STAFF REPORT



то:	Committee of the Whole	MEETING:	June 12, 2018
FROM:	Mike Squire, AScT Project Engineer	FILE:	5330-20-CRFR&PSU
SUBJECT:	Detailed Design Services for Chase River Fo Upgrades	orce Main No	. 1 Replacement and Pump Station

RECOMMENDATION

That the Engineering Services contract for the detailed design of the Chase River Force Main No. 1 Replacement and Pump Station Upgrades Project be awarded to CH2M Hill Canada Limited for \$199,682 (excluding GST).

SUMMARY

A Request for Proposals (RFP) for the detailed design of the Chase River Force Main No. 1 Replacement and Pump Station Upgrades was publicly advertised on February 1, 2018. The RFP closed on April 18, 2018 and three (3) Proposals were received. The proposal from CH2M Hill Canada Limited (CH2M) was determined to be the highest ranked and lowest cost proposal.

BACKGROUND

The Chase River Pump Station and force main are critical infrastructure components of the Southern Communities Wastewater Infrastructure that receive wastewater from the south end of the City of Nanaimo. Wastewater from the Pump Station is conveyed approximately 1.1 kilometers northward along Haliburton Street to the Nanaimo Interceptor Pipeline through twin 450 mm diameter Ductile Iron pipes (Chase River Force Mains No. 1 and 2). The Force Mains were installed in 1980 and 1998 respectively. Several major leaks on Force Main No. 1 were detected in 2017. Ductile iron pipe generally has a service life of 60 to 80 years, to determine the cause of the premature failure a section of pipe was removed and inspected. The inspection found that the bottom of the forcemain was badly eroded, likely due to gravel and grit within the wastewater. To avoid further failures and emergency repairs a full-scale replacement of the force main was required and became a high priority. The new force main upgrade will generally follow the same alignment and grade of the existing Force Main No. 1. The Chase River Pump Station is also in need of the following upgrades to meet capacity requirements and address other operational issues:

- Provisions for improved Pump Station grit and rock removal at the pump station inlet.
- Expanded force main valve chamber with access / egress improvements.
- Upgrades to the existing septage receiving facility.
- Replace aging motor control.

• Replace internal piping.

The RFP for the detailed design of the Chase River Force Main No. 1 Replacement and Pump Station Upgrades was publicly advertised on February 1, 2018.

The RFP closed on April 18, 2018 and three (3) Proposals were received from the following Consultants:

- CH2M Hill Canada Ltd.
- ISL Engineering and Land Services Ltd.
- Wedler Engineering LLP

The selection process followed the RDN Selection of Consultants Policy A2.17 and selection was made on the basis of technical merit and financial fees. Proposals were evaluated using the following weighting:

- Technical Submission 60% of total proposal score
- Financial Submission 40% of total proposal score

The Evaluation Team determined that the highest ranked overall Proposal was provided by CH2M who also provided the lowest cost submission.

CH2M is a consulting engineering firm specializing in water and wastewater. CH2M demonstrated a thorough understanding of the Project and has the experience and expertise needed to work with RDN staff to complete the detailed design of this Project.

The design work is expected to be completed in 2018, tendering, award and construction will take place in 2019.

ALTERNATIVES

- 1. Award the Engineering contract for the Chase River Force Main No. 1 Replacement and Pump Station Upgrades Project to CH2M for \$199,682 (excluding GST).
- 2. Provide alternate direction to staff.

FINANCIAL IMPLICATIONS

The 2018 and 2019 financial plan provides \$380,000 in funding for the design, engineering and construction services of this project in the Southern Communities Waste Water Services Fund. CH2M's financial submission included a total fixed-fee of \$199,682 is within the 2018 allocation in the approved five year financial plan. The current budget for construction identified in the five year financial plan for this project is \$1,710,000.

STRATEGIC PLAN IMPLICATIONS

The design and construction of the Chase River Pump Station and Force Mains directly supports the Board Strategic Priority to Focus on Organizational Excellence. This priority states that the RDN will deliver efficient, effective and economically viable services that meet the needs of the Region, including funding infrastructure in support of our core services employing an asset management focus.

The project also supports the strategic priority to Focus on Economic Health and recognizes the importance of wastewater in supporting economic and environmental health.

Mike Squire, AScT msquire@rdn.bc.ca 05/02/2018 Reviewed by:

- M. Mauch, Manager, Engineering
- S. De Pol, Director, Water & Wastewater Services
- R. Alexander, General Manager, Regional and Community Utilities
- P. Carlyle, Chief Administrative Officer