All Way Stop Control Review: Flemington Road at Varna Drive

<table>
<thead>
<tr>
<th>Date:</th>
<th>August 19, 2013</th>
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<tbody>
<tr>
<td>To:</td>
<td>North York Community Council</td>
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<tr>
<td>From:</td>
<td>Acting Director, Transportation Services, North York District</td>
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<tr>
<td>Wards:</td>
<td>Ward 15 – Eglinton-Lawrence</td>
</tr>
<tr>
<td>Reference Number:</td>
<td>ny13104</td>
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SUMMARY

As the Toronto Transit Commission (TTC) operates a transit service on Flemington Road and Varna Drive, City Council approval of this report is required.

The purpose of this report is to deny the request for the installation of an all way stop control at the intersection of Flemington Road and Varna Drive.

The existing traffic and roadway conditions do not warrant the introduction of an all way stop control or traffic control signals at the above noted intersection.

RECOMMENDATIONS

Transportation Services, North York District, recommends that City Council:

1. Deny the installation of an all way stop control at the intersection of Flemington Road and Varna Drive.

Financial Impact

There is no financial impact associated with the adoption of this report.

ISSUE BACKGROUND

The Transportation Services Division, North York District was requested by the Local Councillor on behalf of a local resident to review the feasibility of installing an All Way Stop Control at the intersection of Flemington Road and Varna Drive.

Intersection Control: Flemington Road at Varna Drive
 COMMENTS

Both Flemington Road and Varna Drive are designated as collector roadways with a posted speed limit of 40 km/h. The pavement width of both roadways is approximately 10.0 metres and marked as a single lane per direction. Currently northbound traffic on Varna Drive is required to stop at the intersection of Flemington Road and Varna Drive. The intersection of Flemington Road and Varna Drive form a T-type intersection, and municipal sidewalks are located on both sides of each roadway.

This area is primarily comprised of the low rise apartments, Toronto Community Housing Complex. Located on the north side of Flemington Road is Flemington Park and approximately 250 metres to the west of this intersection is Flemington Road Elementary school. Toronto Transit Commission operates the 109B and C Ranee bus route on both roadways. Both routes operate at all times, seven days a week.

To assess the existing traffic conditions at the intersection of Flemington Road and Varna Drive, this Division conducted an All Way Stop study, Traffic Control Signal Study and assessed the existing roadway geometry and collected intersection collision statistics.

 All-Way Stop Control Study:

The results of the study are as follows:

<table>
<thead>
<tr>
<th>Flemington Road and Varna Drive</th>
<th>Actual</th>
<th>Required</th>
<th>Satisfied (YES/NO)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A Collision History</td>
<td>0/3 yrs</td>
<td>12/3 yrs</td>
<td>NO</td>
</tr>
<tr>
<td>B1 Total Vehicle Volumes</td>
<td>298</td>
<td>500/avg hr</td>
<td>NO</td>
</tr>
<tr>
<td>B2 Combined Vehicle &amp; Pedestrian Volumes Crossing Major Road</td>
<td>123</td>
<td>200/avg hr</td>
<td>NO</td>
</tr>
<tr>
<td>B3 Percentage of Traffic on Major Road</td>
<td>61</td>
<td>≤30</td>
<td>NO</td>
</tr>
<tr>
<td>Overall Warrant</td>
<td></td>
<td></td>
<td>NO</td>
</tr>
</tbody>
</table>

In order for the All Way Stop “Overall Warrant” to be warranted, either Warrant A must be met or Warrant B1 or B2 combined with Warrant B3 must be achieved.

The results of the All Way Stop study concluded that the warrants for the installation of an All Way Stop Control were not satisfied.

Traffic Control Signal Review

This Division also conducted a study for the feasibility of installing a Traffic Control Signal at the intersection of Flemington Road and Varna Drive.

The technical warrants for the installation of traffic control signals are satisfied to the following extent:

Warrant 1: Minimum Vehicular Volume 32 %
Warrant 2: Delay to Cross Traffic 22 %
Warrant 3: Collision Hazard 0 %

Intersection Control: Flemington Road at Varna Drive
To satisfy the installation of traffic control signals, one of either the Minimum Vehicular Volume or Delay to Cross Traffic warrants must be 100 percent satisfied, or both must be satisfied to the extent of 80 percent. The Collision Hazard warrant is based on the number of collisions susceptible to correction by the installation of traffic control signals, and must be 100 percent satisfied.

A review of Toronto Police Service collision records revealed that in a three-year period ending December 31, 2012, there has been no collision susceptible to correction by the installation of a traffic control signal or by the installation of an All-Way Stop at this intersection. Motorist and pedestrian sight lines were found to be clear and unobstructed for all approaches to the intersection.

Should an all way stop control or traffic control signal be approved for this location, significant civil modifications will be required. That is sidewalk leads, accessibility ramps and pavement markings would need to be modified to appropriately control the pedestrian and vehicular traffic respectively.

It should be noted that traffic engineering studies has shown that the installation of unwarranted stop signs may lead to a high level of non-compliance, which may result in an increase in the number of collisions and the reduction in the level of safety for both motorists and pedestrians. The principle purpose of the installation of an all way stop control is to control the right-of-way movements within the limits of the intersection and not as a speed control.

As such, this Division does not support the installation of traffic control signals or an All Way Stop Control at the intersection of Flemington Road and Varna Drive.

The Ward Councillor has been advised of the recommendation in this staff report.

**CONTACT**

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**SIGNATURE**

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Kypros Perikleous
Director
ATTACHMENTS

Attachment 1: Map – All Way Stop Review: Flemington Road at Varna Drive