

DATE: September 20, 2018

FILE: 5330-20/CVWTP

TO: Chair and Directors
Comox Valley Water Committee

Supported by Russell Dyson
Chief Administrative Officer

FROM: Russell Dyson
Chief Administrative Officer

R. Dyson

RE: Comox Valley Water Treatment Project – Request for Proposals

Purpose

To describe the planned request for proposals (RFP) process for the Comox Valley Water Treatment Project (CVWTP) and to provide the rationale for advanced approval to implement once funding is approved.

Recommendation from the Chief Administrative Officer:

THAT the request for proposals plan for the Comox Valley Water Treatment Project as described in the staff report dated September 20, 2018 be approved for release subject to confirmation of grant funding and written K'ómoks First Nation and BC Hydro support for the project.

Executive Summary

At the October 17, 2017 Comox Valley Water Committee meeting the committee approved a comprehensive strategy in support of implementation for the CVWTP. The strategy includes project procurement and delivery under a design-build (DB) model. The RFP process recommended in this report is integral to the DB process. The CVWTP is in-line with the implementation strategy approved at the October 2017 meeting.

- Staff released the request for qualifications (RFQ) for the CVWTP on August 24th, 2018.
- The RFQ was released after good progress was made on permits, funding and work with K'ómoks First Nation (KFN). Staff have a high level of confidence we shall be ready to release the RFP in November 2018.
- Milestones for release of the RFP include:
 - Grant funding confirmation, and a fully funded project;
 - CVWTP support from KFN;
 - BC Hydro support for provincial approvals for the CVWTP.
- In August 2018, the Comox Valley Water Committee approved the method of RFP evaluation as well as the three target groups for Community Employment Benefits for the CVWTP.
- With no Comox Valley Water Committee meeting scheduled for October due to elections, Staff require approval of the RFP process in September to release the RFP on-time.
- Key aspects of the RFP process include:
 - The CVWTP shall be a DB based on technical specifications included in the RFP documents. The technical specifications supersede the indicative design completed in September 2017, allowing the design-builder to create their own design, using innovation to find cost efficiencies.

- The capital budget of the DB contract will be between \$95 and \$100 million, to be confirmed prior to the release of the RFP pending final risk allocation. The proposals shall be evaluated to confirm they are compliant and fit within the overall project budget, but compared based on lifecycle cost to the Comox Valley Regional District (CVRD) over 30 years.
- Between \$4 and \$8 million of the total project budget will be kept by the CVRD for contingency, in addition to the healthy capital works reserve maintained in the water service through the construction and commissioning of the CVWTP. The contingency value will be confirmed based on the final risk allocation, as per the capital budget.
- CVWTP costs include both the DB contract and components of the project initiated directly by the CVRD. The breakdown of costs is as follows:

	DB Contract (\$ million)	CVRD Initiatives (\$ million)	Total (\$ million)
Estimated DB Contract Cost	85.3	-	85.3
DB Contingency	13 *	5.4 *	18.4
Other CVWTP Costs **	-	6.7	6.7
Total Budget	98.3 *	12.1 *	110.4

* Contingency allocation between CVRD and the DB capital budget may change pending final risk allocation, modifying these values.

** Other CVWTP Costs (such as development of the DP specification, multiple environmental studies, etc). These are in part funded by the by the Clean Water and Wastewater Fund Grant which is 83 per cent funded. Of this, approximately \$2.5 million has been spent to date.

- The procurement team propose \$5 million as the tie-breaker value for evaluation of proposals, based on lifecycle cost. This translates to approximately four per cent of the expected lifecycle cost of the CVWTP. Any proposals within this \$5 million tie breaker value from the lowest cost proposal will be evaluated based on best value to the CVRD, incorporating the qualitative elements of the proposal. The qualitative elements are proposed to include:
 - Community benefits;
 - Operability of facilities;
 - Environmental footprint;
 - Facility aesthetics.
- The Community Employment Benefit targets, which are required by the federal government, will be set in collaboration with the highest ranked DB proponent during final contract negotiations at the end of the procurement process.
- As per the staff report approved in August 2018, the RFP evaluations team will be made up of members of the procurement team: Jonathan Huggett, Chris Baisley (Deloitte), Stephen Horseman (WSP) and Charlie Gore (CVRD).
- The DB Agreement will be structured to ensure quality performance of the facility by only releasing holdbacks after successful completion of a performance period – these shall be in addition to the builder’s lien holdback which assures quality construction.
- The design-builder will be in charge of operation for the first year, training our personnel while proving performance of the facility. The CVRD will hire a new lead treatment plant operator and level III treatment plant operator prior to the

commencement of the facility commissioning, as per the 2018-2022 five year financial plan.

- The procurement process is complete when a contract is signed with the design-builder, expected for early spring 2019 if the RFP is released on-time. Staff are on track to have the CVWTP completed in spring 2021, ahead of the approved schedule.

Prepared By:

Concurrence:

Concurrence:

C. Gore

K. La Rose

M. Rutten

Charlie Gore, P.Eng
 Manager of Capital
 Projects

Kris La Rose, P.Eng
 Senior Manager of
 Water/ Wastewater
 Services

Marc Rutten, P.Eng
 General Manager of
 Engineering Services

Stakeholder Distribution (Upon Agenda Publication)

Island Health	✓
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Background/Current Situation

Procurement Team

In addition to our Senior Manager of Water/Wastewater Services, Manager of Operating and Capital Procurement, Manager of Capital Projects, and the CVRD’s engineer WSP, the procurement team includes the following:

Procurement Advisor	Jonathan Huggett	Independent Consultant Large government projects and DB expert.
Commercial Advisor	Chris Baisley	Deloitte Water treatment engineer turned commercial consultant, specializing in water DB projects.
Lawyer	Matt Mulligan	Norton Rose Fulbright Specializing in DB contracts.
Fairness Advisor	Jane Shackell	Miller Thompson LLP Specializing in DB procurement.

Milestones for RFP Release

The two items which require resolution prior to CVWTP construction are:

- The receipt of grant funds to complete the funding requirements for the CVWTP; and
- Provincial approval of the CVWTP through the Environmental Assessment Office and the Ministry of Forest, Lands, Natural Resource Operations and Rural Development (MFLNRO)

Receiving sufficient grant funding to fund the remainder of the CVWTP is a hard-milestone for the release of the RFP. The RFP will not be released until the CVWTP is fully funded.

The provincial approvals are not required until construction starts, which isn’t forecast until fall 2019 on the current schedule. The two items which hold the key to the provincial approvals are:

- KFN support for the CVWTP; and
- The water availability study that CVRD are completing regarding the CVWTP’s impacts on Puntledge River fish habitat.

The water availability study has been a complicated undertaking, with extensive collaboration between the Department of Fisheries and Oceans, MFLNRO, BC Hydro, and CVRD. CVRD have finally received agreement on the water model parameters which kicks off the habitat analysis. Results are due at the end of September. CVRD are confident that this study will show that with implementation of watering restrictions tied to flows in the Puntledge River, our CVWTP's impact on fish habitat will be insignificant even during drought years. BC Hydro's support of the study results, as the expert and manager of the Puntledge River system, is key to provincial approval. BC Hydro have indicated they will support our provincial approvals once it is shown that the CVWTP does not significantly impact fish habitat.

Collaboration with the KFN regarding water services in the Comox Valley has also been extensive. The Comox Lake watershed falls within the KFN's traditional territory, and provincial permits and approvals rely in part on KFN support for the CVWTP. The KFN are also keen for the region to extend water services to their significant fee simple and treaty settlement lands in around Union Bay. The CVRD continues to work with KFN towards their participation in and support of the CVWTP.

In light of the fact that the provincial approvals aren't required until construction starts, CVRD have set interim milestones for the release of the RFP which indicate a high-probability of achieving the necessary provincial approvals prior to construction starting in fall 2019:

- KFN support for the CVWTP; and
- BC Hydro support for provincial approvals for the CVWTP.

CVWTP Budget

The budget for the DB contract are derived from budget presented in the Value Planning Study Report, which was approved by the Comox Valley Water Committee in May 2018. The value planning report detailed the budgeted cost for the design-builder costs, including engineering, construction and indirect costs, totalling \$85.3 million. The report also stated a contingency of \$18.4 million, 25 per cent of the estimated costs of the design-builder.

When issuing the RFP for the DB contract, CVRD need to place a budget on the contract. This budget needs to include a portion of the contingency, as the accuracy of the cost estimate is between a Class B and Class C estimate, in line with an indicative design. CVRD also need to retain a level of contingency, to account for future changes to the contract such as encountering unexpected ground conditions, contaminated materials, BC Hydro requirements, etc.

The apportionment of contingency is dependent on decisions regarding who holds what risk. After a recent review of the CVWTP's risk register, CVRD have embarked on additional geotechnical and contaminated material testing to reduce the unknowns. At the culmination of this work (expected at the end of September), the procurement team shall define the best way to allocate the risk, and shall distribute the contingency accordingly. CVRD expects the budget of the DB contract to be between \$95 and \$100 million, corresponding to \$10 to \$15 million in contingency assigned to the DB contract. The contingency assigned to CVRD shall be between \$4 and \$9 million, approximately.

RFP Evaluation

In August 2018, the Comox Valley Water Committee approved the tie-breaker method for evaluating the DB proposals. This method drives proponents to lowest price while encouraging them to address qualitative elements to differentiate them from other proposals of similar cost to the CVRD.

Metro Vancouver recently used this method for the procurement of their new wastewater treatment plant, which had a budgeted lifecycle cost of \$900 million. The tie-breaker value was set at six per

cent of this value, at \$54 million. On another Metro Vancouver project, this time a conveyance project, the tie-breaker value was set at 10 per cent of the lifecycle cost, or approximately \$15 million. In neither of these cases was the tie-breaker clause used, in each case a proposal was lower in price by more than the tie-breaker value. Regardless of whether the tie-breaker mechanism is actually triggered, the potential that it would be drives proponents to ensure their concept and design addresses the qualitative elements identified as priorities in the RFP.

The estimated lifecycle cost of the CVWTP is approximately \$130 million, based on a 30 year period. After debating pros and cons of higher and lower values, the procurement team proposes that \$5 million is used as the tie-breaker value, which corresponds to approximately four per cent of the lifecycle cost. It is important to clarify the basis of this value. This value is not indicative of how much CVRD believe the qualitative elements are worth. It is a value which highly competitive proponents may believe their competitors' price will be within, thus encouraging them to provide low cost-high impact qualitative elements in their proposal.

If the tie-breaker clause is activated, the evaluation team will compare proposals based on “best value” to the CVRD. This will include their price, but also the following qualitative elements:

- Community benefits, inclusive of First Nation opportunities;
- Operability of facilities;
- Environmental footprint;
- Facility aesthetics.

If the tie-breaker clause is not activated, the lowest cost project which is technically compliant with the RFP specification will be selected.

Performance Guarantee

The procurement team has structured the RFP with the following elements to assure quality construction and performance of the facility:

- The facilities shall only reach acceptance after a successful 30-day uninterrupted performance test. This releases a 10 per cent holdback on payments (builder's lien);
- An additional 12-month performance period starts after acceptance. This performance period has two phases, with holdbacks on payments released throughout the period:
 - Phase One (three months):
 - Run the facility using their certified lead operator. CVRD's lead operator shall shadow the DB operator during this phase;
 - Complete all the necessary training for CVRD staff;
 - Prove out performance values as per their proposal, including power consumption.
 - Phase Two (nine months):
 - Direct the CVRD lead operator's operation, either in person or remotely;
 - Take responsibility for performance values as per their proposal, including chemical consumption, residual performance and water quality performance.

Policy Analysis

At the August 14, 2018 meeting of the Comox Valley Water Committee the following motion was approved:

THAT the Comox Valley Water Committee approve the “tie-breaker” method for selecting the preferred design-build proponent in the Comox Valley Water Treatment Project Request for Proposals as described in the August 8, 2018 staff report;

AND FINALLY THAT the Comox Valley Water Committee approve Indigenous peoples, apprentices and under-represented populations (women, persons with disabilities, veterans, youth or recent immigrants) as

the three target groups for the Community Employment Benefits to be implemented in the Comox Valley Water Treatment Project, as required by the federal government for the Request for Proposal and grant application documents.

At the June 19, 2018 meeting of the Comox Valley Water Committee the following motion was approved:

THAT the request for qualifications plan for the Comox Valley Water Treatment Project as described in the staff report dated June 14, 2018 be approved.

At the May 15, 2018 meeting of the Comox Valley Water Committee the following motion was approved:

THAT the revised scope and cost estimate for the Comox Valley Water Treatment Project as presented in the Value Propositions Implementation Response Technical Memo prepared by WSP Engineering and attached as Appendix A to the staff report dated May 9, 2018 be approved, including selection of direct filtration as the filtration technology, and reducing the depth and length of the lake intake.

At the October 17, 2017 meeting of the Comox Valley Water Committee the following motion was approved:

THAT the Comox Valley Water Treatment Project implementation strategy as noted in the staff report dated October 11, 2017 is fully endorsed including:

- 1. The scope of the infrastructure, which includes a deep water intake, raw water pump station, raw water pipeline, water treatment plant, and treated water pipeline;*
- 2. The revised schedule, specifically to obtain public assent in March 2018 and complete the project in mid-2021;*
- 3. The revised capital cost estimate of \$110.6 million; and*
- 4. The funding model and proposed future grant applications, aiming to maximise grant funding and borrow funds in line with a minimum of 50 per cent grant funding.*

Options

The Comox Valley Water Committee has the following options:

1. Approve the RFP plan as proposed in this report;
2. To direct staff to modify certain parameters of the RFP plan and approve the modified version;
3. To delay the RFP plan pending approvals and permits.

The RFP plan as proposed within this report is recommended to ensure the CVWTP remains on schedule and meets the previously communicated milestone dates. The plan has been developed with input and collaboration from the procurement team, and as such only Option No.1 is recommended.

If concerns are raised with specific values presented in the plan, it is recommended to provide modifications to the specific parameters and proceed with approval of the RFP plan, as highlighted in Option No.2. This option although not recommended, will ensure that the CVWTP remains on schedule.

Financial Factors

The budget of the CVWTP is set and it is not proposed to be modified as per this report. The allocation of risk and contingency does not change the CVWTP budget, it only changes the budget for the DB contract and the ratio of DB contingency to CVRD contingency.

The DB contract budget will be set prior to RFP submission, however this shall not be a hard-cap on contract cost. This budget shall be used to help evaluate proposals and if a proposal is above this budget it will not automatically be rejected. However the CVRD will retain the right to reject proposals above this budget.

The RFP will not proceed without confirmation of grant funding.

Legal Factors

The CVRD has engaged a highly experienced lawyer with expertise in delivery of DB projects and a fairness advisor to ensure a fair and competitive procurement process that mitigates legal risk to the CVRD and member municipalities.

Regional Growth Strategy Implications

None.

Intergovernmental Factors

The CVRD has worked closely with the City of Courtenay and the Town of Comox on several aspects of the CVWTP. The municipalities continue to provide valuable input to the procurement process, the development of the RFP and many other project aspects.

Community benefits are a requirement of the federal government and are evaluated by the provincial Ministry of Municipal Affairs and Housing. Both the federal and provincial government must be satisfied with the proposed plan for community benefits for the CVWTP to receive significant grant funding from the Investing in Canada Infrastructure Program.

KFN are involved with the following elements of community benefits:

- Targets for involvement as per federal requirements;
- Procurement and involvement agreements as part of a CVRD – KFN partnership;
- Cultural incorporation and aesthetic of water treatment plant; and
- Trailhead facilities at water treatment plant.

Interdepartmental Involvement

Engineering Services is leading this work with help from the Communications Department within Corporate Services, as well as the Capital Procurement Department within Financial Services.

Citizen/Public Relations

The CVWTP has a communications plan, which was approved by the Comox Valley Water Committee in October 2017. The plan calls for the communication of project milestones to keep the public up-to-date on project progress. The release of the RFP is considered an important milestone and would be communicated in a press release, through the CVRD's website, Connect CVRD and social media. The community benefits would be highlighted in this initial release and in subsequent communications about the tendering process and the project construction.