

Committee of the Whole (2) Report

DATE: Tuesday, December 7, 2021

WARD(S): 3

TITLE: ALL-WAY STOP CONTROL REVIEW AT THE INTERSECTION
OF LAWFORD ROAD AND HARLEY DRIVE

FROM:

Zoran Postic, Deputy City Manager, Public Works

ACTION: DECISION

Purpose

This report seeks Council approval to implement an all-way stop control at the intersection of Lawford Road and Harley Drive to improve traffic operations.

Report Highlights

- A traffic study was undertaken, and the existing traffic volumes at the subject intersection fulfill the warrant requirements of the Minimum Provincial Warrant for all-way stop controls.
- All-way stop controls would benefit vehicular and pedestrian movements in the area.
- It is recommended that an all-way stop control be implemented at the subject intersection.

Recommendations

1. That Council approve the implementation of an all-way stop control at the intersection of Lawford Road and Harley Drive;
2. That a By-law be enacted to amend By-law 284-94, the Consolidated Traffic By-law, to add an all-way stop control at the intersection of Lawford Road and Harley Drive; and
3. That the City Clerk forward a copy of this report to York Regional Police.

Background

A review of traffic operations was conducted at the intersection of Lawford Road and Harley Drive to assess the need for additional traffic control measures.

Lawford Road and Harley Drive forms a three-legged intersection, with two travel lanes (one lane per direction). Lawford Road is designated as a minor collector roadway with a pavement width of 11.5 metres, and a right-of-way width of 23.0 metres. Harley Drive is a local road with a pavement width of 8.0 metres and a right-of-way width of 17.5 metres.

Lawford Road is oriented north-south and does not currently require vehicles to stop at the intersection with Harley Drive. Vehicles traveling on Harley Drive, which is oriented east-west, are required to stop at Lawford Road. There are sidewalks along both sides of Lawford Road, on the south side of Harley Drive and a textured crosswalk on the south side of the intersection.

There are several pedestrian destinations located within this community, including Johnny Lombardi Public School (on the southwest corner of Lawford Road and Stanton Avenue), Guardian Angels Catholic Elementary School (on the northwest corner of Lawford Road and Chatfield Drive) and Lawford Neighbourhood Park on the west side of Lawford Road between Lindbergh Drive and Hansard Drive.

Previous Reports/Authority

[Consolidated Traffic By-Law 284-94](#)

Analysis and Options

An all-way stop control is recommended at the intersection of Lawford Road and Harley Drive to improve traffic operations and facilitate pedestrian and vehicle traffic.

The City's all-way stop control warrant analysis takes into consideration the minimum vehicular volumes required, accident hazards, and sight restrictions at the intersection. This warrant analysis is generally consistent with the thresholds established in the Book 5 of the Ontario Traffic Manual. The study results are summarized in Table 1.

Traffic volume data is based on turning movement counts collected on September 22, 2021, at the intersection of Lawford Road and Harley Drive. The study was conducted during the peak traffic periods of 7:00 a.m. to 9:00 a.m. and 3:00 p.m. to 6:00 p.m.

As shown in Table 1, observed traffic volumes at the intersection of Lawford Road and Harley Drive exceed 100 percent of the minimum required to meet the Provincial Warrant for all-way stop controls.

Table 1: All Way Stop Warrant Analysis at Lawford Road and Harley Drive

Warrant #	Warrant Description	Study Results
Warrant 1	Minimum Vehicular Volumes	128%
Warrant 2	Accident Hazards	0%
Warrant 3	Sight Restrictions	0%

Table 1 also shows that Warrant 2, based on accident hazards, was not met at either intersection. Specifically, collision data from York Regional Police indicate that there have been no reported collisions at the intersection during the three-year period from May 2018 to May 2021.

Warrant 3, based on sight restrictions, was also not met. The sightline assessment determined that pedestrian and motorist sightlines are unobstructed at this intersection. The intersection geometry is not noted as an issue, as both streets are at grade level and intersect at 90 degrees.

All-way stop controls are recommended when one of the above warrants meets or exceeds 100 percent. As shown in Table 1, the existing volumes at the intersection of Lawford Road and Harley Drive exceed the Minimum Vehicular Volume requirement of Warrant 1. Additionally, due to the proximity of this intersection to Johnny Lombardi Public School, Guardian Angels Catholic Elementary School and Lawford Neighbourhood Park, it is recommended that an all-way stop control be installed at this location to improve vehicle and pedestrian movements.

Financial Impact

The capital cost associated with the installation of the all-way stop signs is estimated to be \$700 and is supported in the approved 2021 Operating Budget. The on-going cost to maintain the signs and pavement markings (stop bars) is estimated to be \$200 per annum and will be incorporated into future year Operating Budgets.

A continuous parking layby lane exists on the west side of the intersection. To facilitate the crosswalk connection, an interim design with pavement markings will need to be developed to address the continuous parking layby lane at the intersection. No parking signs will be implemented to keep vehicles clear of the intersection. A capital project for a proposed curb extension will be submitted for consideration as part of the 2022 budget process.

Broader Regional Impacts/Considerations

York Regional Police will be responsible for enforcing compliance with the recommended all-way stop at the intersection of Lawford Road and Harley Drive. As such, a copy of this report will be forwarded to them upon approval of the recommendations by Council.

Conclusion

An all-way stop control is recommended at the intersection of Lawford Road and Harley Drive to improve traffic operations and pedestrian movements.

For more information, please contact Peter Pilateris, Director of Transportation and Fleet Management Services, 6141 and/or Margie Chung, Manager of Traffic Engineering, 6173

Attachments

1. Location Map

Prepared by

Mark Ranstoller, Senior Traffic Technologist, ext. 6117

Approved by



Zoran Postic,
Deputy City Manager, Public Works

Reviewed by



Nick Spensieri, City Manager