

Committee of the Whole (1) Report

DATE: Tuesday, March 03, 2020

WARD(S): 3

**TITLE: ALL-WAY STOP CONTROL REVIEW AT THE INTERSECTION
OF WESTCREEK DRIVE AND CRESTMOUNT BOULEVARD**

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 Westcreek and Crestmount Boulevard 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 Westcreek Drive and Crestmount Boulevard be approved;
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 Westcreek Drive and Crestmount Boulevard; 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 Westcreek Drive and Crestmount Boulevard to assess the need for additional traffic control measures.

Westcreek Drive and Crestmount Boulevard form a three-legged intersection, with two travel lanes per leg (one lane per direction). Westcreek Drive, south of Crestmount Boulevard is designated as a minor collector roadway with a pavement width of 14.0 metres, and right of way width of 26.0 metres. Westcreek Drive, north of Crestmount Boulevard is designated as a minor collector roadway with a pavement width of 11.5 metres, and right of way width of 23.0 metres. Crestmount Boulevard is a minor collector roadway with a pavement width of 14.0 metres and right of way width of 26.0 metres.

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

There is a signalized intersection at Weston Road and Crestmount Boulevard/ Greenpark Boulevard located approximately 100 metres west of the intersection of Westcreek Drive and Crestmount Boulevard.

There are pedestrian generators/destinations located within this community, including commercial/industrial companies. Based on the turning movement counts (TMC) collected at the intersection, there were three pedestrians crossing Westcreek Drive at Crestmount Boulevard on both north and south sides in the morning peak hour and six pedestrians crossing Westcreek Drive at Crestmount Boulevard on the north side in the afternoon peak hour.

There are heavy eastbound right-turn vehicle movements during the morning peak hours, and northbound left-turn vehicle movements during the afternoon peak hours. The high volume of northbound left-turn vehicle movements creates delays for eastbound vehicles completing a left-turn.

Previous Reports/Authority

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

Analysis and Options

An all-way stop control is recommended at the intersection of Westcreek Drive and Crestmount Boulevard, to improve traffic operations and facilitate pedestrian and vehicular movements.

The City's all-way stop control warrant analysis considers the minimum vehicular volumes required, accident hazards, and sight restrictions at an intersection, and is generally based on 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 Westcreek Drive and Crestmount Boulevard are 143 percent of the minimum required to meet the Provincial Warrant for all-way stop control. Traffic volume data is based on turning movement counts collected on Thursday, September 19, 2019 during the peak traffic periods of 7:00am to 9:00am and 3:00pm to 6:00pm.

Table 1: All-Way Stop Warrant Analysis at Westcreek Drive and Crestmount Boulevard

Warrant #	Warrant Description	Study Results
Warrant 1	Minimum Vehicular Volumes	143%
Warrant 2	Accident Hazard	0%
Warrant 3	Sight Restriction	0%

Table 1 also shows that Warrant 2, based on accident hazards, was not met at this intersection. Specifically, collision data from York Regional Police indicate 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. Specifically, the sightline assessment found that pedestrian and motorist sightlines are unobstructed at this intersection. The intersection geometry does not pose any issues, with both streets at grade level and intersecting 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 Westcreek Drive and Crestmount Boulevard exceed the requirements of Warrant 1. As such, an all-way stop control is recommended at this location to improve vehicular and pedestrian movements.

Financial Impact

The capital cost associated with the installation of the all-way stop signs is estimated to be \$700 and has been included 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 Westcreek Drive and Crestmount boulevard. 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 Westcreek Drive and Crestmount Boulevard, to improve traffic operations and pedestrian movements.

For more information, please contact:

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

Attachments

1. Location Map

Prepared by

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