

WEST HANTS REGIONAL MUNICIPALITY
Special Council Meeting Agenda
December 7, 2021 – Immediately following COTW
Virtual via Zoom (also FB Livestream)



West Hants
something inspiring awaits

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1. Call to Order
 2. Attendance
 3. Approval of the Agenda
 4. Declaration(s) of Conflict of Interest
 5. Announcements
 6. Panuke Road Water Booster Station Construction
 7. Next Meeting Date / Adjournment




West Hants
something inspiring awaits

WEST HANTS REGIONAL MUNICIPALITY REPORT

Information <input type="checkbox"/>	Recommendation <input checked="" type="checkbox"/>	Decision Request <input type="checkbox"/>	Councillor Activity <input type="checkbox"/>
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To: Members of Council

Submitted by: 
Todd Richard

Date: November 23, 2021

Subject: Panuke Road Water Booster Station Construction

LEGISLATIVE AUTHORITY

Nova Scotia Municipal Government Act, Section 65 authorizes Council to expend funds for municipal purposes.

RECOMMENDATION or DECISION REQUEST

It is recommended that:

Council approve the award of tender WWHPW21-15 for a construction contract for the replacement Panuke Road Water Booster Station to the low compliant bidder, Greytap Commercial Construction, for the tendered price of \$430,562 plus 20% contingency, plus applicable taxes, to be funded from the West Hants Canada Community Building Fund reserve

And, Council approve the Option of adding the provisional back-up generator, for the additional contract cost of \$46,500, plus applicable taxes, to be funded from the West Hants Canada Community Building Fund reserve

BACKGROUND

Property <input checked="" type="checkbox"/>	Public Opinion <input type="checkbox"/>	Environment <input type="checkbox"/>	Social <input type="checkbox"/>	Economic <input type="checkbox"/>	Councillor Activity <input type="checkbox"/>
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The existing Panuke Road Water Booster Station is currently in “very poor” condition, with multiple repairs in the past 4 years, and has been identified for immediate replacement since 2017.

The current Panuke Road Booster Station is a single domestic water booster station (with zero pump redundancy) that provides water services along Panuke Road to approximately 84 individual properties. The station was constructed with the Three Mile Plains distribution system in 1977 and is located at 86 Panuke Road. Pumps and piping are located under the existing road within a confined space manhole structure, with electrical located within an electrical panel mounted on a power pole above grade.

Water is supplied to the booster station via the West Hants water distribution system from the Windsor Water Treatment Plant supply. The pump station is located at an elevation of 32.9m and services lands to a maximum elevation of 75.5m. The watermain terminates at 398 Panuke Road at an elevation of 65.5m. A single booster pump services the domestic water demand, with a larger pump intended to service the fire water system along the road. There is currently no backup generator in the event of a power outage, resulting in minimal water pressure and zero fire water supply.

In April 2017, the domestic pump system failed causing a major disruption to service. The cause of the failure is suspected to be a result of age. During the repair of the domestic pump, the fire pump was utilized to provide water service. However, the capacity of the fire pump exceeds domestic requirements, and in order to maintain adequate pressure and flow, hydrants were opened along Panuke Road, resulting in a large consumption and waste of treated water.

The existing station is classified as a confined space which makes routine maintenance extremely difficult with the truck traffic along Panuke Road. As well, the station is aged significantly and with recent servicing issues, West Hants has identified an urgent requirement replace this station with a modern and more reliable booster station.

In July 2018, the Municipality of the District of West Hants Public Works Department proceeded with a proposal from ABLE Engineering to provide system design and project management services, for the necessary replacement of the existing Panuke Road Booster Station, in order to provide both reliable domestic and fire water coverage.

Council approved the pre-purchase of the Grundfos industrial pump packages direct from the Flowstar Industries for \$160,000 plus applicable taxes, with anticipated delivery of this equipment near the end of January 2022.

DISCUSSION

On October 10, 2021, Public Works staff tendered the replacement booster station project for Lot WU, Panuke Road (PID 56523339) for construction. The bid sheet included lump sum pricing for the following items:

1. Administrative Services and Permitting
2. Site Development
3. Foundation and Base Building Construction
4. Piping, Heating and Mechanical
5. Crane / Lifting Apparatus
6. Electrical, Building Controls and Communications
7. Commissioning and Systems Start-up
8. Driveway / Parking Area / Landscaping
9. Furniture, Fixtures and Misc. Equipment
10. Decommissioning of Existing Booster Station

The bid sheet also included the following provisional considerations, as value-added options for consideration by the Municipality:

- A. Supply, Install and Commission Back-up Generator

The responses for Fixed Sum Bid quotations were received on Thursday, November 19, with a total of three (3) proposals received. Proposals were reviewed for both compliancy and pricing evaluation by Municipality staff.

General Contractor	Review	Bid Value	Provisional
Greytop Commercial Construction	Compliant	\$ 430,562.	\$ 46,500.
Lindsay Construction Limited	Compliant	\$ 542,200.	Not Quoted
Mid-Valley Construction (1997) Limited	Compliant	\$ 793,870.	\$ 70,250.

Greypoint Commercial Construction was deemed to be the low compliant bidder; as such has been recommended to Council for award of this contract. A 20% contingency was deemed appropriate for this project due to the nature of the winter construction work to be expected.

It should be noted that in the event of a power failure, this water booster station would not be operable without a back-up generator, limiting water and water pressure to the residents of

Panuke Road, and would also render the fire hydrants ineffective. Although the Municipality has other portable generators; these will be required to maintain the network of sanitary sewer systems throughout the Regional Municipality.

NEXT STEPS

Pending approval of Council; staff will award formal contract to Greytap Commercial Construction to proceed with construction work as soon as possible, in accordance with their contract.

FINANCIAL IMPLICATIONS

Original budgeted amount for this project back in 2018 was \$450,000 for design and construction. This project design approved \$36,900 plus applicable taxes for ABLE Engineering coming from West Hants Gas Tax Reserve. Remaining construction costs were originally proposed to come from the West Hants Gas Tax Reserve.

The updated cost projections relating to construction and capital equipment for this project in 2021 was \$500,000, as detailed in the 2021/22 capital budget.

TMP Booster Station Replacement Project	
Pumping Equipment	\$160,000.
General Construction	\$300,000.
Emergency Generator	\$40,000.
Total Construction (Estimated):	\$500,000.
<i>Engineering & Design (previously approved by MDOWH, 2018)</i>	<i>\$50,000.</i>

The pumping equipment and control panels has been approved at a cost of \$160,000 plus applicable taxes, this included an approximate 10% contingency of \$14,751, for unforeseen costs.

Costs for construction projects has risen considerably in 2021 due to effects of the Covid-19 pandemic and resulting supply chain demands (commercial inflation rate of +17.5% for Halifax, NS reported for Q3-2021 according to Statistics Canada). In addition, this work is being requested late in the season, causing additional construction costs due to “winter work”. Due to state of the failing critical infrastructure, Public Works feels that this work cannot be deferred until next spring or summer, or the work may need to be executed under “emergency conditions” which would significantly raise the project costs and jeopardize the community with the possibility of complete loss of a critical water supply service.

	Pumping Equipment & Control Panels (approved)	Construction Proposal	Back-up Generator Proposal	Total Proposed Construction Cost
Proposal/Contract	\$145,249	\$430,562	\$46,500	\$622,311
Contingency	\$14,751	\$86,112	-	\$100,873
Applicable Taxes	\$6,864	\$22,165	\$1,994	\$31,023
Total	\$166,864	\$538,840*	\$48,495*	\$754,207

**Rounding to the nearest dollar.*

The 2021/22 Capital Budget approved \$500,000 to come from the West Hants Canada Community Building Fund (CCFB) reserve, which has a proposed balance of \$2,491,395 on March 31, 2022. Variance of between the proposal and approved budget is \$254,207. Should Council proceed, the West Hants CCFB reserve proposed balance on March 31, 2022, will be \$2,237,188.

ALTERNATIVES

1. Council may choose not to include the Optional Back-up Generator in the award of contract.
2. Council may choose to not to proceed with this capital project.

ATTACHMENTS

None


CHIEF ADMINISTRATIVE OFFICER REVIEW

The report highlights the conditions of the noted infrastructure and the need for replacement. Staff have highlighted the procurement process undertaken and the improved water supply conditions that will result from this work being carried out. There have been delays in the project primarily due to land negotiations. Staff are recommending that the construction phase begin immediately to mitigate current concerns and to add a generator to the system ensuring adequate flow and pressure of water during power outages.

The financial section of the report highlights the financial capacity of the municipality to carry out this work, utilizing reserves to cover the added costs.

I support the recommendation.

Report Prepared by:



 Brad Carrigan, P.Eng., Capital Projects Engineer

Report Reviewed by:



Todd Richard, Director of Public Works

Report Approved by:



Mark Phillips, Chief Administrative Officer