

REPORT TO COUNTY COUNCIL

Request for Project Approval – Oxford Road 30 (11th Line) Slope Rehabilitation, City of Woodstock

To: Warden and Members of County Council

From: Acting Director of Public Works

RECOMMENDATIONS

1. That County Council approve the addition of Oxford Road 30 (11th Line) Slope Rehabilitation project as part of the 2024 Capital Budget;
2. And further, that County Council authorize the use of \$125,000 in unspent funds from Capital Account 930080 (retaining walls) to fund the 2024 design efforts.

REPORT HIGHLIGHTS

- The purpose of this report is to obtain County Council approval to include the addition of the Oxford Road 30 (11th Line) Slope Rehabilitation project as part of the 2024 Capital Budget, including accompanying funding in accordance with the County purchasing policy.
- Slope instability adjacent to Oxford Road 30, shown on Attachment 1, has caused significant embankment slippage. Stabilization is required due to ongoing erosion and instability of the existing slope.
- A slope stability investigation (by Engineering Consultant, Englobe Corp) forms the basis for the slope rehabilitation strategy which includes installing an armor stone retaining wall system for toe protection, restoring localized slope sections, and regrading the subject slope area over approximately 50-60m.

IMPLEMENTATION POINTS

Upon Council approval, Public Works staff will initiate the design phase of this project and retain a consulting engineering firm to complete the detailed design for the slope rehabilitation strategy. Once the design is completed, the consultant will prepare detailed tender documents, including the estimated construction costs. This design phase is scheduled to be completed by the end of 2024, and construction will be included as part of the 2025 Business Plan and Budget.

Financial Impact

The Oxford Road 30 Slope Rehabilitation project is required due to the instability of the current road embankment.

As detailed in Table 1, the estimated cost for detailed design is \$114,076. Additionally, approximately \$11,000 is anticipated for non-refundable HST, contract administration, permit application fees and staff time. Staff will request the estimated construction costs as part of the 2025 Business Plan and Budget process.

Table 1: Funding Summary for Oxford Road 30 (11th Line) Slope Rehabilitation

Budget Summary Account/Description	Cost Estimate (excluding HST)
Oxford Road 30 Slope Rehabilitation Design	\$114,076
Estimated County Staff Time and Permit Application Fees (incl. contract admin)	8,762
Subtotal	\$122,838
Non-Refundable HST (1.76%)	2,162
TOTAL ESTIMATED 2024 EXPENDITURES	\$125,000

Within the 2024 Capital Budget, savings have been realized in the 930080 Retaining Walls account as a result of favourable construction costs. The Retaining Wall account is funded by the Road Reserve. These savings are sufficient to fund the costs associated with adding the Oxford Road 30 Slope Rehabilitation project to the 2024 Budget.

Communications

The communication strategy for this project will be similar to other County design and construction projects. The project managers from both the engineering consultant and the County will establish an open communications channel, involving other team members as

necessary. Communications will begin upon report approval and continue throughout the project, with updates and input from Oxford County Public Works Department Engineering Services and Transportation Staff and the Engineering Design Consultant at 30%, 60% and 90% milestones.




Oxford County staff has communicated with the City of Woodstock Engineering and Parks regarding the project scope. Ongoing communication with the City is planned before and throughout the construction period and the public will be notified of a partial trail closing in this area for safety reasons through signage and social media. Additional communication needs will be assessed at each project stage.

2023-2026 STRATEGIC PLAN

Oxford County Council approved the [2023-2026 Strategic Plan](#) on September 13, 2023. The Plan outlines 39 goals across three strategic pillars that advance Council's vision of "Working together for a healthy, vibrant, and sustainable future." These pillars are: (1) *Promoting community vitality*, (2) *Enhancing environmental sustainability*, and (3) *Fostering progressive government*.

The recommendations in this report supports the following strategic goals.

Strategic Plan Pillars and Goals

PILLAR 1	PILLAR 2	PILLAR 3
		
Promoting community vitality	Enhancing environmental sustainability	Fostering progressive government
<p>Goal 1.2 – Sustainable infrastructure and development</p> <p>Goal 1.3 – Community health, safety and well-being</p>		<p>Goal 3.2 – Collaborate with our partners and communities</p> <p>Goal 3.4 – Financial sustainability</p>

See: [Oxford County 2023-2026 Strategic Plan](#)

DISCUSSION

Background

In 2023, a section of the existing road embankment adjacent to Oxford Road 30 (11th Line) began to fail, prompting a slope stability investigation. The slope is located within, and adjacent to (east of), Oxford Road 30's right-of-way, approximately 300 m north of Dundas Street. The gravel shoulder area at the failing slope is part of the Standard Tube, Burgess, and Rotary Club Millennium Trail System. Due to the slope failure, and in the best interest of public safety, fencing and signage will be placed to alert the public with the intention of temporarily closing this trail section. Attachment 1 shows the approximate project location.

A consulting engineer (Englobe) conducted an inspection of the slope and noted a slippage/slump in the upper portion, resulting in an over-steepened or near vertical face (scarp) approximately 45 m long and about 0.2 to 1.2 m in height. The scarp is located adjacent to the roadway and extends into the gravel shoulder.

The failed slope is situated along a sharp meander of the Thames River, where the river approaches the slope, turns sharply, impacts the valley wall, and flows against the valley slopes toe. Photographs, slope failure mapping by Englobe, and follow-up site inspections by Oxford County, suggest that the erosion at the slope's toe likely initiated the slippage and failure. The existing riverbank, scarp, and steep valley slopes are unstable in the long term and are expected to experience ongoing erosion, further slumping, and potential loss of roadway and tablelands.

Englobe prepared a Geotechnical Engineering report with recommendations for the long-term stability of the slope, including the aforementioned rehabilitation strategy to mitigate future risks to the Oxford Road 30 road embankment. The project was not included in the 2024 Budget due to the timing of the geotechnical report, which was finalized in December 2023. Since then, County staff have been monitoring the slope, particularly in response to the heavy rainfall experienced this year, which has further exacerbated the erosion and instability.

These conditions have highlighted the urgency of the repairs to proactively ensure the safety of the embankment and walking trail, and to prevent further slope failure. The decision to pursue a retaining wall and embankment stabilization requires permits and specialized expertise, which has necessitated additional planning and consultation.

Comments

It is critical to proceed with design completion this year and construction during the 2025 construction season. The existing riverbank, steepened slope sections, and relatively steep valley slopes are inherently unstable and are expected to continue experiencing erosion, slumping, and the potential loss of the roadway in the tablelands.

Remediation of the compromised slope is necessary to prevent the scarp from advancing toward Oxford Road 30 and to ensure the safety of the affected road corridor. This work requires working within regulated lands and requires expertise from civil designers, environmental impact assessors, surface water specialists, and related disciplines. Restoration required includes installing an armor stone retaining wall system for toe protection along the riverbank, restoring the slump/scarp, and regrading the slope over a length of approximately 50-60 m.

In accordance with the County's purchasing policy, County staff will engage an experienced consulting engineering firm capable of providing the scope of work outlined above.

CONCLUSIONS

It is recommended that Council approve the above-noted project and use of available funding in order to complete the design work to stabilize the Oxford Road 30 embankment failure.

SIGNATURES

Report author:

Original signed by

Andrew Stewart, P.Eng.
Project Engineer

Departmental approval:

Original signed by

Melissa Abercrombie, P. Eng., PMP
Acting Director of Public Works

Approved for submission:

Original signed by

Benjamin R. Addley
Chief Administrative Officer

ATTACHMENT

Attachment 1 – Project Location Map