# COMOX NO. 2 PUMP STATION Project Update

## PRE-IMPLEMENTATION PHASE RESULTS EXPECTED IN LATE SUMMER

In January 2017, the pre-implementation phase of the Comox No. 2 Pump Station began with the appointment of Opus International Consultants Ltd. as Owner's Engineer. During the preimplementation phase Opus was tasked with developing the indicative design for the project which included resolving any potential red flags and developing technical, architectural and urban design criteria.

Three potential red flags were identified as requiring further investigation:

- Condition of the foreshore forcemain from the Courtenay pump station to the location of the tie-in to a new Comox No. 2 pump station;
- 2. Up-to-date capital cost estimates for the project, including costs of all new associated forcemains;
- 3. Impact of the project on the the quality or quantity of well water in the surrounding neighbourhood.

Comox Valley Regional District (CVRD) staff, and Opus and its team of consultants had been working to complete the investigative work and prepare final reports in time to inform a decision on project implementation in July, however the work has taken longer than expected. Final results will instead be brought forward to the Comox Valley Sewage Commission in late summer 2017.

### **PRELIMINARY RESULTS**

#### **Forcemain Condition Assessment**

- Intended to gain an improved understanding of the condition of the forcemain including the degree of deterioration, structural integrity of the pipe, and future serviceability of each individual section of pipe.
- Two types of investigations undertaken:
  - 1. Acoustical investigation from Courtenay pump station to the Comox Valley water pollution control centre (CVWPCC), which provides secondary wastewater treatment, to determine whether any leaks or gas pockets are present within the forcemain
  - 2. Electromagnetic investigation from Courtenay pump station to Beech Street pump station to provide insight on the condition of the pipe and remaining service life
- Preliminary results indicate that the pipe is in good condition with no leaks or broken reinforcing wires.

#### **Indicative Design and Class B Cost Estimate**

- Indicative design lays out a possible solution for the project. In combination with the project specification, which includes specific mandatory elements, it provides the parameters for the project.
- Allows for a Class B cost estimate to be developed, with an accuracy of +/- 15 per cent.
- Preliminary results indicate that the estimated capital costs for the project have increased by approximately 70 per cent above what was previously budgeted for the project due to escalating construction costs, additional expense of installing backup systems to reduce the risk of overflow at Courtenay and Jane Place pump stations, higher than anticipated level of complexity and technical risk with the foreshore tiein to the existing forcemain, site sizing constraints and the inclusion of state of the art systems to mitigate odour, noise and vibrations.

#### **Further Hydrological Work**

- GW Solutions was originally hired by the local neighbourhood to evaluate potential risks to their groundwater wells from the Comox No. 2 project. Due to the shallow nature and age of most of the wells in the area, they concluded that there was a risk to the wells in the event of a failure of the pump station or forcemain. Seeking further detail, the CVRD subsequently hired GW Solutions to undertake additional work.
- That work now nearing completion includes a survey of local wells, installation of new monitoring wells in the road right-of-way, and establishment of baseline water quality and groundwater levels. Work is also underway to qualify the impact of a leak in the neighbourhood.





## **DESIGN WORKSHOPS SUMMARY**

Workshops, held in March, April and May, provided an opportunity for area residents to engage with the CVRD on the design and aesthetics of the proposed pump station. The informal nature of the workshops also allowed for a conversation between the community and the CVRD about the overall project. The CVRD and its team of consultants were able to respond to the many design-related and technical questions and concerns raised by the participants, as well as to provide updates on the project's progress.



Information boards were set up throughout the room, with specific stations to collect comments and input on areas of focus. Each station was hosted by a subject matter expert from the CVRD, Opus and its team of consultants. Conversations, questions and concerns were also recorded to ensure that all comments were captured.

The themes that emerged during the process included:

#### 1. Lack of trust in the decision process and opposition to identified location

- General lack of trust in the CVRD and elected officials, leading to an initial reticence by area residents to engage in the consultation process. While this improved over the series, there remains a lack of confidence that concerns will be addressed in the project delivery.
- Consensus amongst area residents that the pump station should not be located in the Croteau Beach rural neighbourhood, for reasons of fairness and risk, as the residents would be assuming all the risks and disruptions for a service they do not use.

#### 2. Focus on impacts to quality of life rather than design

- Limited interest in the 'look' of a facility, and instead a continued focus on the impact the project could have on water supplies, noise, smell and vibration, and on the general quality of life for those in the neighbourhood, both during construction and afterwards.
- General openness to the design as long as it met quality-of-life expectations.

#### 3. Appreciation of the general design concept

- Appreciation and general support for the design approach and acknowledgement of the project team's efforts in incorporating the community's feedback into the design concept.
- Characteristics that were highlighted as positive were the green "meadow" roof minimizing the impact on views, attention paid to noise, odour and vibration-mitigation technologies, and proposed landscaping and hedging surrounding building.

Read the full design workshops summary report, posted to the 'Reports and Studies' page at: comoxvalleyrd.ca/comox2

#### To provide comments/feedback/questions: Thank-you for reading this update about the Comox No. 2 Pump Station Project. This newsletter is produced by the Comox Valley Regional District (CVRD) and will Phone: 250-334-6056

#### To review additional information about the project:

be released six times a year, or more regularly as needed.

www.comoxvalleyrd.ca/comox2

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Identify alternate solutions for rerouting Willemar Bluff

forcemain

## **DECISION IS YES**

#### **Implementation Phase Begins**

- Initiate request for qualification (RFQ) process
- Review/shortlist proponents
- Issue request for proposals (RFP) to shortlisted proponents only
- Award contract

Construction Phase begins February 2018

**DECISION IS NO** 

Email: comox2pumpstation@comoxvalleyrd.ca Please email to be added to the mailing list.





## **NEXT STEPS**

**SUMMER 2017** 

**Results Considered** 

**Beech Street location:** 

area?

The Comox Valley Sewage

Commission will decide whether to

move forward with the proposed

Comox No. 2 Pump Station at the

• Have all the red flags related to

• Can the facility be constructed

• Does it still make the most

financial sense?

without causing significant long

term risk to ground water in the

the proposed site been removed?