

Extract from the Minutes of the Council Meeting held on March 26, 2018.

(6) Sawmill Valley Drive and Peter Hall Drive – All-way Stop and Area Traffic Review

Moved by: Seconded by: Councillor Kerwin
Councillor Bisanz

- 1. That the report entitled Sawmill Valley Drive and Peter Hall Drive All-way Stop and Area Review dated March 19, 2018 be received; and,
- 2. That Schedule 3 of the Traffic Bylaw 2011-24 be amended by deleting:
 - a. Peter Hall Drive at Sawmill Valley Drive, 1 way, northbound on Peter Hall Drive; and,
- 3. That Schedule 3 of the Traffic Bylaw 2011-24 be amended by adding:
 - a. Peter Hall Drive at Sawmill Valley Drive, 3 way, northbound on Peter Hall Drive; and,
 - b. Sawmill Valley Drive at Peter Hall Drive, 3 way, eastbound on Sawmill Valley Drive; and,
 - c. Sawmill Valley Drive at Peter Hall Drive, 3 way, westbound on Sawmill Valley Drive; and,
- 4. That Schedule 9 of the Traffic Bylaw 2011-24 be amended by deleting:
 - a. Sawmill Valley Drive at Terry Fox Public School Mid-Block; and,
- 5. That Schedule 9 of the Traffic Bylaw 2011-24 be amended by adding:
 - a. Sawmill Valley Dr. between Society Crescent and Colter Street Mid-Block; and,



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6. That Staff be authorized and directed to do all things necessary to give effect to this resolution.

In Favour:

Mayor Van Bynen, Deputy Mayor & Regional Councillor Taylor, Councillor Vegh, Councillor Kerwin, Councillor Twinney, Councillor Hempen, Councillor Kwapis, Councillor Broome, Councillor Bisanz

Opposed:

None

(9 in favour, 0 opposed)

Carried



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Sawmill Valley Drive and Peter Hall Drive All-way Stop and Area Traffic Review Staff Report

Report Number: 2018-08

Department(s): Engineering Services

Author(s): Director, Engineering Services

Meeting Date: March 19, 2018

Recommendations

- 1. That the report entitled Sawmill Valley Drive and Peter Hall Drive All-way Stop and Area Review dated March 19, 2018 be received; and,
- 2. That Schedule 3 of the Traffic Bylaw 2011-24 be amended by deleting:

 Peter Hall Drive at Sawmill Valley Drive 1 way northbound on Peter Hall Drive; and,
- 3. That Schedule 3 of the Traffic Bylaw 2011-24 be amended by adding:
 - a) Peter Hall Drive at Sawmill Valley Drive 3 way northbound on Peter Hall Drive;
 - b) Sawmill Valley Drive at Peter Hall Drive 3 way eastbound on Sawmill Valley Drive;
 - c) Sawmill Valley Drive at Peter Hall Drive 3 way westbound on Sawmill Valley Drive; and,
- 4. That Schedule 9 of the Traffic Bylaw 2011-24 be amended by deleting: Sawmill Valley Drive at Terry Fox Public School Mid-Block; and
- 5. That Schedule 9 of the Traffic Bylaw 2011-24 be amended by adding: Sawmill Valley Dr. between Society Crescent and Colter Street Mid-Block
- 6. 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 provide the results of the traffic operations review and to provide recommendations for improvement.

Background

At its regular meeting of November 13, 2017, Town Council adopted the following recommendation:

1. That staff be directed to review and report back on the potential for an all-way stop at Sawmill Valley Drive and Peter Hall Drive and opportunities for crosswalk enhancements.

In 2007, residents asked the Town for a school crossing guard on Sawmill Valley Drive for students coming from the homes on the south side of the street. In 2008 (Bylaw 2008-40), the Town hired a school crossing guard to help students cross Sawmill Valley Drive in front of Terry Fox Public School, just west of Society Crescent. The centrally located school crossing served students coming from the east and west sides of the school. However, the Town installed the crossing prior to construction of the subdivision south of Terry Fox Public School (Emily Grove area) in 2009. Staff monitored the school crossing during construction and considered creating an all-way stop at Peter Hall Drive and moving the crossing there. Staff decided against this at the time, due to the active construction. They planned to revisit the crossing once construction of the Emily Grove area ended in 2015.

The Town reviewed the crossing guard location again in 2015. Staff considered creating a school crossing at either Peter Hall Drive, or directly in front of Terry Fox Public School. For reasons that were valid at the time, staff recommended that the school crossing remain in the original location, which was just west of Society Crescent.

Discussion

As the community around Terry Fox Public School matured, both pedestrian and vehicle traffic increased. Staff reviewed the crossing location again and noted an increase in students coming from the west. A decision was made to move the crossing location to accommodate the increase in traffic.

Based on observed patterns, and in consultation with the Ward Councillor, a new location for an all-way stop was considered, as well as the relocation of the existing school crossing. A major consideration in the relocation was that stop signs require a minimum spacing to ensure proper traffic flow and driver recognition of the sign.

The Sawmill Valley/Peter Hall intersection was the best candidate for an all-way stop review. While all local streets intersecting Sawmill Valley Drive are 'T'-intersections, Peter Hall Drive is not, because it is located opposite from the Terry Fox public school driveway and parking areas.

The Sawmill Valley/Peter Hall intersection was reviewed for an all-way stop control using the methods outlined in the Town's Transportation Management Policy. Staff completed a 5-hour traffic count, as per the Town's policy.

The "All-Way Stop Warrant" standard consists of three (3) components. The first component does not apply at this location because it deals with future traffic signals, and traffic signals are not planned for this intersection.

The second component examines the number of vehicle collisions in, or near, the intersection over the previous twelve (12) months. Records indicate that there were no recorded vehicle collisions at this intersection during the last year.

The third component of the warrant is further divided into two parts. Both parts of the third warrant need to be met at 100% or greater for an all-way stop control to be warranted.

The first part of the third component is based on the total traffic and pedestrian volumes approaching the full intersection (i.e. "all-approach" warrant) on an hourly basis. The minimum hourly traffic and pedestrian volume required by the all-approach warrant is an average combined vehicle and pedestrian volume of 500.

The second part of the third component is based on the hourly traffic and pedestrian volumes along the minor street only (Peter Hall Drive and the school entrance, in this case). The minimum hourly traffic and pedestrian volume along the minor street that is needed to warrant an All-Way Stop is an average hourly vehicle and pedestrian volume of 200.

The results of the all-way stop warrant study showed that the all-approach warrant for the major street reached only 86% of the required number, whereas the minor street warrant achieved only 68% of its required number. Therefore, according to the Town Policy, an all-way stop could not be warranted. However, in studying the numbers further, it was seen that the warrants were met at certain specific times of the day, which appeared to be related to the school's start and finish times.

Further to the above, on-site observation revealed that many drivers and pedestrians were crossing Sawmill Valley Drive at the Valley Green Trail intersection. Staff concluded that, if an all-way stop was located at Sawmill Valley Drive and Peter Hall, more drivers and pedestrians might choose to use this intersection instead. Staff conservatively estimated that this diversion of vehicles and pedestrians would change the all-approach warrant to 103% and the minor street warrant to 82%.

Based on the above, staff concluded that the intersection would warrant an all-way stop in the near future as a result of:

- 1. New home construction proposed in the Shining Hill subdivision;
- 2. Changes to traffic patterns to and from Sir William Mulock High School or St. John's Chrysostom Catholic Elementary School (CES);
- 3. The new Sundial subdivision (north side of Davis Drive), which could result in redistribution of students and changes to the operations at Terry Fox public school;
- 4. A future splash pad to be constructed in the area;
- 5. Annual traffic increases on Town residential and collector roads.

Staff also needed to determine where the existing school crossing guard could be relocated to be most effective. As noted above, the centrally located school crossing serves the higher pedestrian volumes coming from the south and east of Terry Fox Public School (the Colter Street community). However, some pedestrians who walk to St. John's Chrysostom CES are not served well by this location. A better location to serve pedestrian traffic from both schools is midway between Colter Street and Society Crescent where the southern trail entrance meets the road. In addition to serving both schools very well, this proposed location also provides a sufficient separation distance between the all-way stop and the school crossing.

Conclusion

Based on the study and on-site inspections, staff recommends that an all-way stop be installed at the Sawmill Valley/Peter Hall intersection and that the school guard crossing location be moved to midway between Colter Street and Society Crescent. The works should be completed between June 30, 2018 and before September 1, 2018 so that it will not interfere with the school year.

Business Plan and Strategic Plan Linkages

This study meets Newmarket's Strategic Plan direction of "Well Planned & Connected", by improving travel within Newmarket through inter-connected neighbourhoods, as well as providing varied transit options, including biking trails, paths, and lanes.

The study also aligns with Council's 2014-2018 Strategic Priority of "Traffic Safety & Mitigation", by ensuring safe streets, improving traffic congestion, and supporting major transit service enhancements.

Consultation

As per the Town's Public Consultation and Support Policy, the immediately impacted residents and Terry Fox P. S. have been notified of the study.

A copy of this report will be forwarded to the community (including St. John's Chrysostom CES) prior to the Committee of the Whole meeting so that residents may attend the meeting or present a deputation if they so wish.

Human Resource Considerations

Not applicable to this report.

Budget Impact

Operating Budget - There is no operating budget impact at this time

Capital Budget - The additional signage and pavement markings are estimated to be less than \$500.00 for the supply and installation of the signs. The additional concrete work for the sidewalk connections and AODA compliance would be less than \$10,000.00.

Attachments

None

Approval

Mark Kryzanowski

Manager, Transportation Services

Rachel Prudhomme

Director, Engineering Services

Peter Noehammer

Commissioner, Development & Infrastructure Services

Contact

For more information of this report, please contact Mark Kryzanowski, Manager, Transportation Services, at 905-953-5300, press "2", then extension 2508 or mkryzanowski@newmarket.ca