

Section I – Items for Authority Action

TO: Chair and Members of the Authority
Meeting #6/18, Friday, July 20, 2018

FROM: Michael Tolensky, Chief Financial and Operating Officer

**RE: DOWNTOWN BRAMPTON FLOOD PROTECTION PROJECT
ENVIRONMENTAL ASSESSMENT**
Award of Contracts for Consulting Services to Undertake a Municipal Class Environmental Assessment with the City of Brampton

KEY ISSUE

Award of contracts #10007828, #10008216, #10007940 and #10008102 for planning and engineering; project management; water resources engineering; and geotechnical, geoenvironmental and hydrogeological consulting services, respectively, for the Downtown Brampton Flood Protection Project; a Municipal Class Environmental Assessment undertaken by Toronto and Region Conservation Authority as a co-proponent with the City of Brampton.

RECOMMENDATION

THAT Contract #10007828 for Planning and Engineering Consulting Services for the technical planning and Environmental Assessment management of the Downtown Brampton Flood Protection Project, in the City of Brampton, be awarded to AECOM, for a total cost not to exceed \$248,870, plus contingency of 30% to be expended as authorized by Toronto and Region Conservation Authority (TRCA) staff, plus HST, it being the highest rank proposal for value meeting TRCA specifications;

THAT Contract #10008216 for the retention of a Senior Project Manager to represent TRCA in the day-to-day project management of an Environmental Assessment (EA) for the Downtown Brampton Flood Protection Project, in the City of Brampton, be awarded to Anneliese Grieve Strategic Environmental Planning Solutions, for a total cost not to exceed \$220,590, plus contingency of 30% to be expended as authorized by TRCA staff, plus HST, it being the only proposal meeting TRCA specifications;

THAT Contract #10007940 for Water Resources Engineering Consulting Services to lead the hydrologic and hydraulic modelling, flood protection design on behalf of TRCA for the Downtown Brampton Flood Protection Project, in the City of Brampton, be awarded to Matrix Solutions Inc., for a total cost not to exceed \$173,670, plus contingency of 30% to be expended as authorized by TRCA staff, plus HST, it being the highest rank proposal for value meeting TRCA specifications;

THAT Contract #10008102 for Geotechnical, Geoenvironmental and Hydrogeological Consulting Services on behalf of TRCA for the Downtown Brampton Flood Protection Project, in the City of Brampton, be awarded to WSP, for a total cost not to exceed \$99,983, plus contingency of 30% to be expended as authorized by TRCA staff, plus HST, it being the bidder with the highest rank proposal for value meeting TRCA specifications;

AND FURTHER THAT pending an authorized Master Service Agreement between TRCA and the City of Brampton, staff be authorized and directed to take all necessary actions to implement the foregoing, including the signing and execution of documents.

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BACKGROUND

At Authority Meeting #7/17, held on September 22, 2017, Resolution #A157/17 was approved, in part, as follows:

...THEREFORE LET IT BE RESOLVED THAT Toronto and Region Conservation Authority staff, in collaboration with the City of Brampton, be directed to undertake an Environmental Assessment (EA) in order to confirm a preferred alternative that will eliminate the risk due to flooding from Etobicoke Creek, to the Downtown Brampton SPA#3, the EA referenced herein as the Brampton Riverwalk Flood Protection EA (or BRFP EA);

THAT the BRFP EA be used to further explore, in part: enhancements to aquatic and terrestrial habitats associated with Etobicoke Creek in the Downtown Brampton area; integrate with municipal servicing and transit; provide opportunities to enhance the Downtown Brampton public realm; and to allow the broader revitalization activities called Brampton Riverwalk to flourish;

THAT TRCA staff be directed to seek \$1.5 million in funding from the federal National Disaster Mitigation Program (NDMP) for the BRFP EA, contingent on matching funds being provided from TRCA (provided by the Region of Peel's Climate Budget (2018 and 2019) for flood remedial studies) and the City of Brampton (seek \$1,000,000 of funding from the City of Brampton 2018-2020 capital budgets);

THAT, upon authorization of funding, staff be directed to retain consultants deemed necessary to undertake the BRFP EA, in accordance with TRCA's Purchasing Policy;

THAT staff be directed to explore mechanisms, such as a Memorandum of Understanding with City of Brampton, outlining the respective roles and responsibilities for each agency throughout the BRFP EA;...

The City of Brampton and TRCA staff have spent several decades devoted to the mitigation of flood risk in historical downtown Brampton and in more recent years the revitalization of the downtown. Between 1854 and 1952, Brampton's historic downtown was subject to near annual occurrences of flooding. The flood events prompted the Etobicoke-Mimico Creek Conservation Authority to construct a trapezoidal concrete-lined bypass channel in 1952, which was designed to convey up to the 100-year return period storm event. Although the by-pass channel has been effective in eliminating the occurrence of low to moderate magnitude flooding (including the remnants of Hurricane Hazel in 1954), 31 hectares of downtown Brampton remains vulnerable to flooding during flood events above the 350-year storm.

To mitigate potential risks to public health, safety and property, conservation authorities have been delegated by the Province of Ontario to define and oversee one-zone floodplain policies. One-zone floodplain policies are restrictive and are intended to limit the amount of development that occurs in a floodplain. For areas that have been previously developed within a floodplain, and where it has been recognized that significant economic hardship would occur if strict one-zone policies are applied, the Province, through the Ministry of Municipal Affairs (MMA) and the Ministry of Natural Resources and Forestry (MNRF) may assign a Special Policy Area (SPA) designation. In 1986, Downtown Brampton SPA 3 was approved by the Province in conjunction with approval of the City of Brampton's Secondary Plan OP84-58. TRCA supported the SPA

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designation and produced a boundary that was reflective of the limit of the floodplain as it was known at that time.

SPA 3 is the fourth most flood vulnerable area in TRCA's jurisdiction. Since 1986, the City of Brampton has experienced significant growth and development pressures within the SPA. This is compounded by the fact that downtown Brampton is designated as an Urban Growth Centre (UGC) in the Province's 2006 Places to Grow Plan (updated in 2017) which articulates specific intensification targets that overlap with the SPA 3 boundary along Queen Street East.

As a result of significant growth pressure and updated floodplain mapping technology, TRCA and the City of Brampton submitted a package to the Province to amend the policies and boundaries of the SPA 3 which included a Flood Protection and Remedial Capital Works Strategy (presented in Resolution #A88/13 at Authority Meeting #3/13, held on May 24, 2013) and a Comprehensive Flood Risk and Management Analysis of the Downtown Brampton Special Policy Area (presented in Resolution #A233/13 at Authority Meeting #11/13, held on January 13, 2014). In 2014, the SPA amendment was approved by MNRF and MMA. The amended SPA re-focused future development to the outer edges of the SPA and is used as the guiding policy for development applications within the area today.

One of the requirements of the SPA Amendment process is that the municipality commits to undertake studies to mitigate and/or remove the flood risk from the area. TRCA and the City of Brampton have completed a number of technical feasibility studies since 2014, to address the risk to public health and safety from flooding within SPA 3. Most recently, the City of Brampton and TRCA completed the "Downtown Integrated Riverine and Urban Flood Risk Analysis and Urban Design Study" in 2018 in a lead up to undertaking an environmental assessment and parallel urban design master plan process.

Furthermore, the City of Brampton completed a major visioning project in May 2018 called, "Brampton 2040 Vision: Living the Mosaic" (Vision 2040), in which the removal of the downtown SPA was considered paramount to the revitalization of the downtown core. Vision 2040, details 10 major city transformations, supported by 28 specific and catalytic actions. The downtown area, a potential public amenity referred to as Riverwalk and urban development (enabled through flood protection) figure prominently in the Vision and have been identified as a City of Brampton priority.

Building upon the extensive technical and policy related studies completed to date, the City of Brampton and TRCA are proceeding as co-proponents on an Environmental Assessment to determine a preferred flood protection solution that will enable the realization of the Brampton 2040 Vision. At the same time, the identification of a permanent flood protection solution will enable TRCA to advance towards our own vision for Etobicoke Creek, where "...people live in harmony with the environment, where the water is clean, where green open spaces are vital and connected, and where fish and wildlife thrive" (Greening Our Watersheds: Revitalization Strategies for Etobicoke and Mimico Creeks, 2002). Following an internal review of the likely range of alternatives to be considered in the EA, and in consultation with the Ministry of the Environment and Climate Change (MOECC) and the Canadian Environmental Assessment Agency (CEAA), the Project will proceed according to the Municipal Class EA (MCEA) procedures, likely as a Schedule C Class EA; though the decision on the appropriate Schedule will be reviewed throughout the Class EA process as per the MCEA guidelines.

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A Master Service Agreement between TRCA and the City of Brampton is currently under review, with a current approved budget of \$3M, based on funding from the City of Brampton, TRCA, Clean Water and Wastewater Fund, and the NDMP grant. In order to undertake the Municipal Class EA, TRCA has released four Request for Proposals (RFP), the results of which are summarized in Table 1 below.

Under a Schedule C MCEA, project planning will proceed through the standard Phases 1 to 4 outlined in the MCEA guidelines, and will include extensive engagement with Indigenous Communities, agency staff, land owners, and the general public. In addition, the Class EA will build upon the past feasibility studies, by conducting a high level review and screening process of all alternatives considered to date in order to develop an initial short-list of alternatives that have the best potential to meet the flood conveyance requirements for the area.

A landscape architect will provide overview concept drawings of this initial short-list of alternatives to enable better visualization of the concepts. The short-list of alternatives will be evaluated using detailed criteria to select a preliminary preferred solution that best meets the need for flood protection, while taking into consideration the future land-uses envisioned through the Brampton 2040 Visioning process.

Once a preliminary preferred alternative solution has been selected, the City of Brampton will initiate their public realm master planning process. The preliminary preferred alternative solution will be provided to the City's design team, at which point they will build upon the preliminary preferred alternative solution in developing a series of alternative designs. These alternative designs will form the basis of the Downtown Brampton Flood Protection EA's Phase 3 design development and evaluation process. Once a preferred alternative design is selected in Phase 3, the Environmental Study Report (ESR) will be drafted, reviewed and submitted for approval through the mandated 30 day review period.

RATIONALE

All four Requests for Proposals seeking consulting services in support of the Downtown Brampton Flood Protection Class EA were released via Biddingo (www.biddingo.com) to facilitate a competitive bidding process. The table below summarizes the procurement process for retaining each of the four technical consultant teams (Table 1). Table 2 summarizes each of the bids for the various RFP competitions, including price.

Table 1 - Procurement Summary

Contract#	Consulting Services Required	Advertised	Proposal Deadline	Number of Bids Received	Reason for Services
#10007828	Planning and Engineering	May 31, 2018	June 21, 2018	3	Primary EA planning, design and engineering consultant team required to undertake the bulk of the work for the EA development. This Consultant Team is anticipated to report to the PMO Senior Manager through the Senior Project Manager retained through the RFP #10008216.

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#10008216	Senior Project Manager for Leading an Environmental Assessment	May 31, 2018	June 21, 2018	1	Due to current resource limitations, TRCA was required to release a Request for Proposals for a consultant to undertake the day-to-day Project Management on behalf of TRCA. This consultant will report directly to the PMO Senior Manager, Special Projects.
#10007940	Water Resources Engineering	June 6, 2018	June 19, 2018	2	A separate RFP for the water resource engineers was released to ensure that TRCA was able to retain the most suitable and experienced water resource engineering team to perform these critical services. The water resource engineering team will be responsible for undertaking the requisite hydraulic model runs, and flood protection design for Phases 2 and 3. This team will report to the PMO Senior Manager, Special Projects through the Senior Project Manager retained through RFP #10008216, but will receive technical instructions from TRCA/City of Brampton staff. Water Resource Engineers will also collaborate with the Planning and Engineering Team as per RFP# 10007828.
#10008102	Geotechnical, Geoenvironmental and Hydrogeological	May 23, 2018	June 11, 2018	6	This RFP was released to characterize the subsurface existing conditions in the Project area. This scope of work is for baseline environmental data collection purposes only – the successful firm will not participate in the EA process other than provide a technical document to inform the existing conditions portion of the EA. This team will report to the PMO Senior Manager through the Senior Project Manager retained through the RFP #10008216, but will receive technical instructions from the TRCA Senior Manager, Hydrogeology.

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In all cases, at least three members of staff (from TRCA and/or City of Brampton) participated in the review and evaluation of proposals. Proposals were submitted during the weeks of June 11 and June 18, 2018 as outlined in Table 1. At the proposal evaluation meetings, consensus was reached between all members of the evaluation committee that the highest ranked proposal offered the best service for the best value.

The criteria used to evaluate the submissions and to select the successful consultant included the following:

- Overall conformance of proposal submission package with the terms of the RFP;
- Understanding of project scope of work;
- Experience of firm working on projects of similar scope and budget;
- Expertise of staff and appropriate allocation of resources;
- Approach and methodology of work plan, including innovative ideas, identification of project limitations, and proposed solutions;
- Clear and well thought out schedule and timelines to achieve project objectives; and
- Detailed cost breakdown, including an itemized cost of additional works anticipated beyond the approved budget.

In addition, for all RFP processes, except the subsurface investigation process, bid submissions were only opened if the technical proposal submissions met a minimum score during the evaluation. Furthermore, as per Attachment 1 – Item 2 of the Request for Proposals, proposals are not considered a binding contract, and as such TRCA, is permitted to seek clarification and otherwise discuss or negotiate with 1 or more of the consultants regarding their proposed technical and budget submissions.

Table 2 - RFP Submission Details

RFP #	Consultant Team	Minimum Scores Met During Technical Evaluation (Y/N)	Initial Bid Price (\$)	Revised Bid Price (\$)	Rank	Discussion
#10007828	AECOM	Y	\$248,870	n/a	1	AECOM had the highest technical score and lowest bid price.
	Jacobs & Matrix	Y	\$757,460	n/a	2	
	Wood & The Planning Partnership	N	Not considered	n/a	-	Not incorporated in the final evaluation – did not receive 60 pts in technical proposal review
#10008216	AG Strategic Environmental Planning Solutions	Y	\$287,280	\$220,590	1	While AG was the only submission, AG's technical and fee submissions offer excellent value for services

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#10007940	Matrix Solutions	Y	\$219,980	\$173,670	1	Matrix Solutions was deemed to provide the best proposal for value.
	Valdor Proposal	N	Not considered	n/a	-	Not incorporated in the final evaluation – did not receive 60 pts in technical proposal review.
#10008102	AECOM	n/a	\$150,164	n/a	2	Not Selected: Highest bid price by far. Over allocated and over-scoped the Project
	EXP	n/a	\$73,485	n/a	3	Not Selected: Details on understanding and work plan insufficient
	Geomaple Geotechnics	n/a	\$60,140	n/a	5	Not Selected: Missing key elements of proposal submission, and details on understanding and work plan insufficient
	Sirati and Partners Consultants Ltd.	N	Not opened	n/a	-	Disqualified Proposal submitted after 12:00 noon Deadline
	Terraprobe	n/a	\$91,790	n/a	4	Not Selected: Missing key elements of proposal submission and work plan details insufficient
	WSP	n/a	\$99,982	n/a	1	Selected: Best technical submission – reasonable price

The selected proponent for the individual RFP competitions have been summarized as follows:

- AECOM for contract #10007828, evaluated on June 28th, 2018;
- AG Strategic Environmental Planning Solutions for contract #10008216, evaluated on June 26th, 2018;
- Matrix Solution Inc. for contract #10007940; evaluated on June 26th, 2018; and
- WSP for contract #1008102; evaluated on June 18th, 2018.

Staff recommends a project contingency of 30% on all contracts given the uncertainty involved with Environmental Assessments.

FINANCIAL DETAILS

Four sources of funding are available to carry out the DBFP EA. The proposed budget and confirmed available funding is as follows:

Funding Source	2018 Budget	2019 Budget	2020 Budget	Confirmed Total
TRCA (Region of Peel Climate Budget)	\$300,000			\$300,000
City of Brampton	\$1,100,000	\$700,000 (ask)	\$1,000,000 (ask)	\$1,100,000

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Clean Water and Wastewater Fund (CWWF Grant to City of Brampton) – for Subsurface Investigation	\$100,000			\$100,000
Federal Government (National Disaster Mitigation Program Funding)	\$700,000	\$800,000		\$1,500,000
CONFIRMED TOTAL	\$2,200,000	\$800,000		\$3,000,000

Project costs will be tracked through the 193-00 series of accounts established for this project.

DETAILS OF WORK TO BE DONE

TRCA and City of Brampton as co-proponents will be delivering this project, with TRCA taking the lead on fulfilling the requirements of the EA process which will include a comprehensive communication and public consultation program. TRCA will oversee management of the consultant teams and facilitate an integrated design process, involving the expertise of the comprehensive engineering and planning team, key TRCA staff, the City of Brampton's Master Plan and Urban Design team and other specialists to realize a highly efficient, cost effective and technically proficient Municipal Class EA process.

The communication and consultation plan will be developed to exceed the standard requirements of public consultation under the Municipal Class EA Process. This plan will outline the various workshops, public information centres and focus group meetings that will be organized to engage First Nations, the public, government agencies, landowners and other additional interested persons and groups to participate in the planning process. It will also detail the communication strategy that will be utilized to ensure that the EA notification requirements are met and that ongoing information and updates are readily available to any interested parties throughout the process. The DBFP EA will also include an extensive Indigenous Engagement Program based on direction from the MOECC. In addition, TRCA will engage the expertise of an independent third party facilitator during the EA to ensure that members of the public and members of a Community Liaison Committee are engaged frequently and effectively throughout the project. An RFP for the third party facilitator will be released in July 2018.

The key phases and project milestones of the DBFP EA are as follows:

- Pre-EA (Project Award and Project Set-up): July-August, 2018
- Notice of Commencement: July 2018
- Phase 1 (Problem Opportunity and Existing Conditions): August – Fall, 2018
- Phase 2 (Identify Alternative Solutions and Select Preliminary Preferred Alternative Solution: Fall, 2018 – Spring/Summer, 2019
- Phase 3 (Examine Alternative Design Concepts for Preferred Solution): Spring/Summer 2019 – December 2019

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- Phase 4 (Draft and Final ESR): December 2019 to March 2020
- Notice of Submission: March 2020 with Approvals by May 2020.

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Date: June 28, 2018