1.1 - Description of Proposed Development

Municipal Address	465 Trident Mews
Description of location	Currently vacant land surrounded by residential
Land Use	Proposed elementary school
Development Size	Capacity for approximately 600 students
Number of Accesses and Locations	Three; a full movement making 4th leg at Kugagami/Findley Creek; one 25m east of that (outbound only); a third minor loading access only 35m west of Trident Mews/Findlay Creek.
Development Phasing	Main phase with a potential portable extension.
Buildout Year	2027
Sketch Plan / Site Plan	See attached

Module 1.2 - Trip Generation Trigger

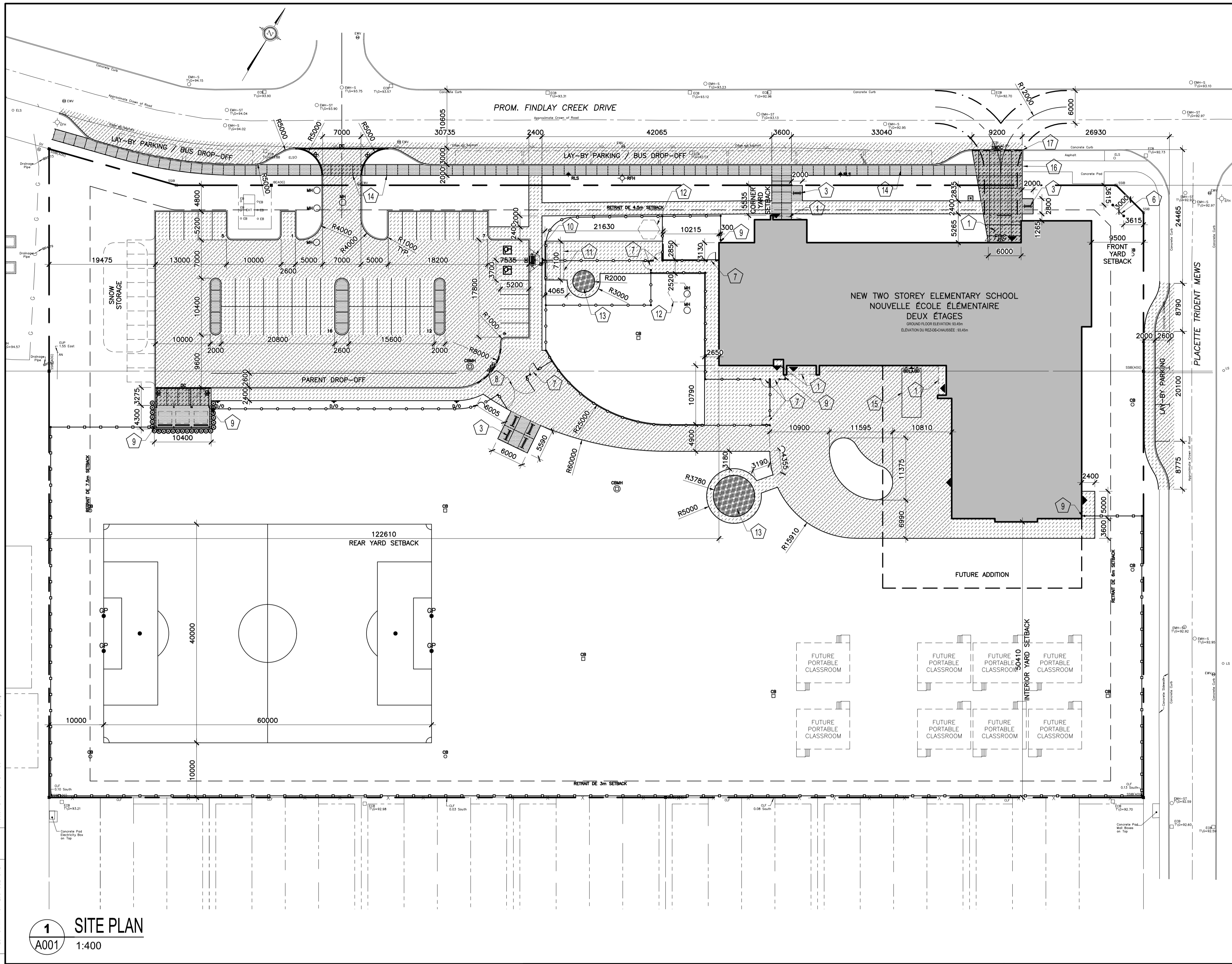
Land Use Type	Other	(School)
Development Size	600	People Trips
Trip Generation Trigger Met?	Yes	

Module 1.3 - Location Triggers

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

Module 1.4 - Safety Triggers

Posted Speed Limit on any boundary road	<80	km/h
Are there any horizontal/vertical curvatures on a boundary street limits sight lines at a proposed driveway?	No	
A proposed driveway is within the area of influence of an adjacent traffic signal or roundabout (i.e. within 300 m of intersection in rural conditions, or within 150 m of intersection in urban/ suburban conditions) or within auxiliary lanes of an intersection?	No	Bank/Findlay Creek approximately 165m away.
Does the proposed driveway make use of an existing median break that serves an existing site?	No	
Is there is a documented history of traffic operations or safety concerns on the boundary streets within 500 m of the development?	No	
Does the development include a drive-thru facility?	No	
Safety Trigger Met?	No	



SITE DATA

SITE AREA	22,498.5 m ²
FOOTPRINT	
NEW SCHOOL FOOTPRINT	2,308.8 m ²
PORTABLES FOOTPRINT	571.0 m ²
SCHOOL W/ PORTABLES FOOTPRINT	2,879.8 m ²
GROSS FLOOR AREA (AS PER CITY OF OTTAWA ZONING BY-LAW DEFINITION)	
NEW SCHOOL G.F.A. (INCLUDING DAYCARE)	2,290.5 m ²
PORTABLES GROSS FLOOR AREA	492.0 m ²
SCHOOL W/ PORTABLES GROSS FLOOR AREA	2,782.5 m ²

TOPOGRAPHICAL AND SURVEY INFORMATION PROVIDED BY ANNIS OSULLIVAN VOLLEBECK LTD.
 File: 25548-25 Bk258 PL1659 & Bk224 PL1624 O F
 LEGAL DESCRIPTION: BLOCK 258; REGISTERED PLAN 4M-1659; BLOCK 224; REGISTERED PLAN 4M-1624, CITY OF OTTAWA
 P.I.N.: 04345-1624, 04345-1114

CITY OF OTTAWA ZONING

INSTITUTIONAL ZONE I1A (AREA D ON SCHEDULE 1)

CRITERIA	REQUIREMENT	PROVIDED
LOT WIDTH	MIN. 15 m	112.0 m
LOT AREA	MIN. 400 m ²	22,498.6 m ²
FRONT YARD SETBACK	MIN. 8.0 m	8.50 m
REAR YARD SETBACK	MIN. 7.5 m	122.61 m
INTERIOR SIDE YARD SETBACK	MIN. 3.0 m	50.41 m
CORNER SIDE YARD SETBACK	MIN. 4.5 m	5.53 m
HEIGHT OF BUILDING	MAX. 15 m	11.0 m
LANDSCAPING PROVISION FOR PARKING LOTS	MIN. 15%	25.2%

PARKING CALCULATIONS

MOTOR VEHICLE PARKING (TABLE 101)

USE	No. CLASS	SPACES PER (includes portables)	SPACES REQ'D
ELEMENTARY SCHOOL	18	1.5/classroom	27
FUTURE PORTABLE CLASSROOMS	8		12
DAYCARE	302.6 m ²	2/ 100 m ²	7
TOTAL REQUIRED PARKING SPACES			46 SPACES
TOTAL REQUIRED ACCESSIBLE PARKING SPACES			1 SPACE

PROVIDED: 45 SPACES
 TYPE A ACCESSIBLE PARKING SPACES @ 5.2 m D X 3.7 m W: 2 SPACE
TOTAL SPACES PROVIDED: 47 SPACES

BICYCLE PARKING (TABLE 111A)

USE	G.F.A.	SPACES PER	SPACES REQ'D
SCHOOL	2,560.2 m ²	1 per 100 m ² of GFA	26 SPACES
DAYCARE	302.6 m ²	1 per 250 m ² of GFA	2 SPACES
PORTABLES	492 m ²	1 per 100 m ² of GFA	5 SPACES
TOTAL REQUIRED BICYCLE PARKING SPACES			33 SPACES
TOTAL BICYCLE SPACES PROVIDED			42 SPACES

LOADING SPACES

USE	GROSS AREA	TABLE 113A	SPACES REQ'D
SCHOOL	2,560.2 m ²	COLUMN V	1
TOTAL REQUIRED PARKING SPACES			1 SPACE
TOTAL SPACES PROVIDED (3.5x7.0m)			1 SPACE

LEGEND

- Barrier Free Parking
- Building Entrance/Exit
- Curb
- DC: Depressed Curb
- SMDC: Semi-Mountable Depressed Curb
- New Vinyl Coated Chain Link Fence, 1220mm High
- New Vinyl Coated Chain Link Fence, 1830mm High
- Road Center Line
- Fire Route
- Set Back Line
- Property Lot Line

LEGEND

- FR: Fire Route Sign
- BF: Barrier-Free Parking Sign, See 10/A004
- D/O: Drop-Off Sign
- OW: One Way Sign
- LA: Loading Area Sign
- LS: New Light Standard, See Detail 7/A004
- RLS: Relocated Existing Light Standard
- IB/SIB/SSIB: Existing Iron Bar (Refer to Survey)
- FDC: New Fire Department Connection
- FH: New Fire Hydrant
- RFH: Relocated Existing Fire Hydrant
- MH: New Man Hole (Refer to Civil)
- CB: New Catch Basin (Refer to Civil)
- FP: New Flag Pole, See Detail 8/A004
- BD: New Bollard, See Detail 9/A004
- Existing Trees to Remain (Refer to Landscape Documents)
- New Trees (Refer to Landscape Documents)
- EFH: Existing Fire Hydrant to Remain
- UP: Existing Utility Pole to Remain
- AN: Existing Guy Wire Anchor to Remain
- CLF: Existing Chain Link Fence to Remain
- ECB: Existing Catch Basin to Remain
- EMH: Existing Manhole to Remain
- EB: Existing Bollard to Remain
- EHT: Existing Hydro Transformer to Remain
- X: Existing Fence to Remain

ISSUE NO.	REV. NO.	DATE	ISSUE
0	1	2025/11/30	ISSUED FOR COORDINATION
1	1	2025/06/05	ISSUED FOR SITE PLAN CONSTRUCTION APPROACH
1	0	2025/06/02	ISSUED FOR SITE PLAN PRE-CONSULTATION 1

LES IDÉES, CONCEPTS, DISPOSITIONS ET PLANS MONTRÉS OU REPRÉSENTÉS PAR CE DESSIN APPARTIENNENT À EDWARD J. CUHACI AND ASSOCIATES ARCHITECTS INC. ET ONT ÉTÉ CRÉÉS ET DÉVELOPPÉS POUR ÊTRE UTILISÉS DANS LE CADRE DU PRÉSENT PROJET. ILS NE DOIVENT PAS ÊTRE UTILISÉS À D'AUTRES FINS NI COMMUNIQUÉS À QUI QUE CE SOIT SANS LA PERMISSION ÉCRITE DE EDWARD J. CUHACI AND ASSOCIATES ARCHITECTS INC.

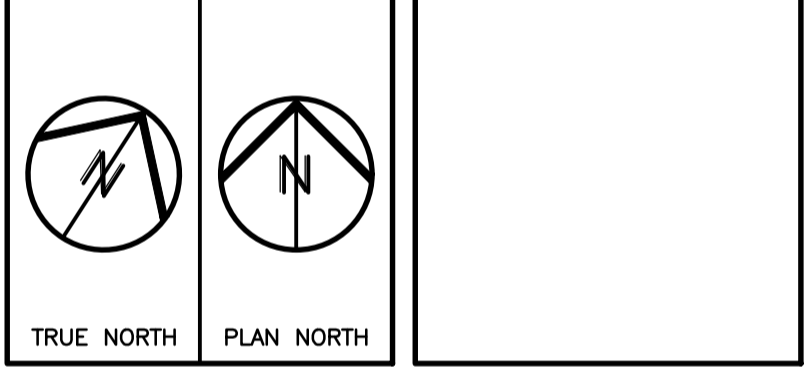
L'ARCHITECTE DÉCLINE TOUTE RESPONSABILITÉ DÉCOULANT DE PROBLÈMES FAISANT SUITE AU NON-RESPECT DES PLANS ET DEVIS OU DE L'INTENTION DU CONCEPT QU'ILS TRANSMETTENT OU DE TOUTS PROBLÈMES POUVANT RÉSULTER DU DÉFAUT DE TIERS D'OBTENIR OU DE SUIVRE LES INSTRUCTIONS DE L'ARCHITECTE RELATIVEMENT AUX ERREURS, OMISSIONS, INCOHÉRENCES, AMBIGUITÉS OU CONTRADICTIONS ALLÉGUÉES.

L'ENTREPRENEUR DOIT VÉRIFIER TOUTES LES DIMENSIONS SUR PLACE ET INFORMER L'ARCHITECTE DE TOUT ÉCART AVANT LE DÉBUT DES TRAVAUX. NE PAS MESURER LES DESSINS À L'ÉCHELLE.

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CONTRACTOR TO VERIFY ALL DIMENSIONS AND NOTIFY THE ARCHITECT OF ANY DISCREPANCIES BEFORE WORK COMMENCES. DO NOT SCALE DRAWINGS



1 SITE PLAN
A001 1:400

SITE PLAN NOTES

- CANOPY OR 2nd FLOOR ABOVE.
- ALIGN WITH BUILDING WALLS.
- BICYCLE RACK, SEE DETAILS ON DRAWING A004.
- EXISTING TRANSFORMER/SWITCHGEAR.
- GAS STATION CONCRETE PAD C/W CHAIN LINK FENCE AND TOP AS PER ENBRIDGE STANDARDS. COORDINATE LOCATION AND SIZE WITH MECHANICAL DRAWINGS AND ENBRIDGE.
- SCHOOL SIGN.
- NEW 1500mm WIDE GATE IN CHAIN LINK FENCE, SEE DETAIL 7/A003.
- NEW 6000mm WIDE DOUBLE GATE IN CHAIN LINK FENCE, C/W FOOTBALL REST, SEE DETAIL 7/A003.
- CHAIN LINK FENCE CANTILEVERED END SECTION, SEE DETAIL 8/A003.
- CURB RAMP WITH FLARED SIDES AND DETECTABLE HAZARD INDICATOR, CONSTRUCTED TO CITY OF OTTAWA STANDARDS, SEE DETAIL 7/A004.
- FUTURE STORAGE SHED N.I.C.
- FUTURE SAND BOX N.I.C.
- ENGINEERED WOOD FIBER PLAY AREA, SEE DETAIL 6/A004.
- TYPICAL CONCRETE PAVING SAW-CUT JOINT AT MAXIMUM 2400mm OR AS SHOWN ON DRAWINGS.
- LOADING AREA, 3.5m x 9.0m
- TIE NEW SIDEWALK TO EXISTING SIDEWALK.
- TIE NEW CONCRETE CURB TO EXISTING CONCRETE CURB.

LEGEND

- NEW TWO STOREY SECONDARY SCHOOL
- UNIT PAVERS WITH HEAVY DUTY BASE, SEE SPECIFICATIONS
- CONCRETE WALK
- CONCRETE WALK WITH HEAVY DUTY BASE
- TYPE 1 ASPHALT: HEAVY DUTY
- TYPE 2 ASPHALT: LIGHT DUTY
- NEW SEED AND TOPSOIL (REFER TO LANDSCAPE DRAWING)
- NEW SOD AND TOPSOIL (REFER TO LANDSCAPE DRAWING)
- MULCH (REFER TO LANDSCAPE DRAWING)
- ENGINEERED WOOD FIBER

EDWARD J. CUHACI & ASSOCIATES ARCHITECTS Inc.
 171 Slater St., Suite 100, Ottawa, Ontario, K1P 5H7
 Fax: (613) 236-1944 Telephone: (613) 236-7135 E-mail: info@cuhaci.com

PROJECT/TITRE DU PROJET
ÉCOLE ÉLÉMENTAIRE CATHOLIQUE LEITRIM
 3290 FINDLAY CREEK DRIVE
 OTTAWA, ONTARIO, K1T 0T2

CECCE
 4000 LABELLE STREET
 OTTAWA, ON, K1J 1A1

DRAWING/TITRE DU DESSIN
SITE PLAN

SCALE ÉCHELLE	1:500	PROJ. No	2527	ISSUE No	REV. No
DRAWN BY DESSINÉ PAR	S.R.	DRAWING/DESSIN			
CHECKED BY VÉRIFIÉ PAR	Z.J.	A001			
DATE	JUNE 2025	FICHER ACAD FILE: 2527-A001SPC.dwg			

Appendix B:

Existing Peak Hour Volumes

Turning Movement Count - Study Results

BANK ST @ FINDLAY CREEK DR

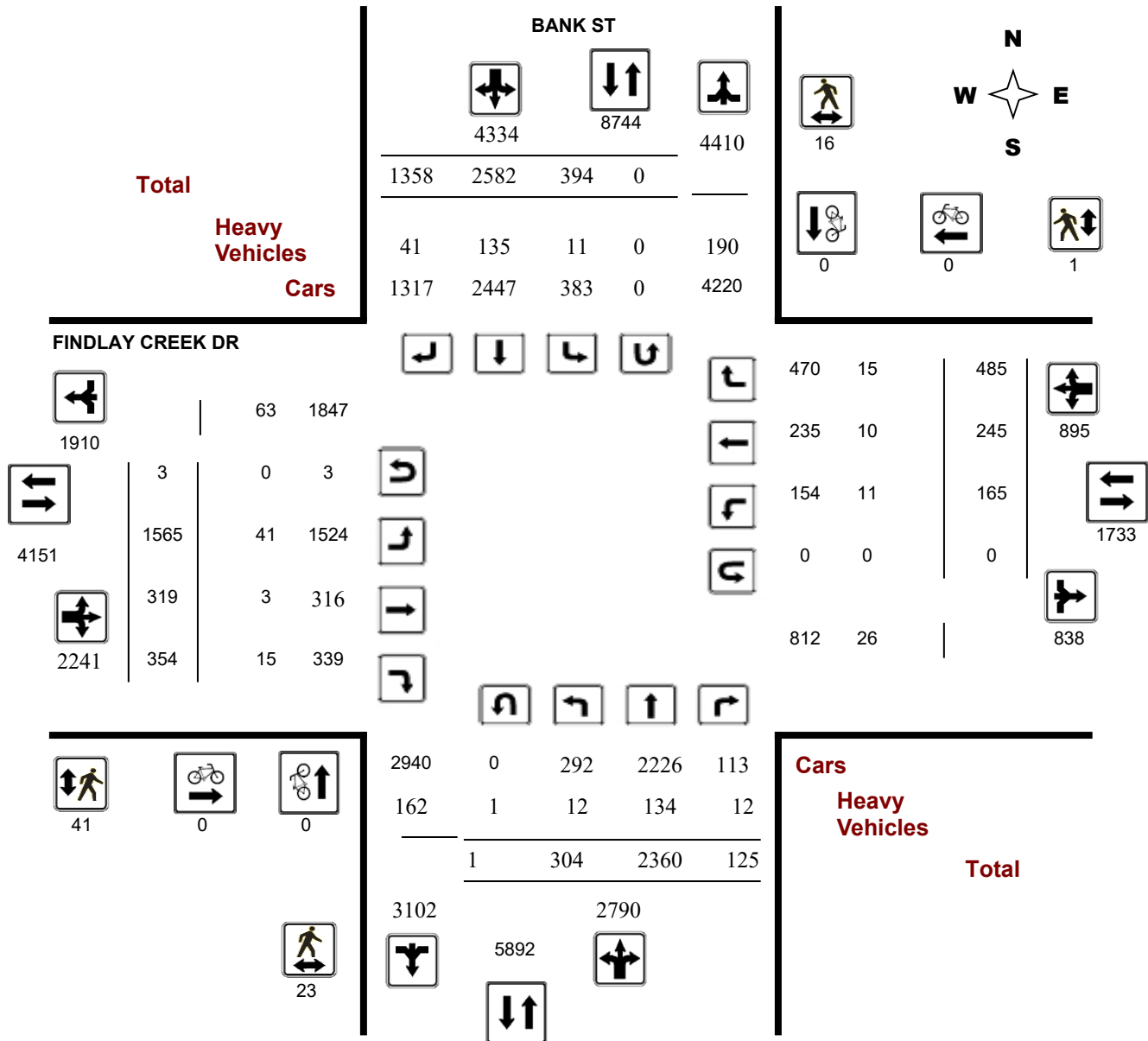
Survey Date: Thursday, February 23, 2023

WO No: 40803

Start Time: 07:00

Device: Miovision

Full Study Diagram



Turning Movement Count - Study Results

BANK ST @ FINDLAY CREEK DR

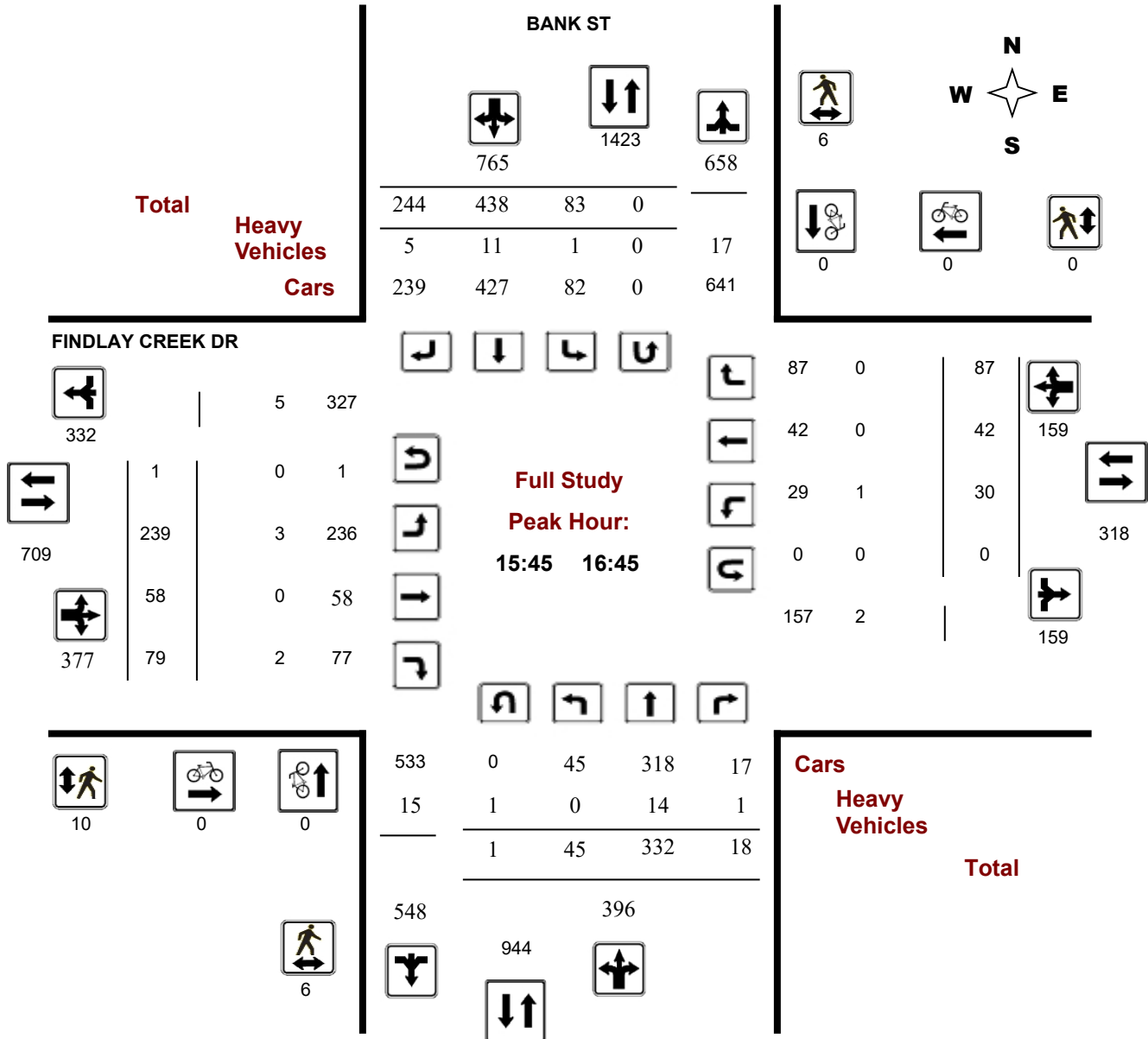
Survey Date: Thursday, February 23, 2023

WO No: 40803

Start Time: 07:00

Device: Miovision

Full Study Peak Hour Diagram



Turning Movement Count - Study Results

BANK ST @ FINDLAY CREEK DR

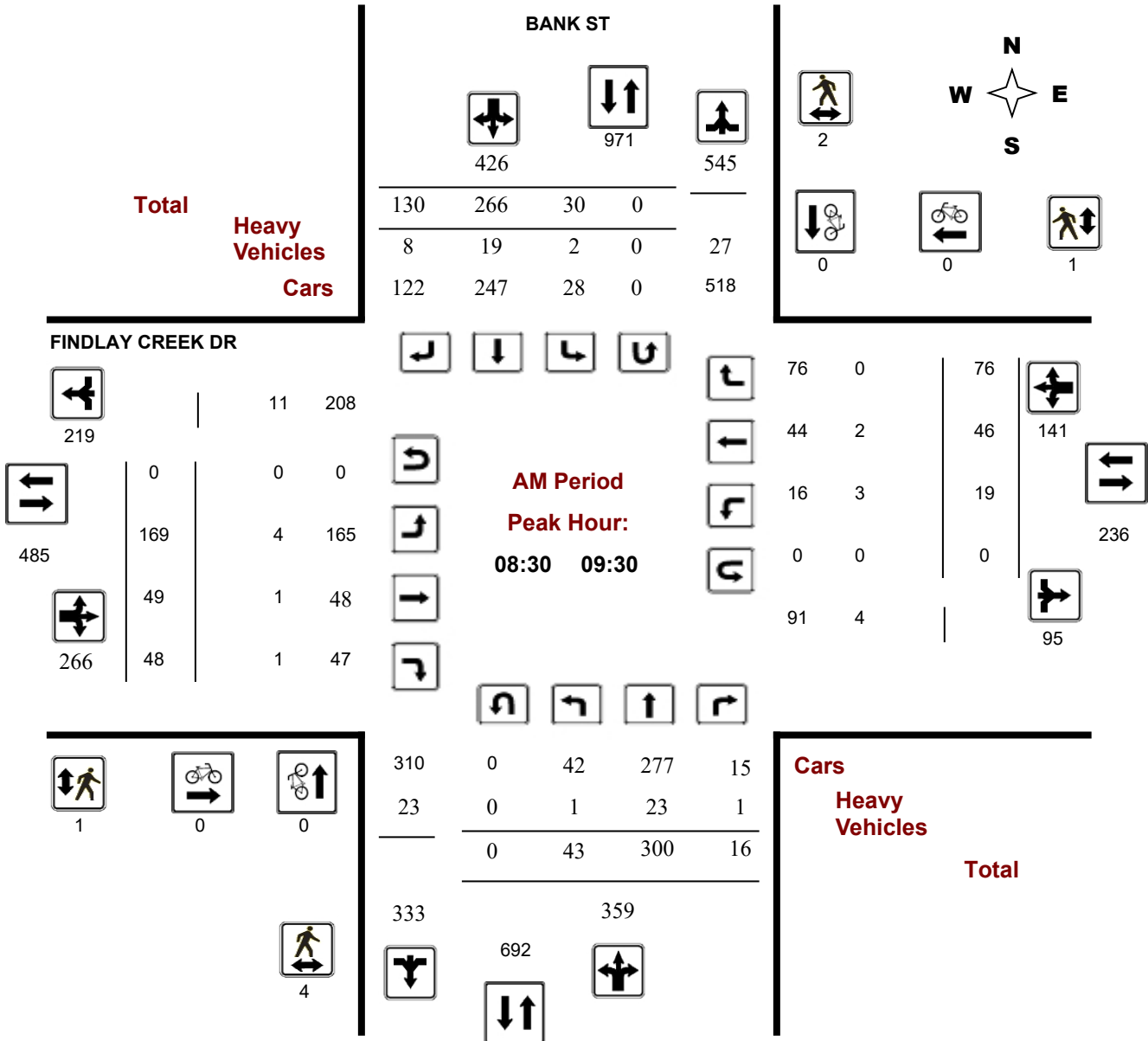
Survey Date: Thursday, February 23, 2023

WO No: 40803

Start Time: 07:00

Device: Miovision

AM Period Peak Hour Diagram



Turning Movement Count - Study Results

BANK ST @ FINDLAY CREEK DR

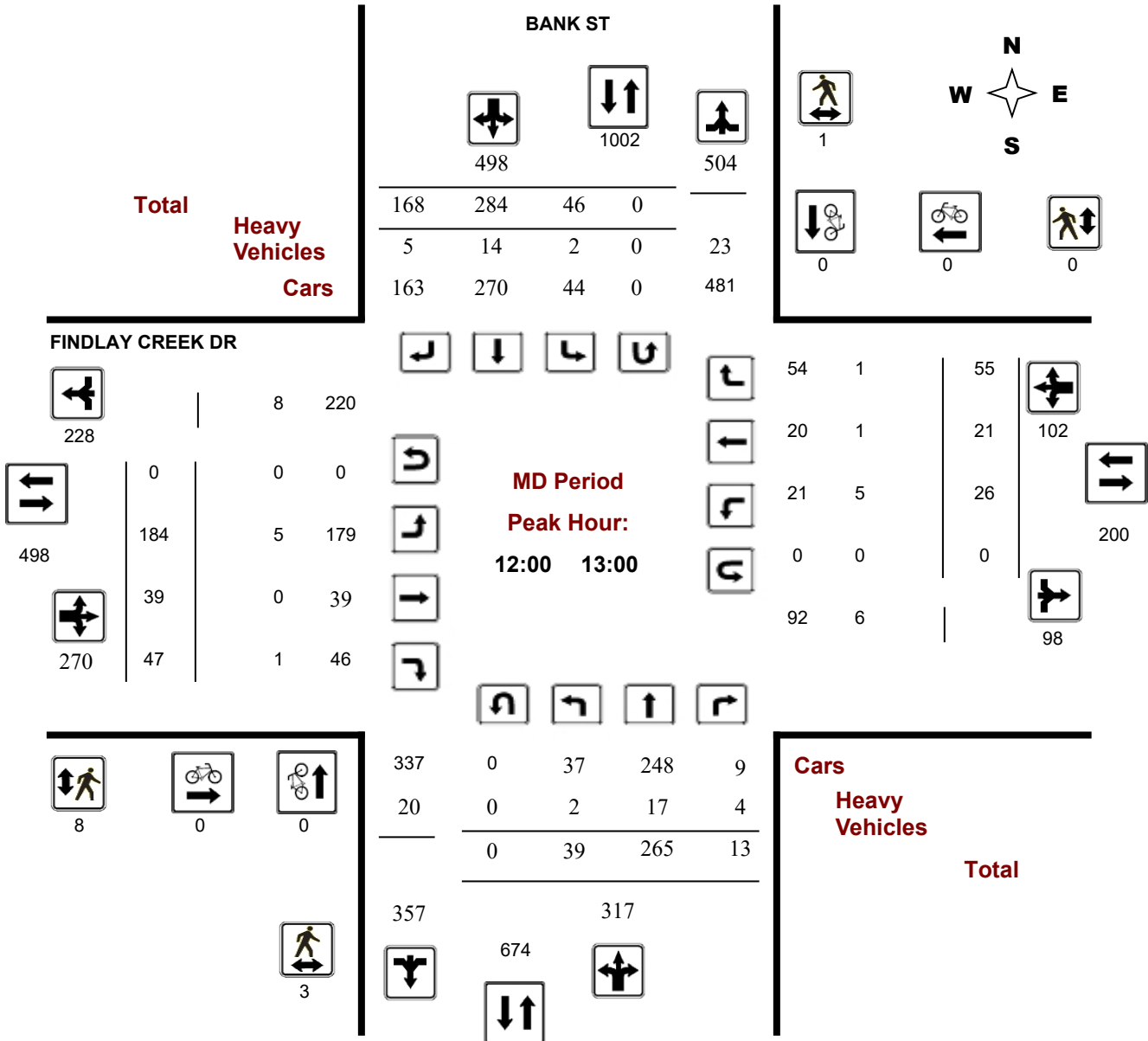
Survey Date: Thursday, February 23, 2023

WO No: 40803

Start Time: 07:00

Device: Miovision

MD Period Peak Hour Diagram



Turning Movement Count - Study Results

BANK ST @ FINDLAY CREEK DR

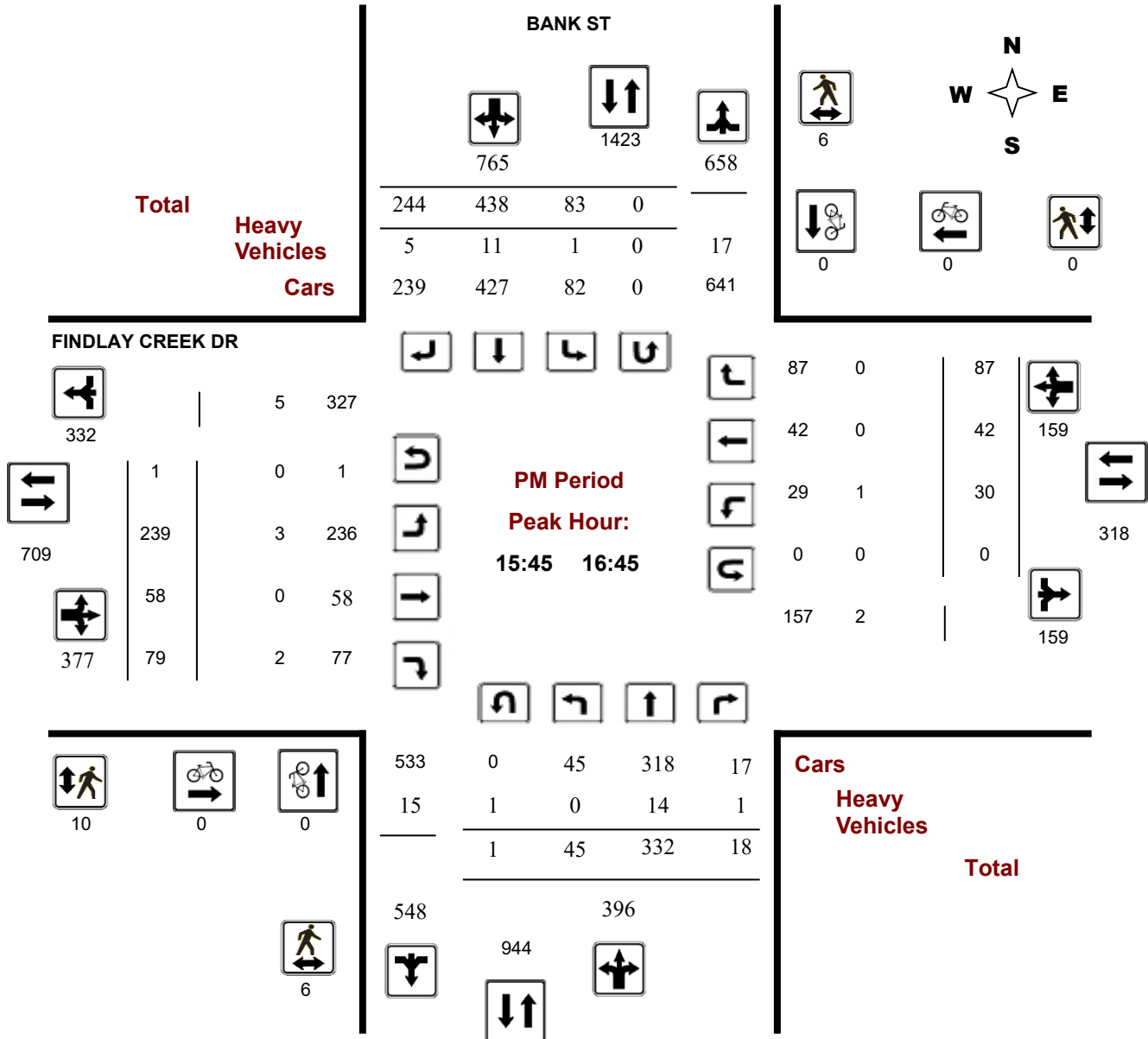
Survey Date: Thursday, February 23, 2023

WO No: 40803

Start Time: 07:00

Device: Miovision

PM Period Peak Hour Diagram





Transportation Services - Traffic Services

Turning Movement Count - Study Results

BANK ST @ FINDLAY CREEK DR

Survey Date: Thursday, February 23, 2023

WO No: 40803

Start Time: 07:00

Device: Miovision

Full Study Summary (8 HR Standard)

Survey Date: Thursday, February 23, 2023

Total Observed U-Turns

AADT Factor

Northbound: 1 Southbound: 0
 Eastbound: 3 Westbound: 0
 .90

Period	BANK ST										FINDLAY CREEK DR										Grand Total
	Northbound					Southbound					Eastbound					Westbound					
	LT	ST	RT	NB TOT	STR TOT	LT	ST	RT	SB TOT	STR TOT	LT	ST	RT	EB TOT	STR TOT	LT	ST	RT	WB TOT	STR TOT	
07:00 08:00	17	341	25	383	693	33	229	48	310	712	219	28	34	281	380	11	21	67	99	380	1073
08:00 09:00	36	315	12	363	787	31	274	119	424	801	193	25	43	261	380	20	27	72	119	380	1167
09:00 10:00	33	271	17	321	723	33	244	125	402	801	172	53	38	263	377	14	43	57	114	377	1100
11:30 12:30	33	262	13	308	801	47	295	151	493	801	165	34	39	238	336	18	26	54	98	336	1137
12:30 13:30	42	240	11	293	787	42	273	179	494	787	183	38	47	268	357	31	20	38	89	357	1144
15:00 16:00	55	295	21	371	1123	55	435	262	752	1123	197	46	52	295	424	33	36	60	129	424	1547
16:00 17:00	46	325	19	390	1163	80	441	252	773	1163	249	55	64	368	520	28	37	87	152	520	1683
17:00 18:00	42	311	7	360	1046	73	391	222	686	1046	187	40	37	264	359	10	35	50	95	359	1405
Sub Total	304	2360	125	2789	7123	394	2582	1358	4334	7123	1565	319	354	2238	3133	165	245	485	895	3133	10256
U Turns				1	1				0	1				3	3				0	3	4
Total	304	2360	125	2790	7124	394	2582	1358	4334	7124	1565	319	354	2241	3136	165	245	485	895	3136	10260

Note: These values are calculated by multiplying the totals by the appropriate expansion factor. **1.39**

AVG 12Hr 381 2952 157 3490 493 4231 2226 5422 8912 1958 399 443 2804 206 307 607 1120 3923 12835

Note: These volumes are calculated by multiplying the Equivalent 12 hr. totals by the AADT factor. **.90**

AVG 24Hr 499 3867 206 4572 646 5543 2916 7103 11675 2565 523 580 3673 270 402 795 1467 5139 16814

Note: These volumes are calculated by multiplying the Average Daily 12 hr. totals by 12 to 24 expansion factor. **1.31**

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



Transportation Services - Traffic Services

Turning Movement Count - Study Results

BANK ST @ FINDLAY CREEK DR

Survey Date: Thursday, February 23, 2023

WO No: 40803

Start Time: 07:00

Device: Miovision

Full Study 15 Minute Increments

BANK ST

FINDLAY CREEK DR

Northbound

Southbound

Eastbound

Westbound

Time Period	LT	ST	RT	N TOT	LT	ST	RT	S TOT	STR TOT	LT	ST	RT	E TOT	LT	ST	RT	W TOT	STR TOT	Grand Total
07:00-07:15	3	60	6	69	6	55	13	74	143	45	7	6	58	2	4	10	16	74	217
07:15-07:30	5	92	7	104	12	48	17	77	181	48	5	9	62	4	8	18	30	92	273
07:30-07:45	3	85	6	94	8	64	10	82	176	61	6	8	75	2	3	23	28	103	279
17:15-17:30	7	65	2	74	17	95	59	171	245	48	7	8	63	3	7	15	25	88	333
17:45-18:00	12	56	1	69	21	93	50	164	233	45	6	16	67	3	8	7	18	85	318
07:45-08:00	6	104	6	116	7	62	8	77	193	65	10	11	86	3	6	16	25	111	304
08:00-08:15	6	75	2	83	7	71	28	106	189	54	7	12	73	1	8	18	27	100	289
08:15-08:30	7	74	4	85	10	60	25	95	180	57	3	6	66	6	3	13	22	88	268
08:30-08:45	8	82	3	93	7	74	30	111	204	39	3	10	52	6	5	22	33	85	289
08:45-09:00	15	84	3	102	7	69	36	112	214	43	12	15	70	7	11	19	37	107	321
09:00-09:15	13	69	2	84	6	62	38	106	190	46	17	13	76	3	19	19	41	117	307
09:15-09:30	7	65	8	80	10	61	26	97	177	41	17	10	68	3	11	16	30	98	275
09:30-09:45	9	71	4	84	6	66	26	98	182	39	11	8	58	7	6	5	18	76	258
09:45-10:00	4	66	3	73	11	55	35	101	174	46	8	7	62	1	7	17	25	87	261
11:30-11:45	11	53	5	69	10	69	36	115	184	45	9	6	60	3	4	13	20	80	264
11:45-12:00	6	64	1	71	13	86	39	138	209	34	8	7	49	4	8	14	26	75	284
12:00-12:15	8	87	6	101	10	75	42	127	228	43	7	15	65	6	7	14	27	92	320
12:15-12:30	8	58	1	67	14	65	34	113	180	43	10	11	64	5	7	13	25	89	269
12:30-12:45	12	73	5	90	8	72	46	126	216	47	14	7	68	5	4	21	30	98	314
12:45-13:00	11	47	1	59	14	72	46	132	191	51	8	14	73	10	3	7	20	93	284
13:00-13:15	8	59	3	70	8	64	50	122	192	53	8	11	72	10	7	8	25	97	289
13:15-13:30	11	61	2	74	12	65	37	114	188	32	8	15	55	6	6	2	14	69	257
15:00-15:15	13	62	5	80	10	85	55	150	230	48	7	5	60	4	5	8	17	77	307
15:15-15:30	9	71	1	81	13	124	70	207	288	46	8	8	62	11	2	17	30	92	380
15:30-15:45	16	77	11	104	13	105	74	192	296	51	11	9	71	7	15	18	40	111	407
15:45-16:00	17	85	4	107	19	121	63	203	310	52	20	30	102	11	14	17	42	144	454
16:00-16:15	8	99	6	113	19	98	50	167	280	76	14	13	103	8	9	24	41	144	424
16:15-16:30	7	69	2	78	17	113	77	207	285	55	10	19	85	7	9	22	38	123	408
16:45-17:00	18	78	5	101	16	124	71	211	312	62	17	15	95	9	9	17	35	130	442
17:30-17:45	7	96	3	106	17	81	50	148	254	45	12	10	67	1	8	15	24	91	345
17:00-17:15	16	94	1	111	18	122	63	203	314	49	15	3	67	3	12	13	28	95	409
16:30-16:45	13	79	6	98	28	106	54	188	286	56	14	17	87	4	10	24	38	125	411
Total:	304	2360	125	2790	394	2582	1358	4334	7124	1565	319	354	2241	165	245	485	895	3136	10,260

Note: U-Turns are included in Totals, cyclist volume is not included in totals. For cyclist volumes refer to Cyclist Volume report.



Transportation Services - Traffic Services

Turning Movement Count - Study Results

BANK ST @ FINDLAY CREEK DR

Survey Date: Thursday, February 23, 2023

WO No: 40803

Start Time: 07:00

Device: Miovision

Full Study Cyclist Volume

BANK ST

FINDLAY CREEK DR

Time Period	Northbound	Southbound	Street Total	Eastbound	Westbound	Street Total	Grand Total
07:00 07:15	0	0	0	0	0	0	0
07:15 07:30	0	0	0	0	0	0	0
07:30 07:45	0	0	0	0	0	0	0
17:15 17:30	0	0	0	0	0	0	0
17:45 18:00	0	0	0	0	0	0	0
07:45 08:00	0	0	0	0	0	0	0
08:00 08:15	0	0	0	0	0	0	0
08:15 08:30	0	0	0	0	0	0	0
08:30 08:45	0	0	0	0	0	0	0
08:45 09:00	0	0	0	0	0	0	0
09:00 09:15	0	0	0	0	0	0	0
09:15 09:30	0	0	0	0	0	0	0
09:30 09:45	0	0	0	0	0	0	0
09:45 10:00	0	0	0	0	0	0	0
11:30 11:45	0	0	0	0	0	0	0
11:45 12:00	0	0	0	0	0	0	0
12:00 12:15	0	0	0	0	0	0	0
12:15 12:30	0	0	0	0	0	0	0
12:30 12:45	0	0	0	0	0	0	0
12:45 13:00	0	0	0	0	0	0	0
13:00 13:15	0	0	0	0	0	0	0
13:15 13:30	0	0	0	0	0	0	0
15:00 15:15	0	0	0	0	0	0	0
15:15 15:30	0	0	0	0	0	0	0
15:30 15:45	0	0	0	0	0	0	0
15:45 16:00	0	0	0	0	0	0	0
16:00 16:15	0	0	0	0	0	0	0
16:15 16:30	0	0	0	0	0	0	0
16:45 17:00	0	0	0	0	0	0	0
17:30 17:45	0	0	0	0	0	0	0
17:00 17:15	0	0	0	0	0	0	0
16:30 16:45	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0



Transportation Services - Traffic Services

Turning Movement Count - Study Results

BANK ST @ FINDLAY CREEK DR

Survey Date: Thursday, February 23, 2023

WO No: 40803

Start Time: 07:00

Device: Miovision

Full Study Pedestrian Volume

BANK ST

FINDLAY CREEK DR

Time Period	NB Approach (E or W Crossing)	SB Approach (E or W Crossing)	Total	EB Approach (N or S Crossing)	WB Approach (N or S Crossing)	Total	Grand Total
07:00 07:15	1	1	2	4	0	4	6
07:15 07:30	1	0	1	0	0	0	1
07:30 07:45	0	1	1	1	0	1	2
17:15 17:30	1	0	1	2	0	2	3
17:45 18:00	0	0	0	1	0	1	1
07:45 08:00	0	0	0	0	0	0	0
08:00 08:15	0	1	1	1	0	1	2
08:15 08:30	0	0	0	0	0	0	0
08:30 08:45	1	0	1	0	1	1	2
08:45 09:00	1	0	1	0	0	0	1
09:00 09:15	2	1	3	1	0	1	4
09:15 09:30	0	1	1	0	0	0	1
09:30 09:45	0	1	1	1	0	1	2
09:45 10:00	0	0	0	0	0	0	0
11:30 11:45	2	0	2	2	0	2	4
11:45 12:00	1	0	1	0	0	0	1
12:00 12:15	0	0	0	2	0	2	2
12:15 12:30	1	1	2	1	0	1	3
12:30 12:45	1	0	1	4	0	4	5
12:45 13:00	1	0	1	1	0	1	2
13:00 13:15	0	2	2	4	0	4	6
13:15 13:30	1	0	1	0	0	0	1
15:00 15:15	0	0	0	0	0	0	0
15:15 15:30	2	0	2	4	0	4	6
15:30 15:45	0	0	0	0	0	0	0
15:45 16:00	1	0	1	2	0	2	3
16:00 16:15	1	0	1	1	0	1	2
16:15 16:30	3	4	7	4	0	4	11
16:45 17:00	0	1	1	0	0	0	1
17:30 17:45	0	0	0	1	0	1	1
17:00 17:15	1	0	1	1	0	1	2
16:30 16:45	1	2	3	3	0	3	6
Total	23	16	39	41	1	42	81



Transportation Services - Traffic Services

Turning Movement Count - Study Results

BANK ST @ FINDLAY CREEK DR

Survey Date: Thursday, February 23, 2023

WO No: 40803

Start Time: 07:00

Device: Miovision

Full Study Heavy Vehicles

BANK ST

FINDLAY CREEK DR

Northbound

Southbound

Eastbound

Westbound

Time Period	Northbound				Southbound				Eastbound				Westbound				Grand Total		
	LT	ST	RT	N TOT	LT	ST	RT	S TOT	STR TOT	LT	ST	RT	E TOT	LT	ST	RT		W TOT	STR TOT
07:00 07:15	0	7	0	7	0	2	3	5	12	2	0	1	3	0	0	0	0	3	15
07:15 07:30	1	6	0	7	1	3	0	4	11	3	0	0	3	0	0	0	0	3	14
07:30 07:45	0	6	0	6	2	9	2	13	19	2	0	1	3	0	0	0	0	3	22
17:15 17:30	0	1	0	1	0	3	1	4	5	1	0	0	1	0	1	0	1	2	7
17:45 18:00	0	3	0	3	0	1	1	2	5	1	0	0	1	0	1	0	1	2	7
07:45 08:00	1	3	0	4	0	8	0	8	12	4	1	1	6	0	0	0	0	6	18
08:00 08:15	0	3	0	3	0	6	1	7	10	1	0	1	2	0	0	0	0	2	12
08:15 08:30	2	7	0	9	0	7	1	8	17	2	0	0	2	0	0	0	0	2	19
08:30 08:45	1	4	0	5	0	5	2	7	12	2	0	0	2	0	1	0	1	3	15
08:45 09:00	0	10	0	10	1	6	2	9	19	0	1	1	2	0	0	0	0	2	21
09:00 09:15	0	7	0	7	1	5	1	7	14	1	0	0	1	2	0	0	2	3	17
09:15 09:30	0	2	1	3	0	3	3	6	9	1	0	0	1	1	1	0	2	3	12
09:30 09:45	0	4	1	5	0	8	1	9	14	2	0	2	4	0	1	1	2	6	20
09:45 10:00	0	7	1	8	0	1	1	2	10	0	0	2	2	0	1	3	4	6	16
11:30 11:45	1	3	1	5	0	8	2	10	15	3	0	1	4	0	0	0	0	4	19
11:45 12:00	0	6	0	6	1	2	2	5	11	1	0	0	1	1	0	1	2	3	14
12:00 12:15	1	4	1	6	1	5	1	7	13	1	0	1	2	1	0	0	1	3	16
12:15 12:30	1	6	1	8	1	2	2	5	13	0	0	0	0	1	0	0	1	1	14
12:30 12:45	0	5	2	7	0	2	2	4	11	4	0	0	4	0	1	1	2	6	17
12:45 13:00	0	2	0	2	0	5	0	5	7	0	0	0	0	3	0	0	3	3	10
13:00 13:15	0	5	0	5	0	7	2	9	14	1	0	0	1	1	0	2	3	4	18
13:15 13:30	2	3	1	6	0	4	1	5	11	0	0	2	2	0	0	0	0	2	13
15:00 15:15	0	2	1	3	1	3	0	4	7	2	0	0	2	0	0	2	2	4	11
15:15 15:30	1	2	0	3	0	9	2	11	14	0	0	0	0	0	0	1	1	1	15
15:30 15:45	1	3	1	5	0	4	0	4	9	1	0	0	1	0	0	0	0	1	10
15:45 16:00	0	5	0	6	1	3	1	5	11	0	0	1	1	0	0	0	0	1	12
16:00 16:15	0	2	0	2	0	3	1	4	6	2	0	0	2	1	0	0	1	3	9
16:15 16:30	0	2	1	3	0	3	2	5	8	0	0	1	1	0	0	0	0	1	9
16:45 17:00	0	3	0	3	1	1	1	3	6	1	1	0	2	0	1	0	1	3	9
17:30 17:45	0	3	0	3	0	3	2	5	8	0	0	0	0	0	2	3	5	5	13
17:00 17:15	0	3	0	3	0	2	0	2	5	2	0	0	2	0	0	1	1	3	8
16:30 16:45	0	5	0	5	0	2	1	3	8	1	0	0	1	0	0	0	0	1	9
Total: None	12	134	12	159	11	135	41	187	346	41	3	15	59	11	10	15	36	95	441



Transportation Services - Traffic Services

Turning Movement Count - Study Results

BANK ST @ FINDLAY CREEK DR

Survey Date: Thursday, February 23, 2023

WO No: 40803

Start Time: 07:00

Device: Miovision

Full Study 15 Minute U-Turn Total

BANK ST

FINDLAY CREEK DR

Time Period		Northbound U-Turn Total	Southbound U-Turn Total	Eastbound U-Turn Total	Westbound U-Turn Total	Total
07:00	07:15	0	0	0	0	0
07:15	07:30	0	0	0	0	0
07:30	07:45	0	0	0	0	0
17:15	17:30	0	0	0	0	0
17:45	18:00	0	0	0	0	0
07:45	08:00	0	0	0	0	0
08:00	08:15	0	0	0	0	0
08:15	08:30	0	0	0	0	0
08:30	08:45	0	0	0	0	0
08:45	09:00	0	0	0	0	0
09:00	09:15	0	0	0	0	0
09:15	09:30	0	0	0	0	0
09:30	09:45	0	0	0	0	0
09:45	10:00	0	0	1	0	1
11:30	11:45	0	0	0	0	0
11:45	12:00	0	0	0	0	0
12:00	12:15	0	0	0	0	0
12:15	12:30	0	0	0	0	0
12:30	12:45	0	0	0	0	0
12:45	13:00	0	0	0	0	0
13:00	13:15	0	0	0	0	0
13:15	13:30	0	0	0	0	0
15:00	15:15	0	0	0	0	0
15:15	15:30	0	0	0	0	0
15:30	15:45	0	0	0	0	0
15:45	16:00	1	0	0	0	1
16:00	16:15	0	0	0	0	0
16:15	16:30	0	0	1	0	1
16:45	17:00	0	0	1	0	1
17:30	17:45	0	0	0	0	0
17:00	17:15	0	0	0	0	0
16:30	16:45	0	0	0	0	0
Total		1	0	3	0	4

Findlay Creek @ Trident Mews

Leg Direction Start Time	North Southbound					East Westbound					South Northbound					West Eastbound					Total	Hourly		
	Right	Thru	Left	U-Turn	Peds	Right	Thru	Left	U-Turn	Peds	Right	Thru	Left	U-Turn	Peds	Right	Thru	Left	U-Turn	Peds				
	2025-08-12 07:30:00	0	0	0	0	0	0	0	36	2	0	0	0	0	6	0	0	0	7	0			0	0
2025-08-12 07:45:00	0	0	0	0	0	0	0	35	0	0	0	0	0	7	0	0	0	2	5	0	0	0	49	
2025-08-12 08:00:00	0	0	0	0	0	0	0	35	0	0	0	0	0	7	0	0	0	0	7	0	0	0	49	
2025-08-12 08:15:00	0	0	0	0	0	0	0	39	0	0	0	3	0	3	0	0	3	4	0	0	0	0	52	201
2025-08-12 08:30:00	0	0	0	0	0	0	0	39	0	0	0	0	0	3	0	0	2	5	0	0	0	0	49	199
2025-08-12 08:45:00	0	0	0	0	0	0	0	39	0	0	0	1	0	3	0	0	0	7	0	0	0	0	50	200
2025-08-12 09:00:00	0	0	0	0	0	0	0	41	0	0	0	1	0	1	0	0	5	2	0	0	0	0	50	201
2025-08-12 09:15:00	0	0	0	0	0	0	0	39	1	0	0	0	0	3	0	0	3	4	0	0	0	0	50	199
	0	0	0	0	0	0	0	42	0	0	0	0	0	0	0	0	0	7	0	0	0	0		
2025-08-12 03:30:00	0	0	0	0	0	0	0	41	1	0	0	1	0	1	0	0	1	6	0	0	0	0		
2025-08-12 03:45:00	0	0	0	0	0	0	0	35	2	0	0	1	0	7	0	0	2	5	0	0	0	0	52	
2025-08-12 04:00:00	0	0	0	0	0	0	0	39	0	0	0	2	0	3	0	0	3	4	0	0	0	0	51	
2025-08-12 04:15:00	0	0	0	0	0	0	0	29	0	0	0	0	0	13	0	0	4	3	0	0	0	0	49	
2025-08-12 04:30:00	0	0	0	0	0	0	0	37	0	0	0	0	0	5	0	1	0	7	0	0	0	0	50	202
2025-08-12 04:45:00	0	0	0	0	0	0	0	39	1	0	0	2	0	3	0	0	6	1	0	0	0	0	52	202
2025-08-12 05:00:00	0	0	0	0	0	0	0	39	3	0	0	0	0	3	0	0	6	1	0	0	0	0	52	203
2025-08-12 05:15:00	0	0	0	0	0	0	0	36	1	0	0	0	0	6	0	0	7	0	0	0	0	0	50	204

Turning Movement Count - Study Results

FINDLAY CREEK DR @ BANK ST

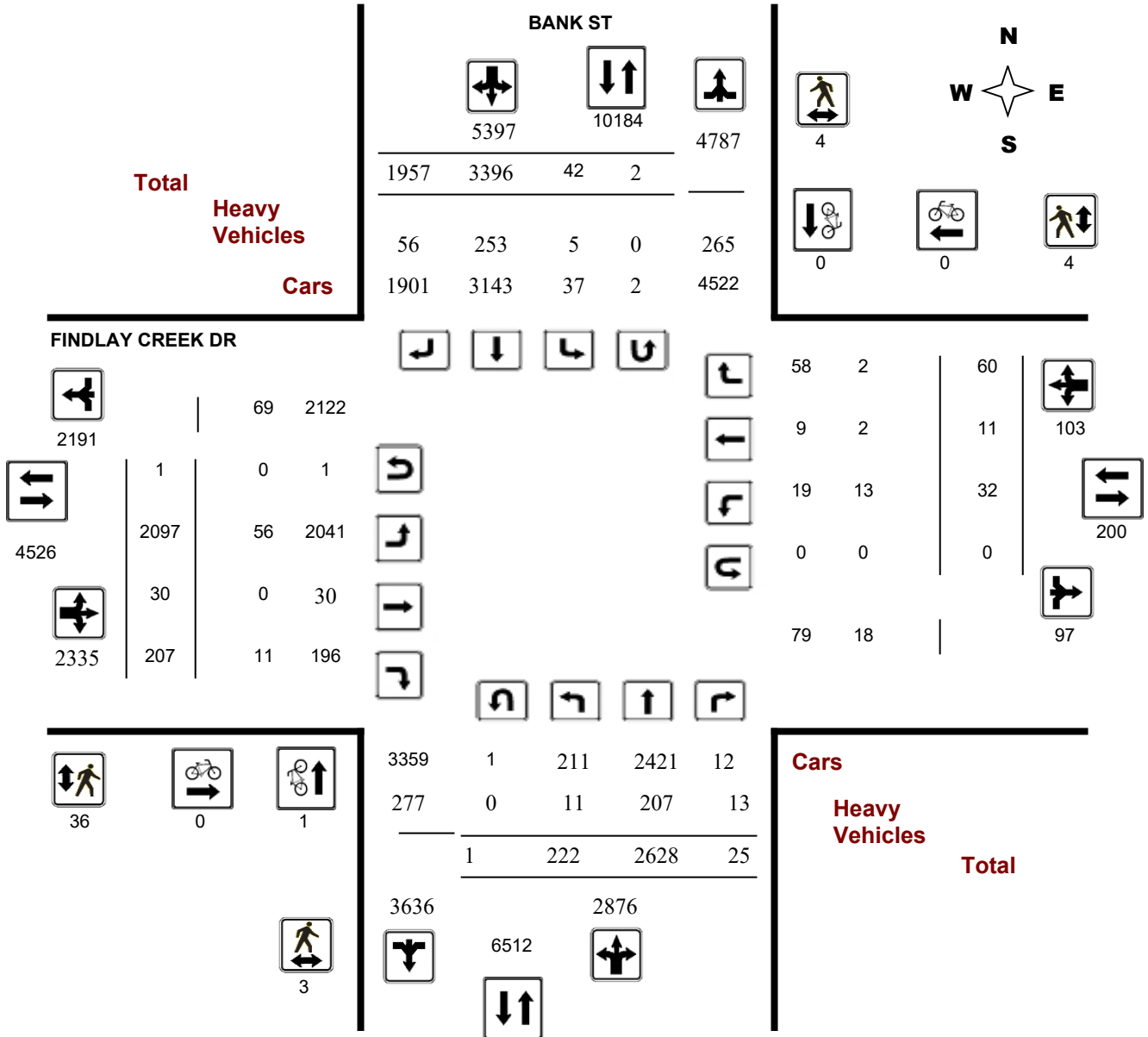
Survey Date: Wednesday, December 04, 2019

WO No: 39205

Start Time: 07:00

Device: Miovision

Full Study Diagram



Turning Movement Count - Study Results

FINDLAY CREEK DR @ BANK ST

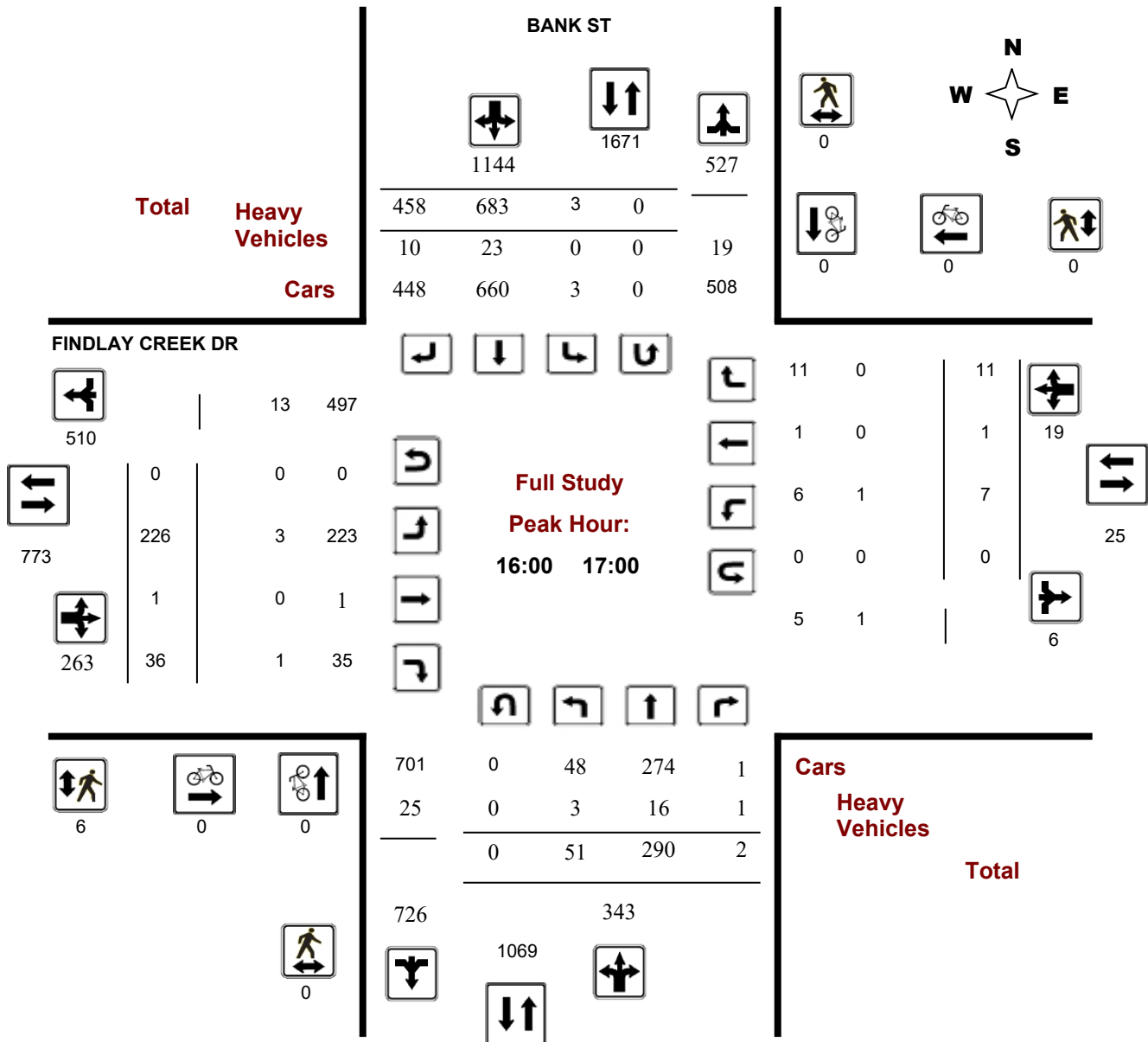
Survey Date: Wednesday, December 04, 2019

WO No: 39205

Start Time: 07:00

Device: Miovision

Full Study Peak Hour Diagram



Turning Movement Count - Peak Hour Diagram

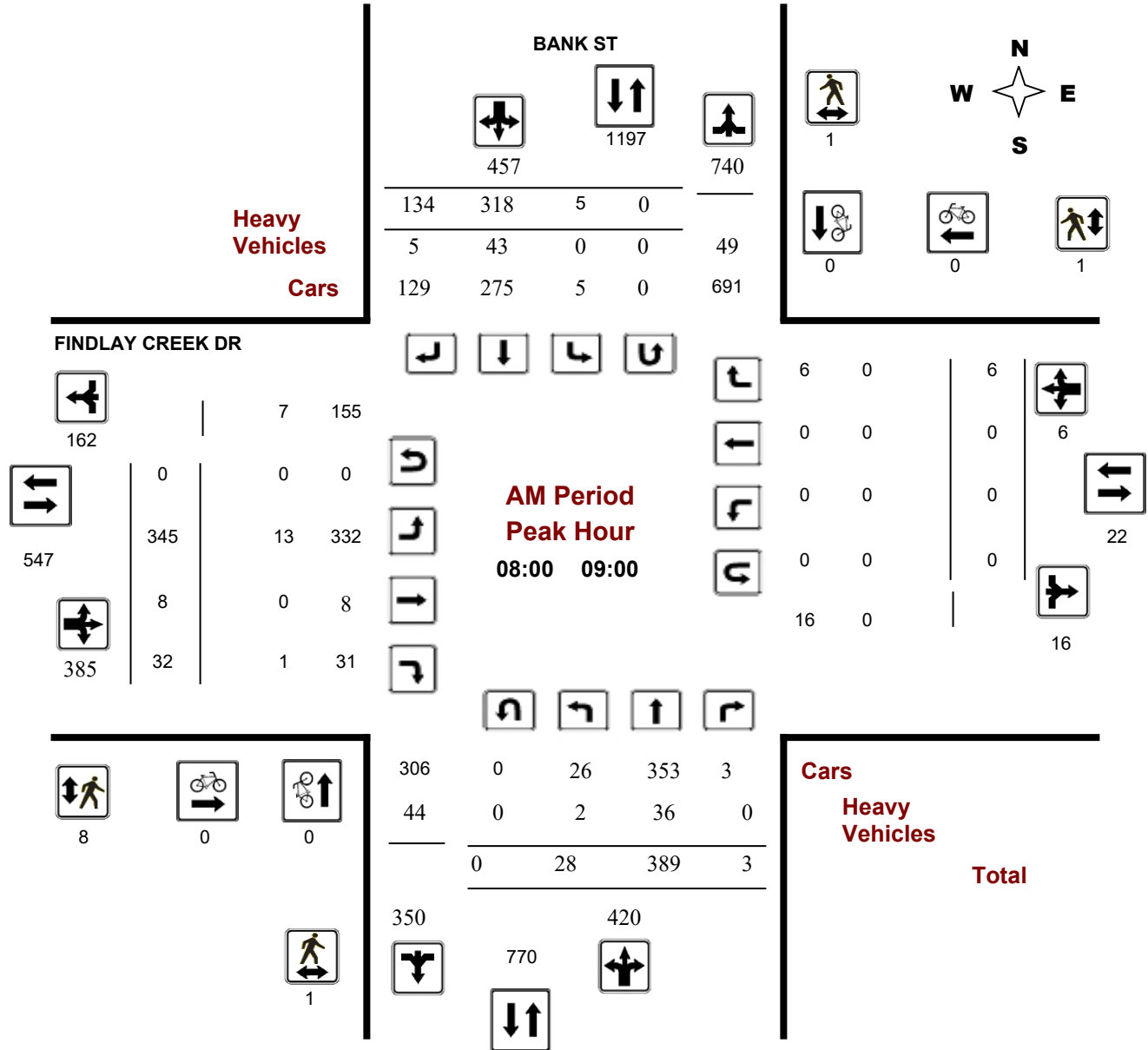
FINDLAY CREEK DR @ BANK ST

Survey Date: Wednesday, December 04, 2019

Start Time: 07:00

WO No: 39205

Device: Miovision



Turning Movement Count - Peak Hour Diagram

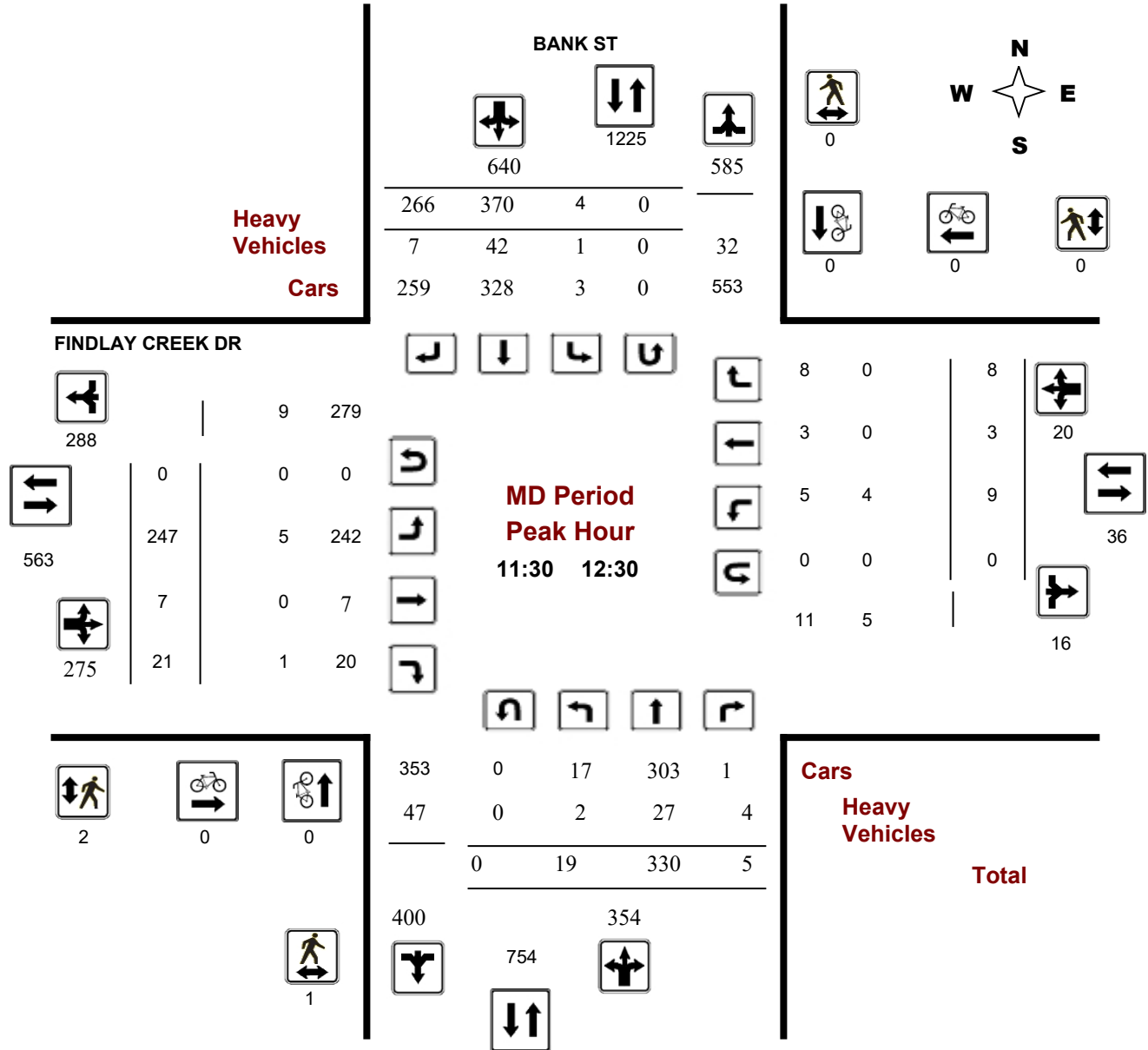
FINDLAY CREEK DR @ BANK ST

Survey Date: Wednesday, December 04, 2019

Start Time: 07:00

WO No: 39205

Device: Miovision





Transportation Services - Traffic Services

Turning Movement Count - Peak Hour Diagram

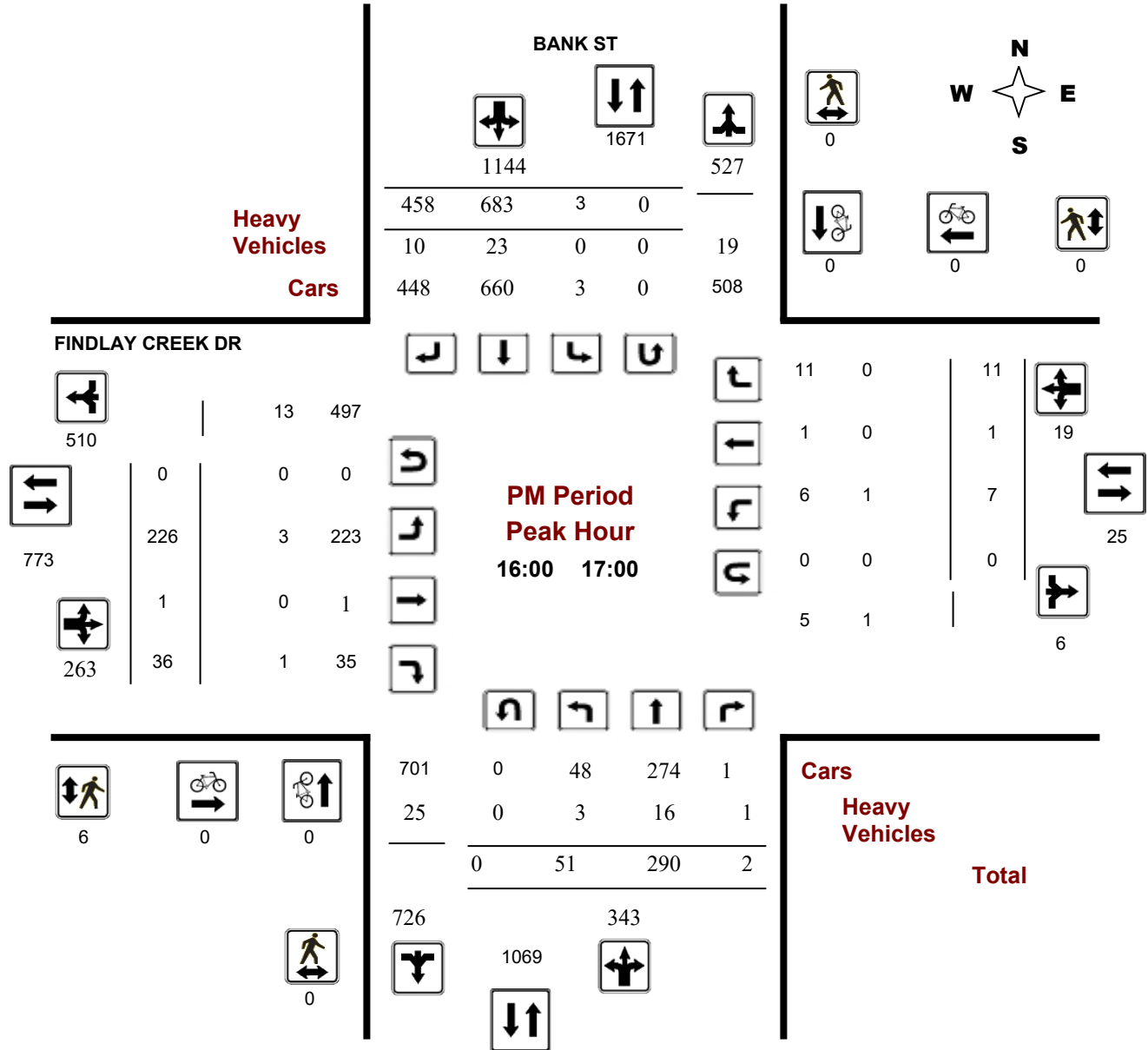
FINDLAY CREEK DR @ BANK ST

Survey Date: Wednesday, December 04, 2019

Start Time: 07:00

WO No: 39205

Device: Miovision





Transportation Services - Traffic Services

Turning Movement Count - Study Results

FINDLAY CREEK DR @ BANK ST

Survey Date: Wednesday, December 04, 2019

WO No: 39205

Start Time: 07:00

Device: Miovision

Full Study Summary (8 HR Standard)

Survey Date: Wednesday, December 04, 2019

Total Observed U-Turns
 Northbound: 1 Southbound: 2
 Eastbound: 1 Westbound: 0

AADT Factor
 1.00

Period	BANK ST									FINDLAY CREEK DR									Grand Total
	Northbound			NB TOT	Southbound			SB TOT	STR TOT	Eastbound			EB TOT	Westbound			WB TOT	STR TOT	
	LT	ST	RT		LT	ST	RT			LT	ST	RT		LT	ST	RT			
07:00 08:00	15	406	1	422	14	289	73	376	798	372	4	22	398	0	1	4	5	403	1201
08:00 09:00	28	389	3	420	5	318	134	457	877	345	8	32	385	0	0	6	6	391	1268
09:00 10:00	14	358	3	375	2	261	104	367	742	237	5	20	262	2	3	6	11	273	1015
11:30 12:30	19	330	5	354	4	370	266	640	994	247	7	21	275	9	3	8	20	295	1289
12:30 13:30	22	272	9	303	6	377	209	592	895	220	3	23	246	7	1	12	20	266	1161
15:00 16:00	34	298	2	334	5	577	331	913	1247	240	2	33	275	7	1	10	18	293	1540
16:00 17:00	51	290	2	343	3	683	458	1144	1487	226	1	36	263	7	1	11	19	282	1769
17:00 18:00	39	285	0	324	3	521	382	906	1230	210	0	20	230	0	1	3	4	234	1464
Sub Total	222	2628	25	2875	42	3396	1957	5395	8270	2097	30	207	2334	32	11	60	103	2437	10707
U Turns	1			1	2			2	3	1			1	0			0	1	4
Total	223	2628	25	2876	44	3396	1957	5397	8273	2098	30	207	2335	32	11	60	103	2438	10711
EQ 12Hr	310	3653	35	3998	61	4720	2720	7501	11499	2916	42	288	3246	44	15	83	142	3388	14887
Note: These values are calculated by multiplying the totals by the appropriate expansion factor.																	1.39		
AVG 12Hr	310	3653	35	3998	61	4720	2720	7501	11499	2916	42	288	3246	44	15	83	142	3388	14887
Note: These volumes are calculated by multiplying the Equivalent 12 hr. totals by the AADT factor.																	1.00		
AVG 24Hr	406	4785	46	5237	80	6183	3563	9826	15063	3820	55	377	4252	58	20	109	187	4439	19502
Note: These volumes are calculated by multiplying the Average Daily 12 hr. totals by 12 to 24 expansion factor.																	1.31		
Note: U-Turns provided for approach totals. Refer to 'U-Turn' Report for specific breakdown.																			



Transportation Services - Traffic Services

Turning Movement Count - Study Results

FINDLAY CREEK DR @ BANK ST

Survey Date: Wednesday, December 04, 2019

WO No: 39205

Start Time: 07:00

Device: Miovision

Full Study 15 Minute Increments

BANK ST

FINDLAY CREEK DR

Northbound

Southbound

Eastbound

Westbound

Time Period	LT	ST	RT	N TOT	LT	ST	RT	S TOT	STR TOT	LT	ST	RT	E TOT	LT	ST	RT	W TOT	STR TOT	Grand Total
07:00 07:15	2	129	0	131	2	69	19	90	221	96	1	3	100	0	0	2	2	102	323
07:15 07:30	3	104	1	108	8	75	15	98	206	112	1	7	120	0	0	1	1	121	327
07:30 07:45	4	102	0	106	3	77	15	95	201	90	0	7	97	0	1	0	1	98	299
07:45 08:00	6	71	0	77	2	68	24	94	171	74	2	5	81	0	0	1	1	82	253
08:00 08:15	6	94	1	101	1	90	30	121	222	100	1	10	111	0	0	1	1	112	334
08:15 08:30	3	106	0	109	3	70	23	96	205	101	4	10	115	0	0	1	1	116	321
08:30 08:45	13	104	1	118	0	84	35	119	237	74	3	6	83	0	0	2	2	85	322
08:45 09:00	6	85	1	92	1	74	46	121	213	70	0	6	76	0	0	2	2	78	291
09:00 09:15	1	98	1	100	0	60	27	87	187	72	2	7	81	1	2	3	6	87	274
09:15 09:30	4	96	0	100	1	66	19	86	186	57	1	5	63	1	0	1	2	65	251
09:30 09:45	5	94	1	100	1	67	22	90	190	59	0	5	64	0	1	1	2	66	256
09:45 10:00	4	70	1	75	0	68	36	104	179	49	2	3	54	0	0	1	1	55	234
11:30 11:45	4	89	2	95	0	89	63	152	247	60	0	5	65	1	0	2	3	68	315
11:45 12:00	3	71	1	75	4	97	71	172	247	55	0	7	62	3	0	2	5	67	314
12:00 12:15	7	72	1	80	0	84	66	150	230	63	3	2	68	4	1	3	8	76	306
12:15 12:30	5	98	1	104	0	100	66	166	270	69	4	7	80	1	2	1	4	84	354
12:30 12:45	3	67	4	74	3	102	61	166	240	56	2	4	62	3	0	3	6	68	308
12:45 13:00	12	68	3	83	0	101	36	137	220	50	0	12	62	0	1	2	3	65	285
13:00 13:15	3	65	1	69	0	82	60	142	211	68	1	4	73	3	0	2	5	78	289
13:15 13:30	4	72	1	77	3	92	52	147	224	46	0	3	49	1	0	5	6	55	279
15:00 15:15	6	84	0	90	2	136	84	222	312	62	1	6	69	2	0	2	4	73	385
15:15 15:30	11	71	1	83	0	133	81	214	297	68	1	6	75	2	1	2	5	80	377
15:30 15:45	7	56	0	63	0	151	84	235	298	58	0	7	65	1	0	3	4	69	367
15:45 16:00	11	87	1	99	3	157	82	242	341	52	0	14	66	2	0	3	5	71	412
16:00 16:15	17	80	1	98	1	183	115	299	397	51	0	12	63	1	0	4	5	68	465
16:15 16:30	10	77	1	88	1	172	97	270	358	64	0	9	73	1	0	0	1	74	432
16:30 16:45	12	66	0	78	1	164	123	288	366	42	1	5	48	1	1	4	6	54	420
16:45 17:00	12	67	0	79	0	164	123	287	366	69	0	10	79	4	0	3	7	86	452
17:00 17:15	15	93	0	108	2	145	110	257	365	64	0	5	69	0	1	1	2	71	436
17:15 17:30	12	69	0	81	2	125	107	234	315	45	0	4	49	0	0	2	2	51	366
17:30 17:45	7	69	0	76	0	135	81	216	292	51	0	7	58	0	0	0	0	58	350
17:45 18:00	5	54	0	59	0	116	84	200	259	51	0	4	55	0	0	0	0	55	314
Total:	223	2628	25	2876	44	3396	1957	5397	8273	2098	30	207	2335	32	11	60	103	8273	10,711

Note: U-Turns are included in Totals.



Transportation Services - Traffic Services

Turning Movement Count - Study Results

FINDLAY CREEK DR @ BANK ST

Survey Date: Wednesday, December 04, 2019

WO No: 39205

Start Time: 07:00

Device: Miovision

Full Study Cyclist Volume

Time Period	BANK ST			FINDLAY CREEK DR			Grand Total
	Northbound	Southbound	Street Total	Eastbound	Westbound	Street Total	
07:00 07:15	0	0	0	0	0	0	0
07:15 07:30	0	0	0	0	0	0	0
07:30 07:45	0	0	0	0	0	0	0
07:45 08:00	0	0	0	0	0	0	0
08:00 08:15	0	0	0	0	0	0	0
08:15 08:30	0	0	0	0	0	0	0
08:30 08:45	0	0	0	0	0	0	0
08:45 09:00	0	0	0	0	0	0	0
09:00 09:15	0	0	0	0	0	0	0
09:15 09:30	0	0	0	0	0	0	0
09:30 09:45	0	0	0	0	0	0	0
09:45 10:00	0	0	0	0	0	0	0
11:30 11:45	0	0	0	0	0	0	0
11:45 12:00	0	0	0	0	0	0	0
12:00 12:15	0	0	0	0	0	0	0
12:15 12:30	0	0	0	0	0	0	0
12:30 12:45	0	0	0	0	0	0	0
12:45 13:00	0	0	0	0	0	0	0
13:00 13:15	0	0	0	0	0	0	0
13:15 13:30	0	0	0	0	0	0	0
15:00 15:15	0	0	0	0	0	0	0
15:15 15:30	0	0	0	0	0	0	0
15:30 15:45	1	0	1	0	0	0	1
15:45 16:00	0	0	0	0	0	0	0
16:00 16:15	0	0	0	0	0	0	0
16:15 16:30	0	0	0	0	0	0	0
16:30 16:45	0	0	0	0	0	0	0
16:45 17:00	0	0	0	0	0	0	0
17:00 17:15	0	0	0	0	0	0	0
17:15 17:30	0	0	0	0	0	0	0
17:30 17:45	0	0	0	0	0	0	0
17:45 18:00	0	0	0	0	0	0	0
Total	1	0	1	0	0	0	1



Transportation Services - Traffic Services

Turning Movement Count - Study Results

FINDLAY CREEK DR @ BANK ST

Survey Date: Wednesday, December 04, 2019

WO No: 39205

Start Time: 07:00

Device: Miovision

Full Study Pedestrian Volume

BANK ST

FINDLAY CREEK DR

Time Period	NB Approach (E or W Crossing)	SB Approach (E or W Crossing)	Total	EB Approach (N or S Crossing)	WB Approach (N or S Crossing)	Total	Grand Total
07:00 07:15	0	0	0	0	0	0	0
07:15 07:30	0	0	0	0	0	0	0
07:30 07:45	1	0	1	1	0	1	2
07:45 08:00	0	0	0	0	0	0	0
08:00 08:15	0	0	0	3	0	3	3
08:15 08:30	0	0	0	0	0	0	0
08:30 08:45	0	0	0	2	0	2	2
08:45 09:00	1	1	2	3	1	4	6
09:00 09:15	0	0	0	0	0	0	0
09:15 09:30	0	0	0	1	0	1	1
09:30 09:45	0	0	0	0	0	0	0
09:45 10:00	0	0	0	0	0	0	0
11:30 11:45	1	0	1	1	0	1	2
11:45 12:00	0	0	0	0	0	0	0
12:00 12:15	0	0	0	0	0	0	0
12:15 12:30	0	0	0	1	0	1	1
12:30 12:45	0	1	1	1	0	1	2
12:45 13:00	0	0	0	0	0	0	0
13:00 13:15	0	0	0	0	0	0	0
13:15 13:30	0	0	0	0	0	0	0
15:00 15:15	0	0	0	0	0	0	0
15:15 15:30	0	1	1	0	1	1	2
15:30 15:45	0	0	0	5	0	5	5
15:45 16:00	0	0	0	1	0	1	1
16:00 16:15	0	0	0	1	0	1	1
16:15 16:30	0	0	0	3	0	3	3
16:30 16:45	0	0	0	0	0	0	0
16:45 17:00	0	0	0	2	0	2	2
17:00 17:15	0	0	0	3	0	3	3
17:15 17:30	0	0	0	4	0	4	4
17:30 17:45	0	0	0	0	2	2	2
17:45 18:00	0	1	1	4	0	4	5
Total	3	4	7	36	4	40	47



Transportation Services - Traffic Services

Turning Movement Count - Study Results

FINDLAY CREEK DR @ BANK ST

Survey Date: Wednesday, December 04, 2019

WO No: 39205

Start Time: 07:00

Device: Miovision

Full Study Heavy Vehicles

BANK ST

FINDLAY CREEK DR

Northbound

Southbound

Eastbound

Westbound

Time Period	Northbound			N TOT	Southbound			S TOT	STR TOT	Eastbound			E TOT	Westbound			W TOT	STR TOT	Grand Total	
	LT	ST	RT		LT	ST	RT			LT	ST	RT		LT	ST	RT				
07:00 07:15	1	12	0	13	0	4	2	6	19	4	0	0	4	0	0	0	0	4	23	
07:15 07:30	0	9	0	9	1	9	0	10	19	2	0	1	3	0	0	0	0	3	22	
07:30 07:45	0	8	0	8	0	7	2	9	17	4	0	0	4	0	0	0	0	4	21	
07:45 08:00	1	5	0	6	0	6	1	7	13	1	0	0	1	0	0	0	0	1	14	
08:00 08:15	0	3	0	3	0	12	2	14	17	5	0	0	5	0	0	0	0	5	22	
08:15 08:30	0	14	0	14	0	4	1	5	19	3	0	0	3	0	0	0	0	3	22	
08:30 08:45	1	11	0	12	0	14	2	16	28	3	0	1	4	0	0	0	0	4	32	
08:45 09:00	1	8	0	9	0	13	0	13	22	2	0	0	2	0	0	0	0	2	24	
09:00 09:15	0	6	0	6	0	12	1	13	19	1	0	0	1	0	1	0	1	2	21	
09:15 09:30	0	6	0	6	0	10	1	11	17	2	0	0	2	1	0	1	2	4	21	
09:30 09:45	1	6	0	7	1	9	1	11	18	1	0	1	2	0	0	0	0	2	20	
09:45 10:00	0	9	0	9	0	7	2	9	18	0	0	0	0	0	0	0	0	0	18	
11:30 11:45	1	7	2	10	0	13	4	17	27	2	0	1	3	1	0	0	1	4	31	
11:45 12:00	0	3	0	3	1	9	2	12	15	1	0	0	1	1	0	0	1	2	17	
12:00 12:15	0	9	1	10	0	8	1	9	19	1	0	0	1	2	0	0	2	3	22	
12:15 12:30	1	8	1	10	0	12	0	12	22	1	0	0	1	0	0	0	0	1	23	
12:30 12:45	0	7	3	10	0	10	5	15	25	2	0	0	2	3	0	0	3	5	30	
12:45 13:00	0	10	1	11	0	9	1	10	21	1	0	3	4	0	1	0	1	5	26	
13:00 13:15	1	9	1	11	0	7	1	8	19	4	0	0	4	1	0	0	1	5	24	
13:15 13:30	0	7	1	8	0	11	1	12	20	2	0	1	3	0	0	1	1	4	24	
15:00 15:15	0	8	0	8	1	14	2	17	25	1	0	0	1	1	0	0	1	2	27	
15:15 15:30	0	10	1	11	0	9	2	11	22	2	0	1	3	0	0	0	0	3	25	
15:30 15:45	0	6	0	6	0	7	3	10	16	4	0	1	5	1	0	0	1	6	22	
15:45 16:00	0	3	1	4	1	7	2	10	14	0	0	0	0	1	0	0	1	1	15	
16:00 16:15	3	4	0	7	0	5	1	6	13	1	0	1	2	0	0	0	0	2	15	
16:15 16:30	0	4	1	5	0	5	2	7	12	1	0	0	1	0	0	0	0	1	13	
16:30 16:45	0	6	0	6	0	3	5	8	14	1	0	0	1	1	0	0	1	2	16	
16:45 17:00	0	2	0	2	0	10	2	12	14	0	0	0	0	0	0	0	0	0	14	
17:00 17:15	0	2	0	2	0	0	2	2	4	2	0	0	2	0	0	0	0	2	6	
17:15 17:30	0	2	0	2	0	2	2	4	6	0	0	0	0	0	0	0	0	0	6	
17:30 17:45	0	1	0	1	0	4	1	5	6	1	0	0	1	0	0	0	0	1	7	
17:45 18:00	0	2	0	2	0	1	2	3	5	1	0	0	1	0	0	0	0	1	6	
Total:	None	11	207	13	231	5	253	56	314	545	56	0	11	67	13	2	2	17	84	629



Transportation Services - Traffic Services

Turning Movement Count - Study Results

FINDLAY CREEK DR @ BANK ST

Survey Date: Wednesday, December 04, 2019

WO No: 39205

Start Time: 07:00

Device: Miovision

Full Study 15 Minute U-Turn Total

BANK ST

FINDLAY CREEK DR

Time Period		Northbound U-Turn Total	Southbound U-Turn Total	Eastbound U-Turn Total	Westbound U-Turn Total	Total
07:00	07:15	0	0	0	0	0
07:15	07:30	0	0	0	0	0
07:30	07:45	0	0	0	0	0
07:45	08:00	0	1	0	0	1
08:00	08:15	0	0	0	0	0
08:15	08:30	0	0	0	0	0
08:30	08:45	0	0	0	0	0
08:45	09:00	0	0	0	0	0
09:00	09:15	0	0	0	0	0
09:15	09:30	0	0	0	0	0
09:30	09:45	0	0	0	0	0
09:45	10:00	0	0	0	0	0
11:30	11:45	0	0	0	0	0
11:45	12:00	0	0	0	0	0
12:00	12:15	0	0	0	0	0
12:15	12:30	0	0	0	0	0
12:30	12:45	0	0	0	0	0
12:45	13:00	0	0	0	0	0
13:00	13:15	0	0	0	0	0
13:15	13:30	0	0	0	0	0
15:00	15:15	1	0	0	0	1
15:15	15:30	0	0	0	0	0
15:30	15:45	0	0	0	0	0
15:45	16:00	0	0	0	0	0
16:00	16:15	0	0	0	0	0
16:15	16:30	0	0	0	0	0
16:30	16:45	0	0	0	0	0
16:45	17:00	0	0	0	0	0
17:00	17:15	0	0	0	0	0
17:15	17:30	0	1	0	0	1
17:30	17:45	0	0	0	0	0
17:45	18:00	0	0	1	0	1
Total		1	2	1	0	4

Findlay Creek @ Kugagami

Leg Direction Start Time	North Southbound					East Westbound					South Northbound					West Eastbound					Total	Hourly
	Right	Thru	Left	U-Turn	Peds	Right	Thru	Left	U-Turn	Peds	Right	Thru	Left	U-Turn	Peds	Right	Thru	Left	U-Turn	Peds		
	2025-08-12 07:30:00	7	0	0	0	1	0	42	0	0	0	0	0	0	0	0	0	0	7	2		
2025-08-12 07:45:00	4	0	0	0	0	1	49	0	0	0	1	0	0	0	0	0	2	13	2	0	0	72
2025-08-12 08:00:00	7	0	1	0	4	0	31	0	0	0	0	0	1	0	0	1	12	2	0	0	59	
2025-08-12 08:15:00	7	0	0	0	1	0	42	0	0	0	0	0	0	0	0	1	18	1	0	0	70	260
2025-08-12 08:30:00	8	0	0	0	0	0	36	0	0	0	1	0	0	0	0	1	20	2	0	0	68	269
2025-08-12 08:45:00	4	0	1	0	2	0	26	0	0	0	0	0	0	0	0	0	20	2	0	0	55	252
2025-08-12 09:00:00	6	0	0	0	1	0	42	0	0	0	0	0	0	0	0	0	26	4	0	0	79	272
2025-08-12 09:15:00	11	0	0	0	0	0	18	1	0	0	2	0	1	0	0	0	11	6	0	0	50	252
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
2025-08-12 03:30:00	3	0	0	0	2	0	26	0	0	0	2	0	0	0	0	0	19	3	0	0	0	
2025-08-12 03:45:00	3	0	0	0	0	1	24	0	0	0	1	0	0	0	0	0	33	3	0	0	65	
2025-08-12 04:00:00	7	0	0	0	0	0	26	0	0	0	0	1	0	0	0	0	34	11	0	0	79	
2025-08-12 04:15:00	11	0	1	0	0	1	38	0	0	0	0	0	0	0	0	0	42	5	0	0	98	
2025-08-12 04:30:00	8	0	0	0	2	2	29	0	0	0	0	0	0	0	0	0	35	10	0	0	86	328
2025-08-12 04:45:00	3	0	0	0	2	2	30	0	0	0	0	0	0	0	0	0	41	4	0	0	82	345
2025-08-12 05:00:00	5	0	0	0	0	0	36	0	0	0	0	0	0	0	0	0	45	3	0	0	89	355
2025-08-12 05:15:00	5	0	0	0	0	0	36	0	0	0	0	0	0	0	0	0	44	4	0	0	89	346

Appendix C:

Historic Collision Data

Total Area

Classification of Accident	Rear End	Turning Movement	Sideswipe	Angle	Approaching	SMV other	SMV unattended vehicle	Other	Total
P.D. only	13	1	0	2	0	0	1	1	18
Non-fatal injury	2	4	0	1	0	1	0	0	8
Non-reportable	0	0	0	0	0	0	0	0	0
Total	15	5	0	3	0	1	1	1	26
	#1 or 58%	#2 or 19%	#7 or 0%	#3 or 12%	#7 or 0%	#4 or 4%	#4 or 4%	#4 or 4%	

69%
31%
0%
100%

FINDLAY CREEK DR/BANK ST

Years	Total # Collisions	24 Hr AADT Veh Volume	Days	Collisions/MEV
9376406--75.5892	24	n/a	366.6607464	n/a

Peds	Cyclists
0	0

Classification of Accident	Rear End	Turning Movement	Sideswipe	Angle	Approaching	SMV other	SMV unattended vehicle	Other	Total
P.D. only	13	1	0	2	0	0	0	0	16
Non-fatal injury	2	4	0	1	0	1	0	0	8
Non-reportable	0	0	0	0	0	0	0	0	0
Total	15	5	0	3	0	1	0	0	24
	63%	21%	0%	13%	0%	4%	0%	0%	

67%
33%
0%
100%

MIDBLOCK SEGMENTS

FINDLAY CREEK DR, KUGAGAMI RD to TRIDENT MEWS

Years	Total # Collisions	24 Hr AADT Veh Volume	Days	Collisions/MEV
9376406--75.5892	1	n/a	366.6607464	n/a

Peds	Cyclists
0	0

Classification of Accident	Rear End	Turning Movement	Sideswipe	Angle	Approaching	SMV other	SMV unattended vehicle	Other	Total
P.D. only	0	0	0	0	0	0	0	1	1
Non-fatal injury	0	0	0	0	0	0	0	0	0
Non-reportable	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	1	1
	0%	0%	0%	0%	0%	0%	0%	100%	

100%
0%
0%
100%

TRIDENT MEWS, FINDLAY CREEK DR to LONGWORTH AVE

Years	Total # Collisions	24 Hr AADT Veh Volume	Days	Collisions/MEV
9376406--75.5892	1	n/a	366.6607464	n/a

Peds	Cyclists
0	0

Classification of Accident	Rear End	Turning Movement	Sideswipe	Angle	Approaching	SMV other	SMV unattended vehicle	Other	Total
P.D. only	0	0	0	0	0	0	1	0	1
Non-fatal injury	0	0	0	0	0	0	0	0	0
Non-reportable	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	1	0	1
	0%	0%	0%	0%	0%	0%	100%	0%	

100%
0%
0%
100%

Appendix D:

Background Growth TRANS Model

TRANS Regional Model

Version 1.01 - Assigned December, 2024

AM Peak Hour Total Traffic Volume

Screenline 8

2022 Model - Basecase

N/A

User Initials: TIMW

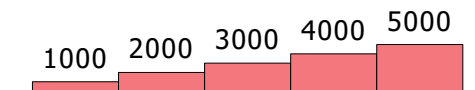
Plot Prepared: June, 2025

EMME Scenario: 22002

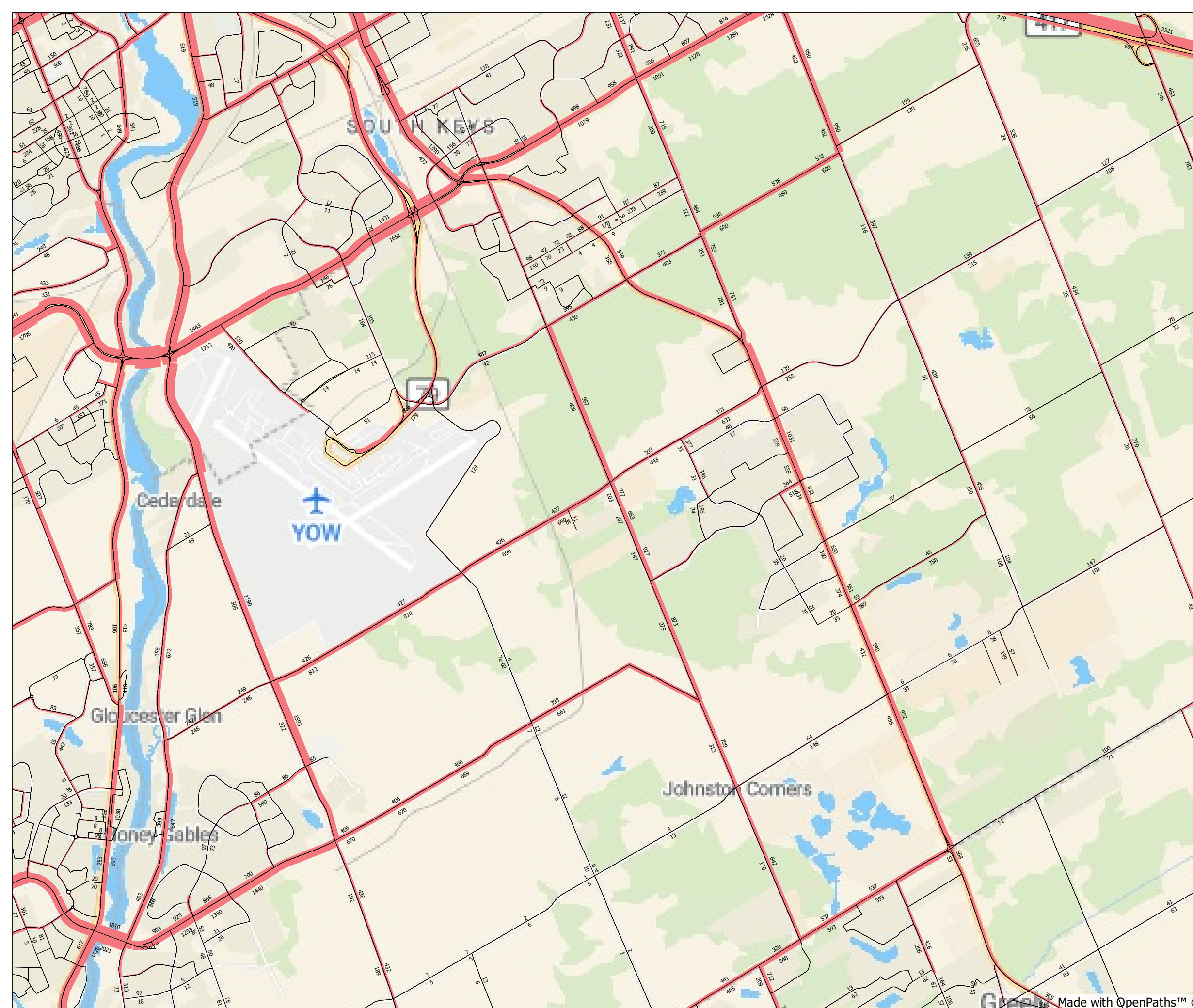
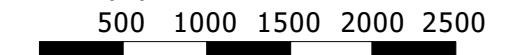


Legend

AM Peak Hour Total Traffic Volume



Distance (m)



The TRANS model is continuously refined & maintained, and all information is provided in good faith. However, model outputs are provided "as is", and no warranty or guarantee is provided as to the accuracy, reliability or reasonableness of the results. In using this data, you agree to accept any and all risks arising from any incorrect, incomplete, or misleading information.

Recipients are required to use caution and professional judgement in using and interpreting model outputs. In particular, caution should be used when focusing on a geographically limited area (such as a single road or intersection), as the model is primarily designed to simulate regional-scale phenomena and has been calibrated at a regional level.

As a general good practice, it is recommended that the user confirm the network coding within the area of interest, and compare base year forecasts against traffic count data to assess the extent to which the model may be over- or under-estimating the travel demand.

TRANS Regional Model

Version 1.01 - Assigned December, 2024

AM Peak Hour Total Traffic Volume

Screenline 8

2046 Model - Basecase

N/A

User Initials: TIMW

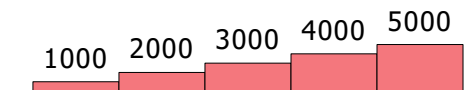
Plot Prepared: June, 2025

EMME Scenario: 46001

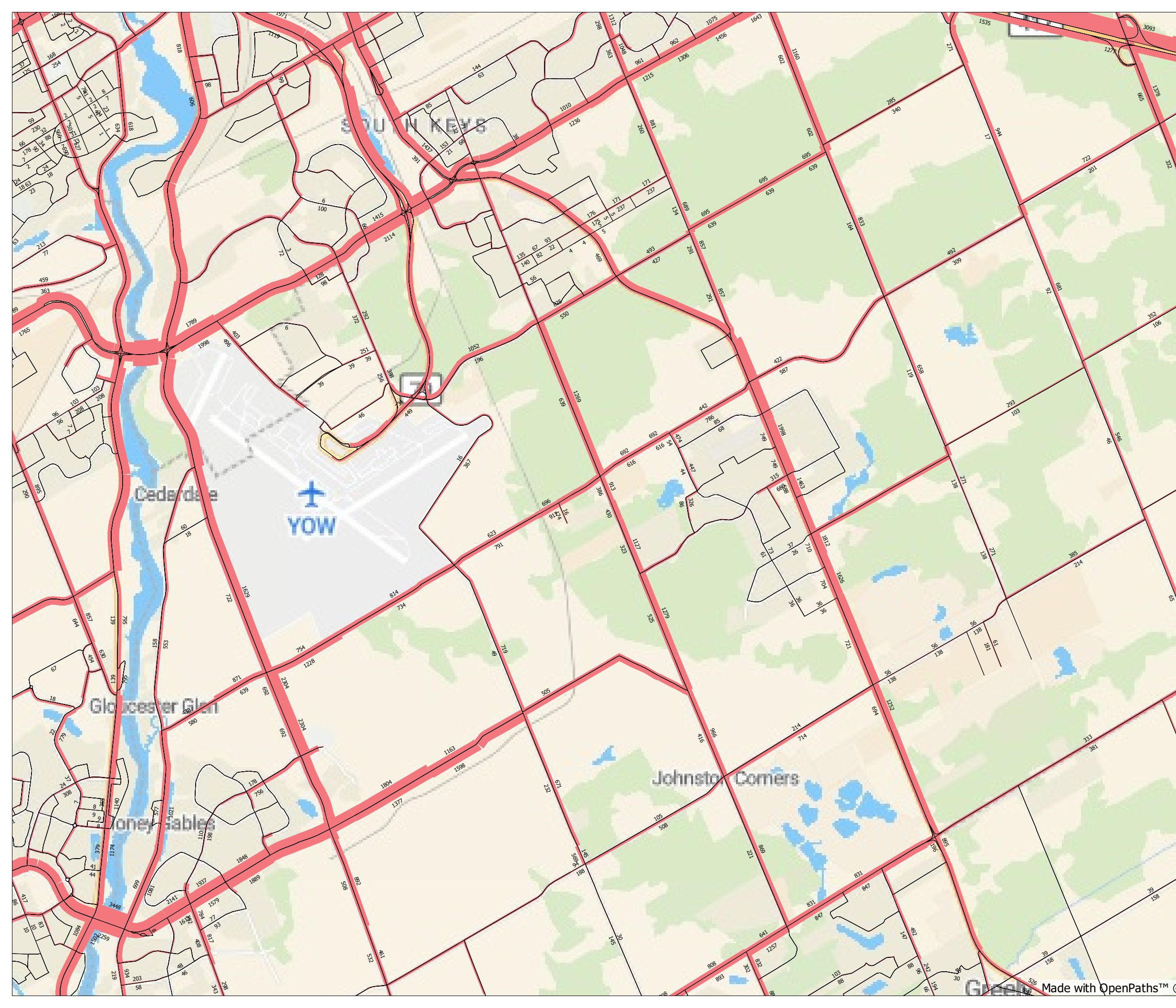
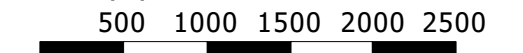


Legend

AM Peak Hour Total Traffic Volume



Distance (m)



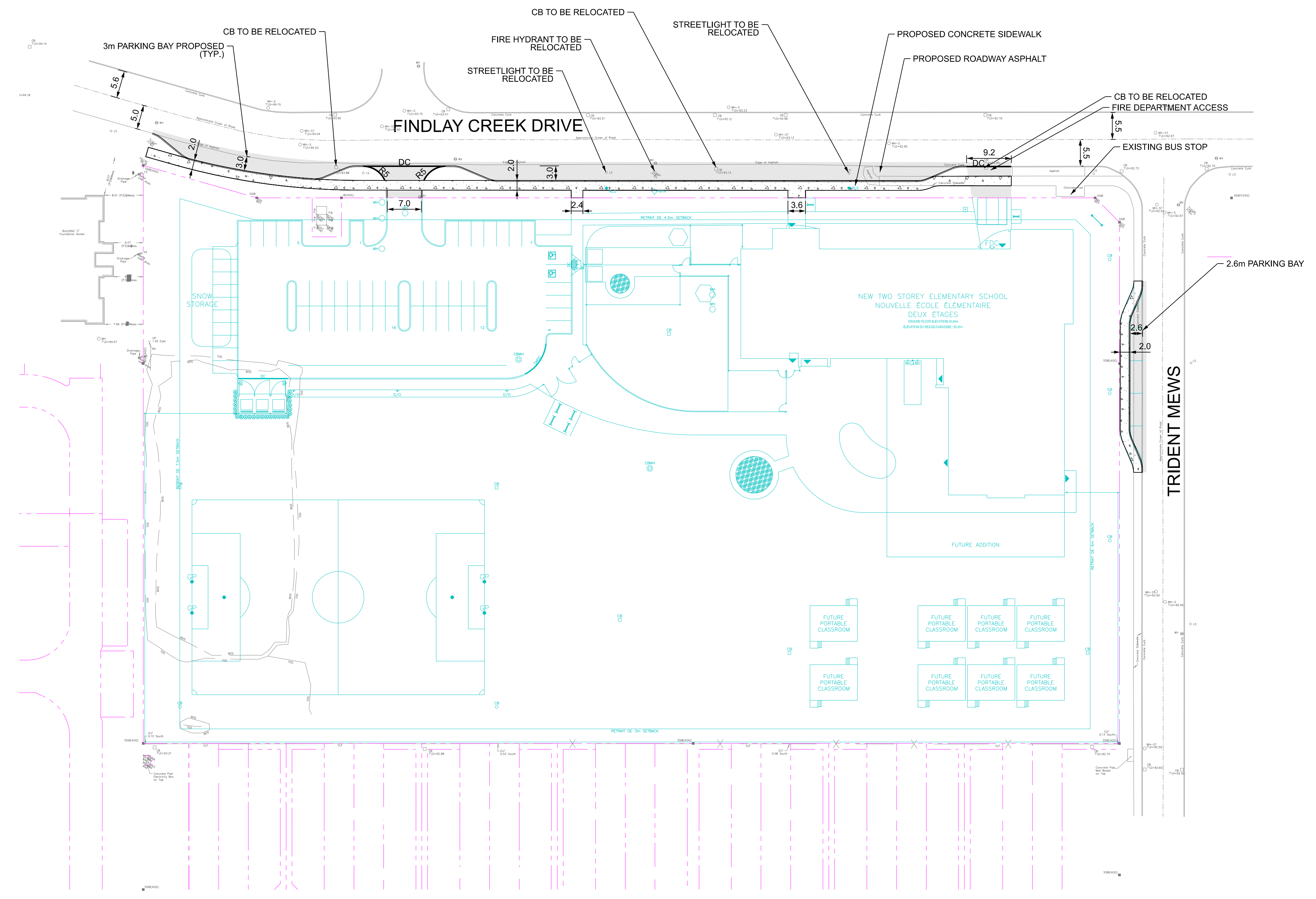
The TRANS model is continuously refined & maintained, and all information is provided in good faith. However, model outputs are provided "as is", and no warranty or guarantee is provided as to the accuracy, reliability or reasonableness of the results. In using this data, you agree to accept any and all risks arising from any incorrect, incomplete, or misleading information.

Recipients are required to use caution and professional judgement in using and interpreting model outputs. In particular, caution should be used when focusing on a geographically limited area (such as a single road or intersection), as the model is primarily designed to simulate regional-scale phenomena and has been calibrated at a regional level.

As general good practice, it is recommended that the user confirm the network coding within the area of interest, and compare base year forecasts against traffic count data to assess the extent to which the model may be over- or under-estimating the travel demand.

Appendix E:

RMA Conceptual Drawings & Truck Turning Templates



LEIRTRIM CATHOLIC ES TIA
(CECCE)

PROPOSED ROADWAY MODIFICATION

Contract No. _____ Dwg. No. **0**
 Sheet **0** of **0**

Asset No. _____
 Asset Group _____

Director, Infrastructure Services _____ Project Manager _____

PARSONS

Des. _____ Chk'd. _____
 Dwn. _____ Chk'd. _____
 Utility Circ. No. _____ Index No. _____
 Const. Inspector _____

Scale: HORIZONTAL
 0m 5 10 20

NOTE: The location of utilities is approximate only, the exact location should be determined by consulting the municipal authorities and utility companies concerned. The contractor shall prove the location of utilities and shall be responsible for adequate protection from damage.

No.	Description	By	Date (dd/mm/yy)

- GENERAL NOTES:
1. PAVEMENT MARKINGS TO BE PROVIDED DURING RMA.
 2. 5m RADII PROVIDED THROUGHOUT.
 3. TURNING MOVEMENTS REVIEWED (HSU CONTROL, GARBAGE COLLECTION TRUCK CONTROL, P-CAR DESIGN) FOR PARKING LOT. TO BE PROVIDED IN SUPPLEMENTAL SUBMISSION.

LEITRIM CATHOLIC ES TIA (CECCE)



PROPOSED ROADWAY MODIFICATION
TURNING MOVEMENT:
HSU AND WASTE COLLECTION TRUCK

Contract No.	Dwg. No.
Sheet 0 of 0	0
Asset No.	
Asset Group	
Des.	Chk'd.
Dwn.	Chk'd.
Utility Circ. No.	Index No.
Const. Inspector	
Scale:	HORIZONTAL
0m 5 10 20	

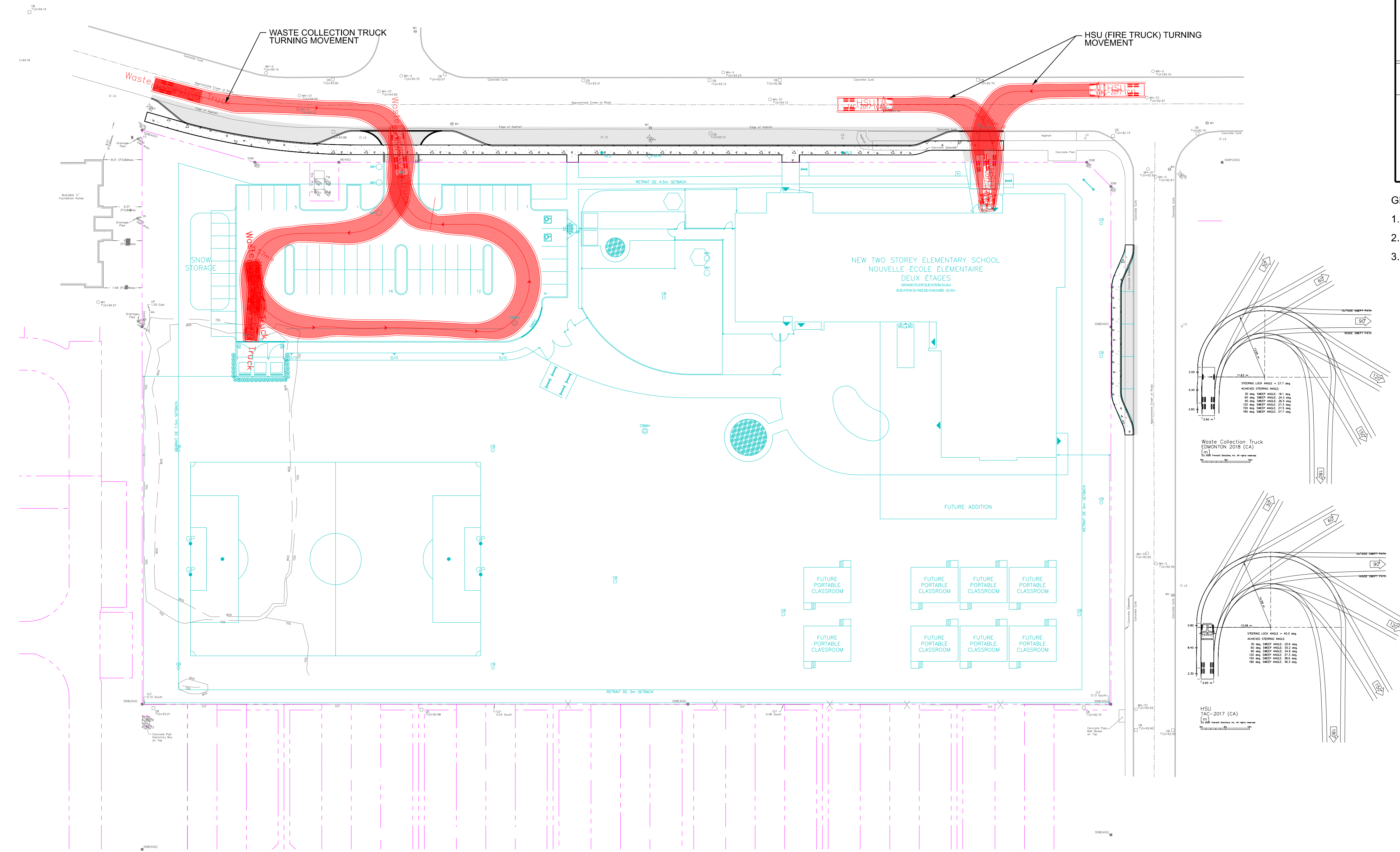
Director, Infrastructure Services Project Manager

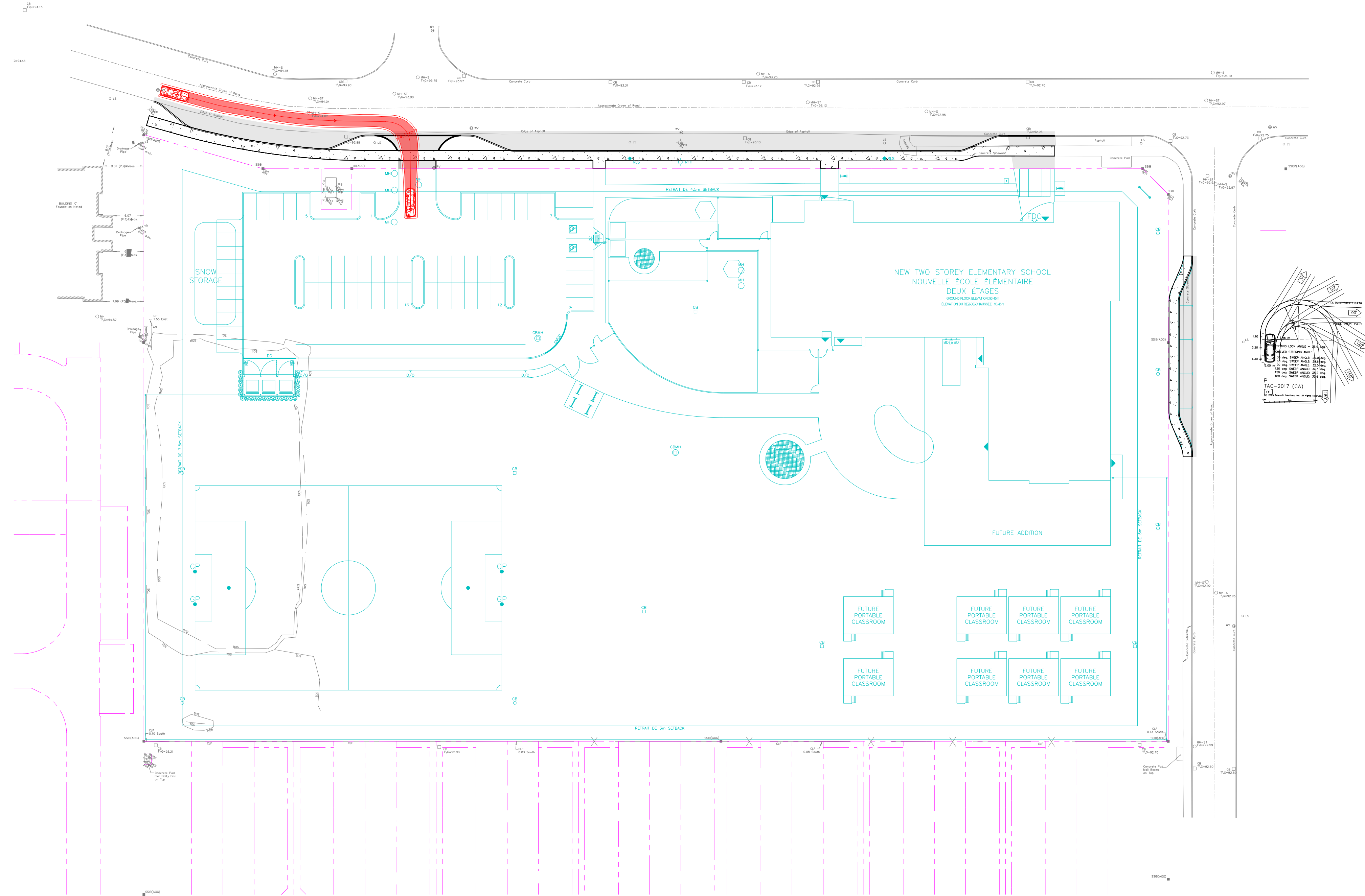


NOTE: The location of utilities is approximate only, the exact location should be determined by consulting the municipal authorities and utility companies concerned. The contractor shall prove the location of utilities and shall be responsible for adequate protection from damage.

No.	Description	By	Date (dd/mm/yy)

- GENERAL NOTES:
- PAVEMENT MARKINGS TO BE PROVIDED DURING RMA.
 - 5m RADII PROVIDED THROUGHOUT.
 - TURNING MOVEMENTS REVIEWED (HSU CONTROL, GARBAGE COLLECTION TRUCK CONTROL, P-CAR DESIGN) FOR PARKING LOT. TO BE PROVIDED IN SUPPLEMENTAL SUBMISSION.





LEIRTRIM CATHOLIC ES TIA
(CECCE)



PROPOSED ROADWAY MODIFICATION
TURNING MOVEMENT: P-CAR

Contract No. _____ Dwg. No. 0

Sheet 0 of 0

Asset No. _____
Asset Group _____

Director, Infrastructure Services _____
Project Manager _____



Des. _____ Chk'd. _____

Dwn. _____ Chk'd. _____

Utility Circ. No. _____ Index No. _____

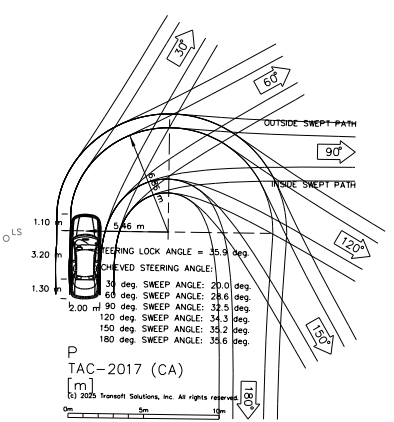
Const. Inspector _____

Scale: HORIZONTAL
0m 5 10 20

NOTE: The location of utilities is approximate only, the exact location should be determined by consulting the municipal authorities and utility companies concerned. The contractor shall prove the location of utilities and shall be responsible for adequate protection from damage.

No.	Description	By	Date (dd/mm/yy)

- GENERAL NOTES:
- PAVEMENT MARKINGS TO BE PROVIDED DURING RMA.
 - 5m RADII PROVIDED THROUGHOUT.
 - TURNING MOVEMENTS REVIEWED (HSU CONTROL, GARBAGE COLLECTION TRUCK CONTROL, P-CAR DESIGN) FOR PARKING LOT. TO BE PROVIDED IN SUPPLEMENTAL SUBMISSION.



Appendix F:

MMLOS Segments & Intersections Analysis

Multi-Modal Level of Service - Intersections Form

Project: Leitrim Catholic School

Consultant: Parsons

Date: Sep 30, 2025

Scenario: Existing

Intersection Name		Bank/Findlay Creek			
OP Transect / Policy Area		Mainstreet Corridor (outside a Hub)			
Pedestrian	PLOS Inputs				
	Pedestrians Crossing the	North Leg	South Leg	East Leg	West Leg
	Number of Travel Lanes Crossed	4	1-3	4	1-3
	Median Refuge (≥2.7m)	No	No	No	No
	Crosswalk Treatment	Std Transverse Markings	Std Transverse Markings	Std Transverse Markings	Std Transverse Markings
	Signal Cycle Length (sec)		120.0		
	Effective Walk Time (sec)	7.0	7.0	7.0	7.0
	Conflict with Right-Turn Vehicles (For PLOS & BLOS)	WBR	EBR	NBR	SBR
	Right-Turn Geometry	Right-Turn With No Channel	Right-Turn With No Channel	Right-Turn With No Channel	Right-Turn With No Channel
	Right-Turn Signal Phasing	Permissive	Permissive	Permissive	Permissive
	Right-Turn Volume	≤ 150 veh/h	≤ 150 veh/h	≤ 150 veh/h	> 300 veh/h
	Right-Turn Effective Corner Radius	> 8m	> 8m	> 8m	> 8m
	Cross-street Posted Speed (km/h)	50 km/h		70 km/h	
	Conflict with Left-Turn Vehicles (For PLOS & BLOS)	EBL	WBL	SBL	NBL
Left-Turn Signal Phasing	Perm or Prot+Perm	Perm or Prot+Perm	Perm or Prot+Perm	Perm or Prot+Perm	
Left-Turn Volume	> 100 veh/h	≤ 50 veh/h	> 50 to 100 veh/h	> 50 to 100 veh/h	
Left-Turn Opposing Lanes	-	-	≤ 1	≤ 1	
Score	3.35	4.15	3.40	3.55	
PLOS	C	B	C	B	
Target PLOS	B				
Bicycle	BLOS Inputs				
	Cycling Route Classification	Elsewhere			
	Cyclists Crossing the	North Leg	South Leg	East Leg	West Leg
	Type of Cycling Facility Across Leg	Bike Lane Through Intersection	Mixed Traffic		
	Two-Way ADT (in Cyclist Travel Direction)	11,675			
	Floating Bike Lane or Right-Turn Lane Crossover Approaching the Crossing?	Yes	No		
	Crossroad Operation	-	-		
	Target Crossroad Setback Met?	-	-		
	Right-Turn Vehicle Volume from Adjacent Roadway > 100 veh/h?	-	-		
	Cyclist Left-Turn Operation	WBL	EBL	NBL	SBL
	Cyclist Left-Turn Treatment Type	Physically Separated	General Purpose Through-Left or Single Left-Turn Lane		
Vehicle Lanes Crossed by Cyclists	-	Two or More Lanes Crossed			
Score	15	40	-	-	
BLOS	E	D	-	-	
Target BLOS	C				
Transit	TLOS Inputs				
	Transit Facility	Mixed Traffic			
	Vehicles Travelling	Southbound	Northbound	Westbound	Eastbound
	Average Transit Delay (if available)	≤ 10 sec			21-35 sec
	Example Transit Priority Treatment	-			-
	TLOS	A	-	-	C
Target TLOS	E (D for frequent transit routes)				
Auto	AutoLOS Inputs				
	Overall Intersection Volume to Capacity Ratio	0 to 0.60			
	Individual Movements V/C Ratios and Queue Lengths	See Separate Traffic Operations Table			
	AutoLOS	A			
Target AutoLOS	E				

Multi-Modal Level of Service - Intersections Form

Project: Leitrim Catholic School
 Consultant: Parsons
 Date: Sep 30, 2025
 Scenario: Future

Intersection Name		Bank/Findlay Creek			
OP Transect / Policy Area		Mainstreet Corridor (outside a Hub)			
Pedestrian	PLOS Inputs				
	Pedestrians Crossing the	North Leg	South Leg	East Leg	West Leg
	Number of Travel Lanes Crossed	6	5	5	1-3
	Median Refuge (≥2.7m)	No	No	No	No
	Crosswalk Treatment	Zebra Stripe Hi-Vis Markings	Zebra Stripe Hi-Vis Markings	Zebra Stripe Hi-Vis Markings	Zebra Stripe Hi-Vis Markings
	Signal Cycle Length (sec)	120.0			
	Effective Walk Time (sec)	7.0	7.0	7.0	7.0
	Conflict with Right-Turn Vehicles (For PLOS & BLOS)	WBR	EBR	NBR	SBR
	Right-Turn Geometry	Right-Turn With No Channel	Right-Turn With No Channel	Right-Turn With No Channel	Smart Channel w/o Raised Crossing
	Right-Turn Signal Phasing	Permissive	Permissive	Permissive	-
	Right-Turn Volume	≤ 150 veh/h	≤ 150 veh/h	≤ 150 veh/h	> 300 veh/h
	Right-Turn Effective Corner Radius	≤ 8m	≤ 8m	> 8m	-
	Cross-street Posted Speed (km/h)	50 km/h		70 km/h	
	Conflict with Left-Turn Vehicles (For PLOS & BLOS)	EBL	WBL	SBL	NBL
Left-Turn Signal Phasing	Fully Protected	Perm or Prot+Perm (with LPI)	Perm or Prot+Perm (with LPI)	Perm or Prot+Perm (with LPI)	
Left-Turn Volume	-	≤ 50 veh/h	> 100 veh/h	> 50 to 100 veh/h	
Left-Turn Opposing Lanes	-	-	-	≤ 1	
Score	2.40	3.00	2.70	3.75	
PLOS	D	C	C	B	
Target PLOS	B				
Bicycle	BLOS Inputs				
	Cycling Route Classification	Elsewhere			
	Cyclists Crossing the	North Leg	South Leg	East Leg	West Leg
	Type of Cycling Facility Across Leg	Crossride	Crossride	Crossride	Crossride
	Two-Way ADT (in Cyclist Travel Direction)	18,500		8,000	
	Floating Bike Lane or Right-Turn Lane Crossover Approaching the Crossing?	No	No	No	No
	Crossride Operation	Unidirectional	Unidirectional	Unidirectional	Unidirectional
	Target Crossride Setback Met?	Yes	Yes	No	-
	Right-Turn Vehicle Volume from Adjacent Roadway > 100 veh/h?	-	-	-	-
	Cyclist Left-Turn Operation	WBL	EBL	NBL	SBL
	Cyclist Left-Turn Treatment Type	Protected Corner	Protected Corner	Protected Corner	Protected Corner
	Vehicle Lanes Crossed by Cyclists	-	-	-	-
	Score	140	140	100	110
	BLOS	A	A	B	B
Target BLOS	C				
Transit	TLOS Inputs				
	Transit Facility	Mixed Traffic			
	Vehicles Travelling	Southbound	Northbound	Westbound	Eastbound
	Average Transit Delay (if available)	≤ 10 sec		21-35 sec	
	Example Transit Priority Treatment	-	-	-	-
	TLOS	A	-	-	C
	Target TLOS	E (D for frequent transit routes)			
Auto	AutoLOS Inputs				
	Overall Intersection Volume to Capacity Ratio	0.61 to 0.70			
	Individual Movements V/C Ratios and Queue Lengths	See Separate Traffic Operations Table			
	AutoLOS	B			
Target AutoLOS	E				

Multi-Modal Level of Service - Segments Form

Project: Leitrim Catholic School
 Consultant: Parsons
 Date: Sep 30, 2025
 Scenario: Existing

Segment Name		Findlay Creek Dr				Trident Mews			
OP Transect / Policy Area		Outer Urban or Suburban				Outer Urban or Suburban			
Segment Component		Majority (>50%)		Critical		Majority (>50%)		Critical	
Side of Street		W or N	E or S	W or N	E or S	W or N	E or S	W or N	E or S
Pedestrian	PLOS Inputs								
	Posted Speed (km/h)	50 km/h		50 km/h		50 km/h		50 km/h	
	Two-Way ADT	2,842		2,842		344		344	
	Pedestrian Facility	Sidewalk	None			Sidewalk	None		
	Does the facility meet the TMP Sidewalk or MUP Policy? If not, for MUPs, does the location have a low volume of peak daily users AND are pedestrian volumes likely less than 20% of total users?	Yes	Yes			Yes	Yes		
	Facility Width (m)	2.00m	-			2.00m	-		
	Offset from Motor Vehicle Travel Lanes (m)	1.5-2.99m	-			< 0.5m	-		
	Presence of Adjacent Parking?	-	-			-	-		
	General Purpose Curb Lane ADT	≤ 3000				≤ 3000			
	Max. Distance between Controlled Crossings (m)	291-400m							
Score	4.00	-	-	-	4.25	-	-	-	
PLOS	B	-	-	-	B	-	-	-	
Target PLOS	C				C				
Bicycle	BLOS Inputs								
	Cycling Route Classification	Elsewhere				Elsewhere			
	Cycling Facility	Shared Operating Space	Shared Operating Space	Input PLOS First	Input PLOS First	Shared Operating Space	Shared Operating Space	Input PLOS First	Input PLOS First
	Is the minimum level of separation provided according to OTM Book 18 Pre-Selection Nomograph - Rural Context (Figure 5.6)? (for paved shoulders)	-	-			-	-		
	Facility Operation	-	-			-	-		
	Pedestrian/Cyclist Volume	-	-			-	-		
	Facility Width	-	-			-	-		
	Boulevard/Buffer Width (excluding curb)	-	-			-	-		
	Unsignalized Roadway Crossing Type (where cyclists are required to yield)	None	None			None	None		
	Number of Travel Lanes at Crossing	-	-			-	-		
	Crossing includes Median Refuge (≥ 2.7m)	-	-			-	-		
	Cross-street Posted Speed (km/h)	-	-			-	-		
	Cycling Path Blockages (e.g. bus stops and/or loading zones)	Rare	Rare			Rare	Rare		
	Score	1.60	1.60	-	-	1.60	1.60	-	-
BLOS	D	D	-	-	D	D	-	-	
Target BLOS	C				C				
Transit	TLOS Inputs								
	Transit Facility	Mixed Traffic				Select Transit Designation			
	Facility Type	Mixed Traffic							
	Expected Transit Running Time	Unimpeded							
	Transit Travel Speed (if available)	Enter Speed (if available)							
TLOS	-	B			-	-			
Target TLOS	E (D for frequent transit routes)				-				
Public Realm	PRLOS Inputs								
	Context	Other Streets	Other Streets			Other Streets	Other Streets		
	Inner Boulevard Width	2.0-3.99m	2.0-3.99m			≤ 0.6m	≤ 0.6m		
	Middle Boulevard Width	≤ 0.5m	≤ 0.5m			≤ 0.5m	≤ 0.5m		
	Outer Boulevard (Frontage) Width	1.5-1.99m	≥ 3.0m			≥ 3.0m	≤ 0.5m		
	Transit Route on Segment?	No	Yes			No	No		
	Bus Stop Elements	-	Curbside platform with no shelter			-	-		
	Number of Midblock Traffic Lanes (both travel directions)	≤ 2				≤ 2			
	Score	20.10	12.90			24.60	14.10		
	PRLOS	C	D			B	D		
	C				C				

Multi-Modal Level of Service - Segments Form

Project: Leitrim Catholic School
 Consultant: Parsons
 Date: Sep 30, 2025
 Scenario: Future

Segment Name		Findlay Creek Dr				Trident Mews			
OP Transect / Policy Area		Within 300m of school				Within 300m of school			
Segment Component		Majority (>50%)		Critical		Majority (>50%)		Critical	
Side of Street		W or N	E or S	W or N	E or S	W or N	E or S	W or N	E or S
Pedestrian	PLOS Inputs								
	Posted Speed (km/h)	50 km/h		50 km/h		50 km/h		50 km/h	
	Two-Way ADT	5,500		5,500		360		360	
	Pedestrian Facility	Sidewalk	Sidewalk			Sidewalk	None		
	Does the facility meet the TMP Sidewalk or MUP Policy? If not, for MUPs, does the location have a low volume of peak daily users AND are pedestrian volumes likely less than 20% of total users?	Yes	Yes			Yes	Yes		
	Facility Width (m)	2.00m	2.00m			2.00m	-		
	Offset from Motor Vehicle Travel Lanes (m)	1.5-2.99m	1.5-2.99m			< 0.5m	-		
	Presence of Adjacent Parking?	-	-			-	-		
	General Purpose Curb Lane ADT	≤ 3000	> 3000			≤ 3000	-		
	Max. Distance between Controlled Crossings (m)	291-400m	291-400m			-	-		
Score	4.00	4.00	-	-	4.25	-	-	-	-
PLOS	B	B	-	-	B	-	-	-	-
Target PLOS	B				B				
Bicycle	BLOS Inputs								
	Cycling Route Classification	Elsewhere				Elsewhere			
	Cycling Facility	Shared Operating Space	Shared Operating Space	Input PLOS First	Input PLOS First	Shared Operating Space	Shared Operating Space	Input PLOS First	Input PLOS First
	Is the minimum level of separation provided according to OTM Book 18 Pre-Selection Nomograph - Rural Context (Figure 5.6)? (for paved shoulders)	-	-			-	-		
	Facility Operation	-	-			-	-		
	Pedestrian/Cyclist Volume	-	-			-	-		
	Facility Width	-	-			-	-		
	Boulevard/Buffer Width (excluding curb)	-	-			-	-		
	Unsignalized Roadway Crossing Type (where cyclists are required to yield)	None	None			None	None		
	Number of Travel Lanes at Crossing	-	-			-	-		
Crossing includes Median Refuge (≥ 2.7m)	-	-			-	-			
Cross-street Posted Speed (km/h)	-	-			-	-			
Cycling Path Blockages (e.g. bus stops and/or loading zones)	Rare	Rare			Rare	Rare			
Score	1.60	1.60	-	-	1.60	1.60	-	-	
BLOS	D	D	-	-	D	D	-	-	
Target BLOS	C				C				
Transit	TLOS Inputs								
	Transit Facility	Mixed Traffic				Select Transit Designation			
	Facility Type	Mixed Traffic							
	Expected Transit Running Time	Slightly Impeded							
	Transit Travel Speed (if available)	Enter Speed (if available)							
TLOS	-	C			-	-			
Target TLOS	E (D for frequent transit routes)				-				
Public Realm	PRLOS Inputs								
	Context	Other Streets	Other Streets			Other Streets	Other Streets		
	Inner Boulevard Width	2.0-3.99m	2.0-3.99m			≤ 0.6m	≤ 0.6m		
	Middle Boulevard Width	≤ 0.5m	≤ 0.5m			≤ 0.5m	≤ 0.5m		
	Outer Boulevard (Frontage) Width	1.5-1.99m	≥ 3.0m			≥ 3.0m	≤ 0.5m		
	Transit Route on Segment?	No	Yes			No	No		
	Bus Stop Elements	-	Curbside platform with no shelter			-	-		
	Number of Midblock Traffic Lanes (both travel directions)	≤ 2				≤ 2			
Score	20.10	19.80			24.60	14.10			
PRLOS	C	C			B	D			
	C				C				

Appendix G:

TDM Measures Checklists

TDM Measures Checklist:
Non-Residential Developments (office, institutional, retail or industrial)

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

TDM measures: <i>Non-residential developments</i>		Check if proposed & add descriptions
1. TDM PROGRAM MANAGEMENT		
1.1 Program coordinator		
BASIC	*	1.1.1 Designate an internal coordinator, or contract with an external coordinator <input checked="" type="checkbox"/> CECCE
1.2 Travel surveys		
BETTER		1.2.1 Conduct periodic surveys to identify travel-related behaviours, attitudes, challenges and solutions, and to track progress <input type="checkbox"/>
2. WALKING AND CYCLING		
2.1 Information on walking/cycling routes & destinations		
BASIC		2.1.1 Display local area maps with walking/cycling access routes and key destinations at major entrances <input checked="" type="checkbox"/>
2.2 Bicycle skills training		
<i>Commuter travel</i>		
BETTER	*	2.2.1 Offer on-site cycling courses for commuters, or subsidize off-site courses <input type="checkbox"/>
2.3 Valet bike parking		
<i>Visitor travel</i>		
BETTER		2.3.1 Offer secure valet bike parking during public events when demand exceeds fixed supply (e.g. for festivals, concerts, games) <input type="checkbox"/>

TDM measures: <i>Non-residential developments</i>		Check if proposed & add descriptions
3. TRANSIT		
3.1 Transit information		
BASIC	3.1.1 Display relevant transit schedules and route maps at entrances	<input checked="" type="checkbox"/> Intended for staff
BASIC	3.1.2 Provide online links to OC Transpo and STO information	<input checked="" type="checkbox"/> For staff
BETTER	3.1.3 Provide real-time arrival information display at entrances	<input type="checkbox"/>
3.2 Transit fare incentives		
<i>Commuter travel</i>		
BETTER	3.2.1 Offer preloaded PRESTO cards to encourage commuters to use transit	<input type="checkbox"/>
BETTER	3.2.2 Subsidize or reimburse monthly transit pass purchases by employees	<input type="checkbox"/>
<i>Visitor travel</i>		
BETTER	3.2.3 Arrange inclusion of same-day transit fare in price of tickets (e.g. for festivals, concerts, games)	<input type="checkbox"/>
3.3 Enhanced public transit service		
<i>Commuter travel</i>		
BETTER	3.3.1 Contract with OC Transpo to provide enhanced transit services (e.g. for shift changes, weekends)	<input type="checkbox"/>
<i>Visitor travel</i>		
BETTER	3.3.2 Contract with OC Transpo to provide enhanced transit services (e.g. for festivals, concerts, games)	<input type="checkbox"/>
3.4 Private transit service		
<i>Commuter travel</i>		
BETTER	3.4.1 Provide shuttle service when OC Transpo cannot offer sufficient quality or capacity to serve demand (e.g. for shift changes, weekends)	<input checked="" type="checkbox"/> students receive fully subsidized private school bus transportation
<i>Visitor travel</i>		
BETTER	3.4.2 Provide shuttle service when OC Transpo cannot offer sufficient quality or capacity to serve demand (e.g. for festivals, concerts, games)	<input type="checkbox"/>

TDM measures: <i>Non-residential developments</i>		Check if proposed & add descriptions
4. RIDESHARING		
4.1 Ridematching service		
<i>Commuter travel</i>		
BASIC	* 4.1.1 Provide a dedicated ridematching portal at OttawaRideMatch.com	<input type="checkbox"/>
4.2 Carpool parking price incentives		
<i>Commuter travel</i>		
BETTER	4.2.1 Provide discounts on parking costs for registered carpools	<input type="checkbox"/>
4.3 Vanpool service		
<i>Commuter travel</i>		
BETTER	4.3.1 Provide a vanpooling service for long-distance commuters	<input checked="" type="checkbox"/> Vans for students located further away from school bus routes
5. CARSHARING & BIKESHARING		
5.1 Bikeshare stations & memberships		
BETTER	5.1.1 Contract with provider to install on-site bikeshare station for use by commuters and visitors	<input type="checkbox"/>
<i>Commuter travel</i>		
BETTER	5.1.2 Provide employees with bikeshare memberships for local business travel	<input type="checkbox"/>
5.2 Carshare vehicles & memberships		
<i>Commuter travel</i>		
BETTER	5.2.1 Contract with provider to install on-site carshare vehicles and promote their use by tenants	<input type="checkbox"/>
BETTER	5.2.2 Provide employees with carshare memberships for local business travel	<input type="checkbox"/>
6. PARKING		
6.1 Priced parking		
<i>Commuter travel</i>		
BASIC	* 6.1.1 Charge for long-term parking (daily, weekly, monthly)	<input type="checkbox"/>
BASIC	6.1.2 Unbundle parking cost from lease rates at multi-tenant sites	
<i>Visitor travel</i>		
BETTER	6.1.3 Charge for short-term parking (hourly)	

TDM measures: <i>Non-residential developments</i>		Check if proposed & add descriptions
7. TDM MARKETING & COMMUNICATIONS		
7.1 Multimodal travel information		
<i>Commuter travel</i>		
BASIC	* 7.1.1 Provide a multimodal travel option information package to new/relocating employees and students	<input checked="" type="checkbox"/>
<i>Visitor travel</i>		
BETTER	* 7.1.2 Include multimodal travel option information in invitations or advertising that attract visitors or customers (e.g. for festivals, concerts, games)	<input type="checkbox"/>
7.2 Personalized trip planning		
<i>Commuter travel</i>		
BETTER	* 7.2.1 Offer personalized trip planning to new/relocating employees	<input type="checkbox"/>
7.3 Promotions		
<i>Commuter travel</i>		
BETTER	7.3.1 Deliver promotions and incentives to maintain awareness, build understanding, and encourage trial of sustainable modes	<input type="checkbox"/>
8. OTHER INCENTIVES & AMENITIES		
8.1 Emergency ride home		
<i>Commuter travel</i>		
BETTER	* 8.1.1 Provide emergency ride home service to non-driving commuters	<input type="checkbox"/>
8.2 Alternative work arrangements		
<i>Commuter travel</i>		
BASIC	* 8.2.1 Encourage flexible work hours	<input type="checkbox"/>
BETTER	8.2.2 Encourage compressed workweeks	<input type="checkbox"/>
BETTER	* 8.2.3 Encourage telework	<input type="checkbox"/>
8.3 Local business travel options		
<i>Commuter travel</i>		
BASIC	* 8.3.1 Provide local business travel options that minimize the need for employees to bring a personal car to work	<input type="checkbox"/>
8.4 Commuter incentives		
<i>Commuter travel</i>		
BETTER	8.4.1 Offer employees a taxable, mode-neutral commuting allowance	<input type="checkbox"/>
8.5 On-site amenities		
<i>Commuter travel</i>		
BETTER	8.5.1 Provide on-site amenities/services to minimize mid-day or mid-commute errands	<input type="checkbox"/>

TDM-Supportive Development Design and Infrastructure Checklist:
Non-Residential Developments (office, institutional, retail or industrial)

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

TDM-supportive design & infrastructure measures: <i>Non-residential developments</i>		Check if completed & add descriptions, explanations or plan/drawing references
1. WALKING & CYCLING: ROUTES		
1.1 Building location & access points		
BASIC	1.1.1 Locate building close to the street, and do not locate parking areas between the street and building entrances	<input checked="" type="checkbox"/> Direct pathways from road to entrance are proposed
BASIC	1.1.2 Locate building entrances in order to minimize walking distances to sidewalks and transit stops/stations	<input checked="" type="checkbox"/> Nearest transit located along site frontage on Findlay Creek Dr
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"/> proposed modern design with windows
1.2 Facilities for walking & cycling		
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"/> Direct access to transit stop along site frontage on the corner of Findlay Creek Dr and Trident Mews
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"/> Direct pathways to/form proposed main entrances on Findlay Creek Dr

TDM-supportive design & infrastructure measures: <i>Non-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"/> Proposed sidewalks and pathways follow city design specs.
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"/> Proposed sidewalks and pathways provide clear connections to existing active transportation network.
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 checked="" type="checkbox"/>
1.3 Amenities for walking & cycling		
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>Non-residential developments</i>		Check if completed & add descriptions, explanations or plan/drawing references
2. WALKING & CYCLING: END-OF-TRIP FACILITIES		
2.1 Bicycle parking		
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"/> Bicycle parking provided in multiple locations across the site.
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"/> Proposed bicycle parking exceeds minimums
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"/> Bicycle parking spaces and access aisles to conform to minimum dimension requirements and to be securely anchored.
BASIC	2.1.4 Provide bicycle parking spaces equivalent to the expected number of commuter cyclists (assuming the cycling mode share target is met), plus the expected peak number of customer/visitor cyclists	<input checked="" type="checkbox"/> Proposed bicycle parking exceeds peak number of expected trips.
BETTER	2.1.5 Provide bicycle parking spaces equivalent to the expected number of commuter and customer/visitor cyclists, plus an additional buffer (e.g. 25 percent extra) to encourage other cyclists and ensure adequate capacity in peak cycling season	<input checked="" type="checkbox"/> Proposed bicycle parking exceeds expected number of peak hour trips by approximately 25%
2.2 Secure bicycle parking		
REQUIRED	2.2.1 Where more than 50 bicycle parking spaces are provided for a single office building, locate at least 25% of spaces within a building/structure, a secure area (e.g. supervised parking lot or enclosure) or bicycle lockers (see <i>Zoning By-law Section 111</i>)	<input checked="" type="checkbox"/> Less than 50 bicycle parking spaces are provided.
BETTER	2.2.2 Provide secure bicycle parking spaces equivalent to the expected number of commuter cyclists (assuming the cycling mode share target is met)	<input type="checkbox"/>
2.3 Shower & change facilities		
BASIC	2.3.1 Provide shower and change facilities for the use of active commuters	<input type="checkbox"/>
BETTER	2.3.2 In addition to shower and change facilities, provide dedicated lockers, grooming stations, drying racks and laundry facilities for the use of active commuters	<input type="checkbox"/>
2.4 Bicycle repair station		
BETTER	2.4.1 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"/>

TDM-supportive design & infrastructure measures: <i>Non-residential developments</i>		Check if completed & add descriptions, explanations or plan/drawing references
3. TRANSIT		
3.1 Customer amenities		
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"/>
4. RIDESHARING		
4.1 Pick-up & drop-off facilities		
BASIC	4.1.1 Provide a designated area for carpool drivers (plus taxis and ride-hailing services) to drop off or pick up passengers without using fire lanes or other no-stopping zones	<input checked="" type="checkbox"/> Proposed pick-up and drop-off location located on southside of parking lot.
4.2 Carpool parking		
BASIC	4.2.1 Provide signed parking spaces for carpools in a priority location close to a major building entrance, sufficient in number to accommodate the mode share target for carpools	<input type="checkbox"/>
BETTER	4.2.2 At large developments, provide spaces for carpools in a separate, access-controlled parking area to simplify enforcement	<input type="checkbox"/>
5. CARSHARING & BIKESHARING		
5.1 Carshare parking spaces		
BETTER	5.1.1 Provide carshare parking spaces in permitted non-residential zones, occupying either required or provided parking spaces (<i>see Zoning By-law Section 94</i>)	<input type="checkbox"/>
5.2 Bikeshare station location		
BETTER	5.2.1 Provide a designated bikeshare station area near a major building entrance, preferably lighted and sheltered with a direct walkway connection	<input type="checkbox"/>

TDM-supportive design & infrastructure measures: <i>Non-residential developments</i>		Check if completed & add descriptions, explanations or plan/drawing references
6. PARKING		
6.1 Number of parking spaces		
REQUIRED	6.1.1 Do not provide more parking than permitted by zoning, nor less than required by zoning, unless a variance is being applied for	<input checked="" type="checkbox"/> Parking meets requirements.
BASIC	6.1.2 Provide parking for long-term and short-term users that is consistent with mode share targets, considering the potential for visitors to use off-site public parking	<input type="checkbox"/>
BASIC	6.1.3 Where a site features more than one use, provide shared parking and reduce the cumulative number of parking spaces accordingly (<i>see Zoning By-law Section 104</i>)	<input type="checkbox"/>
BETTER	6.1.4 Reduce the minimum number of parking spaces required by zoning by one space for each 13 square metres of gross floor area provided as shower rooms, change rooms, locker rooms and other facilities for cyclists in conjunction with bicycle parking (<i>see Zoning By-law Section 111</i>)	<input type="checkbox"/>
6.2 Separate long-term & short-term parking areas		
BETTER	6.2.1 Separate short-term and long-term parking areas using signage or physical barriers, to permit access controls and simplify enforcement (i.e. to discourage employees from parking in visitor spaces, and vice versa)	<input type="checkbox"/>
7. OTHER		
7.1 On-site amenities to minimize off-site trips		
BETTER	7.1.1 Provide on-site amenities to minimize mid-day or mid-commute errands	<input type="checkbox"/>

Appendix H:

Synchro Reports

Lanes, Volumes, Timings

1: Bank & Findlay Creek

10/01/2025



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Configurations									
Traffic Volume (vph)	345	49	19	46	28	389	30	318	134
Future Volume (vph)	345	49	19	46	28	389	30	318	134
Lane Group Flow (vph)	383	90	21	135	31	450	33	353	149
Turn Type	Perm	NA	Perm	NA	Perm	NA	Perm	NA	Perm
Protected Phases		4		8		2		6	
Permitted Phases	4		8		2		6		6
Detector Phase	4	4	8	8	2	2	6	6	6
Switch Phase									
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Minimum Split (s)	32.3	32.3	32.3	32.3	36.6	36.6	36.6	36.6	36.6
Total Split (s)	41.0	41.0	41.0	41.0	69.0	69.0	69.0	69.0	69.0
Total Split (%)	37.3%	37.3%	37.3%	37.3%	62.7%	62.7%	62.7%	62.7%	62.7%
Yellow Time (s)	3.3	3.3	3.3	3.3	4.2	4.2	4.2	4.2	4.2
All-Red Time (s)	3.0	3.0	3.0	3.0	2.4	2.4	2.4	2.4	2.4
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.3	6.3	6.3	6.3	6.6	6.6	6.6	6.6	6.6
Lead/Lag									
Lead-Lag Optimize?									
Recall Mode	None	None	None	None	C-Min	C-Min	C-Min	C-Min	C-Min
Act Effct Green (s)	43.8	43.8	43.8	43.8	53.3	53.3	53.3	53.3	53.3
Actuated g/C Ratio	0.40	0.40	0.40	0.40	0.48	0.48	0.48	0.48	0.48
v/c Ratio	0.81	0.13	0.04	0.20	0.08	0.52	0.10	0.41	0.19
Control Delay	44.1	14.3	20.3	10.2	16.4	22.4	16.9	20.3	3.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	44.1	14.3	20.3	10.2	16.4	22.4	16.9	20.3	3.3
LOS	D	B	C	B	B	C	B	C	A
Approach Delay		38.4		11.6		22.0		15.3	
Approach LOS		D		B		C		B	
Queue Length 50th (m)	71.8	7.7	2.7	7.4	3.4	64.1	3.7	47.1	0.0
Queue Length 95th (m)	#118.4	17.3	7.5	19.2	9.1	95.8	9.7	71.8	10.4
Internal Link Dist (m)		113.5		168.6		419.1		364.2	
Turn Bay Length (m)			25.0		70.0		205.0		70.0
Base Capacity (vph)	475	679	492	682	480	1006	391	1012	913
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.81	0.13	0.04	0.20	0.06	0.45	0.08	0.35	0.16

Intersection Summary

Cycle Length: 110
 Actuated Cycle Length: 110
 Offset: 18 (16%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
 Natural Cycle: 70
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.81
 Intersection Signal Delay: 23.6
 Intersection Capacity Utilization 71.7%
 Analysis Period (min) 15
 # 95th percentile volume exceeds capacity, queue may be longer.
 Queue shown is maximum after two cycles.

Splits and Phases: 1: Bank & Findlay Creek



HCM 6th TWSC
2: Findlay Creek & Kugagami

Existing AM

Intersection						
Int Delay, s/veh	1					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↕	↕		↕	
Traffic Vol, veh/h	2	84	146	0	1	25
Future Vol, veh/h	2	84	146	0	1	25
Conflicting Peds, #/hr	4	0	0	4	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	2	93	162	0	1	28
Major/Minor	Major1	Major2	Minor2			
Conflicting Flow All	166	0	-	0	263	166
Stage 1	-	-	-	-	166	-
Stage 2	-	-	-	-	97	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1412	-	-	-	726	878
Stage 1	-	-	-	-	863	-
Stage 2	-	-	-	-	927	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	1407	-	-	-	719	875
Mov Cap-2 Maneuver	-	-	-	-	719	-
Stage 1	-	-	-	-	859	-
Stage 2	-	-	-	-	923	-
Approach	EB	WB		SB		
HCM Control Delay, s	0.2	0		9.3		
HCM LOS				A		
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	1407	-	-	-	868	
HCM Lane V/C Ratio	0.002	-	-	-	0.033	
HCM Control Delay (s)	7.6	0	-	-	9.3	
HCM Lane LOS	A	A	-	-	A	
HCM 95th %tile Q(veh)	0	-	-	-	0.1	

HCM 6th TWSC
3: Trident Mews & Findlay Creek

Existing AM

Intersection						
Int Delay, s/veh	0.7					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	18	10	0	158	10	5
Future Vol, veh/h	18	10	0	158	10	5
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	20	11	0	176	11	6
Major/Minor	Major1	Major2	Minor1			
Conflicting Flow All	0	0	31	0	202	26
Stage 1	-	-	-	-	26	-
Stage 2	-	-	-	-	176	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1582	-	787	1050
Stage 1	-	-	-	-	997	-
Stage 2	-	-	-	-	855	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1582	-	787	1050
Mov Cap-2 Maneuver	-	-	-	-	787	-
Stage 1	-	-	-	-	997	-
Stage 2	-	-	-	-	855	-
Approach	EB	WB	NB			
HCM Control Delay, s	0	0	9.3			
HCM LOS						A
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT	
Capacity (veh/h)	859	-	-	1582	-	
HCM Lane V/C Ratio	0.019	-	-	-	-	
HCM Control Delay (s)	9.3	-	-	0	-	
HCM Lane LOS	A	-	-	A	-	
HCM 95th %tile Q(veh)	0.1	-	-	0	-	

Lanes, Volumes, Timings

1: Bank & Findlay Creek

Existing PM



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Configurations									
Traffic Volume (vph)	226	58	30	42	51	290	83	683	458
Future Volume (vph)	226	58	30	42	51	290	83	683	458
Lane Group Flow (vph)	251	104	33	144	57	342	92	759	509
Turn Type	Perm	NA	Perm	NA	Perm	NA	Perm	NA	Perm
Protected Phases		4		8		2		6	
Permitted Phases	4		8		2		6		6
Detector Phase	4	4	8	8	2	2	6	6	6
Switch Phase									
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Minimum Split (s)	32.3	32.3	32.3	32.3	36.6	36.6	36.6	36.6	36.6
Total Split (s)	37.0	37.0	37.0	37.0	83.0	83.0	83.0	83.0	83.0
Total Split (%)	30.8%	30.8%	30.8%	30.8%	69.2%	69.2%	69.2%	69.2%	69.2%
Yellow Time (s)	3.3	3.3	3.3	3.3	4.2	4.2	4.2	4.2	4.2
All-Red Time (s)	3.0	3.0	3.0	3.0	2.4	2.4	2.4	2.4	2.4
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.3	6.3	6.3	6.3	6.6	6.6	6.6	6.6	6.6
Lead/Lag									
Lead-Lag Optimize?									
Recall Mode	None	None	None	None	C-Min	C-Min	C-Min	C-Min	C-Min
Act Effct Green (s)	31.3	31.3	31.3	31.3	75.8	75.8	75.8	75.8	75.8
Actuated g/C Ratio	0.26	0.26	0.26	0.26	0.63	0.63	0.63	0.63	0.63
v/c Ratio	0.86	0.23	0.10	0.31	0.20	0.31	0.15	0.67	0.45
Control Delay	69.0	26.8	33.4	17.0	12.5	11.3	10.6	18.6	2.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	69.0	26.8	33.4	17.0	12.5	11.3	10.6	18.6	2.2
LOS	E	C	C	B	B	B	B	B	A
Approach Delay		56.6		20.1		11.5		11.9	
Approach LOS		E		C		B		B	
Queue Length 50th (m)	54.2	13.9	5.7	10.7	5.7	36.6	8.9	115.8	0.0
Queue Length 95th (m)	#103.7	29.3	14.5	28.4	12.1	48.4	15.3	146.0	11.5
Internal Link Dist (m)		113.5		168.6		419.1		364.2	
Turn Bay Length (m)			25.0		70.0		205.0		70.0
Base Capacity (vph)	306	472	333	489	289	1150	611	1158	1140
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.82	0.22	0.10	0.29	0.20	0.30	0.15	0.66	0.45

Intersection Summary

Cycle Length: 120
 Actuated Cycle Length: 120
 Offset: 18 (15%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
 Natural Cycle: 75
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.86
 Intersection Signal Delay: 19.4
 Intersection LOS: B
 Intersection Capacity Utilization 91.8%
 ICU Level of Service F
 Analysis Period (min) 15
 # 95th percentile volume exceeds capacity, queue may be longer.
 Queue shown is maximum after two cycles.

Splits and Phases: 1: Bank & Findlay Creek



HCM 6th TWSC
2: Findlay Creek & Kugagami

Existing PM

Intersection						
Int Delay, s/veh	1.2					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↕	↕		↕	
Traffic Vol, veh/h	22	163	133	5	1	27
Future Vol, veh/h	22	163	133	5	1	27
Conflicting Peds, #/hr	4	0	0	4	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	24	181	148	6	1	30
Major/Minor	Major1	Major2	Minor2			
Conflicting Flow All	158	0	-	0	384	155
Stage 1	-	-	-	-	155	-
Stage 2	-	-	-	-	229	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1422	-	-	-	619	891
Stage 1	-	-	-	-	873	-
Stage 2	-	-	-	-	809	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	1417	-	-	-	602	888
Mov Cap-2 Maneuver	-	-	-	-	602	-
Stage 1	-	-	-	-	853	-
Stage 2	-	-	-	-	806	-
Approach	EB	WB		SB		
HCM Control Delay, s	0.9	0		9.3		
HCM LOS				A		
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	1417	-	-	-	873	
HCM Lane V/C Ratio	0.017	-	-	-	0.036	
HCM Control Delay (s)	7.6	0	-	-	9.3	
HCM Lane LOS	A	A	-	-	A	
HCM 95th %tile Q(veh)	0.1	-	-	-	0.1	

HCM 6th TWSC
3: Trident Mews & Findlay Creek

Existing PM

Intersection						
Int Delay, s/veh	1.3					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	9	19	5	115	17	2
Future Vol, veh/h	9	19	5	115	17	2
Conflicting Peds, #/hr	0	2	2	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	10	21	6	128	19	2
Major/Minor	Major1	Major2	Minor1			
Conflicting Flow All	0	0	33	0	163	23
Stage 1	-	-	-	-	23	-
Stage 2	-	-	-	-	140	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1579	-	828	1054
Stage 1	-	-	-	-	1000	-
Stage 2	-	-	-	-	887	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1576	-	823	1052
Mov Cap-2 Maneuver	-	-	-	-	823	-
Stage 1	-	-	-	-	998	-
Stage 2	-	-	-	-	883	-
Approach	EB	WB	NB			
HCM Control Delay, s	0	0.3	9.4			
HCM LOS			A			
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT	
Capacity (veh/h)	842	-	-	1576	-	
HCM Lane V/C Ratio	0.025	-	-	0.004	-	
HCM Control Delay (s)	9.4	-	-	7.3	0	
HCM Lane LOS	A	-	-	A	A	
HCM 95th %tile Q(veh)	0.1	-	-	0	-	

Lanes, Volumes, Timings

1: Bank & Findlay Creek

FB 2032 AM



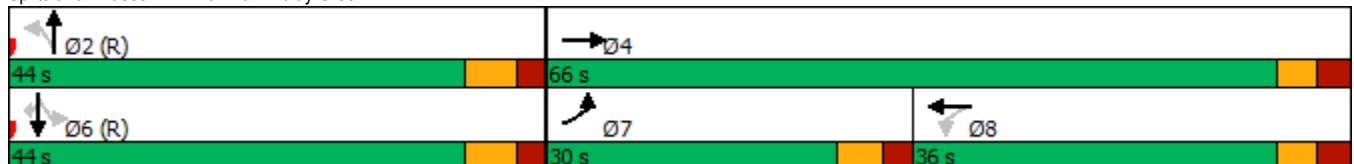
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Configurations									
Traffic Volume (vph)	376	53	21	50	31	541	46	402	146
Future Volume (vph)	376	53	21	50	31	541	46	402	146
Lane Group Flow (vph)	376	88	21	174	31	558	46	402	146
Turn Type	Prot	NA	Perm	NA	Perm	NA	Perm	NA	Perm
Protected Phases	7	4		8		2		6	
Permitted Phases			8		2		6		6
Detector Phase	7	4	8	8	2	2	6	6	6
Switch Phase									
Minimum Initial (s)	5.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Minimum Split (s)	11.2	32.3	32.3	32.3	36.6	36.6	36.6	36.6	36.6
Total Split (s)	30.0	66.0	36.0	36.0	44.0	44.0	44.0	44.0	44.0
Total Split (%)	27.3%	60.0%	32.7%	32.7%	40.0%	40.0%	40.0%	40.0%	40.0%
Yellow Time (s)	3.7	3.3	3.3	3.3	4.2	4.2	4.2	4.2	4.2
All-Red Time (s)	2.5	3.0	3.0	3.0	2.4	2.4	2.4	2.4	2.4
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.2	6.3	6.3	6.3	6.6	6.6	6.6	6.6	6.6
Lead/Lag	Lead		Lag	Lag					
Lead-Lag Optimize?	Yes		Yes	Yes					
Recall Mode	None	None	None	None	C-Min	C-Min	C-Min	C-Min	C-Min
Act Effct Green (s)	17.8	37.8	13.8	13.8	59.3	59.3	59.3	59.3	59.3
Actuated g/C Ratio	0.16	0.34	0.13	0.13	0.54	0.54	0.54	0.54	0.54
v/c Ratio	0.71	0.15	0.13	0.13	0.06	0.31	0.11	0.22	0.17
Control Delay	51.0	14.0	41.4	25.1	16.5	16.2	17.3	15.4	3.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	51.0	14.0	41.4	25.1	16.5	16.2	17.3	15.4	3.7
LOS	D	B	D	C	B	B	B	B	A
Approach Delay		44.0		26.8		16.2		12.7	
Approach LOS		D		C		B		B	
Queue Length 50th (m)	39.8	8.1	4.2	13.0	2.8	30.2	4.2	20.7	0.0
Queue Length 95th (m)	52.5	13.9	10.0	29.5	10.6	60.2	14.8	43.1	12.2
Internal Link Dist (m)		113.5		168.6		419.1		364.2	
Turn Bay Length (m)	100.0		25.0		70.0		160.0		150.0
Base Capacity (vph)	711	920	335	506	494	1817	401	1826	873
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.53	0.10	0.06	0.34	0.06	0.31	0.11	0.22	0.17

Intersection Summary

Cycle Length: 110
 Actuated Cycle Length: 110
 Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBTL, Start of Green
 Natural Cycle: 85
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.71
 Intersection Signal Delay: 23.2
 Intersection Capacity Utilization 77.7%
 Analysis Period (min) 15

Intersection LOS: C
 ICU Level of Service D

Splits and Phases: 1: Bank & Findlay Creek



Lanes, Volumes, Timings

2: Findlay Creek & Kugagami

FB 2032 AM



Lane Group	EBT	WBT	SBL
Lane Configurations			
Traffic Volume (vph)	105	200	1
Future Volume (vph)	105	200	1
Lane Group Flow (vph)	107	200	26
Sign Control	Free	Free	Stop

Intersection Summary	
Control Type: Unsignalized	
Intersection Capacity Utilization 21.4%	ICU Level of Service A
Analysis Period (min) 15	

Lanes, Volumes, Timings

3: Trident Mews & Findlay Creek

FB 2032 AM



Lane Group	EBT	WBT	NBL
Lane Configurations			
Traffic Volume (vph)	33	213	10
Future Volume (vph)	33	213	10
Lane Group Flow (vph)	43	213	15
Sign Control	Free	Free	Stop

Intersection Summary	
Control Type: Unsignalized	
Intersection Capacity Utilization 21.8%	ICU Level of Service A
Analysis Period (min) 15	

Intersection						
Int Delay, s/veh	0.8					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↕	↕		↕	
Traffic Vol, veh/h	2	105	200	0	1	25
Future Vol, veh/h	2	105	200	0	1	25
Conflicting Peds, #/hr	4	0	0	4	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	2	105	200	0	1	25
Major/Minor	Major1	Major2	Minor2			
Conflicting Flow All	204	0	-	0	313	204
Stage 1	-	-	-	-	204	-
Stage 2	-	-	-	-	109	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1368	-	-	-	680	837
Stage 1	-	-	-	-	830	-
Stage 2	-	-	-	-	916	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	1363	-	-	-	673	834
Mov Cap-2 Maneuver	-	-	-	-	673	-
Stage 1	-	-	-	-	825	-
Stage 2	-	-	-	-	912	-
Approach	EB	WB		SB		
HCM Control Delay, s	0.1	0		9.5		
HCM LOS				A		
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	1363	-	-	-	826	
HCM Lane V/C Ratio	0.001	-	-	-	0.031	
HCM Control Delay (s)	7.6	0	-	-	9.5	
HCM Lane LOS	A	A	-	-	A	
HCM 95th %tile Q(veh)	0	-	-	-	0.1	

Intersection						
Int Delay, s/veh	0.5					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↔			↕	↕	
Traffic Vol, veh/h	33	10	0	213	10	5
Future Vol, veh/h	33	10	0	213	10	5
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	33	10	0	213	10	5

Major/Minor	Major1	Major2	Minor1	Minor2	Minor3
Conflicting Flow All	0	0	43	0	251
Stage 1	-	-	-	-	38
Stage 2	-	-	-	-	213
Critical Hdwy	-	-	4.12	-	6.42
Critical Hdwy Stg 1	-	-	-	-	5.42
Critical Hdwy Stg 2	-	-	-	-	5.42
Follow-up Hdwy	-	-	2.218	-	3.518
Pot Cap-1 Maneuver	-	-	1566	-	738
Stage 1	-	-	-	-	984
Stage 2	-	-	-	-	823
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1566	-	738
Mov Cap-2 Maneuver	-	-	-	-	738
Stage 1	-	-	-	-	984
Stage 2	-	-	-	-	823

Approach	EB	WB	NB
HCM Control Delay, s	0	0	9.5
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	816	-	-	1566	-
HCM Lane V/C Ratio	0.018	-	-	-	-
HCM Control Delay (s)	9.5	-	-	0	-
HCM Lane LOS	A	-	-	A	-
HCM 95th %tile Q(veh)	0.1	-	-	0	-

Lanes, Volumes, Timings

1: Bank & Findlay Creek

FB 2032 PM



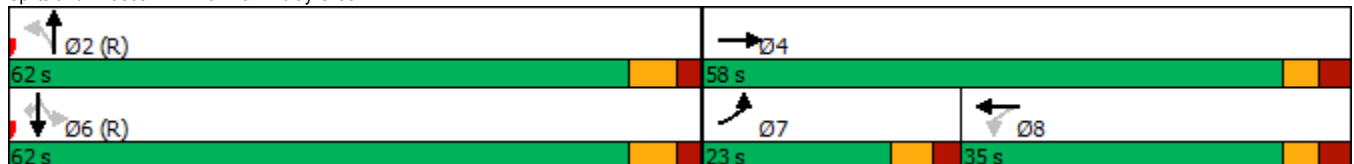
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Configurations									
Traffic Volume (vph)	246	63	33	46	56	386	127	881	499
Future Volume (vph)	246	63	33	46	56	386	127	881	499
Lane Group Flow (vph)	246	102	33	163	56	406	127	881	499
Turn Type	Prot	NA	Perm	NA	Perm	NA	Perm	NA	Perm
Protected Phases	7	4		8		2		6	
Permitted Phases			8		2		6		6
Detector Phase	7	4	8	8	2	2	6	6	6
Switch Phase									
Minimum Initial (s)	5.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Minimum Split (s)	11.2	32.3	32.3	32.3	36.6	36.6	36.6	36.6	36.6
Total Split (s)	23.0	58.0	35.0	35.0	62.0	62.0	62.0	62.0	62.0
Total Split (%)	19.2%	48.3%	29.2%	29.2%	51.7%	51.7%	51.7%	51.7%	51.7%
Yellow Time (s)	3.7	3.3	3.3	3.3	4.2	4.2	4.2	4.2	4.2
All-Red Time (s)	2.5	3.0	3.0	3.0	2.4	2.4	2.4	2.4	2.4
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.2	6.3	6.3	6.3	6.6	6.6	6.6	6.6	6.6
Lead/Lag	Lead		Lag	Lag					
Lead-Lag Optimize?	Yes		Yes	Yes					
Recall Mode	None	None	None	None	C-Min	C-Min	C-Min	C-Min	C-Min
Act Effct Green (s)	14.2	34.4	14.0	14.0	72.7	72.7	72.7	72.7	72.7
Actuated g/C Ratio	0.12	0.29	0.12	0.12	0.61	0.61	0.61	0.61	0.61
v/c Ratio	0.63	0.20	0.23	0.60	0.19	0.20	0.23	0.43	0.46
Control Delay	57.6	20.5	49.3	29.1	15.7	12.1	14.5	14.8	2.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	57.6	20.5	49.3	29.1	15.7	12.1	14.5	14.8	2.9
LOS	E	C	D	C	B	B	B	B	A
Approach Delay		46.8		32.5		12.5		10.8	
Approach LOS		D		C		B		B	
Queue Length 50th (m)	28.8	12.7	7.4	14.3	5.0	19.1	11.8	49.9	0.0
Queue Length 95th (m)	40.6	20.7	15.3	31.6	17.3	39.4	32.1	94.4	17.4
Internal Link Dist (m)		113.5		168.6		419.1		364.2	
Turn Bay Length (m)	100.0		25.0		70.0		160.0		150.0
Base Capacity (vph)	467	738	292	451	301	2041	554	2053	1093
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.53	0.14	0.11	0.36	0.19	0.20	0.23	0.43	0.46

Intersection Summary

Cycle Length: 120
 Actuated Cycle Length: 120
 Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBTL, Start of Green
 Natural Cycle: 85
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.63
 Intersection Signal Delay: 17.8
 Intersection Capacity Utilization 75.5%
 Analysis Period (min) 15

Intersection LOS: B
 ICU Level of Service D

Splits and Phases: 1: Bank & Findlay Creek



Intersection						
Int Delay, s/veh	1					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↕	↕		↕	
Traffic Vol, veh/h	22	215	167	5	1	27
Future Vol, veh/h	22	215	167	5	1	27
Conflicting Peds, #/hr	4	0	0	4	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	22	215	167	5	1	27
Major/Minor	Major1	Major2	Minor2			
Conflicting Flow All	176	0	-	0	433	174
Stage 1	-	-	-	-	174	-
Stage 2	-	-	-	-	259	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1400	-	-	-	580	869
Stage 1	-	-	-	-	856	-
Stage 2	-	-	-	-	784	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	1395	-	-	-	565	866
Mov Cap-2 Maneuver	-	-	-	-	565	-
Stage 1	-	-	-	-	837	-
Stage 2	-	-	-	-	781	-
Approach	EB	WB		SB		
HCM Control Delay, s	0.7	0		9.4		
HCM LOS				A		
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	1395	-	-	-	850	
HCM Lane V/C Ratio	0.016	-	-	-	0.033	
HCM Control Delay (s)	7.6	0	-	-	9.4	
HCM Lane LOS	A	A	-	-	A	
HCM 95th %tile Q(veh)	0	-	-	-	0.1	

Intersection						
Int Delay, s/veh	0.9					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	47	19	5	147	17	2
Future Vol, veh/h	47	19	5	147	17	2
Conflicting Peds, #/hr	0	2	2	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	47	19	5	147	17	2

Major/Minor	Major1	Major2	Minor1	Minor2
Conflicting Flow All	0	0	68	216
Stage 1	-	-	-	59
Stage 2	-	-	-	157
Critical Hdwy	-	-	4.12	6.42
Critical Hdwy Stg 1	-	-	-	5.42
Critical Hdwy Stg 2	-	-	-	5.42
Follow-up Hdwy	-	-	2.218	3.518
Pot Cap-1 Maneuver	-	-	1533	772
Stage 1	-	-	-	964
Stage 2	-	-	-	871
Platoon blocked, %	-	-	-	-
Mov Cap-1 Maneuver	-	-	1530	767
Mov Cap-2 Maneuver	-	-	-	767
Stage 1	-	-	-	962
Stage 2	-	-	-	868

Approach	EB	WB	NB
HCM Control Delay, s	0	0.2	9.7
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	787	-	-	1530	-
HCM Lane V/C Ratio	0.024	-	-	0.003	-
HCM Control Delay (s)	9.7	-	-	7.4	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0.1	-	-	0	-

Lanes, Volumes, Timings

1: Bank & Findlay Creek

TP 2032 AM



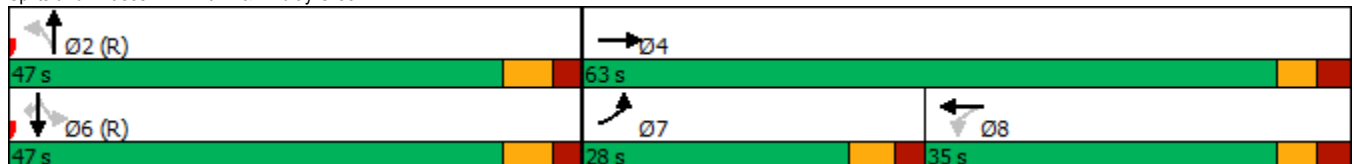
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Configurations									
Traffic Volume (vph)	376	82	44	76	31	541	96	402	146
Future Volume (vph)	376	82	44	76	31	541	96	402	146
Lane Group Flow (vph)	376	117	44	241	31	584	96	402	146
Turn Type	Prot	NA	Perm	NA	Perm	NA	Perm	NA	Perm
Protected Phases	7	4		8		2		6	
Permitted Phases			8		2		6		6
Detector Phase	7	4	8	8	2	2	6	6	6
Switch Phase									
Minimum Initial (s)	5.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Minimum Split (s)	11.2	32.3	32.3	32.3	36.6	36.6	36.6	36.6	36.6
Total Split (s)	28.0	63.0	35.0	35.0	47.0	47.0	47.0	47.0	47.0
Total Split (%)	25.5%	57.3%	31.8%	31.8%	42.7%	42.7%	42.7%	42.7%	42.7%
Yellow Time (s)	3.7	3.3	3.3	3.3	4.2	4.2	4.2	4.2	4.2
All-Red Time (s)	2.5	3.0	3.0	3.0	2.4	2.4	2.4	2.4	2.4
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.2	6.3	6.3	6.3	6.6	6.6	6.6	6.6	6.6
Lead/Lag	Lead		Lag	Lag					
Lead-Lag Optimize?	Yes		Yes	Yes					
Recall Mode	None	None	None	None	C-Min	C-Min	C-Min	C-Min	C-Min
Act Effct Green (s)	17.7	40.8	16.8	16.8	56.3	56.3	56.3	56.3	56.3
Actuated g/C Ratio	0.16	0.37	0.15	0.15	0.51	0.51	0.51	0.51	0.51
v/c Ratio	0.71	0.18	0.24	0.75	0.07	0.34	0.26	0.23	0.17
Control Delay	51.1	15.8	41.4	40.0	18.1	18.0	21.0	17.1	3.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	51.1	15.8	41.4	40.0	18.1	18.0	21.0	17.1	3.9
LOS	D	B	D	D	B	B	C	B	A
Approach Delay		42.7		40.2		18.0		14.7	
Approach LOS		D		D		B		B	
Queue Length 50th (m)	39.8	12.6	8.5	30.3	3.2	36.3	11.0	23.7	0.0
Queue Length 95th (m)	52.6	19.5	17.0	51.6	10.6	62.8	28.8	43.0	12.1
Internal Link Dist (m)		113.5		168.6		419.1		364.2	
Turn Bay Length (m)	100.0		25.0		70.0		160.0		150.0
Base Capacity (vph)	654	887	316	484	465	1718	363	1736	838
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.57	0.13	0.14	0.50	0.07	0.34	0.26	0.23	0.17

Intersection Summary

Cycle Length: 110
 Actuated Cycle Length: 110
 Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBTL, Start of Green
 Natural Cycle: 85
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.75
 Intersection Signal Delay: 26.1
 Intersection Capacity Utilization 81.6%
 Analysis Period (min) 15

Intersection LOS: C
 ICU Level of Service D

Splits and Phases: 1: Bank & Findlay Creek



HCM 6th TWSC
 2: Site Access/Kugagami & Findlay Creek

TP 2032 AM

Intersection												
Int Delay, s/veh	2.6											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	2	119	91	7	200	0	75	0	7	1	0	25
Future Vol, veh/h	2	119	91	7	200	0	75	0	7	1	0	25
Conflicting Peds, #/hr	4	0	0	0	0	4	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	2	119	91	7	200	0	75	0	7	1	0	25

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	204	0	0	210	0	0	396	387	165	390	432	204
Stage 1	-	-	-	-	-	-	169	169	-	218	218	-
Stage 2	-	-	-	-	-	-	227	218	-	172	214	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1368	-	-	1361	-	-	564	547	879	569	516	837
Stage 1	-	-	-	-	-	-	833	759	-	784	723	-
Stage 2	-	-	-	-	-	-	776	723	-	830	725	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1363	-	-	1361	-	-	544	540	879	559	510	834
Mov Cap-2 Maneuver	-	-	-	-	-	-	544	540	-	559	510	-
Stage 1	-	-	-	-	-	-	831	757	-	779	716	-
Stage 2	-	-	-	-	-	-	748	716	-	822	724	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	0.3	12.5	9.5
HCM LOS			B	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	562	1363	-	-	1361	-	-	819
HCM Lane V/C Ratio	0.146	0.001	-	-	0.005	-	-	0.032
HCM Control Delay (s)	12.5	7.6	0	-	7.7	0	-	9.5
HCM Lane LOS	B	A	A	-	A	A	-	A
HCM 95th %tile Q(veh)	0.5	0	-	-	0	-	-	0.1

Intersection						
Int Delay, s/veh	0.6					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	38	26	0	218	12	5
Future Vol, veh/h	38	26	0	218	12	5
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	38	26	0	218	12	5

Major/Minor	Major1	Major2	Minor1	Minor2	Minor3
Conflicting Flow All	0	0	64	0	269
Stage 1	-	-	-	-	51
Stage 2	-	-	-	-	218
Critical Hdwy	-	-	4.12	-	6.42
Critical Hdwy Stg 1	-	-	-	-	5.42
Critical Hdwy Stg 2	-	-	-	-	5.42
Follow-up Hdwy	-	-	2.218	-	3.518
Pot Cap-1 Maneuver	-	-	1538	-	720
Stage 1	-	-	-	-	971
Stage 2	-	-	-	-	818
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1538	-	720
Mov Cap-2 Maneuver	-	-	-	-	720
Stage 1	-	-	-	-	971
Stage 2	-	-	-	-	818

Approach	EB	WB	NB
HCM Control Delay, s	0	0	9.7
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	788	-	-	1538	-
HCM Lane V/C Ratio	0.022	-	-	-	-
HCM Control Delay (s)	9.7	-	-	0	-
HCM Lane LOS	A	-	-	A	-
HCM 95th %tile Q(veh)	0.1	-	-	0	-

Lanes, Volumes, Timings

1: Bank & Findlay Creek

TP 2032 PM



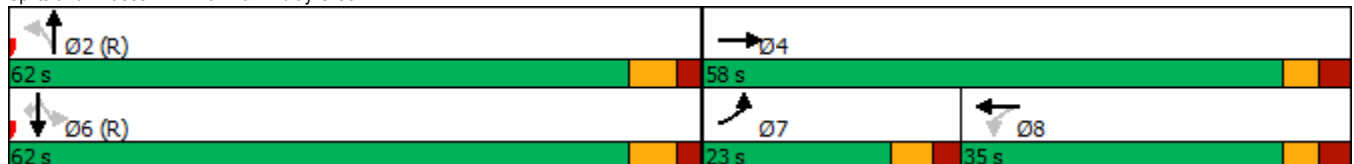
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Configurations									
Traffic Volume (vph)	246	78	49	64	56	386	153	881	499
Future Volume (vph)	246	78	49	64	56	386	153	881	499
Lane Group Flow (vph)	246	117	49	214	56	419	153	881	499
Turn Type	Prot	NA	Perm	NA	Perm	NA	Perm	NA	Perm
Protected Phases	7	4		8		2		6	
Permitted Phases			8		2		6		6
Detector Phase	7	4	8	8	2	2	6	6	6
Switch Phase									
Minimum Initial (s)	5.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Minimum Split (s)	11.2	32.3	32.3	32.3	36.6	36.6	36.6	36.6	36.6
Total Split (s)	23.0	58.0	35.0	35.0	62.0	62.0	62.0	62.0	62.0
Total Split (%)	19.2%	48.3%	29.2%	29.2%	51.7%	51.7%	51.7%	51.7%	51.7%
Yellow Time (s)	3.7	3.3	3.3	3.3	4.2	4.2	4.2	4.2	4.2
All-Red Time (s)	2.5	3.0	3.0	3.0	2.4	2.4	2.4	2.4	2.4
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.2	6.3	6.3	6.3	6.6	6.6	6.6	6.6	6.6
Lead/Lag	Lead		Lag	Lag					
Lead-Lag Optimize?	Yes		Yes	Yes					
Recall Mode	None	None	None	None	C-Min	C-Min	C-Min	C-Min	C-Min
Act Effct Green (s)	14.2	36.7	16.3	16.3	70.4	70.4	70.4	70.4	70.4
Actuated g/C Ratio	0.12	0.31	0.14	0.14	0.59	0.59	0.59	0.59	0.59
v/c Ratio	0.63	0.22	0.30	0.73	0.20	0.21	0.29	0.44	0.46
Control Delay	57.6	22.7	48.9	41.8	17.1	13.1	16.6	16.2	3.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	57.6	22.7	48.9	41.8	17.1	13.1	16.6	16.2	3.0
LOS	E	C	D	D	B	B	B	B	A
Approach Delay		46.4		43.1		13.6		11.9	
Approach LOS		D		D		B		B	
Queue Length 50th (m)	28.8	15.9	10.7	28.2	5.7	22.0	16.6	56.2	0.0
Queue Length 95th (m)	40.6	25.0	20.5	49.2	17.4	40.4	39.1	94.4	17.4
Internal Link Dist (m)		113.5		168.6		419.1		364.2	
Turn Bay Length (m)	100.0		25.0		70.0		160.0		150.0
Base Capacity (vph)	467	740	288	446	286	1968	528	1988	1075
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.53	0.16	0.17	0.48	0.20	0.21	0.29	0.44	0.46

Intersection Summary

Cycle Length: 120
 Actuated Cycle Length: 120
 Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBTL, Start of Green
 Natural Cycle: 85
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.73
 Intersection Signal Delay: 20.1
 Intersection Capacity Utilization 78.0%
 Analysis Period (min) 15

Intersection LOS: C
 ICU Level of Service D

Splits and Phases: 1: Bank & Findlay Creek



HCM 6th TWSC
 2: Site Access/Kugagami & Findlay Creek

TP 2032 PM

Intersection												
Int Delay, s/veh	2.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	22	222	48	4	167	5	59	0	4	1	0	27
Future Vol, veh/h	22	222	48	4	167	5	59	0	4	1	0	27
Conflicting Peds, #/hr	4	0	0	0	0	4	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	22	222	48	4	167	5	59	0	4	1	0	27

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	176	0	0	270	0	0	481	474	246	474	496	174
Stage 1	-	-	-	-	-	-	290	290	-	182	182	-
Stage 2	-	-	-	-	-	-	191	184	-	292	314	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1400	-	-	1293	-	-	495	489	793	501	475	869
Stage 1	-	-	-	-	-	-	718	672	-	820	749	-
Stage 2	-	-	-	-	-	-	811	747	-	716	656	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1395	-	-	1293	-	-	472	476	793	488	463	866
Mov Cap-2 Maneuver	-	-	-	-	-	-	472	476	-	488	463	-
Stage 1	-	-	-	-	-	-	704	659	-	801	744	-
Stage 2	-	-	-	-	-	-	783	742	-	699	644	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.6	0.2	13.5	9.4
HCM LOS			B	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	484	1395	-	-	1293	-	-	843
HCM Lane V/C Ratio	0.13	0.016	-	-	0.003	-	-	0.033
HCM Control Delay (s)	13.5	7.6	0	-	7.8	0	-	9.4
HCM Lane LOS	B	A	A	-	A	A	-	A
HCM 95th %tile Q(veh)	0.4	0	-	-	0	-	-	0.1

Intersection						
Int Delay, s/veh	0.9					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	50	27	5	150	18	2
Future Vol, veh/h	50	27	5	150	18	2
Conflicting Peds, #/hr	0	2	2	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	50	27	5	150	18	2

Major/Minor	Major1	Major2	Minor1	Minor2	Minor3
Conflicting Flow All	0	0	79	0	226
Stage 1	-	-	-	-	66
Stage 2	-	-	-	-	160
Critical Hdwy	-	-	4.12	-	6.42
Critical Hdwy Stg 1	-	-	-	-	5.42
Critical Hdwy Stg 2	-	-	-	-	5.42
Follow-up Hdwy	-	-	2.218	-	3.518
Pot Cap-1 Maneuver	-	-	1519	-	762
Stage 1	-	-	-	-	957
Stage 2	-	-	-	-	869
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1516	-	757
Mov Cap-2 Maneuver	-	-	-	-	757
Stage 1	-	-	-	-	955
Stage 2	-	-	-	-	866

Approach	EB	WB	NB
HCM Control Delay, s	0	0.2	9.8
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	776	-	-	1516	-
HCM Lane V/C Ratio	0.026	-	-	0.003	-
HCM Control Delay (s)	9.8	-	-	7.4	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0.1	-	-	0	-