Eglinton Crosstown LRT At-grade Segment Traffic By-law Amendments

Date: September 5, 2017
To: Public Works and Infrastructure Committee
From: General Manager, Transportation Services
Wards: Wards 26, 34, 35 and 37

SUMMARY

The purpose of this report is to seek approval from City Council for a variety of physical and operational changes to Eglinton Avenue East required to support the construction and final design of the Metrolinx Eglinton Crosstown Light Rail Transit (ECLRT).

The required changes include lane closures and turn prohibitions between Victoria Park Avenue and Rosemount Drive, removal of the High Occupancy Vehicle (HOV) lanes between Leslie Street and Kennedy Road, along the at-grade (surface) segment of the ECLRT and removal of the traffic control signal at Eglinton Avenue West and Prudham Gate.

The proposed closures and amendments form elements of road occupancy permits and construction traffic management plans necessitated by the construction staging plans for this project. The proposed changes to the HOV lane designations have been developed through consultation with the TTC and affected Ward Councillors.

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

The General Manager, Transportation Services recommends that:

1. City Council approve the removal of the existing traffic control signal at Eglinton Avenue East and Prudham Gate/private access.

2. City Council rescind the existing northerly westbound and southerly eastbound reserved lanes for public transit vehicles (PTVs), high occupancy vehicles containing a minimum of 2 persons (HOV2+), taxicabs, plated motorcycles and bicycles in effect from 7:00 a.m. to 10:00 a.m. and 3:00 p.m. to 7:00 p.m., Monday to Friday, except public holidays on Eglinton Avenue East, between a point 100 metres east of Don Mills Road and Kennedy Road.

3. City Council rescind the existing northerly westbound and southerly eastbound reserved lanes for public transit vehicles (PTVs) and taxicabs, plated motorcycles and bicycles in effect from 7:00 a.m. to 10:00 a.m. and 3:00 p.m. to 7:00 p.m., Monday to Friday, except public holidays on Eglinton Avenue East, between Leslie Street and a point 500 metres west of Don Mills Road.

4. City Council close highways on Eglinton Avenue East to vehicular traffic, at the locations listed in Attachment 1 to this report.

5. City Council prohibit left turns at the locations listed in Attachment 2 to this report.

FINANCIAL IMPACT

There is no financial impact to the City of Toronto associated with this report. Crosslinx Transit Solutions (CTS), the contractor for this Metrolinx project, is required to implement all recommendations as conditions of permit approval.

The Deputy City Manager & Chief Financial Officer has reviewed this report and agrees with the financial impact information.

DECISION HISTORY

At its meeting of March 31, 2016, City Council adopted item PW11.5 entitled Metrolinx LRT Projects – Delegation to the General Manager, Transportation Services, to Approve Road Closures Up To And Including 365 Consecutive Days for the Metrolinx Crosstown LRT. This authorized the General Manager, Transportation Services, to temporarily close any highway or part of a highway, until January 1, 2022 for a period up to and including 365 consecutive days as required for the purposes of construction of the Metrolinx Eglinton Crosstown LRT project. The authorization did not extend to the F. G. Gardiner Expressway, the Don Valley Parkway, the W. R. Allen Road, Black Creek Drive or Highway 27. As part of the action, it was noted that Metrolinx has developed
and implemented a comprehensive communications program utilizing a variety of meeting techniques to keep City Councillors and their staff apprised of plans and developments related to the project. From this plan, the proposal outlined in this report have been developed. The Council decision can be found at: http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2016.PW11.5

At its meeting on July 12, 2016, City Council adopted item PW14.10 entitled Metrolinx Eglinton Crosstown LRT Corridor Long-Term Temporary Road Closures and Temporary Traffic Signal Approval. The Council decision can be found at: http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2016.PW14.10

At its meeting on December 13, 2016, City Council adopted item PW 17.9 entitled Metrolinx Eglinton Crosstown LRT Long-Term Temporary Traffic and Parking Amendments. The Council decision can be found at: http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2016.PW17.9


At its meeting on March 9, 2017, City Council adopted item TE 22.57 entitled Metrolinx Eglinton Crosstown LRT Long-Term Temporary Amendment to Traffic Regulations (Ward 21). The Council decision can be found at: http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2017.TE22.57

At its meeting on April 4, 2017, Etobicoke Community Council adopted item EY 21.27 entitled Metrolinx Eglinton Crosstown LRT Long-Term Temporary Road Closure of Yarrow Road. The Council decision can be found at: http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2017.EY21.27

At its meeting on May 2, 2017, Etobicoke Community Council adopted item EY 22.16 entitled Metrolinx Eglinton Crosstown LRT Long-Term Temporary Conversion of Dynevor Road to a Two-way Street. The Council decision can be found at: http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2017.EY22.16


At its meeting on May 24, 2017, City Council adopted item PW 21.4 entitled Eglinton Crosstown LRT Long-Term Roadway Amendments: Keelsdale and Fairbank Stations. The Council decision can be found at: http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2017.PW21.4
At its meeting on June 13, 2017, North York Community Council adopted item NY 23.20 entitled Oakwood Station Traffic Management Update. The Council decision can be found at: http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2017.NY23.20

At its meeting on July 4, 2017, City Council adopted item PW 22.6 entitled Eglinton Crosstown LRT Long-Term Roadway Amendments: Kennedy Station. The Council decision can be found at: http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2017.PW22.6

At its meeting on July 4, 2017, City Council adopted item TE25.118 entitled Menin Road - Removal of Turn Prohibition for Crosstown Construction. The Council decision can be found at: http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2017.TE25.118

**COMMENTS**

**Background**
The construction of the ECLRT is a complex multi-year design-build project being undertaken by CTS. The duration of construction activities is currently planned to continue until 2021. Long-term construction staging plans for the at-grade (surface) segment of the ECLRT have been developed by the Metrolinx contractor (CTS) for the section between Victoria Park Avenue and Rosemount Drive, and work zones in this early phase will not extend into the majority of signalized intersections. The intent of the staging plans is to maintain at least two through general traffic lanes for eastbound and westbound Eglinton Avenue across the at-grade corridor where ever and whenever feasible, until construction staging advances to LRT platform and intersection construction at a later stage. Maintenance of public and contractor safety is paramount throughout the works, as is pedestrian access.

The development of construction traffic management plans is required to mitigate the impacts of LRT construction and the plans are an integral part of the road occupancy permit submission. Adherence to the approved plan is a requirement of permit approval. Work on site cannot proceed until the appropriate permits have been issued for each location.

The recent focus on construction traffic management has been the development of plans for the at-grade segment of the ECLRT. The at-grade segment runs along Eglinton Avenue East, between Kennedy Road and just west of Leslie Street.

The section of Eglinton Avenue East, between Eglinton Square and Rosemount Drive is the first at-grade section scheduled to commence significant construction activities. This section is expected to begin in early October 2017, with the remaining sections of the at-grade segment following thereafter. Therefore this report includes detailed plans regarding the Eglinton Square and Rosemount Drive section, and also general plans for the entire at-grade section as a whole. Upon conclusion of the construction activities, the proposed changes are to remain in place in order to accommodate the final design of the ECLRT.
At-Grade Segment Construction Activities and Final Design

Upcoming construction activities and the final design for the at-grade segment of the ECLRT that are expected to commence in October 2017, require the following amendments:

- removal of the traffic control signal at Eglinton Avenue East and Prudham Gate;
- one eastbound and one westbound lane be closed on Eglinton Avenue East, between Brentcliffe Road and Rosemount Drive;
- removal of, the existing designation of HOV lanes in both eastbound and westbound directions on Eglinton Avenue East, between Leslie Street and Kennedy Road where the number of traffic lanes available per direction is less than three.;
- turn prohibitions at all midblock locations.

Eglinton Avenue East is classified as major arterial in the City's Road Classification System, and has a posted speed limit of 60 km/h. There are sidewalks on both sides of the street.

Eglinton Avenue East and Prudham Gate Traffic Control Signal Removal

The final design of the ECLRT specifies that the Eglinton Avenue East and Prudham Gate intersection operate as a right-in, right-out, for vehicular traffic. The EA approved plan includes the removal of the Eglinton Avenue East and Prudham Gate traffic control signal, and the implementation of stop sign control.

Pedestrian access to businesses and private property along Eglinton Avenue East will be maintained, with pedestrians being able to cross Eglinton Avenue East at the neighbouring traffic control signals of Warden Avenue and Sinnott Road.

Lane Closures

The final design of the ECLRT is planned to have two through lanes in both the east and west directions for Eglinton Avenue East. Eglinton Avenue East currently has three through lanes between Leslie Street and Kennedy Road. As construction substantially commences, these three through lanes will be permanently reduced to two lanes in October 2017.

In addition to the single through lane closure across the segment, merge and turning lanes are proposed to be closed as well. The closures will remain in affect permanently as the lanes are not present in the ECLRT design. Refer to attachment 1 for further details.

Street safety is of primary consideration when planning the closure of the lanes for construction purposes. In order for construction crews to perform their duties in a safe and effective manner, construction zones need to be allocated a proper amount of space. Access to properties, including businesses will be maintained at all times, with particular attention towards maintaining at least one driveway access where a property has more than one. As the plan is to occupy the centre portion of the roadway, vehicular property access will be maintained through right-in, right-out movements.
The section of Eglinton Avenue East, between Brentcliffe Road and Leslie Street will remain under its current configuration going forward.

**HOV Lane Designation Removal**

Once implemented, the operation of the ECLRT is to replace the primary bus service currently available on Eglinton Avenue East. Therefore, designation of lanes for high occupancy vehicles will be permanently removed. In order to facilitate the construction of the LRT guideway along the centre of the roadway, removal of the HOV lane designation during the construction process is required.

The removal of the HOV designation allows for at least two through lanes of traffic in both directions throughout the entire section of the roadway. A consensus was developed amongst all project stakeholders, including the TTC, that impacts to the roadway would be less detrimental if motorists are permitted to drive in both through lanes. Furthermore, as the final design requires the removal of the HOV designation, doing so at this particular stage of construction allows for a safe and effective transition process.

**Turn Prohibitions**

The at-grade guideway for the ECLRT vehicles is designed to occupy the centre of the Eglinton Avenue East road allowance for the majority of the surface segment. The guideway is an exclusive right-of-way for light rail vehicles (LRVs), and therefore general traffic is not permitted to cross the rails at any location other than at traffic control signals, for safety reasons. At signals, the movement of LRVs and general traffic (including pedestrians) will be separated by discrete control signals.

When the construction of the LRT guideway occupies the centre of Eglinton Avenue East, previous midblock left-turn opportunities will no longer be available, into and out of properties on both sides of the street. Instead, alternate access will be provided and promoted, such as U-turn movements at downstream traffic signals.

Provisions in the traffic management plan exist to account for the altered traffic flow caused by the lane closures and turn prohibitions. For instance, the displacement of midblock left turns to U-turn movements at traffic control signals needs to be accommodated and promoted. As noted with the related lane closures, access to properties will be maintained at all times.

The listing of proposed permanent left-turn restrictions is provided in Attachment 2.

**Consultation**

The Rapid Transit Community Relations team at Metrolinx has developed and implemented a comprehensive communications program to keep local Councillors apprised of plans and developments related to the project. The consultation strategy includes one-on-one briefings of Councillors to address specific milestone events and emerging issues, as well as stakeholder and ad hoc meetings as needed. The
recommendations contained in this report have been shared through direct consultation with the Ward Councillors.

The construction staging of the LRT facility, including the guideway, proposed and required by CTS, and the traffic management strategies and regulations associated with the occupation of the roadway discussed in this report, have been reviewed by Transportation Services staff and Metrolinx. There will be opportunities to refine the traffic controls should unforeseen issues arise over the multi-year duration of construction.

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SIGNATURE

Barbara Gray  
General Manager, Transportation Services

ATTACHMENTS

Attachment 1 - Lane Closures on Eglinton Avenue East  
Attachment 2 - Left Turn Prohibitions on Eglinton Avenue East  
Attachment 3 - Eglinton Crosstown LRT At-grade Segment Traffic By-law Amendments
Attachment 1 - Lane Closures on Eglinton Avenue East

a. The westbound curb lane on Eglinton Avenue East, between Brentcliffe Road and Rosemount Drive.

b. The eastbound curb lane on Eglinton Avenue East, between Brentcliffe Road and Sinott Road.

c. The westbound left turn lane on Eglinton Avenue East to the westerly access at 1897 Eglinton Avenue East.

d. The eastbound left turn lane on Eglinton Avenue East to the access at 1900 Eglinton Avenue East.

e. The eastbound left turn lane on Eglinton Avenue East to the easterly access at 1920 Eglinton Avenue East.

f. The westbound left turn lane on Eglinton Avenue East to the access at 1911 Eglinton Avenue East.

g. The eastbound left turn lane on Eglinton Avenue East to the access at 1940 Eglinton Avenue East.

h. The westbound left turn lane on Eglinton Avenue East to the easterly access at 1941 Eglinton Avenue East.

i. The eastbound left turn lanes on Eglinton Avenue East to the access at 1966 and 1972 Eglinton Avenue East.

j. The eastbound right turn lane on Eglinton Avenue East at Prudham Gate.

k. The westbound left turn lane on Eglinton Avenue East at Prudham Gate.

l. The eastbound left turn lane on Eglinton Avenue East to the access at 1980 Eglinton Avenue East.

m. The westbound left turn lane on Eglinton Avenue East to the access at 1995 Eglinton Avenue East.

n. The eastbound left turn lane on Eglinton Avenue East at Thermos Road.
### Attachment 2 – Left-Turn Prohibitions to be Enacted

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<thead>
<tr>
<th>Intersection or Portion of Highway</th>
<th>Direction</th>
<th>Turns Prohibited</th>
<th>Times and/or Days</th>
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<td>Northbound</td>
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