All-Way Stop Control – Indian Road and Indian Road Crescent

Date: May 6, 2016
To: Toronto and East York Community Council
From: Director, Transportation Services, Toronto and East York District
Wards: Parkdale-High Park, Ward 14
Reference Number: Ts2016115te.top.doc

SUMMARY

This staff report is about a matter that Community Council has delegated authority to make a final decision, provided that it is not amended so that it varies with City policy or by-laws.

Transportation Services is requesting approval to install an all-way stop control at the intersection of Indian Road and Indian Road Crescent to enhance safety for pedestrians and motorists using this intersection. Based on staff's investigation, the installation of the all-way stop control is technically warranted and will enhance operational safety at this intersection.

RECOMMENDATIONS

Transportation Services, Toronto and East York District recommends that Toronto and East York Community Council:

1. Approve the installation of an all-way stop control at the intersection of Indian Road and Indian Road Crescent.

Financial Impact
All costs associated with the necessary signage installation are included within the Transportation Services 2016 Operating Budget.
ISSUE BACKGROUND
Transportation Services was requested by Councillor Gord Perks, on behalf of local residents, to investigate and report on the feasibility of installing an all-way stop control at the intersection of Indian Road and Indian Road Crescent to enhance safety for pedestrians and motorists using this intersection.

COMMENTS

Existing Conditions
Indian Road and Indian Road Crescent intersect in a 'T'-type intersection. Indian Road forms the south and east intersection legs and Indian Road Crescent forms the west intersection leg.

Indian Road is a local roadway operating two-way traffic, with a daily two-way traffic volume between 900 and 1,700 vehicles. It generally has a width of about 7.3 metres on the east leg and 8.5 metres on the south leg. The posted speed limit is 30 km/h and heavy trucks are prohibited at all times. The south leg of Indian Road is stop controlled at its intersection with Indian Road Crescent.

Indian Road Crescent is a local roadway operating two-way traffic, with a daily two-way traffic volume is about 1,300 vehicles. It generally has a width of about 7.3 metres, a posted speed limit of 30 km/h and heavy trucks are prohibited at all times. It is not controlled at Indian Road.

There is no TTC service provided at this intersection. The land use in the vicinity is generally residential. The sidewalk on the north side of the west leg is at a higher than typical elevation and is not fully accessible. The sidewalk on the north side ends at the intersection and does not continue to the east leg.

Analysis
Collision statistics provided by the Toronto Police Service for the three-year period ending December 31, 2015 disclosed that one collision had occurred at the intersection of Indian Road and Indian Road Crescent. This collision was considered to be potentially preventable by the installation of an all-way stop control. No pedestrians or cyclists were involved in the collision.

In order for an all-way stop control to be justified at an intersection, established warrant criteria must be satisfied. The criteria, as adopted by City Council, include such factors as collision history, total vehicle volume, combined vehicle and pedestrian volumes crossing the major road and the percentage of traffic on the major road.

Transportation Services evaluated the intersection of Indian Road and Indian Road Crescent and applied the results of the vehicle and pedestrian study and the collision records of the Toronto Police Service to the all-way stop control criteria. Based on the review, this intersection met the minimum criteria required for an all-way stop control.
The results of the all-way stop control warrant study at the intersection of Indian Road and Indian Road Crescent have been summarized in the following table:

<table>
<thead>
<tr>
<th>Minimum Vehicle Volume (Each of Four Peak Hours)</th>
<th>Combined Crossing Volume (Vehicles &amp; Pedestrians)</th>
<th>Main Street/Side-Street Volume Split (&lt;70%/30%)</th>
<th>Collision Hazard (≥2/yr.)</th>
<th>All-Way Stop Warrants Satisfied (Yes/No)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Required: 250 Vehicles/Hour</td>
<td>Required: 100 Units/Hour</td>
<td>42% / 58%</td>
<td>0.3</td>
<td>Yes</td>
</tr>
<tr>
<td>Actual: 155 Vehicles/Hour</td>
<td>Actual: 102 Units/Hour</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Based on the above review, the technical warrants for the installation of all-way stop control at the intersection of Indian Road and Indian Road Crescent are satisfied and the requested installation of an all-way stop control at this intersection is supported.

It is noted that the lack of a sidewalk on the north side of the east intersection leg will preclude the installation of pedestrian crossing lines on this leg.

Councillor Gord Perks has been advised of the recommendations of this staff report.

CONTACT
Ann S. Khan, P. Eng.
Manager, Traffic Operations
Toronto and East York District
Transportation Services
Telephone: (416) 397-5021
Fax: (416) 392-1920
E-mail: akhan5@toronto.ca

SIGNATURE

Kyp Pericleous
Director, Transportation Services
Toronto and East York District

LIST OF ATTACHMENTS
1. Drawing No. 421G-2132, dated May 2016