Proposed Traffic Control Signals – 111 Progress Avenue

<table>
<thead>
<tr>
<th>Date:</th>
<th>May 20, 2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>To:</td>
<td>Scarborough Community Council</td>
</tr>
<tr>
<td>From:</td>
<td>Director, Transportation Services, Scarborough District</td>
</tr>
<tr>
<td>Wards:</td>
<td>Ward 37 – Scarborough Centre</td>
</tr>
<tr>
<td>Reference Number:</td>
<td>P:\2010\Cluster B\TRA\Scarborough\sc1056 D10–3770061, D10-3683379 111 Progress Ave tcs</td>
</tr>
</tbody>
</table>

**SUMMARY**

This staff report is about a matter for which the Community Council does not have delegated authority from City Council to make a final decision.

The purpose of this report is to obtain approval for the installation of traffic control signals at 111 Progress Avenue.

Traffic studies reveal that a pedestrian crossover is warranted; however, a safety review indicates that this intersection is not a suitable location for a pedestrian crossover. As a result, traffic control signals should be installed.

**RECOMMENDATIONS**

Transportation Services, Scarborough District, recommends that Scarborough Community Council recommend that City Council:

1. Approve the installation of traffic control signals at 111 Progress Avenue.

2. Pass or amend the appropriate by-law(s) accordingly.
Financial Impact
The financial cost of installing these new traffic control signals is approximately $125,000.00. The funding for these signals is available in Transportation Services Division’s Capital Works Budget under Project No. CTP710-01.

ISSUE BACKGROUND
Further to a request from the local councillor, Transportation Services staff reviewed the feasibility of installing pedestrian crossing protection at 111 Progress Avenue.

COMMENTS
The following characteristics describe the section of roadway at 111 Progress Avenue:

- The land use on Progress Avenue is industrial/commercial, observations reveal numerous large trucks making deliveries to these establishments, and in general these types of industrial area often generate truck volumes in excess of 10% of the total roadway traffic volumes. Typically, on average, non-industrial area can encounter approximately 2% of traffic volumes consisting of truck traffic.
- Progress Avenue is a four-lane minor arterial roadway.
- Progress Avenue has a speed limit of 60 kilometres per hour (km/h) and a daily traffic volume of approximately 17,555 vehicles per day.
- The operating speed or 85th percentile of this section of road is 61 km/h.
- 111 Progress Avenue, (a packaging plant), has an office and production facility on the south side of Progress Avenue and a large parking lot located on the north side of Progress Avenue.
- Traffic control signals are located approximately 110 metres east at Midland Avenue, and 450 metres west at William Kitchen Road.
- Sidewalks are located on both sides of Progress Avenue.

Pedestrian Crossover Warrant Study

Transportation Services staff conducted a Pedestrian Crossover Warrant Study at 111 Progress Avenue. Using pedestrian volumes recorded over the peak eight hours of a typical weekday (Monday, March 3, 2008), the following results were obtained:

<table>
<thead>
<tr>
<th>Pedestrian Crossover Warrant</th>
<th>Compliance Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pedestrian Volume</td>
<td>116 %</td>
</tr>
<tr>
<td>Pedestrian Delays</td>
<td>133 %</td>
</tr>
</tbody>
</table>

For a pedestrian crossover to be numerically justified, both the “Pedestrian Volume” and “Pedestrian Delays” warrants must be 100% satisfied.
As outlined in the above table, both warrants have been satisfied. However, a review of the design standards, or “environmental standards” for pedestrian crossovers, which prescribe a roadway environment suitable for this type of control revealed that a pedestrian crossover would not be a suitable form of pedestrian crossing protection at this location.

This is due primarily to the operating speeds (85th percentile speed of 61 km/h) on Progress Avenue, the curvature of the roadway, the large percentage of heavy trucks, the proximity of driveways and numerous turning movements at these driveways. Accordingly, upgraded crossing protection in the form of traffic control signals should be installed at this location.

**Collision History**

A review of the Toronto Police Service collision records for the five-year period ending December 31, 2009 revealed the following history:

<table>
<thead>
<tr>
<th>Five-Year Collision Information</th>
<th>Number of Reported Collisions</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2005</td>
</tr>
<tr>
<td>Total Collisions</td>
<td>2</td>
</tr>
<tr>
<td>Collisions Potentially Preventable by the Installation of Traffic Control Signals</td>
<td>0</td>
</tr>
<tr>
<td>Collisions Involving Pedestrians</td>
<td>0</td>
</tr>
</tbody>
</table>

In summary, studies indicate that there are sufficient pedestrian crossing volumes to justify the installation of a pedestrian crossover at 111 Progress Avenue. However, since this device would not be a suitable form of pedestrian crossing protection given the roadway environment, traffic control signals should be installed at this location.

Accordingly, the resultant installation is expected to improve safety for pedestrians crossing at 111 Progress Avenue, as well as for motorists on Progress Avenue. It should not have a significant impact on the operation of the arterial road network. This location also requires signalizing the access to a parking lot on the north side.
Atlantic Packaging was approached to participate in cost-sharing for these signals at a location further to the west that would provide the same pedestrian crossing protection while providing commercial access to their sites on both sides of Progress Avenue.

However, through negotiations, they advised that they were unable to participate due to financial reasons.

**CONTACT**
Marko A. Oinonen, P.Eng.
Manager, Traffic Operations, Scarborough District
Tel: 416-396-7148
Fax: 416-396-5641
E-Mail: moinone@toronto.ca

**SIGNATURE**

______________________________
Peter J. Noehammer, P.Eng.
Director, Transportation Services, Scarborough District

FJB:ca/lab

**ATTACHMENTS**

1. Location Plan (Proposed Traffic Control Signals – 111 Progress Avenue)