

Pedestrian Crossing Protection Study: Sheppard Avenue West at Magellan Drive

Date:	March 2, 2010
To:	North York Community Council
From:	Director, Transportation Services Division, North York District
Wards:	Ward 9 – York Centre
Reference Number:	<i>ny10048</i>

SUMMARY

The purpose of this report is to deny the request for the installation of traffic control signal or a pedestrian crossover at the intersection of Sheppard Avenue West and Magellan Drive.

The existing traffic and roadway conditions do not warrant the introduction of traffic control signal or a pedestrian crossover at the above noted intersection.

RECOMMENDATIONS

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

1. Deny the installation of traffic control signals or a pedestrian crossover at the intersection of Sheppard Avenue West and Magellan Drive.

Financial Impact

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

ISSUE BACKGROUND

Transportation Services, North York District, was requested by Councillor Maria Augimeri, on behalf of the area residents to review the feasibility of installing traffic control signal or a pedestrian crossover at this intersection.

COMMENTS

Sheppard Avenue West is a major arterial roadway with a regulatory speed limit of 60 km/h and a daily two way traffic flow of approximately 25,000 vehicles per day. Traffic control signals are located approximately 290 metres to the west at Jane Street and 230 metres to the east at Yatescastle Drive/Min Avenue. Magellan Drive is a two lane local roadway with a regulatory speed limit of 50 km/h.

The intersection of Sheppard Avenue West and Magellan Drive, essentially is a four legged intersection with the south leg being Magellan Drive and the north leg providing access to the Toronto Public Library and Toronto Community Housing complex at 1900 Sheppard Avenue West. As such the northbound and southbound traffic are controlled by stop signs and Sheppard Avenue West traffic is free flow.

Toronto Transit Commission bus stops for both the eastbound and westbound directions along Sheppard Avenue West are located in direct proximity to the intersection. The eastbound stop is located at the southwest corner of Sheppard Avenue West and Magellan Drive while the westbound stop is located on the north side of Sheppard Avenue West opposite the east side of Magellan Drive. As such both transit stops are located near side of the intersection, with a bus bay and left turn lane on for both directions.

To determine the feasibility of installing traffic control signals or a pedestrian crossover, this division conducted the appropriate studies to identify the existing traffic conditions and any difficulty pedestrians are experiencing when crossing Sheppard Avenue West at Magellan Drive.

Traffic Control Signal Review

An eight-hour turning movement count was conducted at the intersection of Sheppard Avenue West and Magellan Drive. The technical warrants for the installation of traffic control signals are satisfied to the following extent:

Warrant 1: Minimum Vehicular Volume	18%
Warrant 2: Delay to Cross Traffic	63%
Warrant 3: Collision Hazard	0%

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. Accordingly, the installation of traffic control signals is not warranted.

Pedestrian Crossover Review

An eight hour pedestrian delay study was undertaken on January 26, 2010. The technical warrants for the installation of a pedestrian crossover are satisfied to the following extent:

Warrant 1: Pedestrian Volume	53%
Warrant 2: Pedestrian Delay	0%

In order to meet the technical requirements for the installation of a pedestrian crossover, both warrants must be satisfied 100 percent. The study revealed that during eight hour study, a total of 120 pedestrians crossed Sheppard Avenue West in the vicinity of Magellan Drive. A minimum of 200 pedestrians are required in order to warrant a pedestrian crossover. Given the study results, the installation of a pedestrian crossover is not warranted.

Notwithstanding the above, this division has also reviewed the feasibility of installing a pedestrian refuge island (PRI) to assist pedestrian crossings at this location.

The Pedestrian Refuge Islands Guidelines, require that a minimum of 100 pedestrians are observed crossing the roadway and that the pavement width be a minimum of 16.4 metres wide. In this instance the minimum threshold for pedestrian crossings has been observed however, the pavement width for this section of Sheppard Avenue West at Magellan Drive is only 15.2 metres. Furthermore, given the location of the existing transit stops and the existing left turn lanes, our review has indicated that there would be not suitable location to construct a PRI.

As such, this division cannot support the installation of a PRI at this location.

Collision History

A review of Toronto Police Services collision records for the five-year period ending December 31, 2009 revealed the following history in this area of Sheppard Avenue West:

Five-Year Collision Information	Number of Reported Collision					Total
	2005	2006	2007	2008	2009	
Total Collision	3	1	1	1	2	8
Collisions Potentially Preventable by the Installation of Traffic Control Signals	0	0	0	0	1	1
Collisions Involving Pedestrians	2	0	0	0	0	2

It should also be noted that this intersection has been reviewed on several occasions, dating back to 2003. In all instances the warrants for the installation of a traffic control

signal was not justified. As such, the installation of traffic control signals or a pedestrian crossover cannot be justified and should not be installed at the subject intersection based on the above noted information.

CONTACT

Jack Sinopoli
Supervisor, Traffic Operations
Transportation Services Division, North York District
Tel: 416-395-7467
Fax: 416-395-7544
Email: jsinopol@toronto.ca

SIGNATURE

Myles Currie, B.A.
Director

ATTACHMENTS

Attachment 1: Map – Pedestrian Crossing Protection Study: Sheppard Av W at
Magellan Dr (*ny10048_map*)