



Wastewater Treatment Project

Treated for a cleaner future

CRD Wastewater Treatment Project

Monthly Report

Reporting Period: July 2020

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1 Executive Summary

1.1 Introduction

This Monthly Report covers the reporting period of July 2020 and outlines the progress made on the Wastewater Treatment Project over this time.

The Wastewater Treatment Project (the “Project”) includes three main Project Components (the “Project Components”): the McLoughlin Point Wastewater Treatment Plant (the “McLoughlin Point WWTP”), the Residuals Treatment Facility (the “RTF”) and the Conveyance System (which includes upgrades to the conveyance network including the construction of pump stations and pipes). The Project scope is being delivered through a number of contracts with a variety of contracting strategies.

Over the reporting period the COVID-19 public health emergency continued to have impacts on the Project. The Project Team and Project contractors are actively monitoring the status of the COVID-19 public health emergency and are taking additional precautions to protect our staff, contractors, and the public. Construction is ongoing at all of the Project’s sites in accordance with guidelines established by the Provincial Health Officer.

While construction is ongoing, the public health emergency is impacting construction progress and may delay some interim project milestones, such as the transition to commissioning. However, based on current progress the Wastewater Treatment Project remains on schedule to meet the regulatory deadline for treatment by the end of 2020.

The McLoughlin Point WWTP Project Component is continuing with Harbour Resource Partners (“HRP” as the Design-Build contractor for the McLoughlin Point WWTP) progressing: wet commissioning at Densadegs 1, 2 and 3; primary odour control system, plate settler one and two, sludge tank, plant drain tank and valve vault; biological aerated filter (BAF) cell nine; wet commissioning on the blower; installation of disk filter system piping and equipment; lower level interior, second level interior and building envelope are all nearing completion in the Operations and Maintenance building; progressed final north planter and tsunami walls; and the Fortis gas tie-in and the BC Hydro inspection of the generator start-up were completed.

The RTF Project Component is continuing with Hartland Resource Management Group (“HRMG” as the Design-Build-Finance-Operate-Maintain contractor for the RTF) progressing construction activities including: erection of scaffolding for gas membrane installation in the Digester area; insulating piping and installation of receiving hopper in the Other Municipal Solids Receiving Facility; insulation of hot water piping and commissioning of various systems in the Residuals Handling Building; completed installation of external stairs in the Residuals Drying Facility; completion of fiberglass reinforced plastic (FRP) duct installation, and chemical piping installation; and commissioning of various system in the Residuals Storage and Odour Control area.

The Conveyance System is being delivered through seven construction contracts: two design-build contracts and five design-bid-build contracts.

The two design-build Conveyance System contracts progressed over the reporting period as follows:

- Clover Point Pump Station: Kenaidan Contracting Limited (“Kenaidan” as the Design-Build Contractor) progressed construction activities over the reporting period including: electro-mechanical works in the public plaza washroom; completing seismic upgrades, installation of new diesel generator exhaust, fuelling system, diesel generator, and grit separation equipment; and functional and operational tests for upgrades at the existing pump station.
- Macaulay Point Pump Station: Kenaidan Contracting Limited (“Kenaidan” as the Design-Build Contractor) progressed construction activities over the reporting period including: installation of flow splitters in the wet well; commenced grout around the slide gate; ongoing installation of FRP platform and stairs in the pump room and FRP installation in the Bin Room; and completion of the wood siding installation, installation of doors and grout for the flow splitter.

The design-bid-build Conveyance System contracts progressed over the reporting period, as follows:

- Clover Forcemain: Windley Contracting Ltd. (“Windley” as the Construction Contractor) continued construction activities including: cycle track and road restoration; seawall balustrade replacement construction; installing new aluminium fence and progressed installation of new bollards.
- Residual Solids Conveyance Line (“RSCL”): the RSCL is being delivered through two construction contracts, with work progressing as follows:
 - Residual Solids Pipes: Don Mann Excavating Ltd. (“Don Mann” as the Construction Contractor) continued construction activities over the reporting period, including: completing all pipe work, and commencing utility locates and survey layout along with equipment mobilization in preparation for undertaking Saanich infrastructure improvements at Peers Creek.
 - Residual Solids Pump Stations: Knappett Projects Inc. (“Knappett” as the Construction Contractor) continued construction activities including: installation of curbing at Pump Station 1, Hartland Reservoir underground pipe work; completed commissioning of pipes, and pump stations including pigging of the lines; and completed Admirals Bridge installation including pressure testing.
- Arbutus Attenuation Tank (“AAT”): NAC Constructors Ltd. (as the Construction Contractor) continued construction activities including: commencing drilling/grouting and installation of rock anchors; completed final excavation within the tank; and installation of the mud mat base at base of the tank.
- Trent Forcemain: Jacob Bros. Construction Inc. (as the Construction Contractor) progressed construction activities including: installation of 269 m of forcemain along

Fairfield Road and Memorial Crescent; and installation of air release valve chamber at Fairfield Road and Stannard Avenue.

1.2 Dashboard

Table 1 indicates the high level status of the Project and each Project Component with regards to the six Key Performance Indicators (“KPI”) that were defined within the Project Charter.

There were no changes made to the KPIs over the reporting period.

The safety KPI for the Project and the conveyance system remains yellow. Over the reporting period no recordable safety incidents occurred and the total recordable incident frequency decreased from 1.6 (at the end of the June 2020) to 1.5.

The Project Team continues to work with and ensure that all of the prime contractor partners maintain safety as their number one priority. The Project Team is also actively monitoring the status of the COVID-19 public health emergency and is taking additional precautions to protect our staff, contractors, and the public. The BC Government has designated construction as an essential service, and issued guidelines for construction sites to minimize the risks of COVID-19 transmission or illness. All Project contractors have implemented additional precautions to ensure the health and safety of their workers. These measures follow the direction set by the BC Government, including emphasizing the importance of maintaining social distance, increasing handwashing stations, reducing in-person meetings and increasing cleaning of common areas. The Project Team will continue to monitor contractors’ compliance with the direction of the government as the situation evolves.

The schedule KPI for the Project overall and the Project components remains green. The COVID-19 public health emergency is impacting construction progress and may delay some interim project milestones, such as the transition to commissioning. However, construction is ongoing at all of the Project’s sites, in accordance with provincial guidelines, and based on current progress the Wastewater Treatment Project remains on schedule to meet the regulatory deadline for treatment by the end of 2020.

The cost KPI for the Project overall and the conveyance system remained red over the reporting period, and are expected to remain red for the duration of the Project, primarily as a result of inflation in the Vancouver Island construction market. Other factors that have contributed to budget pressures include: design development to incorporate stakeholder input; geotechnical considerations including removal and disposal of contaminated material; and schedule constraints associated with the requirement to provide wastewater treatment by the regulatory deadline of December 31, 2020.

Based on the value of the contracts awarded to-date and the refreshed cost estimate for the scope remaining to be procured, the Project Team forecast the cost to complete the Project at \$775M, or \$10M over the Project’s control budget. In May 2019 the CRD Board approved an increase in the Project’s budget by \$10M to \$775M.

























Subsequent to May 2019 the Project Team have continued to manage risks and there have been two main opposing budget drivers:

- i) The Project’s financing costs to-date have been lower than budgeted for two reasons: firstly as a result of low interest rates since the start of the Project, and





- secondly due to the receipt of funding from the provincial government earlier than forecast; and
- ii) The Project's construction costs may be higher than budgeted as many contractors have advised that there are cost impacts from the COVID-19 public health emergency. Impacts include labour availability, work modifications to comply with provincial guidelines, and delays to the delivery of equipment and supplies.

It is too early to determine the cost impact to the Project, but given the ability to offset the unforeseen costs of COVID-19 through the finance cost savings, the Project Team remain confident that, if construction continues at the current pace, the Project cost will be within the Project's \$775M budget.

Table 1- Executive Summary Dashboard

Key Performance Indicators		Project Overall	WWTP	RTF	Conveyance System	Comments
Safety	Deliver the Project safely with zero fatalities and a total recordable incident frequency (TRIF) of no more than 1*.					No recordable incidents occurred over the period. Site inspections are ongoing. The Project Team is actively monitoring the status of the COVID-19 public health emergency and is taking additional precautions to protect our staff, contractors, and the public. All Project contractors have implemented additional precautions to ensure the health and safety of their workers. The Project Team will continue to monitor and follow the direction of the government during this evolving situation.
Environment	Protect the environment by meeting all legislated environmental requirements and optimizing opportunities for resource recovery and greenhouse gas reduction.					Two minor environmental incident occurred over the reporting period: flows at the Clover Point Pump Station were temporarily diverted from the long outfall to the short outfall, and there was a small fuel leak from a compressor at the Arbutus Attenuation Tank site.
Regulatory Requirements	Deliver the Project such that the Core Area complies with provincial and federal wastewater regulations.					No regulatory issues.
Stakeholders	Continue to build and maintain positive relationships with First Nations, local governments, communities, and other stakeholders.					Engagement activities were ongoing over the reporting period. Significant efforts were made to provide accurate and timely information to stakeholders.
Schedule	Deliver the Project by December 31, 2020.					The COVID-19 public health emergency is impacting construction progress and may delay some interim project milestones, such as the transition to commissioning. The Wastewater Treatment Project has made significant progress and currently remains on schedule to meet the regulatory deadline for treatment by the end of 2020.
Cost	Deliver the Project within the Control Budget (\$765 million).					<p>Based on the value of the contracts awarded to-date and a refreshed cost estimate for the scope remaining to be procured, the Project Team has forecast the cost to complete the Project at \$775M, or \$10M over the Project's Control Budget. This is primarily as a result of inflation in the Vancouver Island construction market. Other factors that have contributed to budget pressures include: design development to incorporate stakeholder input; geotechnical considerations including removal and disposal of contaminated material; and schedule constraints associated with the requirement to provide wastewater treatment by the regulatory deadline of December 31, 2020. The CRD Board have approved an increase in the Project's budget by \$10M, to \$775M.</p> <p>Many contractors have advised that there are cost impacts from the COVID-19 public health emergency. It is too early to determine the cost impact to the Project, but given the ability to offset the unforeseen costs of COVID-19 through the finance cost savings, the Project Team remain confident that, if construction continues at the current pace, the Project cost will be within the Project's \$775M budget.</p>

* A TRIF of no more than 1 means that there is 1 or fewer recordable incidents (being a work-related injury or illness that requires medical treatment beyond first aid or causes death, days away from work, restricted work or transfer to another job, or loss of consciousness) for every 200,000 person-hours of work

Status	Description
	KPI unlikely to be met
	KPI at risk unless correction action is taken
	KPI at risk but corrective action has been identified/is being implemented
	Good progress against KPI

2 Wastewater Treatment Project Progress

2.1 Safety

Safety information for the reporting period and cumulative for the Project from January 1, 2017 is summarized in Table 3.

The Project Team is actively monitoring the status of the COVID-19 public health emergency and is taking additional precautions to protect our staff, contractors, and the public. The BC Government has designated construction as an essential service, and issued guidelines for construction sites to minimize the risks of COVID-19 transmission or illness.

All Project contractors have implemented additional precautions to ensure the health and safety of their workers. These measures follow the direction set by the BC Government, including emphasizing the importance of maintaining social distance, increasing handwashing stations, reducing in-person meetings and increasing cleaning of common areas. The Project Team will continue to monitor contractors' compliance with the direction of the government during this evolving situation.

Site safety tours and weekly safety inspections were carried out by Project Management Office ("PMO") construction and safety personnel over the reporting period at all active worksites: McLoughlin Point WWTP, RTF, Macaulay Point Pump Station, Clover Point Pump Station, Clover Forcemain, Residual Solids Pump Stations; Arbutus Attenuation Tank and Trent Forcemain.

Over the reporting period (July 2020) 12 safety incidents occurred, comprising: seven first-aid, and five report-only incidents, as summarized in Table 2.

Table 2: Safety Incidents over the Reporting Period

Date	Work Site	Incident Type	Description	Outcome	Corrective Action Taken
July 3, 2020	RTF	Report Only	Minor damage caused by telehandler to parked vehicle.	Scratches to the paint on the driver's side rear quarter panel occurred. Contractor will cover cost of repairs. No one was injured or required first aid.	Tool-box talk with crews to remind them to use spotters when backing equipment or working in restricted areas.
July 7, 2020	Residual Solids Pump Stations	Report Only	Access by public to a construction site.	Members of the public on bikes entered a restricted construction site. When asked to leave a verbal confrontation ensued.	Signage to be placed in a more visible area so the public is aware of the site closure. Site security was enhanced to prevent unauthorized entry by the public.

Date	Work Site	Incident Type	Description	Outcome	Corrective Action Taken
July 8, 2020	McLoughlin Pt WWTP	Report Only	Lifting equipment shut-off while in use.	Unit was not loaded at the time. No injuries to any workers reported.	Tags placed on controls and a worker was placed in the area to prevent accidental shut-down of equipment.
July 10, 2020	McLoughlin Pt WWTP	First Aid	Worker lowering equipment into a tank.	Worker felt pain in lower back. Reported to first aid for evaluation. No follow up actions were required.	Tool-box talk to remind workers of the correct way to lift and lower materials and equipment.
July 10, 2020	McLoughlin Pt WWTP	First Aid	Worker was kneeling for a prolonged duration.	Worker felt pain in lower back. Reported to first aid for evaluation. No follow up actions were required.	Workers reminded of proper ergonomics and stretching prior to task in the event they may be in a fixed position for a period of time.
July 13, 2020	McLoughlin Pt WWTP	First Aid	Worker tripped on a fitting that was left under a pipe stand.	Worker sustained a minor injury to their foot. Reported to first aid for evaluation. No follow up actions were required.	Tool-box talk reviewing the importance of always being aware of your work space and ensuring housekeeping practices are followed.
July 13, 2020	Trent Forcemain	Report Only	Minor damage caused by excavator to parked vehicle.	An excavator reversed and contacted a City of Victoria garbage truck which was parked behind the equipment, causing minor damage to the truck.	Tool-box talk conducted to remind workers that spotters are required prior to backing up any equipment.
July 14, 2020	McLoughlin Pt WWTP	First Aid	Worker sustained a hand injury when pinched between scissor lift and steel trough.	Worker reported to first aid where a small cut to their hand was attended to. No follow up was required.	Tool-box talk to remind workers to be aware of their work area at all times.
July 15, 2020	McLoughlin Pt WWTP	Report Only	Worker bumped a ventilation duct while working overhead.	Falling object damaged equipment below.	Workers reminded to perform a risk assessment and identify any potential hazards that may be associated with task. Loose items to be secured with extra caution used when working around them if there is potential for them to fall if bumped.
July 17, 2020	McLoughlin Pt WWTP	First Aid	Worker sustained a hand injury while working in a panel.	Worker reported to first aid to have a small cut on their finger attended to. Worker was wearing gloves at time of incident which limited the injury. No further follow up was required.	Workers reminded to be more aware of hand positioning when opening and closing panel doors.
July 22, 2020	Arbutus Attenuation Tank	First Aid	Worker sustained an ankle injury while crossing site.	Worker stepped on a rock causing the foot to twist. Worker reported to first aid for evaluation. No follow up was required.	Workers reminded to be aware of their surroundings when walking on uneven ground and to ensure that traffic areas are kept free and clear of tripping hazards.

Date	Work Site	Incident Type	Description	Outcome	Corrective Action Taken
July 27, 2020	McLoughlin Pt WWTP	First Aid	Worker experienced a strain.	While attempting to adjust a louver installed in a wall the worker felt pain in forearm. They reported to first aid and no follow up was required.	Tool box talk conducted on the proper techniques for lifting and working overhead.

Key safety activities conducted during July included:

- bi-weekly project update meetings with prime contractors: HRMG, Kenaidan, Windley, Don Mann, HRP, Knappett, Jacob Bros and NAC;
- monthly Incident Investigation reviews;
- reviewed site specific safety plans and high risk tasks;
- WTP Safety Manager and/or Construction Manager conducting regular site inspections at all active Project work sites;
- office safety orientation for all WTP staff as they returned to working in the office, with a focus on COVID-19 protocols;
- host Prime Contractor Safety Coordination Meeting with Project safety representatives;
- heat stress safety notice issued to Prime Contractors;
- review of Prime Contractor Training Safe Work Practice protocols to be used on site; and
- site tour at Macaulay, McLoughlin and Clover Point for CRD Corporate Safety Manager and Emergency Response Coordinator.

Table 3: WTP Safety Information

	Reporting Period (July 2020)	Project Totals
Person Hours		
PMO	3,345	152,077
Project Contractor	89,362	2,061,961
Total Person Hours	92,707	2,214,038
Total Number of Employees		
PMO	29	
Project Contractors (& Project Consultants) working on Project Sites	478	
Total Number of Employees	507	
Near Miss Reports		
Near Miss Reports	0	46
High Potential Near Miss Reports	0	6
Report Only	5	170
First Aid	7	65
Medical Aid	0	10
Medical Aid (Modified Duty)	0	2
Lost Time	0	5
Total Recordable Incidents	0	17
		Project Frequency (from January 1, 2017)
First Aid Frequency		5.9
Medical Aid Frequency		1.1
Lost time Frequency		0.5
Total Recordable Incident Frequency		1.5

2.2 Environment and Regulatory Management

Environmental and regulatory activities continued over the reporting period relating to both the planning of upcoming work and the execution of current work.

2.2.1 Environment

Environmental work progressed as planned over the reporting period. The focus was on environmental monitoring of construction activities and planning for upcoming riparian work.

Key environmental management activities completed in July included:

- The CRD, Parsons (as Design Consultant), Don Mann (as Construction Contractor) and McElhanney (as the Construction Contractor's environmental consultant) met at the site of a culvert at Peers Creek on Interurban Road, that is being replaced as a Saanich infrastructure improvement. The purpose of the meeting was to discuss the environmental protection measures that would be implemented during the work.
- The CRD, District of Saanich and Don Mann (as Construction Contractor) visited the site adjacent to the Admirals Bridge to assess the restoration completed by Don Mann. The CRD and District of Saanich were satisfied with the restoration, with plans to revisit the site later in the fall, once the rains return and the seeding begins to germinate.

Over the reporting period, there were two minor environmental incidents:

- Overnight on July 23rd flows at Clover Point Pump Station were diverted from the long outfall to the short outfall as a result of loss of power to the screens. The CRD's overflow response procedure was implemented: the CRD posted public health advisory signs and closed nearby beaches to swimming for approximately 6 days.
- NAC Constructors Ltd. (NAC) experienced a minor fuel leak from a compressor at the Arbutus Attenuation Tank site. The amount was less than a litre, and was therefore not reportable. A spill kit was used to clean-up the spilled material and the used components of the spill kit were disposed of at an appropriate facility. The compressor was placed on a drip tray and crews were reminded of that requirement for all small equipment.

2.2.2 Regulatory Management

During the reporting period, the Project Team continued to monitor the advancement of the remaining construction-related regulatory approvals and supported or led the advancement of remaining permit applications.

Key permitting activities for July included:

- The CRD and Transport Canada met to discuss the Harbour Crossing Licence Agreement; and
- A similar meeting to discuss the McLoughlin Point outfall will take place in September.

The status of key Project permits are summarized in Table 4. The table is not a list of all required Project permits, but rather a summary of the status of key Project permits.

Table 4- Key Permits Status

<i>Permit/Licence</i>	<i>Anticipated Date</i>	<i>Status</i>	<i>Party Responsible for Obtaining Perming</i>
McLoughlin Point Harbour Crossing			
Transport Canada Lease	Following completion of construction	On track	HRP
McLoughlin Point Outfall			
Transport Canada Lease	Following completion of construction	On track	HRP

2.3 First Nations

First Nations communication and engagement was ongoing over the reporting period. Meetings with the Esquimalt and Songhees' liaisons continued, as did meetings with the WSÁNEĆ Leadership Council's (WLC) liaison. The meetings are a forum for covering both Project-related issues with the potential to impact First Nations, as well as an opportunity for broader discussion of CRD-related issues.

Key activities in July included:

- The CRD, Knappett (as Construction Contractor), Millennia Research (CRD's archaeological consultant) and members of the WLC met to discuss the screening of archaeological material that was excavated from the site of one of the Residual Solids Pump Stations. The purpose of the meeting was discuss methods and schedule.

2.4 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. The key focus of the communications and engagement activities over the period was to keep residents and stakeholders informed of Project plans, progress and construction information, and to receive and respond to questions and concerns raised by the community. A variety of communications tools and engagement activities were utilized to support the implementation of the plan, including stakeholder meetings, Project website updates and notifications of construction through notices and a public inquiry program, among other methods.

Construction Communications

Two construction notices were issued to stakeholders in the reporting period:

- Trent Forcemain: Road Closure at Fairfield and Stannard (July 15, 2020) (Appendix A); and
- Macaulay Point Pump Station: Transition to New Pump Station (July 13, 2020) (Appendix B)

The construction notices were hand delivered in the community. The Trent Forcemain notice was delivered to 75 residences along the closure and detour route and the Macaulay Point Pump Station notice was delivered to 46 residences near the pump station. In addition, as part of ongoing construction communications, residents affected by localized, temporary disruptions, such as driveway impacts, were notified by hand delivery of notices.

One public service announcement was distributed to local media and posted online as an alert:

- Core Area Wastewater Discharge Notice (July 24, 2020) (Appendix C)

Project Website

Over the reporting period the Project website, wastewaterproject.ca, was updated with information about the Project. Two construction notices were posted. A map showing the progress of construction along the Residual Solids Conveyance Line (Appendix D) was updated to show that pipe installation is complete. One alert was added and resolved for the wastewater discharge out of the short outfall at Clover Point, in accordance with the CRD's response protocol.

The CRD's Twitter and Facebook account were used to provide Project information to the public, including updates about the wastewater discharge at the Clover Point Pump Station and traffic advisories for the work on the Trent Forcemain.

Community Meetings

Over the reporting period, the Project Team held meetings with the following community groups and representatives, and municipality representatives:

- James Bay Neighbourhood Association;
- City of Victoria Technical Working Group;

- City of Victoria staff;
- District of Saanich Technical Working Group; and
- Township of Esquimalt Liaison Committee.

Public Inquiries

Public inquiry numbers from the Project email address and 24/7 information phone line (1 844 815-6132) are noted in Table 5.

Table 5 – Project Inquiries- July 2020

Inquiry Source	Contacts for July 2020
Information phone line inquiries	22
Email inquiries responded to	37

Key themes of the public inquiries were as follows:

- interest in restoration, landscaping and public amenities;
- questions regarding work hours and noise associated with construction; and
- interest in when specific construction areas will be finished.

2.5 Resolutions from Other Governments

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

2.6 Schedule

Progress over the reporting period is summarized in Section 2.9.

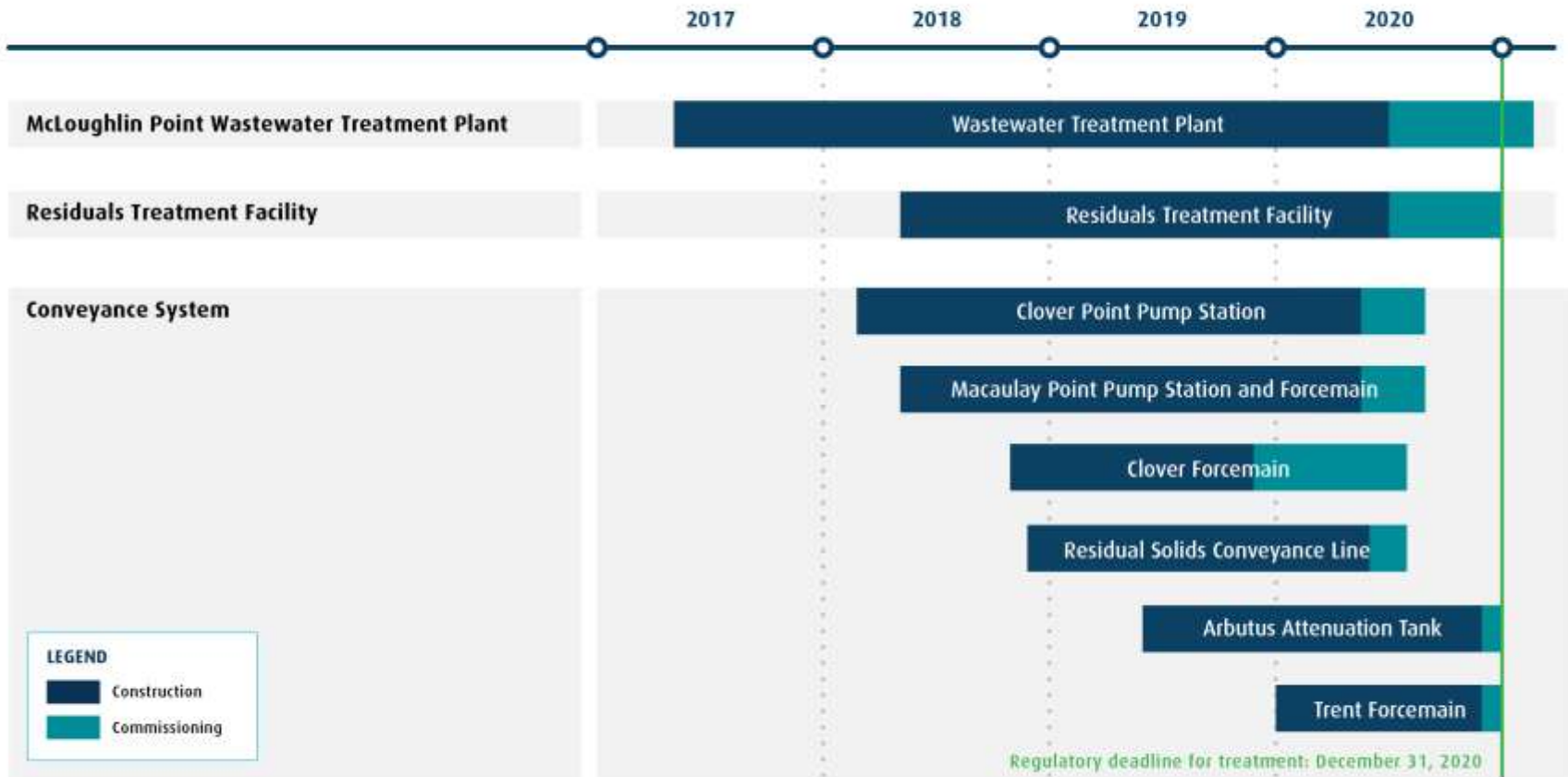
Figure 1 shows the high-level Project schedule. This schedule is unchanged from that shown in the Project's Q2 2020 Quarterly Report.

Over the reporting period the COVID-19 public health emergency continued to have impacts on the Project. Specifically, the COVID-19 public health emergency is impacting construction progress and may delay some interim project milestones, such as the transition to commissioning. However, construction is ongoing at all of the Project's sites, in accordance with provincial guidelines, and based on current progress the Wastewater Treatment Project remains on schedule to meet the provincial and federal regulations for treatment for the Core Area's wastewater by December 31, 2020.

Figure 1- High-Level Project Schedule

Wastewater Treatment Project Schedule*

Construction + Commissioning



*Schedule subject to updates as Project planning progresses.

2.6.1 30 day look ahead

Key activities and milestones for the next 30 days (August) are outlined below by function.

Safety

- CRD corporate occupational health and safety coordination committee meeting;
- site safety tour with Corporate CRD OHS Manager;
- weekly and bi-weekly prime contractor progress meetings;
- host Prime Contractor Safety Coordination Meeting with Project safety representatives;
- review of any site specific safety plans or high risk tasks;
- send out any new Safety Notices or Incident Notifications to Prime Contractor
- review any new COVID-19 document submissions;
- WTP Safety Manager and/or Construction Manager will conduct regular site inspections at all active Project work sites;
- incident reporting review with prime contractors at active work locations; and
- issue Safety Notices for trending observations or any similar incidents occurring on project sites.

Environment and Regulatory Management

- McElhanney (Don Mann qualified environmental professional) to complete stream isolation work at Peers Creek and if fish are present, salvage and relocate them.

First Nations

- CRD to continue meeting with First Nation liaisons.

Stakeholder Engagement

- ongoing construction communications with stakeholders;
- ongoing community liaison meetings; and
- distribution of Dallas Road Update.

Cost Management and Forecast

- prepare cost reports;
- monitor schedule;
- finalize CRD WTP annual budget; and
- submit funding claims to Infrastructure Canada (under the Building Canada Fund and Green Infrastructure Fund).

Construction

McLoughlin Point

- construct site road structures;
- complete landscaping including green roof;
- install plumbing fixtures;
- install electrical finishes, fire sprinkler finishes and ceiling tiles O&M Level 1; and
- continue with functional testing, wet testing and commissioning.

Clover Point Pump Station

- form, pour and strip north retaining wall and buttresses;
- paint generator and fuel storage walls;
- install split stone to exterior retaining walls;
- form, pour and strip landscape retaining walls at public plaza lookout level;
- install doors and hardware to existing pump station; and
- touch-up and final painting.

Macaulay Point Pump Station

- install outdoor site furnishings;
- commence demolition of existing structure;
- install manhole and slide gate for 1350mm pipe replacement; and
- install green roof system.

Residuals Treatment Facility

- continue functional start-up, wet testing and initial system verification;
- tie-in to Residuals Solids Conveyance Line;
- prepare for installation of membrane roof on Digested Solids Storage Tank;
- complete Digester Building construction;
- installation of receiving hopper and weather cover at Other Municipal Solids Receiving Facility;
- continue testing and commissioning activities at the Residuals Handling Building;
- complete truck load-out assembly, complete final mechanical tie-ins, complete insulation; and continue testing and commissioning activities at the Dryer Building;
- complete biogas piping;
- complete Equalization Building construction;
- complete piping insulation at Water Pump House;
- complete testing of Odour Control System; and
- continue site grading, road paving, and retention ponds.

Clover Forcemain

- complete road and cycle track from Lewis Street to Dock Street;
- complete installation of new railings along seawall; and
- commence paving of Dallas Road from Lewis Street to Dock Street.

Residual Solids Pipes

- Peers Creek Culvert replacement.

Residual Solids Pump Stations

- Pump Station 3, final grading; fence installation and landscaping
- Pump Station 2, final grading; fence installation and landscaping; and
- Pump Station 1, final grading, fence installation and landscaping.

Arbutus Attenuation Tank (AAT)

- commence excavation for valve chamber;
- complete mud slab within attenuation tank excavation;
- complete rock anchor installation; and
- commence installation of reinforcing steel, formwork, and concrete pour (staged) for attenuation tank base slab.

Trent Forcemain

- install pipe at Memorial Crescent from Dallas Road to Thurlow Road; and
- restoration and paving at Memorial Crescent.

2.6.2 60 day look ahead

Key activities and milestones for the next 60 days (September) are outlined below by function.

Safety

- CRD corporate occupational health and safety coordination committee meeting;
- host Prime Contractor Safety Coordination Meeting with Project safety representatives;
- weekly and bi-weekly prime contractor progress meetings;
- review of any site specific safety plans or high risk tasks;
- review prime contractor document submissions;
- issue safety notices for trending observations or similar incidents occurring on project sites;
- WTP Safety Manager and/or Construction Manager will conduct regular site inspections at all active Project work sites; and
- incident reporting review with prime contractors at active work locations.

Environment and Regulatory Management

- finalizing the Licence Agreements for the Harbour Crossing and McLoughlin Point Outfall with Transport Canada.

First Nations

- continue meeting with First Nation liaisons.

Stakeholder Engagement

- ongoing construction communications with stakeholders; and
- ongoing community liaison meetings.

Cost Management and Forecast

- prepare cost reports;
- monitor schedule;
- prepare for Quarter 3 close; and
- submit funding claims to Infrastructure Canada (under the Building Canada Fund and Green Infrastructure Fund).

Construction

McLoughlin Point

- commission security systems, mechanical systems, fire systems, and plumbing systems;
- building systems integration; and
- biological growth and process optimization.

Clover Point Pump Station

- install split stone to exterior walls;
- install firestop and smoke seals;
- plant trees and shrubs;

- complete final painting and touch ups;
- spray foam insulation; and
- backfill north retaining wall.

Macaulay Point Pump Station

- install outdoor site furnishings;
- commence demolition of existing structure;
- remove and salvage existing equipment; and
- plant trees and shrubs, and install green roof system.

Residuals Treatment Facility

- continue functional start-up, wet testing and initial system verification;
- install membrane roof on Digested Solids Storage Tank;
- testing in Digester Building construction;
- complete installation of receiving hopper and weather cover at Other Municipal Solids Receiving Facility;
- continue testing and commissioning activities at the Residuals Handling Building;
- continue testing and commissioning activities at the Dryer Building;
- testing biogas piping;
- testing in Equalization Building;
- testing in Water Pump House;
- commission Odour Control System; and
- continue site grading, road paving, and retention ponds.

Clover Forcemain

- final paving of Dallas Rd from Lewis Street to Dock Street; and
- clean-up and demobilize.

Residual Solids Pipes

- complete Peers Creek culvert replacement.

Residual Solids Pump Stations

- final grading, trail restoration; and installation of fence and landscaping at Pump Station #2;
- final grading and install fence at Pump Station #3; and
- remove scaffolding from Admirals and Tillicum bridges.

Arbutus Attenuation Tank (AAT)

- install valve chamber piping;
- commence construction of concrete walls, columns, stairs within the attenuation tank; and
- install manhole and associated piping.

Trent Forcemain

- commence installation of pipe on Dallas Road;
- install pipe and valve chamber at Memorial Crescent from Dallas Road to Thurlow Road; and
- restoration and paving at Memorial Crescent.

2.7 Cost Management and Forecast

The monthly cost report for July is shown in Appendix E. The cost report summarizes Project expenditures and commitments by Project Components and the major cost centres common to the Project Components.

The Project Team has been reporting budget pressures through its monthly reports to the Project Board (and CRD Board) since September 2017, primarily as a result of inflation in the Vancouver Island construction market. Other factors that have contributed to budget pressures include: design development to incorporate stakeholder input; geotechnical considerations including removal and disposal of contaminated material; and schedule constraints associated with the requirement to provide wastewater treatment by the regulatory deadline of December 31, 2020.

Based on the value of the contracts awarded to-date and the refreshed cost estimate for the scope remaining to be procured, the Project Team forecast the cost to complete the Project at \$775M, or \$10M (1.3%) over the Project's control budget. In May 2019 the CRD Board approved an increase in the Project's budget by \$10M to \$775M, and on August 14, 2019, the associated amendment to the 2019-2023 Financial Plan was approved.

Subsequent to May 2019 the Project Team have continued to manage risks and there have been two opposing budget drivers:

- i) The Project's financing costs to-date have been lower than budgeted for two reasons: firstly as a result of low interest rates since the start of the Project, and secondly due to the receipt of funding from the provincial government earlier than forecast; and
- ii) The Project's construction costs may be higher than budgeted as many contractors have advised that there are cost impacts from the COVID-19 public health emergency. Impacts include labour availability, work modifications to comply with provincial guidelines, and delays to the delivery of equipment and supplies.

It is too early to determine the cost impact to the Project, but given the ability to offset the unforeseen costs of COVID-19 through the finance cost savings, the Project Team remain confident that, if construction continues at the current pace, the Project cost will be within the Project's \$775M budget.

2.7.1 Commitments

Commitments were made over the reporting period in furtherance of delivering the Project. The net commitments made during the reporting period resulted in an increase in committed costs of \$0.5 million. The significant commitments made in the reporting period comprised the approval of provisional items in construction contracts and contract change orders.

2.7.2 Expenses and Invoicing

The Project expenditures for the reporting period were as expected and were within the budget allocations for each of the budget areas. The main Project expenditures incurred over the reporting period were associated with construction activities and project management office-related costs.

2.7.3 Contingency and Program Reserves

Contingency credits totalling \$0.2M were received over the reporting period, as summarised in Table 6. The draws to-date, remaining contingency and program reserve balances are summarized in Table 6.

Table 6- Contingency and Program Reserve Draw-Down Table

WTP Contingency and Program Reserve Draws and Reallocations	Draw Date	\$ Amount
Contingency and Program Reserve (in Control Budget)		\$ 69,318,051
Net Contingency and Program Reserve draws to June 30, 2020		\$ (54,479,967)
Contingency and Program Reserve balance as at June 30, 2020		\$ 14,838,084
Control and Instrumentation OSI PI Initial Deployment Credit	Jul-20	\$ 199,327
WWTP Total Draw		\$ -
RTF Total Draw		\$ -
Conveyance Total Increase		\$ -
PMO Total Draw		\$ -
BC Hydro Total Draw		\$ -
WTP Program Reserve Draw		\$ -
Contingency and Program Reserve credits in the reporting period		\$ 199,327
Contingency and Program Reserve balance as at July 31, 2020		\$ 15,037,411

2.7.4 Project Funding

The federal and provincial governments are assisting the Capital Regional District in funding the Project.

The Government of British Columbia will provide \$248 million towards the three components of the Project, while the Government of Canada is contributing:

- \$120 million through the Building Canada Fund Major infrastructure Component towards the McLoughlin Point WWTP;
- \$50 million through the Green Infrastructure Fund towards the conveyance system; and
- up to \$41 million towards the RTF through the P3 Canada Fund.

The Project Team has applied to the Federation of Canadian Municipalities (FCM) for additional funding and has executed a grant agreement for the contribution of up to \$346,900 towards the delineation of the contamination and remediation and risk assessment for the McLoughlin Point Wastewater Treatment Plant.

The status of funding claims is summarised in Table 7. Note that the timing for the provision of Government of British Columbia and Government of Canada's funding differs by funding source. The Project Team will submit claims to the funding partners in accordance with the relevant funding agreements. In accordance with the funding agreements, funding from the P3 Canada Fund and the remainder of the funding from the Government of British Columbia cannot be claimed until relevant Project components are substantially complete.

Table 7- Project Funding Status

Funding Source	Maximum Contribution	Funding Received in the Reporting Period	Funding Received to Date
Government of Canada (Building Canada Fund)	\$120M	\$4.7M	\$108M
Government of Canada (Green Infrastructure Fund)	\$50M	\$0.7M	\$45M
Government of Canada (P3 Canada Fund)	\$41M	-	-
Government of British Columbia	\$248M	-	\$186M
Federation of Canadian Municipalities	\$0.3M	-	-
TOTAL	\$459.3M	\$5.4M	\$339M

2.8 Key Risks and issues

The Project Team actively identified and managed Project risks over the reporting period. Table 8 summarizes the highest-level risks that were actively managed over the reporting period, as well as the mitigation steps identified and/or undertaken over the reporting period.

No changes were made to the active risks summary over the reporting period:

The COVID-19 public health emergency continued to have impacts on the Project over the reporting period. It is anticipated that these impacts may affect several of the Project's risks. The Project Team are currently evaluating the impact of the public health emergency on the Project's risks, and anticipates that changes may be made to several of the risks as the situation evolves. Those risks that the Project Team have identified as potentially impacted, and that are currently under review, are identified in Table 8.

Table 8- Project Active Risks Summary

Risk Event	Description of Risk Event	Risk mitigation activities undertaken or planned in the reporting period	Assessed risk level	Trend in risk level from previous reporting period
Project				
Misalignment between First Nations' interests and the implementation of the Project.	The assessed risk level reflects the Project Team's priority of establishing strong and effective relationships with First Nations interfacing with, or interested in, the Project.	First Nations engagement activities remained ongoing over the reporting period (see section 2.3 for further details).	L	No change
Divergent interests between multiple parties and governance bodies whose co-operation is required to successfully deliver the Project.	The assessed risk level reflects the Project Team's priority of establishing strong and effective relationships with municipal, provincial and federal government departments.	The Project Team continued engagement with municipal, provincial and federal government departments throughout the reporting period.	L	No change
Misalignment between Project objectives/scope and stakeholder expectations.	The assessed risk level reflects the Project Team's priority of establishing strong and effective community stakeholder engagement.	Community engagement activities were ongoing over the reporting period (see section 2.4 for further details).	L	No change
Lack of integration between Project Components.	Planning challenges and system integration between the McLoughlin point WWTP, RTF and Conveyance System components of the Project results in schedule delays and/or additional Project costs.	Physical and schedule interfaces are clearly delineated in all construction contracts along with the requirement for commissioning and control plans. The Project Team has used a single Owner's engineer (Stantec) to develop the indicative design for all critical project components with significant interfaces. Commissioning and control plans are under development	L	No change
Senior government funds issue delayed.	The assessed risk level reflects the Project Team's priority of ensuring Project funding commitments are honoured.	Responsibility for meeting funding commitments has been assigned and is being monitored.	L	No change

Risk Event	Description of Risk Event	Risk mitigation activities undertaken or planned in the reporting period	Assessed risk level	Trend in risk level from previous reporting period
Downstream works delays.	Delay to the commissioning of the conveyance projects delays commissioning of the WWTP and the RTF.	Schedule has sufficient time allowance to ensure conveyance elements complete prior to requirement. Contractor agreements will include terms that require the contractor to recover schedule delays and/or allow for CRD acceleration.	M	No change but this risk may be impacted by the COVID-19 public health emergency (assessment is currently underway)
Upstream works delays.	Delay to the commissioning of either the WWTP or the RTF impacts the commissioning of the other plant.	Contracts with HRP (as the Design-Build Contractor for the McLoughlin Point WWTP) and HRMG (as the Design-Build-Finance-Operate Maintain contractor for the RTF) include terms that require the contractor to recover schedule delays and/or allow for CRD acceleration. Liquidated damages for late delivery are included in both HRP and HRMG contracts.	L	No change but this risk may be impacted by the COVID-19 public health emergency (assessment is currently underway)
Public directly contacting contractors at sites.	Direct contact between the public and contractors could expose both parties to worksite hazards and potential injuries.	Communications and engagement plan and coverage of communications in contractor orientations.	M	No change
Change in law.	A change in law impacts the scope, cost or schedule of the Project.	Keep apprised of proposed modifications to relevant regulations so as to do the following as appropriate: submit comments on proposed modifications; and/or consider including anticipated modifications in contracts.	H	No change
Labour - availability and/or cost escalation.	There is insufficient labour available to construct the Project, and/or there is significant labour cost.	The Project Team will, through the use of competitive selection processes for all construction contracts, ensure that all Project contractors have appropriate experience and therefore understand labour risk.	L	No change

Risk Event	Description of Risk Event	Risk mitigation activities undertaken or planned in the reporting period	Assessed risk level	Trend in risk level from previous reporting period
Disagreement on contractual obligations of the construction contractors.	There is a disagreement between the Project Team and a contractor regarding the performance of their contractual obligations.	The Project Team takes a proactive management approach to the resolution of any changes, claims and disputes that arise, working expeditiously to achieve resolution with the goal of minimizing any impacts to budget and schedule while ensuring adherence to the terms of the construction contracts.	M	No change but this risk may be impacted by the COVID-19 public health emergency (assessment is currently underway)

Risk Level Key - Assessed risk level (based on likelihood and potential impact)			
Low	Medium	High	Closed
L	M	H	C

2.9 Status (Engineering, Procurement and Construction)

2.9.1 Wastewater Treatment Plant (McLoughlin Point WWTP)

The McLoughlin Point WWTP Project Component continued with Harbour Resource Partners (“HRP” as the Design-Build contractor for the McLoughlin Point WWTP) progressing construction and commissioning activities.

Key activities in progress or completed by HRP in July were as follows:

- Primary treatment area:
 - dry commissioned, and commencing wet commissioning at Densadegs 1, 2, & 3;
 - primary odour control system ready for influent;
 - plate settler 1 & 2 ready for influent;
 - sludge tank, plant drain tank and valve vault ready for influent;
 - untreated wash down water system ready for influent;
 - fine screens ready for influent; and
 - treated wash down water system progressed.

- Secondary treatment area:
 - moving bed bio reactor ready for influent;
 - biological aerated filter cell 9 progressed;
 - blower dry commissioning complete, ready for wet commissioning; and
 - heat recovery room steady progression, nearing construction completion.

- Tertiary treatment area:
 - outfall and clean water tank ready for influent;
 - backwash and clean water pumping systems dry commissioned and ready for wet commissioning;
 - progressed installation of disk filter system piping and disk filter equipment;
 - untreated wash down water system ready for influent; and
 - progressed treated wash down water system.

- O&M building:
 - lower level interior south of the workshop approaching completion;
 - building envelope is nearing completion; and
 - green roofing continued.

- Site Works:
 - progressed final north planter and tsunami walls;
 - continued backfill on site;
 - completed Fortis gas tie-in; and
 - completed BC Hydro inspection of generator start-up.

Photographs of construction progress over the month of July at McLoughlin Point WWTP are shown in Figures 2-5.



Figure 2– McLoughlin Point Wastewater Treatment Plant – Installation of cabinets in the Laboratory.



Figure 3– McLoughlin Point Wastewater Treatment Plant- operations and maintenance building north façade cladding and observation deck green roof membrane inspection.



Figure 4- McLoughlin Point Wastewater Treatment Plant- Tertiary building stairway cladding installation.



Figure 5- McLoughlin Point Wastewater Treatment Plant- North tsunami wall concrete pour.

2.9.2 Residuals Treatment Facility

The RTF Project Component continued with Hartland Resource Management Group (“HRMG” as the Design-Build-Finance-Operate-Maintain contractor for the RTF) progressing construction and commissioning activities.

Key activities in progress or completed by HRMG in July were as follows:

- Digester Area
 - erect scaffolding for gas membrane installation; and
 - commissioning systems and install of biogas piping on roof of Digester Building.
- Other Municipal Solids Receiving Facility
 - insulation of piping; and
 - installation of receiving hopper.
- Residuals Handling Building
 - commissioning of various systems; and
 - insulation of hot water piping.
- Residuals Drying Facility
 - completed installation of external stairs; and
 - commissioning of various systems in progress.
- Residuals Storage & Odour Control
 - completed installation of fiberglass reinforced plastic (FPR) duct installation; and
 - chemical piping installation complete.
- Operations Building
 - commenced fire alarm verification.

Photographs of construction progress over the month of July at the Residuals Treatment Facility are shown in Figures 6-8.



Figure 6– Residuals Treatment Facility- Ongoing placement and compaction of road base.



Figure 7- Residuals Treatment Facility- Filtrate self-priming pumps commissioning complete.



Figure 8- Residuals Treatment Facility – Wet testing and commissioning of Bio trickling Filter at Odour Control Facility.

2.9.3 Conveyance System

2.9.3.1 Clover Point Pump Station

The Clover Point Pump Station continued with Kenaidan Contracting Limited (“Kenaidan” as the Design-Build Contractor) progressing construction and commissioning activities over the reporting period.

Key construction activities in progress or completed by Kenaidan in July included:

- completed seismic upgrades;
- completed installation of new diesel generator exhaust, fuelling system, and diesel generator;
- completed installation of grit separation equipment;
- completed works in the new wastewater channel;
- progressed electro-mechanical works in the public plaza washroom; and
- completed functional and operational test for upgrades at existing pump station.

Photographs of construction progress over the month of July at Clover Point are shown in Figures 9-10.



Figure 9–Clover Point Pump Station- Stone siding being installed on the public washroom.



Figure 10- Clover Point Pump Station – Curved landscape retaining wall formwork.

2.9.3.2 Macaulay Point Pump Station and Forcemain

The Macaulay Point Pump Station and Forcemain continued with Kenaidan Contracting Limited (“Kenaidan” as the Design-Build Contractor) progressing construction and commissioning activities over the reporting period.

Key construction activities in progress or completed by Kenaidan in July were as follows:

- Diversion Chamber
 - completed concrete work around the slide gate;
 - commenced grout around the slide gate; and
 - installed slide gate.

- Pump Station
 - completed installation of turning vanes in wet well;
 - ongoing installation of fiberglass reinforced plastic (FRP) platform and stair in the pump room;
 - completed wood siding installation;
 - completed installation of all doors;
 - installed flow splitters in the wet well;
 - completed grout for the flow splitter; and
 - commenced FRP grating installation in the bin room.

Photographs of construction progress over the month of July at Macaulay Point Pump Station are shown in Figures 11-12.



Figure 11–Macaulay Point Pump Station- Final section of pipe being installed.



Figure 12–Macaulay Point Pump Station- Exterior finishes.

2.9.3.3 Clover Forcemain (CFM)

Windley Contracting Ltd. (“Windley” as the Construction Contractor) continued construction activities over the reporting period.

Key construction activities in progress or completed by Windley in July included:

- continued seawall balustrade replacement construction;
- removed old wall;
- completed new concrete wall;
- completed new sidewalk;
- installed new aluminium fence; and
- progressed bollard installation.

Photographs of construction progress over the month of July on the Clover Forcemain are shown in Figures 13-14.



Figure 13–Clover Forcemain- Installing parking bollards along Dallas Road



Figure 14–Clover Forcemain- New aluminium fence installed along Dallas Road.

2.9.3.4 Residual Solids Conveyance Line

The RSCL is being delivered through two construction contracts:

- Residual Solids Pipes; and
- Residual Solids Pump Stations

Residual Solids Pipes: Don Mann Excavating Ltd. (“Don Mann” as the Construction Contractor for the Residual Solids Pipes) continued construction and commissioning activities over the reporting period.

Key construction activities in progress or completed by Don Mann in July were as follows:

- All pipe work was completed.
- Peers Creek: utility locates and survey layout were conducted along with equipment mobilization in preparation for construction activity to replace a culvert as part of a Saanich infrastructure improvement.

Photographs of construction progress over the month of July on the Residual Solids Pipes are shown in Figures 15-16.



Figure 15– Residual Solids Pipes- Pressure washing manhole at Lyall Street and Peters Street.



Figure 16-Residual Solids Pipes - Building layers of geobag wall at Admirals Bridge.

Residual Solids Pump Stations: Knappett Projects Inc. (“Knappett” as the Construction Contractor for the Residual Solids Pump Stations) continued construction activities over the reporting period. Key construction activities in progress or completed by Knappett in July included:

- completed commissioning of the pipes and pump stations;
- completed pigging of the lines;
- at the pump stations, the odour control unit (OCU) installation was completed and stainless steel stacks were erected;
- OCU advanced start up began;
- completed and pressure tested pig receiver piping at Marigold Pump Station;
- completed Admirals Bridge installation;
- completed final paving and line painting on Willis Point Road;
- installed curbing at Pump Station1; and
- Hartland Reservoir underground pipe work.

Photographs of construction progress over the month of July on the Residual Solids Pump Stations are shown in Figures 17-18.



Figure 17–Residual Solids Pump Stations– Pump Station 1 –Installing bollard sleeves on the Odour Control pad.



Figure 18 –Residual Solids Pump Stations – Pump Station # 1: Excavating to install curbs.

2.9.3.5 Arbutus Attenuation Tank

NAC Constructors Ltd. (as the Construction Contractor for the Arbutus Attenuation Tank) continued construction activities over the reporting period. Key construction activities in progress or completed by NAC Constructors Ltd. in July included:

- completed final excavation within attenuation tank;
- commence drilling / grouting / installation of rock anchors; and
- complete installation of mud matt at base of attenuation tank.

Photographs of construction progress during the month of July at the Arbutus Attenuation Tank is shown in Figures 19 and 20.



Figure 19–Arbutus Attenuation Tank- Base Slab Steel Installation Progress.



Figure 20–Arbutus Attenuation Tank- Installed Rock Anchors and Granular Material Compaction.

2.9.3.6 Trent Forcemain

Jacob Bros. Construction Inc. (as the Construction Contractor for the Trent Forcemain) progressed construction activities over the reporting period. Key construction activities in progress or completed by Jacob Bros. in July included:

- installed 202m on Bushby Street including concrete cap running the entire length;
- installed 59m pipe at Fairfield Road, including the installation of three bends and corresponding thrust blocks;
- installed 210m of pipe along Memorial Crescent;
- installed air release valve chamber at the intersection of Fairfield Road and Stannard Avenue; and
- completed Fortis BC gas main relocation at Brooke Street.

A photograph of construction progress during the month of July at the Trent Forcemain is shown in Figure 21.



Figure 21–Trent Forcemain- Fairfield Road curb and sidewalk subgrade preparation.

Appendix A– Trent Forcemain: Road Closure at Fairfield and Stannard (July 15, 2020)



July 15, 2020

Trent Forcemain: Road Closure at Fairfield and Stannard

As part of the Wastewater Treatment Project, an air valve chamber is being constructed at Stannard Avenue and Fairfield Road. This work will require the closure of Fairfield Road between the Fairfield Shopping Centre and Arnold Avenue. The closure is expected to take place during work hours starting on Thursday, July 16 and be complete within approximately two days. A detour will be in place (see map on reverse).

What to Expect

- The area will be excavated, the chamber installed, and the site will be temporarily restored.
- Final restoration will take place after the section of forcemain along Fairfield Road has been tested and completed.
- Noise associated with this work includes excavation machinery and truck back-up beepers.
- Pipes and equipment will be temporarily stored in the area while this work is completed.

Traffic Impacts

- A signed detour will be in place during work hours.
- On-street parking along Memorial Crescent and St Charles Street will be removed to allow for detour traffic.
- Traffic control areas will be delineated by cones and signs and controlled by flaggers.

Access

- Vehicle access to residences will not be impacted.
- Emergency services will have access at all times.
- Garbage and recycling services will be picked up as usual.

Work Hours

- Monday to Friday from 7:00 a.m. to 7:00 p.m.
- Saturday from 10:00 a.m. to 7:00 p.m.

Thank you for your patience as this work is completed.

About the Wastewater Treatment Project

The Wastewater Treatment Project will provide tertiary treatment for wastewater from the core area municipalities of Victoria, Esquimalt, Saanich, Oak Bay, View Royal, Langford and Colwood, and the Esquimalt and Songhees Nations by the end of 2020.

Any questions about the work, please contact the Project Team.



24/7 Phone Line
1.844.815.6132

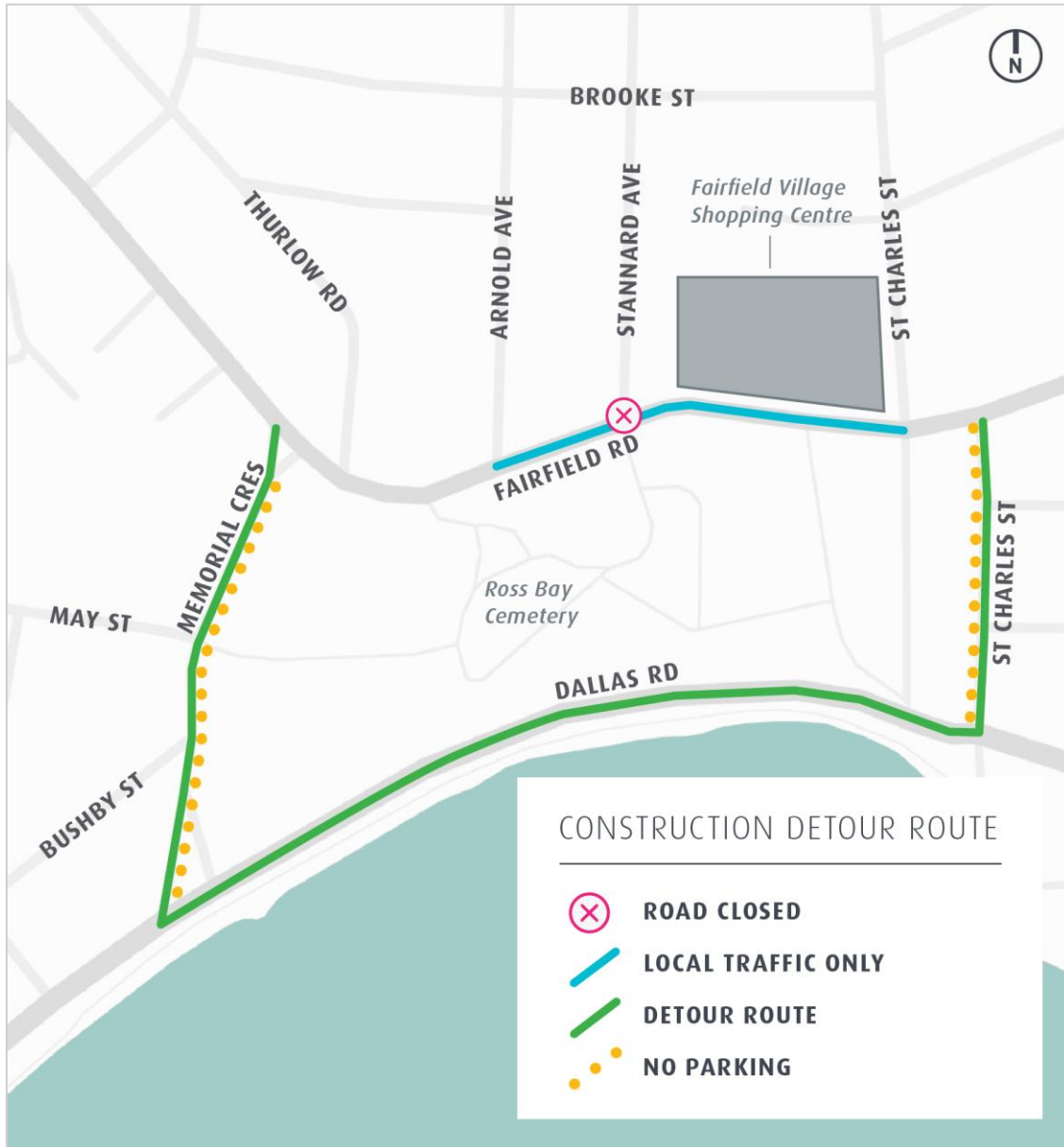


Email
wastewater@crd.bc.ca



Website
wastewaterproject.ca

Detour Route



Any questions about the work, please contact the Project Team.



24/7 Phone Line
1.844.815.6132



Email
wastewater@crd.bc.ca



Website
wastewaterproject.ca

Appendix B– Macaulay Point Pump Station: Transition to New Pump Station (July 13, 2020)



July 13, 2020

Macaulay Point Pump Station: Transition to New Pump Station

The Macaulay Point Pump Station is starting commissioning and wastewater will soon be diverted from the existing pump station to the new pump station. Diesel-powered pumps outside the pump station will be operating during the day beginning July 14 for one week, and will then operate continuously for an anticipated three weeks. Some overnight work, anticipated to begin the week of July 20, will also be required.

What to Expect

- Diesel-powered pumping units will operate outside the Macaulay Point Pump Station.
 - Beginning July 14, the pumps will operate during the day.
 - Beginning the week of July 20, the pumps will operate 24 hours a day until the work is complete (anticipated to be by the end of the first week of August)
- The pumps are equipped with acoustic enclosures to reduce noise.
- For overnight work, construction equipment will be in operation, including lights and truck back-up beepers.
- Increased short-term odour may occur intermittently during this work.

Work Hours

- Monday to Friday from 7:00 a.m. to 7:00 p.m.
- Saturday from 7:00 a.m. to 5:00 p.m.
- Some overnight work will be required for short periods the week of July 20.

Traffic Impacts

- No traffic impacts are expected.

About the Wastewater Treatment Project

The Wastewater Treatment Project will provide tertiary treatment for wastewater from the core area municipalities of Victoria, Esquimalt, Saanich, Oak Bay, View Royal, Langford and Colwood, and the Esquimalt and Songhees Nations by the end of 2020.

Any questions about the work, please contact the Project Team.



24/7 Phone Line
1.844.815.6132



Email
wastewater@crd.bc.ca



Website
wastewaterproject.ca

Appendix C– Core Area Wastewater Discharge Notice (July 24, 2020)



Making a difference...together

Public Service Announcement

For Immediate Release

July 24 2020

Core Area Wastewater Discharge Notice

Victoria, BC- Construction at the Clover Point Pump Station resulted in an unplanned wastewater discharge out the short outfall for intermittent periods overnight on July 23, 2020, and into the morning of July 24, 2020. The shorelines affected are along Dallas Road between Government Street and Crescent Road including Holland Point, Clover Point, Ross Bay and Gonzales Bay. This pump station is currently undergoing upgrades related to the Wastewater Treatment Project.

As a result of this discharge, residents are advised to avoid entering the waters along the affected shorelines, as the wastewater may pose a health risk.

As a precaution and in consultation with Island Health and the local municipalities, beaches within the affected areas will be posted with public health advisory signs until sample results indicate enterococci levels are below the 70CFU/100mL recreational limit.

For updates, please visit www.crd.bc.ca and follow us on Twitter [@crd_bc](https://twitter.com/crd_bc)

The CRD delivers regional, sub-regional and local services to 13 municipalities and three electoral areas on southern Vancouver Island and the Gulf Islands. Governed by a 24-member Board of Directors, the CRD works collaboratively with First Nations and all levels of government to enable sustainable growth, foster community well-being, and develop cost-effective infrastructure while continuing to provide core services to residents throughout the region. Visit us online at www.crd.bc.ca.

-30-

For media inquiries, please contact:

Andy Orr, Senior Manager

CRD Corporate Communications

Office 250.360.3229

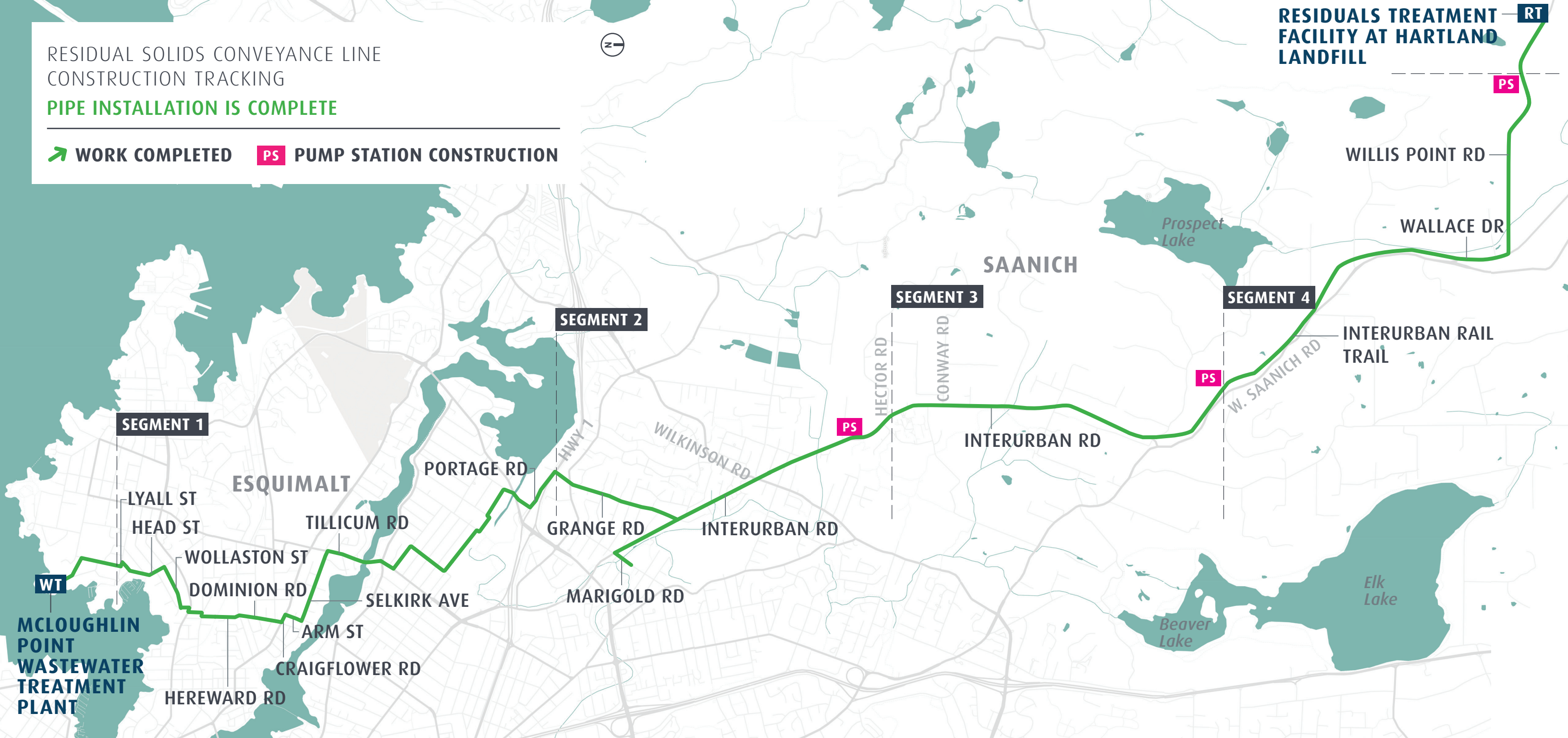
Cell 250.216.5492

Appendix D– Residual Solids Conveyance Line Map (July 20, 2020)

RESIDUAL SOLIDS CONVEYANCE LINE
CONSTRUCTION TRACKING

PIPE INSTALLATION IS COMPLETE

 WORK COMPLETED  PUMP STATION CONSTRUCTION



Appendix E– Monthly Cost Report (July)

MONTHLY COST REPORT
as at July 31, 2020

Description	BUDGET		COST EXPENDED					COMMITMENTS			FORECAST		VARIANCE	
	Control Budget	Allocated Budget	Expended to June 30, 2020	Expended over reporting period (July 2020)	Expended to July 31, 2020	Expended to July 31, 2020 as a % of Allocated Budget	Remaining (Unexpended) Allocated Budget at July 31, 2020	Total Commitment at July 31, 2020	Unexpended Commitment at July 31, 2020	Uncommitted Allocated Budget at July 31, 2020	Forecast to Complete	Forecast at Completion	Variance at Completion \$	Variance at Completion as a % of Allocated Budget
McLoughlin Point Wastewater Treatment Plant	331.4	328.1	298.8	4.3	303.0	92%	25.1	321.0	17.9	7.1	25.1	328.1	-	0%
Construction	306.7	320.8	298.2	4.3	302.6	94%	18.2	320.3	17.7	0.5	18.2	320.8	-	0%
Contingency	14.9	0.4	-	-	-	0%	0.4	-	-	0.4	0.4	0.4	-	0%
Financing	9.8	6.9	0.5	-	0.5	7%	6.4	0.7	0.2	6.2	6.4	6.9	-	0%
Residuals Treatment Facility	159.4	140.0	11.3	0.1	11.4	8%	128.6	139.0	127.6	1.0	128.6	140.0	-	0%
Construction	145.4	139.0	11.3	0.1	11.4	8%	127.6	139.0	127.6	0.0	127.6	139.0	-	0%
Contingency	12.3	0.2	-	-	-	0%	0.2	-	-	0.2	0.2	0.2	-	0%
Financing	1.7	0.8	0.0	-	0.0	2%	0.8	0.0	0.0	0.8	0.8	0.8	-	0%
Conveyance System	158.0	215.7	166.3	4.2	170.4	79%	45.3	195.7	25.3	19.9	45.3	215.7	-	0%
Macaulay Point Pump Station	25.4	30.9	27.7	0.0	27.7	90%	3.2	30.9	3.2	0.0	3.2	30.9	-	0%
Macaulay Forcemain	5.6	7.4	7.4	-	7.4	100%	-	7.4	-	-	-	7.4	-	0%
Craigflower Pump Station	12.5	12.4	12.4	-	12.4	100%	-	12.4	-	-	-	12.4	-	0%
Clover Point Pump Station	23.7	27.3	24.7	-	24.7	91%	2.5	27.3	2.5	0.0	2.5	27.3	-	0%
Currie Pump Station [^]	2.8	0.1	0.1	-	0.1	100%	-	0.1	-	-	-	0.1	-	0%
Arbutus Attenuation Tank	14.2	24.6	13.5	1.2	14.7	60%	9.9	23.3	8.6	1.3	9.9	24.6	-	0%
Clover Forcemain	14.6	32.5	30.0	0.3	30.3	93%	2.2	31.9	1.6	0.6	2.2	32.5	-	0%
Currie Forcemain [^]	3.3	0.2	0.2	-	0.2	100%	-	0.2	-	-	-	0.2	-	0%
Trent Forcemain	9.5	11.3	2.6	1.3	3.9	34%	7.4	8.1	4.2	3.2	7.4	11.3	-	0%
Residual Solids Conveyance Line	19.1	36.6	34.3	0.1	34.4	94%	2.2	36.5	2.1	0.1	2.2	36.6	-	0%
Residual Solids Pump Stations & Bridge Crossings	4.6	18.1	13.0	1.2	14.1	78%	4.0	17.0	2.8	1.1	4.0	18.1	-	0%
Residual Solids Conveyance Line – Highway Crossing	-	0.4	0.3	-	0.3	76%	0.1	0.4	0.0	0.1	0.1	0.4	-	0%
Contingency	16.8	9.9	-	-	-	0%	9.9	-	-	9.9	9.9	9.9	-	0%
Financing	5.8	4.1	0.2	-	0.2	4%	3.9	0.3	0.2	3.7	3.9	4.1	-	0%
Project Management Office ("PMO")	75.8	77.9	56.8	0.6	57.4	74%	20.4	70.0	12.6	7.8	20.4	77.9	-	0%
Project costs Aug 2016-Dec 2016	2.2	2.2	2.2	-	2.2	100%	-	2.2	-	-	-	2.2	-	0%
Owner's Engineering	17.2	17.5	14.5	-	14.5	83%	3.0	17.5	3.0	-	3.0	17.5	-	0%
Conveyance Design	5.0	9.5	7.6	0.2	7.8	82%	1.7	8.8	1.0	0.7	1.7	9.5	-	0%
Advisors & Professional Support	7.0	15.0	10.3	0.0	10.3	69%	4.7	11.5	1.1	3.5	4.7	15.0	-	0%
Project Board	2.0	1.3	0.9	0.0	0.9	74%	0.3	0.9	-	0.3	0.3	1.3	-	0%
Project Board Expenses	0.3	0.1	0.1	-	0.1	64%	0.0	0.1	-	0.0	0.0	0.1	-	0%
Project Team	29.1	23.1	16.3	0.3	16.5	71%	6.6	22.9	6.4	0.2	6.6	23.1	-	0%
Project Leadership Team Expenses	0.7	0.4	0.2	-	0.2	59%	0.2	0.2	-	0.2	0.2	0.4	-	0%
Project Support Team Expenses	0.5	0.2	0.1	-	0.1	67%	0.1	0.1	-	0.0	0.1	0.2	-	0%
CRD Financial Services	1.5	1.4	0.9	0.0	0.9	67%	0.5	1.4	0.5	-	0.5	1.4	-	0%
CRD Human Resources	0.3	0.3	0.2	0.0	0.2	88%	0.0	0.3	0.0	-	0.0	0.3	-	0%
CRD Corporate Communications	0.2	0.2	0.2	-	0.2	86%	0.0	0.2	0.0	-	0.0	0.2	-	0%
CRD Real Estate	0.3	0.3	0.2	-	0.2	92%	0.0	0.3	0.0	-	0.0	0.3	-	0%
CRD Information Technology	0.4	0.4	0.3	0.0	0.3	71%	0.1	0.4	0.1	-	0.1	0.4	-	0%
CRD Insurance	0.1	0.0	0.0	-	0.0	100%	-	0.0	-	-	-	0.0	-	0%
CRD Operations	0.6	0.6	0.5	0.0	0.5	86%	0.1	0.6	0.1	-	0.1	0.6	-	0%
CRD Legislative Services	0.1	0.1	0.1	-	0.1	100%	-	0.1	-	-	-	0.1	-	0%
CRD Corporate Safety	0.2	0.2	0.2	-	0.2	100%	-	0.2	-	-	-	0.2	-	0%
CRD Executive Services	-	0.1	0.1	-	0.1	86%	0.0	0.1	0.0	-	0.0	0.1	-	0%
Office Lease	1.9	1.3	0.9	0.0	0.9	69%	0.4	1.2	0.3	0.1	0.4	1.3	-	0%
Office Supplies	0.1	0.2	0.2	-	0.2	88%	0.0	0.2	-	0.0	0.0	0.2	-	0%
Vehicles	0.2	0.2	0.2	-	0.2	89%	0.0	0.2	0.0	-	0.0	0.2	-	0%
Connections Call Center	-	0.0	0.0	-	0.0	100%	-	0.0	-	-	-	0.0	-	0%
Communication support materials	0.5	0.2	0.1	-	0.1	61%	0.1	0.1	-	0.1	0.1	0.2	-	0%
Computer Hardware, Software & Training	1.0	1.1	0.6	-	0.7	61%	0.4	0.7	-	0.4	0.4	1.1	-	0%
Contingency	4.8	2.3	-	-	-	0%	2.3	-	-	2.3	2.3	2.3	-	0%
BC Hydro	12.9	4.3	2.0	-	2.0	48%	2.3	2.1	0.0	2.2	2.3	4.3	-	0%
Third Party Commitments	8.1	8.1	4.0	0.1	4.1	50%	4.1	6.8	2.8	1.3	4.1	8.1	-	0%
Program Reserves	19.2	0.9	-	-	-	0%	0.9	-	-	0.9	0.9	0.9	-	0%
Core Area Wastewater Treatment Project	765.0	775.0	539.2	9.2	548.4	71%	226.5	734.6	186.2	40.3	226.5	775.0	-	0%

* Values presented in \$millions, results in minor rounding differences

** Cost report presents approved expenditures

[^] Component no longer required, and would not provide any value therefore removed from Project Scope; Costs include Seaterra initiation, planning and design