



Committee of the Whole Report

Meeting date:	June 30, 2020
Title:	IPW – West Grey Bridge 17 Concession 4 NDR Status Report
Prepared by:	Vance Czerwinski, Director, Infrastructure and Public Works
Approved by:	Laura Johnston, CAO

Recommendation

That committee of the whole receives report IPW – West Grey Bridge 17 Concession 4 NDR Status Report for consideration; and, further

That committee of the whole recommends that council approves a budget adjustment to rehabilitate bridge 17 in 2020 by transferring a portion of funds allocated to bridge 46; and further

That the remaining 2020 budget for bridge 46 be used to complete the preliminary work in 2020, with the surplus carried forward to the 2021 budget for bridge 46 allowing it to be “shovel ready” in 2021.

Executive Summary

Bridge 17 on Concession 4 NDR experienced a bridge deck failure. The bridge has been temporarily closed until further notice.

Background and Discussion

On June 19, 2020, a West Grey public works crew was conducting spring bridge deck maintenance. During the maintenance, the front wheel of a tandem truck broke through the bridge deck; no employee was hurt and equipment was not damaged. The bridge was barricaded with concrete blocks traffic cones and snow fencing to prevent vehicle and pedestrian access to the bridge. Notification to the public and EMS, fire and police was engaged through the 511 service. As per the Ontario Traffic Manual Book 7, traffic on Concession 4 NDR has been detoured north on Mulock Road, east on Concession 6 NDR, south on 30th Sideroad NDR, and back to Concession 4 NDR east of Bridge 17 (see attached Traffic Control Plan).

Triton Engineering was engaged immediately to inspect the bridge, determine the extent of the damage, provide a cost estimate and time line to repair the bridge. Triton Engineering engaged Doug Dixon & Associates to inspect bridge 17 and based on the bridge inspection Triton Engineering/Doug Dixon & Associates has determined the following:



June 30, 2020 (2)

1. Estimated Cost and Time Lines - the estimated timelines for design, Saugeen Valley Conservation Authority (SVCA) approval and tender documents can be completed by August 7, 2020. Construction could start shortly after acceptance by the Municipality of West Grey. This is contingent upon contractor and material (dried timbers) availability. It is estimated that construction could be completed within 25 working days.

The estimated cost (including engineering and contingency) for the repair works is in the range of \$250,000.00 to \$275,000.00 (excluding HST). There is an estimated \$25,000 needed for surface treatment for the wooden deck.

2. Permits Required – an SVCA permit will be required under “maintenance of existing bridges” for a fee of \$436. The working area will be contained with tarps and nets and therefore; the works would not be susceptible to the “in-water” timing windows. This allows for some buffer time for construction into the late fall, if needed.
3. Watercraft Access Under Bridge - According to Doug Dixon & Associates, it is safe to continue to allow watercraft under bridge 17 provided the bridge remains closed to vehicular traffic.
4. Feasibility of Repairing Bridge 17 - based on correspondence with Doug Dixon & Associates, it is their opinion that bridge 46 (McQuarrie Bridge) rehabilitation could be delayed by one year with no significant increase in the cost of the future rehabilitation and without any impact to the structural integrity. Doug Dixon & Associates was also engaged to inspect the condition of bridge 46 to determine if it could be delayed in order to reallocate capital funding to rehabilitate bridge 17.

Legal and Legislated Requirements

- Ontario Structure Inspection Manual (OSIM)
- O. Reg. 239/02: Minimum Maintenance Standards for Municipal Highways
- 2020 Occupational Health and Safety Act
- Ontario Traffic Manual Book 7

Financial and Resource Implications

The 2020 capital budget includes \$600,000 for bridge 46: \$205,252 is tax levy, \$15,000 is DC reserves and \$379,748 is gas tax funding.

The cost of the rehabilitation of bridge 17 is estimated at \$300,000.

The cost of preliminary work on bridge 46 to be completed in 2020 will be approximately \$115,000. There will be approximately \$185,000 to be carried forward to 2021 for bridge 46 rehabilitation.

Staffing Implications

None.



June 30, 2020 (3)

Consultation

Triton Engineering
Doug Dixon & Associates
Director of Finance, West Grey
CAO, West Grey
Saugeen Valley Conservation Authority

Alignment to Strategic Vision Plan

Pillar: Build a Better Future
Goal: Vibrant Community
Strategy: Maintain and invest in our infrastructure; be responsible stewards of the tax dollars

Attachments

Triton Engineering/Doug Dixon & Associates "Safety of Bridge for Users of the Saugeen River"
Triton Engineering/Doug Dixon & Associates "Inspection and Recommendation for Repair"
Traffic Control Plan Detour Map

Next steps

On council direction, bridge 17 will be rehabilitated in 2020 and bridge 46 pre-engineering will be completed in 2020 so that bridge 46 is "shovel ready" for 2021.

Respectfully submitted:

Vance Czerwinski, Director of Infrastructure and Public Works