

Staff Report

Report To: City Council

Report From: Bradey Carbert, Manager of Corporate Services

Meeting Date: September 26, 2022

Report Code: CR-22-091

Subject: Award of RFP-22-042 - Preselection of Filter Upgrade Equipment: Underdrains, Blowers and Filter Media for the Owen Sound Water Treatment Plant Filter Upgrade Project

Recommendations:

THAT in consideration of Staff Report CR-22-091 respecting Award of RFP-22-042 - Preselection of Filter Upgrade Equipment: Underdrains, Blowers and Filter Media for the Owen Sound Water Treatment Plant Filter Upgrade Project, City Council:

1. Awards the above-noted Request for Proposal to the highest scoring proponent, Xylem Canada LP, at an upset limit of \$1,123,633.92, including the non-refundable allocation of HST; and
2. Authorizes the Director of Corporate Services to issue a Purchase Order to reflect the City's direct costs associated with the purchase of the pre-selected equipment.

Highlights:

- The City applied for the Investing in Canadian Infrastructure (ICIP) Green Stream Program in 2022 for the Owen Sound Water Treatment Plant Filter Upgrade Project
- The City approved By-law 2022-091 to enter into a Transfer Payment Agreement with the Province of Ontario for \$2,841,900 to fund 73% of the project.

- The preselection of filter underdrains, blowers, and filter media will allow the City's engineering consultant to develop the construction specifications and drawings for the construction tender to be issued in winter 2022/23 in anticipation of a December 31, 2023 completion date.

Strategic Plan Alignment:

This report supports the delivery of Core Service.

Previous Report/Authority:

The project mentioned above was approved in the 2022 Capital Budget. A copy of the budget sheet has been attached to this report.

In March 2022, City staff were notified that the application for the ICIP Green Stream program was approved by the Province of Ontario.

Background:

In 2019 the City of Owen Sound commissioned a consultant's report to examine the feasibility of adding an air scour system to the City's Water Treatment Plant filters to address historical issues during springtime wet weather events, when poor raw water quality impacts the filter run times, resulting in the need for frequent backwashing with treated water, and subsequently significantly reduced net water production over that consumed by backwashing. This has resulted in City reservoir depletion (<50%) during such events in the past.

The three capital interrelated components that are intended to be implemented are:

1. Installation of air scour system to improve filter performance. This includes blowers and associated mechanical and electrical components.
2. Replacement of the underdrain system, which is at the end of its useful life and cannot be relied upon to support an air scour system physically.
3. Replacement of filter media at the same time.

The upgrades will substantially increase the asset's useful life and improve filter capacity during wet weather events. Additionally, as part of the work,

other work included in the capital plan will be undertaken, including valve, piping, other mechanical replacements, instrumentation work, and pump control equipment.

The engineering and design component of this process was awarded to R.V. Anderson under Delegated Authority on July 19, 2021. As part of the design process, R.V. Anderson has completed a review of the Water Treatment Plant and identified multiple options for replacing the existing underdrains and media that would also allow for the installation of an air scour system. R.V. Anderson prepared a Request for Proposal for pre-selection of the new equipment to find the most suitable and cost-effective system for the water treatment plant.

The pre-selection process allows for a more accurate design process, allowing for shop drawings to be produced by the equipment manufacturer for equipment to be purchased ahead of construction to mitigate long design and manufacturing lead times (currently estimated at 48 weeks).

For the project to be completed in accordance with the Transfer Payment Agreement, staff and R.V. Anderson are recommending the Award of RFP-22-042 for the pre-selection of filter upgrade equipment to allow for the design to be completed by the end of 2022. The City will be responsible for the costs associated with developing and approving the shop drawings that will accompany the construction tender.

Once the design process has been completed, R.V. Anderson will release a construction tender that will allow for the pre-selected equipment to be purchased and installed by the successful General Contractor through a novation agreement that transfers the responsibility of the purchase of the equipment from the City to the General Contractor. This tender is anticipated to be awarded in January or February 2023.

Analysis:

The above-mentioned request for proposal was issued in compliance with the City's Purchasing By-law and closed on August 26, 2022, with three bids received before closing.

Proposals submitted were scored on weighted criteria where the technical component was valued at 70%, and the financial part was valued at 30% to generate a weighted score. The results of the evaluation are as follows:

Company Name	Weighted Score	Bid Price (including non-refundable allocation of HST)
Xylem Canada LP	96	\$1,123,633.92
AWI	93	\$1,287,335.23
Roberts Filter International	83	\$1,312,704.00

Xylem Canada LP received the highest score and is recommended by both City staff and R.V. Anderson to be awarded the contract for pre-selection filter upgrade equipment.

It is anticipated that shop drawings and specifications will be completed within 6-10 weeks after the award of the pre-selected equipment. The underdrain/piping materials will be delivered 14 weeks after submittal approval, and the blower equipment will be delivered 38 weeks after submittal approval. A more detailed schedule will be defined at the time of the award of the construction component of this project.

Financial Implications:

The approved budget for this project is \$3,955,000, with \$2,841,900 being funded by the Federal and Provincial Governments and the remaining \$1,113,100 being funded from water reserves.

The purchase of the equipment included in the RFP is \$1,123,633.92, including the non-refundable allocation of HST. The City will be responsible for the direct payment of shop drawings at a value of \$168,048.20. The remaining \$955,585.72 will be paid for by the general contractor after the execution of the novation agreement and upon the release of progress payments throughout the project.

In addition to the equipment purchase, an additional \$224,885 has been committed to the engineering component of the project.

The remaining funds will be allocated to construction, including the purchase and installation of valves, piping, other mechanical replacements, instrumentation work, and pump control equipment that was not included in the pre-selection process.

A more detailed breakdown of the project, including any variance from the approved budget, will be included at the time of the award of the construction component of the project.

Communication Strategy:

The above-noted request for proposal was posted on the City's Bids & Tenders website on July 7, 2022, in compliance with the City's Purchasing By-law to be accessible to all potential bidders.

Consultation:

Manager of Public Works
Water Treatment Superintendent
R.V. Anderson Engineers

Attachments:

Capital Budget Sheet 22N.4 – WTP Filter Refurbishment

Recommended by:

Kate Allan, Director of Corporate Services

Mike Crone, (A) Director of Engineering and Public Works

Submission approved by:

Tim Simmonds, City Manager

For more information on this report, please contact Bradey Carbert, Manager of Corporate Services, at bcarbert@owensound.ca or 519-376-4440 ext. 1240.