

Core Area Wastewater Treatment Project Board



October 2017 Monthly Report
November 30, 2017

October Monthly Report - Summary

Overall the Project is progressing as planned.

- The **Wastewater Treatment Plant** (WWTP) is continuing with Harbour Resource Partners (“HRP”) progressing engineering of the WWTP and outfall, drilling of the harbour crossing from Ogden Point, and site work at McLoughlin Point.
- The **Residuals Treatment Facility** (RTF) is in the procurement phase. The Request for Proposals (“RFP”) is progressing as planned: technical submissions were received in September 2017 and evaluation of the submissions commenced.
- The **Conveyance System** is being delivered through seven contracts, including two design-build contracts and five design-bid-build contracts. The two design-build Conveyance System contracts were in procurement during the reporting period:
 - Following evaluation of the RFP proposals, Kenaidan Contracting Ltd. was selected as the contractor for the Clover Point Pump Station; and
 - Shortlisted proponents continued development of their proposals for the Macaulay Point Pump Station and Forcemain RFP.

























October Monthly Report – Summary

The five design-bid-build Conveyance System contracts are in the engineering phase. Progress over the period included:

- **Arbutus Attenuation Tank:** Kerr Wood Leidal progressed the incorporation of code updates into the design for the Arbutus Attenuation Tank;
- **Residual Solids Conveyance Line:**
 - Following evaluation of the RFP proposals, Parsons was selected as the successful proponent to provide design consulting services for the Residual Solids Conveyance Line; and
 - the alignment of the Residual Solids Conveyance Line was confirmed: while the route is close to final, it is still subject to input from communities and feedback received during the November community information meetings will be considered, along with other technical and financial considerations, in finalizing the design.

Monthly Project Dashboard

The dashboard below indicates the high level status of each project component with regards to the six Key Project Indicators (“KPI”) that were defined within the Project Charter.

Key Performance Indicators		WTP Project Overall	WWTP	RTF	Conveyance System
Safety	Deliver the Project safely with zero fatalities and a total recordable incident frequency (TRIF) of no more than 1.				
Environment	Protect the environment by meeting all legislated environmental requirements and optimizing opportunities for resource recovery and greenhouse gas reduction.				
Regulatory Requirements	Deliver the Project such that the Core Area complies with provincial and federal wastewater regulations.				
Stakeholders	Continue to build and maintain positive relationships with First Nations, local governments, communities, and other stakeholders.				
Schedule	Deliver the Project by December 31, 2020.				
Cost	Deliver the Project within the Control Budget (\$765 million).				

Fisheries Act Authorization

- On October 24, Fisheries and Oceans Canada (DFO) sent a letter to the CRD indicating that a *Fisheries Act* Authorization would be required for the construction of the McLoughlin Point outfall.
- The *Fisheries Act* Authorization is a subset of the Transport Canada Facilities Alteration Permit. HRP are responsible for obtaining the *Fisheries Act* Authorization, and have begun to prepare the application.
- The Transport Canada permits and Provincial authorizations required for the McLoughlin Point Outfall (Crown Grant and Notice from the Director) are conditional on receipt of the *Fisheries Act* Authorization, so the anticipated dates of receipt of these permits and authorizations has been deferred.
- HRP is managing the delay in obtaining these permits by adjusting the planned start of outfall construction from January 2018 to July 2018 (the next available fishery construction window) and have advised that this will not result in a delay to the overall project schedule.

First Nations

- First Nations communication and engagement was ongoing over the period.
- The Songhees Nation Liaison and Esquimalt Nation Liaison continued coordination activities with their respective Nations, including meeting with their leadership to identify potential candidates for employment on the Project. Additionally, both First Nation Liaisons assisted the Project Team in disseminating Project related notices to their communities.
- Members of the Esquimalt and Songhees Nations assisted Millennia with their archaeological investigations at Macaulay Point, along the Macaulay Forcemain route and at the Arbutus Attenuation Tank site. The investigations were in support of the Archaeological Impact Assessment.
- The Project Team finalised Project Component-specific First Nations Consultation Reports for the McLoughlin Point outfall and the Clover Point Pump Station. The Consultation Reports were submitted to Transport Canada and FLNR as part of the applications.

Stakeholder Engagement

The Project maintained its ongoing two-way Communications and Engagement Plan to provide Project information to stakeholders, communities and the public and to respond to public inquiries. A variety of materials and methods were used to implement the Plan:

- Project website was regularly updated and two information sheets uploaded:
 - The Arbutus Attenuation Tank Information Sheet
 - Construction Schedule Information Sheet
 - McLoughlin Point blasting schedules updated weekly
- Community and stakeholder meetings were held with representatives from the following:
 - District of Saanich staff
 - District of Saanich Council meeting
 - Township of Esquimalt Technical Working Group;
 - Township of Esquimalt Liaison Committee;
 - James Bay Neighbourhood Association;
 - Greater Victoria Harbour Authority;
 - Department of National Defense;
 - City of Victoria staff; and
 - Willis Point Community Association Representatives
- Responses provided through public inquiry program (Project email address and 24/7 information phone line)

Stakeholder Engagement

Community Information Open Houses

Saanich

Wednesday, November 15, 5 - 8pm

St. Joseph the Worker Parish Hall

Saturday, November 18, 10am - 1pm

Prospect Lake Community Hall

Esquimalt

Wednesday, November 22, 5 - 8pm

Royal Canadian Legion

Victoria

Monday, November 27, 5 - 8pm

Victoria Conference Centre

Community Information Open House Key Themes

- Traffic management
- Route selection and alignment
- Tsunami and earthquake protections
- Construction schedule, impacts and mitigation
- Construction and operating noise and odour

Resolutions from Other Governments

There were no resolutions related to the Project passed by other Governments during the reporting period.

An update is provided on progress related to resolutions passed by the Core Area Liquid Waste Management Committee and City of Victoria related to Dallas Road Waterfront Geotechnical Monitoring

CALWMC April 12th resolution:

That the CRD Board request that the Core Area Wastewater Treatment Project Board:

- *Closely monitor geotechnical issues along the Dallas Road waterfront and advise the Core Area Liquid Waste Management Committee of any issues that arise and solutions.*

City of Victoria's May 11th resolution:

- *Put in place risk mitigation measures to protect the Dallas Road Bluffs during construction including but not limited to:*
 - a. Assembling an interdisciplinary team to study and address the protection of the bluffs.*
 - b. As part of the detailed design of the conveyancing, include a plan for the preservation of the bluffs.*

And that the Project Board report out to the public at one of their regular community meetings, to the JBNA and to Victoria City Council on the measures outlined.

Progress on Plan

The Project Team outlined a plan to address geotechnical concerns.

As of the end of October the Project Team has made the following progress on the plan:

Geotechnical investigations have been undertaken along Dallas Road with an enhanced focus on the shoreline and bluffs. The geotechnical investigations included:

- 24 boreholes drilled along the pipe alignment, with samples sent for laboratory testing;
- three slope inclinometers (one near Paddon Avenue, and two near Douglas Street); and
- one standpipe piezometer with two nested groundwater monitoring wells near Douglas Street.

In preparation for geotechnical monitoring during and after the construction of the Clover Point Forcemain, instruments have been installed near the bluffs and along the pipe alignment. Recordings from these instruments will be used to monitor conditions during the construction and post construction phase of the project.

Design Team Expertise

Company	Relevant Qualifications	Member	Role/Specialty	Years of Experience	Degrees
Kerr Wood Leidal	Extensive familiarity with the Dallas Road Bluffs, including preparation of a conservation plan for the bluffs that considered vegetation impacts, geotechnical assessments, climate change impacts and an archaeological overview.	Colin Kristiansen, P. Eng.	Project Manager	26	BASc, MBA
		Dave Murray, P.Eng.	Civil Engineering Specialist	28	BSCE, Dip. Civil
CH2M Hill	Expertise in seismic design of large diameter forcemains including specialists seismic design and resiliency for large diameter forcemains including ground improvements as well as trenchless technology.	Joe Broberg, P.Eng. ⁽¹⁾	Large Diameter Pressure Pipe	43	BSCE, MSCE, MBA
		Donald Anderson, P.E.	Seismic Specialist	43	BSCE, MSCE, PhD, D.GE
		Andrew Finney, P.Eng	Trenchless Technology	24	BSCE, MSCE
Thurber Engineering	Geotechnical specialists having extensive local experience that includes the Dallas Road Bluffs, with specialists in the field of slope stability and terrain hazard assessments.	Stephen Bean, P.Eng.	Geotechnical Specialist	31	BASc, M.Eng
Plan Dynamics Ltd.	Environmental specialists, having extensive local experience in terrestrial and aquatic habitat, species at risk, ecology, etc.	David Harper CPESC, MCIP, RPP	Environmental Specialist	43	B.A., M.A., Ph.D.
Millennia Research	Archaeological expertise with extensive experience in local archaeological assessments and impact studies.	D'Ann Owens, RPCA	Archaeology Specialist	23	BA (Hons)

Geotechnical Assessment

- The Kerr Wood Leidal team have been provided with the indicative design and the results of the geotechnical investigations undertaken to-date, and have reviewed that work in preparation for developing the final design.
- Kerr Wood Leidal also reviewed previous studies and technical reports, and have completed a geotechnical assessment.
- The assessment concluded that the Dallas Road alignment is suitable from a geotechnical perspective and that the forcemain can be constructed and operated without having an adverse environmental or geotechnical impact on the Dallas Road bluffs.
- A report outlining the results of the geotechnical investigations to-date and the geotechnical assessment of the alignment was posted on the Project website in November.

Next Steps

The Project Team:

- Reported on the results of the geotechnical assessment to the public at the November 27th, 2017 community information meeting,
- will report to Victoria City Council on December 14th, 2017 and
- to the James Bay Neighbourhood Association at a meeting on January 10th, 2018.

The Project Team remains committed to completing the following:

- Geotechnical monitoring will take place along Dallas Road with an enhanced focus on the shoreline and bluffs during and after the construction of the Clover Point Forcemain, including post construction monitoring for 12 months following completion of construction.
- As part of finalising the design, the Kerr Wood Leidal-led team will prepare a plan to mitigate any impacts that construction may have on the bluffs. Kerr Wood Leidal will monitor the construction contractor's adherence to that plan.

Contingency and Program Reserve

- The contingency and program reserve draws over the reporting period are itemised in these tables.
- The remaining contingency and program reserve is anticipated to be sufficient to deliver the Project within the Control Budget.

WTP Contingency and Program Reserve Draw	\$ Amount
Total Contingency and Program Reserve Draw as at Sep. 30, 2017	\$1,467,698
Total Contingency and Program Reserve Draw as at Oct. 31, 2017	\$5,732,558
Total Contingency and Program Reserve Remaining	\$63,585,493

Draws Over Reporting Period	\$ Amount
McLoughlin Point Site Remediation: Hydrocarbon Contaminated Material and Hazardous Waste	\$1,668,441
Golder Associates geotechnical services for independent review of the design of the foundation system proposed for the McLoughlin Point	\$100,000
Clover Point Pump Station Design-Build Contract - proposal price greater than budget on account of cost escalation due to inflationary pressures in the Victoria area construction market.	\$2,448,800
Clover Point Pump Station Design-Build Contract Honorarium fee for unsuccessful bidders	\$47,619
Total October Draws – WWTP & Conveyance Total	4,264,860

Public Realm Improvements

There will be public realm improvements as part of the Clover Point Pump Station expansion and Clover Forcemain construction. The City of Victoria has determined the vision and overall principles as identified in the design guidelines for the improvements.

Clover Point Public

- Public plaza accessible to pedestrians and cyclists, to replace the existing parking lot above the pump station
- Street furniture and bicycle facilities (e.g. benches, bike racks, a bike rack for bicycle maintenance and repair, and a drinking fountain) on the plaza
- Bike node (pathway intersection for bike and pedestrian traffic)
- Interpretive signage and wayfinding signs at the public plaza
- Two replanted grassed open spaces to the west and east of the public plaza
- One public washroom with two gender neutral, universally accessible stalls
- Clover Point Road and Dallas Road intersection improvements
- New connecting walkway and bike path across Clover Point Road to the Dallas Road/Ross Bay Seawalk
- Pedestrian path from Dallas Road alongside Clover Point Road and connecting to the existing Clover Point Park path

Dallas Road

- Cycle track extending from Dock Street at the Ogden Point breakwater to Clover Point
- Gathering/dismount area for the cycle track incorporated on the west side of Clover Point Road at Dallas Road
- Site furnishings (bike rack and a bench at a minimum of six locations at key intersections)
- Barrier fencing between dog off-leash areas
- Wayfinding signage
- One-time payment for the construction of additional capital improvements by the City of Victoria

Public Realm Improvements Next Steps

The contractor is currently designing the public realm improvements based on the City of Victoria's design guidelines. The final design of the exterior of the Clover Point Pump Station building and public realm improvements will be subject to input from the community and the City of Victoria Council.

Public Input

January 2018

Presentation of the 50% design to obtain feedback for incorporation into the final design:

- **James Bay Neighbourhood Association.**
Project Team to present the design and alignment of the cycle track and alignment of the Clover Forcemain.
- **Fairfield Gonzales Community Association.**
Project Team to present the design and alignment of the cycle track and alignment of the Clover Forcemain, as well as the design for the exterior of the Clover Point Pump Station building and the public realm improvements.

City of Victoria Input

December 2017

- Project Team to present design proposal to the City of Victoria Council for their review.

February 2018

- Project Team to present the 50% design to the City of Victoria Council. This presentation will reflect input received from the community associations in January.

March 2018

- The public realm improvements, cycle track design and alignment, exterior of the Clover Point Pump Station building, and Clover Forcemain alignment is subject to City of Victoria approval in accordance with the criteria set out in the City of Victoria licenses.