

<b>TO:</b>	<b>CHAIR AND MEMBERS CIVIC WORKS COMMITTEE MEETING ON JUNE 19, 2018</b>
<b>FROM:</b>	<b>KELLY SCHERR, P.ENG., MBA, FEC MANAGING DIRECTOR, ENVIRONMENTAL &amp; ENGINEERING SERVICES AND CITY ENGINEER</b>
<b>SUBJECT:</b>	<b>WHARNCLIFFE ROAD SOUTH IMPROVEMENTS WHARNCLIFFE ROAD BRIDGE REHABILITATION DETAILED DESIGN &amp; TENDERING APPOINTMENT OF CONSULTING ENGINEER</b>

<b>RECOMMENDATION</b>
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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 Wharncliffe Road South Improvements from Becher Street to Springbank Drive and the Wharncliffe Road Bridge Rehabilitation:

- (a) WSP **BE APPOINTED** Consulting Engineers for the detailed design and tendering at an upset amount of \$2,053,458.15 (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 rail-related agreements, if required, to give effect to these recommendations.

<b>PREVIOUS REPORTS PERTINENT TO THIS MATTER</b>
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- Civic Works Committee – June 19, 2012 – London 2030 Transportation Master Plan
- Strategic Priorities and Policy Committee – June 23, 2014 – Approval of 2014 Development Charges By-Law and DC Background Study
- Civic Works Committee – October 6, 2014 – Environmental Assessment Appointment of Consulting Engineer
- Civic Works Committee – November 29, 2016 – Environmental Assessment Update
- LACH - January 11, 2017 – Municipal Class Environmental Assessment Study – Wharncliffe Road South from Becher Street to Commissioners Road West
- LACH - November 16, 2017 – Wharncliffe Road South Environmental Assessment – 100 Stanley Street
- Civic Works Committee – February 6, 2018 – Environmental Study Report

## 2015-19 STRATEGIC PLAN

The following report supports the Strategic Plan through the strategic focus area of *Building a Sustainable City* by implementing and enhancing safe and convenient mobility choices for transit, automobile users, pedestrians, and cyclists. The rehabilitation of the Wharncliffe Road Bridge and reconstruction and widening of the CNR grade separation will improve the reliability of the local transit service and provides vital roadway network improvements.

## BACKGROUND

### **Purpose**

This report seeks the approval of the Municipal Council to retain an engineering consultant to complete the detailed design and tendering for the Wharncliffe Road South Phase 1 Improvements project between Becher Street and Springbank Drive as well as the rehabilitation of the Wharncliffe Road Bridge (01-BR-07) over the Thames River. The implementation of these two projects are being coordinated into one contract to maximize efficiencies and to reduce the impacts to road users.

### **Context**

Wharncliffe Road South is a major transportation corridor designed to carry high volumes of traffic. Improvements to the subject section will accommodate pedestrians, cyclists and vehicular traffic in a safe and efficient manner and improve mobility within the surrounding community.

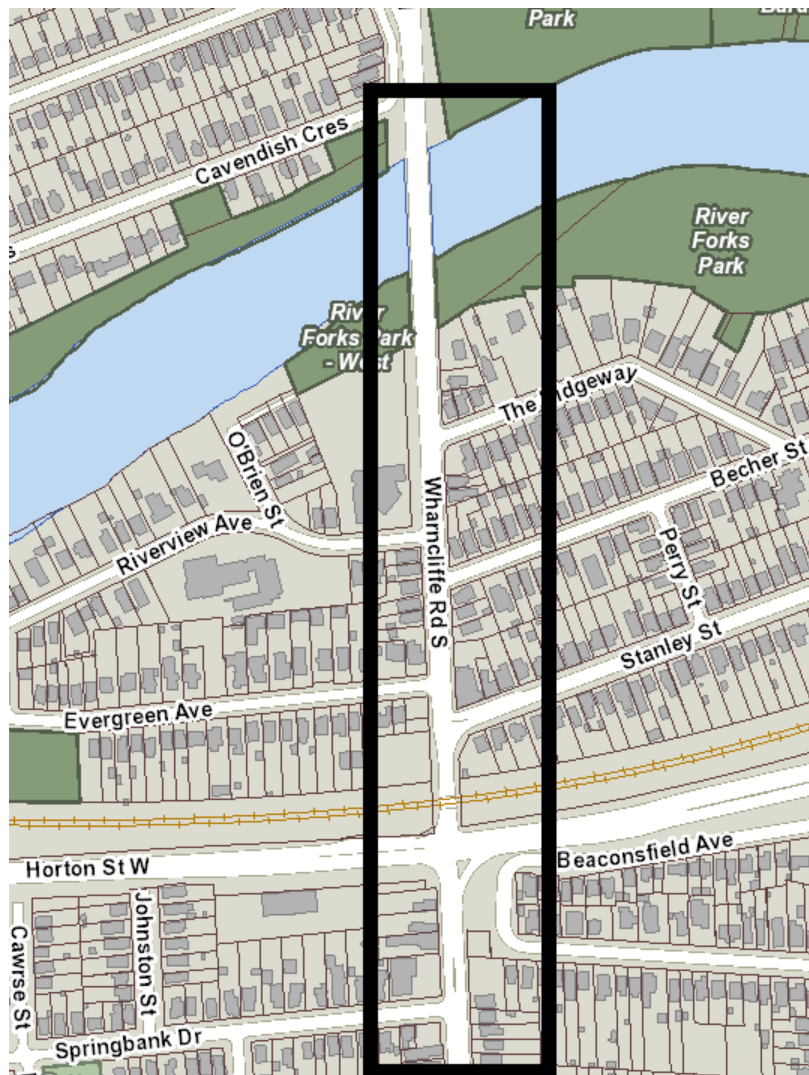
#### *Project 1*

An Environmental Study Report (ESR), the result of a comprehensive environmental Assessment (EA) for Wharncliffe Road South was completed in May 2018. The subject road section (Phase 1) was identified as a priority in the 2030 Smart Moves Transportation Master Plan (TMP). Wharncliffe Road South from Becher Street to Springbank Drive will be widened to four through lanes, including the reconstruction of the railway grade separation, with bike lanes, localized turning lanes, curbs, sidewalks and illumination improvements.

#### *Project 2*

The City's Bridge Management System and biennial inspections identified life cycle renewal needs for to maintain the structural integrity of the Wharncliffe Road Bridge (01-BR-07) over the Thames River. A preliminary Structural Design Report (SDR) was completed in March 2018. A structural evaluation and Bridge Deck Condition Survey (BDCS) were also completed to establish any limitations for rehabilitating the structure. A life cycle cost comparison was completed and determined that the most cost-effective approach over a 50 year period of assessment is to complete a major rehabilitation now and a superstructure replacement in 35 years.

See below for a map illustrating the combined project limits.



**Wharncliffe Road South Improvement Limits**

## DISCUSSION

### Project Description

This is a large complex assignment to address two projects involving numerous property acquisitions, utility relocations and approvals. The cost for the Wharncliffe Road Improvements between Becher Street and Springbank Drive is estimated at approximately \$39 Million. The cost estimate includes roadway construction, the railway grade separation, street lighting and signalization, stormwater management, utility relocation, landscaping, traffic control, sanitary sewers, watermain, landscaping, staging and property acquisitions.

The cost for the rehabilitation of the Wharncliffe Road Bridge over the Thames River is estimated at approximately \$3.1 Million. The cost estimate includes removal and replacement of deteriorated concrete, deck waterproofing and new asphalt. Works also include the construction of abutment thrust blocks and approach slabs with concrete sleeper slabs in conjunction with a semi-integral abutment retrofit, jacking the structure and replacing the abutment rocker bearings with new elastomeric bearings and concrete pedestals, upgrading the light poles north and south of bridge local watermain insulation and steel casing repairs and the removal of the abandoned gas main.

Both projects will require restrictions to traffic on Wharncliffe Road. The Wharncliffe Road / CN Grade Separation reconstruction will require a road closure of several months. The bridge rehabilitation will require a reduction of lanes. As such, the simultaneous implementation of the two projects in the coordinated manner proposed in this consultant assignment can greatly reduce the social impacts.

#### *Wharncliffe Road South EA*

The Municipal Class EA process includes an appeal provision to change the status of a project from being subject to the Municipal Class EA process to being subject to an Individual Environmental Assessment as per Part II of the Ontario Environmental Assessment Act. A Part II Order request requires submission of a written request to the Minister of the Environment and Climate Change outlining the unresolved issue and requesting the Minister to review the matter.

Three Part II Order requests have been received for the Wharncliffe Road South Class EA. Two of the Part II Order requests primarily relate to cultural heritage aspects and the potential future relocation of 100 Stanley Street, communication and environmental impacts. The third Part II Order request relates primarily to the communication and notification of the anticipated temporary closures of Wharncliffe Road during the construction, the environmental impacts on climate change and the impacts on the neighbourhood.

Part II Order requests are resolved by a decision of the Minister after gathering and considering relevant information. The schedule for this process is unpredictable and has the potential to delay the project. Based on previous experience, a Minister response to the Part II Order requests may take up to 8 to 10 months.

The municipality has the authority to proceed with the design of the project at its risk. The enclosed recommendation to proceed with the detailed design of Phase 1 is based on an assessment of the nature of the Part II Order requests. Any potential revisions to the CNR bridge replacement design as a result of the Minister's decision are anticipated to be manageable within the design assignment. Advancing the project design may provide information useful to facilitate further discussions with the Part II Order requestors.

Notwithstanding the potential for delays associated with the Part II Order requests, the project schedule envisions the CNR bridge construction commencing in 2020/2021. The award of the design at this time aims to maintain this project schedule.

The primary deliverables from this detailed design assignment include field investigations, design, approvals, contract preparation, property acquisition support, and traffic assessment. Particular focus areas for the assignment include:

- Detail Design
  - CNR Bridge Replacement
  - Wharncliffe Road Bridge Rehabilitation Design
  - Sanitary/Storm Sewers, and Watermain Improvements
  - Street Lighting and Signalization Upgrades
  - Streetscaping
  - Traffic Management and Staging Plan
  - Prequalification of Contract
  - Cost Estimates

- Design Co-ordination
  - Utility Coordinating Committee (UCC) Liaison
  - Agency approvals
- Geotechnical Investigation
- Surveys
- Property acquisition support
- Preparation of the complete tender package, including advertisement, review of the submitted tenders for completeness, and contractor recommendation.

## **Cultural Heritage**

The identification, evaluation, management and conservation of Ontario's cultural heritage resources was an essential component of the environmental assessment. With this proposed consultant detailed design award, additional cultural heritage documentation will be required, consistent with the Ontario Heritage Act and City of London Official Plan policy.

The EA preliminary recommendation with respect to conserving the cultural heritage value of 100 Stanley Street is to relocate the dwelling in a manner that offers the best opportunity to protect the cultural heritage value that is both sympathetic to the original context and recognizes the importance of the building to the city and neighbourhood. Work will be undertaken during the detailed design assignment to further develop the relocation strategy.

## **Schedule**

Construction of this project is predominantly planned to take place in 2021/2022 with commencement of the utility relocations required in 2020 to facilitate the improvements. The project schedule is subject to EA clearance, property acquisition and railway concurrence.

To maximize work done during the road closures required for the CNR grade separation reconstruction, infrastructure work such as watermain and sewer upgrades and rehabilitation of the Wharncliffe Road Bridge over Thames River will be coordinated to occur at the same time. These other work items have been anticipated and would individually trigger substantial road restrictions if implemented separately.

The development of the detail design will enable further development of the construction phasing and scheduling with the railway company. The related road closure timing and scheduling will be developed during this assignment with the goal of minimizing impacts, sharing information with the public and business community.

The design and approvals of the proposed improvement project will include property acquisition requirements, and thorough agency review and coordination such as CNR and MOECC.

## **Consultant Selection**

The city previously procured WSP for the project environmental assessment with a competitive two stage consultant acquisition process for this complex project in accordance with the Procurement of Goods and Services Policy. The process, which included a publicly advertised Request for Qualifications (RFQ) and a Request for Proposal (RFP), identified the selected consultant from a short list of engineering consultants based on evaluations from an inclusive City project team.

Due to the consultant's knowledge and positive performance on the project, the consultant was invited to submit a proposal to carry out the detailed design. 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.

The continued use of WSP on this project for detailed design 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 continued coordination of railway works that WSP began during the environmental assessment phase is important. The approval of this work will bring the value of the overall consulting assignment to \$2,600,158.15 (excluding HST).

In accordance with Section 15.2 (g) of the Procurement of Goods and Services Policy, Civic Administration is recommending that WSP be authorized to carry out the detailed design and tendering of this project for a fee estimate \$2,053,458.15 (excluding HST).

<b>CONCLUSION</b>
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The EA for the Wharnccliffe Road South Improvements from Becher Street to Commissioners Road was completed by WSP. The EA was prepared with input from residents, external agencies, utilities, emergency service providers, community and other stakeholders, as well as First Nations and property owners in proximity to the study. WSP also has the design capabilities for the Wharnccliffe Road Bridge rehabilitation.

It is recommended that WSP be awarded the consulting assignment for the detailed design and tendering of the Wharnccliffe Road South Improvements Phase 1 from Becher Street to Springbank Drive, as well as the detailed design and tendering for the Wharnccliffe Road Bridge over the Thames River, in the amount of \$2,053,458.15 (excluding HST).

## Acknowledgements

This report was prepared with the assistance of Ted Koza, P.Eng., Transportation Design Engineer, Jane Fullick, C.E.T., Senior Technologist, and Josh Ackworth, C.E.T., Technologist II of the Transportation Planning & Design Division.

<b>PREPARED BY:</b>	<b>REVIEWED AND CONCURRED BY:</b>
<b>DOUG MACRAE, P.ENG. DIVISION MANAGER TRANSPORTATION PLANNING &amp; DESIGN</b>	<b>EDWARD SOLDO, P.ENG. DIRECTOR, ROADS AND TRANSPORTATION</b>
<b>RECOMMENDED BY:</b>	
<b>KELLY SCHERR, P.ENG., MBA, FEC MANAGING DIRECTOR ENVIRONMENTAL &amp; ENGINEERING SERVICES AND CITY ENGINEER</b>	

Attach: Appendix A – Source of Financing

cc. Geoff Smith, CSCMP, Purchasing and Supply  
Marta Semeniuk, Financial Planning and Policy  
Gary McDonald, Tangible Capital Assets  
Bob Rook, WSP  
CN Rail