



REPORT

COMMUNITY SERVICES COMMITTEE
MEETING DATE: DECEMBER 15, 2014

FROM: Engineering and Construction Department
DATE: November 6, 2014
SUBJECT: Request for All-Way Stop Control at Grand Oak Trail and Blue Holly Crescent / Edgerose Lane
LOCATION: West Oak Trails
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RECOMMENDATION:

That the request to implement all-way stop control at the intersection of Grand Oak Trail and Blue Holly Crescent/Edgerose Lane, as detailed in the report from the Engineering and Construction Department, dated November 6, 2014, be denied.

KEY FACTS:

The following are key points for consideration with respect to this report:

- A petition was received from area residents requesting installation of an all-way stop at the intersection of Grand Oak Trail and Blue Holly Crescent/Edgerose Lane
- Staff undertook and completed a review of the area (i.e. intersection turning movement count, speed surveys, and collision assessments).
- The conclusion of the reviews reveals that:
 - Traffic volumes are within acceptable range for the class of roads
 - There have been no reportable collisions in the last five years.
 - Traffic operating speeds are at acceptable levels.
 - All-way stop control warrant is not met.
 - Crossing guard warrant is not met.

BACKGROUND:

On June 17, 2014, the town received a petition from area residents which requested the installation of all-way stop controls at Grand Oak Trail and Blue Holly Crescent/Edgerose Lane. There were 101 signatures on the petition. The concern expressed by residents related to traffic volumes along Grand Oak Trail and pedestrian safety at the intersection. The petition stated:

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"We, the undersigned residents of Oakville, request the installation of a 4-way stop sign at the northern intersection of Blue Holly Crescent/Edgerose Lane and Grand Oak Trail. This intersection is the site of two different school bus stops. Stopping traffic along Grand Oak Trail at this location would greatly increase driver awareness and pedestrian safety while ensuring neighbourhood children a safe route to and from school".

Grand Oak Trail is a 12.5 metre wide residential major collector roadway with curbs, boulevards and sidewalks on both sides of assumed portion (from Upper Middle Road to just north of Blue Holly Crescent/Edgerose Lane). Grand Oak Trail has received passive traffic calming measures, as part of the 2014 Traffic Calming Program; the road surface was changed from the previous pavement marking arrangement comprising of two driving lanes, dual centre left turn lane and curb edge lines to a standardized form of passive traffic calming treatment consisting of a driving lane and bike lane in the southbound direction, and a driving lane, bike lane and parking lane in the northbound direction. These treatments have proven to be effective in reducing operating speeds in the range of 3-5 km/h. The posted speed limit on Grand Oak Trail is 50 km/h.

Blue Holly Crescent and Edgerose Lane are both 7.5 m wide roadways with curbs and boulevards on both sides and sidewalks on the north side of both roadways.

An area map is provided in Appendix A.

COMMENT/OPTIONS:

Staff have assembled several sets of data and performed a number of assessments based on these data. The data collected included:

- ✓ 24 hour traffic volumes;
- ✓ 8 hour intersection turning movement count;
- ✓ Collision review at the intersection of Grand Oak Trail and Blue Holly Crescent/Edgerose Lane;
- ✓ Automatic speed survey on Grand Oak Trail south of Blue Holly Crescent/Edgerose Lane;
- ✓ Field investigation of the intersection;

Traffic Volume Assessments

Based on 2014 traffic volume data, Grand Oak Trail carries approximately 1180 vehicles per day (vehicles/day) in the northbound direction, and 1200 in the southbound direction. *Livable Oakville* classifies this roadway as a major collector roadway with capabilities to carry up to 8,000 vehicles/day.

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All-way Stop Warrant and Operational Assessments

The main purpose of all-way stop control is to assign right-of-way between two roadways with similar volume demands and operating characteristics. To help ensure that all-way stops controls are placed at appropriate locations, criteria or warrants have been developed based on numerous traffic studies and provincial guidelines. These criteria consider aspects such as traffic volumes, delay to side street motorists and pedestrians, visibility and collision history. The misuse of all-way stop control can result in non-compliance for the stop sign, especially by main street motorists, which may in turn provide a false sense of security for pedestrians (particularly children) crossing the main street.

Staff performed all-way stop warrant analysis, which includes three separate warrant reviews (traffic volumes, accident hazards and stopping sight distance.) This first warrant was not met due to low traffic volume on Blue Holly Crescent and Edgerose Lane. The minimum vehicular volumes resulted in warrant compliance levels of only 27 % (out of required 100 %). The second involved the review of accident hazards and considered the collision history for the past 5 years. There has been no reportable collision by the Halton Regional Police Services for the last 5 years. The third warrant review indicates that a minimum stopping sight distance of 84 m is available to motorists. There are no sight line impediments from either approach when exiting Blue Holly Crescent or Edgerose Lane. All-way stop warrant results are summarized in Appendix B.

The all-way stop warrant analysis concluded that conversion to all-way stop control at the intersection of Grand Oak Trail and Blue Holly Crescent/Edgerose Lane is not warranted.

Crossing Guard Warrant Assessments

The town has an established procedure to establish supervised crossing locations for elementary schoolchildren. Peak hour turning movement counts were collected at the intersection of Grand Oak Trail and Blue Holly Crescent/Edgerose Lane to determine if the location would be suitable for the introduction of a crossing guard. The completed analysis revealed this location being only 10% (out of 100% required) for implementation of the school crossing guard. This is mainly due to a low number of unassisted school children crossing Grand Oak Trail on their way to school. The majority of the recorded children were crossing for the school bus and was accompanied by an adult. The school crossing guard would not be implemented to assist the crossing of the school children to and from the school bus stop. The school crossing guard warrant calculation would only take into account school children walking to and from school.

Collision Assessments

An assessment was completed for reportable collisions, as provided by the Halton Regional Police Services, for the intersection of Grand Oak Trail and Blue Holly Crescent/Edgerose Lane during the past five years. There were no reported collisions likely to be prevented by an all-way stop control at this intersection.

Speed Assessments

Staff completed 24 hour automatic speed survey on Grand Oak Trail, south of Blue Holly Crescent in November 2014. The results indicated the 85th percentile speed (the speed at which 85% of the total traffic surveyed were travelling at or below) was 58 km in the northbound direction and 55 km/h in the southbound direction. These results, based on the town's traffic calming program, demonstrates an acceptable compliance with the posted speed limit of 50 km/h. These results were forwarded to Halton Regional Police Services for their review and action, as appropriate.

CONSIDERATIONS:

(A) PUBLIC

The local Councillors of the affected area and the petitioners' representative were notified of this report.

(B) FINANCIAL

N/A

(C) IMPACT ON OTHER DEPARTMENTS & USERS

N/A

(D) CORPORATE AND/OR DEPARTMENT STRATEGIC GOALS

This report addresses the corporate strategic goal to:

- continuously improve our programs and services
- be accountable in everything we do

(E) COMMUNITY SUSTAINABILITY

The safe operation of our intersections and roadways is an important facet to the social pillar of community sustainability.

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APPENDICES:

Appendix A – Area Map

Appendix B – All-Way Stop Warrant Summary

Appendix C – School Crossing Guard Warrant Summary

Appendix D – Speed Results Summary

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