



To: Chair and Members
Engineering and Public Works Committee

From: Michael Currie
Director, Water and Wastewater Services

Adam Smith
Project Manager

Date: September 20, 2023

Subject: Award of Contract 412-19-A-23 – Construction of the Mountview Sewage Pumping Station in the Town of Huntsville

Report: PW-10-2023-1

Recommendation

THAT Contract 412-19-A-23 **be awarded** to Peak Construction Group Ltd. in the amount of \$30,194,900 excluding HST;

AND THAT subject to the satisfaction of the District Solicitor, the Commissioner, Engineering and Public Works, and the Commissioner, Finance and Corporate Services **be authorized** to execute the agreement and any related documents on behalf of The District Municipality of Muskoka;

AND THAT the 2023 Rate Supported Capital Budget and Forecast **be amended** as outlined in the following tables:

Project	Current Amended Budget	Proposed Amendment	Total Proposed Budget
412067 HV Forcemain from MV to GP and SPS	\$22,692,000	\$14,651,590	\$37,343,590
412155 HV Outfall Studies and Construction	\$15,350,000	(\$14,651,590)	\$698,410
Total Expenditures	\$38,042,000	\$0	\$38,042,000

Sources of Financing	Current Amended Budget	Proposed Amendment	Total Proposed Budget
Wastewater Development Charges	\$6,685,840	\$0	\$6,685,840
Sustainable Infrastructure Reserve Fund	\$482,067	\$0	\$482,067
DC Post Benefit Period - Wastewater	\$2,390,960	\$0	\$2,390,960
412067 Ontario Community Infrastructure Fund	\$2,003,700	\$2,607,029	\$4,610,729
415155 Ontario Community Infrastructure Fund	\$2,731,300	(\$2,607,029)	\$124,271
412067 Wastewater Capital Reserve Fund	\$2,154,233	\$12,044,561	\$14,198,794
412155 Wastewater Capital Reserve Fund	\$12,618,700	(\$12,044,561)	\$574,139
Environmental Reserve Fund	\$1,500,000	\$0	\$1,500,000
Debt Reduction Reserve Fund	\$7,475,200	\$0	\$7,475,200
Total Sources of Financing	\$38,042,000	\$0	\$38,042,000

Background

The District Municipality of Muskoka (District) completed a Municipal Class Environmental Assessment (MCEA) in 2014 to evaluate alternatives for management of wastewater in the Huntsville Urban Service Area (HUSA) and established that the preferred solution is to decommission the existing Mountview Wastewater Treatment Plant (WWTP) and construct a new sewage pumping station (SPS) at the Mountview site to convey wastewater to the Golden Pheasant WWTP.

Mountview SPS will receive flows from five pumping stations in Huntsville and is designed to pump over 25,000 cubic metres of sewage per day

The Mountview site is located at 20 Mountview Avenue, in Huntsville, on the shore of the Muskoka River. The current Mountview WWTP receives wastewater from five (5) pumping stations in the Town of Huntsville: Princess Street (SPS#1), Hodges Lane (SPS#10), Church Street (SPS#2), Park Drive (SPS#26), and Mountview (SPS#30). The new Mountview SPS will be constructed adjacent to the Mountview WWTP and will receive flows from these same five sewage pumping stations.

Ainley Group (Ainley) was retained in 2020 following a competitive Request for Proposal (RFP) process and performed the detailed design of the Mountview SPS. The Mountview SPS is designed as a dry-well/wet-well configuration with four pumps to deliver a total firm capacity of 25,299 m³/day (293 L/s). Provisions to add two future pumps to accommodate growth in the Town were incorporated into the design.

The design for the new sewage pumping station is focused on integrating modern efficiencies and prioritizing care for the environment, while also incorporating advanced odour control systems. This innovative design aims to minimize negative impacts on the environment by utilizing energy-efficient equipment and incorporating sustainable technologies. The pumping station will be equipped with state-of-the-art odour control systems that effectively neutralize unpleasant smells, ensuring a more pleasant and liveable surrounding for the community. By combining smart design elements with

advanced technological solutions, this sewage pumping station promises to be a model of efficiency and environmental consciousness for Muskoka.

The proposed works are critical to permit the decommissioning of the Mountview Wastewater Treatment Plant on the Muskoka River in the Town of Huntsville.

The project includes measures to mitigate impacts to Species at Risk including Butternut trees

District Staff and our retained consultants are also taking measures in collaboration with the Ministry of the Environment, Conservation and Parks (MECP) to protect Butternut trees present on the Mountview site. The Butternut trees, a Species at Risk in Ontario, were evaluated for their health on the Mountview site. Mitigation measures and limits of construction are incorporated into the relevant Contract documents for continued protection of the species.

Analysis

RFP 412-19-A-23 was issued on June 26, 2023 and posted on the District’s website as well as advertised on Biddingo with a closing date of August 30, 2023. Submissions were evaluated in accordance with the Technical Criteria listed below:

- Company Experience and Project Management;
- Project Team and Sub-trades;
- Quality Management;
- Environmental Management;
- Safety Management;
- Project Schedule;
- Technical Plan; and
- Financial Control.

Two (2) proposals were received as a result of the RFP process. The proposals were submitted by Peak Construction Group Ltd. (Peak) and Graham Construction and Engineering LP (Graham). Both proponents were interviewed to discuss their proposal and understanding of the project.

The technical review revealed that both proponents had an understanding of the scope of work, complexities associated with the delivery of the project and site specific constraints. Through the assessment noted above, both proponents met the technical score required to be considered for award and were ranked as follows:

Contractor	Ranking	Price (Excluding HST)
Peak Construction Group Ltd.	1	\$30,194,900
Graham Construction and Engineering LP	2	-

In addition to achieving the highest technical ranking, Peak’s proposal also had the lowest cost.

The proposal from Peak is recommended for award by staff and Ainley. The engineer's pre-tender estimate provided by Ainley was \$26,400,000 (excluding HST). The pricing received exceeded the engineer's estimate by 14.4%.

Proposal Review

Unit prices observed in the submissions are consistent with unit prices received in recent times, as inflationary pressures and market volatility continue to heavily influence construction pricing. The pricing received reflects the challenges being faced in the construction sector and are consistent with observations throughout Ontario. The leading cause for the discrepancy from the engineer's construction cost estimate for this project was the price for the complex earthworks and other site work required for the construction of this station. Contractor availability continues to be a challenge as many projects are moving to construction as the backlog created by the pandemic continues to be addressed within the industry. This, in addition to the market volatility associated with materials and fuel costs, are contributing to higher construction costs.

The proposal received from Peak contained all the relevant information and met all the criteria specified. Options for potential cost savings during construction were provided in the proposal. Peak are familiar to the District and have completed multiple projects on District facilities with positive outcomes.

The proposal from Peak is recommended for award by staff and the consultant, Ainley Group.

Financial Considerations

Project 412067 HV Forcemain from MV to GP and SPS is included in the 2023 Rate Supported Capital Budget and Forecast and is financed by seven funding sources which can be seen in the project forecast below.

The budget amendment being proposed through this report will fund the additional project expenditures of \$14,651,590 from project 412155 HV Outfall Studies & Construction.

412155 HV Outfall Studies & Construction is the recommended source of the budget amendment as this project is not considered to move forward at this time based on pricing received earlier this year with constructability concerns noted by the bidding contractors. Treated wastewater would continue to outlet into the Muskoka River through the existing Golden Pheasant Outfall which has adequate capacity confirmed through the 2014 MCEA.

412067 is further proposed to be adjusted in the 2024 Rate Supported Budget and Forecast to reflect updated costing based on the design work for construction of the conveyance forcemain to the Golden Pheasant Wastewater Treatment Plant.

The District has also submitted an application to the Disaster Mitigation and Adaptation Fund (DMAF) to further fund the Mountview SPS and decommissioning. DMAF was launched by Infrastructure Canada in 2018 and funds structural and natural

infrastructure projects to increase resilience of communities that are impacted by climate change. As a substantial footprint of the existing Mountview Wastewater Treatment Plant is located within the Muskoka River floodplain, it was seen as a risk to the environment and a viable candidate for this funding. A report would be brought to this Committee to amend funding of this project should the application be successful. Results of being successful in receiving funding are not anticipated until October 2023.

The following tables summarize the anticipated 412067 project spending and the sources of financing:

412067 HV Forcemain from MV to GP and SPS	LTD Actuals	Commitments to Complete	Contract Award to Complete	Additional Forecast to Complete	Total Proposed Project Budget
Consultant	\$1,505,735	\$411,000	\$0	\$1,400,000	\$3,316,735
Contract	\$2,400	\$0	\$30,194,900	\$0	\$30,197,300
Contingency	\$0	\$0	\$0	\$3,019,490	\$3,019,490
Sub contract	\$106,151	\$0	\$0	\$0	\$106,151
Non-rebatable HST	\$0	\$7,234	\$531,430	\$77,783	\$616,447
In-House Costs	\$2,888	\$0	\$0	\$84,579	\$87,467
Total Expenditures	\$1,617,174	\$418,234	\$30,726,330	\$4,581,852	\$37,343,590

Sources of Financing	LTD Actuals	Commitments to Complete	Contract Award to Complete	Additional Forecast to Complete	Total Proposed Project Budget
Wastewater Development Charges	\$401,218	\$74,879	\$5,501,114	\$820,316	\$6,685,840
Sustainable Infrastructure Reserve Fund	\$453,240	\$5,399	\$396,645	\$59,147	\$482,067
DC Post Period Benefit - Wastewater	\$187,787	\$26,778	\$1,967,283	\$293,358	\$2,390,960
Ontario Community Infrastructure Fund	\$322,195	\$51,638	\$3,793,711	\$565,711	\$4,610,729
Wastewater Capital Reserve Fund	\$12,636	\$159,021	\$11,682,777	\$1,742,114	\$14,198,794
Environmental Reserve Fund	\$8,798	\$16,799	\$1,234,201	\$184,042	\$1,500,000
Debt Reduction Reserve Fund	\$231,300	\$83,719	\$6,150,599	\$917,166	\$7,475,200
Total Sources of Financing	\$1,617,174	\$418,234	\$30,726,330	\$4,581,852	\$37,343,590

Extensive assessment of the Mountview site including hydrogeological and geotechnical investigations of subsurface conditions were completed to mitigate major financial risk of proposed construction activities. Hence, a 10% contingency has been accounted for in the proposed project budget to cover any unforeseen costs during construction.

Schedule and Impacts

There are no anticipated service disruptions to the public for the duration of the project. The project is scheduled to commence pending approval from this Committee and ratification of the budget amendment at District Council. The project is anticipated to be substantially completed by the end of 2025.

Climate Change Implications

The District assesses climate implications in all staff reports using the Clean Air Partnership's '[Municipal Climate Lens Tool](#)' to consider climate impacts or benefits associated with any project, program or initiative. The following is a summary of the results.

Municipal Climate Lens Tool	Results
Mitigation	GHG impact has been considered
Temperature	Project does not result in increased temperature exposure, but alternates resulted in greater exposure
Precipitation	Project does not result in increased precipitation exposure, but alternates resulted in greater exposure

Communications

Upon approval and ratification of the proposed budget amendment, a notice of intent to award will be sent to the successful bidder, agreements will be executed, and instructions will be provided to proceed with the work as per the contract.

The District continues to work with Town of Huntsville staff on implementation of this project. The Town of Huntsville intend to partner with the District for the upcoming forcemain contract to complete road rehabilitation in conjunction with District works.

Notices of construction with project contact information will be provided to residents in the vicinity of the Mountview site to advise of the works.

Strategic Priorities

This section is being updated based on the recently approved Strategic Plan and related pending Action Plans.

Respectfully submitted,

Adam Smith, C.E.T., Project Manager
Michael Currie, Director, Water and Wastewater Services; and
James Steele, P.Eng., Commissioner, Engineering and Public Works