

Traffic Control Signals Review - 88 Corporate Drive

Date: June 29, 2018
To: Scarborough Community Council
From: Director, Transportation Services, Scarborough District
Wards: Ward 38 – Scarborough Centre

SUMMARY

This report responds to a request from the Scarborough Community Council to review the feasibility of installing traffic control signals on Corporate Drive at driveway to 88 Corporate Drive. Currently, this driveway is controlled by a stop sign for southbound traffic leaving the condominium complex.

RECOMMENDATIONS

The Director, Transportation Services, Scarborough District recommends that:

1. City Council authorise the installation of traffic control signals on Corporate Drive at the private access approximately 150 metres east of Consilium Place.

FINANCIAL IMPACT

The cost for installing the Traffic Control Signals would be approximately \$200,000.00, the funding for which is not available in the 2018 Transportation Services Capital Budget. The installation would be expected to occur as funding and scheduling permit.

DECISION HISTORY

At its meeting on May 18, 2018, the Scarborough Community Council requested the Director, Transportation Services, Scarborough District to report to the July 4, 2018 meeting of Scarborough Community Council on the feasibility of installing a traffic light

in the vicinity of the driveways of the large condominium complexes at 68 Corporate Drive and 88 Corporate Drive. Below is the link to this decision:

<http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2018.SC31.19>

COMMENTS

Existing Conditions

The following characteristics describe the surface driveway at 66 & 88 Corporate Drive:

- This surface driveway is located east of Consilium Place and west of Bellamy Road North.
- Corporate Drive is a two-lane collector road with a signed regulatory speed limit of 50 km/h.
- The land use in the surrounding area consists mainly of residential condominium dwellings, a health unit, and commercial businesses. There is a proposed future public street directly south of the surface access to 88 Corporate Drive.
- Currently, southbound traffic from the driveways at 66-88 Corporate Drive are required to stop prior to the sidewalk. There are sidewalks on both sides of Corporate Drive at these addresses.
- Toronto Transit Commission (TTC) operates a revenue service on Corporate Drive. There are mid-block bus stops on both sides of Corporate Drive, west of this driveway.
- There are traffic control signal controls at Consilium Place and Corporate Drive 150 metres to the west of the driveway to 88 Corporate Drive, and 150 metres to the west at Consilium Place, and 160 metres to the east at Lee Centre Drive.
- There is street lighting on both sides of Corporate Drive.

Analysis

Pedestrian Crossing Protection Warrant Studies

Transportation Services staff conducted a detailed Warrant Study at 88 Corporate Drive during the peak eight hours of a typical weekday (Tuesday, April 28, 2015). The study provides an assessment of the need for traffic control signals or a pedestrian crossover based on vehicle turning movements and pedestrian crossing volumes and delays, which are expressed in terms of percent compliance with accepted thresholds.

Traffic Control Signal Justification Study

Using traffic volumes recorded during the peak eight hours on Tuesday, April 28, 2015 the following results were obtained:

Traffic Control Signal Warrant	Compliance Level
Minimum Vehicular Volume	36%
Delay To Cross Traffic	74%
Collision Hazard	7%

For traffic control signals to be numerically justified, one of the "Minimum Vehicular Volume" or "Delay to Cross Traffic" or "Collision Hazard" warrants must be 100% satisfied, or both the "Minimum Vehicular Volume" and "Delay to Cross Traffic" warrants must be at least 80% satisfied. Our review of the Collision Hazard is based on the previous three-year (2012 – 2014) collision history available.

As outlined in the above table, the traffic volumes do not satisfy the requirements to install traffic control signals.

Pedestrian Crossing Protection Study

Using traffic volumes recorded during the peak eight hours on Tuesday, April 28, 2015 the following results were obtained:

Pedestrian Crossing Protection	Compliance Level
Pedestrian Volumes	96%
Pedestrian Delays	100%

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, the pedestrian volumes and delays do not technically satisfy the requirements to install a pedestrian crossover at the subject intersection at this time.

During the peak eight hour study period, a total of 244 pedestrian crossings were recorded at this location. For a pedestrian crossover to be numerically justified at this intersection, the required "Pedestrian Volume" must exceed 275 pedestrians crossing Corporate Drive during the peak eight hour period.

However, considering that a pedestrian crossing protection is nearly justified, and that this location will be signalized in the future when a new planned road is constructed to the south opposite these driveways, Traffic Control Signals should be considered. A Pedestrian Crossover (PXO) is not feasible due to this location being too wide to safely

accommodate one as this road has five lanes, and a PXO can only have a maximum of four lanes to cross.

Collision History

An updated review of the available Toronto Police Service collision records for the five-year period ending December 31, 2016 are summarized below.

Five-Year Collision Information	Number of Reported Collisions (By Year)					
	2012	2013	2014	2015	2016	Total
Collisions Potentially Preventable by Traffic Control Signals	1	2	1	0	0	4
Collisions Involving Pedestrians Crossing Corporate Drive	1	0	0	0	0	1

In summary, it is recommended to install traffic control signals at the surface driveway location of 88 Corporate Drive. The TTC has been consulted and concurs with these findings. However, the TTC recommends relocating the existing midblock stops at 88 Corporate Drive (Stop #11366 and Stop #11362) to the intersection of Corporate Drive and Consilium Place. Relocating these stops will improve customer safety by providing them with a protected pedestrian crossing, a more reliable service through efficient stop spacing meeting TTC service standards, and optimally placed TTC stop locations to support both the current needs of customers and future development in this area.

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SIGNATURE

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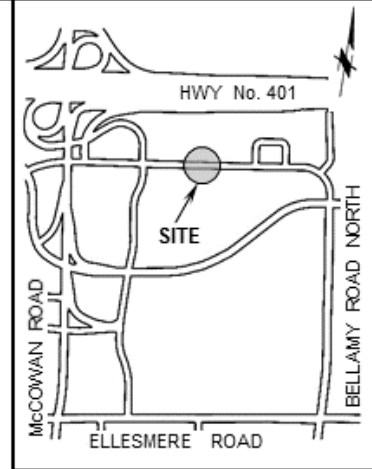
ATTACHMENTS

1. Location Plan (Traffic Control Signals Review - 88 Corporate Drive)

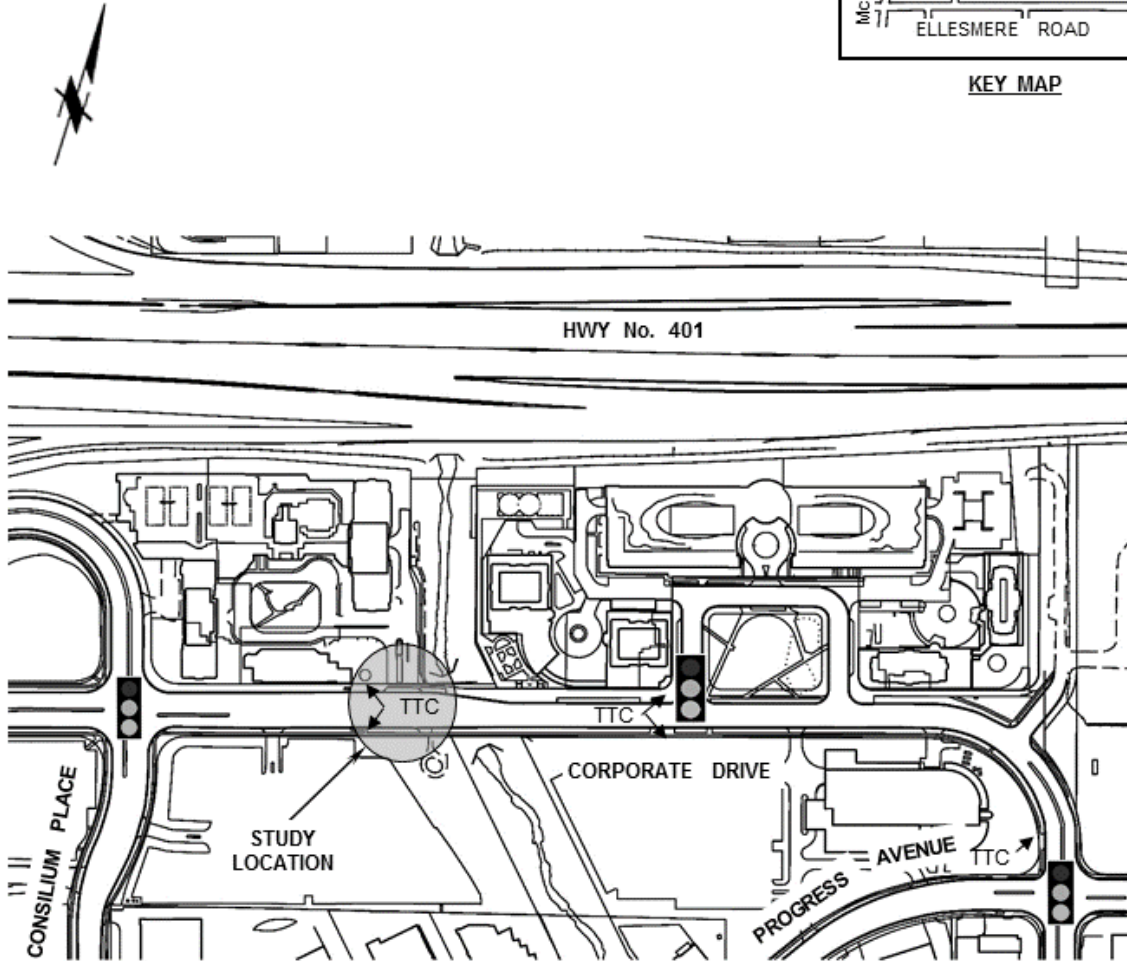
LEGEND



EXISTING TRAFFIC CONTROL SIGNAL



KEY MAP



LOCATION MAP

TORONTO TRANSPORTATION SERVICES

TRAFFIC OPERATIONS
Scarborough District

SCALE:	N.T.S.
DATE:	JUNE, 2018
DRAFTING:	O.K.

**TRAFFIC CONTROL SIGNALS REVIEW
66 to 88 CORPORATE DRIVE**

FILE NUMBER: D18-8956057	
ATTACHMENT 1	WARD 38