

## 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:** Contract Award: RFT-2024-022  
Springbank Reservoir 2 Replacement and Expansion  
**Date:** April 9, 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 Springbank Reservoir 2 Replacement and Expansion (EW3617) project:

- (a) The bid submitted by Stone Town Construction Limited at its tendered price of \$43,032,902.00, excluding HST, **BE ACCEPTED**; it being noted that the bid submitted by Stone Town Construction Limited was the lowest of two bids received and meets the City's specifications and requirements in all areas.
- (b) Aecom Canada Ltd., **BE AUTHORIZED** to carry out the resident inspection and contract administration for the Springbank Reservoir 2 Replacement and Expansion project in accordance with the estimate, on file, at an upset amount of \$3,769,075.00, including 10% contingency, excluding HST, in accordance with Section 15.2 (g) of the City of London's Procurement of Goods and Services Policy;
- (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 (RFT-2024-022).
- (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

This report recommends the award of a tender to a contractor and consulting engineer services for resident inspection and contract administration for the Springbank Reservoir 2 Replacement and Expansion (EW3617). This project will demolish the existing Springbank 2 Reservoir with a capacity of 45 Million Litres (ML) and floating membrane cover which has reached the end of its life expectancy, and construct a new larger 88 Million Litre (ML) Springbank Reservoir 2 in the same location and expanded to the east in accordance with the recommendations of the Long Term Water Storage EA.

The 2024-2027 multi-year budget includes funding for construction of the reservoir in the amount of \$54.5M which is sufficient for this award.

## Linkage to the Corporate Strategic Plan

The following report supports the 2023 – 2027 Strategic Plan areas of focus:

- Climate Action and Sustainable Growth
  - The infrastructure gap is managed for all assets; and
  - Infrastructure is built, maintained, and secured to support future growth and protect the environment.

- The City of London is a Leader in Public Service.
  - The City of London has effective facilities and infrastructure management.

## Analysis

### 1.0 Background Information

#### 1.1 Previous Reports Related to this Matter.

- Civic Works Committee – November 17, 2020 – Award of Consulting Engineering Services for Detailed Design of the Springbank Reservoir 2 Replacement and Expansion RFP 20-43
- Civic Works Committee – June 18, 2019 – Long Term Water Storage Options Municipal Class Assessment: Notice of Completion
- Civic Works Committee - April 17, 2018 - Appointment of Consulting Engineering Services for Long Term Water Storage Options - Environmental Assessment
- Civic Works Committee - April 2, 2012 - Contract Award: Springbank Reservoir 2 Rehabilitation Project No. EW3617 Tender No. 12-52
- Environment and Transportation Committee - October 27, 2008 - Water System Risk Management Continuous Improvement Update
- Environment and Transportation Committee - April 23, 2007 - Water System Risk Management Exercise and Evaluation

### 2.0 Discussion and Considerations

#### 2.1 Springbank Water Reservoirs

The City of London Water Supply System includes several water storage reservoirs used for balancing flows for domestic drinking water, emergency firefighting needs, and to provide storage in the event of an interruption in the water supply from either of the Lake Huron Area Water Supply System or the Elgin Area Water Supply System. Three of these reservoirs are located within the Springbank complex.

One of the City's existing reservoirs, Springbank Reservoir 2 was constructed in the 1920s and is at the end of its useful life. A location map of Springbank Reservoir 2 can be found in Appendix B. Unlike the other City reservoirs which have fixed concrete roofs, Springbank Reservoir 2 has a flexible floating cover. The risk of breaching this cover has been identified as one of the highest risks of biological contamination to the City of London water system. An Environmental Assessment (EA) was completed to determine how the reservoir should be reconstructed or replaced. The EA has also analyzed the long-term storage needs city-wide considering the current need for emergency storage and the servicing needs of future urban growth. This assessment recommended that, in conjunction with the replacement of Springbank 2, its capacity be increased to accommodate the increased needs of the City. This increase is expected to satisfy the City's water storage needs for at least the next 20 years.

#### 2.2 Work Description

The Springbank Reservoir 2 Replacement and Expansion (EW3617) will demolish the existing Springbank 2 Reservoir and construct a new larger Springbank Reservoir 2 in the same location and expanded to the east.

The Springbank Reservoir 2 Replacement and Expansion project includes the following work details:

- Demolish the existing Springbank 2 Reservoir,
- Remove earth for the foundation of the expanded reservoir,
- Prepare area for the construction work and required staging and storage,

- Construct a new larger 88ML Springbank Reservoir 2 in the same location and expanded to the east,
- Replace a section of 900mm concrete Watermain on Commissioners Road West and construct a new reservoir inlet/outlet for the new reservoir,
- Replace the electrical service and communications ducting and cables for the existing valve house and the existing London Hydro Communications Tower which will remain in place and to accommodate the new Reservoir 2 Access Building,
- Conduct necessary environmental mitigation and protection measures in accordance with the recommendations of the EIS,
- Replace identified existing valves within the existing Reservoir 1 and 2 Valve House,
- Placement of waterproof membrane on the new Reservoir 2,
- Placement of fill over the new reservoir and restoration with a sports field grass mixture, and
- Restoration of the site and staging and storage areas when completed.

It is anticipated that this project will require more than two full years of construction, with construction commencing in the spring of 2024 and anticipated completion in the fall of 2026. Access to the site will be from Commissioners Road West. This project will use a staging and storage area within the unopened Commissioners Road right of way located to the south of Springbank Reservoir 3 and the Springbank Community Gardens. As well, areas to the north and to the east of new reservoir in Reservoir Park will be used for staging and storage during construction.

Advance work at the site in February and March 2024 has included the construction of an access road to the site and the removal of the trees that will conflict with the construction. Approximately 324 trees were removed for the project. As part of the tree clearing work, any trees/logs of economic value were salvaged.

A tree compensation strategy has been developed taking into consideration a 3:1 tree compensation ratio which will result in the planting of 972 trees. There is not sufficient space at the Springbank 2 location to accommodate this compensation tree planting. The project will provide funding to the City's Forestry Operations to plant the required amount of trees. The funding provided will be used for replanting on City-owned lands, with specific timing and locations to be determined. Forestry's priority will be to plant at locations proximate to the site and/or locations within the applicable Planning District. This will help off-set the loss of canopy cover and habitat in the general area of the project and support the expansion of the urban forest within the targeted area. It is estimated that the compensation will be for the replanting of 972 trees (50mm caliper) at \$580 per tree, or approximately \$563,760 in total.

This infrastructure replacement need has been coordinated within the Environment and Infrastructure Department. The funding for this project comes from the approved Water capital works budgets.

This project has submitted a site plan for approval through Planning and Development. A Demolition Permit and a Building Permit will be obtained by staff prior to construction commencement.

### **2.3 Public Consultation**

The initial project notice (dated January 20, 2022) was mailed to properties within and flanking the project limits. Included with the notice was information regarding the project and the timing of key components of the project. Residents were asked to contact the City's project manager at any time if they had any questions, concerns, and input for consideration.

The subsequent Pre-Construction Notice (dated September 25, 2023) was mailed to properties within and flanking the project limits. Included in this notice was an invitation for residents to attend a drop-in event to view construction plans, review necessary tree removals, discuss impacts to their property and to learn more about the project. Following the meeting, project boards displayed at the meeting were made available for download on the project website.

Previous public consultation and engagement was also provided during the undertaking

of the Long-Term Water Storage Options Municipal Class Assessment in 2018/2019.

### 3.0 Financial Impact/Considerations

#### 3.1 Tender Summary

This construction project has been subject to a 2-stage award process, where the first stage was a prequalification of contractors, and the second stage is the Construction Tender.

The first stage, the Prequalification of Contractors, was conducted in the fall of 2023. A prequalification process was undertaken due to this work being specialized, particularly the construction of a water retaining concrete structure. Five Contractors submitted proposals which were reviewed by a review team comprising of staff from Water Engineering, Water Operations, and members of the Consultant Design Team. The review team identified that two of the contractors met all the criteria for eligibility to be able to submit a tender for the project.

Following the prequalification process, Tender RFT-2024-022 was sent to the eligible contractors. The tender for the Springbank Reservoir 2 Replacement and Expansion project closed on February 22, 2024. Two contractors submitted tender prices as listed below, excluding HST. All tenders received include a contingency of \$4,000,000.00.

Table 1: Summary of submitted tender prices.

| <b>Contractor</b>                             | <b>Tender Price Submitted</b> |
|---|-------------------------------|
| <b>Stone Town Construction Limited</b>        | <b>\$43,032,902.00</b>        |
| <b>North America Construction (1993) Ltd.</b> | <b>\$48,821,300.00</b>        |

The Environment and Infrastructure Department and Aecom Canada Ltd. have checked all tenders No mathematical errors were found. The results of the tendering process indicate a competitive process. The tender estimate prior to tender opening was \$44,618,000.00, including contingency, excluding HST.

#### 3.2 Consulting Engineer Services

Aecom Canada Ltd. was awarded the detailed design of the Springbank Reservoir 2 Replacement and Expansion project by Council on November 24, 2020. Due to the consultant's knowledge and positive performance on the detailed design, the consultant was invited to submit a proposal to conduct the resident inspection and contract administration for the project. Aecom Canada Ltd. submitted a proposal which includes an upset limit of \$3,769,075.00, including 10% contingency, excluding HST.

Staff have reviewed the fee submission, including the time allocated to each project task, along with hourly rates provided by each of the consultant's staff members. That review of assigned personnel, time per project task, and hourly rates is appropriate for the project and is satisfactory to staff. The continued use of Aecom Canada Ltd. on this project for construction administration and inspection is of financial advantage to the City because 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.

In addition to the financial advantage, there are also accountability and risk reduction benefits. The City requires a Professional Engineer to seal all construction drawings. These 'record drawings' are created based on field verification and ongoing involvement by the Professional Engineer. This requirement promotes consultant accountability for the design of these projects, and correspondingly, reduces the City's overall risk exposure. Consequently, the continued use of the consultant who created and sealed the design drawings is required to maintain this accountability process and to manage risk.

In accordance with Section 15.2 (g) of the City of London's Procurement of Goods and Services Policy, civic administration is recommending that Aecom Canada Ltd. be authorized to conduct the remainder of engineering services, as construction administrators, for a fee estimate of \$3,769,075.00, including 10% contingency, excluding HST. These fees are associated with the construction resident inspection and contract administration services to ensure that the City receives the product specified and associated value. The approval of this work will bring the total engineering services for this project to \$5,327,117.00, including 10% contingency, excluding HST, for both detailed design and construction administration.

### **3.3 Operating Budget Impacts**

There will be no additional annual operating costs to the Water Service Area attributed to this new infrastructure. The additional operating costs from the increase in reservoir size is offset by the elimination of the special operating costs of the floating cover on the existing reservoir.

## **Conclusion**

The existing Springbank Reservoir 2 has reached the end of its useful life and requires replacement as well as expansion to meet the growing needs of the City. Completing this work will help to effectively manage our infrastructure assets and ensure the London's infrastructure is built and maintained to support future growth and protect the environment. The tender award and the consultant award for this project are within the Council approved budget and represent good value to the City.

**Prepared by:** Aaron Rozentals, P.Eng.  
Division Manager, Sewer Engineering

**Submitted by:** Ashley Rammeloo, MSc, P.Eng.  
Director, Water, Wastewater, and Stormwater

**Recommended by:** Kelly Scherr, P.Eng., MBA, FEC  
Deputy City Manager, Environment, and Infrastructure

cc: P. Lupton, A. Dunbar, S. Mollon, J. Robinson, P. Choma, K. Fairhurst, D. Huggins, S. Koshowski, P. Yeoman, J. Ackworth (Aecom)

Appendix 'A' – Sources of Financing

Appendix 'B' – Location Map