

Report PW 2024-01 PUBLIC WORKS Council Date: January 10, 2024

#### REPORT TO COUNTY COUNCIL

# Contract Award - Oxford Road 59 Bridge Rehabilitation

To: Warden and Members of County Council

From: Director of Public Works

#### **RECOMMENDATIONS**

- 1. That County Council award a contract to the low bidder, Sierra Bridge Inc., in the amount of \$6,342,043 (excluding HST) for the rehabilitation of Bridge No. 59755 on Oxford Road 59 in the City of Woodstock;
- 2. And further, that County Council authorize the Chief Administrative Officer and Director of Public Works to sign all documents related hereto.

## **REPORT HIGHLIGHTS**

- The purpose of this report is to obtain County Council approval to award the above-noted project to Sierra Bridge Inc., in accordance with the County's Purchasing Policy.
- Bridge No. 59755 on Oxford Road 59 in Woodstock (Attachment 1) is planned for major rehabilitation, as per the 2024 Business Plan and Budget.
- A road closure for southbound traffic is required for the completion of this work and the
  planned detour route (Attachment 2) has been created in consultation with the City of
  Woodstock Engineering staff, as well as City Police, City Fire, and County Paramedic
  Services. The bridge will remain open to northbound traffic only throughout construction.
- This project is anticipated to begin in February 2024 and is targeted for completion by December 2024.



#### **IMPLEMENTATION POINTS**

Upon County Council approval, a contract will be executed with the low bidder, Sierra Bridge Inc., prior to proceeding with the work.

County Staff (in conjunction with the Contractor) will commence public outreach through various channels including radio and newspaper advertisements, social media posts, website publications, and the installation of advanced construction notice signage. This communication strategy will be implemented before the construction starts.

Oxford Road 59 will be closed for southbound traffic for the duration of construction in order to accommodate the planned works. Two detour routes have been planned (east via Oxford Road 17 and Oxford Road 30). The bridge is to remain open for northbound traffic only throughout the duration of construction as approved by Oxford County Council (Report PW 2023-37).

Access for local residents and emergency services will be maintained, as required. Construction is anticipated to begin in February 2024 and be completed by December 2024.

## **Financial Impact**

This work has been planned for in the 2024 *Business Plan and Budget*, and the low bid amount is within budget. The construction costs and funding sources for this project are summarized in Table 1 below.

Table 1: Expenditure Summary for Rehabilitation of Bridge No. 59755 on OR 59

2024 Budget Summary Account / Description	Available 2024 Budget	Bid Amount (excluding HST)
930200 – Bridge Construction (Approved budget: \$14,495,000) (Less other projects: \$5,995,000)	\$8,500,000	\$6,342,043
Project Contingency (15%)		1,000,000
Rail Authority Project Management	471,947	
Consulting Engineer's Inspection and Co	51,081	
County Contract Administration; Inspection	100,000	
Non-Refundable HST (1.76%)		140,185
TOTAL ESTIMATED CONSTRUCTION	\$8,105,256	

Based on the information presented above, this project falls within the estimated budget available for this project.

#### **Communications**

Operational communication for this construction project will be similar to other County projects. The Contractor and County project managers will form an open channel of communication and will include other members of the project team as needed. These communications will commence upon approval of this report and will continue for the duration of the project.

Extensive communication with the public is scheduled both before and during the construction phase. In addition to the formal Notice of Construction, a community update will be distributed to nearby property owners well in advance, supplemented by construction signage at the project site to inform motorists and residents in the area. The wider public will be informed and updated throughout the construction period through media relations, social media, the Oxford County website, and print, digital and online advertising. Regulatory authorities and emergency services will receive advanced notice of road closures through Municipal511 notifications.

The methodology employed for selecting the detour route, detailing its implications on emergency services, and the comprehensive review of alternative options were outlined and previously approved through Report PW 2023-37.

Staff will continue to work with affected stakeholders (including the City of Woodstock) during the execution of this project as required to ensure the appropriate level of communication and outreach is maintained, and further ensuring all parties involved are updated as needed.

#### 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 Plan Pillars and Goals:

PILLAR 1	PILLAR 2	PILLAR 3
		Man and the second
Promoting community vitality	Enhancing environmental sustainability	Fostering progressive government
Goal 1.2 – Sustainable infrastructure and development Goal 1.3 – Community health, safety and well-being Goal 1.4 – Connected people and places		Goal 3.1 – Continuous improvement and results-driven solutions Goal 3.2 – Collaborate with our partners and communities Goal 3.4 – Financial sustainability

See: Oxford County 2023-2026 Strategic Plan

#### DISCUSSION

## Background

Bridge No. 59755 is owned by the County of Oxford and is located approximately 0.4 km north of Oxford Road 35 (Devonshire Ave.) in Woodstock Ontario. A map identifying the bridge location is included as Attachment 1 to this report.

Bridge No. 59755 is a four-span, 143.25 m (470 ft.) reinforced concrete deck on welded steel plate girder bridge. It was originally constructed in 1967 and was rehabilitated in 2000 with works including: localized repairs of the steel girders, abutment diaphragms, deck drains, guiderail, deck, and sidewalk, as well as replacement of the existing expansion joints, bearing, asphalt, and waterproofing.

The County's 2022 Bridge Inspection Report noted that Bridge No. 59755 had a bridge condition index (BCI) of 66.1 and included a recommendation for major rehabilitation within four years. A detailed deck condition survey report was completed in August 2022. The results of this report were incorporated into the preliminary design report (PDR) and, ultimately, into the final design of the bridge rehabilitation completed by the County's consultant (Doug Dixon and Associates) in January 2023.

The preferred alternative is to replace the existing deck and construct a new deck complete with water proofing and pavement. The new deck will be 800mm wider (400mm on both sides) allowing for bike lanes and sidewalk on both sides of the new bridge cross section.

As such, rehabilitation of this structure generally includes the following scope of work:

- Removal of the existing deck, asphalt, sidewalks, barriers, ballast walls, bearings, approach slabs, and guiderail;
- Jacking the superstructure;
- Installation of new deck complete with new sidewalks and TL4 compliant barriers, waterproofing and pavement, bearings, barriers, ballast walls, expansion joints, approach slabs, and steel beam guide rails;
- Minor repairs to existing piers, wingwalls, and abutments:
- Widening of approach embankments and the bridge structure itself;
- Steel repairs to girders and diaphragms;
- Restoration of all disturbed areas including placement of granular material and asphalt placement for road restoration as required;
- Slope stabilization, erosion and sediment control measures:
- CPR Flagging;
- Installation of bird exclusion netting; and
- Small structures (fencing, signs, etc.), pavement markings, etc.

### **Comments**

Based on its current asset condition, Bridge No. 59755 was prioritized for rehabilitation in order to extend its useful service life by approximately 75 years. If the bridge rehabilitation is not completed, the condition will continue to deteriorate to the point where the bridge is considered structurally deficient and/or unsafe to use. Failure to complete the structure rehabilitation will increase the risk of structure failure, load restrictions and/or road closure.

As this project has the possible risks that would be associated with any construction project of this scale and scope, the successful Contractor is also required to secure construction bonds and insurance to mitigate risks related to the exposure of financial loss.

County staff solicited bids from eligible pre-qualified Contractors and the project was tendered through a competitive bidding process. The County received the following six bids at tender close on Friday, December 8, 2023.

Table 2: Summary of Bid Submissions

Contractor	Bid Amount (HST Excluded)	
1. Sierra Bridge Inc.	\$6,342,043	
2. Clearwater Structures Inc.	\$6,617,511	
McLean Taylor Construction Ltd.	\$7,718,019	
4. Looby Builders (Dublin) Ltd.	\$7,843,053	
5. Aecon Construction and Materials Ltd.	\$8,449,930	
6. Facca Incorporated	\$13,681,348	

Staff have reviewed the submissions and confirmed that the low bid received from Sierra Bridge Inc., in the amount of \$6,342,043 (excluding HST), represents good value for the work. Sierra Bridge Inc. has completed several bridge and culvert rehabilitation projects for the County in recent years, including the rehabilitation of bridge 807313 on Oxford Road 29 in 2020 and bridge 597068 on Oxford Road 59 in 2021, respectively. Sierra Bridge Inc. completed this work to staff's satisfaction on budget and without any noted issues.

Should the contract not be awarded and the work does not proceed, the condition of the County's affected asset will continue to deteriorate and the costs to rehabilitate it in the future will rise.

## **CONCLUSIONS**

Review of the competitive bid submissions confirms that it is appropriate to award the proposed bridge rehabilitation works on Bridge No. 59755 to the low bidder, Sierra Bridge Inc.

## **SIGNATURES**

## Report author:

Original signed by

Ryan Vink, P. Eng. Project Engineer

## **Departmental approval:**

Original signed by

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

## **Approved for submission:**

Original signed by

Benjamin R. Addley Chief Administrative Officer

## **ATTACHMENTS**

Attachment 1 – Bridge 59755 Location Map Attachment 2 – Bridge 59755 Traffic Detour Routes