

To: Warden and Members of County Council

From: Director of Public Works

Woodingford Lodge Domestic Water Booster System Replacement

RECOMMENDATION

- 1. That County Council authorize additional funding in the amount of \$129,088 for the replacement of the domestic water booster system at Woodingford Lodge, Woodstock, to be funded from the Facilities Reserve.**

REPORT HIGHLIGHTS

- The purpose of this report is to seek additional funds to proceed with replacement of the domestic water booster system at Woodingford Lodge in Woodstock.
- The Woodingford Lodge, Woodstock domestic water booster system has reached its useful service life and now requires system replacement, along with upgrades to the piping, pumps, electrical and control systems to ensure ongoing operational reliability and compliance with current safety standards.
- The project will be commenced in February, 2022 and is targeted for substantial completion by Q2 2022.

Implementation Points

Upon approval of the additional funds, a construction contract will be executed with the successful contractor. Staff will continue to liaise with Woodingford Lodge staff regarding the project schedule throughout the process in order to ensure water service continuity and a safe working environment is maintained throughout the contract.

Financial Impact

Contract amounts and funding sources for this project are summarized in Table 1 below. This work was originally planned to be completed as part of the 2021 Business Plan and Budget; however, the low bid for the tendered work of \$207,700 (excluding HST) exceeded the approved budget funding limit as noted in Table 1.

Table 1: Funding Summary for Domestic Water Booster System







2022 Budget Summary Account / Description	Bid Amount (excluding HST)
391000 - WFL – WOODSTOCK Construction Contract (Culliton Inc.) New pump/motors, new piping and insulation, electrical, and controller system	\$207,700
Consultant Contract Administration	10,000
Non-Refundable HST (1.76%)	3,832
TOTAL ESTIMATED CONSTRUCTION EXPENDITURES	\$221,532
Available 2022 Budget (Carry Forward from 2021 Approved Funds)	92,444
BUDGET SHORTFALL	\$129,088

Based on the information provided above, additional funding is required to cover the cost of the construction contract. In order to proceed with awarding the contract to the low bidder, it is recommended that an additional \$129,088 be transferred from the Facilities Reserve which has a budgeted 2022 closing balance of \$2,802,276.

Communications

The communication strategy for this project will be similar to other County Facilities projects in that the focus will be on operational communication. The Contractor’s project manager and the County’s project manager will form an open channel of communication with key project stakeholders (Woodingford Lodge staff, County Management staff) throughout the project. These communications will commence upon approval of this report and continue throughout the project to ensure all parties involved are updated on project status and outcomes.

Strategic Plan (2020-2022)

					
WORKS WELL TOGETHER	WELL CONNECTED	SHAPES THE FUTURE	INFORMS & ENGAGES	PERFORMS & DELIVERS	POSITIVE IMPACT
1.ii.		3.iii.			

DISCUSSION

Background

The Woodingford Lodge domestic water booster system was installed during the construction of the building in 2007. The existing domestic water booster system uses two constant speed dual pumps that are equipped with integral pressure-reducing valves.

Both pumps are driven by 15 horsepower motors. These pumps utilize a cast iron pump body, fitted with bronze impellers. The pump package utilizes constant speed motors and pressure-reducing discharge valves for protection from overpressure.

With several components of the domestic water booster system nearing the end of their useful life, Facilities staff reached out to POW Peterman Consulting Engineers in 2021, who in turn partnered with Chorley + Bisset Consulting Engineers to review the existing domestic water system design and determine if any improvements could be implemented to allow the system to operate more optimally in terms of both appurtenance and energy performance. Additionally POW Peterman has engineered upgrades to the Woodingford Lodge water system in the past, and as such was asked to consult on this project. Given the complexity of this system, POW Peterman Engineering chose to work with Chorley + Bisset, who provide additional expertise in this specialized field.

In May 2021, the County contracted Chorley + Bisset Consulting to provide pre-design, design and construction administrative assistance for the replacement and upgrade of the existing domestic water booster system to a triplex pumping skid using all stainless-steel construction, multi-impeller pumps and integrated variable speed drives with controller package.

Comments

The upgrade to the Woodingford Lodge domestic booster system includes the following scope of work:

- Complete replacement of existing pumps and pump motors;
- Upgrade system with controller package (to support energy conservation and efficiency goals under the County's 100% Renewable Energy Plan); and
- Miscellaneous upgrades as required to ensure compliance with current health and safety standards, and/or to improve operation and maintenance.

A Request-For-Quotation (RFQ) based on this scope of work was then issued on November 22, 2021. Three contractors were selected to bid on the domestic water booster system replacement RFQ. As shown below, only one submission was received at RFQ close on December 13, 2021.

Table 2: RFQ Submissions Received for the Domestic Water Booster System

Contractor	Bid Amount (HST Excluded)
1. Culliton Inc.	\$207,700

Culliton Inc, has been contracted for a number of projects at Woodingford Lodge since it was originally constructed and consistently provided excellent service and quality workmanship at competitive prices. Staff have reviewed the submission and confirmed that the low bid received from Culliton Inc., in the amount of \$207,700 (excluding HST), represents good value for the work. As the current domestic water booster system has reached the end of its service life there is risk of asset failure and impact water service continuity.

Conclusions

Staff recommend that additional funds in the amount of \$129,088 be transferred from the Facilities Reserve in order to complete this critical work in a timely manner.

SIGNATURES

Report Author:

Original Signed By

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Departmental Approval:

Original Signed By

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Approved for submission:

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