



Report to: General Committee

Date Report Authored: July 24, 2015

SUBJECT: 14th Avenue & Hobbs Gate – Proposed All-way Stop Control

PREPARED BY: Dan Ahir, Traffic Technologist, ext. 2736
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ext. 2040

RECOMMENDATION:

- 1) That the report entitled “14th Avenue & Hobbs Gate – Proposed All-way Stop Control”, be received;
- 2) And that Schedule 12 of Traffic By-law 106-71, pertaining to compulsory stops, be amended to include all approaches to the intersection of 14th Avenue & Hobbs Gate;
- 3) And that the Operations Department be directed to install the appropriate signs and pavement markings at the subject locations;
- 4) And that the cost of materials and installation for the traffic signs and pavement markings be funded from capital project # 14228 (Traffic Operational Improvements) in the amount of \$500;
- 5) And that York Regional Police be requested to enforce the all-way stop controls upon installation of these stop signs and passing of the By-law;
- 6) And that staff be authorized and directed to do all things necessary to give effect to this resolution.

PURPOSE:

This report recommends implementing an all-way stop at the intersections of 14th Avenue & Hobbs Gate to improve intersection operations and address safety concerns.

BACKGROUND:

Traffic Operations staff received concerns from several local business establishments regarding operational safety concerns at the intersection of 14th Avenue & Hobbs Gate (see Attachment “A”).

Located within an industrial/business park west of Woodbine Avenue, this section of 14th Avenue is a four-lane collector road with an average daily traffic (ADT) volume of 6,000 vehicles. 14th Avenue is not a through street, ending in a cul-de-sac adjacent to Highway 404. Hobbs Gate is a minor commercial road, with an ADT volume of 1,350 vehicles. Businesses and commercial activities surrounding this intersection contribute significantly vehicular traffic at the intersection. Currently, stop control at the intersection is assigned to Hobbs Gate only, giving traffic on 14th Avenue the right-of-way.

DISCUSSION:

In response to the aforementioned concerns, Traffic Operations staff conducted an all-way stop warrant analysis at the subject intersection. An all-way stop control may be considered where

provincial warrant guidelines are met, as outlined in the Ontario Traffic Manual. The warrant considers total vehicular volume and volume distribution between the “major” and “minor” approaches of the intersection during the busiest hour of the day.

All-way stop control is recommended at 14th Avenue & Hobbs Gate.

In September 2014, Traffic Operations staff conducted an all-way stop warrant analysis during the busiest one-hour period of a typical weekday at the intersection. The warrant analysis results are as follows:

Figure 1: 14th Avenue & Hobbs Gate - All-way Stop Warrant Results

CRITERIA #1 Total Traffic Volume <i>(All Approaches)</i>			CRITERIA #2 Volume Assigned to “Minor” Street <i>(Hobbs Gate)</i>		
Minimum Criteria	Recorded Value	Criteria Met?	Minimum Criteria (3-way)	Recorded Value	Criteria Met?
350	495	YES	25%	27%	YES

All-way stop control is warranted when both Criteria #1 and Criteria #2 are satisfied. As shown above, the intersection meets Provincial guidelines for all-way stop control. Therefore, Operations Department recommends that an all-way stop control be provided. Once implemented, it is expected that the all-way stop control will improve intersection operations and safety.

FINANCIAL CONSIDERATIONS:

The cost of materials and installation for the traffic signs and pavement markings in the amount of \$500 has been included in the capital project # 14228 (Traffic Operational Improvements). On-going maintenance costs for this installation will be considered in the 2016 Operations Department operating budget.

ALIGNMENT WITH STRATEGIC PRIORITIES:

This report aligns with the community safety component of Markham’s transportation strategic priority.

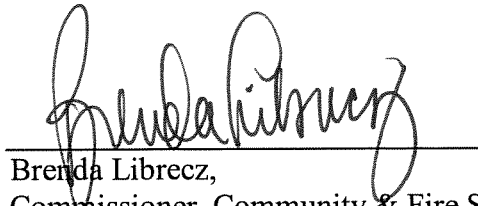
DEPARTMENTS CONSULTED AND AFFECTED:

Not applicable.

RECOMMENDED BY:



Morgan Jones,
Director (Acting), Operations



Brenda Librecz,
Commissioner, Community & Fire Services

ATTACHMENTS:

Attachment “A” – Location Map, 14th Avenue & Hobbs Gate

Attachment “B” – All-way Stop Control By-Law Amendment