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Section II – Items for Executive Action

TO: Chair and Members of the Executive Committee
Meeting #5/19, Friday, June 07, 2019

FROM: Sameer Dhalla, Director, Development and Engineering Services

RE: **REQUEST FOR PROPOSAL FOR FLOOD REMEDIATION FEASIBILITY STUDY AND MUNICIPAL CLASS ENVIRONMENTAL ASSESSMENT FOR HIGHLAND CREEK – MARKHAM BRANCH CORPORATE DRIVE – CITY OF TORONTO**
RFP No. 10009966

KEY ISSUE

Award of Request for Proposal (RFP) No. 10009966 for engineering consulting services to undertake a feasibility study to examine flood remediation options for a section of Highland Creek - Markham Branch by Corporate Drive as part of a Municipal Class Environmental Assessment.

RECOMMENDATION

WHEREAS Toronto and Region Conservation Authority (TRCA) is engaged in a project that requires engineering consulting services.

AND WHEREAS TRCA solicited proposals through a publicly advertised process and evaluated the proposals based on pre-established RFP criteria;

THEREFORE LET IT BE RESOLVED THAT Request for Proposal (RFP) No.10009966 for Highland Creek Markham Branch (Corporate Drive) Flood Remediation Class Environmental Assessment be awarded to Morrison Hershfield Limited at a total cost not to exceed \$299,007.50, plus applicable taxes, to be expended as authorized by TRCA staff;

THAT TRCA staff be authorized to approve additional expenditures to a maximum of \$68,150.50, plus applicable taxes in the event that the Technical Study determines the Municipal Engineers Class Environmental Assessment process should be completed as a Schedule C project;

THAT TRCA staff be authorized to approve a contingency for the project to a maximum of \$55,000 (approximately 15% of the total maximum cost), plus applicable taxes, if deemed necessary;

THAT should TRCA staff be unable to negotiate a contract with the above-mentioned proponent, staff be authorized to enter into and conclude contract negotiations with other Proponents that submitted proposals, beginning with the next highest ranked Proponent meeting TRCA specifications;

AND FURTHER THAT authorized TRCA officials be directed to take whatever action may be required to implement the contract, including the obtaining of necessary approvals and the signing and execution of any documents.

BACKGROUND

The southeast corner of Corporate Drive & Consilium Place in Scarborough Centre is owned by 8104476 Canada Inc. (Owner). This site and surrounding areas are located within the Regional flood plain of Markham Branch of Highland Creek. At Toronto City Council's meeting on July 23, 24 & 25, 2018, City Council adopted item MM44.52 which requests the TRCA to undertake a Flood Remediation Study to investigate the measures necessary to contain the flood plain in consultation with City of Toronto staff at the expense of the Owner. The TRCA has entered into an agreement with the Owner and the City to undertake the Flood Remediation Study which consists of a Technical Study and an Environmental Assessment (EA). The Owner has provided TRCA the appropriate funds to cover all costs associated with the study including Consultant fees, TRCA staff costs, contingency, legal and other fees related to undertaking the study.

The Markham Branch of Highland Creek spills out of the river and floods urban lands within the study area during storm events greater than the 25-year event. This is a known flood risk area and forms a part of the larger Progress Business Park Flood Vulnerable Area (FVA). At Corporate Drive, storms as low as the 25-year storm event cause water to overtop the road and spill through adjacent lands. The flooding is largely the result of undersized culverts at Corporate Drive, Progress Avenue, and Bellamy Road which restrict flow, causing water to backup upstream of the culverts.

The project will examine options to provide flood protection for an 1800 metre section of the Markham Branch of Highland Creek. The planning and design of the preferred remedial solution will require the expertise of a multi disciplinary professional engineering firm with experience in fluvial geomorphology, water resources engineering, ecology, civil engineering, transportation engineering, geotechnical engineering and EA planning. This project will follow the process outlined in the Municipal Engineers Association (MEA) Municipal Class Environmental Assessment (MCEA) (October 2000, as amended in 2007, 2011 & 2015) parent Class EA document. The Municipal Class EA process is being used because of the cost thresholds of potential works and because it enables flood remediation to facilitate land development and for physical changes to municipal infrastructure.

The project will be split into two phases:

- a) Phase 1: Technical Study to examine a range of floodplain relief alternatives and to determine how much relief is provided by each alternative. The Technical Study will also characterize baseline conditions and identify mitigation measures for impacted infrastructure, ecology, stream stability, and land uses. The Technical Study will also form an opinion of the costs for each alternative, confirm the appropriate EA Schedule, and establish the feasibility of the alternatives. This stage of study will follow Phases 1 and 2 of the Municipal Class EA process, (excluding the public engagement elements of the study) to confirm that a viable alternative can be established.
- b) Phase 2: Undertaking the formal Municipal Class EA process.

The outcome of the Technical Study will determine whether a Schedule B or Schedule C ME Class EA is required. A provisional cost of \$68,150.50 is being requested due to uncertainties associated with the appropriate Environmental Assessment Schedule for the EA component of the study. During the development of the RFP, TRCA and City staff assumed that the EA study would be completed as a Schedule B project which is consistent with similar type flood

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remediation environmental assessments. However, should the Technical Study determine significant environmental or technical issues resulting in increased implementation complexity and costs, the EA study will be conducted as a Schedule C project requiring an Environmental Study Report to be filed and further public consultation.

DETAILS OF WORK TO BE DONE

The project will include the following key components:

1. **Background Review and Data Gap Analysis**

The Consultant will complete a thorough background review of all available information for the project study area. The Consultant will identify data gaps and work with the study team to fill those gaps.

2. **Baseline Inventory**

Baseline conditions include existing physical, biological, cultural, socioeconomic, flooding and erosion characteristics. The consultant will conduct a site visit, topographic surveys, fluvial geomorphic assessment, erosion threshold assessment, subsurface utility assessment, and cultural assessment for three crossings.

3. **Screening of Initial High-Level Alternative Solutions**

The Consultant will develop detailed one-dimensional and two-dimensional hydraulic models to represent flooding in the study area. The study team will identify high level Alternative Solutions that can provide flood protection. The Consultant will screen high level solutions to those that meet project objectives of flood protection.

4. **Development and Evaluation of Refined Alternative Solutions**

The Consultant will work with the City and TRCA to identify and refine the remaining Alternative Solutions into a number of variations for further evaluation. These new refined Alternatives will explore different configurations and footprints, and incorporate considerations related to soil conditions, infrastructure, and utility conflicts. Factors such as cost, mitigation measures to the watercourse, and traffic impacts will be considered. Based on this analysis a preliminary Preferred Alternative will be identified.

All the work done up to this point will be summarized in a Technical Study report. TRCA, the City, and the Owner will assess the findings of the report. If it is deemed that the project is not technically and/or fiscally feasible then the project will conclude. Otherwise the project will proceed as a Municipal Class EA.

5. **Municipal Class EA**

A Notice of Commencement will be released, and the Consultant will prepare for the first of what is anticipated to be two rounds of public and stakeholder engagement. Following the first round of public engagement the study team will update the evaluation of refined Alternative Solutions and selection of the preliminary Preferred Alternative based on stakeholder and public feedback. The revised information will be presented at the second round of public engagement.

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Following the conclusion of the second round of engagement, and if no significant concerns or issues have been raised, the Project Management team and Consultant will proceed with the completion of the Municipal Class EA. This will include advancing 10% design drawing to 30% design drawings for the selected Preferred Alternative and compiling an EA File Study Report.

RATIONALE

RFP documentation was posted on the public procurement website www.biddingo.com on April 30, 2019 and closed on May 17, 2019. Two (2) addendums were issued to respond to questions received. A total of twenty-seven (27) firms downloaded the documents and two (2) proposals were received from the following Proponents:

- Matrix Solutions Inc.
- Morrison Hershfield

An Evaluation Committee comprised of staff from Development and Engineering Services, Corporate Services, as well as representatives from the City of Toronto Transportation and Development and Planning Services reviewed the proposals. The criteria used to evaluate and select the recommended Proponent included the following:

Criteria	Weight	Minimum Score
Conformance with the terms of the RFP	5	3
Understanding of Project and Scope of Work	15	9
Similar Projects - Scope and Magnitude	10	6
Expertise and Availability of Project Team (Resumes)	20	15
Approach/Methodology/Schedule	30	20
Sub-Total Technical	80	53
Pricing	20	-
Sub-Total Pricing	20	-
Total Points	100	-

Morrison Hershfield Limited was the highest overall ranked firm for both the technical and cost components of the evaluation. Therefore, it is recommended that contract No. 10009966 be awarded to Morrison Hershfield Limited at a total cost not to exceed \$299,007.50, plus 40% contingency, plus applicable taxes, it being the highest ranked Proponent meeting TRCA specifications. Proponent's scores and staff analysis of the evaluation results can be provided in an in-camera presentation, upon request.

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Relationship to Building the Living City, the TRCA 2013-2022 Strategic Plan

This report supports the following strategic priorities set forth in the TRCA 2013-2022 Strategic Plan:

Strategy 2 – Manage our regional water resources for current and future generations

Strategy 7 – Build partnerships and new business models

Strategy 8 – Gather and share the best sustainability knowledge

FINANCIAL DETAILS

TRCA at the request of City of Toronto council, has entered into a funding agreement with the owner of the site who will cover all costs associated with the study including Consultant fees, TRCA staff costs, contingency, legal and other fees related to undertaking the study. Funds for the contract are identified in account 107-65 Highland Creek at Markham Branch (Corporate Drive) Flood Remediation Study.

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Date: May 29, 2019