Comox Valley Sewer Conveyance Project Update

December 2023

Webinar for Lazo Road Area Residents

Questions & Answers

Comox Valley REGIONAL DISTRICT

QUESTION

Has new leak detection been tested on raw sewage and in common use for this purpose?

No. The CVRD did not propose this solution initially because it is not commonly used in municipal sewer systems. The technology has been long-established in the oil and gas sector and is used to monitor large oil pipelines for leaks. Although Metro Vancouver has started installing a few systems, it is still relatively new to the local government industry.

QUESTION

We were told pumping sewage up Lazo Hill was too expensive and HDD was the cheapest option. How is pumping now magically cheaper than HDD?

There has been a significant shift in the tunneling industry, with costs skyrocketing faster than those for installing cut and cover pipelines. Federal decisions regarding past incidents during construction have made the tunneling industry more risk-averse, leading to higher pricing for their work. During procurement, there were large variations in prices from contractors, but the installation of cut and cover pipelines was deemed less risky and easier to estimate. This resulted in competitive pricing and favorable rates from contractors, making the project economically successful.

QUESTION

Why are you planning to do public consultation after you have started construction?

The project staff are committed to ongoing engagement throughout the entire life cycle of the project, particularly in relation to a Liquid Waste Management Plan. The Sewer Conveyance Project involves two different contracting methodologies, with one part being a standard detailed design and tender project, while the other involves three pump stations and follows a design-build approach. While construction may be underway in certain areas, continued engagement on specific design elements is necessary due to the project's unique aspects. The intention is to engage with the public on aspects that will have an impact on them well in advance of the actual construction activities., such as the construction of air valves along Lazo Road.

QUESTION

What is the total CO2 emissions for this entire project? Diesel burned, plastic pipe manufacturing, repaving roads etc.

While total CO2 emissions for the project are not typically calculated, the CVRD makes efforts to influence design decisions in areas that we can address such as climate change impacts. We are able to share the results of the climate change assessment that we will collect for the Courtney Pump Station. However, there are limitations in areas where external mandates or industry standards for pipe material constraints exist.

QUESTION

Does the contractor constructing the project have any experience installing this specific leak detection technology?

We have contracted a specialist firm for the Sewer Conveyance Project to oversee the construction and installation of the leak detection system. The system consists of resilient cables with temperature sensing capabilities. The cables are surrounded by steel cables and a hard-plastic coating. The installation is continuously tested by the overseeing firm to ensure quality and continuity. At the end, they will commission and approve the system to ensure it is installed correctly.

QUESTION

How is the CVRD funding this project? The AAP only approved about $50M. Where is the other $40M coming from?

In 2021, the AAP approved a total of $52 million for debt. The remaining funds come from a combination of CICCs, DCCs, capital reserves and short-term debt. Capital Improvement Cost Charges (CICCs) and Development Cost Charges (DCCs) are funds collected from developers to cover system growth. Capital reserves are funds saved and accumulated on an annual basis specifically for larger projects and short-term debt is borrowing that does not require voter approval. The detailed breakdown of the approved budget and project funding components, including debt and reserves, is available in the August 2022 documentation.

QUESTION

What is the long-term operating cost increase to tax payers of pumping this much sewage up a hill? What is cost over 50 years vs. existing pipe?

The potential impacts on ratepayers have been considered in public engagement messaging about the project. While specific figures on operational expenditure are not provided, it's noted that routing overland is more expensive than routing through the estuary due to pumping costs. However, the difference in pumping costs between tunneling through Lazo Hill and going over the hill are marginal, approximately 1 percent of operating costs. Despite the higher cost of pumping over land, the Public and Technical Advisory Committees (TACPAC) involved in the LWMP process decided against installing a pipe through the estuary. As a result, the wastewater will be pumped overland, incurring higher operational costs as the system moves away from the sensitive environment onto roads where the threat to our waterways can be mitigated.

QUESTION

What is the rush to get to construction? Why is the CVRD pursuing this project so aggressively? The existing pipe has 50 years of capacity and is in great shape according your NHS study.

The current system is operating beyond capacity, particularly at the Courtenay and Comox pump stations, especially during storm events and king tides. There is an urgent need to build a new system due to the existing infrastructure being at its limit. Quality assessments revealed additional life in the pipes through the estuary, but the exposed section on Willemar Bluffs poses a high risk. Any disruption to this section could lead to a spill that would devastate the aquaculture industry in Baynes Sound, a crucial economic driver for the region. The urgency stems from environmental stewardship and the critical need to replace the aging infrastructure to prevent a major environmental crisis. Efforts to protect the exposed pipe are ongoing, but decommissioning it as soon as possible is deemed necessary.

QUESTION

How many venting kiosks will there be along Lazo between Torrence and Brent Road? Are these vents essentially manholes or tall pipes?

The exact number is not yet certain but estimates are two to three air vents in a pressure pipeline. These vents are not traditional manholes but will be housed in above-ground metallic kiosks resembling BC Hydro boxes. The system is fully sealed, allowing for the routing of air vents to these kiosks, which will contain components like air valves and carbon filter cartridges to manage any odour. There is still ongoing work to determine the locations and numbers of these kiosks and we will come back to the community with more details including location and design specifications.

QUESTION

What is the operating cost of the leak detection system for IT, maintenance, software subscriptions, etc.? Do local contractors fix it when it breaks?

The agreement with the supplier involves the supply of materials for construction, overseeing the construction process, and providing operational support for a system. The annual cost of the agreement is approximately $14,000, making it more cost-effective than acoustic leak detection in the long run. While local contractors can handle repairs for the physical fibers, the operational control and monitoring will be managed remotely in a location outside the local region.

QUESTION

What has changed with respect to pumping up hill and how are you creating enough pressure now?

Initially, there was a belief that non-clog low voltage (600V) pumps couldn't handle high heads. However, after addressing significant market issues related to tunneling, the project staff revisited these assumptions and discovered instances in Western Canada where low voltage non-clog sewer pumps were effectively operating at larger heads with excellent reliability. This led to changes in our design, allowing the use of larger pumps in the pump stations to handle higher pressures successfully. This had been discussed at the previous Lazo area presentation about assumptions and experiences with running low voltage sewer pumps at high heads in the industry.

QUESTION

Is Lazo Road going to be totally repaved and widened by the end of the project?

The CVRD's mandate is to repair and repave a specific lane on Lazo Road. The construction will be limited to one lane and discussions with the Ministry of Transport are ongoing to determine if they will conduct work on the other half simultaneously. The focus is on reducing costs for taxpayers, however, the project does not involve widening roads that are under the responsibility of Ministry of Transportation and Infrastructure (MoTI).

QUESTION

Interest rates and borrowing costs have skyrocketed since the AAP was approved.

What is the cost of borrowing now?

Local Governments in BC utilize long term debt through the Municipal Finance Authority (MFA). MFA is an independent authority that pools all of the borrowing and investment needs for local governments within BC, which allows them to provide long term loans that offer rates significantly less than a bank can. Debt in local government is also calculated much differently than typical household debt, which, in turn, reduces the impact debt servicing costs have on tax payers. Rising borrowing interest rates are mitigated through the increased revenue generated through the pooled investments.

More information on Local Government debt, visit https://www2.gov.bc.ca/gov/content/governments/local-governments/finance/borrowing-liabilities

QUESTION

What is the status of the existing pipe in the foreshore? When was the last integrity inspection completed?

The last inspections for that pipe were completed as part of the LWMP process in 2019 and 2020. It showed that that pipe has some significant life left in it. However, the exposed section of pipe that runs along Willemar Bluffs is the main concern and the main impetus to replace the pipe. We are confident it can last through this project but want to get construction underway so that we can decommission that line immediately.

The inspection of a raw sewage pipeline requires the insertion of a large electromagnetic machine, which runs along with the sewage. It's very expensive, and only provides information on the steel within the concrete. It is similar to a little x ray machine. We ran an inspection after 35 years in operation to understand the condition of that pipe at that time but it likely won't show a change over 3 to 4 years so there's no plan to undertake another expensive analysis of the condition of that pipe.

QUESTION

Where are bid documents and engineering drawings?

The tender bid drawings for the section of work through the Town of Comox were issued on BC Bid in September and were publicly available, though it's unclear if they remain accessible after the bidding period. However, the engineering drawings for the design build portion, including pump stations and rural areas, are still in the detailed design process and not yet publicly available as they are being finalized.

QUESTION

Where are bid documents and engineering drawings?

The tender bid drawings for the section of work through the Town of Comox were issued on BC Bid in September and were publicly available, though it's unclear if they remain accessible after the bidding period. However, the engineering drawings for the design build portion, including pump stations and rural areas, are still in the detailed design process and not yet publicly available as they are being finalized.

How are homeowners within municipalities that are not already being service (remains on septic) being brought into the service?

The sewer conveyance system under construction is a regional transmission system without any direct connections to individual properties. Sewage collection is collected by municipalities or First Nations, not the CVRD, and the project does not offer opportunities for private properties to receive sewer servicing. To access the system, annexation of private property into municipalities is required.

QUESTION

How do the tax payers of Courtenay and Comox benefit from this project?

The project focuses on renewing aging and failing infrastructure, driven by the need to address capacity issues and potential risks in the system.

It is important to understand that, as a growing and well-functioning community, there is a need for maintaining and upgrading both water and sewer infrastructure to effectively serve its residents. The decision to undertake such projects is based on a thorough analysis, ensuring the longevity of service to the community. The focus is on managing and maintaining the existing infrastructure to sustain the services that benefit the community for years to come.

QUESTION

Are there still intersection upgrades planned along the pipe line route?

There are major intersection upgrades are planned in Comox, including new roundabouts at the intersections of Comox Road and Glacier View, as well as Comox Avenue and Rodello St. Additionally, street improvements will be made along Beaufort Avenue and Balmoral Avenue. These long-term projects involve collaboration with the town to minimize public impact and obtain favorable contractor pricing by combining the scope. The procurement process was successful, and the pipe installation will precede the street improvements and roundabout construction by the same contractor.

QUESTION

How is the CVRD addressing impacts to K'ómoks First Nation resulting from this project?

The K'ómoks First Nation is an important partner on this project. In February 2021, a Community Benefit Agreement was ratified that commits both parties to work together collaboratively on a regional solution for sewer. This agreement supports upgrading the sewer conveyance line that crosses through IR#1 as well as the extension of sewer service to K'ómoks Treaty Settlement Lands south of Courtenay. The CVRD recognizes that the existing sewer line was expropriated without adequate consultation and the agreement provides compensation for past and future impacts of sewer infrastructure within the reserve. Through this agreement the CVRD has also committed to working with K'ómoks to protect archaeologically sensitive areas during project construction in an effort to preserve cultural heritage sites, ancestral burial places and artifacts. For more information read the press release.

QUESTIONS?

Visit:
www.engagecomoxvalley.ca/conveyanceproject



Post questions to the project team



Review project information

Contact



communications@comoxvalleyrd.ca



250-334-6000

Comox Valley
REGIONAL DISTRICT