

Date: Wednesday, March 12, 2025

From: Kevin Verkindt, Manager, Engineering and Infrastructure

Subject: OSIM Progress Report and Budget Amendment

Report#: DEV2025-20

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

Recommendation

THAT Council receive Staff Report DEV2025-020, OSIM Progress Report and Budget Amendment;

AND THAT Council amend the existing approved budget of \$44,370 (excluding HST) to \$53,370 (excluding HST) to be funded from the Bridges Reserve.

Background

The Ontario Structure Inspection Manual (OSIM) is a manual that sets standards for detailed visual inspection and condition rating of structures and their components. It provides a uniform inspection approach for all structures in Ontario.

The OSIM report prioritizes structural needs ranging from rehabilitations and replacement recommendations in a 10-year capital forecast. The repair/replacement priority recommendations will be reviewed by staff and placed in a 10-year capital budget forecast for structural rehabilitation and replacement in future years.

Staff procured RFP 2024-05 Biennial OSIM and Asset Management in February 2024 and retained Pearson Engineering from years 2024-2026 in the amount of \$44,370.00 (excluding HST).

Pearson Engineering has completed the 2024 Biennial OSIM inspection and will be completing the Biennial OSIM in 2026 and the consultant will work with Township staff to prepare and guide a ten (10) year capital budget forecast that includes recommendations of structures to be replaced and rehabilitated.

Analysis

Pearson Engineering has identified eight (8) additional structures that were not currently included in the Township's database. Due to the number, size, replacement value and/

or length, the additional structures, mainly culverts were added to the Township’s inventory and now total 48 structures. Through completing a review of Grey County’s inventory map, it was concluded that none of these structures are currently being reviewed by the County or the Township.

The identification of these structures is based on visual inspections, and Pearson Engineering is confident that they warrant inclusion in the database due to their size, functionality, and importance to the watercourse and conveyance of drainage. Accurate and comprehensive records will be essential to ensure ongoing maintenance, structural assessments, and any necessary future upgrades or repairs.

The additional structures are listed below and can be found on the Structure Inventory List and Location map (Attachment 1 & 2):

- Triple CSP Culvert (1.1m, 1.1m, and 0.7m diameters) located on Sideroad 20, south of Grey Road 17.
- 6m span, 13.9m long rigid frame located on Concession 20, east of Burgess Sideroad.
- Quadruple CSP (4 x 1.6m diameters) located on Lundy’s Lane.
- 5.4m span, 12.6m long rigid frame, located on Concession 20, west of Cole’s Sideroad.
- Double CSP (2 x 1.2m diameter, 46.5m long) located in Kemble, under Kemble Rock Road.
- 9.4m span Concrete Girder Bridge, with steel beam bridge clear spanning over structure on Sarawak-Keppel Line, north of Church Sideroad.
- Double CSP Culvert (2 x 1.8m diameter) located on Sideroad 15, north of Highway 6.
- Double CSP Culvert (2m and 2.2m diameters) located on Sideroad 12, west of Concession 7

As these structures have not been inspected in the past (or in recent years), Pearson Engineering is estimating that the cost of completing detailed measurements for these structures and preparing the required OSIM reports is \$750 / structure in 2024. This cost would be lowered to \$375 / structure during the 2026 inspections as a majority of the data input would already be completed. Therefore, the increase to complete the inspections is \$6,000 in 2024 and \$3,000 in 2026.

The amended annual breakdown for the project is as follows (excluding HST):

Task	Approved Budget (\$)	Amended Budget (\$)
Contingency	5,000	5,000
2024 OSIM & Asset Management	20,370	26,370

2025 Asset Management	3,520	3,520
2026 OSIM & Asset Management	15,480	18,480
Total	44,370	53,370

10 Year Capital Budget Forecast

Pearson Engineering developed a comprehensive 10-year capital rehabilitation and replacement plan (Attachment 3), which includes a detailed capital budget estimate for each identified structure replacement or rehabilitation. The plan was structured to prioritize the various infrastructure elements based on the findings of the OSIM reports, which provide essential condition assessments for bridges and other structures. Additionally, the Bridge Condition Index (BCI) scores were used to further rank the urgency and importance of each structure requiring attention. This strategic approach ensures that critical repairs and replacements are addressed first, optimizing the allocation of resources and improving the long-term performance and safety of the infrastructure.

The total estimated capital cost for the necessary rehabilitation and replacement over the next decade is approximately \$18.2 million. This figure reflects the cost of restoring the infrastructure to optimal condition, accounting for materials, labor, engineering services, and other associated expenses. Through this carefully structured plan, Pearson Engineering aims to improve the long-term sustainability and safety of the infrastructure, while managing the financial impact over time.

Financial Impact

Staff are requesting Council to approve an additional \$6,000 in 2024 to be funded from the Bridges Reserve to address the 2024 OSIM & Asset Management. There are no requested changes to the 2025 asset management work. An additional hold of \$3,000 on the Bridges Reserve would be required to fund the 2026 OSIM & Asset Management work.

At this time staff anticipate the Bridges Reserve balance to have an uncommitted balance of \$1,115,825.

Strategic Priorities

Enhancing Service Delivery

Enhancing Environment and Infrastructure

Conclusion

The proposed budget amendment reflects the need for detailed inspections of structures that have not been assessed recently. Pearson Engineering has provided an estimate of \$750 per structure for the 2024 inspections, accounting for the preparation of detailed measurements and OSIM reports. As much of the data will already be gathered by 2026, the cost per structure will decrease to \$375, resulting in a reduced total cost for the 2026 inspections. The overall increase in the budget for the 2024 inspections is \$6,000, with an additional \$3,000 required in 2026. The total budget will be amended from \$44,370 to \$53,370. These adjustments will ensure that the inspections are thorough and accurate, laying the groundwork for more efficient future assessments.

Respectfully Submitted:

Kevin Verkindt, Manager, Engineering and Infrastructure

Report Approval Details

Document Title:	OSIM Progress Report and Budget Amendment.docx
Attachments:	<ul style="list-style-type: none"> - Attachment 1 - Structure Inventory List .pdf - Attachment 2 - Structure Location Map .pdf - Attachment 3 - 10 Year Capital Works Plan .pdf
Final Approval Date:	Mar 4, 2025

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

Michael Benner, Director of Development and Infrastructure

Niall Loble, Chief Administrative Officer