

Report to Council

Report Title:	Greenock Bridge Structure No. 0006 Closure			
Prepared By:	Gregg Furtney, Director of Operations			
Department:	Operations/Public Works			
Date:	October 13, 2020			
Report Number:	PW2020-30	File Number:	C11PW, T11	
Attachments:	Load Evaluation Report – Greenock Structure 0006 G.M. BluePlan Recommendation Letter - Greenock Bridge Structure 0006 Bridge Structure 0006 Greenock Map			

Recommendation:

That the Council of the Municipality of Brockton hereby receives Report Number PW2020-30 - Greenock Bridge Structure No. 0006 Closure, prepared by Gregg Furtney, Director of Operations and in doing so:

- 1) Approves the closure of Greenock Bridge Structure 0006 as of November 16, 2020 at 8:00 a.m.
- 2) Further approves that money be set aside in the 2021 Capital Budget to move forward with a Municipal Class Environmental Assessment and initiation of a project plan.

Report:

Background:

Greenock Structure 0006 is located on Lot 2, Concession 8/9, Greenock Survey. It is a single span and single lane steel through truss bridge. Construction of the bridge is estimated to be around 1920, based on the bridge construction method and the advanced level of deterioration. It is 4.2 meters wide and 35 meters long. It has an exposed laminated 2X6 timber deck. Concession 8 (Greenock) is a gravel road but the bridge has asphalt approaches on each end.

A detailed investigation and load evaluation was completed in 2017 by GM BluePlan which updated the load posting to 6, 12, and 19 tonnes. Another investigation and load evaluation was completed by GM BluePlan in 2020.



Analysis:

The Load Evaluation Report, triggered by the Bridge Review Report, prepared by GM BluePlan, includes the bridge description, rehabilitation history, to date, review methodology, outlines the condition of each of the superstructure components, gives a structural evaluation, offers some estimated rehabilitation costs, and provides some recommendations.

Please note that the estimated rehabilitation costs (\$150,000 to \$200,000, not including taxes) are only estimates and are only a temporary fix to allow the bridge to reopen for a short period of time (5 to 10 years). This rehabilitation would only allow for the very minimum single load posting which would cause concern for snow removal operations and would not allow agricultural vehicles to cross. That posting would be evaluated once the project rehabilitation was complete.

Rehabilitation work would include, at a minimum:

- 1.) Replacement of the northeast, southeast, and southwest bearing connections
- 2.) Replacement of the northeast and southeast bottom cords
- 3.) Replacement of 3 to 4 cross beams
- 4.) Concrete repairs to the east bearing seat

As per the Bridge Review Report and Load Evaluation Report submitted to the Municipality of Brockton by GM BluePlan, the recommendation is to close Greenock Bridge Structure 0006 to all vehicles AND pedestrians, prior to the beginning of winter (2020), and to budget for the initiation of a Municipal Class Environmental Assessment and project plan in Brockton's 2021 Capital Budget.

A letter will be mailed out 276 property owners within a three (3) kilometer radius of the bridge, including residents of Chepstow and Cargill. Staff will also post this on the Municipality's website and social media pages.

Once the 2021 Capital Budget is approved, municipal staff and staff from GM BluePlan will work towards completing the Municipal Class Environmental Assessment (approximately \$60,000) and will provide Council with options and cost estimates for a work plan. Stakeholder Consultation and communications will remain a primary factor in this process.

Sustainability Checklist:

What aspect of the Brockton Sustainable Strategic Plan does the content/recommendations in this report help advance?

 Do the recommendations help move the Municipality closer to its Vision? 	N/A
 Do the recommendations contribute to achieving Cultural Vibrancy? 	N/A
 Do the recommendations contribute to achieving Economic Prosperity? 	N/A
 Do the recommendations contribute to Environmental Integrity? 	N/A
 Do the recommendations contribute to the Social Equity? 	N/A

Financial Impacts/Source of Funding:

Do the recommendations represent a sound financial investment from a sustainability perspective?
 N/A

The closure of Greenock Bridge Structure 0006 will need to include signage and physical barriers on either side of the bridge, warning signage on Concession 8, and turnarounds built on either side of the bridge for vehicle traffic and snow removal vehicles. These items can be addressed by way of the 2020 Public Works Operating Budget.

The Municipal Class Environmental Assessment (approximately \$60,000) and associated Engineering work (currently unknown \$ value) will need to be captured in the 2021 Capital Budget.

Reviewed By:

Trish Serratore, Chief Financial Officer

Respectfully Submitted by:

Gregg Furtney, Director of Operations

Reviewed By:

Any Wel

Sonya Watson, Chief Administrative Officer