

Report to Civic Works Committee

To: Chair and Members
Civic Works Committee

From: Kelly Scherr, P. Eng., MBA, FEC
Deputy City Manager, Environment & Infrastructure

Subject: RFP18-34 Contract Amendment: Detailed Design for Highbury Avenue South Reconstruction

Date: February 21, 2024

Recommendation

That, on the recommendation of the Deputy City Manager, Environment & Infrastructure, the following actions **BE TAKEN** with respect to the contract amendment for the detailed design and tendering of the Highbury Avenue South Reconstruction:

- a) The contract with Parsons Inc. **BE INCREASED** by \$746,161.41 to a total agreement value of \$1,567,367.91 (excluding HST) to complete additional detailed design activities for Highbury Avenue South Reconstruction including rehabilitation of the Bradley Avenue and Commissioners Road bridges, in accordance with Section 20.3 (e) of the City's Procurement of Goods and Services Policy;
- b) the financing for this assignment **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 assignment;
- 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.

Executive Summary

This report seeks the approval of Council to increase the existing Highbury Avenue South Reconstruction engineering consultant contract with Parsons Inc. by \$746,161.41 to \$1,567,367.91 to complete additional detailed design activities associated with the rehabilitation of the Bradley Avenue and Commissioners Road bridges over Highbury Avenue. The current contract includes the detailed design for the reconstruction of Highbury Avenue South not including these bridges. The Commissioners Road and Bradley Avenue bridges have recently been recommended for rehabilitation to improve their condition and to extend the service life of the structures. Additional design effort and revisions to the Highbury Avenue South design package are necessary to accommodate as well as coordination with the on-going provincial Highway 401/Highbury Avenue interchange construction project. The inclusion of this additional work within the current project provides good value and will result in construction cost efficiencies and minimized traffic impacts and disruption.

The tender preparation for the reconstruction of Highbury Avenue South, including the rehabilitation of the Commissioners Road and Bradley Avenue bridges is anticipated to be completed later this year to allow for construction to start in 2025 subject to updated costing and sufficient budget.

Linkage to the Corporate Strategic Plan

Municipal Council's new Strategic Plan identifies "Mobility and Transportation" as a strategic area of focus. This report supports the Strategic Plan by identifying the building of infrastructure that provides safe, integrated, connected, reliable and efficient

transportation choices.

Analysis

1.0 Background Information

1.1 Previous Reports Related to this Matter

- Civic Works Committee - October 30, 2018 – Rehabilitation of Wenige Expressway Bridge and Highbury Avenue South, Preliminary, Detailed Design and Tendering Appointment of Consulting Engineer
- Civic Works Committee - March 10, 2020 – Contract Award Tender No. 20-15 Wenige Expressway Bridge Rehabilitation
- Civic Works Committee - December 14, 2021 – Highbury Avenue South Rehabilitation Project

2.0 Discussion and Considerations

2.1 Background

The Highbury Avenue South Reconstruction project includes road reconstruction from south of the Wenige Expressway Bridge (Thames River) to the north limit of the Highway 401 Interchange as shown in Figure 1 below.

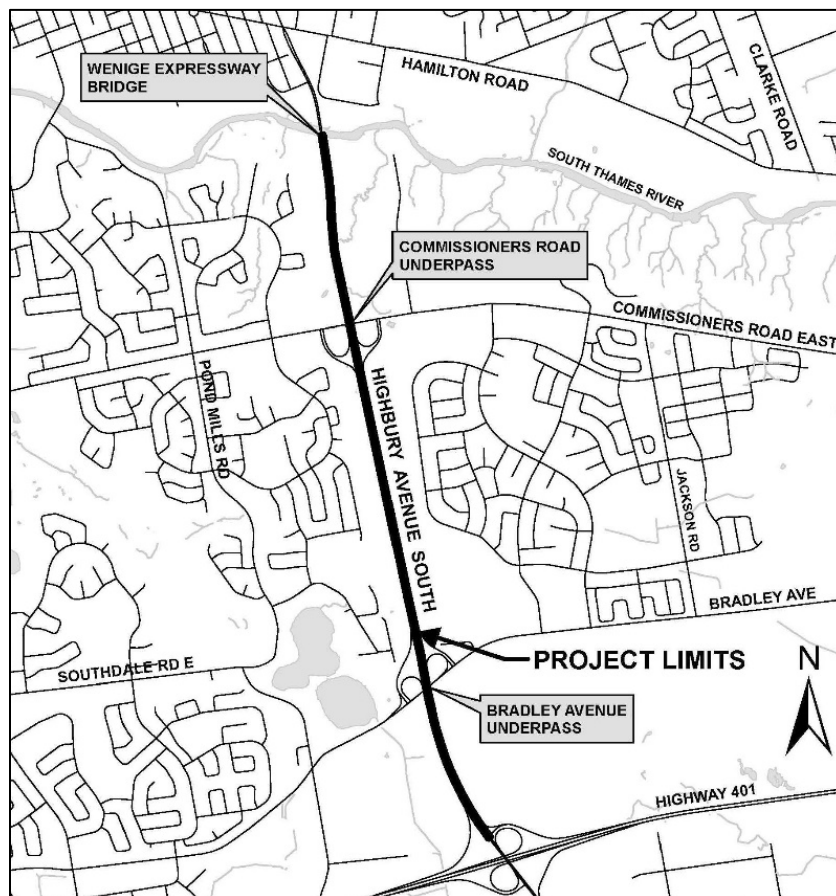


Figure 1: Highbury Avenue South Reconstruction Project Limits

The existing concrete roadway south of the Wenige Expressway Bridge to Highway 401 was built in the mid 1960's. The road has been subject to heavy traffic loading and the current average daily traffic count is 48,000 vehicles. The concrete roadway is in poor condition. Parsons Inc. was appointed to complete the detailed design and tendering for the rehabilitation of Highbury Avenue South. Based on recent bridge inspection information, it has been recommended that the Commissioners Road and Bradley Avenue bridges be rehabilitated to extend the useful life of the structures and improve their condition. Incorporation of this work into the current contract creates efficiencies.

The Commissioners Road Underpass at Highbury Avenue was constructed in 1965 and

while some repairs have been carried out during its life, a major rehabilitation has not yet occurred. In 2023, a detailed bridge condition survey and preliminary structural design report was completed and recommended that major rehabilitation be completed to extend the structure's service life by another 30 years. The proposed rehabilitation of the Commissioners Road bridge includes:

- Concrete patch repairs to the deck;
- Replacement of the waterproofing and asphalt system;
- Replacement of the expansion joints;
- Replacement of the barrier wall system;
- Widening of sidewalks;
- Patch repairs to the deck soffit and girders, sidewalk, median, piers, pier caps, diaphragms, abutments, and wingwalls, where required; and,
- Repair of deteriorated concrete slope paving.

The Bradley Avenue Underpass at Highbury Avenue was constructed in 1965 and is in fair to poor condition. The structure requires regular maintenance which includes scaling of loose concrete to keep it from falling to the Highbury driving lanes below. In 2023, a detailed bridge condition survey and preliminary structural design report was completed which recommended that minor rehabilitation be completed to extend the structure's service life by another 15 years, which is when the bridge is scheduled for replacement. The proposed rehabilitation of Bradley Avenue bridge includes:

- Replacement of asphalt;
- Placement of concrete barrier in front of the existing barrier system; and,
- Patch repairs to the deck soffit, girders, and fascia.

Completing the two bridge rehabilitations during the roadway reconstruction of Highbury Avenue South will provide overall cost and construction efficiencies thereby providing good value for the city and will reduce future traffic impacts and disruption.

2.2 Procurement Process

In 2018, Request for Proposal RFP18-34 was conducted and Parsons Inc. was awarded the project for the initial design of the reconstruction of the Wenige Expressway Bridge and Highbury Avenue from Hamilton Road to Highway 401 in the amount of \$537,028.50, in accordance with Section 15.2(e) of the Procurement of Goods and Services Policy. The timing of this procurement was dictated by the need to address the deteriorating condition of the Wenige Expressway Bridge which was reconstructed in 2020 and 2021 as the first phase of the project.

In 2021, Parsons Inc. was retained to complete the detailed design and tendering of the second phase of the project on Highbury Avenue South from the Wenige Expressway Bridge to Highway 401 in the amount of \$284,178.00, in accordance with Section 15.2 (g) of the Procurement of Goods and Services Policy.

Parsons Inc. has prepared a proposal for the detailed design required to incorporate the two bridge rehabilitations into the Highbury Avenue South Reconstruction project. Extending the current design assignment with Parsons Inc. provides cost efficiencies and good value to the city as there is significant background knowledge within the firm related to the project. The negotiated consultant fees for this scope change includes engineering services required to complete the detailed design, contract drawings, and incorporation of the additional bridge work into the Highbury Avenue South tender package. Additional effort and revisions for the detailed design of the Highbury Avenue rehabilitation are also included in the fees, which include:

- Coordinating traffic staging with the Ministry of Transportation for the Highway 401/Highbury Avenue interchange construction project which is underway;
- Engineering investigation and review to comply with updated excess soil regulations; and,

- Reconstruction of the Commissioners Road / Highbury Avenue signalized intersection at the west side ramps to comply with AODA standards.

The additional fees have been reviewed and negotiated to ensure that they are reasonable for the scope of work required and competitive with rates for other similar projects. The approval of this additional work valued at \$746,161.41 will bring the new total value of the overall consulting assignment to \$1,567,367.91.

City administration is recommending awarding the additional work to Parsons Inc. as an amendment to the original award, as per Section 20.3 e) ii) of the Procurement of Goods & Services Policy.

- ii. the total amended value of the contract will exceed the Council approved source of financing by an amount greater than \$50,000 or 3% of original contract value, whichever is greater, and there are funds available.

3.0 Financial Impact/Considerations

Funds are available from existing capital budgets. There are no ongoing operating costs associated with the award of this assignment. The Source of Financing Report is appended to this report as Appendix A.

Conclusion

It is recommended that the Commissioners Road and Bradley Avenue underpass bridges be rehabilitated to improve their condition and extend the service life of the structures. Completing these bridge rehabilitations as part of the upcoming roadway reconstruction of Highbury Avenue South will provide cost and construction efficiencies representing good value for the city while reducing future traffic impacts and disruption. Through the ongoing project, Parsons Inc. has demonstrated a good understanding of the requirements for this project and has effectively completed the detailed design for the Highbury Avenue South Reconstruction project. The original contract value with Parsons Inc. was \$537,028.50 and included the design of the Wenige Expressway Bridge and Highbury Avenue from Hamilton Road to Highway 401. In 2021, Parsons Inc.'s contract was extended by \$284,178.00 to complete the detailed design assignment and tendering of the project's second phase involving the reconstruction of Highbury Avenue South.

It is recommended that Parsons Inc.'s contract be increased by \$746,161.41 which will result in a total contract value of \$1,567,367.91 (excluding HST) to complete additional detailed design activities including the rehabilitation of the Bradley Avenue and Commissioners Road bridges over Highbury Avenue. Cost and construction efficiencies is achieved through one consolidated construction contract as there is significant background knowledge within the firm and many of the same staff working on the project. The request for tender is anticipated to be completed later this year with construction planned to start in the spring of 2025 subject to budget availability.

Prepared by:	Garfield Dales, P. Eng., Division Manager Transportation Planning & Design
Submitted by:	Doug MacRae, P. Eng., MPA, Director Transportation & Mobility
Recommended by:	Kelly Scherr, P. Eng., MBA, FEC, Deputy City Manager, Environment & Infrastructure
Appendix A:	Source of Financing Report
c:	Steve Mollon, Senior Manager, Procurement & Supply Steven Funk, Technologist II Andrew Denomme, P.Eng., Transportation Design Engineer Paul Yanchuk, P.Eng., Transportation Design Engineer Osama Gamal, P.Eng., Parsons Inc.

Appendix "A"

#24022
February 21, 2024
(Contract Increase)

Chair and Members
Civic Works Committee

RE: RFP18-34 Contract Amendment: Detailed Design for Highbury Avenue South Reconstruction
(Subledger RD210015)
Capital Project TS144620 - Road Network Improvements(Main)
Capital Project TS176323 - Bridges Major Upgrades
Capital Project TS406723 - Traffic Signals - MTCE
Parsons Inc. - \$746,161.41 (excluding HST)

Finance Supports Report on the Sources of Financing:

Finance Supports confirms that the cost of this project can be accommodated within the financing available for it in the Capital Budget and that, subject to the approval of the recommendation of the Deputy City Manager, Environment and Infrastructure, the detailed source of financing is:

Estimated Expenditures	Approved Budget	Committed To Date	This Submission	Balance for Future Work
TS144620 - Road Network Improvements(Main)				
Engineering	1,081,019	994,430	86,588	0
Construction	8,543,134	7,874,216	0	668,918
Construction (Utilities)	38,855	36,793	0	2,062
City Related Expenses	5,294	5,294	0	(0)
TS144620 - Total	9,668,302	8,910,733	86,588	670,981
TS176323 - Bridges Major Upgrades				
Engineering	1,112,097	457,672	654,425	0
Construction	4,276,564	4,070	0	4,272,493
City Related Expenses	20,000	2,624	0	17,376
TS176322 - Total	5,408,661	464,366	654,425	4,289,870
TS406723 - Traffic Signals - MTCE				
Engineering	500,000	29,455	18,281	452,264
Construction	3,766,089	1,721,116	0	2,044,973
Traffic Signals	63,572	63,572	0	0
TS406723 - Total	4,329,661	1,814,144	18,281	2,497,237
Total Expenditures	\$9,738,322	\$2,278,510	\$672,706	\$6,787,106

Sources of Financing

TS144620 - Road Network Improvements(Main)

Canada Community-Building Fund	9,613,695	8,856,126	86,588	670,981
Other Contributions	54,607	54,607	0	0
TS144620 - Total	9,668,302	8,910,733	86,588	670,981

TS176323 - Bridges Major Upgrades

Drawdown from Transportation Renewal Reserve Fund	2,486,898	0	0	2,486,898
Canada Community-Building Fund	2,921,763	464,366	654,425	1,802,972
TS176322 - Total	5,408,661	464,366	654,425	4,289,870

Sources of Financing Countinued

	Approved Budget	Committed To Date	This Submission	Balance for Future Work
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Appendix "A"

#24022

February 21, 2024
(Contract Increase)

Chair and Members
Civic Works Committee

RE: RFP18-34 Contract Amendment: Detailed Design for Highbury Avenue South Reconstruction

(Subledger RD210015)

Capital Project TS144620 - Road Network Improvements(Main)

Capital Project TS176323 - Bridges Major Upgrades

Capital Project TS406723 - Traffic Signals - MTCE

Parsons Inc. - \$746,161.41 (excluding HST)

TS406723 - Traffic Signals - MTCE

Capital Levy	3,632,783	1,814,144	0	1,818,639
Drawdown from Transportation Renewal Reserve Fund	696,878	0	18,281	678,597
TS406723 - Total	4,329,661	1,814,144	18,281	2,497,236
Total Financing	\$9,738,322	\$2,278,510	\$672,706	\$6,787,106

Financial Note:

	TS144620	TS176323	TS406723	Total
Contract Increase	85,090	\$643,106	\$17,965	\$746,161
Add: HST @13%	11,062	83,604	2,335	97,001
Total Contract Price Including Taxes	96,152	726,710	20,300	843,162
Less: HST Rebate	-9,564	-72,285	-2,019	-83,868
Net Contract Price	\$86,588	\$654,425	\$18,281	\$759,294

Jason Davies
Manager of Financial Planning & Policy

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