

TO:	CHAIR AND MEMBERS CIVIC WORKS COMMITTEE MEETING ON JULY 23, 2019
FROM:	KELLY SCHERR, P. ENG, MBA, FEC MANAGING DIRECTOR, ENVIRONMENTAL & ENGINEERING SERVICES AND CITY ENGINEER
SUBJECT:	VICTORIA BRIDGE REPLACEMENT DETAILED DESIGN & TENDERING APPOINTMENT OF CONSULTING ENGINEER

RECOMMENDATION

That on the recommendation of the Managing Director, Environmental & Engineering Services and City Engineer the following actions **BE TAKEN** with respect to the appointment of a Consulting Engineer for the Victoria Bridge Replacement Project:

- (a) AECOM Canada Ltd. **BE APPOINTED** Consulting Engineers for the detailed design and tendering for the Victoria Bridge Replacement Project at an upset amount of \$772,894 (excluding HST) in accordance with Section 15.2 (g) of the Procurement of Goods and Services Policy;
- (b) the financing for this project **BE APPROVED** as set out in the Sources of Financing Report attached hereto as Appendix A;
- (c) the Civic Administration **BE AUTHORIZED** to undertake all the administrative acts that are necessary in connection with this project;
- (d) the approvals given herein **BE CONDITIONAL** upon the Corporation entering into a formal contract with the consultant for the work; and,
- (e) the Mayor and City Clerk **BE AUTHORIZED** to execute any contract or other documents including agreements, if required, to give effect to these recommendations.

PREVIOUS REPORTS PERTINENT TO THIS MATTER
--

- Strategic Priorities and Policy Committee – January 28, 2016 – Downtown Infrastructure Planning and Coordination
- Civic Works Committee – November 1, 2016 – Environmental Assessment Appointment of Consulting Engineer
- Strategic Priorities and Policy Committee – November 21, 2017 – Downtown Infrastructure Construction Project Coordination
- Civic Works Committee – June 19, 2018 – Victoria Bridge Environmental Study Report

COUNCIL'S 2019-2023 STRATEGIC PLAN

The following report supports the Strategic Plan through the strategic focus area of Building a Sustainable City by building new transportation infrastructure to meet the long term needs of our community.

BACKGROUND

Purpose

This report recommends the appointment of a consulting engineer to complete the detailed design and tendering for the Victoria Bridge Replacement Project.

Context

The Victoria Bridge (6-BR-19) located on Ridout Street South spans the South Branch of the Thames River, just south of Horton Street. There have been three previous bridges in this location dating back to 1848. The current bridge was constructed in 1926 on the abutments and central pier from the previous bridge which was constructed in 1875. The south abutment was replaced in the 1950's when the original abutment was damaged by flood waters. The current structure is a steel modified warren pony truss structure.

The bridge supports two lanes of traffic, with two cantilevered sidewalks outside of the truss. A watermain, sanitary sewer and Bell Canada cables are suspended beneath the structure. At 93 years of age with substructure elements at 144 years of age, this structure is nearing the end of its service life. It has had emergency repairs due to full perforations of the steel truss, deck perforations, and expansion joint failures within the last five years. The Schedule C Class Municipal Environmental Assessment for this project was completed in July 2018 and recommended the full replacement of this structure.

This consultant assignment will allow the detailed design for the replacement of the Victoria Bridge to be completed and be 'shovel ready' in the fall of 2020. Currently, the upcoming budget anticipates the construction in 2022.

DISCUSSION

The Victoria Bridge serves as a connecting link for pedestrian, cyclist and vehicle traffic while concurrently providing a support mechanism for City services and Bell Canada cables on Ridout Street South over the South Branch of the Thames River.

The preferred alternative in the environmental assessment was to replace the existing two span steel truss bridge with a new single span steel through arch structure founded on a concrete cap and pile system. The new bridge will be wide enough to allow for two through lanes, a 1.5m bicycle lane and a 2.5m wide concrete sidewalk on the east (northbound side) and a 4.0m wide raised multi-use path on the west (southbound side). The steel truss replacement structure will provide the sympathetic design elements that recognize the cultural heritage value of this river crossing.

The removal and replacement of this structure will require that Ridout Street South be closed from Horton Street to the Thames Park entrance for approximately one year. Vehicle traffic will be detoured around the area. A temporary modular bridge is proposed to provide the necessary support to maintain the existing services currently supported under the existing structure. The bridge design will be designed to maintain connectivity over the river for pedestrians and cyclists.

The road profile will be raised by approximately 1.5 m within the limits of the project so that the new bridge will permit the river to convey the 100 year storm event river flow. This profile change necessitates reconfiguration, upgrades and revised tie-ins to the Thames Valley Parkway and the entrances to the London Hydro lands & Thames

Park, along with adjustments to various City services and utilities.

The project will also include the removal of the existing central pier from the river with due regard and protection for all the flora, fauna, terrestrial, avian and aquatic life and features, and the historic presence of coal tar.

The current bridge capital budget is balancing a number of priorities and has this project programmed for construction in 2022 and 2023. Project implementation is subject to available funding and the coordination of this work with other large infrastructure projects planned on parallel corridors. The Wharnccliffe/CN Underpass reconstruction and rapid transit reconstruction of Wellington Road (including the widening of Clark's Bridge over the South Branch of the Thames River) are also scheduled in the near term.

City Staff are recommending the advancement of the detailed design for this project at this time to provide implementation timing flexibility to facilitate coordination with the other area large scale projects and to create an opportunity to accelerate in conjunction with potential external funding programs. Deferral of the construction is also possible but not desired due to the bridge condition and the likelihood of additional maintenance and repair costs.

Consultant Procurement

AECOM Canada Ltd. was selected to complete the environmental assessment in the fall of 2016 after a two stage competitive process in accordance with Section 15.2 (e) of the Procurement of Goods and Services Policy in which the assignment was publicly advertised and firms were subsequently invited to submit detailed proposals.

Due to the consultant's knowledge and experience on similar design projects combined with their positive performance on the project during the environmental assessment, AECOM was invited to submit a proposal to carry out the detailed design and tendering of this project. City staff have reviewed the fee submission in detail considering the hourly rates provided by each of the consultant's staff members. City staff have confirmed that hourly rates are consistent with those submitted through competitive processes. City staff also reviewed the time allocated to each project related task. The amount of time allocated to each project task is consistent with prior projects of a similar nature that have been awarded through a competitive process.

In accordance with Section 15.2 (g) of the Procurement of Goods and Services Policy, Civic Administration is recommending that AECOM Canada Ltd. be authorized to carry out engineering services related to detailed design and tendering for the Victoria Bridge Replacement Project for a fee estimate of \$772,894 (excluding HST).

AECOM Canada Ltd. has a long history of successful structural projects within the City of London and surrounding area. AECOM's local office has a strong structural staff component fully capable of completing this assignment.

The continued use of AECOM Canada Ltd. on this project for these additional services is of financial advantage to the City due to the fact that the firm has specific knowledge of the project and has undertaken work for which duplication would be required if another firm were to be selected. The approval of this work will bring the value of the overall consulting assignment to \$1,162,294. Funds for this assignment are available in the capital budget. Subject to successful completion of the design phase of this project, AECOM may be considered for the construction administration stage.

CONCLUSION

It is recommended that AECOM Canada Ltd. be appointed to undertake the detailed design and tendering for the replacement of the Victoria Bridge in the amount of \$772,894 (excluding HST). AECOM Canada Ltd. has demonstrated an understanding of the City requirements for this project. AECOM has acquired a detailed knowledge of this project and issues by completing the environmental assessment

There are no anticipated additional annual operating costs to the Environmental and Engineering Services Department associated with this assignment.

Acknowledgements

This report was prepared with the assistance of Jane Fullick, C.E.T., Senior Technologist and Karl Grabowski, P. Eng., Transportation Design Engineer of the Transportation Planning & Design Division.

PREPARED BY:	REVIEWED & CONCURRED BY:
GARFIELD DALES, P. ENG. DIVISION MANAGER TRANSPORTATION PLANNING & DESIGN	DOUG MACRAE, P. ENG., MPA DIRECTOR ROADS AND TRANSPORTATION
RECOMMENDED BY:	
KELLY SCHERR, P. ENG., MBA, FEC MANAGING DIRECTOR, ENVIRONMENTAL & ENGINEERING SERVICES AND CITY ENGINEER	

Attach: Appendix A: Source of Financing

c: G. McDonald/J. Pucchio, AECOM Canada Ltd.