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Date: January 4, 2021
To: Mayor and Council
Author: Tim Del Greco, Manager of Engineering
RE: Sumac Drive Pedestrian Bridge
Report No.: IED 2021 – 01

AIM

To seek direction from Council in regards to removal or rehabilitation of the Sumac Drive pedestrian bridge.

BACKGROUND

Biennial inspection of bridges and culverts with a span equal to or exceeding 3.0 meters in length is mandated by the Public Transportation and Highway Improvement Act. In 2019, AUE Structural was procured to facilitate such inspection within the Town of Kingsville. Following inspection, a report was generated for each bridge and culvert indicating current condition ratings, recommendations for rehabilitation or replacement if necessary, and an estimation of costs for any recommended works.

DISCUSSION

The Sumac Drive pedestrian bridge crosses Mill Creek between Sumac Drive and Spruce Street North. A map of the bridge location is attached in Appendix A for your reference.

The bridge is constructed of timber decking on steel beams, supported by concrete piers. The structure is approximately 20 years old. The 2019 bridge inspection report (attached in Appendix B) indicates the following:

- The structure is generally in fair to poor condition.
- The timber deck is cracking, splitting, and rotting.
- There is medium to severe corrosion of the steel beams as well as section loss.
- The bridge is not accessible per current regulations.

The 2019 bridge inspection report concludes that a detailed rehabilitation or replacement study be completed. In 2020, this study was completed by Dillon Consulting (attached in Appendix C and summarized below).

There are three options to consider:

Option #1 – Replacement based on current size and span.

Assuming the existing piers can be repurposed, the beams and decking can be replaced at a cost of \$150,000. However, the bridge would remain non-compliant with the *Accessibility for Ontarians with Disabilities Act (AODA)* as the approaches are too steep. Further, the staircase on the south side of the bridge would continue to require funding for periodic maintenance.

\$20,000 for engineering would be required in 2021 should this option be chosen.

Option #2 – Replace with AODA compliant structure.

Installing a new bridge at a higher elevation will ensure compliance with current accessibility regulations as mandated by the AODA. The cost of doing so is estimated to be \$811,000.

\$35,000 for engineering would be required in 2021 should this option be chosen.

Option #3 – Bridge removal only.

Removing the bridge and staircase (with no replacement) is estimated at \$25,000.

This bridge currently serves low volume pedestrian traffic between two local roads. Higher priority for replacement is typically given to pedestrian bridges that either form part of a major trail network, are located on a collector road, or are necessary in order to reach a major point of interest. Examples of such include a pedestrian bridge on the Chrysler Canada Greenway and the Jasperson Lane pedestrian bridge which provides direct access to the arena and sports fields.

Division Street North and Augustine Drive are alternative pedestrian routes should the bridge be removed with no replacement.

There is no impact to the 2021 budget should this option be chosen.

LINK TO STRATEGIC PLAN

To become a leader in sustainable infrastructure renewal and development.

FINANCIAL CONSIDERATIONS

The ongoing impact of critical infrastructure renewal and general operating costs puts great pressure on the tax rate and lifecycle reserves. There are a number of current and short term critical infrastructure projects that will require significant funding, some of which must be debt financed in order to be feasible. Examples include:

- Jasperson Drive reconstruction
- Road 2 East reconstruction
- Installation of large diameter watermain to the southwest service area
- Graham Sideroad reconstruction (south of Highway 3)

Therefore, removal of the Sumac Drive pedestrian bridge (with no replacement) is recommended. This will ensure funds are spent efficiently and prioritized where most needed (critical assets).

CONSULTATIONS

Kingsville Administration
Dillon Consulting Limited

RECOMMENDATION

That Council approve removal of the Sumac Drive pedestrian bridge and allocate \$25,000 in the 2022 Capital Budget in order to facilitate such work.

Tim Del Greco

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