



## **Staff Report for Council Meeting**

**Date of Meeting:** April 14, 2021

**Report Number:** SRPI.21.018

**Department:** Planning and Infrastructure  
**Division:** Infrastructure and Engineering Services

**Subject:** **SRPI.21.018 – Pedestrian Crossing  
Improvements on Rollinghill Road and Jack  
Ashton Avenue**

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### **Purpose:**

To respond to traffic operational and pedestrian safety concerns on Rollinghill Road in the vicinity of St. Marguerite D'Youville Catholic School, located at 121 Rollinghill Road.

### **Recommendation(s):**

- a) That the installation of a 'Level 2 Type C' Pedestrian Crossover (PXO) be approved for the north approach of the Rollinghill Road and Jack Ashton intersection;
- b) That an in-year budget in the amount of \$65,000 be approved to implement the PXO identified in a) and any related works identified in staff report SRPI.21.018; and
- c) That the budget identified be funded from the Federal Gas Tax Reserve Fund.

### **Contact Person:**

Hubert Ng, Manager of Transportation, 905-771-6501

Habibur Rahman, Traffic Analyst, 905-771-5447

### **Report Approval:**

**Submitted by:** Kelvin Kwan, Commissioner of Planning and Infrastructure Department

**Approved by:** Mary-Anne Dempster, City Manager

All reports are electronically reviewed and/or approved by the Division Director, Treasurer (as required), City Solicitor (as required), Commissioner, and City Manager. Details of the reports approval are attached.

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### Background:

Concerns have been raised from area residents and York Catholic District School Board regarding the need to improve pedestrian safety at the intersection of Rollinghill Road and Jack Ashton Avenue, and a desire to implement all-way-stop control. The intersection is located toward the north end of St. Marguerite D'Youville Catholic School. Figure 1 illustrates the location of the subject intersection and school.

**Figure 1: Location of Rollinghill Rd. and Jack Ashton Ave. intersection, and St. Marguerite D'Youville Catholic School**



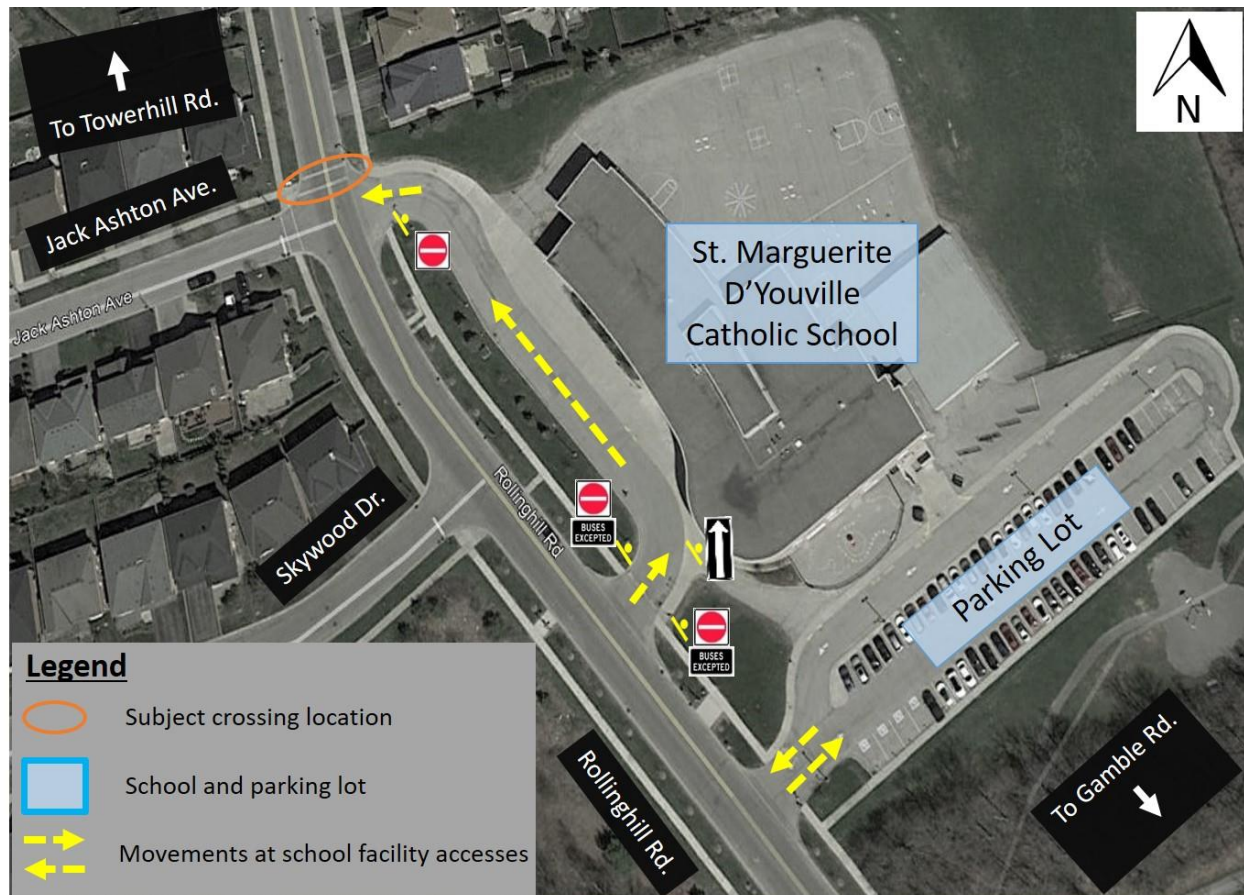
Rollinghill Road is a two-lane collector road consisting of a right-of-way width of 23 metres, and a pavement width of 9.75 metres. Sidewalks are present on both sides of the street, providing pedestrian connections to the school. The road has a posted speed limit of 40 km/h with edge lines painted on both sides.

Rollinghill Road serves a bus route for York Region Transit (YRT) during the school a.m. and p.m. peak periods, with bus stops located on both sides of the road.

Figure 2 below, illustrates the subject site and configuration of access to St. Marguerite D'Youville Catholic School. The south driveway provides access to the school parking lot and allows full turning movements for vehicles. On-site school bus pick-up and drop-off activities occur via the alternate driveways, whereby vehicles enter at the centre driveway and exit via the northerly driveway.

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**Figure 2: Site and Configuration of Access to St. Marguerite D’Youville Catholic School**



### **An all-way stop control is not warranted for the intersection of Rollinghill Road and Jack Ashton Avenue**

In response to the requests received, an all-way stop warrant analysis; as per **Ontario Traffic Manual (OTM) Book 5 – Regulatory Signs**, was conducted for the Rollinghill Road and Jack Ashton Avenue intersection. The assessment results found that both prescribed criteria; the minimum vehicle volume and minimum volume split requirements, are not met for the intersection to warrant all-way stop control. Other criteria; such as collision records and sight distance requirements, are also not met for the intersection.

Based on the assessment results, it was concluded that none of the requirements necessary to warrant all-way stop controls at this intersection are satisfied. The All-Way Stop Control Warrant Analysis Report is presented in Attachment 1.

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### **Pedestrian safety in school zones is a priority and alternate solutions including the use of a Pedestrian Crossover (PXO) were investigated**

Pedestrian safety is a priority in school zones. Given the pedestrian and traffic volumes along Rollinghill Road at Jack Ashton Avenue, as well as the community feedback, staff investigated alternate solutions to address the concerns to determine if a PXO crossing Rollinghill Road at Jack Ashton Avenue would be warranted.

A PXO assessment; as per **Ontario Traffic Manual (OTM) Book 15 – Pedestrian Crossing Treatments**, was conducted at the intersection of Rollinghill Road and Jack Ashton Avenue. The assessment is a tool that takes into account four-hour pedestrian and vehicle volumes; distance of the site from other traffic control devices, and system connectivity. The technical criteria for the installation of a PXO is shown below, along with the assessment results.

#### **Four-hour Pedestrian Volume**

Threshold Value: 65

Observed Value on Rollinghill Road: 248

Criteria Met: 100%

#### **Four-hour Traffic Volume**

Threshold Value: 395

Observed Value on Rollinghill Road: 1264

Criteria Met: 100%

#### **Distance from nearest Traffic Control Device**

Threshold Value: 200m

Measured Value on Rollinghill Road: 450m

Criteria Met: 100%

### **The warrant assessment fully satisfies all of the criteria for an intersection PXO at the intersection of Rollinghill Road and Jack Ashton Avenue**

Based on the warrant assessment, the intersection of Rollinghill Road and Jack Ashton Avenue fully satisfies all of the criteria. The collected data revealed that a significant number of pedestrians cross Rollinghill Road between gaps in traffic throughout the day. Furthermore, a large portion of the crossing activity is related to school children; which are considered vulnerable road users, and higher risk for pedestrian-vehicle

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conflicts. The majority of east-west pedestrian crossings occurred at the north leg of the intersection, confirming a clear desire line of pedestrian activity. This desire line is approximately 450 metres away from the closest controlled crossing point, which is located at Rollinghill Road and Richvalley Crescent.

As such, based on the pedestrian and vehicle volume and the context-specific factors noted above, staff recommend that an intersection PXO be implemented at the north leg of the Rollinghill Road and Jack Ashton Avenue intersection.

It is important to note that the intent of this PXO is to provide a dedicated crossing facility for pedestrians and is not intended to replace an approved school crossing guard position. A school crossing guard should be hired as soon as possible based on the demand for the position. The presence of a school crossing guard; together with the PXO facility, would provide ideal crossing conditions.

### **Selection of the appropriate type of PXO is essential to improving safety in school zones**

The appropriate type of PXO facility is selected based on four criteria:

1. Four-hour, two-way vehicular volume of the roadway at the location of the crosswalk;
2. Posted speed limit of the roadway;
3. Total number of lanes for the roadway cross-section; and
4. Presence of raised pedestrian refuge.

The four-hour vehicular volume for Rollinghill Road was 1,264 vehicles. The posted speed limit is 40 km/h for the two-lane road. There is no raised pedestrian refuge in the area. Based on the matrix of facility types in **OTM Book 15**, a 'Level 2 Type C' pedestrian crossing treatment is warranted for this intersection. The 'Level 2 Type C' PXO will consist of zebra-striped pavement markings, actuated and double-sided rectangular rapid flashing beacons and push-buttons (to activate the crossing and flashing beacons to cross), along with required regulatory signage.

Minor sidewalk extensions and curb modifications will also be required to properly facilitate the PXO.

A clear area of 65 metres is required on each approach to the PXO in order to improve visibility and safety for the users of the facility. An illustration of the recommended PXO, its configuration, and required signage is provided in Attachment 2.

### **Climate Change Considerations**

The proposed crossing and connection to adjacent sidewalks in this neighbourhood will contribute to climate change mitigation by providing safe streets that will encourage more walking and cycling through the community, reducing the need for vehicular transportation and helping to lower GHG emissions in Richmond Hill.



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### **Financial/Staffing/Other Implications:**

The implementation of the 'Level 2 Type C' PXO and the sidewalk extensions/curb modifications at the Rollinghill Road and Jack Ashton Avenue intersection are estimated to cost approximately \$65,000.

It is recommended that an in-year project budget for this amount be established from the Federal Gas Tax Reserve Fund, so that this work can be implemented in 2021.

### **Reference to Council's Strategic Priorities 2020-2022:**

The recommendations of this report are consistent with Council's Strategic Priorities to create a "Strong Sense of Belonging" and improve "Getting Around the City" through the implementation of a PXO at the north approach of the Rollinghill Road at Jack Ashton intersection to facilitate safe pedestrian/cycling movements which will promote and encourage active transportation between the community and St. Marguerite D'Youville Catholic School.

### **Conclusion:**

Staff recommend the implementation of an east-west, 'Level 2 Type C' Pedestrian Crossover (PXO) at the north leg of the Rollinghill Road and Jack Ashton Avenue intersection. The facility will provide a dedicated, conspicuous and regulatory crossing between St. Marguerite D'Youville Catholic School and adjoining residential neighbourhoods. Moreover, a school crossing guard should be hired to facilitate crossing at the subject PXO as soon as possible.

### **Attachments:**

The following attached documents may include scanned images of appendices, maps and photographs. If you require an alternative format please call the contact person listed in this document.

- Attachment 1: All-Way Stop Control Warrant Analysis Report
- Attachment 2: Illustration of Recommended PXO

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### Report Approval Details

Document Title:	SRPI.21.018 – Ward 4 Pedestrian Crossing Improvements on Rollinghill Road and Jack Ashton Avenue.docx
Attachments:	- SRPI.21.018 - Attachment 1 – All-Way Stop Control Warrant Analysis Report.pdf - SRPI.21.018 – Attachment 2 – Illustration of Recommended PXO.pdf
Final Approval Date:	Mar 23, 2021

This report and all of its attachments were approved and signed as outlined below:

- Dan Terziewski - Mar 17, 2021 - 4:53 PM
- Paolo Masaro – Mar 17, 2021 – 5:27 PM
- Kelvin Kwan - Mar 18, 2021 - 10:26 AM
- David Dexter – Mar 18, 2021 – 10:31 AM
- MaryAnne Dempster - Mar 23, 2021 - 2:31 PM