
TO: Committee of the Whole **MEETING:** October 8, 2019

FROM: K. Maynes
Project Engineer, Engineering
Services, Regional and Community
Utilities **FILE:** 5330-20-Bay Ave

SUBJECT: Bay Avenue Pump Station Upgrade – Detailed Design Award

RECOMMENDATIONS

1. That the Board approves the award for Detailed Design of the Bay Avenue Pump Station Upgrade to Koers & Associates Engineering for \$454,847 (Excluding GST).
2. That the Board approves a management reserve of \$45,485 (10% of the contract price) in order to accommodate additional expenses that may be incurred during the Detailed Design Phase of this project.

SUMMARY

A Request for Proposals (RFP) for the detailed design of the Bay Avenue Pump Station Upgrade was publicly advertised on June 27, 2019. All proponents were asked to provide a proposal for detailed design services as well as an estimate for engineering support during the construction phase of the project. The RFP closed on August 2, 2019 and three Proposals were received. The proposal received by Koers & Associates Engineering (Koers) was determined to be the highest ranked proposal.

BACKGROUND

The Bay Avenue Pump Station is a critical infrastructure component of the Northern Communities Wastewater Infrastructure located adjacent to 385 Bay Avenue in Parksville, BC. The pump station services approximately 85% of the City of Parksville and conveys wastewater to the French Creek Pollution Control Centre. The original pump station was constructed in 1978 and subsequent upgrades in 1997 and 2003 included the installation of a backup generator and an additional pump. Preliminary design for this project was completed by Kerr Wood Leidal Associates in 2017 which clarified the design criteria and conceptual layout of the pump station. These upgrades are being recommended to achieve two main operational objectives:

1. Increase Pumping Capacity:

Adequate pumping capacity at Bay Avenue is critical to achieving planned growth in the service area. A 2016 hydraulic analysis of the French Creek sewer system was completed to calculate the future expected flow rates through the Bay Avenue Pump Station due to

population growth through the year 2035. The results of this analysis concluded that the future expected flow rates will greatly exceed the current pumping capacity of the station. A capacity increase is required to reduce the risk of a future overflow at this location.

2. Meet Current Standards for Flood Construction Levels (FCL):

A preliminary design report was completed for this location in November of 2017. This report determined that the Bay Avenue Pump Station, which was built in 1978, is located approximately 2 metres below the FCL recommended in the Professional Engineer's pre-design report. An increase in the station's FCL is required to protect critical electrical and control system components at the pump station and mitigate a potential environmental release.

Three proposals were received in response to the RFP which were evaluated by RDN Staff. Each proposal was evaluated on a 60% technical, 40% financial basis. The tables below summarize the evaluation of each proposal:

Part A – Technical Evaluation:

Consultant	Score (out of 60)
Koers & Associates Engineering	55
Jacobs Engineering Group	56.7
Stantec Inc.	40

Part B – Financial Submission:

Consultant	Total Fees:	Score (out of 40)
Koers & Associates Engineering	\$ 454,847	29.7
Jacobs Engineering Group	\$ 509,550	26.5
Stantec Inc.	\$ 337,852	40

Total: Part A + Part B

Consultant	Total Score	Rank
Koers & Associates Engineering	84.7	1
Jacobs Engineering Group	83.2	2
Stantec Inc.	80	3

The proposal from Koers was determined to be the highest ranked proposal overall. The Koers proposal demonstrated a high degree of experience in completing similar projects, and an excellent level of understanding of the requirements and challenges involved in the Bay Avenue Pump Station Upgrades. In summary, this proposal:

- Meets all requirements as defined by the RFP,
- Reduces the overall scope and schedule of construction,
- Improves safety for RDN operations staff by eliminating confined spaces,

- Mitigates significant risk with regards to budgetary, environmental, and archaeological concerns throughout the construction phase of the project,
- Minimizes the impact on the Bay Avenue neighbourhood by maintaining public beach access and reducing the amount of construction at street level and on the foreshore.
- Includes a firm fee for detailed design services as well as an estimated fee for engineering support through the construction phase of the project, to be reviewed at the time of construction award.

ALTERNATIVES

1. That the Board approves the award for Detailed Design of the Bay Avenue Pump Station Upgrade to Koers & Associates Engineering for \$454,847. (Excluding GST); and that the Board approves a management reserve of \$45,485 (10% of the contract price) in order to accommodate additional expenses that may be incurred during the Detailed Design Phase of this project
2. Provide alternate direction to staff.

FINANCIAL IMPLICATIONS

The recommendations in this report are within the approved budget for this project:

Award of Detailed Design to Koers and Associates	\$454,847
Management reserve for Detailed Design (15%)	\$ 68,227

STRATEGIC PLAN IMPLICATIONS

Environmental Stewardship - Protect and enhance the natural environment, including land, water, and air quality for future generations.

- Ensuring safe transportation of liquid waste in an environmentally sensitive and popular public use area along the Parksville foreshore.

Environmental Stewardship - Continue to improve the quality of treated wastewater in the Region.

- This upgrade will greatly reduce the risk of untreated wastewater release in the Region.



Kyle Maynes
Project Engineer, Engineering Services
kmaynes@rdn.bc.ca
September 19, 2019

Reviewed by:

- K. Felker, Purchasing Manager
- Duncan Taylor, Manager, Engineering Services
- Sean de Pol, Director, Water and Wastewater Services
- Randy Alexander, General Manager, RCU
- P. Carlyle, Chief Administrative Officer