



STAFF REPORT ACTION REQUIRED

Proposed Traffic Control Signals – Pharmacy Avenue and Newport Avenue

Date:	March 17, 2008
To:	Scarborough Community Council
From:	Director, Transportation Services, Scarborough District
Wards:	Ward 35 – Scarborough Southwest
Reference Number:	P:\2007\Cluster B\TRA\Scarborough\sc08023 D07-1744 Pharmacy Newport TCS Draft SCC

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 Pharmacy Avenue and Newport 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:

1. Approve the installation of traffic control signals at the intersection of Pharmacy Avenue and Newport Avenue, and
2. Pass or amend the appropriate by-law(s) accordingly.

Financial Impact

The financial cost of installing these new traffic control signals is approximately \$110,000.00. The funding for these signals is available in Transportation Services Division's Capital Works Budget under Project No. CTP708-01.

ISSUE BACKGROUND

Further to a request from an area resident, Transportation Services staff reviewed the feasibility of installing a pedestrian crossover or traffic control signals on Pharmacy Avenue and Newport Avenue.

COMMENTS

The following characteristics describe the intersection of Pharmacy Avenue and Newport Avenue:

- This T-type intersection is located in the Oakridges Community and is presently controlled by stop signs on Newport Avenue.
- Pharmacy Avenue is a four-lane minor arterial roadway
- Pharmacy Avenue has a posted speed limit of 50 kilometres per hour (km/h) and a daily traffic volume of approximately 10,321 vehicles per day (vpd).
- Newport Avenue is a two-lane local roadway with a posted speed limit of 40 km/h.
- Two elementary schools are located just to the east on Newport Avenue
- Toronto Transit Commission bus stops for both the northbound and southbound directions along Pharmacy Avenue are located in close proximity to the intersection.
- Traffic control signals are located approximately 204.9 metres north at Teesdale Place, and 131.1 metres south at Denton Avenue.
- Sidewalks are located on both sides of Pharmacy Avenue and Newport Avenue.

Pedestrian Crossover Warrant Study

Transportation Services staff conducted a Pedestrian Crossover Warrant Study at the intersection of Pharmacy Avenue and Newport Avenue. Using pedestrian volumes recorded over the peak eight hours of a typical weekday (Wednesday November 7, 2007), the following results were obtained:

Pedestrian Crossover Warrant	Compliance Level
Pedestrian Volume	199%
Pedestrian Delays	103%

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 describe a roadway environment suitable for this type of control (and exposure factors, which would make a pedestrian crossover unsuitable or potentially unsafe) revealed that a pedestrian crossover would not be a suitable form of pedestrian crossing protection at this location. This is due to the proximity of the Traffic Control Signals located 131.1 metres to the south at Denton Avenue. The required spacing to adjacent controls is to be no less than 215 metres. However, the installation of a Pedestrian Crossover between two existing traffic control signals with sub-standard spacing, creates discontinuous traffic flow that may contribute to rear end collision hazard and motorist non-compliance at the pedestrian crossover. In addition, the study shows a significant amount of turning movements at this intersection that could be potentially be unsafe with the installation of a pedestrian crossover. 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, 2007 revealed the following history:

Five-Year Collision Information	Number of Reported Collisions					
	2003	2004	2005	2006	2007	Total
Total Collisions	0	0	0	4	1	5
Collisions Potentially Preventable by the Installation of Traffic Control Signals	0	0	0	0	1	1
Collisions Involving Pedestrians	0	0	0	0	1	1

In summary, studies indicate that there are sufficient pedestrian crossing volumes to justify the installation of a pedestrian crossover at the intersection of Pharmacy Avenue and Newport 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 intersection.

Accordingly, the resultant installation is expected to improve safety for pedestrians crossing Pharmacy Avenue as well as motorists in the intersection and should not have a significant impact on the operation of the minor arterial roadway.

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/FL:ca

ATTACHMENTS

1. Location Plan (Proposed Traffic Control Signals – Pharmacy Avenue and Newport Avenue)