

CITY OF VAUGHAN

EXTRACT FROM COUNCIL MEETING MINUTES OF OCTOBER 20, 2015

Item 19, Report No. 35, of the Committee of the Whole, which was adopted without amendment by the Council of the City of Vaughan on October 20, 2015.

19 LOAD RESTRICTION BY-LAW ON BRIDGE NO. 008601 HUMBER BRIDGE TRAIL BRIDGE IN THE VICINITY OF HIGHWAY 27 AND MAJOR MACKENZIE DRIVE WARD 1

The Committee of the Whole recommends approval of the recommendation contained in the following report of the Commissioner of Public Works, the Director of Capital Delivery and Asset Management and the Director of Transportation Services, Parks and Forestry Operations, dated October 7, 2015:

Recommendation

The Commissioner of Public Works, the Director of Capital Delivery and Asset Management and the Director of Transportation Services, Parks and Forestry Operations recommend:

1. That a by-law be enacted to limit the loading on the existing concrete bridge, being Bridge No. 008601, (Humber River, West Branch on Humber Bridge Trail, approximately 0.2 km east of Highway No. 27) to a maximum of 3 tonnes; and
2. That the by-law be in effect for a period of 1 year.

Contribution to Sustainability

This report contributes to the goals and objectives within Green Directions Vaughan, the City's Community Sustainability and Environmental Master Plan, specifically:

Goal 3: To ensure that Vaughan is a city that is easy to get around with a low environmental impact.

Objective 3.2: To develop and sustain a network of roads that supports efficient and accessible public and private transit.

Economic Impact

There is no economic impact to the City as a result of the recommendations from this report.

Communications Plan

A Communications Plan is not required for this activity.

Purpose

To pass a by-law to impose a load restriction on an existing concrete bridge for a period of 1 year, in accordance with regulations under the Highway Traffic Act (Section 123(2)) and the Bridges Act (Section 2).

Background - Analysis and Options

The Humber Bridge Trail bridge was built in 1914 and is nearing the end of its useful life

The Humber Bridge Trail bridge, (Bridge No. 008601), is located on Humber Bridge Trail, approximately 0.2 km east of Highway No. 27. (See Attachment No.1).

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The existing bridge was constructed in 1914 and is an 18.3 metre single span cast in place concrete bowstring arch bridge with a concrete deck and wearing surface. The bridge provides a roadway width of 3.7 metres and accommodates a single lane for two way vehicular traffic.

Based on recent inspections, it is recommended that a load limit of 3 tonnes be imposed on the bridge for a period of 1 year

Regulations under the Highway Traffic Act (Section 123(2)) and the Bridges Act (Section 2) requires the City to ensure that the bridges are kept safe and in good repair. This requirement is completed through the performance of regular biennial structure inspections in accordance with the Ontario Structure Inspection Manual.

In accordance with these regulations, municipalities are responsible for the approval of load limit by-laws. In place of the Ministry of Transportation of Ontario review, the recommendations to support the load limit and the duration for which it is valid, must now be stamped by two professional engineers. Based on the age and condition of the Humber Bridge Trail bridge, staff have developed a work plan to inspect the bridge every 6 months to ensure that its structural integrity is maintained.

Based on the most recent inspection of the structure, completed by AECOM in September 2015, it is recommended that a 3 tonne load limit be imposed on the bridge. This limit will be in place for a period of 1 year.

The current By-law will expire on December 31, 2015 and a new by-law is required for renewal and continued enforcement of the posted load limit on this structure.

A capital project for the rehabilitation of Humber Bridge Trail bridge was approved in 2015 and it is recommended that the load limit remain until the bridge construction has been completed

A Class Environmental Assessment was undertaken to identify rehabilitation/replacement alternatives for Bridge No. 008601 (Humber Bridge Trail bridge). At the meeting held on September 25, 2012, Council adopted the recommendation to proceed with a full rehabilitation of the bridge. The bridge rehabilitation has been identified within the 2015 – 2018 capital plan. A review of future load limit requirements will be undertaken once the detailed design of the bridge rehabilitation has been completed. It is appropriate to impose the recommended load limit until the bridge construction is complete.

Relationship to Vaughan Vision 2020/Strategic Plan

In consideration of the strategic priorities related to Vaughan Vision 2020, the recommendations of the report will assist in enhancing and maintaining community safety, health and wellbeing, by ensuring that an appropriate level of service for the bridge is maintained for the citizens of Vaughan.

Regional Implications

There are no Regional Implications for this activity.

Conclusion

A load limit by-law is required to impose a load restriction of 3 tonnes for a period of 1 year in accordance with regulations under the Highway Traffic Act (Section 123(2)) and the Bridges Act (Section 2).

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Attachments

1. Location Map

Report prepared by:

Vince Musacchio, Manager of Infrastructure Programming, ext. 8311

(A copy of the attachments referred to in the foregoing have been forwarded to each Member of Council and a copy thereof is also on file in the office of the City Clerk.)

**LOAD RESTRICTION BY-LAW ON BRIDGE NO. 008601
HUMBER BRIDGE TRAIL BRIDGE
IN THE VICINITY OF HIGHWAY 27 AND MAJOR MACKENZIE DRIVE
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Respectfully submitted,

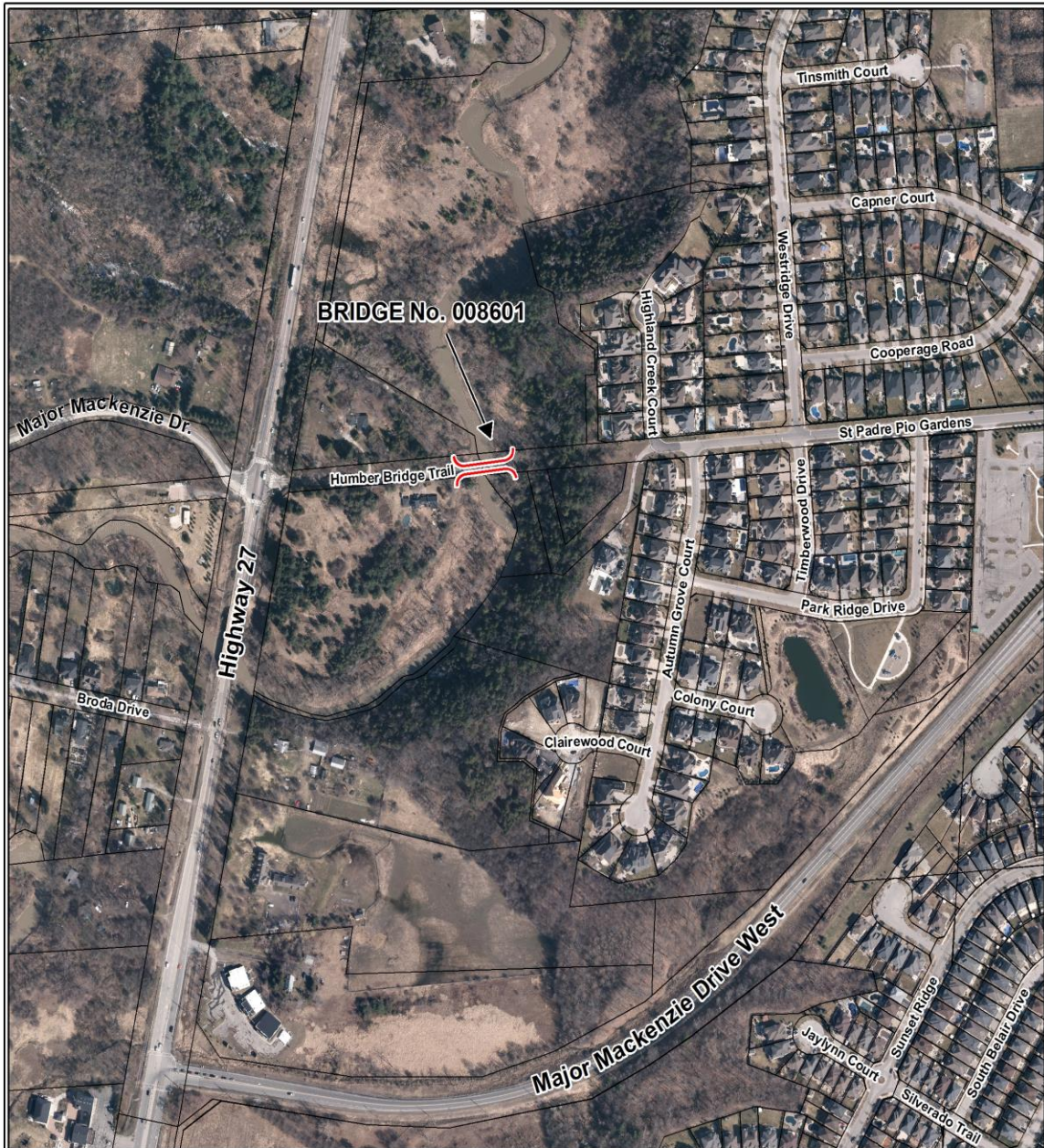
Paul Jankowski
Commissioner of Public Works

Jack Graziosi
Director of Capital Delivery and Asset Management

Zoran Postic
Director of Transportation Services,
Parks and Forestry Operations

VM:vm

ATTACHMENT No. 1



HUMBER BRIDGE TRAIL BRIDGE BRIDGE No.008601

LOCATION: Part of Lots 20 & 21,
Concession 8

LEGEND



SUBJECT BRIDGE

Note: Aerial photography acquired in Spring 2014



NOT TO SCALE