

2026-10-08
Project: (260552)

Northern Capital Corp.
22 Romina Drive,
Concord, ON L4K 4Z7

**RE: TRAFFIC BRIEF – PROPOSED DAY CARE – 412 FOUR-MILE CREEK ROAD,
TOWN OF NIAGARA-ON-THE-LAKE**

Paradigm Transportation Solutions Limited (Paradigm) has been retained to prepare this Traffic Brief in support of a Minor Variance application for the property located at 412 Four-Mile Creek Road in Niagara-on-the-Lake, Ontario.

Development Proposal

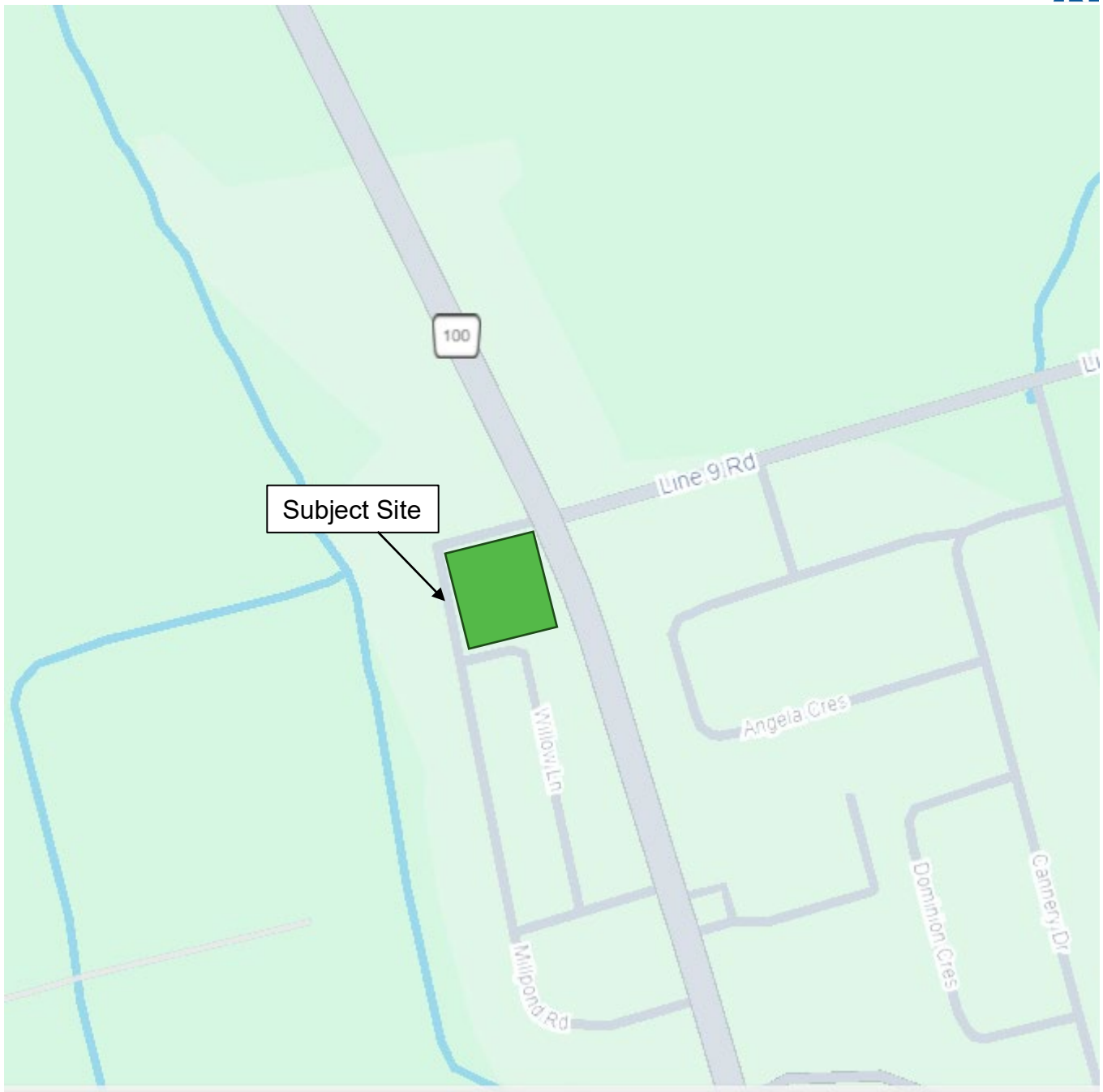
The subject property is developed as an existing commercial plaza. The applicant is seeking approval to permit a daycare centre, including an associated outdoor play area and perimeter fencing, within an existing commercial unit.

The Committee of Adjustment previously considered the application in August; however, it deferred it after Committee members raised concerns about traffic. This Traffic Brief has therefore been prepared to assess the transportation implications of the proposed daycare use and to demonstrate that the anticipated traffic impact is minor in the context of the existing commercial plaza and the subject unit's previous use.

The proposed daycare is understood to have a licensed capacity of 64 children and approximately 3,671 square feet (341 m²) of gross floor area (GFA). While the licensed capacity represents the maximum number of children that may be accommodated, typical daily attendance is expected to be approximately 38 children.

The subject unit was most recently occupied by a restaurant. Accordingly, the transportation review considers the anticipated traffic characteristics of the proposed daycare relative to the previous restaurant use, with consideration given to peak-hour traffic generation, site access, parking, and daycare pick-up and drop-off activity. Vehicle access to the commercial plaza is provided via a driveway to Four-Mile Creek Road and a driveway to Line 9; both connections permit full movements.

Figure 1 illustrates the site location, which is located in the southwest quadrant of the Four-Mile Creek Road and Line 9 intersection. **Appendix A** includes a reduced-scale site plan.



NTS
Source: Google Earth



Subject Site Location

Pick Up and Drop Off Operations

Based on information provided by the landlord, the proposed day care is expected to operate with a licensed capacity of approximately 64 children, with typical daily attendance of approximately 38 to 40 children. Parent drop-off and pick-up activity is expected to be distributed over several hours rather than occurring during a concentrated peak period.

During the morning drop-off period between 7:00 and 9:00 AM, approximately 30 children are expected to arrive, with arrivals distributed throughout the two-hour period. A further 7 to 9 children are expected to arrive between 9:00 and 11:00 AM, associated with part-time schedules, appointments, and varying work schedules. Vehicle dwell times are expected to be short, generally approximately 2 to 3 minutes per vehicle.

During the afternoon pick-up period between 4:00 and 7:00 PM, approximately 30 to 39 children are expected to depart, with activity distributed relatively evenly throughout the three-hour period. Given the staggered arrival and departure patterns and short vehicle dwell times, the day-care operation is expected to generate a steady and distributed pattern of vehicle activity rather than a concentrated traffic peak.

To assess how many on-site parking spaces should be reserved for daycare pick-up and drop-off, the analysis considers the peak number of vehicles expected on-site at any one time, rather than the total number of daycare children or total daily vehicle trips. This approach recognizes that daycare pick-up and drop-off activity is spread over several hours and that parents generally remain on-site only briefly while dropping off or collecting their children.

For a conservative assessment, the analysis assumes the daycare is operating at its full licensed capacity of 64 children. It is further assumed that each child is associated with one vehicle for the applicable drop-off and pick-up periods.

Morning drop-off activity is expected to occur primarily between 7:00 AM and 9:00 AM. For the purposes of the assessment, we have assumed that approximately 80% of the 64 children (51 children) arrive during this two-hour period, with the remaining children arriving later in the morning. The 51 morning arrivals are distributed over the two-hour period to reflect a typical spread of daycare arrivals rather than a concentrated peak. A representative distribution is provided below:

- ▶ 7:00–7:30 AM (9–10 arrivals)
- ▶ 7:30–8:00 AM (12–13 arrivals)
- ▶ 8:00–8:30 AM (9–10 arrivals)
- ▶ 8:30–9:00 AM (12–13 arrivals)



The highest 30-minute period is therefore approximately 13 vehicle arrivals. Assuming an average dwell time of approximately 15 minutes per vehicle, the estimated simultaneous parking demand during the peak 30-minute period is: 6.5 vehicles (13 vehicles ÷ 30 minutes × 15 minutes). Accordingly, approximately 6–7 vehicles could reasonably be expected to be present simultaneously during the busiest morning drop-off period.

Afternoon pick-up activity is expected to occur primarily between 4:00 p.m. and 7:00 p.m. For the purposes of the assessment, approximately 90% of the 64 children, or 58 children, are assumed to be picked up during this period. A representative distribution is provided below:

- ▶ 4:00–4:30 PM (9–10 departures))
- ▶ 4:30–5:00 PM (9–10 departures))
- ▶ 5:00–5:30 PM (9–10 departures)
- ▶ 5:30–6:00 PM (9–10 departures)
- ▶ 6:00–6:30 PM (9–10 departures)
- ▶ 6:30–7:00 PM (8–9 departures)

The highest anticipated 30-minute period is therefore approximately 10 vehicle arrivals. Using the peak 30-minute arrival period and a 15-minute average dwell time, the estimated simultaneous parking demand is: 5.0 vehicles (10 vehicles ÷ 30 minutes × 15 minutes). Accordingly, approximately 5 vehicles could reasonably be expected to be present simultaneously during the busiest afternoon pick-up period.

Based on the full licensed capacity of 64 children, the estimated distribution of arrivals and departures, and a conservative 15-minute dwell time per vehicle, the analysis indicates a peak simultaneous demand of approximately 6–7 vehicles during morning drop-off and 5 vehicles during afternoon pick-up.

Accordingly, it is recommended that seven (7) parking spaces be designated for short-term daycare pick-up and drop-off activity. These spaces should be clearly identified as daycare pick-up/drop-off spaces and could be subject to an appropriate time restriction to discourage use by longer-term parkers.

The recommended seven-space allocation is based on the controlling morning drop-off demand and provides sufficient capacity to accommodate the estimated peak simultaneous demand while also providing a reasonable operational buffer for variations in arrival patterns and occasional longer dwell times. The analysis is intentionally conservative, as it assumes the daycare is operating at its full licensed capacity of 64 children, despite typical daily attendance being lower. The seven-space allocation is therefore considered a reasonable and conservative provision for the daycare's anticipated pick-up and drop-off activity.



Existing Roadways

Four-Mile Creek Road is a north/south arterial roadway operating under the jurisdiction of the Region of Niagara. South of Line 9, the road has a two-lane urban cross-section with one travel lane per direction, sidewalks, and on-street cycling lanes on both sides, and operates with a posted speed limit of 50 km/h. North of Line 9, the road transitions to a rural cross-section with no cycling or sidewalks and an increased posted speed limit of 60 km/h. Within the study area, this roadway is straight and flat.

Line 9 is an east/west local roadway operating under the jurisdiction of the Town of Niagara-on-the-Lake. The road has an urban cross-section with one travel lane per direction, sidewalks on the south side, and a posted speed limit of 50 km/h. Within the study area, this roadway is straight and flat. Stop signs control the eastbound and westbound approaches of Line 9 at the Four-Mile Creek Road intersection.

Traffic Data

Turning Movement Counts (TMC) assess intersection operations and quantify vehicle movement. Traffic counts are usually collected during peak periods to support level of service analysis. Existing traffic counts at an intersection or road section form the foundation for analysis. Paradigm collected TMC data at the intersection of Four-Mile Creek Road and Line 9, as well as at two driveway connections to the commercial plaza, in September 2026.

Appendix B contains the existing count data.

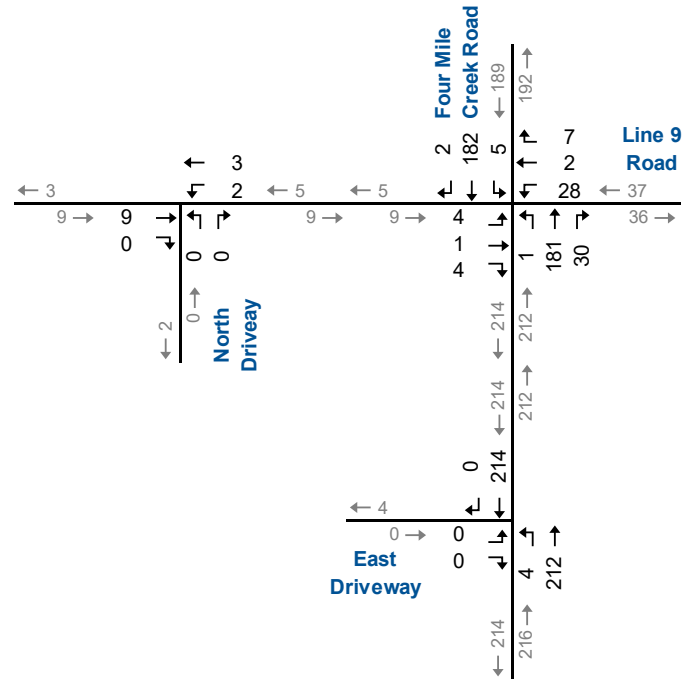
The traffic volumes have been balanced between adjacent intersections to consistently represent traffic flow through the study area. Where discrepancies were identified between recorded entering and exiting volumes at successive intersections, adjustments were made based on observed traffic patterns and the relative volume magnitudes at each intersection. The balancing process accounts for different peak hours observed at each intersection. This approach provides a consistent basis for the subsequent intersection capacity analysis and ensures that the traffic volumes used in the analysis appropriately reflect expected traffic flow through the study area.

Figure 2 illustrates the base year peak-hour traffic volumes.

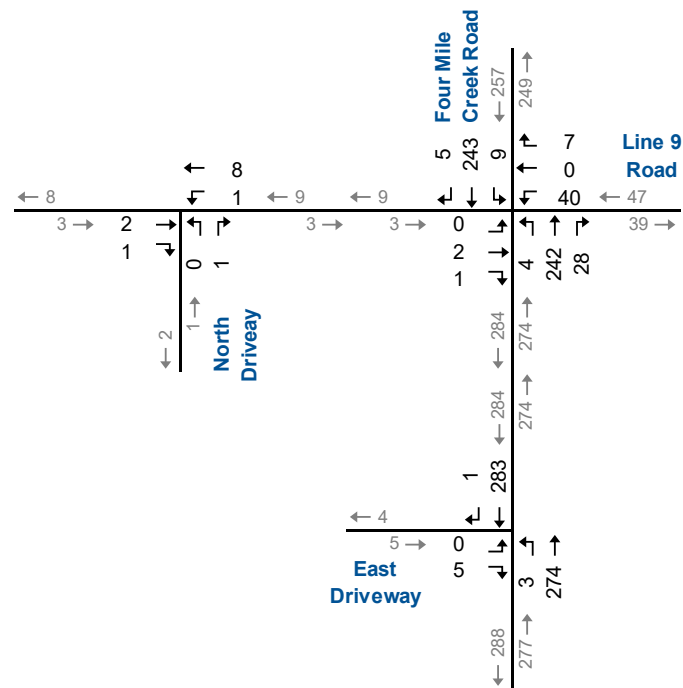




Weekday AM Peak Hour



Weekday PM Peak Hour



Truck Traffic

Truck volumes on Four-Mile Creek Road were recorded as part of the traffic data collection program to establish existing heavy-vehicle activity in the study area. During the count period, 36 northbound trucks accounted for approximately 2.55% of northbound traffic, while 41 southbound trucks accounted for approximately 3.00% of southbound traffic. These results indicate that heavy vehicles represent a relatively small share of traffic on Four-Mile Creek Road.

Collision Review

Niagara Region provided collision data for 2020 to 2025 for the Four-Mile Creek Road and Line 9 intersection. The information was presented in tabular form and included details such as date and time, weather, impact type, injuries, and road surface conditions. Additional details for each driver were also included: direction of travel, vehicle manoeuvre, vehicle type, and driver actions. **Appendix C** contains the collision summary sheets.

The collision reports have been reviewed as is. No modifications or adjustments were made to correct duplicate entries or entries where the collision record appears incorrect (e.g., a rear-end collision between a northbound and westbound driver). The key element of site collision analysis is detecting unusual collision patterns and trends. To determine what is unusual, the concept compares the collision characteristics of the study area with those of a group of similar sites. Variations between the study's collision data and the comparison group are considered abnormal and signal a safety issue.

A review of available collision records identified three collisions at the intersection of Four Mile Creek Road and Line between 2016 and 2026 (10-year span). One collision, occurring in July 2021, involved a non-fatal injury and was an angle collision between a westbound right-turning vehicle and a northbound through vehicle, with the westbound driver reported to have failed to yield the right-of-way. The remaining two collisions involved only property damage and different circumstances, including a single-motor-vehicle event and a collision between a northbound overtaking vehicle and a northbound left-turning vehicle. All three collisions occurred under clear environmental conditions, and no pedestrian or cyclist involvement was reported. Overall, the available collision records do not indicate a consistent collision pattern or recurring movement-related safety concern at the subject location.

The Safety Performance Function (SPF) application helps screen networks to identify intersections with more collisions than predicted. The analysis is a broad-based approach to estimating safety; nonetheless, it is appropriate for a planning-level comparative analysis.

Collision prediction for the intersection of Four-Mile Creek Road and Line 9 used intersection SPFs developed by Niagara Region to estimate expected collision frequency and severity. The prediction models use annual daily traffic volumes as the dependent variable for the major and minor roadways; this has been determined based on the peak hour traffic volumes as contained in **Appendix A** of this report, and the following formula has been utilized to provide reasonable AADT projections:



$$AADT = (AM + PM) / 2 * 10$$

AADT = Annual Average Daily Traffic
 AM = AM peak hour traffic volumes
 PM = PM peak hour traffic volumes

If the two-way AADT on the two minor leg approaches differ, the larger value is used. **Table 1** summarizes expected collisions per year and compares them with actual collisions per year.

TABLE 1: SPF INTERSECTION

Intersection	Collision Per Year	Collision Type		
		Total	Severe	PDO
Four Mile Creek Road at Line 9	Predicted	0.70	0.10	0.60
	Actual (Average)	0.30	0.10	0.20

The table above shows that the intersection of Four-Mile Creek Road at Line 9 aligns with the predicted number of collisions per year.

Summary

Although the traffic data indicates that truck volumes along Four-Mile Creek Road are relatively low, and the traffic review shows no indication that the adjacent intersection is a high collision-prone location, consider the safety of children using the proposed outdoor play area. Given the vulnerability of young children and the proximity of the outdoor play area to the roadway, we recommend considering a physical barrier, such as bollards or a similar appropriate protective treatment, along the Four-Mile Creek Road frontage adjacent to the outdoor play area.

Such a barrier would provide an additional level of separation between the outdoor play area and vehicular traffic and reduce the potential for an errant vehicle to encroach into the play area.



Trip Generation

The Institute of Transportation Engineers (ITE) Trip Generation is referenced to estimate the peak-hour vehicular traffic generated by the site. Land Use Code (LUC) 565 Day Care Centre has been used. **Table 2** summarizes the estimated trip generation for the development. The subject site is forecast to generate approximately 40 and 39 new vehicle trips during the weekday AM and PM peak hours. To remain conservative, no trip reductions for alternative modes of transportation (i.e., cycling, transit, or walking) have been applied.

TABLE 2: TRIP GENERATION (DAY CARE)

Land Use Code	Units	AM Peak Hour				PM Peak Hour			
		Rate	In	Out	Total	Rate	In	Out	Total
565 - Day Care - GFA	3,671	10.88	21	19	40	10.75	19	20	39

Distribution

The site's trip distribution follows existing travel patterns observed from the collected traffic data. **Table 3** summarizes the estimated trip distribution. **Figure 3** illustrates the site-generated traffic estimates assigned to the transportation network.

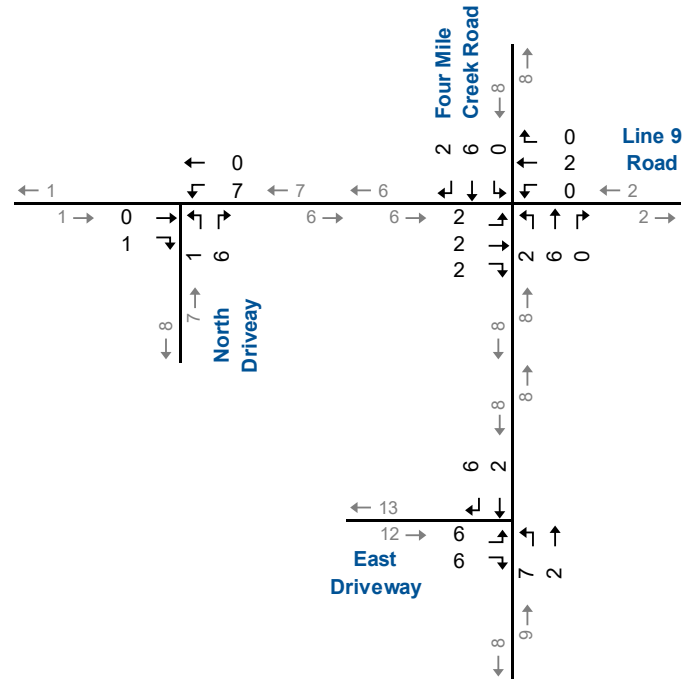
TABLE 3: TRIP DISTRIBUTION

Origin/Destination	Percent
North via Four Mile Creek Road	40%
South via Four Mile Creek Road	45%
East via Line 9 Road	10%
West via 9 Line Road	5%
Total	100%

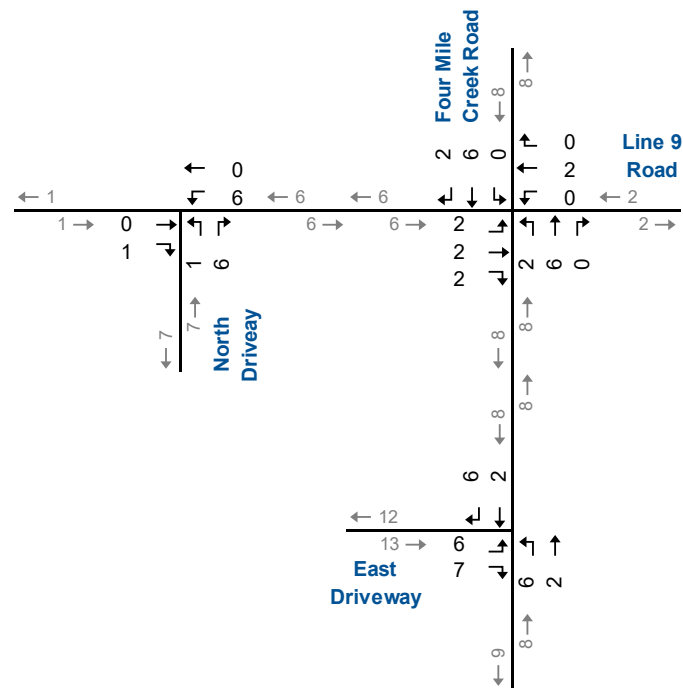




Weekday AM Peak Hour



Weekday PM Peak Hour



Previous Use Comparison

Further, the subject unit contemplated for a day care was most recently occupied by a restaurant. To provide an appropriate comparison, traffic generation was also estimated using Land Use Code 932 – High-Turnover Sit-Down Restaurant. Based on the same 3,671 ft² of GFA, **Table 4** summarizes the estimated traffic generation associated with the previous restaurant use.

TABLE 4: TRIP GENERATION (RESTAURANT USE)

Land Use Code	Units	AM Peak Hour				PM Peak Hour			
		Rate	In	Out	Total	Rate	In	Out	Total
932 - High-Turnover Sit-Down Restaurant - GFA	3,671	8.97	18	15	33	9.18	21	13	34

The proposed daycare is estimated to generate approximately 7 additional vehicle trips during the AM peak hour and 5 during the PM peak hour compared to the previous restaurant use. This represents a relatively small increase in traffic, equivalent to approximately one additional vehicle every 8–12 minutes during the peak hour.

The comparison is also conservative, as the daycare trip generation is based on the full 3,671 ft² GFA and ITE rates, whereas typical daily attendance is expected to be approximately 38 children compared with the maximum licensed capacity of 64 children. Overall, the proposed use is expected to generate traffic at a similar order of magnitude to the previous restaurant use.

Future Traffic Volumes

Five years from the date of the study (2031) have been assessed for traffic operations at the Four-Mile Creek Road and Line 9 intersection as well the two proposed driveway connections to Four-Mile Creek Road and Line 9. The projected future volumes near the subject site are estimated to consist of the following:

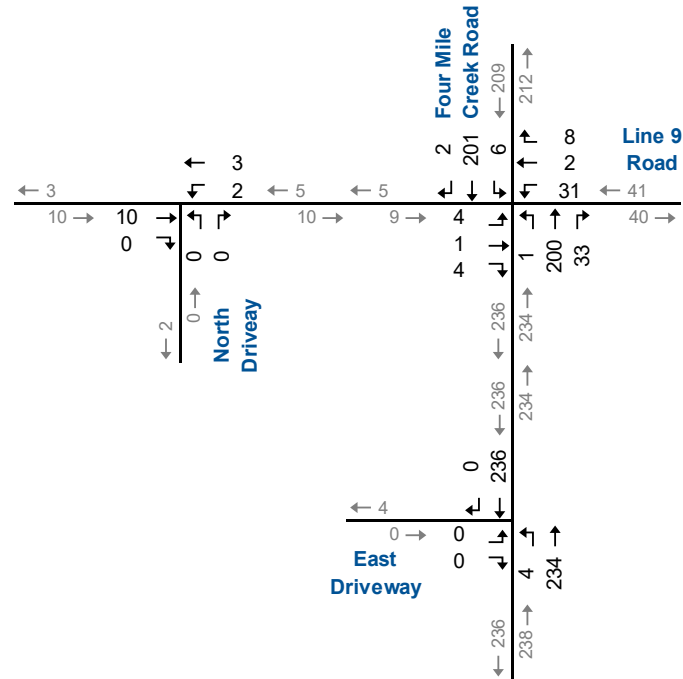
- ▶ Generalized background traffic growth of 2% per annum, and
- ▶ Traffic generated by the subject site.

Figures 4 and 5 illustrate the 2031 background and total traffic volumes.

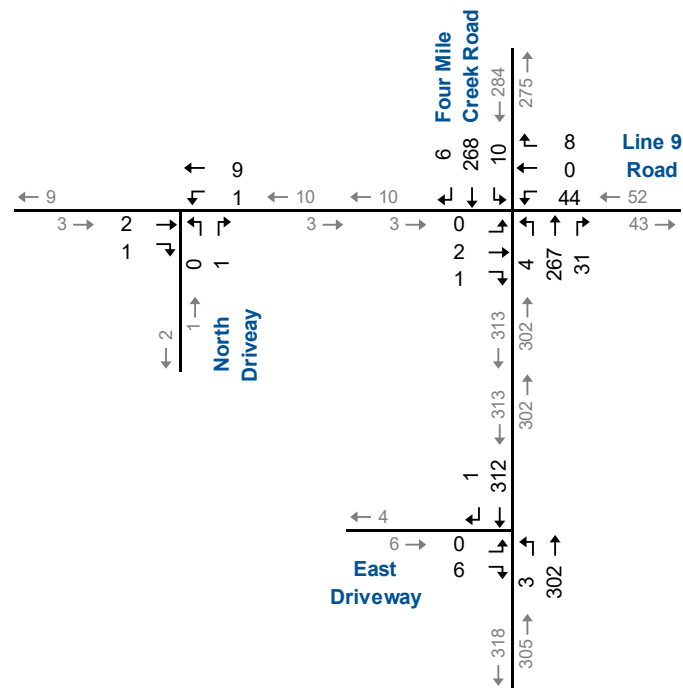




Weekday AM Peak Hour

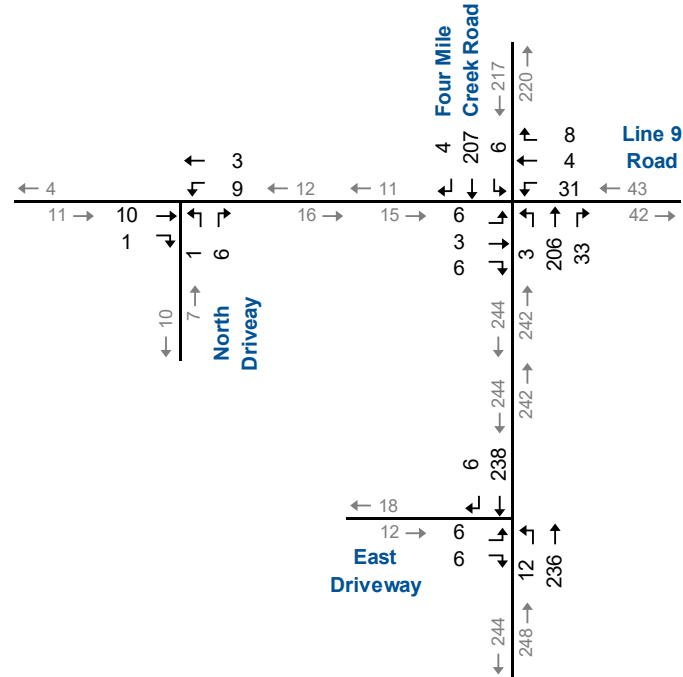


Weekday PM Peak Hour

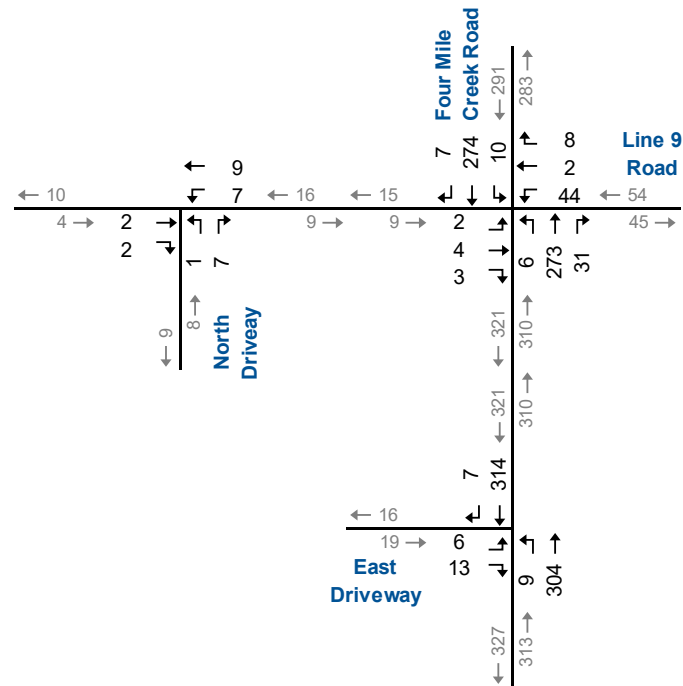




Weekday AM Peak Hour



Weekday PM Peak Hour



Traffic Operations

Operational analyses were completed for the existing and future background and total traffic conditions at the study area intersections. The evaluation criteria used to analyze the intersections are based on the Highway Capacity Manual (HCM) 2000.¹ utilizing Synchro 12 software.

Level of service (LOS) denotes the different operating conditions on a given roadway segment under various traffic volume loads. It is a qualitative measure that indexes the operational qualities of a roadway segment or intersection, with designations ranging from LOS A to F, where LOS A represents the best operating conditions and LOS F represents the worst.

At unsignalized intersections, individual movements operating between LOS A-C are considered to have tolerable delays, LOS D-E increased delays, and LOS F significant delays. For all intersections, queues for an individual movement that extend beyond the available turning-lane storage are also considered to exceed capacity.

Table 5 summarizes the operational analyses for the study area intersection. **Appendix D** contains detailed supporting Synchro outputs.

Four-Mile Creek Road at Line 9 (Unsignalized)

2026 Base Year Operations	Tolerable Delays	●
2031 Background Operations	Tolerable Delays	●
2031 Total Operations	Tolerable Delays	●

At the unsignalized intersection of Four-Mile Creek Road at Line 9, individual movements under existing conditions operate at LOS B or better with a v/c ratio no greater than 0.12 during the weekday peak hours. With the increase in traffic generated by the proposed development, individual movements are projected to operate at LOS C or better with a v/c ratio no greater than 0.15 and would be classified as acceptable operations with spare capacity available.

¹ Transportation Research Board, Highway Capacity Manual, Washington, D.C. 2003.



Line 9 at North Driveway (Unsignalized)

2026 Base Year Operations	Tolerable Delays	●
2031 Background Operations	Tolerable Delays	●
2031 Total Operations	Tolerable Delays	●

At the unsignalized intersection of Line 9 and the North Driveway, individual movements under existing conditions operate at LOS A during the weekday peak hours. With the increase in traffic generated by the proposed development, individual movements are projected to operate at LOS A and would be classified as acceptable operations with spare capacity available.

Four-Mile Creek Road at East Driveway (Unsignalized)

2026 Base Year Operations	Tolerable Delays	●
2031 Background Operations	Tolerable Delays	●
2031 Total Operations	Tolerable Delays	●

At the unsignalized intersection of Four-Mile Creek Road and the East Driveway, individual movements under existing conditions operate at LOS A during the weekday peak hours. With the increase in traffic generated by the proposed development, individual movements are projected to operate at LOS B or better and would be classified as acceptable operations with spare capacity available.



TABLE 5: OPERATIONAL SUMMARY

Analysis Period	Intersection	Control Type	Horizon Year	MOE	Direction / Movement / Approach																Overall
					Eastbound				Westbound				Northbound				Southbound				
					Left	Through	Right	Approach	Left	Through	Right	Approach	Left	Through	Right	Approach	Left	Through	Right	Approach	
AM Peak Hour	1 - Four Mile Creek Road at Line 9	TWSC	2026 Base	LOS Delay V/C Q	B 11 0.01 0	B 11 0.01 0	B 11 0.01 0	B 11	B 12 0.07 2	B 12 0.07 2	B 12 0.07 2	B 12	A 0 0.00 0	A 0 0.00 0	A 0 0.02 0	A 0	A 0 0.00 0	A 0 0.00 0	A 0 0.00 0	A 0	
			2031 Background	LOS Delay V/C Q	B 11 0.02 0	B 11 0.02 0	B 11 0.02 0	B 11	B 12 0.08 2	B 12 0.08 2	B 12 0.08 2	B 12	A 0 0.00 0	A 0 0.00 0	A 0 0.02 0	A 0	A 0 0.00 0	A 0 0.00 0	A 0 0.00 0	A 0	
			2031 Total	LOS Delay V/C Q	B 12 0.03 1	B 12 0.03 1	B 12 0.03 1	B 12	B 13 0.09 2	B 13 0.09 2	B 13 0.09 2	B 13	A 0 0.00 0	A 0 0.00 0	A 0 0.02 0	A 0	A 0 0.00 0	A 0 0.00 0	A 0 0.00 0	A 0	
	2 - Line 9 at Driveway (North)	TWSC	2026 Base	LOS Delay V/C Q		A 0 0.00 0	A 0 0.00 0	A 0	A 3 0.00 0	A 3 0.00 0		A 3	A 0 0.00 0		A 0 0.00 0	A 0					
			2031 Background	LOS Delay V/C Q		A 0 0.00 0	A 0 0.00 0	A 0	A 3 0.00 0	A 3 0.00 0		A 3	A 0 0.00 0		A 0 0.00 0	A 0					
			2031 Total	LOS Delay V/C Q		A 0 0.00 0	A 0 0.00 0	A 0	A 6 0.00 0	A 6 0.00 0		A 6	A 8 0.00 0		A 8 0.00 0	A 8					
	3 - Four Mile Creek Road at Driveway (East)	TWSC	2026 Base	LOS Delay V/C Q	A 0 0.00 0		A 0 0.00 0	A 0					A 0 0.00 0	A 0 0.00 0		A 0		A 0 0.14 0	A 0 0.14 0	A 0	
			2031 Background	LOS Delay V/C Q	A 0 0.00 0		A 0 0.00 0	A 0					A 0 0.00 0	A 0 0.00 0		A 0		A 0 0.16 0	A 0 0.16 0	A 0	
			2031 Total	LOS Delay V/C Q	B 11 0.02 1		B 11 0.02 1	B 11					A 1 0.00 0	A 1 0.00 0		A 1		A 0 0.16 0	A 0 0.16 0	A 0	
PM Peak Hour	1 - Four Mile Creek Road at Line 9	TWSC	2026 Base	LOS Delay V/C Q	B 13 0.00 0	B 13 0.00 0	B 13 0.00 0	B 13	B 14 0.12 3	B 14 0.12 3	B 14 0.12 3	B 14	A 0 0.00 0	A 0 0.00 0	A 0 0.02 0	A 0	A 0 0.00 0	A 0 0.00 0	A 0 0.00 0	A 0	
			2031 Background	LOS Delay V/C Q	B 13 0.00 0	B 13 0.00 0	B 13 0.00 0	B 13	C 15 0.14 4	C 15 0.14 4	C 15 0.14 4	C 15	A 0 0.00 0	A 0 0.00 0	A 0 0.02 0	A 0	A 0 0.00 0	A 0 0.00 0	A 0 0.00 0	A 0	
			2031 Total	LOS Delay V/C Q	B 13 0.02 1	B 13 0.02 1	B 13 0.02 1	B 13	C 16 0.15 4	C 16 0.15 4	C 16 0.15 4	C 16	A 0 0.00 0	A 0 0.00 0	A 0 0.02 0	A 0	A 0 0.00 0	A 0 0.00 0	A 0 0.00 0	A 0	
	2 - Line 9 at Driveway (North)	TWSC	2026 Base	LOS Delay V/C Q		A 0 0.00 0	A 0 0.00 0	A 0	A 1 0.00 0	A 1 0.00 0		A 1	A 8 0.00 0		A 8 0.00 0	A 8					
			2031 Background	LOS Delay V/C Q		A 0 0.00 0	A 0 0.00 0	A 0	A 1 0.00 0	A 1 0.00 0		A 1	A 8 0.00 0		A 8 0.00 0	A 8					
			2031 Total	LOS Delay V/C Q		A 0 0.00 0	A 0 0.00 0	A 0	A 3 0.00 0	A 3 0.00 0		A 3	A 8 0.01 0		A 8 0.01 0	A 8					
	3 - Four Mile Creek Road at Driveway (East)	TWSC	2026 Base	LOS Delay V/C Q	A 10 0.00 0		A 10 0.00 0	A 10					A 0 0.00 0	A 0 0.00 0		A 0		A 0 0.18 0	A 0 0.18 0	A 0	
			2031 Background	LOS Delay V/C Q	B 10 0.00 0		B 10 0.00 0	B 10					A 0 0.00 0	A 0 0.00 0		A 0		A 0 0.19 0	A 0 0.19 0	A 0	
			2031 Total	LOS Delay V/C Q	B 11 0.03 1		B 11 0.03 1	B 11					A 0 0.00 0	A 0 0.00 0		A 0		A 0 0.20 0	A 0 0.20 0	A 0	

MOE - Measure of Effectiveness

LOS - Level of Service

Delay - Average Delay per Vehicle in Seconds

Q - 95th Percentile Queue Length

Ex. - Existing Available Storage

Avail. - Available Storage

TCS - Traffic Control Signal

TWSC - Two-Way Stop Control

AWSC - All-Way Stop Control

RBT - Roundabout



All-Way Stop Warrant

To determine if an all-way stop would be required at the intersection of Four-Mile Creek Road and Line 9 Road, an all-way stop warrant has been undertaken and is based on the Ontario Traffic Manual (OTM) Book 5 warrant for all-way stop control along a rural arterial roadway. The assessment for all-way stop control consists of three criteria that must be satisfied for the warrant to be met:

- ▶ The total vehicle volume on all intersection approaches exceeds 375 vehicles per hour for each of the highest eight hours of the day, and
- ▶ The combined vehicle and pedestrian volume on the minor street exceeds 150 units per hour (all vehicles plus pedestrians wishing to enter the intersection) for each of the same eight hours as the total volume OR the combined vehicle and pedestrian volume on the minor street exceeds 120 units per hour (all vehicles plus pedestrians wishing to enter the intersection) for each of the same eight hours as the total volume, with an average delay to all minor street traffic (vehicles and pedestrians) of greater than 30 seconds for the entire eight-hour period; and
- ▶ The volume split does not exceed 70/30 (the minor street must not be less than 30% of the total volume entering the intersection) as measured over the entire eight-hour count period. Volume on the major street is defined as vehicles only. Volume on the minor street includes all vehicles and pedestrians wishing to cross the major roadway. For three-legged intersections, a volume split of 75/25 is permissible.

The volumes projected at this intersection under the 2031 Total horizon would not warrant installing an all-way stop. The All-way Stop Warrant is provided in **Appendix E**.



Parking Review

The site provides 45 on-site parking spaces, including two barrier-free spaces.

The Town of Niagara-on-the-Lake Zoning By-law 4316-09 mandates the site's vehicle parking supply. The Zoning By-law requires 1.00 space per 18.5 m² of total GFA for a day care land use. Compared with the other commercial uses on site, the parking requirements are similar: retail sales, service, and rental establishments require 1.00 space per 18.5 m² of total GFA.

Table 6 summarizes the zoning vehicle parking calculations for the subject site. With a proposed parking supply of 45 spaces, the site meets the zoning by-law requirements to permit a day care in lieu of a retail sales, service and rental establishment use.

TABLE 6: ZONING BY-LAW REQUIREMENTS (PARKING)

Unit #	Land Use	GFA (m ²)	Calculated Rate	Calculated Spaces
Unit 1	Day Care Centre	341.05	1 space per 18.5 m ²	18
Unit 3	Commercial Use	160.2	1 space per 18.5 m ²	9
Unit 4	Commercial Use	160.68	1 space per 18.5 m ²	9
Unit 3	Commercial Use	160.68	1 space per 18.5 m ²	9
Total		822.61		45

On-Site Parking Review

To determine the current on-site parking utilization of the existing commercial uses, a parking demand survey was completed. To our understanding, the existing site currently operates with a pharmacy, Pilates studio, and dentist's office.

Parking surveys were completed on Wednesday, September 23, 2026, from 7 AM to 7 PM to provide a comprehensive dataset of parking observations during a typical weekday.

The parking survey shows the site operates at a maximum utilization rate of 29%, with 13 of the 45 available spaces occupied, leaving 32 spaces available. Peak demand of 29% occurred at 10:00 AM; however, it quickly fell to 11% (5 of the 45 available spaces occupied) at 11:00 AM. The average utilization over the survey hours was 13% (6 of the 45 available spaces occupied). **Appendix F** contains the parking survey data.



ITE Parking Demand

A review of parking demands likely to be generated by the proposed development has been considered. The forecast parking demand is based on published data from the Institute of Transportation Engineers (ITE) Parking Generation Manual (6th Edition) and parking demand data collected by Paradigm at a similar site located in the City of Brampton.

The ITE Parking Generation Manual (6th Edition) , provides estimates on parking generation for a variety of land uses, including medical office land uses.

The site's parking generation is forecast using ITE Land Use Code (LUC) 565 (Day Care Centre). ITE describes the land use as a facility where care for pre-school age children is provided, normally during daytime hours. A day care facility generally includes classrooms, offices, eating areas, and playgrounds. A day care center may also provide after-school care for school-age children. .

The site's forecast parking demand is estimated to range from 8 to 12 spaces. **Table 7** summarizes the ITE parking demand estimates for the proposed development.

TABLE 7: ITE PROJECTED PARKING DEMAND

Land Use Code	Units	Calculated Parking Demand		
		Weighted Average	Fitted Curve	85th Percentile
565 - Day Care - GFA	341.05	8	9	12
Effective Rate		1 space per 42.6 m ²	1 space per 37.9 m ²	1 space per 28.4 m ²

Weighted Average - A central value where some data points carry more "importance" or "frequency" than others

Fitted Curve - A mathematical equation (trendline) that models the overarching relationship between two variables (GFA and Parking Demand).

85th Percentile - A threshold value indicating that 85% of the data falls at or below it.

With the site currently generating a peak parking demand of only 13 spaces, 32 spaces are available for use. Based on the ITE projected parking demand, applying the 85th percentile would leave the site with a surplus of 20 parking spaces.

Proxy Parking Demand

To help determine the site's anticipated parking demand, parking utilization survey data was reviewed for a similar land-use. The parking utilization survey data was collected at 1450 Queen Street (Lullaboo Nursery and Childcare Center Inc.) within the City of Brampton Tuesday, September 18th, 2018, by Paradigm.

The Lullaboo Nursery and Childcare Center contain three floors and has an estimated GFA of 1,500 m². In addition to surveying the existing parking lot, which contains approximately 68 parking spaces, nearby on-street and off-site parking locations were also surveyed. Parking observation counts were completed every 15 minutes between 7:00 AM and 7:00 PM.

Appendix G contains the parking proxy survey data.



A peak parking demand of 39 total vehicles (employees and visitors) or 1.00 space per 38.5 m² was observed at 12:00 PM. **Table 8** summarizes the proxy survey peak parking demand results.

TABLE 8: PROXY DATA PROJECTED PARKING DEMAND

Proxy Site	GFA (m ²)	Calculated Rate	Calculated Spaces
1450 Queen Street West (Brampton)	341.05	1 space per 38.5 m ²	9

Based on the proxy site parking data, the site's peak parking demand is forecast to be 9 spaces. The proxy parking survey results align with the ITE Parking Generation Manual, which estimates 9 spaces using the fitted curve equation approach.

With the site currently generating a peak parking demand of only 13 spaces, 32 spaces are available. Based on the proxy demand data, applying the observed peak parking demand rate of 9 spaces would leave the site with a surplus of 23 parking spaces.

Summary

Based on the review completed, the existing on-site parking supply of 45 spaces, including two barrier-free spaces, is sufficient to accommodate the proposed day care use. The proposed parking supply satisfies the Town of Niagara-on-the-Lake Zoning By-law 4316-09 requirement of 1.00 space per 18.5 m² of GFA for a day care use and is consistent with the parking requirement applicable to the existing retail, service, and rental uses.

The parking utilization survey undertaken at the site indicates that the existing commercial uses generate relatively low parking demand, with a maximum observed utilization of 29% (13 of 45 spaces) and an average utilization of 13%. Accordingly, 32 parking spaces were available at the observed peak period.

The forecast parking demand for the proposed day care was assessed using both the ITE Parking Generation Manual, 6th Edition, and parking utilization data from a comparable day care facility. The ITE analysis forecasts a parking demand of approximately 8 to 12 spaces, while the proxy site data indicates a peak demand of approximately 9 spaces. Both methodologies demonstrate that the proposed use can be accommodated within the existing parking supply. Applying the ITE 85th-percentile demand would result in a surplus of approximately 20 spaces, while the proxy parking demand would result in a surplus of approximately 23 spaces.

Overall, the analysis shows that the existing 45-space parking supply is more than sufficient to accommodate the proposed day care use, with substantial parking capacity remaining during peak demand. No additional on-site parking supply is therefore considered necessary to support the proposed use.



As a courtesy and to support efficient day care operations and minimize conflicts during peak arrival and departure periods, it is recommended that 7 on-site parking spaces be designated for day care pick-up and drop-off only between 7:00–9:00 AM and 4:00–7:00 PM. The signage would encourage parents and caregivers to use these spaces for short-term pick-up and drop-off during peak arrival and departure periods, while preserving the remaining parking supply for the day care and other commercial uses on the site. The courtesy signage would be an operational measure and is not required to address a parking supply deficiency.

Conclusions

The Traffic Brief assesses the transportation implications of converting an existing commercial unit at 412 Four-Mile Creek Road to a daycare with a licensed capacity of 64 children and approximately 341 m² of GFA. Typical daily attendance is expected to be approximately 38 to 40 children. The review considers traffic generation, site access, parking, pick-up/drop-off activity, intersection operations, and the proximity of the proposed outdoor play area to Four-Mile Creek Road.

The proposed daycare is forecast to generate approximately 40 AM peak-hour trips and 39 PM peak-hour trips based on ITE trip-generation rates. Compared with the previous restaurant use within the same unit, the daycare is expected to generate approximately 7 additional AM peak-hour trips and 5 additional PM peak-hour trips, equivalent to approximately one additional vehicle every 8 to 12 minutes. Daycare pick-up and drop-off activity is expected to be distributed over several hours, with short vehicle dwell times, and can be accommodated within the existing commercial plaza without vehicles queuing on Four-Mile Creek Road.

Traffic counts conducted in September 2026 indicate relatively low truck activity on Four-Mile Creek Road, with trucks representing approximately 2.55% of northbound traffic and 3.00% of southbound traffic.

Operational analysis indicates that all study intersections currently operate at acceptable levels of service with substantial spare capacity. Under 2031 total traffic conditions, the Four-Mile Creek Road/Line 9 Road intersection is projected to operate at LOS C or better, while the two plaza driveways are projected to operate at LOS A and LOS B or better, respectively, including day care traffic. An all-way stop warrant assessment also confirms that an all-way stop is not warranted under 2031 total traffic conditions at the intersection of Four-Mile Creek Road and Line 9.

The existing site provides 45 parking spaces, including two barrier-free spaces, which is sufficient to accommodate the proposed daycare. The parking supply satisfies the Town of Niagara-on-the-Lake Zoning By-law 4316-09 requirement of 1.00 space per 18.5 m² of GFA for a daycare use.



An on-site parking survey of the existing commercial plaza, which currently operates with a pharmacy, Pilates studio and dental office, was completed and found a maximum utilization of 29% (13 of 45 spaces), leaving 32 spaces available at peak observed demand.

Forecast daycare parking demand was assessed using both the ITE Parking Generation Manual, 6th Edition, and parking utilization data from a daycare in Brampton. The ITE analysis forecasts approximately 8 to 12 spaces, while the proxy site indicates a peak demand of approximately 9 spaces. Applying the ITE 85th-percentile demand of 12 parking spaces would leave approximately a 20-space surplus, while utilizing the proxy demand data would leave approximately a 23-space surplus. Accordingly, no additional parking supply is required to accommodate the proposed daycare.

Overall, the analysis demonstrates that the proposed daycare can be accommodated within the existing transportation network, parking supply, and commercial plaza circulation system. The anticipated increase in traffic is minor relative to the previous restaurant use; intersection operations remain acceptable under future conditions; sufficient parking is available; and no adverse traffic or parking conditions are anticipated as a result of the proposed daycare.

Recommendations

- ▶ As a courtesy and to support efficient pick-up and drop-off operations, it is recommended that 7 parking spaces with courtesy signage for daycare pick-up and drop-off between 7:00–9:00 AM and 4:00–7:00 PM be provided. This signage would encourage short-term use by parents and caregivers during peak periods while preserving the remaining parking supply for other commercial uses. The courtesy signage is an operational measure.
- ▶ Although no traffic operational or collision-related concerns were identified, the proximity of the proposed outdoor play area to Four-Mile Creek Road warrants consideration of a physical separation treatment, such as bollards or a similar barrier, to reduce the potential for unintended vehicle encroachment into the play area.



We trust that this meets your requirements. Please do not hesitate to contact us if we can be of further assistance.

Yours very truly,

PARADIGM TRANSPORTATION SOLUTIONS LIMITED



Adam J. Makarewicz
Dipl.T., CET, LET, RSP1, MITE
Senior Project Manager



Professional Engineers
Ontario

Licensed Engineering Technologist

Name: A. J. MAKAREWICZ

Number: 100574092



Limitations: Development of traffic impact and transportation planning studies, and reporting recommendations for associated transportation system improvements. **2026-10-08**

Association of Professional Engineers of Ontario



Attachments



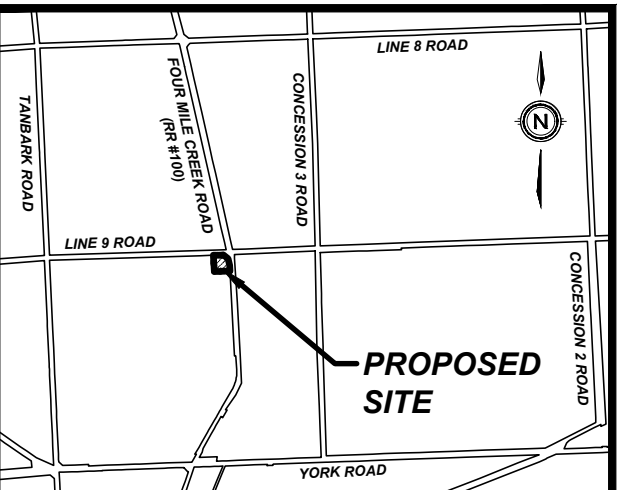
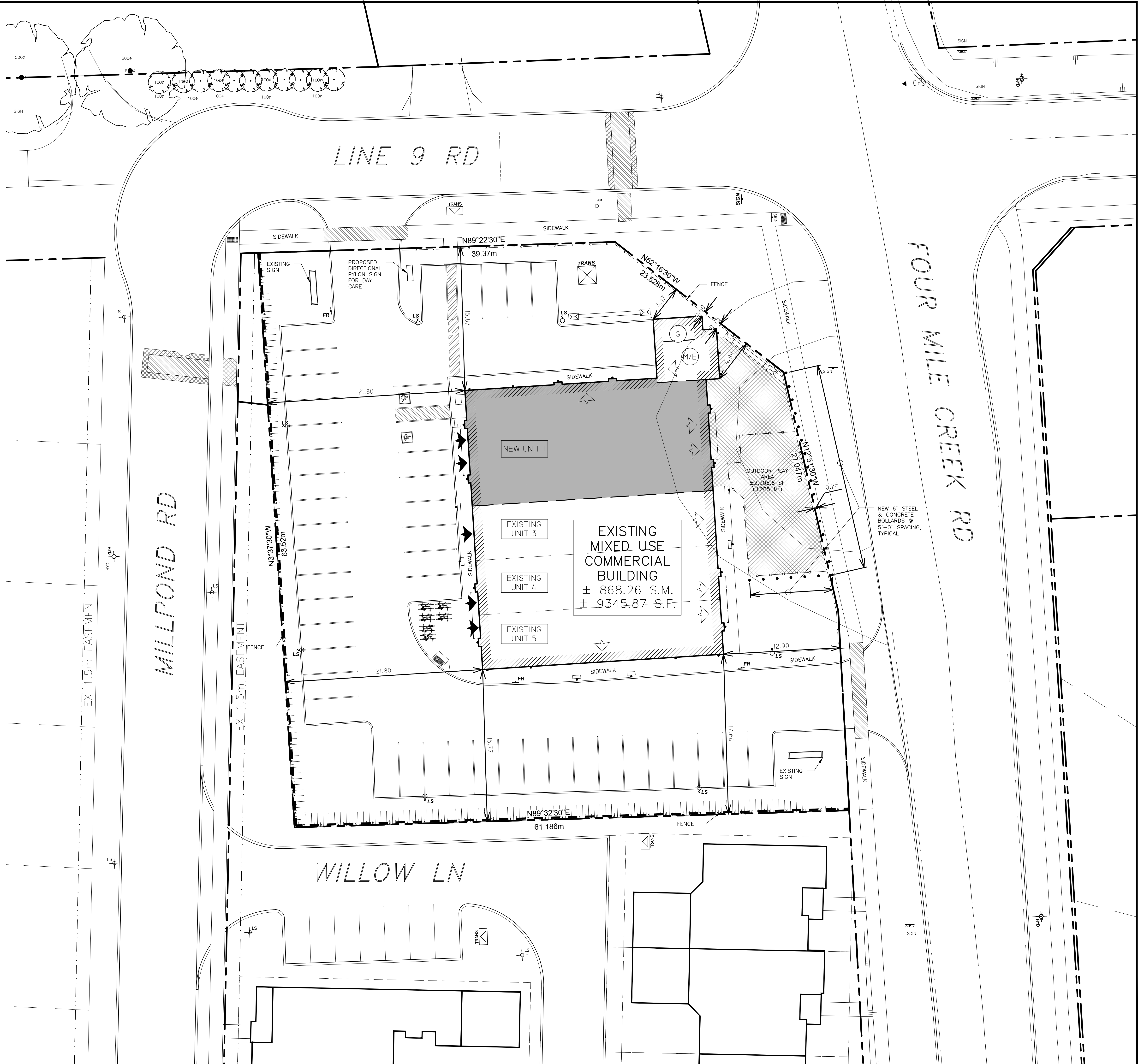
APPENDIX A – SITE PLAN



SITE PLAN and BUILDING STATISTICS

1	ZONING	VILLAGE COMMERCIAL ZONE (VC)
2	SITE AREA	0.36 HA. 0.90 AC.
3	ADDRESS	412 FOUR MILE CREEK ROAD, ST. DAVIDS
4	LOT NUMBER	LOT 88

GROUND LEASABLE AREA				
UNIT No.	UNIT NAME	USE	SQ. M	(SQ. FT)
5	001	NEW UNIT 1	DAY CARE USE	341.05 3671.02
6	003	EXIST. UNIT 3	COMMERCIAL USE	160.20 1724.3
7	004	EXIST. UNIT 4	COMMERCIAL USE	160.68 1729.54
8	005	EXIST. UNIT 5	COMMERCIAL USE	160.68 1729.54
9		EXIST. GARBAGE & MECH/ELCT ROOM	45.65	491.37
10	TOTAL GROSS FLOOR AREA		868.26	9345.87



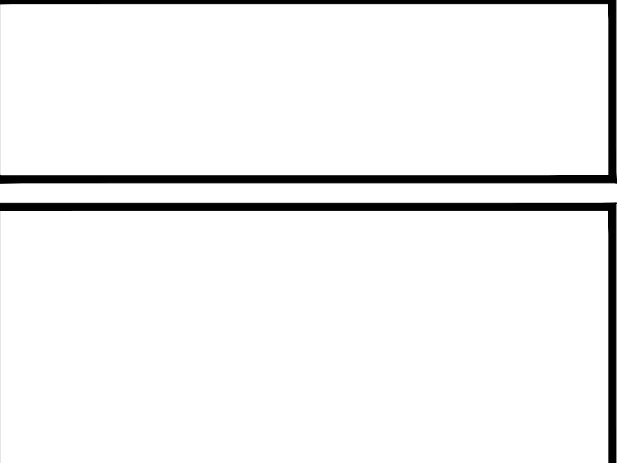
KEY PLAN
N.T.S.

LEGEND

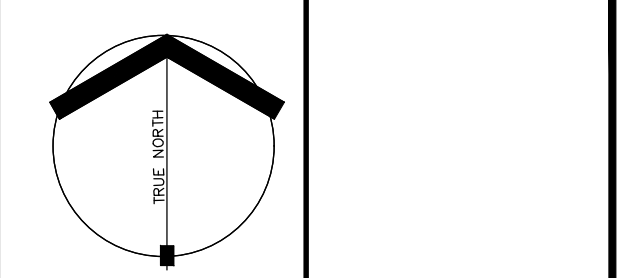
	LEGAL DESCRIPTION AND PROPERTY LINE SUBJECT (LANDS)
	EASEMENTS (NO BUILD, MTO)
	FIRE ROUTE (HEAVY DUTY ASPHALT)
	DEMOLITION
	TRUCK ROUTE (HEAVY DUTY ASPHALT) (SEE GRADING PLANS)
	PARCEL LINES
	L.D. - DENOTES LINE OF LIMITING DISTANCE
	EXISTING FENCE
	PROPOSED FENCE
	NEW CONCRETE CURBS C/W SAW CUTS AND EXPANSION JOINTS
	RAISED ISLAND C/W CONCRETE PAVING AND CONCRETE CURBS
	RAISED ISLAND C/W CONCRETE CURBS AND LANDSCAPING
	PAINTED LINES (REFER TO SITE DETAILS)
	NEW CONCRETE SIDEWALK MULTILITHIC POLY C/W SAWCUTS AT 2.0M EXPANSION JOINTS
	PAINTED PEDESTRIAN CROSSWALK (REFER TO SITE DETAILS)
	PRESSED ASPHALT TYP. FOR ALL AREAS SHOWN
	PROPOSED OUTDOOR PLAY AREA
	PAINTED TRAFFIC LINES (REFER TO SITE DETAILS)
	PROPOSED BUILDING ENTRY
	PROPOSED BUILDING EXIT
	FIRE HYDRANT
	STOP SIGNS
	FIRE ROUTE SIGNS
	BARRIER FREE PARKING SIGN
	SIGN POST ONLY, SIGN BY TENANT
	EXISTING GRADE ELEVATION
	NEW SITE SERVICES (REFER TO SITE SERVICES DRAWINGS)
	DENOTES LIGHT STANDARD

REV	BY	DESCRIPTION	DATE
AZ	REVISED PER CITY COMMENTS		OCT 05 2026
AZ	ISSUED FOR MINOR VARIANCE		JUL 06 2026
REVISIONS			

CONTRACTOR SHALL CHECK AND VERIFY ALL DIMENSIONS ON SITE.
(DO NOT SCALE DRAWINGS)



ANTHONY ZACARIA
ARCHITECT
365A - 700 LAWRENCE AVENUE WEST
TORONTO, ONTARIO M6A 3B6
VIA (416) 783-5477 EMAIL: @LLARCH.CA
WWW.LLARCH.CA



PROJECT		PROPOSED DAYCARE	
412 FOUR MILE CREEK ROAD		ST. DAVIDS	
DRAWING TITLE			
SITE PLAN			
DRAWN BY	LV	COMM. NO.	XX-XX
CHECKED	AZ	DRAWING NO.	
SCALE	1:200	SP1	
DATE	SEP 23 2026		

APPENDIX B – TRAFFIC DATA





Paradigm Transportation Solutions Limited
5A-150 Pinebush Rd

Cambridge, Ontario, Canada N1R 8J8
519-896-3163 cbowness@pts1.com

Count Name: Four Mile Creek & 412 Four Mile
Creek Driveway
Site Code: 260552
Start Date: 09/23/2026
Page No: 1

Turning Movement Data

Start Time	412 Four Mile Creek Driveway Eastbound					Four Mile Creek Road Northbound					Four Mile Creek Road Southbound					Int. Total
	Left	Right	U-Turn	Peds	App. Total	Left	Thru	U-Turn	Peds	App. Total	Thru	Right	U-Turn	Peds	App. Total	
7:00 AM	0	0	0	0	0	0	27	0	0	27	24	0	0	0	24	51
7:15 AM	0	0	0	0	0	0	26	0	0	26	28	0	0	0	28	54
7:30 AM	0	0	0	0	0	0	50	0	0	50	44	0	0	0	44	94
7:45 AM	0	1	0	1	1	0	34	0	0	34	41	0	0	0	41	76
Hourly Total	0	1	0	1	1	0	137	0	0	137	137	0	0	0	137	275
8:00 AM	0	0	0	0	0	0	40	0	0	40	53	0	0	0	53	93
8:15 AM	0	0	0	1	0	0	31	0	0	31	44	0	0	0	44	75
8:30 AM	0	0	0	0	0	0	62	0	0	62	61	0	0	0	61	123
8:45 AM	0	0	0	0	0	4	54	0	0	58	54	0	0	0	54	112
Hourly Total	0	0	0	1	0	4	187	0	0	191	212	0	0	0	212	403
9:00 AM	0	0	0	0	0	0	48	0	0	48	52	0	0	0	52	100
9:15 AM	0	0	0	0	0	0	53	0	1	53	49	0	0	0	49	102
9:30 AM	0	0	0	0	0	2	49	0	0	51	56	0	0	0	56	107
9:45 AM	0	0	0	1	0	5	51	0	0	56	47	0	0	0	47	103
Hourly Total	0	0	0	1	0	7	201	0	1	208	204	0	0	0	204	412
10:00 AM	1	1	0	0	2	2	46	0	0	48	41	0	0	0	41	91
10:15 AM	0	0	0	0	0	0	56	0	0	56	58	0	0	0	58	114
10:30 AM	0	0	0	0	0	1	73	0	0	74	57	0	0	0	57	131
10:45 AM	2	5	0	0	7	0	54	0	0	54	54	0	0	0	54	115
Hourly Total	3	6	0	0	9	3	229	0	0	232	210	0	0	0	210	451
11:00 AM	0	0	0	0	0	0	69	0	0	69	47	1	0	0	48	117
11:15 AM	0	0	0	0	0	0	51	0	0	51	32	0	0	0	32	83
11:30 AM	0	0	0	0	0	1	64	0	0	65	54	0	0	0	54	119
11:45 AM	0	0	0	0	0	1	55	0	0	56	49	0	0	0	49	105
Hourly Total	0	0	0	0	0	2	239	0	0	241	182	1	0	0	183	424
12:00 PM	0	0	0	1	0	0	53	0	0	53	78	0	0	0	78	131
12:15 PM	0	0	0	0	0	0	45	0	0	45	63	0	0	0	63	108
12:30 PM	0	0	0	2	0	1	59	0	0	60	65	0	0	0	65	125
12:45 PM	0	0	0	0	0	1	47	0	0	48	56	0	0	0	56	104
Hourly Total	0	0	0	3	0	2	204	0	0	206	262	0	0	0	262	468
1:00 PM	0	0	0	0	0	0	63	0	0	63	60	0	0	0	60	123
1:15 PM	0	0	0	0	0	0	60	0	0	60	45	0	0	0	45	105
1:30 PM	0	1	0	2	1	1	65	0	0	66	57	0	0	0	57	124
1:45 PM	0	0	0	0	0	0	70	0	0	70	52	0	0	0	52	122
Hourly Total	0	1	0	2	1	1	258	0	0	259	214	0	0	0	214	474
2:00 PM	0	0	0	0	0	0	53	0	0	53	54	0	0	0	54	107

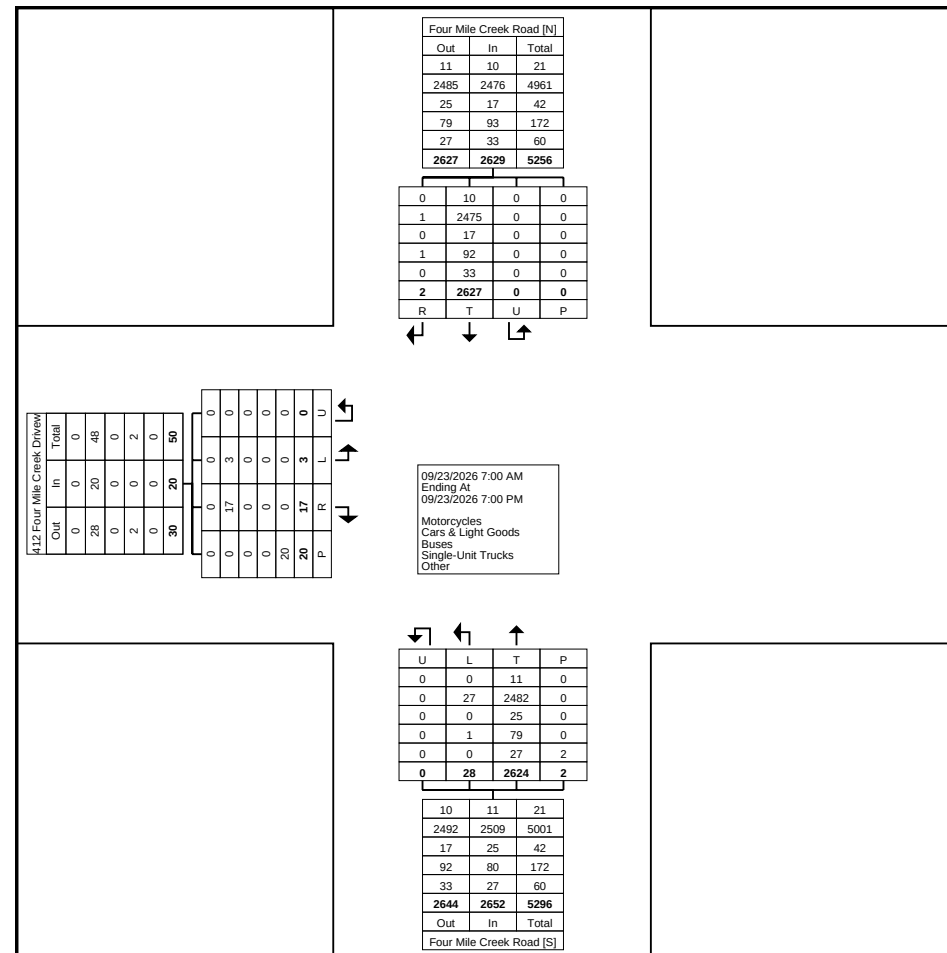
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2:30 PM	0	1	0	0	1	0	77	0	0	77	61	0	0	0	61	139
2:45 PM	0	0	0	0	0	0	76	0	0	76	49	0	0	0	49	125
Hourly Total	0	1	0	0	1	1	279	0	0	280	237	0	0	0	237	518
3:00 PM	0	1	0	0	1	0	67	0	0	67	72	1	0	0	73	141
3:15 PM	0	0	0	1	0	1	75	0	0	76	60	0	0	0	60	136
3:30 PM	0	2	0	0	2	1	67	0	0	68	78	0	0	0	78	148
3:45 PM	0	2	0	1	2	1	69	0	0	70	66	0	0	0	66	138
Hourly Total	0	5	0	2	5	3	278	0	0	281	276	1	0	0	277	563
4:00 PM	0	0	0	0	0	0	63	0	0	63	72	0	0	0	72	135
4:15 PM	0	0	0	0	0	0	65	0	0	65	68	0	0	0	68	133
4:30 PM	0	0	0	2	0	0	74	0	0	74	70	0	0	0	70	144
4:45 PM	0	1	0	0	1	0	56	0	0	56	65	0	0	0	65	122
Hourly Total	0	1	0	2	1	0	258	0	0	258	275	0	0	0	275	534
5:00 PM	0	0	0	3	0	0	44	0	0	44	78	0	0	0	78	122
5:15 PM	0	0	0	3	0	0	55	0	0	55	79	0	0	0	79	134
5:30 PM	0	0	0	0	0	0	39	0	0	39	57	0	0	0	57	96
5:45 PM	0	2	0	0	2	0	64	0	0	64	46	0	0	0	46	112
Hourly Total	0	2	0	6	2	0	202	0	0	202	260	0	0	0	260	464
6:00 PM	0	0	0	2	0	0	38	0	0	38	45	0	0	0	45	83
6:15 PM	0	0	0	0	0	2	47	0	0	49	51	0	0	0	51	100
6:30 PM	0	0	0	0	0	0	37	0	1	37	31	0	0	0	31	68
6:45 PM	0	0	0	0	0	3	30	0	0	33	31	0	0	0	31	64
Hourly Total	0	0	0	2	0	5	152	0	1	157	158	0	0	0	158	315
Grand Total	3	17	0	20	20	28	2624	0	2	2652	2627	2	0	0	2629	5301
Approach %	15.0	85.0	0.0	-	-	1.1	98.9	0.0	-	-	99.9	0.1	0.0	-	-	-
Total %	0.1	0.3	0.0	-	0.4	0.5	49.5	0.0	-	50.0	49.6	0.0	0.0	-	49.6	-
Motorcycles	0	0	0	-	0	0	11	0	-	11	10	0	0	-	10	21
% Motorcycles	0.0	0.0	-	-	0.0	0.0	0.4	-	-	0.4	0.4	0.0	-	-	0.4	0.4
Cars & Light Goods	3	17	0	-	20	27	2482	0	-	2509	2475	1	0	-	2476	5005
% Cars & Light Goods	100.0	100.0	-	-	100.0	96.4	94.6	-	-	94.6	94.2	50.0	-	-	94.2	94.4
Buses	0	0	0	-	0	0	25	0	-	25	17	0	0	-	17	42
% Buses	0.0	0.0	-	-	0.0	0.0	1.0	-	-	0.9	0.6	0.0	-	-	0.6	0.8
Single-Unit Trucks	0	0	0	-	0	1	79	0	-	80	92	1	0	-	93	173
% Single-Unit Trucks	0.0	0.0	-	-	0.0	3.6	3.0	-	-	3.0	3.5	50.0	-	-	3.5	3.3
Articulated Trucks	0	0	0	-	0	0	21	0	-	21	31	0	0	-	31	52
% Articulated Trucks	0.0	0.0	-	-	0.0	0.0	0.8	-	-	0.8	1.2	0.0	-	-	1.2	1.0
Bicycles on Road	0	0	0	-	0	0	6	0	-	6	2	0	0	-	2	8
% Bicycles on Road	0.0	0.0	-	-	0.0	0.0	0.2	-	-	0.2	0.1	0.0	-	-	0.1	0.2
Bicycles on Crosswalk	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-
% Bicycles on Crosswalk	-	-	-	0.0	-	-	-	-	0.0	-	-	-	-	-	-	-
Pedestrians	-	-	-	20	-	-	-	-	2	-	-	-	-	0	-	-
% Pedestrians	-	-	-	100.0	-	-	-	-	100.0	-	-	-	-	-	-	-



Paradigm Transportation Solutions Limited
5A-150 Pinebush Rd

Cambridge, Ontario, Canada N1R 8J8
519-896-3163 cbowness@pts1.com

Count Name: Four Mile Creek & 412 Four Mile
Creek Driveway
Site Code: 260552
Start Date: 09/23/2026
Page No: 3



Turning Movement Data Plot



Paradigm Transportation Solutions Limited
5A-150 Pinebush Rd

Cambridge, Ontario, Canada N1R 8J8
519-896-3163 cbowness@pts1.com

Count Name: Four Mile Creek & 412 Four Mile
Creek Driveway
Site Code: 260552
Start Date: 09/23/2026
Page No: 4

Turning Movement Peak Hour Data (8:30 AM)

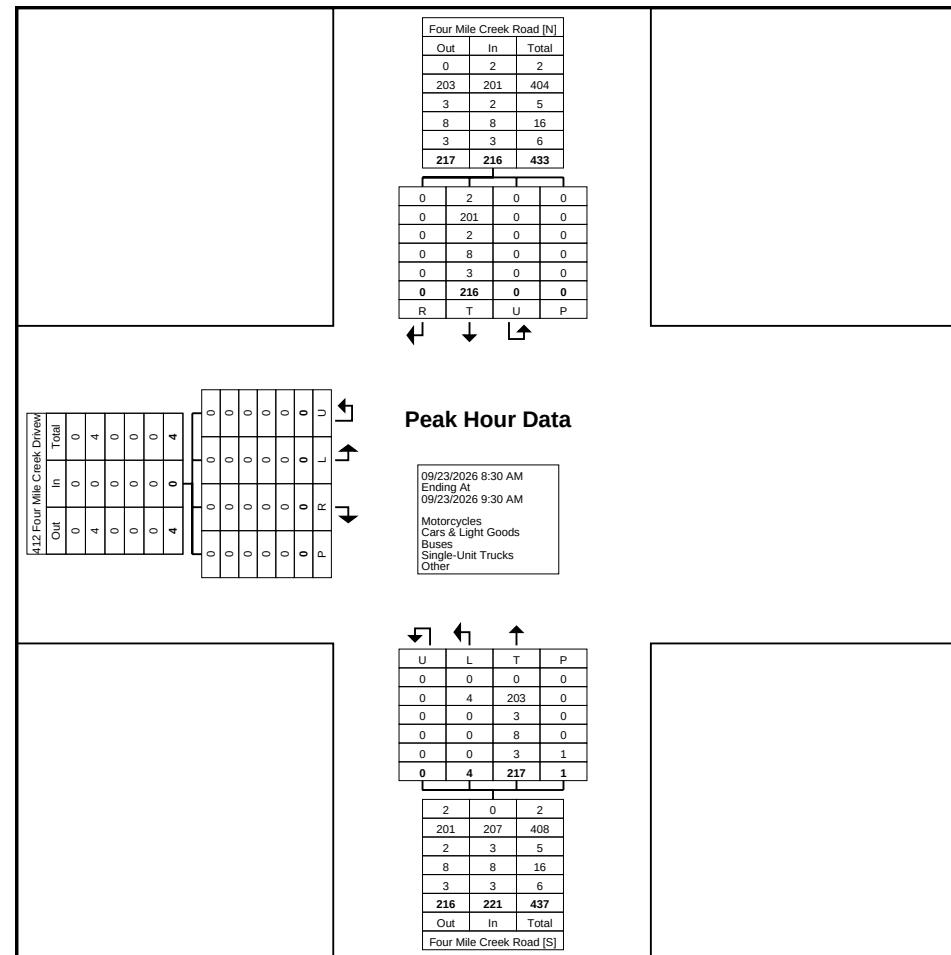
Start Time	412 Four Mile Creek Driveway Eastbound					Four Mile Creek Road Northbound					Four Mile Creek Road Southbound					Int. Total
	Left	Right	U-Turn	Peds	App. Total	Left	Thru	U-Turn	Peds	App. Total	Thru	Right	U-Turn	Peds	App. Total	
8:30 AM	0	0	0	0	0	0	62	0	0	62	61	0	0	0	61	123
8:45 AM	0	0	0	0	0	4	54	0	0	58	54	0	0	0	54	112
9:00 AM	0	0	0	0	0	0	48	0	0	48	52	0	0	0	52	100
9:15 AM	0	0	0	0	0	0	53	0	1	53	49	0	0	0	49	102
Total	0	0	0	0	0	4	217	0	1	221	216	0	0	0	216	437
Approach %	0.0	0.0	0.0	-	-	1.8	98.2	0.0	-	-	100.0	0.0	0.0	-	-	-
Total %	0.0	0.0	0.0	-	0.0	0.9	49.7	0.0	-	50.6	49.4	0.0	0.0	-	49.4	-
PHF	0.000	0.000	0.000	-	0.000	0.250	0.875	0.000	-	0.891	0.885	0.000	0.000	-	0.885	0.888
Motorcycles	0	0	0	-	0	0	0	0	-	0	2	0	0	-	2	2
% Motorcycles	-	-	-	-	-	0.0	0.0	-	-	0.0	0.9	-	-	-	0.9	0.5
Cars & Light Goods	0	0	0	-	0	4	203	0	-	207	201	0	0	-	201	408
% Cars & Light Goods	-	-	-	-	-	100.0	93.5	-	-	93.7	93.1	-	-	-	93.1	93.4
Buses	0	0	0	-	0	0	3	0	-	3	2	0	0	-	2	5
% Buses	-	-	-	-	-	0.0	1.4	-	-	1.4	0.9	-	-	-	0.9	1.1
Single-Unit Trucks	0	0	0	-	0	0	8	0	-	8	8	0	0	-	8	16
% Single-Unit Trucks	-	-	-	-	-	0.0	3.7	-	-	3.6	3.7	-	-	-	3.7	3.7
Articulated Trucks	0	0	0	-	0	0	3	0	-	3	3	0	0	-	3	6
% Articulated Trucks	-	-	-	-	-	0.0	1.4	-	-	1.4	1.4	-	-	-	1.4	1.4
Bicycles on Road	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0
% Bicycles on Road	-	-	-	-	-	0.0	0.0	-	-	0.0	0.0	-	-	-	0.0	0.0
Bicycles on Crosswalk	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	0.0	-	-	-	-	-	-	-
Pedestrians	-	-	-	0	-	-	-	-	1	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	-	-	-	-	100.0	-	-	-	-	-	-	-



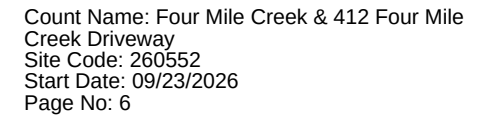
Paradigm Transportation Solutions Limited
5A-150 Pinebush Rd

Cambridge, Ontario, Canada N1R 8J8
519-896-3163 cbowness@pts1.com

Count Name: Four Mile Creek & 412 Four Mile
Creek Driveway
Site Code: 260552
Start Date: 09/23/2026
Page No: 5



Turning Movement Peak Hour Data Plot (8:30 AM)

[illegible]

Turning Movement Peak Hour Data Plot (3:00 PM)



Paradigm Transportation Solutions Limited
5A-150 Pinebush Rd

Cambridge, Ontario, Canada N1R 8J8
519-896-3163 cbowness@ptsl.com

Count Name: Four Mile Creek Road & Line 9 -
Mid Day
Site Code: 260552
Start Date: 09/23/2026
Page No: 1

Turning Movement Data

Start Time	Line 9 Eastbound						Line 9 Westbound						Four Mile Creek Road Northbound						Four Mile Creek Road Southbound						Int. Total
	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	
11:00 AM	1	0	1	0	0	2	6	0	3	0	0	9	1	60	7	0	0	68	2	41	1	0	0	44	123
11:15 AM	0	0	0	0	0	0	3	0	1	0	0	4	0	47	4	0	1	51	2	27	1	0	0	30	85
11:30 AM	3	1	1	0	0	5	15	2	0	0	1	17	1	58	5	0	1	64	2	39	0	0	0	41	127
11:45 AM	1	0	2	0	0	3	7	0	1	0	1	8	1	46	7	0	2	54	1	38	1	0	0	40	105
Hourly Total	5	1	4	0	0	10	31	2	5	0	2	38	3	211	23	0	4	237	7	145	3	0	0	155	440
12:00 PM	2	1	1	0	0	4	15	0	2	0	0	17	0	43	9	0	1	52	0	60	0	0	0	60	133
12:15 PM	0	0	0	0	0	0	8	2	2	0	0	12	0	32	10	0	1	42	2	56	0	0	0	58	112
12:30 PM	1	0	1	0	0	2	11	1	2	0	0	14	0	44	8	0	1	52	5	51	0	0	0	56	124
12:45 PM	1	0	0	0	0	1	9	0	1	0	0	10	0	43	2	0	0	45	4	47	0	0	0	51	107
Hourly Total	4	1	2	0	0	7	43	3	7	0	0	53	0	162	29	0	3	191	11	214	0	0	0	225	476
1:00 PM	0	0	1	0	0	1	7	0	4	0	0	11	1	53	8	0	0	62	1	51	0	0	0	52	126
1:15 PM	1	1	1	0	0	3	5	0	1	0	0	6	0	56	4	0	0	60	1	39	1	0	0	41	110
1:30 PM	1	0	2	0	0	3	10	0	0	0	0	10	0	55	9	0	0	64	1	45	0	0	0	46	123
1:45 PM	0	1	0	0	0	1	13	0	2	0	0	15	2	60	8	0	1	70	0	39	0	0	0	39	125
Hourly Total	2	2	4	0	0	8	35	0	7	0	0	42	3	224	29	0	1	256	3	174	1	0	0	178	484
Grand Total	11	4	10	0	0	25	109	5	19	0	2	133	6	597	81	0	8	684	21	533	4	0	0	558	1400
Approach %	44.0	16.0	40.0	0.0	-	-	82.0	3.8	14.3	0.0	-	-	0.9	87.3	11.8	0.0	-	-	3.8	95.5	0.7	0.0	-	-	-
Total %	0.8	0.3	0.7	0.0	-	1.8	7.8	0.4	1.4	0.0	-	9.5	0.4	42.6	5.8	0.0	-	48.9	1.5	38.1	0.3	0.0	-	39.9	-
Motorcycles	0	0	0	0	-	0	1	0	1	0	-	2	0	2	0	0	-	2	0	2	0	0	-	2	6
% Motorcycles	0.0	0.0	0.0	-	-	0.0	0.9	0.0	5.3	-	-	1.5	0.0	0.3	0.0	-	-	0.3	0.0	0.4	0.0	-	-	0.4	0.4
Cars & Light Goods	10	4	10	0	-	24	104	5	18	0	-	127	5	559	77	0	-	641	21	498	3	0	-	522	1314
% Cars & Light Goods	90.9	100.0	100.0	-	-	96.0	95.4	100.0	94.7	-	-	95.5	83.3	93.6	95.1	-	-	93.7	100.0	93.4	75.0	-	-	93.5	93.9
Buses	0	0	0	0	-	0	0	0	0	0	-	0	0	3	0	0	-	3	0	1	0	0	-	1	4
% Buses	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.5	0.0	-	-	0.4	0.0	0.2	0.0	-	-	0.2	0.3
Single-Unit Trucks	1	0	0	0	-	1	2	0	0	0	-	2	1	28	2	0	-	31	0	27	1	0	-	28	62
% Single-Unit Trucks	9.1	0.0	0.0	-	-	4.0	1.8	0.0	0.0	-	-	1.5	16.7	4.7	2.5	-	-	4.5	0.0	5.1	25.0	-	-	5.0	4.4
Articulated Trucks	0	0	0	0	-	0	1	0	0	0	-	1	0	5	0	0	-	5	0	5	0	0	-	5	11
% Articulated Trucks	0.0	0.0	0.0	-	-	0.0	0.9	0.0	0.0	-	-	0.8	0.0	0.8	0.0	-	-	0.7	0.0	0.9	0.0	-	-	0.9	0.8
Bicycles on Road	0	0	0	0	-	0	1	0	0	0	-	1	0	0	2	0	-	2	0	0	0	0	-	0	3
% Bicycles on Road	0.0	0.0	0.0	-	-	0.0	0.9	0.0	0.0	-	-	0.8	0.0	0.0	2.5	-	-	0.3	0.0	0.0	0.0	-	-	0.0	0.2
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	0.0	-	-	-	-	-	0.0	-	-	-	-	-	-	-	-

Pedestrians	-	-	-	-	0	-	-	-	-	2	-	-	-	-	8	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	100.0	-	-	-	-	100.0	-	-	-	-	-	-	-

Turning Movement Data Plot



Paradigm Transportation Solutions Limited
5A-150 Pinebush Rd

Cambridge, Ontario, Canada N1R 8J8
519-896-3163 cbowness@ptsl.com

Count Name: Four Mile Creek Road & Line 9 -
Mid Day
Site Code: 260552
Start Date: 09/23/2026
Page No: 4

Turning Movement Peak Hour Data (11:00 AM)

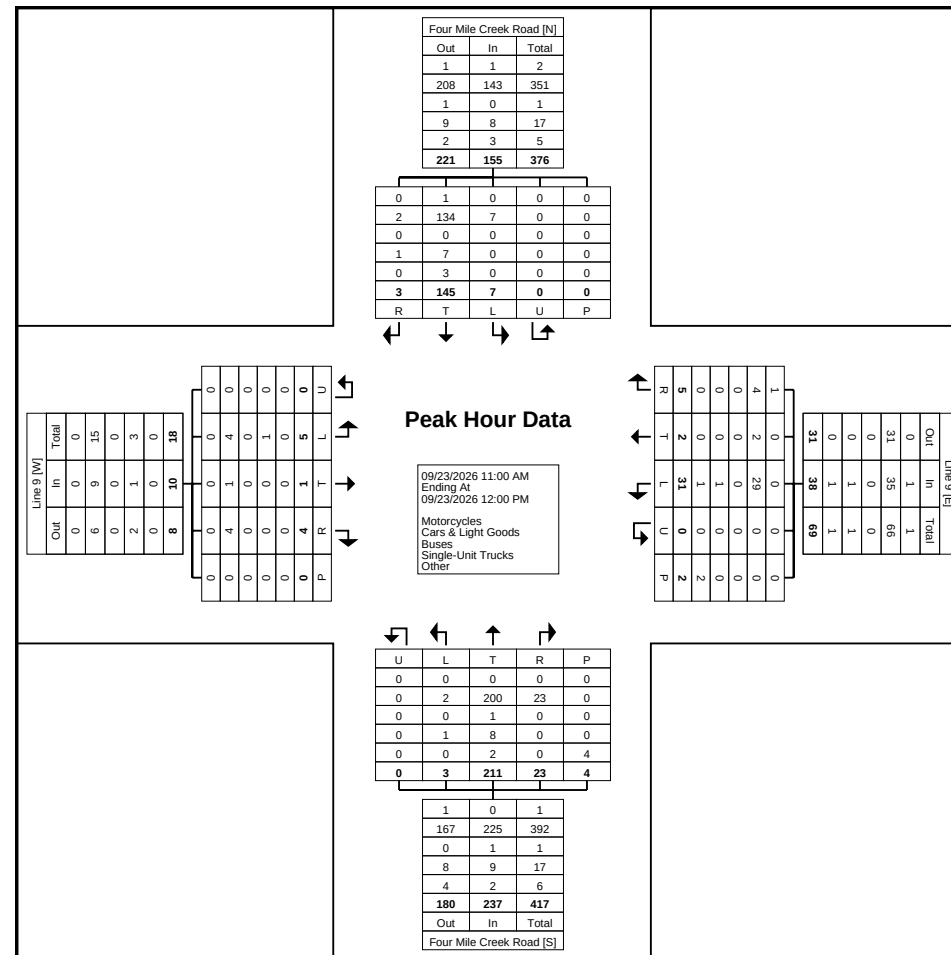
Start Time	Line 9 Eastbound						Line 9 Westbound						Four Mile Creek Road Northbound						Four Mile Creek Road Southbound						Int. Total
	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	
11:00 AM	1	0	1	0	0	2	6	0	3	0	0	9	1	60	7	0	0	68	2	41	1	0	0	44	123
11:15 AM	0	0	0	0	0	0	3	0	1	0	0	4	0	47	4	0	1	51	2	27	1	0	0	30	85
11:30 AM	3	1	1	0	0	5	15	2	0	0	1	17	1	58	5	0	1	64	2	39	0	0	0	41	127
11:45 AM	1	0	2	0	0	3	7	0	1	0	1	8	1	46	7	0	2	54	1	38	1	0	0	40	105
Total	5	1	4	0	0	10	31	2	5	0	2	38	3	211	23	0	4	237	7	145	3	0	0	155	440
Approach %	50.0	10.0	40.0	0.0	-	-	81.6	5.3	13.2	0.0	-	-	1.3	89.0	9.7	0.0	-	-	4.5	93.5	1.9	0.0	-	-	-
Total %	1.1	0.2	0.9	0.0	-	2.3	7.0	0.5	1.1	0.0	-	8.6	0.7	48.0	5.2	0.0	-	53.9	1.6	33.0	0.7	0.0	-	35.2	-
PHF	0.417	0.250	0.500	0.000	-	0.500	0.517	0.250	0.417	0.000	-	0.559	0.750	0.879	0.821	0.000	-	0.871	0.875	0.884	0.750	0.000	-	0.881	0.866
Motorcycles	0	0	0	0	-	0	0	0	1	0	-	1	0	0	0	0	-	0	0	1	0	0	-	1	2
% Motorcycles	0.0	0.0	0.0	-	-	0.0	0.0	0.0	20.0	-	-	2.6	0.0	0.0	0.0	-	-	0.0	0.0	0.7	0.0	-	-	0.6	0.5
Cars & Light Goods	4	1	4	0	-	9	29	2	4	0	-	35	2	200	23	0	-	225	7	134	2	0	-	143	412
% Cars & Light Goods	80.0	100.0	100.0	-	-	90.0	93.5	100.0	80.0	-	-	92.1	66.7	94.8	100.0	-	-	94.9	100.0	92.4	66.7	-	-	92.3	93.6
Buses	0	0	0	0	-	0	0	0	0	0	-	0	0	1	0	0	-	1	0	0	0	0	-	0	1
% Buses	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.5	0.0	-	-	0.4	0.0	0.0	0.0	-	-	0.0	0.2
Single-Unit Trucks	1	0	0	0	-	1	1	0	0	0	-	1	1	8	0	0	-	9	0	7	1	0	-	8	19
% Single-Unit Trucks	20.0	0.0	0.0	-	-	10.0	3.2	0.0	0.0	-	-	2.6	33.3	3.8	0.0	-	-	3.8	0.0	4.8	33.3	-	-	5.2	4.3
Articulated Trucks	0	0	0	0	-	0	1	0	0	0	-	1	0	2	0	0	-	2	0	3	0	0	-	3	6
% Articulated Trucks	0.0	0.0	0.0	-	-	0.0	3.2	0.0	0.0	-	-	2.6	0.0	0.9	0.0	-	-	0.8	0.0	2.1	0.0	-	-	1.9	1.4
Bicycles on Road	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Bicycles on Road	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	0	-	-	-
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	0.0	-	-	-	-	-	0.0	-	-	-	-	-	-	-	-
Pedestrians	-	-	-	-	0	-	-	-	-	-	2	-	-	-	-	-	4	-	-	-	-	0	-	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	-	-	-



Paradigm Transportation Solutions Limited
5A-150 Pinebush Rd

Cambridge, Ontario, Canada N1R 8J8
519-896-3163 cbowness@pts1.com

Count Name: Four Mile Creek Road & Line 9 -
Mid Day
Site Code: 260552
Start Date: 09/23/2026
Page No: 5



Turning Movement Peak Hour Data Plot (11:00 AM)



Paradigm Transportation Solutions Limited
5A-150 Pinebush Rd

Cambridge, Ontario, Canada N1R 8J8
519-896-3163 cbowness@ptsll.com

Count Name: Four Mile Creek Road & Line 9 -
Mid Day
Site Code: 260552
Start Date: 09/23/2026
Page No: 6

Turning Movement Peak Hour Data (1:00 PM)

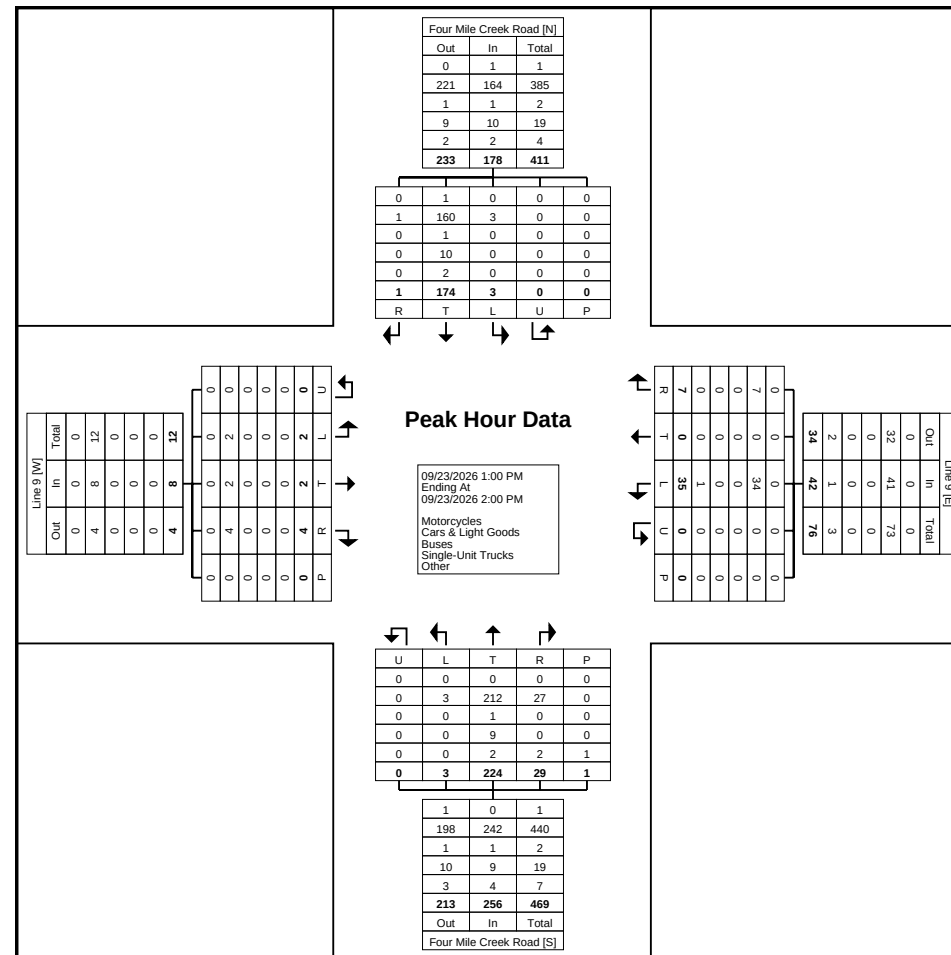
Start Time	Line 9 Eastbound						Line 9 Westbound						Four Mile Creek Road Northbound						Four Mile Creek Road Southbound						Int. Total
	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	
1:00 PM	0	0	1	0	0	1	7	0	4	0	0	11	1	53	8	0	0	62	1	51	0	0	0	52	126
1:15 PM	1	1	1	0	0	3	5	0	1	0	0	6	0	56	4	0	0	60	1	39	1	0	0	41	110
1:30 PM	1	0	2	0	0	3	10	0	0	0	0	10	0	55	9	0	0	64	1	45	0	0	0	46	123
1:45 PM	0	1	0	0	0	1	13	0	2	0	0	15	2	60	8	0	1	70	0	39	0	0	0	39	125
Total	2	2	4	0	0	8	35	0	7	0	0	42	3	224	29	0	1	256	3	174	1	0	0	178	484
Approach %	25.0	25.0	50.0	0.0	-	-	83.3	0.0	16.7	0.0	-	-	1.2	87.5	11.3	0.0	-	-	1.7	97.8	0.6	0.0	-	-	-
Total %	0.4	0.4	0.8	0.0	-	1.7	7.2	0.0	1.4	0.0	-	8.7	0.6	46.3	6.0	0.0	-	52.9	0.6	36.0	0.2	0.0	-	36.8	-
PHF	0.500	0.500	0.500	0.000	-	0.667	0.673	0.000	0.438	0.000	-	0.700	0.375	0.933	0.806	0.000	-	0.914	0.750	0.853	0.250	0.000	-	0.856	0.960
Motorcycles	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	1	0	0	-	1	1
% Motorcycles	0.0	0.0	0.0	-	-	0.0	0.0	-	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.6	0.0	-	-	0.6	0.2
Cars & Light Goods	2	2	4	0	-	8	34	0	7	0	-	41	3	212	27	0	-	242	3	160	1	0	-	164	455
% Cars & Light Goods	100.0	100.0	100.0	-	-	100.0	97.1	-	100.0	-	-	97.6	100.0	94.6	93.1	-	-	94.5	100.0	92.0	100.0	-	-	92.1	94.0
Buses	0	0	0	0	-	0	0	0	0	0	-	0	0	1	0	0	-	1	0	1	0	0	-	1	2
% Buses	0.0	0.0	0.0	-	-	0.0	0.0	-	0.0	-	-	0.0	0.0	0.4	0.0	-	-	0.4	0.0	0.6	0.0	-	-	0.6	0.4
Single-Unit Trucks	0	0	0	0	-	0	0	0	0	0	-	0	0	9	0	0	-	9	0	10	0	0	-	10	19
% Single-Unit Trucks	0.0	0.0	0.0	-	-	0.0	0.0	-	0.0	-	-	0.0	0.0	4.0	0.0	-	-	3.5	0.0	5.7	0.0	-	-	5.6	3.9
Articulated Trucks	0	0	0	0	-	0	0	0	0	0	-	0	0	2	0	0	-	2	0	2	0	0	-	2	4
% Articulated Trucks	0.0	0.0	0.0	-	-	0.0	0.0	-	0.0	-	-	0.0	0.0	0.9	0.0	-	-	0.8	0.0	1.1	0.0	-	-	1.1	0.8
Bicycles on Road	0	0	0	0	-	0	1	0	0	0	-	1	0	0	2	0	-	2	0	0	0	0	-	0	3
% Bicycles on Road	0.0	0.0	0.0	-	-	0.0	2.9	-	0.0	-	-	2.4	0.0	0.0	6.9	-	-	0.8	0.0	0.0	0.0	-	-	0.0	0.6
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	0	-	-	-
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0	-	-	-	-	-	-	-	-
Pedestrians	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	1	-	-	-	-	0	-	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100.0	-	-	-	-	-	-	-	-



Paradigm Transportation Solutions Limited
5A-150 Pinebush Rd

Cambridge, Ontario, Canada N1R 8J8
519-896-3163 cbowness@pts1.com

Count Name: Four Mile Creek Road & Line 9 -
Mid Day
Site Code: 260552
Start Date: 09/23/2026
Page No: 7



Turning Movement Peak Hour Data Plot (1:00 PM)



Paradigm Transportation Solutions Limited
5A-150 Pinebush Rd

Cambridge, Ontario, Canada N1R 8J8
519-896-3163 cbowness@pts1.com

Count Name: Line 9 & 412 Four Mile Creek
Driveway
Site Code: 260552
Start Date: 09/23/2026
Page No: 1

Turning Movement Data

Start Time	Line 9 Road Eastbound					Line 9 Road Westbound					412 Four Mile Creek Driveway Northbound					Int. Total
	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	U-Turn	Peds	App. Total	Left	Right	U-Turn	Peds	App. Total	
7:00 AM	1	0	0	0	1	0	2	0	0	2	0	0	0	0	0	3
7:15 AM	4	0	0	0	4	0	0	0	0	0	0	0	0	0	0	4
7:30 AM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	1
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	1	0	3	1	1
Hourly Total	5	0	0	0	5	0	3	0	0	3	0	1	0	3	1	9
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1	1
8:15 AM	1	0	0	0	1	0	1	0	0	1	0	0	0	1	0	2
8:30 AM	3	0	0	0	3	1	0	0	0	1	0	0	0	1	0	4
8:45 AM	2	0	0	0	2	1	2	0	0	3	0	0	0	0	0	5
Hourly Total	6	0	0	0	6	2	3	0	0	5	0	1	0	3	1	12
9:00 AM	3	0	0	0	3	0	0	0	0	0	0	0	0	0	0	3
9:15 AM	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	2
9:30 AM	1	0	0	0	1	0	0	0	0	0	0	0	0	2	0	1
9:45 AM	3	0	0	0	3	0	0	0	0	0	0	1	0	2	1	4
Hourly Total	7	0	0	0	7	0	2	0	0	2	0	1	0	4	1	10
10:00 AM	5	0	0	0	5	1	2	0	0	3	0	0	0	0	0	8
10:15 AM	2	0	0	0	2	0	0	0	0	0	0	1	0	0	1	3
10:30 AM	1	0	0	0	1	0	1	0	0	1	0	1	0	1	1	3
10:45 AM	3	0	0	0	3	0	2	0	0	2	0	0	0	1	0	5
Hourly Total	11	0	0	0	11	1	5	0	0	6	0	2	0	2	2	19
11:00 AM	1	0	0	0	1	0	1	0	0	1	0	0	0	0	0	2
11:15 AM	0	0	0	0	0	0	1	0	2	1	0	1	0	1	1	2
11:30 AM	4	0	0	0	4	1	2	0	0	3	0	2	0	1	2	9
11:45 AM	2	0	0	0	2	0	1	0	0	1	0	1	0	2	1	4
Hourly Total	7	0	0	0	7	1	5	0	2	6	0	4	0	4	4	17
12:00 PM	4	1	0	0	5	0	0	0	1	0	0	0	0	2	0	5
12:15 PM	0	0	0	0	0	0	2	0	0	2	0	0	0	1	0	2
12:30 PM	2	0	0	0	2	0	1	0	0	1	1	0	0	0	1	4
12:45 PM	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
Hourly Total	7	1	0	0	8	0	3	0	1	3	1	0	0	3	1	12
1:00 PM	0	0	0	0	0	0	1	0	0	1	0	1	0	0	1	2
1:15 PM	2	0	0	0	2	0	1	0	0	1	0	0	0	0	0	3
1:30 PM	3	0	0	0	3	0	0	0	0	0	0	0	0	2	0	3
1:45 PM	1	0	0	0	1	0	2	0	0	2	0	0	0	1	0	3
Hourly Total	6	0	0	0	6	0	4	0	0	4	0	1	0	3	1	11
2:00 PM	0	0	0	0	0	0	3	0	0	3	0	0	0	2	0	3

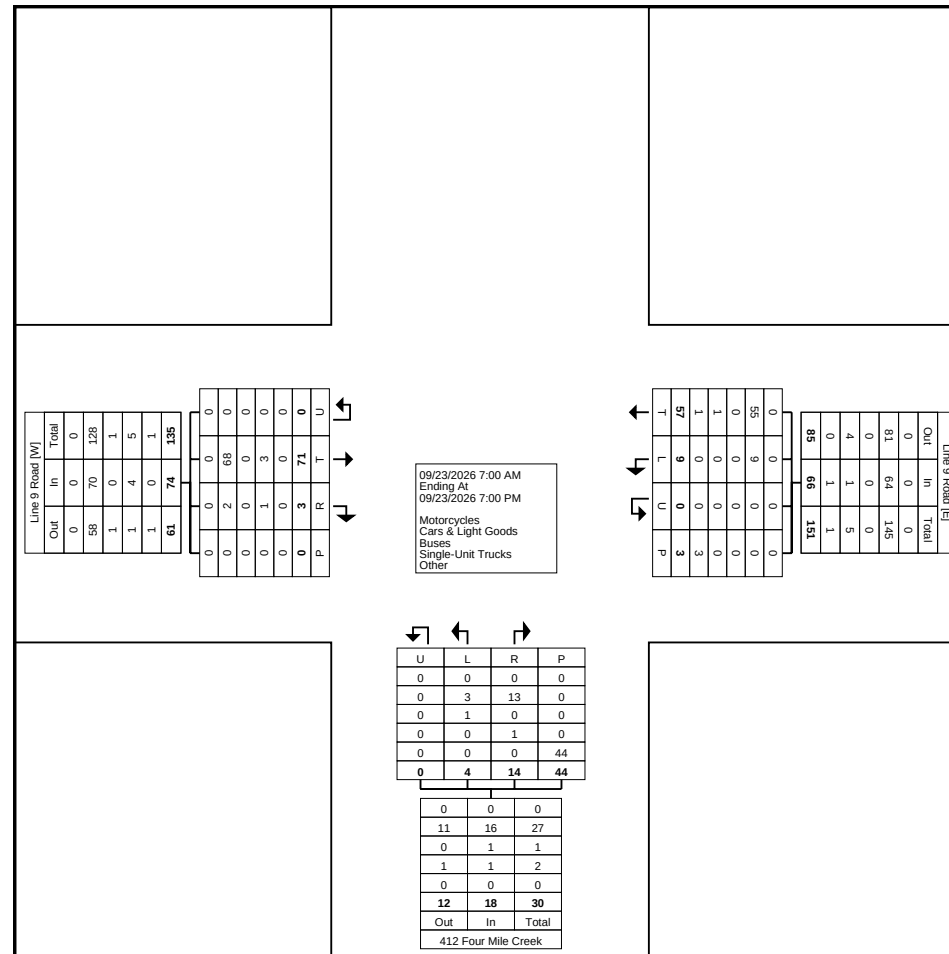
2:15 PM	1	1	0	0	2	0	2	0	0	2	0	1	0	0	1	5
2:30 PM	0	0	0	0	0	0	1	0	0	1	0	0	0	1	0	1
2:45 PM	1	0	0	0	1	0	1	0	0	1	0	0	0	0	0	2
Hourly Total	2	1	0	0	3	0	7	0	0	7	0	1	0	3	1	11
3:00 PM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	1
3:15 PM	2	0	0	0	2	0	1	0	0	1	0	0	0	0	0	3
3:30 PM	2	0	0	0	2	1	1	0	0	2	0	0	0	0	0	4
3:45 PM	0	0	0	0	0	0	1	0	0	1	0	0	0	2	0	1
Hourly Total	4	0	0	0	4	1	4	0	0	5	0	0	0	2	0	9
4:00 PM	0	0	0	0	0	2	4	0	0	6	1	0	0	0	1	7
4:15 PM	0	0	0	0	0	0	1	0	0	1	1	0	0	1	1	2
4:30 PM	3	0	0	0	3	0	1	0	0	1	0	0	0	1	0	4
4:45 PM	1	0	0	0	1	0	2	0	0	2	0	0	0	2	0	3
Hourly Total	4	0	0	0	4	2	8	0	0	10	2	0	0	4	2	16
5:00 PM	1	0	0	0	1	0	2	0	0	2	0	0	0	5	0	3
5:15 PM	3	0	0	0	3	0	0	0	0	0	0	0	0	3	0	3
5:30 PM	1	1	0	0	2	1	3	0	0	4	0	1	0	3	1	7
5:45 PM	4	0	0	0	4	0	1	0	0	1	0	0	0	0	0	5
Hourly Total	9	1	0	0	10	1	6	0	0	7	0	1	0	11	1	18
6:00 PM	1	0	0	0	1	0	2	0	0	2	0	0	0	0	0	3
6:15 PM	1	0	0	0	1	0	3	0	0	3	0	0	0	0	0	4
6:30 PM	0	0	0	0	0	0	0	0	0	0	0	2	0	2	2	2
6:45 PM	1	0	0	0	1	1	2	0	0	3	1	0	0	0	1	5
Hourly Total	3	0	0	0	3	1	7	0	0	8	1	2	0	2	3	14
Grand Total	71	3	0	0	74	9	57	0	3	66	4	14	0	44	18	158
Approach %	95.9	4.1	0.0	-	-	13.6	86.4	0.0	-	-	22.2	77.8	0.0	-	-	-
Total %	44.9	1.9	0.0	-	46.8	5.7	36.1	0.0	-	41.8	2.5	8.9	0.0	-	11.4	-
Motorcycles	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0
% Motorcycles	0.0	0.0	-	-	0.0	0.0	0.0	-	-	0.0	0.0	0.0	-	-	0.0	0.0
Cars & Light Goods	68	2	0	-	70	9	55	0	-	64	3	13	0	-	16	150
% Cars & Light Goods	95.8	66.7	-	-	94.6	100.0	96.5	-	-	97.0	75.0	92.9	-	-	88.9	94.9
Buses	0	0	0	-	0	0	0	0	-	0	1	0	0	-	1	1
% Buses	0.0	0.0	-	-	0.0	0.0	0.0	-	-	0.0	25.0	0.0	-	-	5.6	0.6
Single-Unit Trucks	3	1	0	-	4	0	1	0	-	1	0	1	0	-	1	6
% Single-Unit Trucks	4.2	33.3	-	-	5.4	0.0	1.8	-	-	1.5	0.0	7.1	-	-	5.6	3.8
Articulated Trucks	0	0	0	-	0	0	1	0	-	1	0	0	0	-	0	1
% Articulated Trucks	0.0	0.0	-	-	0.0	0.0	1.8	-	-	1.5	0.0	0.0	-	-	0.0	0.6
Bicycles on Road	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0
% Bicycles on Road	0.0	0.0	-	-	0.0	0.0	0.0	-	-	0.0	0.0	0.0	-	-	0.0	0.0
Bicycles on Crosswalk	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	0.0	-	-	-	-	0.0	-	-
Pedestrians	-	-	-	0	-	-	-	-	3	-	-	-	-	44	-	-
% Pedestrians	-	-	-	-	-	-	-	-	100.0	-	-	-	-	100.0	-	-



Paradigm Transportation Solutions Limited
5A-150 Pinebush Rd

Cambridge, Ontario, Canada N1R 8J8
519-896-3163 cbowness@pts1.com

Count Name: Line 9 & 412 Four Mile Creek
Driveway
Site Code: 260552
Start Date: 09/23/2026
Page No: 3



Turning Movement Data Plot



Paradigm Transportation Solutions Limited
5A-150 Pinebush Rd

Cambridge, Ontario, Canada N1R 8J8
519-896-3163 cbowness@pts1.com

Count Name: Line 9 & 412 Four Mile Creek
Driveway
Site Code: 260552
Start Date: 09/23/2026
Page No: 4

Turning Movement Peak Hour Data (8:15 AM)

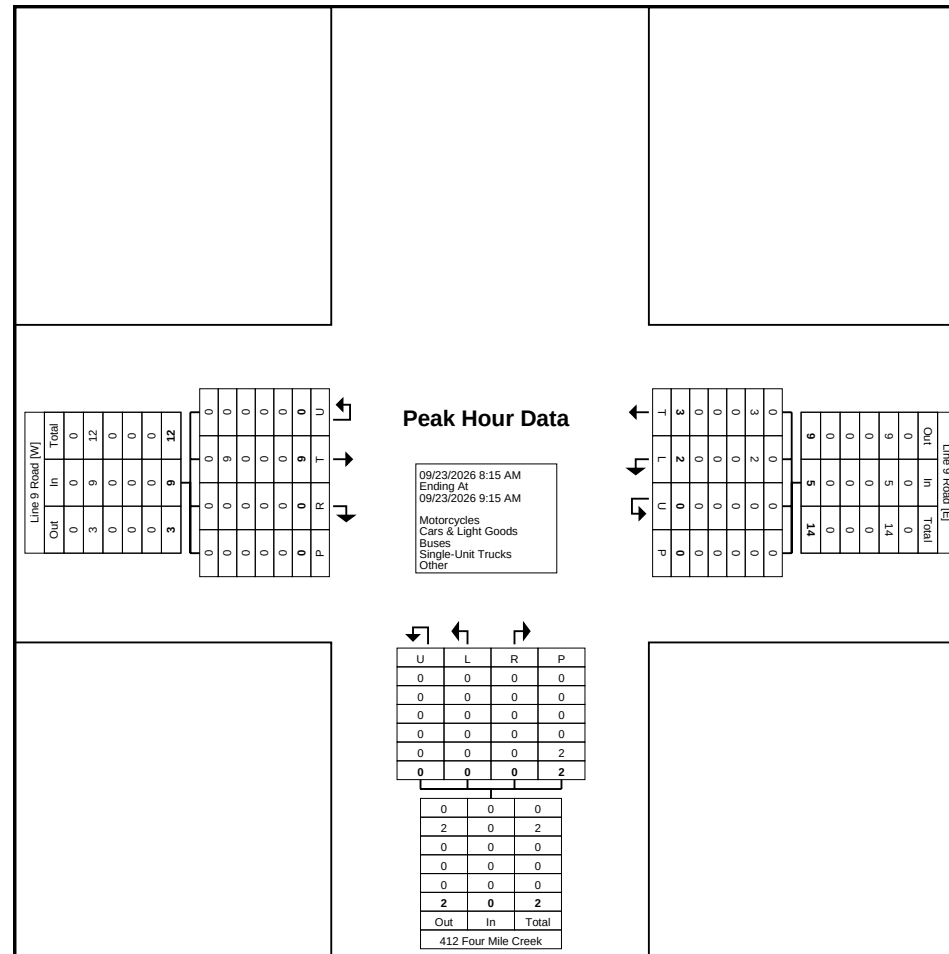
Start Time	Line 9 Road Eastbound					Line 9 Road Westbound					412 Four Mile Creek Driveway Northbound					Int. Total
	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	U-Turn	Peds	App. Total	Left	Right	U-Turn	Peds	App. Total	
8:15 AM	1	0	0	0	1	0	1	0	0	1	0	0	0	1	0	2
8:30 AM	3	0	0	0	3	1	0	0	0	1	0	0	0	1	0	4
8:45 AM	2	0	0	0	2	1	2	0	0	3	0	0	0	0	0	5
9:00 AM	3	0	0	0	3	0	0	0	0	0	0	0	0	0	0	3
Total	9	0	0	0	9	2	3	0	0	5	0	0	0	2	0	14
Approach %	100.0	0.0	0.0	-	-	40.0	60.0	0.0	-	-	0.0	0.0	0.0	-	-	-
Total %	64.3	0.0	0.0	-	64.3	14.3	21.4	0.0	-	35.7	0.0	0.0	0.0	-	0.0	-
PHF	0.750	0.000	0.000	-	0.750	0.500	0.375	0.000	-	0.417	0.000	0.000	0.000	-	0.000	0.700
Motorcycles	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0
% Motorcycles	0.0	-	-	-	0.0	0.0	0.0	-	-	0.0	-	-	-	-	-	0.0
Cars & Light Goods	9	0	0	-	9	2	3	0	-	5	0	0	0	-	0	14
% Cars & Light Goods	100.0	-	-	-	100.0	100.0	100.0	-	-	100.0	-	-	-	-	-	100.0
Buses	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0
% Buses	0.0	-	-	-	0.0	0.0	0.0	-	-	0.0	-	-	-	-	-	0.0
Single-Unit Trucks	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0
% Single-Unit Trucks	0.0	-	-	-	0.0	0.0	0.0	-	-	0.0	-	-	-	-	-	0.0
Articulated Trucks	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0
% Articulated Trucks	0.0	-	-	-	0.0	0.0	0.0	-	-	0.0	-	-	-	-	-	0.0
Bicycles on Road	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0
% Bicycles on Road	0.0	-	-	-	0.0	0.0	0.0	-	-	0.0	-	-	-	-	-	0.0
Bicycles on Crosswalk	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0	-	-
Pedestrians	-	-	-	0	-	-	-	-	0	-	-	-	-	2	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	100.0	-	-



Paradigm Transportation Solutions Limited
5A-150 Pinebush Rd

Cambridge, Ontario, Canada N1R 8J8
519-896-3163 cbowness@pts1.com

Count Name: Line 9 & 412 Four Mile Creek
Driveway
Site Code: 260552
Start Date: 09/23/2026
Page No: 5



Turning Movement Peak Hour Data Plot (8:15 AM)



Paradigm Transportation Solutions Limited
5A-150 Pinebush Rd

Cambridge, Ontario, Canada N1R 8J8
519-896-3163 cbowness@pts1.com

Count Name: Line 9 & 412 Four Mile Creek
Driveway
Site Code: 260552
Start Date: 09/23/2026
Page No: 6

Turning Movement Peak Hour Data (5:30 PM)

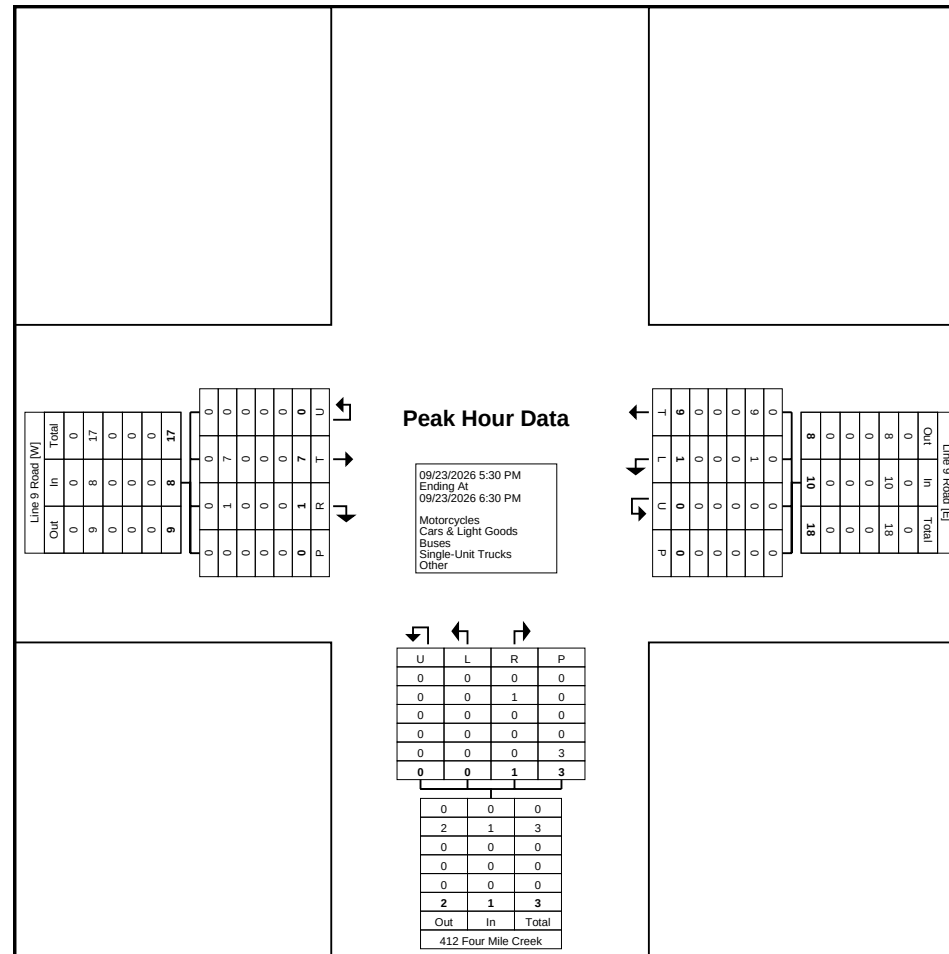
Start Time	Line 9 Road Eastbound					Line 9 Road Westbound					412 Four Mile Creek Driveway Northbound					Int. Total
	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	U-Turn	Peds	App. Total	Left	Right	U-Turn	Peds	App. Total	
5:30 PM	1	1	0	0	2	1	3	0	0	4	0	1	0	3	1	7
5:45 PM	4	0	0	0	4	0	1	0	0	1	0	0	0	0	0	5
6:00 PM	1	0	0	0	1	0	2	0	0	2	0	0	0	0	0	3
6:15 PM	1	0	0	0	1	0	3	0	0	3	0	0	0	0	0	4
Total	7	1	0	0	8	1	9	0	0	10	0	1	0	3	1	19
Approach %	87.5	12.5	0.0	-	-	10.0	90.0	0.0	-	-	0.0	100.0	0.0	-	-	-
Total %	36.8	5.3	0.0	-	42.1	5.3	47.4	0.0	-	52.6	0.0	5.3	0.0	-	5.3	-
PHF	0.438	0.250	0.000	-	0.500	0.250	0.750	0.000	-	0.625	0.000	0.250	0.000	-	0.250	0.679
Motorcycles	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0
% Motorcycles	0.0	0.0	-	-	0.0	0.0	0.0	-	-	0.0	-	0.0	-	-	0.0	0.0
Cars & Light Goods	7	1	0	-	8	1	9	0	-	10	0	1	0	-	1	19
% Cars & Light Goods	100.0	100.0	-	-	100.0	100.0	100.0	-	-	100.0	-	100.0	-	-	100.0	100.0
Buses	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0
% Buses	0.0	0.0	-	-	0.0	0.0	0.0	-	-	0.0	-	0.0	-	-	0.0	0.0
Single-Unit Trucks	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0
% Single-Unit Trucks	0.0	0.0	-	-	0.0	0.0	0.0	-	-	0.0	-	0.0	-	-	0.0	0.0
Articulated Trucks	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0
% Articulated Trucks	0.0	0.0	-	-	0.0	0.0	0.0	-	-	0.0	-	0.0	-	-	0.0	0.0
Bicycles on Road	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0
% Bicycles on Road	0.0	0.0	-	-	0.0	0.0	0.0	-	-	0.0	-	0.0	-	-	0.0	0.0
Bicycles on Crosswalk	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0	-	-
Pedestrians	-	-	-	0	-	-	-	-	0	-	-	-	-	3	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	100.0	-	-



Paradigm Transportation Solutions Limited
5A-150 Pinebush Rd

Cambridge, Ontario, Canada N1R 8J8
519-896-3163 cbowness@pts1.com

Count Name: Line 9 & 412 Four Mile Creek
Driveway
Site Code: 260552
Start Date: 09/23/2026
Page No: 7



Turning Movement Peak Hour Data Plot (5:30 PM)



Paradigm Transportation Solutions Limited
5A-150 Pinebush Rd

Cambridge, Ontario, Canada N1R 8J8
519-896-3163 cbowness@ptsl.com

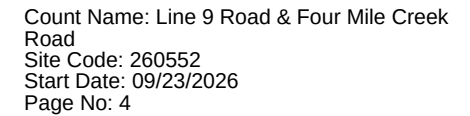
Count Name: Line 9 Road & Four Mile Creek Road
Site Code: 260552
Start Date: 09/23/2026
Page No: 1

Turning Movement Data

Start Time	Line 9 Road Eastbound						Line 9 Road Westbound						Four Mile Creek Road Northbound						Four Mile Creek Road Southbound						Int. Total
	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	
7:00 AM	1	0	0	0	0	1	6	0	0	0	0	6	0	26	1	0	0	27	3	18	2	0	0	23	57
7:15 AM	1	0	3	0	0	4	3	0	0	0	0	3	0	24	2	0	0	26	1	22	0	0	0	23	56
7:30 AM	0	0	0	0	0	0	5	1	0	0	0	6	0	48	1	0	0	49	0	39	0	0	0	39	94
7:45 AM	0	0	2	0	0	2	9	0	2	0	0	11	0	34	0	0	3	34	0	30	0	0	0	30	77
Hourly Total	2	0	5	0	0	7	23	1	2	0	0	26	0	132	4	0	3	136	4	109	2	0	0	115	284
8:00 AM	1	0	0	0	0	1	8	0	5	0	0	13	0	35	1	0	1	36	1	43	0	0	0	44	94
8:15 AM	0	0	1	0	0	1	5	0	1	0	0	6	0	30	1	0	2	31	3	36	0	0	0	39	77
8:30 AM	1	1	1	0	0	3	8	0	3	0	1	11	0	45	10	0	0	55	1	54	0	0	0	55	124
8:45 AM	1	0	1	0	0	2	9	2	3	0	0	14	0	48	9	0	0	57	3	39	1	0	0	43	116
Hourly Total	3	1	3	0	0	7	30	2	12	0	1	44	0	158	21	0	3	179	8	172	1	0	0	181	411
9:00 AM	2	0	2	0	0	4	5	0	1	0	0	6	0	41	6	0	0	47	1	46	0	0	0	47	104
9:15 AM	0	0	0	0	0	0	6	0	0	0	0	6	1	47	5	0	0	53	0	43	1	0	0	44	103
9:30 AM	1	0	0	0	0	1	13	0	1	0	0	14	0	44	4	0	2	48	3	46	0	0	0	49	112
9:45 AM	2	0	1	0	0	3	5	0	3	0	0	8	0	48	5	0	3	53	0	42	0	0	0	42	106
Hourly Total	5	0	3	0	0	8	29	0	5	0	0	34	1	180	20	0	5	201	4	177	1	0	0	182	425
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3:00 PM	0	1	0	0	0	1	11	1	5	0	0	17	0	55	8	0	0	63	1	58	0	0	0	59	140
3:15 PM	1	1	0	0	1	2	9	0	5	0	0	14	1	63	10	0	0	74	1	51	0	0	0	52	142
3:30 PM	1	0	0	0	0	1	16	2	3	0	0	21	0	56	13	0	0	69	2	60	0	0	0	62	153
3:45 PM	0	0	0	0	0	0	8	0	2	0	0	10	1	55	10	0	0	66	1	56	0	0	0	57	133
Hourly Total	2	2	0	0	1	4	44	3	15	0	0	62	2	229	41	0	0	272	5	225	0	0	0	230	568
4:00 PM	0	0	0	0	0	0	14	0	2	0	0	16	2	56	5	0	0	63	2	62	4	0	0	68	147
4:15 PM	0	0	0	0	0	0	10	0	2	0	0	12	1	57	7	0	0	65	4	57	0	0	0	61	138
4:30 PM	0	2	1	0	0	3	8	0	1	0	0	9	0	74	6	0	0	80	2	68	1	0	0	71	163
4:45 PM	0	0	2	0	0	2	6	0	1	0	0	7	1	46	8	0	2	55	5	59	1	0	0	65	129
Hourly Total	0	2	3	0	0	5	38	0	6	0	0	44	4	233	26	0	2	263	13	246	6	0	0	265	577
5:00 PM	0	0	0	0	0	0	7	2	1	0	0	10	0	40	4	0	4	44	1	72	0	0	0	73	127
5:15 PM	0	0	0	0	0	0	8	0	0	0	0	8	0	49	6	0	2	55	3	68	0	0	0	71	134
5:30 PM	1	0	0	0	0	1	3	0	0	0	1	3	1	34	3	0	2	38	3	55	3	0	0	61	103
5:45 PM	0	2	1	0	0	3	6	0	1	0	0	7	1	57	4	0	0	62	1	40	0	0	0	41	113
Hourly Total	1	2	1	0	0	4	24	2	2	0	1	28	2	180	17	0	8	199	8	235	3	0	0	246	477
6:00 PM	0	1	0	0	0	1	2	1	1	0	1	4	1	31	8	0	0	40	1	42	0	0	0	43	88
6:15 PM	0	0	1	0	0	1	4	0	0	0	0	4	2	40	4	0	0	46	2	45	1	0	0	48	99
6:30 PM	0	0	2	0	0	2	4	0	2	0	0	6	1	32	4	0	2	37	1	24	0	0	0	25	70
6:45 PM	1	0	0	0	0	1	4	1	2	0	0	7	1	23	5	0	0	29	4	27	0	0	0	31	68

Hourly Total	1	1	3	0	0	5	14	2	5	0	1	21	5	126	21	0	2	152	8	138	1	0	0	147	325
Grand Total	14	8	18	0	1	40	202	10	47	0	3	259	14	1238	150	0	23	1402	50	1302	14	0	0	1366	3067
Approach %	35.0	20.0	45.0	0.0	-	-	78.0	3.9	18.1	0.0	-	-	1.0	88.3	10.7	0.0	-	-	3.7	95.3	1.0	0.0	-	-	-
Total %	0.5	0.3	0.6	0.0	-	1.3	6.6	0.3	1.5	0.0	-	8.4	0.5	40.4	4.9	0.0	-	45.7	1.6	42.5	0.5	0.0	-	44.5	-
Motorcycles	0	0	0	0	-	0	0	0	0	0	-	0	0	1	0	0	-	1	0	3	0	0	-	3	4
% Motorcycles	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.1	0.0	-	-	0.1	0.0	0.2	0.0	-	-	0.2	0.1
Cars & Light Goods	14	8	18	0	-	40	197	10	43	0	-	250	14	1196	144	0	-	1354	45	1247	13	0	-	1305	2949
% Cars & Light Goods	100.0	100.0	100.0	-	-	100.0	97.5	100.0	91.5	-	-	96.5	100.0	96.6	96.0	-	-	96.6	90.0	95.8	92.9	-	-	95.5	96.2
Buses	0	0	0	0	-	0	2	0	3	0	-	5	0	11	2	0	-	13	1	11	0	0	-	12	30
% Buses	0.0	0.0	0.0	-	-	0.0	1.0	0.0	6.4	-	-	1.9	0.0	0.9	1.3	-	-	0.9	2.0	0.8	0.0	-	-	0.9	1.0
Single-Unit Trucks	0	0	0	0	-	0	3	0	1	0	-	4	0	19	4	0	-	23	1	27	1	0	-	29	56
% Single-Unit Trucks	0.0	0.0	0.0	-	-	0.0	1.5	0.0	2.1	-	-	1.5	0.0	1.5	2.7	-	-	1.6	2.0	2.1	7.1	-	-	2.1	1.8
Articulated Trucks	0	0	0	0	-	0	0	0	0	0	-	0	0	11	0	0	-	11	1	13	0	0	-	14	25
% Articulated Trucks	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.9	0.0	-	-	0.8	2.0	1.0	0.0	-	-	1.0	0.8
Bicycles on Road	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	2	1	0	0	-	3	3
% Bicycles on Road	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	4.0	0.1	0.0	-	-	0.2	0.1
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	0	-	-	-
% Bicycles on Crosswalk	-	-	-	-	0.0	-	-	-	-	-	0.0	-	-	-	-	-	0.0	-	-	-	-	-	-	-	-
Pedestrians	-	-	-	-	1	-	-	-	-	-	3	-	-	-	-	-	23	-	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	-	-	-

Turning Movement Data Plot

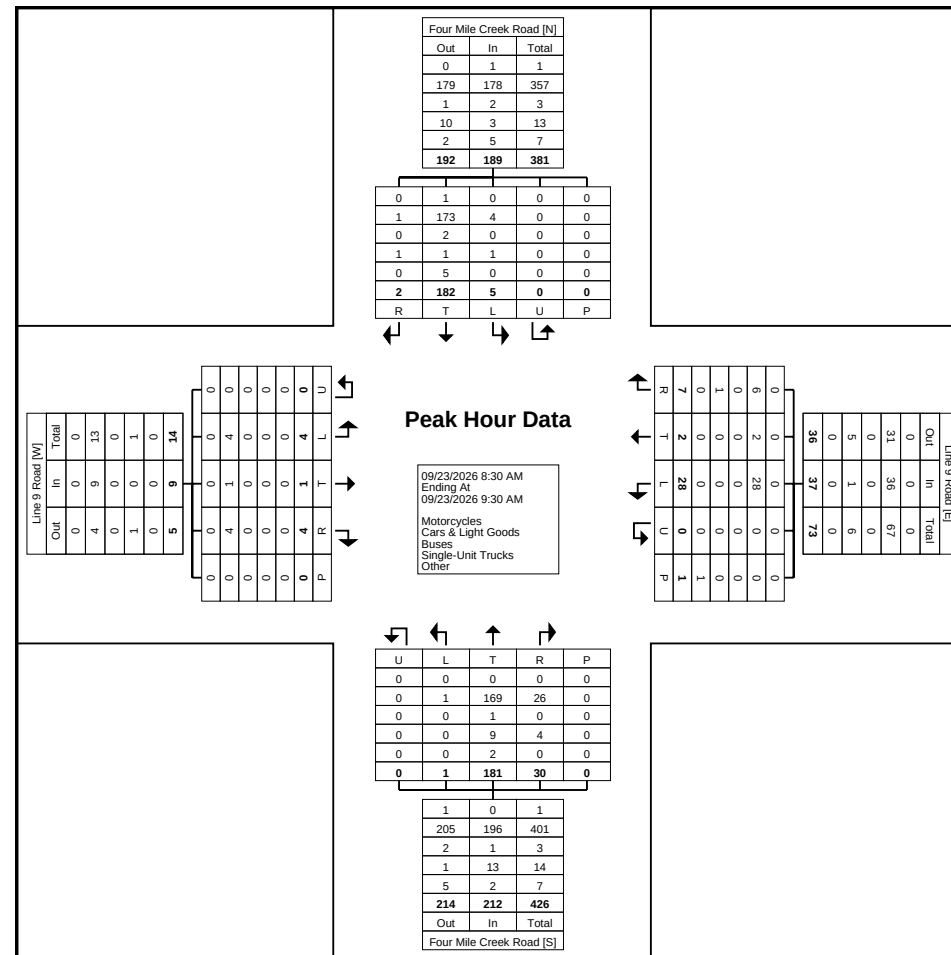
[illegible]



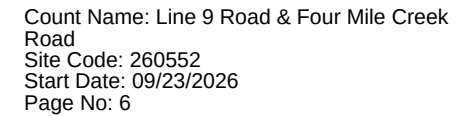
Paradigm Transportation Solutions Limited
5A-150 Pinebush Rd

Cambridge, Ontario, Canada N1R 8J8
519-896-3163 cbowness@pts1.com

Count Name: Line 9 Road & Four Mile Creek
Road
Site Code: 260552
Start Date: 09/23/2026
Page No: 5



Turning Movement Peak Hour Data Plot (8:30 AM)

[illegible]

Turning Movement Peak Hour Data Plot (3:45 PM)

APPENDIX C – COLLISION REPORTS



Collision Summary Report

Location: Four Mile Creek Road @ Line 9 Road
Municipality: NIAGARA-ON-THE-LAKE
Traffic Control: Stop sign

Geo ID: 00579
Jurisdiction: Regional municipality
Total Collisions: 5

Collision ID	Date/Time	Env	Impact Type	Classification	Direction	Surface Cond'n	Vehicle Manoeuvre	Vehicle Type	First Event	Driver Action	No. Ped
2182286	2021-Jul-30, Fri, 14:03	Clear	Angle	Non-fatal injury	West	Dry	Turning right	Automobile, station wagon	Other motor vehicle	Failed to yield right-of-way	0
Comments:					North	Dry	Going ahead	Automobile, station wagon		Driving properly	
1948134	2019-May-29, Wed, 6:44	Clear	SMV other	P.D. only	North	Dry	Going ahead	Automobile, station wagon	Construction marker	Driving properly	0
Comments:						Dry					
18123594	2018-Dec-18, Tue, 14:30	Clear	Sideswipe	P.D. only	North	Dry	Overtaking	Pick-up truck	Other motor vehicle		0
Comments:					North	Dry	Turning left	Construction equipment			
14-105218s	2014-Nov-26, Wed, 21:50	Clear	SMV other	Non-reportable	South	Dry	Going ahead	Automobile, station wagon		Driving properly	0
Comments:											
13-14796	2013-Feb-23, Sat, 14:01	Clear	Angle	P.D. only							0
Comments:											

APPENDIX D – OPERATIONAL REPORTS



												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	4	1	4	28	2	7	1	181	30	5	182	2
Future Volume (vph)	4	1	4	28	2	7	1	181	30	5	182	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	0.0		0.0	0.0		0.0	0.0		0.0	0.0		5.0
Storage Lanes	0		0	0		0	0		1	0		0
Taper Length (m)	2.5		2.5	2.5		2.5	2.5		2.5	2.5		2.5
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.940			0.974				0.850		0.999	
Flt Protected		0.978			0.964						0.999	
Satd. Flow (prot)	0	1766	0	0	1756	0	0	1796	1445	0	1811	0
Flt Permitted		0.978			0.964						0.999	
Satd. Flow (perm)	0	1766	0	0	1756	0	0	1796	1445	0	1811	0
Link Speed (k/h)		50			50			48			48	
Link Distance (m)		37.2			227.7			56.1			105.4	
Travel Time (s)		2.7			16.4			4.2			7.9	
Confl. Peds. (#/hr)									1	1		
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	0%	0%	0%	0%	0%	14%	0%	7%	13%	20%	5%	50%
Adj. Flow (vph)	4	1	4	31	2	8	1	201	33	6	202	2
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	9	0	0	41	0	0	202	33	0	210	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		0.0			0.0			0.0			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Sign Control		Stop			Stop			Free			Free	
Intersection Summary												
Area Type:	Other											
Control Type:	Unsignalized											
Intersection Capacity Utilization 27.0%	ICU Level of Service A											
Analysis Period (min) 15												

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	4	1	4	28	2	7	1	181	30	5	182	2
Future Volume (Veh/h)	4	1	4	28	2	7	1	181	30	5	182	2
Sign Control	Stop			Stop			Free			Free		
Grade	0%			0%			0%			0%		
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	4	1	4	31	2	8	1	201	33	6	202	2
Pedestrians	1											
Lane Width (m)	3.7											
Walking Speed (m/s)	1.1											
Percent Blockage	0											
Right turn flare (veh)												
Median type							None			None		
Median storage veh												
Upstream signal (m)												
pX, platoon unblocked												
vC, conflicting volume	427	452	203	424	420	202	204				235	
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	427	452	203	424	420	202	204				235	
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.3	4.1				4.3	
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.4	2.2				2.4	
p0 queue free %	99	100	100	94	100	99	100				100	
cM capacity (veh/h)	532	503	843	538	524	809	1380				1232	
Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1							
Volume Total	9	41	202	33	210							
Volume Left	4	31	1	0	6							
Volume Right	4	8	0	33	2							
cSH	631	575	1380	1700	1232							
Volume to Capacity	0.01	0.07	0.00*	0.02	0.00*							
Queue Length 95th (m)	0.3	1.7	0.0	0.0	0.1							
Control Delay (s/veh)	10.8	11.7	0.0	0.0	0.3							
Lane LOS	B	B	A	A								
Approach Delay (s/veh)	10.8	11.7	0.0	0.3								
Approach LOS	B	B										
Intersection Summary												
Average Delay				1.3								
Intersection Capacity Utilization				27.0%	ICU Level of Service				A			
Analysis Period (min)				15								

* Value less than 0.01.

						
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	9	0	2	3	0	0
Future Volume (vph)	9	0	2	3	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt						
Flt Protected				0.979		
Satd. Flow (prot)	1921	0	0	1881	1921	0
Flt Permitted				0.979		
Satd. Flow (perm)	1921	0	0	1881	1921	0
Link Speed (k/h)	50			50	20	
Link Distance (m)	63.4			37.2	38.0	
Travel Time (s)	4.6			2.7	6.8	
Confl. Peds. (#/hr)		2	2			
Peak Hour Factor	0.70	0.70	0.70	0.70	0.70	0.70
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	13	0	3	4	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	13	0	0	7	0	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	0.0			0.0	3.7	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	1.6			1.6	1.6	
Two way Left Turn Lane						
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)		14	24		24	14
Sign Control	Free			Free	Stop	
Intersection Summary						
Area Type:	Other					
Control Type:	Unsignalized					
Intersection Capacity Utilization	7.3%			ICU Level of Service A		
Analysis Period (min)	15					

						
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	9	0	2	3	0	0
Future Volume (Veh/h)	9	0	2	3	0	0
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.70	0.70	0.70	0.70	0.70	0.70
Hourly flow rate (vph)	13	0	3	4	0	0
Pedestrians					2	
Lane Width (m)					3.7	
Walking Speed (m/s)					1.1	
Percent Blockage					0	
Right turn flare (veh)						
Median type	None			None		
Median storage veh						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume			15		25	15
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			15		25	15
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		100	100
cM capacity (veh/h)			1613		992	1068
Direction, Lane #	EB 1	WB 1	NB 1			
Volume Total	13	7	0			
Volume Left	0	3	0			
Volume Right	0	0	0			
cSH	1700	1613	1700			
Volume to Capacity	0.00*	0.00*	0.00			
Queue Length 95th (m)	0.0	0.0	0.0			
Control Delay (s/veh)	0.0	3.1	0.0			
Lane LOS		A	A			
Approach Delay (s/veh)	0.0	3.1	0.0			
Approach LOS			A			
Intersection Summary						
Average Delay			1.1			
Intersection Capacity Utilization			7.3%	ICU Level of Service		A
Analysis Period (min)			15			

* Value less than 0.01.

						
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	0	0	4	212	214	0
Future Volume (vph)	0	0	4	212	214	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt						
Flt Protected				0.999		
Satd. Flow (prot)	1921	0	0	1812	1795	0
Flt Permitted				0.999		
Satd. Flow (perm)	1921	0	0	1812	1795	0
Link Speed (k/h)	20			48	48	
Link Distance (m)	35.8			114.7	56.1	
Travel Time (s)	6.4			8.6	4.2	
Confl. Peds. (#/hr)		1				
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89
Heavy Vehicles (%)	0%	0%	0%	6%	7%	0%
Adj. Flow (vph)	0	0	4	238	240	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	242	240	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	3.7			0.0	0.0	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	1.6			1.6	1.6	
Two way Left Turn Lane						
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24	14	24			14
Sign Control	Stop			Free	Free	
Intersection Summary						
Area Type:	Other					
Control Type:	Unsignalized					
Intersection Capacity Utilization	24.7%			ICU Level of Service A		
Analysis Period (min)	15					

						
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	0	4	212	214	0
Future Volume (Veh/h)	0	0	4	212	214	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89
Hourly flow rate (vph)	0	0	4	238	240	0
Pedestrians				1		
Lane Width (m)				3.7		
Walking Speed (m/s)				1.1		
Percent Blockage				0		
Right turn flare (veh)						
Median type				None	None	
Median storage veh						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	486	241	240			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	486	241	240			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	100	100			
cM capacity (veh/h)	542	802	1339			
Direction, Lane #	EB 1	NB 1	SB 1			
Volume Total	0	242	240			
Volume Left	0	4	0			
Volume Right	0	0	0			
cSH	1700	1339	1700			
Volume to Capacity	0.00	0.00*	0.14			
Queue Length 95th (m)	0.0	0.1	0.0			
Control Delay (s/veh)	0.0	0.2	0.0			
Lane LOS	A	A				
Approach Delay (s/veh)	0.0	0.2	0.0			
Approach LOS	A					
Intersection Summary						
Average Delay				0.1		
Intersection Capacity Utilization				24.7%	ICU Level of Service	A
Analysis Period (min)				15		
* Value less than 0.01.						

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Future Volume (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	0.0		0.0	0.0		0.0	0.0		0.0	0.0		5.0
Storage Lanes	0		0	0		0	0		1	0		0
Taper Length (m)	2.5		2.5	2.5		2.5	2.5		2.5	2.5		2.5
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt												
Flt Protected												
Satd. Flow (prot)	0	1921	0	0	1921	0	0	1902	1921	0	1865	0
Flt Permitted												
Satd. Flow (perm)	0	1921	0	0	1921	0	0	1902	1921	0	1865	0
Link Speed (k/h)		50			50			48			48	
Link Distance (m)		37.2			227.7			56.1			105.4	
Travel Time (s)		2.7			16.4			4.2			7.9	
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Heavy Vehicles (%)	0%	0%	0%	5%	0%	0%	0%	1%	0%	11%	3%	0%
Adj. Flow (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		0.0			0.0			0.0			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Sign Control		Stop			Stop			Free			Free	
Intersection Summary												
Area Type:	Other											
Control Type:	Unsignalized											
Intersection Capacity Utilization	0.0%											
ICU Level of Service A												
Analysis Period (min) 15												

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	0	0	0	0	0	0	0	0	0
Future Volume (Veh/h)	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop			Stop			Free			Free		
Grade	0%			0%			0%			0%		
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Hourly flow rate (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrians												
Lane Width (m)												
Walking Speed (m/s)												
Percent Blockage												
Right turn flare (veh)												
Median type	None						None					
Median storage veh												
Upstream signal (m)												
pX, platoon unblocked												
vC, conflicting volume	0	0	0	0	0	0	0			0		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	0	0	0	0	0	0	0			0		
tC, single (s)	7.1	6.5	6.2	7.2	6.5	6.2	4.1			4.2		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.3		
p0 queue free %	100	100	100	100	100	100	100			100		
cM capacity (veh/h)	1029	900	1091	1016	900	1091	1636			1566		
Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1							
Volume Total	0	0	0	0	0							
Volume Left	0	0	0	0	0							
Volume Right	0	0	0	0	0							
cSH	1700	1700	1700	1700	1700							
Volume to Capacity	0.00	0.00	0.00	0.00	0.00							
Queue Length 95th (m)	0.0	0.0	0.0	0.0	0.0							
Control Delay (s/veh)	0.0	0.0	0.0	0.0	0.0							
Lane LOS	A	A										
Approach Delay (s/veh)	0.0	0.0	0.0	0.0								
Approach LOS	A	A										
Intersection Summary												
Average Delay	0.0											
Intersection Capacity Utilization	0.0%			ICU Level of Service					A			
Analysis Period (min)	15											

						
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	0	0	0	0	0	0
Future Volume (vph)	0	0	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Flt						
Flt Protected						
Satd. Flow (prot)	1921	0	0	1921	1921	0
Flt Permitted						
Satd. Flow (perm)	1921	0	0	1921	1921	0
Link Speed (k/h)	50			50	20	
Link Distance (m)	63.4			37.2	38.0	
Travel Time (s)	4.6			2.7	6.8	
Confl. Peds. (#/hr)		3	3			
Peak Hour Factor	0.68	0.68	0.68	0.68	0.68	0.68
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	0	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	0.0			0.0	3.7	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	1.6			1.6	1.6	
Two way Left Turn Lane						
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)		14	24		24	14
Sign Control	Free			Free	Stop	
Intersection Summary						
Area Type:	Other					
Control Type:	Unsignalized					
Intersection Capacity Utilization	7.6%			ICU Level of Service A		
Analysis Period (min)	15					

						
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	0	0	0	0	0	0
Future Volume (Veh/h)	0	0	0	0	0	0
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.68	0.68	0.68	0.68	0.68	0.68
Hourly flow rate (vph)	0	0	0	0	0	0
Pedestrians					3	
Lane Width (m)					3.7	
Walking Speed (m/s)					1.1	
Percent Blockage					0	
Right turn flare (veh)						
Median type	None			None		
Median storage veh						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume			3		3	3
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			3		3	3
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		100	100
cM capacity (veh/h)			1628		1022	1084
Direction, Lane #	EB 1	WB 1	NB 1			
Volume Total	0	0	0			
Volume Left	0	0	0			
Volume Right	0	0	0			
cSH	1700	1700	1700			
Volume to Capacity	0.00	0.00	0.00			
Queue Length 95th (m)	0.0	0.0	0.0			
Control Delay (s/veh)	0.0	0.0	0.0			
Lane LOS			A			
Approach Delay (s/veh)	0.0	0.0	0.0			
Approach LOS			A			
Intersection Summary						
Average Delay			0.0			
Intersection Capacity Utilization			7.6%	ICU Level of Service		A
Analysis Period (min)			15			

						
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	0	0	0	0	0	0
Future Volume (vph)	0	0	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt						
Flt Protected						
Satd. Flow (prot)	1921	0	0	1847	1812	0
Flt Permitted						
Satd. Flow (perm)	1921	0	0	1847	1812	0
Link Speed (k/h)	20			48	48	
Link Distance (m)	35.8			114.7	56.1	
Travel Time (s)	6.4			8.6	4.2	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	0%	0%	0%	4%	6%	0%
Adj. Flow (vph)	0	0	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	3.7			0.0	0.0	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	1.6			1.6	1.6	
Two way Left Turn Lane						
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24	14	24			14
Sign Control	Stop			Free	Free	
Intersection Summary						
Area Type:	Other					
Control Type:	Unsignalized					
Intersection Capacity Utilization	0.0%			ICU Level of Service A		
Analysis Period (min)	15					

						
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	0	0	0	0	0
Future Volume (Veh/h)	0	0	0	0	0	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	0	0	0	0	0	0
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	0	0	0			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	0	0	0			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	100	100			
cM capacity (veh/h)	1029	1091	1636			
Direction, Lane #	EB 1	NB 1	SB 1			
Volume Total	0	0	0			
Volume Left	0	0	0			
Volume Right	0	0	0			
cSH	1700	1700	1700			
Volume to Capacity	0.00	0.00	0.00			
Queue Length 95th (m)	0.0	0.0	0.0			
Control Delay (s/veh)	0.0	0.0	0.0			
Lane LOS	A					
Approach Delay (s/veh)	0.0	0.0	0.0			
Approach LOS	A					
Intersection Summary						
Average Delay			0.0			
Intersection Capacity Utilization			0.0%	ICU Level of Service		A
Analysis Period (min)			15			

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	4	1	4	31	2	8	1	200	33	6	201	2
Future Volume (vph)	4	1	4	31	2	8	1	200	33	6	201	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	0.0		0.0	0.0		0.0	0.0		0.0	0.0		5.0
Storage Lanes	0		0	0		0	0		1	0		0
Taper Length (m)	2.5		2.5	2.5		2.5	2.5		2.5	2.5		2.5
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.940			0.973				0.850		0.999	
Flt Protected		0.978			0.964						0.998	
Satd. Flow (prot)	0	1766	0	0	1753	0	0	1796	1445	0	1810	0
Flt Permitted		0.978			0.964						0.998	
Satd. Flow (perm)	0	1766	0	0	1753	0	0	1796	1445	0	1810	0
Link Speed (k/h)		50			50			48			48	
Link Distance (m)		37.2			227.7			56.1			105.4	
Travel Time (s)		2.7			16.4			4.2			7.9	
Confl. Peds. (#/hr)									1	1		
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	0%	0%	0%	0%	0%	14%	0%	7%	13%	20%	5%	50%
Adj. Flow (vph)	4	1	4	34	2	9	1	222	37	7	223	2
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	9	0	0	45	0	0	223	37	0	232	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		0.0			0.0			0.0			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Sign Control		Stop			Stop			Free			Free	
Intersection Summary												
Area Type:	Other											
Control Type:	Unsignalized											
Intersection Capacity Utilization	28.0%											
Analysis Period (min)	15											
	ICU Level of Service A											

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	4	1	4	31	2	8	1	200	33	6	201	2
Future Volume (Veh/h)	4	1	4	31	2	8	1	200	33	6	201	2
Sign Control	Stop			Stop			Free			Free		
Grade	0%			0%			0%			0%		
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	4	1	4	34	2	9	1	222	37	7	223	2
Pedestrians	1											
Lane Width (m)	3.7											
Walking Speed (m/s)	1.1											
Percent Blockage	0											
Right turn flare (veh)												
Median type	None						None					
Median storage veh												
Upstream signal (m)												
pX, platoon unblocked												
vC, conflicting volume	472	500	224	468	464	223	225				260	
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	472	500	224	468	464	223	225				260	
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.3	4.1				4.3	
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.4	2.2				2.4	
p0 queue free %	99	100	100	93	100	99	100				99	
cM capacity (veh/h)	495	472	820	502	495	787	1356				1206	
Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1							
Volume Total	9	45	223	37	232							
Volume Left	4	34	1	0	7							
Volume Right	4	9	0	37	2							
cSH	597	541	1356	1700	1206							
Volume to Capacity	0.02	0.08	0.00*	0.02	0.00*							
Queue Length 95th (m)	0.3	2.1	0.0	0.0	0.1							
Control Delay (s/veh)	11.1	12.3	0.0	0.0	0.3							
Lane LOS	B	B	A		A							
Approach Delay (s/veh)	11.1	12.3	0.0		0.3							
Approach LOS	B	B										
Intersection Summary												
Average Delay				1.3								
Intersection Capacity Utilization				28.0%	ICU Level of Service				A			
Analysis Period (min)				15								

* Value less than 0.01.

						
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	10	0	2	3	0	0
Future Volume (vph)	10	0	2	3	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt						
Flt Protected				0.979		
Satd. Flow (prot)	1921	0	0	1881	1921	0
Flt Permitted				0.979		
Satd. Flow (perm)	1921	0	0	1881	1921	0
Link Speed (k/h)	50			50	20	
Link Distance (m)	63.4			37.2	38.0	
Travel Time (s)	4.6			2.7	6.8	
Confl. Peds. (#/hr)		2	2			
Peak Hour Factor	0.70	0.70	0.70	0.70	0.70	0.70
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	14	0	3	4	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	14	0	0	7	0	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	0.0			0.0	3.7	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	1.6			1.6	1.6	
Two way Left Turn Lane						
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)		14	24		24	14
Sign Control	Free			Free	Stop	
Intersection Summary						
Area Type:	Other					
Control Type:	Unsignalized					
Intersection Capacity Utilization	7.3%			ICU Level of Service A		
Analysis Period (min)	15					

						
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	10	0	2	3	0	0
Future Volume (Veh/h)	10	0	2	3	0	0
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.70	0.70	0.70	0.70	0.70	0.70
Hourly flow rate (vph)	14	0	3	4	0	0
Pedestrians					2	
Lane Width (m)					3.7	
Walking Speed (m/s)					1.1	
Percent Blockage					0	
Right turn flare (veh)						
Median type	None		None			
Median storage veh						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume			16		26	16
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			16		26	16
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		100	100
cM capacity (veh/h)			1612		991	1067
Direction, Lane #	EB 1	WB 1	NB 1			
Volume Total	14	7	0			
Volume Left	0	3	0			
Volume Right	0	0	0			
cSH	1700	1612	1700			
Volume to Capacity	0.00*	0.00*	0.00			
Queue Length 95th (m)	0.0	0.0	0.0			
Control Delay (s/veh)	0.0	3.1	0.0			
Lane LOS		A	A			
Approach Delay (s/veh)	0.0	3.1	0.0			
Approach LOS		A	A			
Intersection Summary						
Average Delay			1.0			
Intersection Capacity Utilization			7.3%	ICU Level of Service		A
Analysis Period (min)			15			

* Value less than 0.01.

						
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	0	0	4	234	236	0
Future Volume (vph)	0	0	4	234	236	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt						
Flt Protected				0.999		
Satd. Flow (prot)	1921	0	0	1812	1795	0
Flt Permitted				0.999		
Satd. Flow (perm)	1921	0	0	1812	1795	0
Link Speed (k/h)	20			48	48	
Link Distance (m)	35.8			114.7	56.1	
Travel Time (s)	6.4			8.6	4.2	
Confl. Peds. (#/hr)		1				
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89
Heavy Vehicles (%)	0%	0%	0%	6%	7%	0%
Adj. Flow (vph)	0	0	4	263	265	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	267	265	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	3.7			0.0	0.0	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	1.6			1.6	1.6	
Two way Left Turn Lane						
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24	14	24			14
Sign Control	Stop			Free	Free	
Intersection Summary						
Area Type:	Other					
Control Type:	Unsignalized					
Intersection Capacity Utilization	25.8%			ICU Level of Service A		
Analysis Period (min)	15					

						
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	0	4	234	236	0
Future Volume (Veh/h)	0	0	4	234	236	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89
Hourly flow rate (vph)	0	0	4	263	265	0
Pedestrians				1		
Lane Width (m)				3.7		
Walking Speed (m/s)				1.1		
Percent Blockage				0		
Right turn flare (veh)						
Median type				None	None	
Median storage veh						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	536	266	265			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	536	266	265			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	100	100			
cM capacity (veh/h)	507	777	1311			
Direction, Lane #	EB 1	NB 1	SB 1			
Volume Total	0	267	265			
Volume Left	0	4	0			
Volume Right	0	0	0			
cSH	1700	1311	1700			
Volume to Capacity	0.00	0.00*	0.16			
Queue Length 95th (m)	0.0	0.1	0.0			
Control Delay (s/veh)	0.0	0.1	0.0			
Lane LOS	A	A				
Approach Delay (s/veh)	0.0	0.1	0.0			
Approach LOS	A					
Intersection Summary						
Average Delay			0.1			
Intersection Capacity Utilization			25.8%	ICU Level of Service		A
Analysis Period (min)			15			
* Value less than 0.01.						

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	2	1	44	0	8	4	267	31	10	268	6
Future Volume (vph)	0	2	1	44	0	8	4	267	31	10	268	6
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	0.0		0.0	0.0		0.0	0.0		0.0	0.0		5.0
Storage Lanes	0		0	0		0	0		1	0		0
Taper Length (m)	2.5		2.5	2.5		2.5	2.5		2.5	2.5		2.5
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.955			0.979				0.850		0.997	
Flt Protected					0.959			0.999			0.998	
Satd. Flow (prot)	0	1835	0	0	1731	0	0	1900	1633	0	1852	0
Flt Permitted					0.959			0.999			0.998	
Satd. Flow (perm)	0	1835	0	0	1731	0	0	1900	1633	0	1852	0
Link Speed (k/h)		50			50			48			48	
Link Distance (m)		37.2			227.7			56.1			105.4	
Travel Time (s)		2.7			16.4			4.2			7.9	
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Heavy Vehicles (%)	0%	0%	0%	5%	0%	0%	0%	1%	0%	11%	3%	0%
Adj. Flow (vph)	0	2	1	49	0	9	4	300	35	11	301	7
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	3	0	0	58	0	0	304	35	0	319	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		0.0			0.0			0.0			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Sign Control		Stop			Stop			Free			Free	
Intersection Summary												
Area Type:	Other											
Control Type:	Unsignalized											
Intersection Capacity Utilization	38.8%											
Analysis Period (min)	15											
	ICU Level of Service A											

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	2	1	44	0	8	4	267	31	10	268	6
Future Volume (Veh/h)	0	2	1	44	0	8	4	267	31	10	268	6
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Hourly flow rate (vph)	0	2	1	49	0	9	4	300	35	11	301	7
Pedestrians												
Lane Width (m)												
Walking Speed (m/s)												
Percent Blockage												
Right turn flare (veh)												
Median type	None								None			
Median storage veh												
Upstream signal (m)												
pX, platoon unblocked												
vC, conflicting volume	644	670	305	637	638	300	308			335		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	644	670	305	637	638	300	308			335		
tC, single (s)	7.1	6.5	6.2	7.2	6.5	6.2	4.1			4.2		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.3		
p0 queue free %	100	99	100	87	100	99	100			99		
cM capacity (veh/h)	381	376	740	380	392	744	1264			1176		
Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1							
Volume Total	3	58	304	35	319							
Volume Left	0	49	4	0	11							
Volume Right	1	9	0	35	7							
cSH	450	412	1264	1700	1176							
Volume to Capacity	0.00*	0.14	0.00*	0.02	0.00*							
Queue Length 95th (m)	0.2	3.7	0.1	0.0	0.2							
Control Delay (s/veh)	13.1	15.2	0.1	0.0	0.4							
Lane LOS	B	C	A		A							
Approach Delay (s/veh)	13.1	15.2	0.1		0.4							
Approach LOS	B	C										
Intersection Summary												
Average Delay			1.5									
Intersection Capacity Utilization			38.8%	ICU Level of Service					A			
Analysis Period (min)			15									

* Value less than 0.01.

						
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	2	1	1	9	0	1
Future Volume (vph)	2	1	1	9	0	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt	0.966				0.865	
Flt Protected				0.996		
Satd. Flow (prot)	1856	0	0	1913	1662	0
Flt Permitted				0.996		
Satd. Flow (perm)	1856	0	0	1913	1662	0
Link Speed (k/h)	50			50	20	
Link Distance (m)	63.4			37.2	38.0	
Travel Time (s)	4.6			2.7	6.8	
Confl. Peds. (#/hr)		3	3			
Peak Hour Factor	0.68	0.68	0.68	0.68	0.68	0.68
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	3	1	1	13	0	1
Shared Lane Traffic (%)						
Lane Group Flow (vph)	4	0	0	14	1	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	0.0			0.0	3.7	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	1.6			1.6	1.6	
Two way Left Turn Lane						
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)		14	24		24	14
Sign Control	Free			Free	Stop	
Intersection Summary						
Area Type:	Other					
Control Type:	Unsignalized					
Intersection Capacity Utilization	14.3%			ICU Level of Service A		
Analysis Period (min)	15					

						
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	2	1	1	9	0	1
Future Volume (Veh/h)	2	1	1	9	0	1
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.68	0.68	0.68	0.68	0.68	0.68
Hourly flow rate (vph)	3	1	1	13	0	1
Pedestrians						3
Lane Width (m)						3.7
Walking Speed (m/s)						1.1
Percent Blockage						0
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume			7	22		7
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			7	22		7
tC, single (s)			4.1	6.4		6.2
tC, 2 stage (s)						
tF (s)			2.2	3.5		3.3
p0 queue free %			100	100		100
cM capacity (veh/h)			1622	997		1079
Direction, Lane #	EB 1	WB 1	NB 1			
Volume Total	4	14	1			
Volume Left	0	1	0			
Volume Right	1	0	1			
cSH	1700	1622	1079			
Volume to Capacity	0.00*	0.00*	0.00*			
Queue Length 95th (m)	0.0	0.0	0.0			
Control Delay (s/veh)	0.0	0.5	8.3			
Lane LOS			A			
Approach Delay (s/veh)	0.0	0.5	8.3			
Approach LOS			A			
Intersection Summary						
Average Delay			0.8			
Intersection Capacity Utilization			14.3%	ICU Level of Service		A
Analysis Period (min)			15			
* Value less than 0.01.						

						
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	0	6	3	302	312	1
Future Volume (vph)	0	6	3	302	312	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.865					
Flt Protected						
Satd. Flow (prot)	1662	0	0	1848	1813	0
Flt Permitted						
Satd. Flow (perm)	1662	0	0	1848	1813	0
Link Speed (k/h)	20			48	48	
Link Distance (m)	35.8			114.7	56.1	
Travel Time (s)	6.4			8.6	4.2	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	0%	0%	0%	4%	6%	0%
Adj. Flow (vph)	0	6	3	318	328	1
Shared Lane Traffic (%)						
Lane Group Flow (vph)	6	0	0	321	329	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	3.7			0.0	0.0	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	1.6			1.6	1.6	
Two way Left Turn Lane						
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24	14	24			14
Sign Control	Stop			Free	Free	
Intersection Summary						
Area Type:	Other					
Control Type:	Unsignalized					
Intersection Capacity Utilization	28.3%			ICU Level of Service A		
Analysis Period (min)	15					

						
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	6	3	302	312	1
Future Volume (Veh/h)	0	6	3	302	312	1
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	0	6	3	318	328	1
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	653	329	329			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	653	329	329			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	99	100			
cM capacity (veh/h)	434	718	1242			
Direction, Lane #	EB 1	NB 1	SB 1			
Volume Total	6	321	329			
Volume Left	0	3	0			
Volume Right	6	0	1			
cSH	718	1242	1700			
Volume to Capacity	0.00*	0.00*	0.19			
Queue Length 95th (m)	0.2	0.1	0.0			
Control Delay (s/veh)	10.1	0.1	0.0			
Lane LOS	B	A				
Approach Delay (s/veh)	10.1	0.1	0.0			
Approach LOS	B					
Intersection Summary						
Average Delay			0.1			
Intersection Capacity Utilization			28.3%	ICU Level of Service		A
Analysis Period (min)			15			
* Value less than 0.01.						

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	6	3	6	31	4	8	3	206	33	6	207	4
Future Volume (vph)	6	3	6	31	4	8	3	206	33	6	207	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	0.0		0.0	0.0		0.0	0.0		0.0	0.0		5.0
Storage Lanes	0		0	0		0	0		1	0		0
Taper Length (m)	2.5		2.5	2.5		2.5	2.5		2.5	2.5		2.5
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.944			0.974				0.850		0.998	
Flt Protected		0.980			0.965			0.999			0.999	
Satd. Flow (prot)	0	1777	0	0	1759	0	0	1795	1445	0	1804	0
Flt Permitted		0.980			0.965			0.999			0.999	
Satd. Flow (perm)	0	1777	0	0	1759	0	0	1795	1445	0	1804	0
Link Speed (k/h)		50			50			48			48	
Link Distance (m)		37.2			227.7			56.1			105.4	
Travel Time (s)		2.7			16.4			4.2			7.9	
Confl. Peds. (#/hr)									1	1		
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	0%	0%	0%	0%	0%	14%	0%	7%	13%	20%	5%	50%
Adj. Flow (vph)	7	3	7	34	4	9	3	229	37	7	230	4
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	17	0	0	47	0	0	232	37	0	241	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		0.0			0.0			0.0			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Sign Control		Stop			Stop			Free			Free	
Intersection Summary												
Area Type:	Other											
Control Type:	Unsignalized											
Intersection Capacity Utilization	28.5%											
Analysis Period (min)	15											
ICU Level of Service A												

													
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations													
Traffic Volume (veh/h)	6	3	6	31	4	8	3	206	33	6	207	4	
Future Volume (Veh/h)	6	3	6	31	4	8	3	206	33	6	207	4	
Sign Control	Stop			Stop			Free			Free			
Grade	0%			0%			0%			0%			
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	
Hourly flow rate (vph)	7	3	7	34	4	9	3	229	37	7	230	4	
Pedestrians	1												
Lane Width (m)	3.7												
Walking Speed (m/s)	1.1												
Percent Blockage	0												
Right turn flare (veh)													
Median type							None			None			
Median storage veh													
Upstream signal (m)													
pX, platoon unblocked													
vC, conflicting volume	492	519	232	491	484	230	234						267
vC1, stage 1 conf vol													
vC2, stage 2 conf vol													
vCu, unblocked vol	492	519	232	491	484	230	234						267
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.3	4.1						4.3
tC, 2 stage (s)													
tF (s)	3.5	4.0	3.3	3.5	4.0	3.4	2.2						2.4
p0 queue free %	99	99	99	93	99	99	100						99
cM capacity (veh/h)	478	460	812	481	481	780	1345						1198
Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1								
Volume Total	17	47	232	37	241								
Volume Left	7	34	3	0	7								
Volume Right	7	9	0	37	4								
cSH	571	519	1345	1700	1198								
Volume to Capacity	0.03	0.09	0.00*	0.02	0.00*								
Queue Length 95th (m)	0.7	2.3	0.1	0.0	0.1								
Control Delay (s/veh)	11.5	12.6	0.1	0.0	0.3								
Lane LOS	B	B	A		A								
Approach Delay (s/veh)	11.5	12.6	0.1		0.3								
Approach LOS	B	B											
Intersection Summary													
Average Delay				1.5									
Intersection Capacity Utilization				28.5%	ICU Level of Service				A				
Analysis Period (min)				15									

* Value less than 0.01.

						
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	10	1	9	3	1	6
Future Volume (vph)	10	1	9	3	1	6
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt	0.991				0.878	
Flt Protected				0.963	0.995	
Satd. Flow (prot)	1904	0	0	1850	1678	0
Flt Permitted				0.963	0.995	
Satd. Flow (perm)	1904	0	0	1850	1678	0
Link Speed (k/h)	50			50	20	
Link Distance (m)	63.4			37.2	38.0	
Travel Time (s)	4.6			2.7	6.8	
Confl. Peds. (#/hr)		2	2			
Peak Hour Factor	0.70	0.70	0.70	0.70	0.70	0.70
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	14	1	13	4	1	9
Shared Lane Traffic (%)						
Lane Group Flow (vph)	15	0	0	17	10	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	0.0			0.0	3.7	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	1.6			1.6	1.6	
Two way Left Turn Lane						
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)		14	24		24	14
Sign Control	Free			Free	Stop	
Intersection Summary						
Area Type:	Other					
Control Type:	Unsignalized					
Intersection Capacity Utilization	17.3%			ICU Level of Service A		
Analysis Period (min)	15					

						
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	10	1	9	3	1	6
Future Volume (Veh/h)	10	1	9	3	1	6
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.70	0.70	0.70	0.70	0.70	0.70
Hourly flow rate (vph)	14	1	13	4	1	9
Pedestrians					2	
Lane Width (m)					3.7	
Walking Speed (m/s)					1.1	
Percent Blockage					0	
Right turn flare (veh)						
Median type	None			None		
Median storage veh						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume			17		47	17
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			17		47	17
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			99		100	99
cM capacity (veh/h)			1610		959	1066
Direction, Lane #	EB 1	WB 1	NB 1			
Volume Total	15	17	10			
Volume Left	0	13	1			
Volume Right	1	0	9			
cSH	1700	1610	1055			
Volume to Capacity	0.00*	0.00*	0.00*			
Queue Length 95th (m)	0.0	0.2	0.2			
Control Delay (s/veh)	0.0	5.6	8.4			
Lane LOS		A	A			
Approach Delay (s/veh)	0.0	5.6	8.4			
Approach LOS			A			
Intersection Summary						
Average Delay			4.3			
Intersection Capacity Utilization			17.3%	ICU Level of Service		A
Analysis Period (min)			15			
* Value less than 0.01.						

						
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	6	6	12	236	238	6
Future Volume (vph)	6	6	12	236	238	6
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt	0.932				0.997	
Flt Protected	0.976			0.998		
Satd. Flow (prot)	1748	0	0	1814	1793	0
Flt Permitted	0.976			0.998		
Satd. Flow (perm)	1748	0	0	1814	1793	0
Link Speed (k/h)	20			48	48	
Link Distance (m)	35.8			114.7	56.1	
Travel Time (s)	6.4			8.6	4.2	
Confl. Peds. (#/hr)		1				
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89
Heavy Vehicles (%)	0%	0%	0%	6%	7%	0%
Adj. Flow (vph)	7	7	13	265	267	7
Shared Lane Traffic (%)						
Lane Group Flow (vph)	14	0	0	278	274	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	3.7			0.0	0.0	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	1.6			1.6	1.6	
Two way Left Turn Lane						
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24	14	24			14
Sign Control	Stop			Free	Free	
Intersection Summary						
Area Type:	Other					
Control Type:	Unsignalized					
Intersection Capacity Utilization	32.5%			ICU Level of Service A		
Analysis Period (min)	15					

						
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	6	6	12	236	238	6
Future Volume (Veh/h)	6	6	12	236	238	6
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89
Hourly flow rate (vph)	7	7	13	265	267	7
Pedestrians				1		
Lane Width (m)				3.7		
Walking Speed (m/s)				1.1		
Percent Blockage				0		
Right turn flare (veh)						
Median type				None	None	
Median storage veh						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	562	272	274			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	562	272	274			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	99	99	99			
cM capacity (veh/h)	487	771	1301			
Direction, Lane #	EB 1	NB 1	SB 1			
Volume Total	14	278	274			
Volume Left	7	13	0			
Volume Right	7	0	7			
cSH	597	1301	1700			
Volume to Capacity	0.02	0.00*	0.16			
Queue Length 95th (m)	0.5	0.2	0.0			
Control Delay (s/veh)	11.2	0.5	0.0			
Lane LOS	B	A				
Approach Delay (s/veh)	11.2	0.5	0.0			
Approach LOS	B					
Intersection Summary						
Average Delay				0.5		
Intersection Capacity Utilization				32.5%	ICU Level of Service	A
Analysis Period (min)				15		
* Value less than 0.01.						

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	2	4	3	44	2	8	6	273	31	10	274	7
Future Volume (vph)	2	4	3	44	2	8	6	273	31	10	274	7
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	0.0		0.0	0.0		0.0	0.0		0.0	0.0		5.0
Storage Lanes	0		0	0		0	0		1	0		0
Taper Length (m)	2.5		2.5	2.5		2.5	2.5		2.5	2.5		2.5
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.955			0.980				0.850		0.997	
Flt Protected		0.989			0.961			0.999			0.998	
Satd. Flow (prot)	0	1814	0	0	1738	0	0	1901	1633	0	1852	0
Flt Permitted		0.989			0.961			0.999			0.998	
Satd. Flow (perm)	0	1814	0	0	1738	0	0	1901	1633	0	1852	0
Link Speed (k/h)		50			50			48			48	
Link Distance (m)		37.2			227.7			56.1			105.4	
Travel Time (s)		2.7			16.4			4.2			7.9	
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Heavy Vehicles (%)	0%	0%	0%	5%	0%	0%	0%	1%	0%	11%	3%	0%
Adj. Flow (vph)	2	4	3	49	2	9	7	307	35	11	308	8
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	9	0	0	60	0	0	314	35	0	327	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		0.0			0.0			0.0			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Sign Control		Stop			Stop			Free			Free	
Intersection Summary												
Area Type:	Other											
Control Type:	Unsignalized											
Intersection Capacity Utilization	38.5%											
Analysis Period (min)	15											
	ICU Level of Service A											

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	2	4	3	44	2	8	6	273	31	10	274	7
Future Volume (Veh/h)	2	4	3	44	2	8	6	273	31	10	274	7
Sign Control	Stop			Stop			Free			Free		
Grade	0%			0%			0%			0%		
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Hourly flow rate (vph)	2	4	3	49	2	9	7	307	35	11	308	8
Pedestrians												
Lane Width (m)												
Walking Speed (m/s)												
Percent Blockage												
Right turn flare (veh)												
Median type	None						None					
Median storage veh												
Upstream signal (m)												
pX, platoon unblocked												
vC, conflicting volume	665	690	312	660	659	307	316	342				
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	665	690	312	660	659	307	316	342				
tC, single (s)	7.1	6.5	6.2	7.2	6.5	6.2	4.1	4.2				
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2	2.3				
p0 queue free %	99	99	100	87	99	99	99	99				
cM capacity (veh/h)	366	365	733	364	380	738	1256	1169				
Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1							
Volume Total	9	60	314	35	327							
Volume Left	2	49	7	0	11							
Volume Right	3	9	0	35	8							
cSH	439	394	1256	1700	1169							
Volume to Capacity	0.02	0.15	0.00*	0.02	0.00*							
Queue Length 95th (m)	0.5	4.0	0.1	0.0	0.2							
Control Delay (s/veh)	13.4	15.8	0.2	0.0	0.4							
Lane LOS	B	C	A	A								
Approach Delay (s/veh)	13.4	15.8	0.2	0.4								
Approach LOS	B	C										
Intersection Summary												
Average Delay	1.7											
Intersection Capacity Utilization	38.5%			ICU Level of Service					A			
Analysis Period (min)	15											

* Value less than 0.01.

						
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	2	2	7	9	1	7
Future Volume (vph)	2	2	7	9	1	7
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt	0.932				0.877	
Flt Protected				0.979	0.995	
Satd. Flow (prot)	1790	0	0	1881	1676	0
Flt Permitted				0.979	0.995	
Satd. Flow (perm)	1790	0	0	1881	1676	0
Link Speed (k/h)	50			50	20	
Link Distance (m)	63.4			37.2	38.0	
Travel Time (s)	4.6			2.7	6.8	
Confl. Peds. (#/hr)		3	3			
Peak Hour Factor	0.68	0.68	0.68	0.68	0.68	0.68
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	3	3	10	13	1	10
Shared Lane Traffic (%)						
Lane Group Flow (vph)	6	0	0	23	11	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	0.0			0.0	3.7	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	1.6			1.6	1.6	
Two way Left Turn Lane						
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)		14	24		24	14
Sign Control	Free			Free	Stop	
Intersection Summary						
Area Type:	Other					
Control Type:	Unsignalized					
Intersection Capacity Utilization	16.7%			ICU Level of Service A		
Analysis Period (min)	15					

						
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	2	2	7	9	1	7
Future Volume (Veh/h)	2	2	7	9	1	7
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.68	0.68	0.68	0.68	0.68	0.68
Hourly flow rate (vph)	3	3	10	13	1	10
Pedestrians					3	
Lane Width (m)					3.7	
Walking Speed (m/s)					1.1	
Percent Blockage					0	
Right turn flare (veh)						
Median type	None			None		
Median storage veh						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume			9		41	8
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			9		41	8
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			99		100	99
cM capacity (veh/h)			1620		967	1078
Direction, Lane #	EB 1	WB 1	NB 1			
Volume Total	6	23	11			
Volume Left	0	10	1			
Volume Right	3	0	10			
cSH	1700	1620	1067			
Volume to Capacity	0.00*	0.00*	0.01			
Queue Length 95th (m)	0.0	0.1	0.2			
Control Delay (s/veh)	0.0	3.2	8.4			
Lane LOS		A	A			
Approach Delay (s/veh)	0.0	3.2	8.4			
Approach LOS			A			
Intersection Summary						
Average Delay			4.1			
Intersection Capacity Utilization			16.7%	ICU Level of Service	A	
Analysis Period (min)			15			
* Value less than 0.01.						

						
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	6	13	9	304	314	7
Future Volume (vph)	6	13	9	304	314	7
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.905				0.997	
Flt Protected	0.985			0.999		
Satd. Flow (prot)	1713	0	0	1847	1809	0
Flt Permitted	0.985			0.999		
Satd. Flow (perm)	1713	0	0	1847	1809	0
Link Speed (k/h)	20			48	48	
Link Distance (m)	35.8			114.7	56.1	
Travel Time (s)	6.4			8.6	4.2	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	0%	0%	0%	4%	6%	0%
Adj. Flow (vph)	6	14	9	320	331	7
Shared Lane Traffic (%)						
Lane Group Flow (vph)	20	0	0	329	338	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	3.7			0.0	0.0	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	1.6			1.6	1.6	
Two way Left Turn Lane						
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24	14	24			14
Sign Control	Stop			Free	Free	
Intersection Summary						
Area Type:	Other					
Control Type:	Unsignalized					
Intersection Capacity Utilization	33.3%			ICU Level of Service A		
Analysis Period (min)	15					

						
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	6	13	9	304	314	7
Future Volume (Veh/h)	6	13	9	304	314	7
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	6	14	9	320	331	7
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	673	335	338			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	673	335	338			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	99	98	99			
cM capacity (veh/h)	421	712	1232			
Direction, Lane #	EB 1	NB 1	SB 1			
Volume Total	20	329	338			
Volume Left	6	9	0			
Volume Right	14	0	7			
cSH	590	1232	1700			
Volume to Capacity	0.03	0.00*	0.20			
Queue Length 95th (m)	0.8	0.2	0.0			
Control Delay (s/veh)	11.3	0.3	0.0			
Lane LOS	B	A				
Approach Delay (s/veh)	11.3	0.3	0.0			
Approach LOS	B					
Intersection Summary						
Average Delay	0.5					
Intersection Capacity Utilization	33.3%			ICU Level of Service	A	
Analysis Period (min)	15					
* Value less than 0.01.						

APPENDIX E – ALL-WAY STOP WARRANT



ALL-WAY STOP INTERSECTION ANALYSIS

Four Mile Creek Road at Line 9 Road

2031 Total

Arterial/Major Collector Warrant Analysis

Hour Ending	10:00 AM	11:00 AM	12:00 PM	1:00 PM	2:00 PM	3:00 PM	4:00 PM	5:00 PM	TOTAL	AVERAGE
Approaching: All Legs	466	473	488	528	536	633	649	542	4315	
Vol all legs >375/h	YES	YES	YES	YES	YES	YES	YES	YES		
Minor Ped/Veh X-ing	60	48	53	66	55	75	58	41	456	
Vol Minor Leg>150/h	NO	NO	NO	NO	NO	NO	NO	NO		
Approaching: Major	406	425	435	462	481	558	591	501	3859	482
%Tot Appr on Minor	15%	11%	12%	14%	11%	13%	10%	8%		12%
% Split on Minor>30?	NO	NO	NO	NO	NO	NO	NO	NO		NO

WARRANT

YES

NO

NO

An ALL WAY STOP condition WOULD NOT BE recommended for this location under the Arterial/Major Collector Warrants.

All Approaches 2031 Projections						
	Raw	Existing	Growth Rate	Daycare Inbound	Daycare Outbound	2029 Total
8:00	411	411	43	6	6	466
9:00	425	425	44	2	2	473
11:00	440	440	46	1	1	488
12:00	476	476	50	1	1	528
13:00	484	484	50	1	1	536
15:00	568	568	59	3	3	633
16:00	577	577	60	6	6	649
17:00	477	477	50	7	8	542

Minor Approaches 2031 Projections						
	Raw	Existing	Growth Rate	Daycare Inbound	Daycare Outbound	2029 Total
8:00	51	51	5	2	2	60
9:00	42	42	4	1	1	48
11:00	48	48	5	0	0	53
12:00	60	60	6	0	0	66
13:00	50	50	5	0	0	55
15:00	66	66	7	1	1	75
16:00	49	49	5	2	2	58
17:00	33	33	3	2	3	41

APPENDIX F – ON-SITE PARKING SURVEY

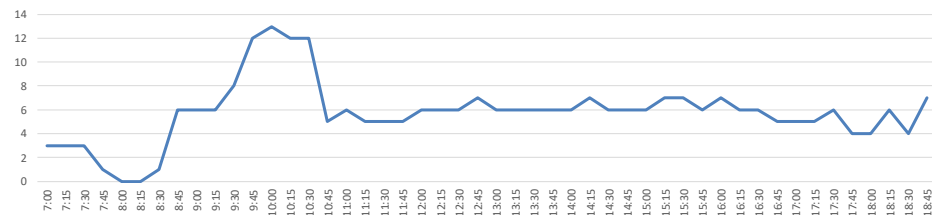




412 Four Mile Creek Road (NOTL) - Parking Utilization Survey

Dentist (160.20 m ²) + Pharmacy (160.68 m ²) + Fitness Studio (160.68 m ²)			
Project Number: 260552			
Total GFA (m ²):			822.61
Occupied GFA (m ²):			481.56
Total Number of Spaces:			45
Walk Score:			28
Transit Score:			0
Bike Score:			35
2026-09-23	Utilization		
	Occupied		Unoccupied
7:00	3	7%	42 93%
7:15	3	7%	42 93%
7:30	3	7%	42 93%
7:45	1	2%	44 98%
8:00	0	0%	45 100%
8:15	0	0%	45 100%
8:30	1	2%	44 98%
8:45	6	13%	39 87%
9:00	6	13%	39 87%
9:15	6	13%	39 87%
9:30	8	18%	37 82%
9:45	12	27%	33 73%
10:00	13	29%	32 71%
10:15	12	27%	33 73%
10:30	12	27%	33 73%
10:45	5	11%	40 89%
11:00	6	13%	39 87%
11:15	5	11%	40 89%
11:30	5	11%	40 89%
11:45	5	11%	40 89%
12:00	6	13%	39 87%
12:15	6	13%	39 87%
12:30	6	13%	39 87%
12:45	7	16%	38 84%
13:00	6	13%	39 87%
13:15	6	13%	39 87%
13:30	6	13%	39 87%
13:45	6	13%	39 87%
14:00	6	13%	39 87%
14:15	7	16%	38 84%
14:30	6	13%	39 87%
14:45	6	13%	39 87%
15:00	6	13%	39 87%
15:15	7	16%	38 84%
15:30	7	16%	38 84%
15:45	6	13%	39 87%
16:00	7	16%	38 84%
16:15	6	13%	39 87%
16:30	6	13%	39 87%
16:45	5	11%	40 89%
17:00	5	11%	40 89%
17:15	5	11%	40 89%
17:30	6	13%	39 87%
17:45	4	9%	41 91%
18:00	4	9%	41 91%
18:15	6	13%	39 87%
18:30	4	9%	41 91%
18:45	7	16%	38 84%

Peak Peak Demand 13



APPENDIX G – PROXY SURVEY PARKING DATA



Location: 1450 Queen St W, Brampton

Date: Tuesday, Sep 18, 2018

Site Statistics	
Supply	68 spaces
Staff	44 person
Children	240 students
Storeys	3 levels
GFA	1500 m2

Start Time	Employee Parking	Visitor Parking	On-Street Parking	Off-Site Parking	Total	Rate (spaces per 25 m2)
7:00 AM	2	0	0	0	2	0.03
7:15 AM	11	10	0	0	21	0.35
7:30 AM	10	0	0	0	10	0.17
7:45 AM	10	8	0	0	18	0.30
8:00 AM	12	13	0	0	25	0.42
8:15 AM	14	15	0	0	29	0.48
8:30 AM	16	14	0	0	30	0.50
8:45 AM	21	14	0	0	35	0.58
9:00 AM	25	12	0	0	37	0.62
9:15 AM	24	9	0	0	33	0.55
9:30 AM	26	8	0	0	34	0.57
9:45 AM	28	7	0	0	35	0.58
10:00 AM	28	8	0	0	36	0.60
10:15 AM	29	5	0	0	34	0.57
10:30 AM	31	4	0	0	35	0.58
10:45 AM	32	3	0	0	35	0.58
11:00 AM	32	3	0	0	35	0.58
11:15 AM	31	1	0	0	32	0.53
11:30 AM	33	4	0	0	37	0.62
11:45 AM	34	3	0	0	37	0.62
12:00 PM	36	3	0	0	39	0.65
12:15 PM	33	0	0	0	33	0.55
12:30 PM	33	1	0	0	34	0.57
12:45 PM	33	1	0	0	34	0.57
1:00 PM	30	2	0	0	32	0.53
1:15 PM	28	1	0	0	29	0.48
1:30 PM	27	1	0	0	28	0.47
1:45 PM	26	1	0	0	27	0.45
2:00 PM	29	1	0	0	30	0.50
2:15 PM	23	0	0	0	23	0.38
2:30 PM	20	1	0	0	21	0.35
2:45 PM	25	1	0	0	26	0.43
3:00 PM	26	1	0	0	27	0.45

3:15 PM	25	1	0	0	26	0.43
3:30 PM	27	1	0	0	28	0.47
3:45 PM	24	1	0	0	25	0.42
4:00 PM	21	10	0	0	31	0.52
4:15 PM	18	11	0	0	29	0.48
4:30 PM	19	10	0	0	29	0.48
4:45 PM	21	8	0	0	29	0.48
5:00 PM	22	6	0	0	28	0.47
5:15 PM	13	17	0	0	30	0.50
5:30 PM	17	7	0	0	24	0.40
5:45 PM	18	14	0	0	32	0.53
6:00 PM	11	9	0	0	20	0.33
6:15 PM	6	13	0	0	19	0.32
6:30 PM	7	5	0	0	12	0.20
6:45 PM	4	2	0	0	6	0.10
Peak Observation					39	0.65