

To: Warden and Members of County Council

From: Director of Public Works

Emergency Repairs – Oxford Road 51 (John Pound Road) Storm Sewer and Slope Stabilization, Tillsonburg

RECOMMENDATION

- 1. That Oxford County Council receive Report No. PW 2021-20 entitled “Emergency Repairs - Oxford Road 51 (John Pound Road) Storm Sewer and Slope Stabilization Project” for information.**

REPORT HIGHLIGHTS

- In 2020, the County awarded a contract to Gedco Excavating Ltd. to undertake storm sewer installation, slope rehabilitation and full-depth road restoration works on Oxford Road 51. While this work was being completed, it was discovered that the extent of the underlying impact to Oxford Road 51 extended far beyond the original slope failure.
- Due to the significant threat to the existing road embankment and newly-installed storm sewer, emergency restoration work was completed by Gedco Excavating Ltd. in 2021.
- In accordance with the County’s Purchasing Policy, the Director of Public Works, in collaboration with the Chief Administration Officer, has authorized this emergency capital works which were unplanned and not budgeted as part of the 2021 Business Plan and Budget.

Implementation Points

As construction progressed in 2020 per the original contract, it was discovered that the impact from the original slope failure extended far beyond the site than what was initially considered. An emergency site meeting was held to discuss the required additional restoration work to safely rehabilitate the slope and remedy potential impacts to road stability.

In order to derive an implementable solution to address these concerns, Public Works staff provided engineering project management support to the general contractor and coordination with the retained engineering consultant to derive an implementable solution. The necessary emergency repairs were subsequently authorized and the original contract was expanded to include this new project scope. The emergency capital works were then carried out in the first quarter of 2021.

Oxford Road 51 was subsequently reopened on March 24, 2021 as the emergency works were completed. Additional restoration work (seed restoration on slopes) and topcoat surface asphalt will take place in the spring and summer of 2021.

Financial Impact

The emergency slope restoration was completed as an Emergency Purchase in accordance with Section 10.1 of the Purchasing Policy:

'The Purchasing Designate shall be authorized to make emergency purchases in excess of \$25,000 upon the approval of the Director. The Director shall advise the CAO by memo. The CAO will decide whether a report to Council is required'.

The 2021 emergency slope restoration expenditures (construction and engineering fees), totalling \$475,000, will be funded from the Roads Reserve which has a budgeted 2021 closing balance of \$8,470,822.







Communications

The communication strategy for this project was similar to other County construction projects. In early August 2020, ahead of construction start-up, a Notice of Construction letter was delivered to nearby property owners and local businesses and construction signage was posted at the project location in advance to alert the general public. As construction commenced, updates and road closures were communicated on the Municipal 511 website.

Oxford County staff has been in communication with the Town of Tillsonburg staff with respect to the scope of work, schedule and impacts to local residents, businesses and traffic. The Director of Public Works has personally updated Town of Tillsonburg staff and council members with respect to road closures and project schedule extensions throughout the project duration for the emergency works. The community has been notified of project extension through social media posts and updates through 511.

County staff will provide the necessary information to the Long Point Region Conservation Authority (LPRCA) regarding tree removals and will also provide updates to County Council on emergency authorized purchases through the quarterly Financial Update and 2021 Business Plan Review.

Strategic Plan (2020-2022)

					
WORKS WELL TOGETHER	WELL CONNECTED	SHAPES THE FUTURE	INFORMS & ENGAGES	PERFORMS & DELIVERS	POSITIVE IMPACT
1.i.	2.i.	3.iii.			

DISCUSSION

Background

The tender for the Oxford Road 51 (John Pound Road) Storm Sewer and Slope Stabilization project in Tillsonburg was awarded to Gedco Excavating Ltd. in 2020 for new storm sewer installation, rehabilitation of slope failures and full-depth road restoration, as shown in Attachment 1.

Prior to the 2020 construction contract, drainage along Oxford Road 51 was primarily accommodated by roadside ditches and storm sewers which would outlet over a slope to the Otter Creek. The existing storm sewers were corrugated metal pipe (CMP) ranging in diameter from 200mm to 300mm and were installed before mid-1980's. As a result of the age and material of the pipe, these sewers had experienced moderate to severe levels of corrosion, leading to erosion of pipe bedding material, undermining of the sewer and slope failure at outlet locations.

In general, the scope of work for the original construction contract, which was undertaken from September 2020 to December 2020, consisted of:

- Storm sewer removals and/or abandonment;
- Installation of storm sewer and appurtenances;
- Pavement structure including granular road base, curb and gutter, and asphalt pavement;
- Existing outlets will be abandoned and the areas of slope failure will be repaired; and
- Re-grading/restoration/landscaping where required.

As construction progressed and the extent of the underlying slope failure problem became more clearly defined, it was apparent that the underlying impact extended far beyond the site of the original slope failure causing additional slope instability, failure in the surface of the roadway and unsafe road conditions for vehicles.

Comments

In response to the problems identified with the slope and structural integrity of the road, an emergency site meeting was held on December 13, 2020 and, with the assistance of an engineering consultant (Vallee Consulting Engineers), an estimated scope of work was established with the General Contractor (Gedco Excavating Ltd.) as outlined below:

- Removal and disposal of over-thickened asphalt pavement structure;
- Specialized construction equipment to remove existing concrete blocks from bottom of slope in order to place stabilization materials;
- Excavate the slope much deeper and wider (than was originally designed) due to unforeseen soil conditions and install stabilization materials;
- Additional engineering design and specialty contractor to install sheet-pile in order to save existing road embankment and stabilize newly installed storm sewer; and
- Additional slope restoration measures included: structural granular fill material; low strength flowable fill; gabion baskets; slope re-grading; re-instate guiderails and localized base asphalt placement.

This emergency work was completed on March 24, 2021 and the road has since been re-opened for public use.

Remaining roadside works include seed restoration and topcoat surface asphalt restoration, which will be completed when weather conditions are favourable in spring/summer 2021.

Conclusions

Unforeseen circumstances at the Oxford Road 51 (John Pound Road) project site in Tillsonburg required additional design and construction, safety provisions, specialized equipment and immediate action in order to rehabilitate the slope and reinstate the structural integrity of the road.

SIGNATURES

Report Author:

Original signed by

Heather Van, P.Eng., PMP
Project Engineer

Departmental Approval:

Original signed by

David Simpson, P.Eng., PMP
Director of Public Works

Approved for submission:

Original signed by

Michael Duben, B.A., LL.B.
Chief Administrative Officer

ATTACHMENT

Attachment 1: Oxford Road 51 (John Pound Road) Construction Location Map