



Capital Business Case

Weir Road Bridge Maintenance and Repair

2023 Budget

Operations

Weir Road Bridge Repair

Executive Summary

The Operations Department is including the Weir Road Bridge Maintenance and Repair Project in the 2023 capital budget in order to correct deficiencies, extend asset life and improve the overall Township Level of Risk standing in asset management.

Business Need

In early May of 2022, Keystone Bridge conducted an OSIM, (Ontario Structure Inspection Manual), inspection of the Township's 14 bridges and large culverts. The resulting report identified Weir Road Bridge as a priority for maintenance and repair in 2023 and 2024, (see attached excerpt). The report outlines various deficiencies, provides recommended timeframes for investment and a Capital Needs Cost Estimate Break-Down.

Options or Solutions Analysis

1. Remain status quo – leave the bridge as is and look to full remediation in 2024.
2. Replace the expansion joints in 2023 as recommended in the inspection report and look to budget and finish the maintenance in 2024.

Financial and/or Non-Financial Benefits

The financial impacts for the options are as follows:

Option 1- remain status quo. This option has minimal impact on budget but leaves the bridge susceptible to further degradation and inflating costs to remediate.

Option 2 -The total cost of rehabilitation estimate is \$794,000.00 including 20% for Contract Administration, (C/A), and Contingency. The report indicates that the expansion joint portion of the rehabilitation should be undertaken in 2023 at an estimated cost of \$107,800.00 plus 20% for C/A and contingency for a total of \$129,360. The balance of the required work is recommended for 2024.

Risk Analysis

The risk associated with remaining status quo is that the Bridge will continue to deteriorate. Expansion joints are utilized as a flexible, (typically rubber), connections

between the bridge platform and road surface on either side. The joint prevents debris, water and road salt from corroding the end components of the bridge on either side while allowing for some movement resulting from expansion and contraction due to temperature changes.

Recommendation

After a review of the options, staff recommends Council keep replacement of the Weir Road Bridge expansion Joints in the 2023 Budget for consideration.

Implementation Plan

A request for Keystone Bridge to provide a quote undertake contract administration could be sent immediately. Expected that expansion joint work would be completed by the fall of 2023.

Documentation

Weir Road Bridge Inspection Report.

Acceptance Sign-off

Lead Department

Prepared By: Gord Shaw, Director of Operations **Date:** January 24, 2023

Signature: 

Approved By: Sean Nicholson, Treasurer **Date:** January 30, 2023

Signature: 

Approved By: Dave Grant, CAO **Date:** January 30, 2023

Signature: 