



Town of Newmarket
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William Booth Avenue and Knapton Drive All-way Stop Request, Staff Report to Council

Report Number: 2019-95.

Department(s): Engineering Services

Author(s): M. Kryzanowski, Manager, Transportation Services

Meeting Date: October 15, 2019

Recommendations

1. That the report entitled William Booth Avenue and Knapton Drive All-way Stop Request, dated October 15, 2019, be received; and,
2. That Staff monitor the area road network and report back to Council if changes need to be made; and,
3. That Staff be authorized and directed to do all things necessary to give effect to this resolution.

Purpose

The purpose of this report is to summarize the findings and recommendations of the all-way stop review for the William Booth Avenue and Knapton Drive intersection.

Background

At its regular meeting of January 21, 2019, Town Council adopted the recommendations of the previous Committee of the Whole, at which a deputation request in regards to installing an All-way stop at William Booth Avenue and Knapton Drive was referred to staff.

William Booth Avenue is a primary residential collector road located in the northwest quadrant of the Town. William Booth Avenue, from Knapton Drive to Woodspring Avenue, was assumed by the Town in 2013. The section of William Booth Avenue from

Knapton Drive to Davis Drive has been open to the community since December 2017. However, the subdivision (Sundial subdivision) is still being constructed and that part of the subdivision is unassumed by the Town.

Traffic on William Booth Avenue is steadily increasing due to several new homes being occupied and because of changing traffic patterns due, in part, to new traffic signals that were installed by York Region at the intersection of William Booth and Davis Drive.

While Knapton Drive is a local road, it also provides internal community connections for traffic originating from Alfred Smith Way. Motorists travelling to the south or west from this community are evidently taking advantage of this new roadway. The subject intersection, as a result, has also become a point of increased traffic flow.

There is an existing all-way stop at William Booth Avenue and Tango Crescent, approximately 60 metres south of the William Booth Avenue and Knapton Drive intersection. This all-way stop was installed to serve as an access point to a (future) school site.

Discussion

Traffic counts were taken on William Booth Avenue both before and after the road was opened at Davis Drive. The counts revealed that the east-west traffic on Knapton Drive at William Booth Avenue has doubled, with the largest increases occurring during the morning traffic peak. As expected, the traffic volumes on William Booth Avenue, both northbound and southbound, have increased dramatically during both morning and afternoon traffic peak times.

To start the All-Way Stop review directed by Council as a result of the petition, a 5-hour traffic count was undertaken at the intersection. The traffic count was performed in conformance with the Town's Transportation Management Policy, which requires that vehicle turning movements and pedestrian activity be collected between 7:00 AM and 9:00 AM and between 3:00 PM and 6:00 PM.

The subject intersection was then analysed to determine if the All-Way Stop warrants were met. The All-Way Stop warrant consists of three (3) parts. The first part addresses the future signalization of intersections. This part does not apply, since traffic signals are not planned for any of the William Booth Avenue intersections.

The second part of the All-Way Stop warrant examines the frequency of recorded vehicle collisions in, or adjacent to, the intersection for the twelve (12) month period prior to the review. A search of our records indicated that no vehicle collisions occurred within the intersection during that period.

The third part of the warrant deals with both traffic and pedestrian volumes on the major and minor streets of the intersection. Accordingly, staff obtained counts for the total number of vehicles and pedestrians approaching the intersection on an hourly basis, and the average volume on the minor street (Knapton Drive, in this case).

The results of the all-way stop warrant analysis confirmed that the all-approach volume reached only 52% of the required minimum warrant volume of 500, and the minor street volume was only 35% of the required minimum warrant volume of 200. Therefore, the intersection does not meet the warrants for an All-Way Stop control.

Staff has confirmed, therefore, that the warrants would not be met until the traffic volumes increase significantly from what they are today. This may occur upon full build-out of the Sundial subdivision, and after completion of a school in the area. Currently, traffic volumes are expected to continue to fluctuate due to construction activity both within the subdivision and on Yonge Street, but they will not meet the warrants for the all-way stop.

It should be noted that school traffic entering and exiting William Booth Avenue at Tango Crescent may eventually warrant an All-Way Stop at that intersection. Tango Crescent is located very close to the William Booth/Knapton intersection, and staff anticipates that, when the future school site is completed, All-Way Stops at these two locations will help with right-of-way control.

Conclusion

It is recommended that an All-Way Stop control at William Booth Avenue and Knapton Drive not be implemented at this time. However, staff will continue to monitor this intersection, and the area's road network, to determine any required future action. If there is further action required, staff will report back to Council.

Business Plan and Strategic Plan Linkages

Well-planned and connected...strategically planning for the future to improve information access and enhance travel to, from, and within Newmarket.

Consultation

After the deputation at the Committee of the Whole, the Town sent a letter dated July 12, 2019, to each household in the immediate area around the intersection to collect feedback on the request. Input from the community was favourable.

A copy of this report will be forwarded to all households within the study area advising the residents of the date and time that this matter will be addressed at the Committee of the Whole.

Residents who wish to address the Committee regarding this report or its recommendations can do so at that time.

Human Resource Considerations

None.

Budget Impact

The recommendations do not directly impact Capital or Operating budgets, as the Town has funds to routinely monitor traffic in areas of concern.

Attachments

None

Approval

Rachel Prudhomme, Director, Engineering Services

Peter Noehammer, Commissioner, Development & Infrastructure Services

Contact

For more information or questions regarding this report, please contact Mark Kryzanowski, Manager, Transportation Services, at 905-895-5193 extension 2508 or MKryzanowski@newmarket.ca.