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: Greenway and Adelaide Wastewater Treatment Plants Climate

Change Resiliency Detailed Design Consultant Award

Date: October 4, 2022

Recommendation

That, on the recommendation of the Deputy City Manager, Environment and Infrastructure, the following actions **BE TAKEN** with respect to the award of consulting services for the completion of the Detailed Design and Contract Administration for flood protection at the Greenway and Adelaide Wastewater Treatment Plants:

- a) CIMA Canada Inc. BE APPOINTED Consulting Engineers in the amount of \$2,104,213.00, including 10% contingency, excluding HST, in accordance with Section 15.2 (e) of the City of London's Procurement of Goods and Services Policy;
- b) the financing for the project **BE APPROVED** in accordance with 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 project;
- d) the approvals given herein **BE CONDITIONAL** upon the Corporation entering into a formal contract; and,
- e) the Mayor and City Clerk **BE AUTHORIZED** to execute any contract or other documents, if required, to give effect to these recommendations.

Executive Summary

Purpose

This report recommends that CIMA Canada Inc. be appointed to carry out the detailed design and contract administration of the construction of flood protection measures at the Greenway and Adelaide Wastewater Treatment Plants.

Context

The City of London secured the opportunity for federal funding through the Disaster Mitigation and Adaptation Fund for improvements to the resilience of the Greenway and Adelaide Wastewater Treatment Plants through flood protection. This report provides the consultant award recommendation for the completion of detailed design and contract administration.

The detailed designs will build upon work previously completed through two separate Municipal Class Environmental Assessments, which were finalized on August 11, 2022. The Environmental Assessments identified the preferred flood protection measures for these two sites to improve asset resilience, enhance treatment capabilities, and enhance the safety of plant staff during extreme wet weather events.

Linkage to the Corporate Strategic Plan

This project supports the 2019-2023 Strategic Plan through Building a Sustainable City:

• Build infrastructure to support future development and protect the environment;

- Improve London's resiliency to respond to potential future challenges; and
- Conserve energy and increase actions to respond to climate change and severe weather.

Analysis

1.0 Background Information

1.1 Previous Reports Related to this Matter

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.

2.0 Discussion and Considerations

2.1 Project Description

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. The Adelaide Wastewater Treatment Plant, located at 1157 Adelaide Street North, treats approximately 15% of London's wastewater. 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. Flooding is a concern at the City's wastewater treatment plants for two main reasons:

- Damage of treatment plant components, including equipment and tanks, due to inundation by rising river levels at these sites and
- Environmental impacts associated with the bypass of untreated or partially treated wastewater for several days following an intense wet weather event.

The Greenway and Adelaide Wastewater Treatment Plants were identified as locations where additional flood protection is necessary. Two Municipal Class Environmental Assessments were completed to determine the preferred flood mitigation solutions at each facility.

The Class Environmental Assessment for the Greenway Wastewater Treatment Plant developed a recommended strategy of constructing a combination of earthen berm and artificial flood wall to protect the plant from elevated river levels, plus the construction of an effluent pumping station to convey treated flows to the river even during flood conditions.

The Class Environmental Assessment for the Adelaide Wastewater Treatment Plant developed a recommended strategy of constructing a combination of earthen berm and raising the access road, an effluent pumping station to convey treated flows to the river during flood conditions, and a flow equalization facility in the north-east portion of the

property to help reduce peak flows to the effluent pumping station.

2.2 Procurement Process

A two-stage procurement process was undertaken in accordance with the City of London's Procurement of Goods and Services Policy, Section 15.2 (e).

Through the City's Purchasing Division, a Request for Qualifications (RFQUAL 2022-165) was issued to evaluate the capability of interested firms to complete the required scope of work. Two firms were selected through that process to proceed to the RFP stage and were invited to submit bids in response to the subsequent Request for Proposals (RFP 2022-196).

Both invited firms provided submissions, which were reviewed by staff from Wastewater Treatment Operations and Purchasing and Supply to ensure compliance with the City's Procurement of Goods and Services Policy. The City's evaluation team determined that the proposal provided by CIMA Canada Inc. provided the best overall value to the City. The project team proposed by CIMA Canada Inc. has extensive experience with wastewater treatment plant design. They also were directly involved in the Class Environmental Assessments for each facility and therefore have a strong familiarity with the project requirements. Overall, their proposal met all the key project requirements, and their staff are qualified to undertake the required consulting engineering services.

2.3 Schedule and Budget Implications

This assignment is scheduled to be complete and ready for tendering by late 2023 and all construction is expected to be complete by the end of 2025.

The consulting service fees proposed within this report include an estimation of contract administration services required for the construction phase of the projects. The appropriate scope of contract administration services will be reviewed during detailed design and revised if required. Any increases to the value of the engineering services contracts would be reported to Council at the time of tender award at the completion of detailed design.

This project is to be funded in part by the Government of Canada's Disaster Mitigation and Adaptation Fund, with the maximum federal share of all project related expenses totalling \$19.8 million (40%). The remainder of the budget is proposed to be funded under existing capital budgets with final construction and engineering costs estimated at \$49.5 Million. Civic Administration has confirmed that this award can be approved by Municipal Council, noting specifically that as it pertains to the funding sources, the municipal portion of these projects is financed by previously approved capital budgets, and the capital project budget adjustments illustrated in the source of financing document pertain to previously approved contributions from other levels of government (Disaster Mitigation and Adaptation Fund – Contribution Agreement. Civic Works Committee. March 29, 2022). This award is therefore not a restricted act of Council after Nomination Day for the 2022 Municipal Election.

Conclusion

CIMA Canada Inc. was found to provide the best value to the City through the two phase RFQUAL and RFP selection process for consulting services for flood protection Detailed Design and Contract Administration at the Greenway and Adelaide Wastewater Treatment Plants. The CIMA Canada Inc. team has a demonstrated ability to complete flood mitigation and wastewater treatment plant design and demonstrated a solid understanding of this project in their proposal. It is recommended that CIMA Canada Inc. be awarded this assignment.

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

Division Manager, Wastewater Treatment Operations

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

Director, Water, Wastewater, and Stormwater

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

Deputy City Manager, Environment and Infrastructure

cc: Steve Mollon

Elaine Nickerson Gary McDonald Alan Dunbar Jason Davies

Kelly Frensch, CIMA Canada Inc.

Appendix 'A' Sources of Financing

Appendix "A"

#22140

October 4, 2022

(Appoint Consulting Engineer)

Chair and Members Civic Works Committee

RE: Greenway and Adelaide Wastewater Treatment Plants Climate Change Resiliency Detailed Design Consulting Award (Subledger FS210001)

Capital Project ES3230 - DMAF Greenway WWTP Flood Protection

Capital Project ES3231 - DMAF Adelaide WWTP Flood Protection

CIMA Canada Inc. - \$2,104,213.00 (excluding HST)

Finance Supports Report on the Sources of Financing:

Finance Supports confirms that the cost of this project 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
ES3230 - DMAF Greenway WWTP Flood Protection			
Engineering	1,312,654	192,129	1,120,525
City Related Expenses	2,486	2,486	0
ES3230 Total	1,315,140	194,615	1,120,525
ES3231 - DMAF Adelaide WWTP Flood Protection			
Engineering	1,150,870	130,148	1,020,722
City Related Expenses	2,474	2,474	0
ES3231 Total	1,153,344	132,622	1,020,722
Total Expenditures	\$2,468,484	\$327,237	\$2,141,247
Sources of Financing			
ES3230 - DMAF Greenway WWTP Flood Protection			
Drawdown from Sewage Works Renewal Reserve Fund	789,084	116,769	672,315
Federal DMAF Funding	526,056	77,846	448,210
ES3230 Total	1,315,140	194,615	1,120,525
ES3231 - DMAF Adelaide WWTP Flood Protection			
Drawdown from Sewage Works Renewal Reserve Fund	692,006	79,573	612,433
Federal DMAF Funding	461,338	53,049	408,289
ES3231 Total	1,153,344	132,622	1,020,722
Total Financing	\$2,468,484	\$327,237	\$2,141,247
Financial Note: Contract Price	ES3230 \$1,101,145	ES3231 \$1,003,068	Total \$2,104,213
Add: HST @13% Total Contract Price Including Taxes	143,149 1,244,294	130,399 1,133,467	273,548 2,377,761
Less: HST Rebate	-123,769	-112,745	-236,514
Net Contract Price	\$1,120,525	\$1,020,722	\$2,141,247