

STAFF REPORT ACTION REQUIRED

Traffic Control Signals - Scarlett Road and Hill Garden Road

Date:	October 10, 2013	
To:	Etobicoke York Community Council	
From:	Director, Transportation Services - Etobicoke York District	
Wards:	Ward 2 – Etobicoke-North	
Reference Number:	p:\2013\Cluster B\TRA\EtobicokeYork\eycc130100-to	

SUMMARY

Although the warrants for the installation of traffic control signals are not met, a safety audit of the existing pedestrian crossover on Scarlett Road between Hill Garden Road and Raymore Drive revealed that this location is no longer environmentally suitable for a pedestrian crossover given the operating speed of vehicular traffic on Scarlett Road. Based on the results of the pedestrian crossover audit, staff is recommending that the pedestrian crossover be replaced with traffic control signals.

Since the Toronto Transit Commission (TTC) operates a transit service on Scarlett Road, City Council approval of this report is required. TTC staff has been consulted on the matter and have not objected to the proposal.

RECOMMENDATIONS

Transportation Services recommends that City Council approve:

- 1. The removal of the pedestrian crossover on Scarlett Road north of Raymore Drive as this location fails the pedestrian crossover safety audit.
- 2. The installation of traffic control signals at the intersection of Scarlett Road and Hill Garden Road.

Financial Impact

Type of Funding	Source of Funds	Amount
Available within capital works budget	Project No. CTP709-01	\$135,000.00

ISSUE BACKGROUND

Transportation Services staff received a request from an area resident to review the feasibility of replacing the existing pedestrian crossover on Scarlett Road between Hill Garden Road and Raymore Drive with traffic control signals. A map of the area is shown on Attachment 1.

COMMENTS

According to the City of Toronto's road classification system, Scarlett Road is classified as a 'minor arterial' roadway. Scarlett Road in the area of Hill Garden Road has a five lane cross section. Raymore Drive and Hill Garden Road are classified as 'local' roadways. The speed limit is 50 km/h on Scarlett Road and Hill Garden Road, while Raymore Drive has a 40 km/h speed limit. The intersection of Scarlett Road and Raymore Drive is controlled by a 'Stop' sign on Raymore Drive facing westbound traffic; the intersection of Scarlett Road and Hill Garden Road is controlled by a 'Stop' sign facing eastbound traffic. A pedestrian crossover (PXO) is located between the intersections of Raymore Drive and Hill Garden Road.

The Toronto Transit Commission (TTC) operates a transit service on Scarlett Road. Bus stops are currently located on the south approach to Raymore Drive. The northbound bus stop is located nearside while the southbound is located far side. In consultation with the TTC, they have agreed to relocate the existing bus stops to nearside stops, once the traffic control signals are operational.

To assess traffic conditions, an eight-hour turning movement count was conducted on a typical weekday at the intersection of Scarlett Road and Raymore Drive. Our turning movement study results were applied to the Traffic Control Signal Warrant analysis. The study results are as follows:

Minimum Vehicular Volume Warrant	24% compliance
Delay to Cross Traffic Warrant	30% compliance

In order to meet the warrants, 100 percent compliance is required in one of the categories or a minimum of 80 percent in both. The warrants for the installation of traffic control signals are not met at the intersection of Scarlett Road and Raymore Drive.

Given the failure of the intersection to meet the traffic control signal warrants, the safety protocol requires that staff conduct a safety audit of the existing pedestrian crossover. One of the primary safety criteria is the road's vehicular operating or 85th percentile speed. Pedestrian crossovers are not environmentally suitable if vehicle operating speeds exceed 60 km/h. Our most recent (May, 2012) speed studies on Scarlett Road in the area of Raymore Drive revealed 85th percentile speeds of 63 km/h. Given the excessive operating speeds on Scarlett Road, the existing pedestrian crossover near Raymore Drive is no longer considered environmentally suitable for safe pedestrian crossings. Since pedestrian crossing assistance is essential in the area, the existing pedestrian crossover should be replaced with traffic control signals.

Since the existing pedestrian crossover is located between Raymore Drive and Hill Garden Road we reviewed several different scenarios including pedestrian only signals between the intersection of Raymore Drive and Hill Garden Road, full traffic controls signals at the intersection of Raymore Drive and Scarlett Road and full traffic control signals at the intersection of Hill Garden Road and Scarlett Road.

Our review of the intersection of Scarlett Road and Raymore Drive revealed a number of issues most of which revolve around the two full movement driveways located opposite Raymore Drive. Since both driveways would be included within the intersection, the current configuration could result in conflicting movements exiting the driveways at the same time (e.g. right turning vehicle from the north driveway and left turning vehicle from the south driveway) in which there is no clear assigned right-of-way. In addition, due to the existing TTC bus stops and the two commercial driveways there is no suitable location for pedestrian crossings on the south approach. Therefore we would be required to prohibit pedestrian crossings on the south approach.

Although the distance between the intersection of Raymore Drive and the intersection of Hill Garden Road would permit the installation of a mid-block pedestrian signal, it would result in the stop bars being located at or just beyond the intersections for both directions. This would result in the stopped vehicles blocking motorists from exiting both Raymore Drive and Hill Garden Road.

Our review of the intersection of Scarlett Road and Hill Garden Road did not reveal any significant operational concerns. However, this location is the furthest from the existing TTC stops. In consultation with TTC staff, they have agreed to relocate the existing northbound and southbound bus stops to the intersection of Scarlett Road and Hill Garden Road.

Therefore, due to operational and safety concerns at the other locations, Hill Garden Road was chosen as the preferred location. This location has been discussed with the area councillor, TTC and Traffic Signal Control staff.

Based on the findings of the pedestrian crossover safety audit, it is recommended that the existing pedestrian crossover be removed and be replaced by traffic control signals at the intersection of Scarlett Road and Hill Garden Road. The installation of traffic control signals will provide a more appropriate form of crossing protection at this location.

CONTACT

Kevin Akins, Traffic Engineering - Etobicoke York District

Tel: (416) 394-6046; Fax: (416) 394-8942;

E-mail: krakins@toronto.ca

AFS18151

SIGNATURE

Steven T. Kodama, P.Eng.

Director, Transportation Services - Etobicoke York District

ATTACHMENTS

Attachment 1: Map