Report to Civic Works Committee

To: Chair and Members

Civic Works Committee

From: Kelly Scherr, P.Eng., MBA, FEC

Deputy City Manager, Environment and Infrastructure

Subject: RFT-2024-084 Greenway Flood Protection Tender Award

Date: June 11, 2024

Recommendation

That, on the recommendation of the Deputy City Manager, Environment and Infrastructure, the following actions **BE TAKEN** with respect to the award of contract for the construction of flood protection at Greenway Wastewater Treatment Plant:

- a) the bid submitted by Stone Town Construction Limited at its tendered price of \$24,477,992.06, excluding HST, for the construction of flood protection at Greenway Wastewater Treatment Plant **BE ACCEPTED**;
- b) the increase in fees for engineering services related to design and contract administration for the Greenway Flood Protection projects of \$760,641.00, plus HST. **BE APPROVED**:
- c) the financing for this project **BE APPROVED** as set out in the Sources of Financing Report attached hereto as Appendix "A";
- d) the Civic Administration **BE AUTHORIZED** to undertake all the administrative acts that are necessary in connection with this project;
- e) the approval given, herein, **BE CONDITIONAL** upon the Corporation entering into a formal contract, or issuing a purchase order for the material to be supplied and the work to be done, relating to this project; and
- f) the Mayor and City Clerk **BE AUTHORIZED** to execute any contract or other documents, if required, to give effect to these recommendations.

Executive Summary

Greenway Wastewater Treatment Plant is located within the flood plain of the Thames River and is therefore susceptible to flooding events that are expected to become more frequent and more severe with climate change. By providing protection from flooding events, infrastructure worth over \$500 million is better protected from natural disaster and full treatment capability is maintained even during other significant flooding events. The City was able to obtain federal funding under the Disaster Mitigation and Adaptation Fund to contribute up to 40% of the cost of these works.

This report recommends the award of a tender for the construction of flood protection measures at Greenway Wastewater Treatment Plant and an increase in fees to the City's engineering consultant to reflect the expected scope of services for contract administration.

Linkage to the Corporate Strategic Plan

This report supports the 2023-2027 Corporate Strategic Plan by contributing to the following outcome:

- London is one of the greenest and most resilient cities in Canada in alignment with the Council-declared climate emergency and the Climate Emergency Action Plan.
 - London is more resilient and better prepared for the impacts of a changing climate.

Analysis

1.0 Background Information

1.1 Previous Reports Related to this Matter

Greenway and Adelaide Wastewater Treatment Plants Climate Change Resiliency Equipment Preselection. Civic Works Committee. October 24, 2023.

Greenway and Adelaide Wastewater Treatment Plants Climate Change Resiliency Consulting Fees Value Increase. Civic Works Committee. August 15, 2023.

Greenway and Adelaide Wastewater Treatment Plants Climate Change Resiliency Geotechnical Consultant Award. Civic Works Committee. April 12, 2023.

Greenway and Adelaide Wastewater Treatment Plants Climate Change Resiliency Detailed Design Consultant Award. Civic Works Committee. October 4, 2022.

Greenway WWTP Climate Change Resilience Class EA – Notice of Completion. Civic Works Committee. April 20, 2022.

Adelaide WWTP Climate Change Resilience Class EA – Notice of Completion. Civic Works Committee. April 20, 2022.

Disaster Mitigation and Adaptation Fund – Contribution Agreement. Civic Works Committee. March 29, 2022.

Greenway and Adelaide Wastewater Treatment Plants Climate Change Resiliency Class Environmental Assessment Consultant Award. Civic Works Committee. March 2, 2021.

Climate Emergency Action Plan - Update. Civic Works Committee. August 11, 2020.

Adelaide Wastewater Treatment Plant Upgrades Consultant Award. Civic Works Committee. May 26, 2020.

2.0 Discussion and Considerations

2.1 Discussion

The Greenway Wastewater Treatment Plant, located at 109 Greenside Avenue, is the City's largest plant and treats approximately 60% of the wastewater produced in London. With climate change, the City of London and other communities are experiencing more frequent and intense wet weather events, which increases the potential for flooding. Greenway is in a location that would be impacted by flooding of the Thames River. Through the federal Disaster Mitigation and Adaptation program, the City has secured funding of up to 40% of the cost to construct flood protection measures at the Greenway Wastewater Treatment Plant to protect against floods up-to and including a 1 in 250-year storm event. The flood protection systems, once complete, will improve asset resilience, enhance treatment capabilities during flood events, and enhance the safety of plant staff during those events.

Following the completion of an Environmental Assessment and the pre-purchase of key equipment, detailed design was completed to allow the construction contract to be put out for tender. The project includes the construction of a flood barrier consisting of a combination of earthen berm and sheet pile wall, as well as an effluent pumping station to allow treated flows to be discharged even when river levels are elevated.

During construction, there will be closures of the Thames Valley Parkway and Terry Fox Parkway in the vicinity of Greenway, but those closures have been restricted to the winter period. It is expected that the Thames Valley Parkway will be closed for two months or less, while the Terry Fox Parkway may require up to three months, both ending no later than March 2025. The construction contract includes bonus and penalty clauses to incentivize the contractor to keep the duration of the closure to a minimum.

2.2 Procurement Process – Construction Contract

The procurement of a General Contractor to complete the construction of flood protection at Greenway Wastewater Treatment Plant was conducted as a two-part process, with prospective contractors first pre-qualified to bid based on their experience, expertise and capacity as determined by RFPQ-2023-303. Contractors were pre-qualified for flood protection projects at both the Greenway and Adelaide plants. These pre-qualified contractors were then invited to submit tenders for the Greenway project in response to RFT-2024-084. Of the five firms who were pre-qualified, four submitted compliant bids. Stone Town Construction Limited was the lowest submitted tender at a total cost of \$24,477,992.06, excluding HST, which was within the expected budget. As per Section 13.2 of the Procurement of Goods and Services Policy, Committee and City Council must approve award of tenders greater than \$6,000,000.

2.3 Consultant Fee Increase

When the Request for Proposals was issued to procure the services of an Engineering Consultant to complete detailed design and provide contract administration for the flood protection projects at both Greenway and Adelaide wastewater treatment plants, an assumed contract duration was provided in order to establish an equal playing field for the procurement process. It was known at the time to be conservative, and that future consulting fees would be reviewed and considered based on the final design and expected construction duration put forward during tender.

Construction of the Greenway flood protection works is expected to require 143 weeks as compared with the 80 weeks that was mandated by the City for pricing during the Request for Proposals. As a result of this additional time, the City has negotiated with CIMA+, the prime consultant for this project, a fee increase of \$760,641.00 plus HST, including a 34.8% contingency. The significant contingency is intended to capture the potential variability in this project without being overly cautious with the increase in base scope, which in this case is seen to be a reasonable strategy. It is recommended that the contract be amended as requested.

It is noted that the upcoming tender for flood protection at Adelaide wastewater treatment plant may require a similar amendment to the consulting fees.

3.0 Financial Impact/Considerations

The detailed source of financing is included in Appendix 'A' of this report. The City's share of the contract is 60%, with the remaining 40% available to be recovered through the federal Disaster Mitigation and Adaptation Fund.

Conclusion

The Greenway Flood Protection project is a significant undertaking with a high level of complexity that provides essential protection against climate. Pre-qualification of the potential general contractors helps ensure lower risk and higher quality construction. Stone Town Construction Limited submitted the lowest compliant tender in a competitive process involving five pre-qualified bidders and is prepared to undertake the work. Staff recommends that the contract be awarded to Stone Town Construction Limited in the amount of \$24,477,992.06 plus HST.

In addition, the City's Engineering Consultant, CIMA+, will be required to provide contract administration services for a longer duration than was originally contemplated at the time of the procurement of their services. Staff recommends that the contract with CIMA+ for engineering services related to the flood protection projects be increased by \$760,641.00 plus HST accordingly.

Prepared by: Kirby Oudekerk, MPA, P. Eng.

Division Manager, Wastewater Treatment Operations

Submitted by: Ashley M. Rammeloo, MMSc., P. Eng.

Director - Water, Wastewater, and Stormwater

Recommended by: Kelly Scherr, P. Eng., MBA, FEC

Deputy City Manager, Environment & Infrastructure

Appendix 'A' - Source of Financing

cc: Steve Mollon, Senior Manager, Procurement and Supply

Jason Davies, Manager III, Financial Planning and Policy

Zeina Nsair, Financial Business Administrator, Finance and Corporate Services

Appendix "A"

#24112

June 11, 2024 (Award Contract)

Chair and Members Civic Works Committee

RE: RFT-2024-084 Greenway Flood Protection Tender Award

(Subledger FS210001)

Capital Project ES3230 - DMAF Greenway WWTP Flood Protection

CIMA+ - \$760,641.00 (excluding HST)

Stone Town Construction Limited - \$24,477,992.06 (excluding HST)

Finance Supports Report on the Sources of Financing:

Finance Supports confirms that the cost of this purchase 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
Engineering	2,244,989	1,470,961	774,028
Construction	24,908,805	0	24,908,805
City Related Expenses	21,971	21,971	0
Vehicle and Equipment	1,230,535	1,230,535	0
Total Expenditures	\$28,406,300	\$2,723,467	\$25,682,833
Sources of Financing			
Drawdown from Sewage Works Renewal Reserve Fund	17,170,644	1,634,080	15,409,700
Federal Funding - Disaster Mitigation and Adaptation Fund (DMAF)	11,235,656	1,089,387	10,273,133
Total Financing	\$28,406,300	\$2,723,467	\$25,682,833
Financial Note	Engineering	Construction	Total
Contract Price	\$760,641	\$24,477,992	\$25,238,633
Add: HST @13%	98,883	3,182,139	3,281,022
Total Contract Price Including Taxes	859,524	27,660,131	28,519,655
Less: HST Rebate	-85,496	-2,751,326	-2,836,822
Net Contract Price	\$774,028	\$24,908,805	\$25,682,833

Jason Davies

Manager of Financial Planning & Policy

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