STAFF REPORT
ACTION REQUIRED

All-Way Stop Control Study – Merryfield Drive and Blaisdale Road

Date: August 20, 2012
To: Scarborough Community Council
From: Director, Transportation Services, Scarborough District
Wards: Ward 37 – Scarborough Centre
Reference Number: P:\2012\Cluster B\TRA\Scarborough\sc1281

SUMMARY

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

This report responds to a request from Councillor Michael Thompson to review the feasibility of installing an All-Way Stop Control at the intersection of Merryfield Drive and Blaisdale Road. The report shows that this intersection did not meet the required technical warrant for this type of traffic control.

It is recommended that an All-Way Stop Control not be installed on Merryfield Drive at Blaisdale Road.

RECOMMENDATIONS

Transportation Services recommends that Scarborough Community Council:

1. Not approve the installation of an All-Way Stop Control on Merryfield Drive and Blaisdale Road.

2. Not pass or amend the appropriate by-law(s) accordingly.

Financial Impact

There would be no financial impact associated with the staff recommendation regarding the unwarranted control; however, if an All-Way Stop Control were to be approved, the minimal financial cost of installing the two additional stop signs and associated pavement markings would be approximately $500.00. The funding for these stop signs would be available in the Transportation Services 2012 Operating Budget, within Cost Centre TP0397.
ISSUE BACKGROUND
Further to a request from Councillor Michael Thompson, Transportation Services staff reviewed the feasibility of installing an All-Way Stop Control at the intersection of Merryfield Drive at Blaisdale Road. The report shows that this intersection did not meet the required technical warrant for this type of traffic control.

COMMENTS
The following characteristics describe the intersection of Merryfield Drive and Blaisdale Road and surrounding area:

- This intersection is located within the community east of Birchmount Road, west of Kennedy Road, south of Ellendale Drive and north of Lawrence Avenue East.
- Merryfield Drive is a two-lane east-west local road with an unposted speed limit of 50 kilometres per hour and a daily traffic volume of approximately 408 vehicles per day. It has an 85th percentile speed of 48 km/h.
- Blaisdale Road is a two-lane, north-south local road with an unposted speed limit of 50 kilometres per hour.
- Both these local roadways experience vehicle volumes in the lower range of local road volumes, (under 1,000 vehicles per day).
- There are sidewalks on both sides of Merryfield Drive and Blaisdale Road
- The land use of this neighbourhood is single family residential.

An All-Way Stop Control cannot be recommended on Merryfield Drive at Blaisdale Road since the subject intersection did not meet the warrant for an All-Way Stop Control installation as per City Policy.

All-Way Stop Control Warrant Study

A traffic study conducted at the intersection of Merryfield Drive at Blaisdale Road during the morning and afternoon peak hours of a typical weekday, (Monday, May 2, 2011), produced the following results:

<table>
<thead>
<tr>
<th>All-Way Stop Control Warrant</th>
<th>A Total Approach Vehicle Volume</th>
<th>B Vehicle/Pedestrian Volume Crossing Major Road</th>
<th>C Unit Volume Split* Major/Minor Roads</th>
</tr>
</thead>
<tbody>
<tr>
<td>Two-Hour Study Period Average</td>
<td>82</td>
<td>54</td>
<td>43/67</td>
</tr>
<tr>
<td>Warrant Requirements For Study Period Average For Local Roads</td>
<td>≥ 250</td>
<td>≥ 100</td>
<td>≥ 30/70 or ≤ 70/30</td>
</tr>
</tbody>
</table>

*“Unit Volume Split”: Major Road Volume – Vehicles only.

Minor Road Volume – Vehicles plus pedestrians crossing the major road.

For an All-Way Stop Control to be numerically justified, the traffic volume requirements for the “Study Period Average” must be completely satisfied in Categories A and C, or Categories B and C.
As outlined in the above table, the traffic volumes do not meet the requirements to install an All-Way Stop Control at the subject intersection at this time.

It should be noted that notwithstanding the current non-compliance with the numerical warrants and staff not being able to recommend an all-way stop control on Merryfield Drive at Blaisdale Road, this could be a suitable location for an all-way stop in the future as the vehicle volume splits approach desired levels. The spacing to adjacent controls is acceptable and the unit vehicle volume splits indicate that a reasonable amount of compliance with this stop control can be anticipated.

A review of the collision records revealed that there was only one collision reported at this intersection during the five-year period ending December 31, 2011 that could have been potentially prevented by the installation of an All-Way Stop Control.

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SIGNATURE

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Peter J. Noehammer, P.Eng.
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ATTACHMENTS

1. Location Plan (All-Way Stop Control Study - Merryfield Drive and Blaisdale Road)