TORONTO

# STAFF REPORT
# ACTION REQUIRED

# Environmental Assessment Study of St. Clair Avenue West / Rail Crossing between Keele Street and Old Weston Road

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| **Date:** | April 27, 2012 |
| **To:** | Public Works and Infrastructure Committee |
| **From:** | Acting General Manager, Transportation Services Division |
| **Wards:** | Ward 11 (York South-Weston)<br>Ward 17 (Davenport) |
| **Reference Number:** | P:\2012\Cluster B\TRA\TIM\pw12013tim |

## SUMMARY

Public Works and Infrastructure Committee, at its meeting of April 18, 2012, considered a letter dated April 12, 2012 from Councillor Cesar Palacio (PW14.4) with respect to an "Environmental Assessment of the Proposed Widening of the CP Railway Bridge Crossing on St. Clair Avenue West between Keele Street and Old Weston Road". In considering this communication, the Committee, among other things, directed the Acting General Manager, Transportation Services, to report back to its May 16, 2012 meeting on the actions required to initiate this Environmental Assessment.

This report responds to this directive and recommends that City Council direct staff to initiate and undertake an Environmental Assessment Study of the St. Clair Avenue / Rail Crossing between Keele Street and Old Weston Road. The study would follow the Municipal Class Environmental Assessment process, as a Schedule C undertaking.

## RECOMMENDATIONS

**The Acting General Manager, Transportation Services recommends that:**

1. City Council direct the Acting General Manager, Transportation Services to initiate and carry out an Environmental Assessment Study of the St. Clair Avenue / Rail Crossing between Keele Street and Old Weston Road.

### Implementation Points

The direction by City Council to undertake an Environmental Assessment Study will require Transportation Services staff to:

- Prepare and issue a Request for Proposals;
- Evaluate proposals and select a qualified Consultant to provide the resources and expertise to assist the City in carrying out the study;
- Manage the Consultant to ensure that all of the study requirements are met;
- Prepare a Staff Report at the conclusion of the study, with recommendations for consideration by Public Works and Infrastructure Committee; and
- Consider the study recommendations in subsequent planning, funding, and implementation decision-making processes.

### Financial Impact

Retention of a Consultant to assist the City in carrying out the Environmental Assessment Study is expected to cost in the order of $200,000. Funds can be accommodated in the Transportation Services 2012 Capital Budget and 10-Year Capital Plan as part of the Engineering Studies program although its inclusion in the 2012 program will require the reallocation of funds from one or more other planned studies.

There are no funds currently allocated in the Transportation Services approved 10-Year Capital Plan for the widening of the bridge, any required property acquisition, or other improvements that may be recommended in the Environmental Assessment Study to address the traffic problems on this section of St. Clair Avenue West. A new bridge, should this be the preferred alternative, is estimated to cost in the order of $30 million or more, although costs could be considerably higher for complex rail detours which would likely be required during construction. Any changes to the Transportation Services 10-Year Capital Plan will require consideration and approval through the future year budget processes. The Deputy City Manager and Chief Financial Officer has reviewed this report and agrees with the financial impact information.

## DECISION HISTORY

Public Works and Infrastructure Committee, at its meeting of April 18, 2012, considered a letter dated April 12, 2012 from Councillor Cesar Palacio (PW14.4) with respect to an "Environmental Assessment of the Proposed Widening of the CP Railway Bridge Crossing on St. Clair Avenue West between Keele Street and Old Weston Road". The Committee, among other things, directed the Acting General Manager, Transportation Services, to report back to its May 16, 2012 meeting on the actions required to initiate this Environmental Assessment of possible measures in the area to improve traffic operations, safety and movements on St. Clair Avenue West, such measures to include, but not be limited to, the widening of the rail bridge structure between the Old Weston Road and Keele Street/Weston Road intersections.

## ISSUE BACKGROUND

The railway structure over St. Clair Avenue West between Keele Street/Weston Road and Old Weston Road was constructed in 1931-32, replacing a level crossing. The bridge has a median pier; each span accommodates a 6.4 m wide roadway and a 2.66 m wide sidewalk. The total width between abutments is 19.2 m.

The rail crossing is a critical link in the area transportation system, as the street grid of the area is disrupted by the rail corridors and traffic is restricted to a few road crossings (Dupont Street, St. Clair Avenue, Old Weston Road / Junction Road and Rogers Road). The structure carries GO Transit, VIA, CN, and CP trains. The rail corridor is currently being improved to accommodate expanded GO service and the future Air-Rail Link service, which is scheduled to be in serve in 2015. There is no rehabilitation or remedial work intended for this structure associated with the Air Rail Link project.

## COMMENTS

In July 2010, the Toronto Transit Commission (TTC) began operation of their streetcar service in a dedicated transit right-of-way on this section of St. Clair Avenue West, between Lansdowne Avenue and the Gunns Road loop. St. Clair Avenue West is a heavily-used arterial road that generally features two through traffic lanes in each direction alongside the dedicated TTC streetcar right-of-way. However, at the railway underpass between Keele Street/Weston Road and Old Weston Road, the narrow bridge span limits the roadway to one traffic lane in each direction. As a consequence, traffic congestion occurs upstream of the crossing in both directions, triggering traffic diversion through the surrounding community and raising concerns about safety, environmental quality, and business impacts. The situation will be exacerbated as development intensification in the area continues. Motorists, local businesses and residents, and the affected Ward Councillors have requested that the City take steps to alleviate this congestion.

There needs to be detailed analysis (including computer traffic modelling) to determine the extent, cause and implications of this congestion, including the capacity of the road network at this rail crossing, diversion of traffic to/from alternate routes, geometric or intersection operational problems, streetcar-related impacts, and motorist origin-destination patterns. With the problem clearly defined, various alternatives can then be identified to address the issue(s).

One solution that has been proposed is the widening (replacement) of the rail structure to eliminate the road capacity "bottleneck". There are, however, other potential solutions to be considered and a comprehensive study is required to assess needs, develop alternatives, define constraints/analysis factors, evaluate options, and determine a recommended plan for the area for funding and implementation. A project of this nature is required to follow the processes of the Environmental Assessment Act of Ontario,

which include a comprehensive review of alternatives and impacts, full documentation, and public/stakeholder consultation.

It should be noted that if a new or modified bridge structure is recommended, it would need to be designed to current geometric standards and the Canadian Highway Bridge Design Code and adequately accommodate motor vehicle traffic, transit, emergency vehicles, trucks, cyclists, and pedestrians (including those with disabilities). Furthermore, the posted vertical clearance of 4.0 m is considerably below the current 5.0 m standard and, as a result, any replacement structure would require lowering St. Clair Avenue or raising the rail lines in order to achieve the required vertical clearance. The ability to lower St. Clair Avenue is constrained by existing below-grade utilities and the roadway approach grades of 6 % to the west and 5 % to the east which are close to the maximum permitted. Further issues and challenges include possible property acquisition, constructability and staging (to maintain CN, CP, GO, VIA, and Air-Rail Link operations as well as TTC service on St. Clair Avenue during construction), geometry and operations at adjacent intersections, and ultimately the capital cost of addressing and mitigating all these issues.

There is an existing Board Order (May 1932) in place for the structure under the Canadian Transportation Agency outlining the cost share apportionment. This would require renegotiation if the structure B widened.

This is a complex and constrained situation. The Environmental Assessment study would work through all these issues and determine a recommended plan for consideration by Council. It is expected that the study would take approximately one year to complete.

The timing of commencement of the EA is of the essence, given the scheduled 2015 opening of the Air Rail Link. If a widened or reconstructed bridge is part of the recommended solution, property acquisition would be required along with a minimum one-year period of detail design, all of which would need to have funding approved before initiating. The construction of a new or altered bridge would require complex rail

detours and would need to be done in several stages. No new work could be performed in the rail corridor prior to completion of the Air Rail Link project. The timing for this work, therefore, is extremely aggressive.

## CONTACT

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## SIGNATURE

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Andrew Koropeski, P.Eng.
Acting General Manager, Transportation Services

## ATTACHMENTS

Figure 1: Location Plan
Figure 2: Existing Crossing

**Figure 1: Location Plan**

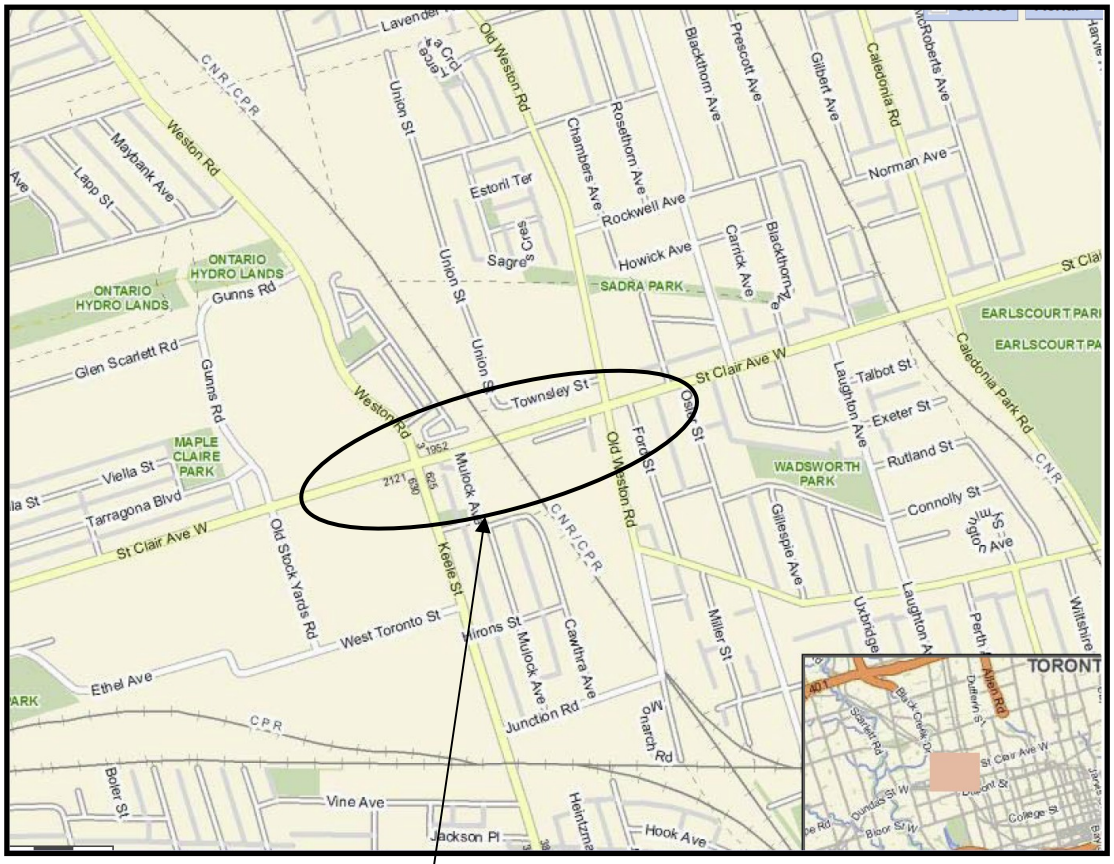


**Figure 2: Existing Crossing**

Figure 2a: Newly Constructed Subway, May 1932


Figure 2b: Existing Conditions, 2012