

Committee of the Whole (1) Report

DATE: Tuesday, March 03, 2020 WARD(S): 4

TITLE: ALL-WAY STOP CONTROL REVIEW AT THE INTERSECTION OF IVY GLEN DRIVE AND OBERFRICK AVENUE

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 Ivy Glen Drive and Oberfrick Avenue to improve traffic operations.

Report Highlights

- A traffic study was undertaken, and the existing traffic volumes at the subject intersection exceed the 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 the implementation of an all-way stop control at the intersection of Ivy Glen Drive and Oberfrick Avenue be approved;
- That a By-law be enacted to amend By-law 284-94, the Consolidated Traffic Bylaw, to add an all-way stop control at the intersection of Ivy Glen Drive and Oberfrick Avenue; 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 Ivy Glen Drive and Oberfrick Avenue to assess the need for additional traffic control measures.

Ivy Glen Drive and Oberfrick Avenue form a four-legged intersection, with two travel lanes per leg (one lane per direction). Ivy Glen Drive is designated as a minor collector roadway with a pavement width of 11.5 metres, and right-of-way width of 23.0 metres. Oberfrick Avenue is a local road with a pavement width of 8.0 metres and right-of-way width of 17.5 metres.

Ivy Glen Drive is oriented east-west and does not currently require vehicles to stop at the intersection with Oberfrick Avenue. Vehicles traveling on Oberfrick Avenue, which is oriented north-south, are required to stop at Ivy Glen Drive. There are sidewalks along both sides of Ivy Glen Drive and on the east side of Oberfrick Avenue.

There are several pedestrian generators/destinations located within this community, including Dr. Roberta Bondar Public School (on the southeast corner of Ivy Glen Drive and Grand Trunk Avenue), St. Cecilia Catholic Elementary School (on the southwest corner of Peter Rupert Avenue and Golden Forest Road) and Romeo Dallaire Public School (on the southwest corner of Peter Rupert Avenue and Petticoat Road).

Previous Reports/Authority

Consolidated Traffic By-Law 284-94

Analysis and Options

An all-way stop control is recommended at the intersection of Ivy Glen Drive and Oberfrick Avenue to improve traffic operations and facilitate pedestrian and vehicular movements.

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 based on the thresholds established in Book 5 of the Ontario Traffic Manual. The study results are summarized in Table 1.

As shown in Table 1, observed traffic volumes at the intersection of Ivy Glen Drive and Oberfrick Avenue exceed the minimum requirements of the Provincial Warrant for an all-way stop control. Traffic volume data is based on turning movement counts collected on Wednesday, November 6, 2019, at the intersection of Ivy Glen Drive and Oberfrick Avenue. 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.

Table 1: All Way Stop Warrant Analysis at Ivy Glen Drive and Oberfrick Avenue

Warrant #	Warrant Description	Study Results
Warrant 1	Minimum Vehicular Volumes	109%
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 this intersection. Collision data from York Regional Police indicates that there have been no reported collisions at this intersection during the three-year period from June 2016 to June 2019.

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 Ivy Glen Drive and Oberfrick Avenue exceed the Minimum Vehicular Volume requirement of Warrant 1. Additionally, due to the proximity of this intersection to Dr. Roberta Bondar Public School, St. Cecilia Catholic Elementary School and Romeo Dallaire Public School, 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 supported in the approved 2020 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 in future year Operating Budgets through the 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 Ivy Glen Drive and Oberfrick Avenue. 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 Ivy Glen Drive and Oberfrick Avenue to improve traffic operations and pedestrian movements.

For more information, please contact:

Donald Eta, Director of Transportation and Fleet Management Services Margie Chung, Manager of Traffic Services

Attachment

1. Location Map

Prepared by

Mark Ranstoller, Senior Traffic Technologist, ext. 6117