

**Installation of Traffic Control Signals: Lawrence Avenue East at Bayview Avenue Northbound Off-Ramp/York University Access/Chedington Place**

<b>Date:</b>	March 31, 2011
<b>To:</b>	North York Community Council
<b>From:</b>	Director, Transportation Services Division, North York District
<b>Wards:</b>	<b>Wards 25 – Don Valley East</b>
<b>Reference Number:</b>	<i>ny11069</i>

**SUMMARY**

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As the Toronto Transit Commission (TTC) operates a transit service on Lawrence Avenue East and Bayview Avenue, City Council approval of this report is required.

To obtain approval for the permanent installation of traffic control signals at the intersection of Lawrence Avenue East at Bayview Avenue Northbound Off-Ramp/York University Access/Chedington Place. TTC staff has indicated that the temporary traffic control signals have resulted in regular travel times for transit vehicles, particularly during the peak periods.

The permanent installation of traffic control signals at Lawrence Avenue East at Bayview Avenue Northbound Off-Ramp/York University Access/Chedington Place will improve the intersection right-of-way for vehicles and pedestrians.

**RECOMMENDATIONS**

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

1. Approve the permanent installation of the traffic control signals at the intersection of Lawrence Avenue East at Bayview Avenue Northbound Off-Ramp/York University Access/Chedington Place;

2. Prohibit westbound right turns on a red signal indication at all times from York University Access; and
3. Prohibit southbound right turns on a red signal indication at all times from Chedington Place driveway.

## **FINANCIAL IMPACT**

The initial cost of installing the temporary traffic control signal at Lawrence Avenue East at Bayview Avenue Northbound Off-Ramp/York University Access/Chedington Place was funded by capital account CTP711-01 in conjunction with the Lawrence Avenue Bridge Rehabilitation Project. In order for the traffic control signal to continue to operate on a permanent basis, an additional cost would be required. All costs associated with the permanent installation of a traffic control signal at this intersection are included in the Transportation Services Division 2011 Operating Budget.

## **ISSUE BACKGROUND**

A temporary traffic control signal was installed in July 2009 at the east intersection of Lawrence Avenue East and Bayview Avenue in order to control traffic during the Lawrence Avenue Bridge Rehabilitation Project. Prior to the installation of the temporary traffic control signal, westbound traffic exiting the York University Glendon College Campus and the residential driveway from the Chedington Place Condominium was required to stop at stop signs at the east intersection of the Lawrence Avenue and Bayview Avenue. In addition, northbound traffic on the Bayview Avenue Off-Ramp was required to stop at Lawrence Avenue East.

## **COMMENTS**

The intersection of Bayview Avenue and Lawrence Avenue East is grade separated. Interchange between Bayview Avenue and Lawrence Avenue East is achieved by northbound and southbound ramps. The intersection at the east limit of the bridge over Bayview Avenue includes the access to York University's Glendon Campus as well as access to the Chedington Place Condominium.

Prior to the Lawrence Bridge Rehabilitation Project in 2009, this Division had registered complaints that northbound motorists on the off-ramp at Lawrence Avenue and westbound motorists exiting Glendon College/Chedington Condominium were experiencing significant delays due to the heavy unrestricted eastbound to northbound left turning movement from Lawrence Avenue. In addition, northbound delays included TTC buses.

In order to facilitate traffic operations during the Lawrence Bridge Rehabilitation Project, a temporary traffic control signal was installed to facilitate traffic movements at the east intersection of Lawrence Avenue and Bayview Avenue. The signal operation was designed with multi signal phasing to allow safe and efficient right-of-way for all traffic movements during the various phases of construction. To ensure safety, right turn on red signal indications were prohibited for southbound vehicles exiting Chedington Place and westbound vehicles exiting the Glendon College driveway.

The technical requirements for the installation of a traffic control signal at Lawrence Avenue East at Bayview Avenue Northbound Off-Ramp/York University Access/Chedington Place are satisfied as follows:

<b>Warrant</b>		<b>Compliance</b>
Warrant 1	Minimum Vehicular Volume	90%
Warrant 2	Delay to Cross Traffic	75%

To consider the installation of traffic of control signals, one of either the Minimum Vehicular Volume or Delay to Cross Traffic warrants must be 100 percent satisfied, or both must be at least 80 percent satisfied.

As the Delay to Cross Traffic warrant has not been satisfied to the extent of 80 percent the overall technical warrant for the installation of a new traffic control signal has not been satisfied. However, given the unique physical layout of this intersection with five legs, along with having unusual traffic patterns resulting from the presence of a University campus and traffic generated from the ramps, a traffic control signal is required in order to achieve safe and efficient movement of traffic at this intersection.

A review of our collision statistics for the preceding three years indicate no angle-type collisions have occurred at the east intersection that would be considered preventable by the installation of a traffic control signal.

Observations have verified that the temporary traffic control signal operation at the intersection of Lawrence Avenue East at Bayview Avenue Northbound Off-Ramp/York University Access/Chedington Place has significantly improved both vehicular and pedestrian operation by way of reducing delays. Furthermore, signalization has removed any perceived confusion over right-of-way given the unique physical layout of this intersection. The signalization of this intersection has resulted in providing an equitable level of service to all intersection users.

In this regard, this Division supports the designation of permanent status of the traffic control signal at this location and the prohibition of the no right turn on red signal indication for southbound vehicles exiting the Chedington Place Condominium access and also the westbound vehicles exiting the York University access.

The Ward Councillor has been advised and supports the recommendation contained within this staff report.

## **CONTACT**

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## **SIGNATURE**

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Myles Currie, B.A.  
Director

## **ATTACHMENTS**

Attachment 1: Map – Lawrence Av E at Bayview Av NB Off-Ramp / York University Access; Traffic Control Signals