# **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: Highbury Avenue South Rehabilitation Project

Date: December 14, 2021

#### Recommendation

That, on the recommendation of the Deputy City Manager, Environment & Infrastructure, the following actions **BE TAKEN** with respect to the appointment of a Consulting Engineering for the Highbury Avenue South Rehabilitation Project from the Wenige Expressway Bridge to Highway 401:

- (a) Parsons Inc. **BE APPOINTED** Consulting Engineers to update and complete the detailed design, and provide assistance with the tendering for the rehabilitation of Highbury Avenue South (Wenige Expressway Bridge to Highway 401) in the amount of \$284,178.00 (excluding HST), in accordance with Section 15.2 (g) of the Procurement of Goods and Services Policy;
- (b) The financing for this appointment **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 appointment;
- (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 MTO or utility agreements, if required, to give effect to these recommendations.

#### **Executive Summary**

This report seeks the approval of Council to retain a consultant to complete the detailed design assignment for Highbury Avenue South, from the Wenige Expressway Bridge to Highway 401.

A previous assignment included the start of the detailed design for the rehabilitation of Highbury Avenue South. This new contract will complete the detailed design to tender ready status, in anticipation of a request for tender being called in the fall of 2022.

### **Linkage to the Corporate Strategic Plan**

The following report supports the 2019–2023 Strategic Plan through the strategic focus areas of Building a Sustainable City and Growing Our Economy by maintaining robust infrastructure and managing the transportation infrastructure gap.

# 1.0 Background Information

## 1.1 Previous Reports Related to this Matter

- Civic Works Committee March 10, 2020 Contract Award Tender No. 20-15
  Wenige Expressway Bridge Rehabilitation
- Civic Works Committee October 30, 2018 Rehabilitation of Wenige Expressway Bridge and Highbury Avenue South, Preliminary, Detailed Design and Tendering Appointment of Consulting Engineer
- Board of Control June 23, 2010 Contract Award: Tender No. 10-93
  Highbury Avenue South Concrete Pavement Rehabilitation
- Board of Control November 26, 2008 Highbury Avenue Rehabilitation
- Environment and Transportation Committee— April 21, 2008 Highbury Avenue Rehabilitation
- Environment and Transportation Committee August 7, 2007 Appointment of Consulting Engineer, Highbury Avenue Rehabilitation

#### 2.0 Discussion and Considerations

#### 2.1 Background

In the fall of 2018, the City initiated a preliminary and detailed design assignment to investigate the needs of the Wenige Expressway Bridge and Highbury Avenue between Hamilton Road and Highway 401. This assignment included:

- progressing the detailed design to tender for the Wenige Expressway Bridge rehabilitation and the road renewal works from Hamilton Road to approximately 100 m south of the bridge, and
- partially progressing the detailed design for the rehabilitation of the existing concrete roadway on Highbury Ave South, from the limits of the bridge rehabilitiation project, southerly to Highway 401.

The bridge and road components were linked for coordination of corridor pavement design and temporary construction staging measures that could service both phases.

Parsons Inc. was selected to complete the original design assignment following a two stage procurement process. Parsons progressed the detailed design of the northerly portion of the project with this work being tendered in 2020. Following two years of construction, the work on the Wenige Expressway Bridge and Highbury Avenue from Hamilton Road to the south side of the bridge will be completed this construction season.

The City would like to progress the remainder of the design work on the balance of Highbury Avenue South (from the south side of the bridge rehabilitation project, southerly to Highway 401) in order to be ready to tender this work in the fall of 2022 for construction in 2023.

#### 2.2 Discussion

Highbury Avenue South within the project limits is classified as an expressway, conveying 45,000 vehicles per day including 15% trucks. The last repairs to the roadway were in 2010 & 11 when some full depth repairs were completed before Diamond grinding of the existing concrete surface. The concrete roadway, which is approximately 57 years old, is in poor condition and experiencing various distresses.

Parsons Inc. completed the initial design work under for the previous assignment as per City requirements. Since then, Ontario Regulation 406/19 under the Environmental Protection Act has been implemented by the Province of Ontario. This Regulation deals with how excess soils generated from excavation or earthworks must be managed during construction. As a result, a substantial amount of the effort in this new design assignment will go towards geotechical and soils investigations in order to prepare the information required for tendering, as well as design options for the re-use of materials within the Highbury Avenue South corridor.

The majority of Highbury Avenue South consists of a concrete road surface, with sections that have been repaired with asphalt over time. This is a unique characteristic within London as most other roads are constructed with asphalt. Concrete pavements typically have a slightly higher initial cost and have a longer lifespan with lower maintenance costs whereas asphalt pavements are initially more economical to install but have a shorter lifespan and require more frequent maintenance. This design assignment will require Parsons and the geotechnical subconsultant analyze lifecycle cost estimates to determine which option (concrete or asphalt) provides the best value to the City of London in order to ensure the final product is durable and cost-effective.

Also included in this design assignment will be the redesign of the traffic signals at the Commissioners Road East/Highbury Avenue South northbound offramp to accommodate widening of the off-ramp for double left-turn lanes, coordination with nearby MTO projects, a review of structure clearances over Highbury Avenue South as well as minor design updates to complete the detailed design to tender ready status.

Having Parsons continue with the design of this project allows for efficiencies and provides value to the City as there is significant background knowledge within the firm and many of the same staff will be working on the project. The negotiated consultant fee for this assignment includes completing the detailed design process, assistance with tendering, public consulation and complying with new environmental requirements and legislation. The approval of this work will bring the value of the overall consulting assignment to \$821,206.50, excluding HST. Subject to project performance, Parsons will be considered for construction administration.

### 3.0 Financial Impact/Considerations

Funds are available in the Capital Budget. There are no ongoing operating costs associated with the award of this assignment. The Source of Financing Report is appended to this report under Appendix A.

### 4.0 Key Issues and Considerations

Highbury Avenue South provides a vital connection to Highway 401 for the movement of goods and traffic. Built in the early 1960's, the concrete roadway is nearing the end of its service life and needs replacement. The renewal of the pavement represents a significant asset management investment that requires comprehensive engineering design given the classification and characteristics of the facility.

The capital program for major roads has previously established a program to address these needs. With award of this consulting contract, the detailed design will be completed, allowing the project to be tendered in the fall of 2022, with construction to occur in 2023.

# Conclusion

Parsons Inc. has demonstrated an understanding of the requirements for this project and can effectively leverage previous work. It is recommended that this design assignment for Parsons Inc. be awarded in the amount of \$284,178.00 (excluding HST) to allow the consultant to complete the detailed design assignment for the Highbury Avenue South Rehabilitation Project from the Wenige Expressway Bridge to Highway 401.

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** 

Schedule A: Source of Financing

c: John Freeman, Manager, Purchasing and Supply

Marko Paranosic, Parsons Inc.