



2025 Budget Request

Request: Bridge Replacement 2025 and 2026

From: Niall Lobley, CAO

Department: Development & Infrastructure Services

Total Financial Ask: \$1,750,000 (Over three years)

Type of Budget Request: *Capital*

This document and its attachments are public and available in an accessible format upon request.

Background and Strategic Priority

Core Services

Analysis

The 2024 OSIM (Ontario Structure Inspection Manual) has reviewed more than 40 structures across the municipality. OSIM inspections are required to be undertaken on a biannual basis of bridges and culverts over a certain size. The 2024 inspection has included a small number of additional structures that had been overlooked in past inspections.

The OSIM inspection is a visual inspection, completed by a qualified structural engineer that identifies whether there are visual signs which could be indicative of areas of concern on bridges and culverts. While exploratory and visual in nature, the OSIM report provides an insight into how the bridges and culverts are performing and provides a tool to help inform asset management planning and in year maintenance works. By completing a regular routine of OSIM inspections and addressing the issues within them, it is hoped that the anticipated lifecycle of bridges and culverts can be met or exceeded. Generally speaking, it is anticipated that a lifecycle of between 50 and 75 years be achieved by most of these structures.



The Township has at least 8 structures older than 75 years, and at least 20 that exceed 50 years. The oldest structure is the Hepworth Creek Bridge which is thought to date from 1910.

The bridges and culverts inspected are all structures over which a road or trail passes; their failure would prevent use of the road or trail and could cause injury or property damage.

The Township has two bridges currently closed; the Emery Bridge on Church Sideroad West and the Sideroad 3 bridge in the former Township of Derby. It is anticipated that work to replace the Emery Bridge will commence in 2025, and staff have engaged consultants to prepare the background design and environmental works to address the Sideroad 3 bridge, as per past budget directions.

During the 2024 bridge inspection, Pearson Engineering, who were engaged to undertake the review, have highlighted several further structures that are beyond the end of their lives.

- The Big Bay Sideroad Culvert has failed and is considered to be in critical condition. The recommendations are that the culvert be subject to monthly engineering inspections and be replaced immediately.
- The 2024 OSIM inspection included a review of a culvert system in Kemble, at the intersection of Kemble Rock Road and Concession 20 in Kemble. These were overlooked in past inspections and have been noted to be in critical condition.

Both structures have been highlighted for immediate replacement (within 1 year) and in the absence of immediate replacement, both structures should be included in monthly engineering assessments to ensure that they do not fail to the point of public hazard.

In addition to these structures, the Townline Trail Bridge on Keppel-Sarawak Townline, north of Church Sideroad West, was also inspected. The road has been closed, by signage, to road traffic, but is a key trail connection and used by both ATVs and snowmobiles on a regular basis. The structure has failed and a transport trailer was placed over the top of the failed bridge to maintain connectivity for off road and snowmobile traffic as well as pedestrian use. This bridge was a former county bridge, transferred to the Township and, as a result of its condition, the road was closed between Church Sideroad West and Lindenwood Road.

The 2024 OSIM inspection noted the past defects and continued failure of the underlying bridge, but also noted the trailer that has been used to redeck the bridge is now also a source of significant concern. They are recommending the immediate closure of the structure, while considerations for its future use, potentially as a load



restricted structure to support the continuation of existing uses as a multi use trail, be considered.

As a result of these findings, staff are seeking budget to advance the required environmental and heritage background work, detailed design and permitting of all three structures and the budget to replace, on a like-for-like basis the culverts in Kemble and on Big Bay Sideroad.

As with other bridges, this work will provide design options for Council to consider before work on site for replacement occurs. At this time, further details on costs of options will be shared which may affect the overall budget.

This budget request reflects the estimated design and construction for a replacement on a like-for-like basis for the Big Bay Sideroad Culvert and for the culverts in Kemble. It would be anticipated that design and permitting works will be completed by early 2026 and that construction works will be tendered and awarded shortly thereafter. While it is hoped construction of the Big Bay Sideroad culvert take place in 2026, it is possible that construction may not occur until 2027. The complexity of the Kemble culverts means it is unlikely construction will occur until 2027. Much of this timing rests of budget approval timelines.

The budget request also includes the design and background work for presenting options in respect to the Townline Bridge. However, no budget is included in this request for ultimate work associated with the bridge. A separate staff report will be brought to Council in respect to immediate next steps such as closure.

Financial Impact

On a like for like basis, staff estimate that the design, engineering, and replacement of:

- The Big Bay Sideroad Culvert is \$150,000 in 2025 and \$500,000 in 2026.
- The Kemble culvert is \$150,000 in 2025, \$200,000 in 2026 and \$600,000 in 2027.
- The Townline Bridge design and engineering costs are \$150,000 in 2025 (Bridge replacement options are not included in this request).

Total: \$1.75M over three years; \$450k in 2025, \$700k in 2026 and \$600k in 2027.

Staff will continue to actively seek out grant funding opportunities to support infrastructure replacements such as bridges. Staff note that infrastructure funding currently available is largely focussed on growth supportive projects which these bridges do not align with. Replacement of bridges to enhance them as multi use trails rather than as roads, may attract tourism or recreational grant funding.



Report Approval Details

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| Document Title: | 2025 Budget Request - Bridge Replacements 2025 and 2026.docx |
| Attachments: | <ul style="list-style-type: none">- 24017 - 2024 OSIM Inspections - K-0009 Report.pdf- 24017 - 2024 OSIM Inspections - K-0021 Report.pdf- 24017 - 2024 OSIM Inspections - S-0005 Report.pdf |
| Final Approval Date: | Sep 11, 2024 |

This report and all of its attachments were approved and signed as outlined below:

Niall Loble, Chief Administrative Officer