



**STAFF REPORT
ACTION REQUIRED**

**Review of Traffic Control Signals – Broadview Avenue
and Bridgepoint Drive**

Date:	November 6, 2014
To:	Toronto and East York Community Council
From:	Director, Transportation Services, Toronto and East York District
Wards:	Toronto-Danforth – Ward 30
Reference Number:	Ts2014159te.top.doc

SUMMARY

Transportation Services has reviewed the need for traffic control signals at the intersection of Broadview Avenue and Bridgepoint Drive, as directed by Toronto and East York Community Council at its meeting of August 12, 2014.

Based on recent traffic studies completed by the City under current conditions where Bridgepoint Hospital is open and the internal road network partially operational, it has been determined that traffic control signals at the intersection of Broadview Avenue and Bridgepoint Drive are not warranted at this time and deferral of installation is recommended. The existing stop control for Bridgepoint Drive at the intersection is acceptable at this time.

However, staff also recommend that once all the roads within the Bridgepoint lands are open to the public another traffic study be done at the intersection. If traffic signals are not warranted at that time, studies should be completed every six months until development of the first block within the Bridgepoint Hospital campus commences, at which time, it is recommended that the signals be installed.

RECOMMENDATIONS

Transportation Services recommends that:

1. City Council defer the installation of traffic control signals at the intersection of Broadview Avenue and Bridgepoint Drive at this time.

2. City Council authorize Transportation Services to install traffic control signals at the intersection of Broadview Avenue and Bridgepoint Drive once traffic studies indicate that installation is warranted or prior to completion of construction on the next block to be developed within the Bridgepoint Hospital campus plan of subdivision, whichever occurs earlier..
3. City Council direct Transportation Services to monitor the intersection of Broadview Avenue and Bridgepoint Drive once all the roads within the Bridgepoint lands are open and then every six months thereafter until either the installation of traffic control signals is justified or the next block within the Bridgepoint Hospital campus lands is developed.
4. City Council authorize and direct appropriate City Officials to take such actions as are necessary to implement the foregoing, including proceeding with acceptance and dedication of Bridgepoint Drive and Blue Rodeo Way as appropriate and amendment to the Subdivision Agreement (June 15, 2009) if necessary.

Financial Impact

Pursuant to a Subdivision Agreement, dated June 15, 2009, Bridgepoint Health/Bridgepoint Hospital are responsible for the cost of installation of traffic control signals on Broadview Avenue at Bridgepoint Drive based on background studies submitted at the time of the development approvals. Installation was contemplated at the time of completion of the road network within the plan of subdivision at an estimated cost of \$250,000.00 which has been secured. A further lump sum payment of \$30,000.00 for future on-going maintenance has also been paid. Should the costs exceed this amount at the time of installation by the City, the City would be responsible for any additional funds under the Transportation Services Capital Program.

DECISION HISTORY

Toronto and East York Community Council, at its meeting of August 12, 2014, deferred Item TE34.149, from the Director, Transportation Services, Toronto and East York District, headed "Traffic Control Signals - Broadview Avenue and Bridgepoint Drive", until the December 4, 2014 meeting of the Toronto and East York Community Council.

Also, Council directed that City Staff undertake traffic investigations on Broadview Avenue, Gerrard Street East, Jack Layton Way and St. Matthews Road to confirm the current volumes and patterns on those roads and compare them against the projected traffic volumes in the accepted traffic study submitted at the time of the development approvals. Staff were also directed to report the findings and recommendations to the December 4, 2014 meeting when the above item will be reconsidered. The link to Item TE34.149 is:

<http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2014.TE34.149>

ISSUE BACKGROUND

The Bridgepoint Hospital/Don Jail lands recently redeveloped at the north-west

corner of the intersection of Broadview Avenue and Gerrard Street East are subject to a Subdivision Agreement, dated June 15, 2009, that requires the developer to pay for the cost of design and installation of traffic control signals at the intersection of Broadview Avenue and Bridgepoint Drive. Background studies at the time of development approvals indicated that installation was warranted once the hospital was open and the road within the plan of subdivision complete. The anticipated cost of installation was \$250,000.00 with an additional \$30,000 payment required for future maintenance.

Bridgepoint Drive and Blue Rodeo Way have been recently constructed and will complete the new road network within the Bridgepoint Hospital campus to service the hospital building, the future park, and development blocks within these lands. The Subdivision Agreement contemplated that the traffic signals at Broadview Avenue would be installed following construction and prior to acceptance of these roads unless otherwise acceptable to Construction and Engineering Services. Transportation Services submitted a report dated June 2, 2014 to City Council seeking the necessary approvals to proceed with the installation.

However, local residents expressed concerns that the installation of traffic signals at the intersection of Bridgepoint Drive and Broadview Avenue may result in increased cut-through traffic on Victor Avenue. As a result, Toronto and East York Community Council deferred consideration of the above report until further traffic investigations could be undertaken with the hospital now open to determine if the actual resulting traffic volumes combined with appropriate projections would warrant traffic control signals. The traffic investigations have now been completed on the subject roads.

COMMENTS

Existing Conditions

The intersection of Broadview Avenue and Bridgepoint Drive is located east of the Don Valley, approximately 160 metres north of the traffic control signals at Gerrard Street East. Broadview Avenue is a north/south four-lane minor arterial road with TTC streetcar service. Bridgepoint Drive is proposed as an 8.5 metre wide two-lane, east-west road that is stop-controlled at the intersection with the west side of Broadview Avenue. It is off-set approximately 15 metres south of Victor Avenue. Bridgepoint Drive and Blue Rodeo Way will not be open to the public until the work is accepted, required land conveyances completed and roads have been dedicated. Bridgepoint Drive currently only accesses the front entrance to the hospital as a driveway, but will eventually connect with Jack Layton Way to the south via Blue Rodeo Way. Victor Avenue is a local residential street that operates one-way eastbound from Broadview Avenue to Carlaw Avenue.

There is a northbound TTC stop for Sunday service on Broadview Avenue, north of Victor Avenue and a southbound stop for regular service on Broadview Avenue, north of Jack Layton Way. However, the TTC has advised that the northbound stop will be removed before the end of 2014. Also, if traffic signals are not installed at the intersection of Bridgepoint Drive and Broadview Avenue the TTC has advised that the southbound stop will likely be removed as well. As a result the closest northbound and

southbound Broadview Avenue TTC stops to Bridgepoint Drive will be at Langley Avenue.

A pedestrian crossover is located approximately 100 metres north of the subject intersection on Broadview Avenue at Langley Avenue. This pedestrian crossover will remain in place.

Traffic Study Results

Traffic studies were completed on Broadview Avenue, Gerrard Street East, Jack Layton Way and St. Matthews Road in September 2014. The results of these studies were compared to the 2004 predicted future total traffic volumes in the study completed by BA Consultants during the subdivision approval process. This comparison indicated that the 2004 study had generally over predicted future traffic volumes for applicable roads. Attached Drawing No. 421G-1557 depicts the traffic volumes predicted in 2004 and the traffic volumes observed in September 2014.

Traffic Control Signals

The requirement for traffic control signals at the intersection of Bridgepoint Drive and Broadview Avenue was based on the same 2004 study mentioned above that predicted future traffic volumes generated by the new hospital building and new road network once the Don Jail was closed, and the new hospital completed. Also, it was assumed that the signalization of the intersection of Broadview Avenue and Bridgepoint Drive would encourage 50 percent of eastbound left-turn traffic at the intersection of Broadview Avenue and Jack Layton Way to reroute to the new signals.

The hospital is now open as are the first phase roads (Jack Layton Way and St. Matthews Road), within the plan of subdivision so the need for traffic control signals can be re-evaluated based on observed traffic data. However, since Bridgepoint Drive is not yet open to Jack Layton Way it is necessary to use the same methodology used in the 2004 study to determine the traffic volume that would likely use the intersection of Broadview Avenue and Bridgepoint Drive when it is part of the fully operational road network. As part of this process a peak eight-hour, weekday traffic count was done recently at the intersection of Broadview Avenue and Jack Layton Way and it was assumed that 50 percent of the observed eastbound left-turn traffic would divert to the intersection of Broadview Avenue and Bridgepoint Drive. These volumes, as well as the past predicted volumes for the less significant intersection movements, were used to reevaluate the need for traffic control signals. The results of this warrant analysis, as well as the 2004 results are as follows:

	<u>2004 Study Results</u>	<u>2014 Study Results</u>
Minimum Vehicular Volume:	84 percent;	17 percent;
Delay to Cross Traffic:	88 percent.	44 percent.

To meet the technical requirements for the installation of traffic control signals, one of the Minimum Vehicular Volume or Delay to Cross Traffic justifications must be 100 percent satisfied, or any two must be at least 80 percent satisfied. Based on the above

results, the installation of traffic control signals is not justified at the intersection of Broadview Avenue and Bridgepoint Drive at this time.

As a result of the review of the need for traffic control signals at the intersection of Broadview Avenue and Bridgepoint Drive it is recommended that traffic signals not be installed at this time. A stop control for Bridgepoint Drive at the intersection is acceptable at this time.

However, the opening of all the roads within the Bridgepoint Hospital campus lands will facilitate the use of the front entrance of the hospital. As a result, there may be an increase in pedestrian crossings and/or vehicular volumes on Bridgepoint Drive and at the intersection with Broadview Avenue. It is also likely that any further development within the plan of subdivision will justify traffic signals. Therefore further studies should be completed every six months until either the installation of traffic control signals is warranted or prior to completion of construction on the next block to be developed within the Bridgepoint Hospital campus plan of subdivision, whichever occurs earlier.

CONTACT

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SIGNATURE

Kyp Perikleous
Director, Transportation Services
Toronto and East York District

LIST OF ATTACHMENTS

- (1) Drawing No. 421G-1557, dated November 2014
- (2) Drawing No. 421G-1560, dated November 2014

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