All-Way Stop Control – Prince Edward Drive North and King Georges Road (South Intersection)

Date: May 1, 2019
To: Etobicoke York Community Council
From: Acting Director, Traffic Management, Transportation Services
Wards: Ward 3 - Etobicoke-Lakeshore

SUMMARY

This staff report is about a matter that Community Council has delegated authority from City Council to make a final decision.

This report presents the results of staff’s investigation on a traffic study conducted at the south intersection of Prince Edward Drive North and King Georges Road to determine the feasibility for all-way stop controls. A staff assessment has determined that the criteria for the installation of an all-way stop control are achieved at the south intersection of Prince Edward Drive North and King Georges Road.

RECOMMENDATIONS

The Acting Director, Traffic Management, Transportation Services recommends that:

1. Etobicoke York Community Council authorize an all-way stop control at the south intersection of Prince Edward Drive North and King Georges Road.

FINANCIAL IMPACT

The estimated cost for the installation of the signage is $800.00. These funds are available in the Transportation Services' 2019 Operating Budget.

DECISION HISTORY

Etobicoke York Community Council, at its meeting of November 14, 2017, adopted item EY26.33 which, "Requested the Director, Transportation Services, Etobicoke-York District, to investigate an All Way Stop at King Georges Road and Prince Edward Drive North, as well as a round-about".

As per the aforementioned Community Council directive, Transportation Services staff investigated the need for additional all-way stop controls at the south intersection of Prince Edward Drive North and King Georges Road. A map of the area is Attachment 1.

Prince Edward Drive North is classified in the City’s Road Classification System as a “Collector” road having one lane in each direction. The posted speed limit between Dundas Street West and Government Road and between Queen Anne Road and Bloor Street West is 40 km/h. The roadway has an urban cross-section which includes curb and gutter. There are sidewalks on the both sides of the street. Lambton Kingsway Junior Middle School is located on the east side of Prince Edward Drive North, south of Government Road. A Pedestrian Crossover (PXO) is located at the south limit of the school just north of Marquis Avenue. Four speed humps were installed on this section of Prince Edward Drive North in November 2013 along with a corresponding 30 km/h speed limit.

The justification for the installation of an all-way stop control is subject to a technical warrant adopted by Toronto City Council based on collision history and traffic volume. Based on the findings of our study, an all-way stop control is warranted at the intersection of Prince Edward Drive North (south intersection) and King Georges Road based on the collision history. Toronto Police Service collision records for a three-year period (October 31, 2015 – October 31, 2017) for which we have complete data revealed there have been nine reported collisions at the intersection which would be considered preventable with the installation of all-way stop controls. It appears we do not have complete data for 2018 but there have been two more preventable collisions. Our all-way stop control warrant analysis is summarized in Attachment 2.

A site review reveals good sightlines at the intersection of Prince Edward Drive North (south intersection) and King Georges Road with respect to east-west motorists’ view of north-south traffic and the existing stop signs at the east and west approaches. Also, the existing stop bars and centre lines on the east and west approaches are in good condition.

To improve the management of traffic, it is recommended that an all-way stop control be installed at the south intersection of Prince Edward Drive North and King Georges Road. This would address the issue of the continued occurrence of angled type collisions at the intersection of Prince Edward Drive North (south intersection) and King Georges Road.

With respect to the feasibility for the installation of a round-about at the intersection of Prince Edward Drive North and King Georges Road, it appears that there is insufficient public right-of-way to install a round-about.

The local Councillor has been advised of the recommendation of this staff report.
CONTACT

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SIGNATURE

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Roger Browne, M.A. Sc., P.Eng.
Acting Director, Traffic Management
Transportation Services

ATTACHMENTS

Attachment 1: Location Plan - Prince Edward Drive North and King Georges Road.
Attachment 2: Warrant for All-Way Stop Control - Prince Edward Drive North and King Georges Road (south intersection).
Attachment 3: Collision Review - Intersection of Prince Edward Drive North (south intersection) and King Georges Road (south intersection).
Attachment 1: Location Map - Prince Edward Drive North and King Georges Road (south intersection)
Attachment 2 - Warrant for All-Way Stop Control

Study Date: Thursday, January 11, 2018
Study Location: Prince Edward Drive North and King Georges Road (south intersection)

The justification for the installation of an all-way stop control is based on a technical warrant adopted by Toronto City Council. The analysis of this warrant is based on data compiled from a four-hour traffic study and a review of the collision history.

### Four-Hour Study Period

<table>
<thead>
<tr>
<th>Four-Hour Study Period</th>
<th>Total Approach Vehicle Volume</th>
<th>Vehicle and Pedestrian Volume Crossing Major Road</th>
<th>Unit Volume Split Major/Minor Roads**</th>
</tr>
</thead>
<tbody>
<tr>
<td>7:00 a.m. to 8:00 a.m.</td>
<td>704</td>
<td>134</td>
<td>81/19</td>
</tr>
<tr>
<td>8:00 a.m. to 9:00 a.m.</td>
<td>693</td>
<td>125</td>
<td>82/18</td>
</tr>
<tr>
<td>4:00 p.m. to 5:00 p.m.</td>
<td>542</td>
<td>84</td>
<td>85/15</td>
</tr>
<tr>
<td>5:00 p.m. to 6:00 p.m.</td>
<td>554</td>
<td>79</td>
<td>86/14</td>
</tr>
<tr>
<td>Study Period Average</td>
<td>623</td>
<td>106*</td>
<td>83/17</td>
</tr>
<tr>
<td>Warrant Requirements</td>
<td>³ 375</td>
<td>³ 150</td>
<td>³ 30/70 or ³ 70/30</td>
</tr>
</tbody>
</table>

*An average of three pedestrians per hour crossed the major road (Prince Edward Drive North).

To warrant the installation of an all-way stop control, the traffic volume requirements for the “Study Period Average” must be completely satisfied in either of the following two combinations of the above three categories:

1. “Total Approach Vehicle Volume” and “Unit Volume Split – Major/Minor Roads”

or

2. “Vehicle/Pedestrian Volume Crossing Major Road” and “Unit Volume Split – Major/Minor Roads”

**Major Road Volume – Vehicles only; Minor Road Volume – Vehicles plus pedestrians crossing the major road.
Attachment 3: Collision Review - Prince Edward Drive North and King Georges Road (south intersection)

Three year (January 1, 2015 – December 31, 2017) collision history at the south intersection of Prince Edward Drive North and King Georges Road, type susceptible to correction with an all-way stop control.

<table>
<thead>
<tr>
<th>Number of Collisions (Susceptible to correction with an all-way stop)</th>
<th>3-Year Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015</td>
<td>2016</td>
</tr>
<tr>
<td>2</td>
<td>1</td>
</tr>
</tbody>
</table>

The collision warrant is met if the average number of collisions per year over a three year period, of the type susceptible to correction by the use of an all-way stop control, is greater than or equal to 3.