Project Development Phase

1.	Introduction	3
2.	Project Definition/Approval	3
3.	Project Funding / Sources and Uses	3
4.	Schedule	5
5.	Senior Government Funding	5
6.	First Nations Support Agreements	5
7.	Land Use	6
a	Township of Esquimalt	7
	i. Zoning	7
	ii. Amenity Agreements	7
	iii. Right of Way (future trail)	7
b	. City of Victoria	7
	i. Zoning	7
8.	Land Interests	
8. 9.	-	8
	Land Interests Permits and Approvals	8 9
9.	Land Interests Permits and Approvals Ministry of Environment – Core Area Liquid Waste Management Plan (CALWMP)	8 9 9
9. a	Land Interests Permits and Approvals Ministry of Environment – Core Area Liquid Waste Management Plan (CALWMP) Township of Esquimalt Development Permit	8 9 9 9
9. a. a.	Land Interests Permits and Approvals Ministry of Environment – Core Area Liquid Waste Management Plan (CALWMP) Township of Esquimalt Development Permit	8 9 9 9 10
9. a. a. b	Land Interests Permits and Approvals Ministry of Environment – Core Area Liquid Waste Management Plan (CALWMP) Township of Esquimalt Development Permit Other Permits Construction Phase Contracts	8 9 9 9 10 10
9. a. b 10.	Land Interests Permits and Approvals Ministry of Environment – Core Area Liquid Waste Management Plan (CALWMP) Township of Esquimalt Development Permit Other Permits Construction Phase Contracts	8 9 9 9 10 10
9. a. b 10. a.	 Land Interests Permits and Approvals. Ministry of Environment – Core Area Liquid Waste Management Plan (CALWMP) Township of Esquimalt Development Permit Other Permits. Construction Phase Contracts. Harbour Resource Partners Construction Phase Procurement. 	8 9 9 9 10 10
9. a. b 10. a. 11.	Land Interests Permits and Approvals Ministry of Environment – Core Area Liquid Waste Management Plan (CALWMP) Township of Esquimalt Development Permit Other Permits Other Permits Construction Phase Contracts Harbour Resource Partners Construction Phase Procurement Residual Solids	8 9 9 10 10 10 10
9. a. b 10. a. 11. a.	Land Interests Permits and Approvals Ministry of Environment – Core Area Liquid Waste Management Plan (CALWMP) Township of Esquimalt Development Permit Other Permits Other Permits Construction Phase Contracts Harbour Resource Partners Construction Phase Procurement Residual Solids	8 9 9 10 10 10 10 10
9. a. b 10. a. 11. a. b	Land Interests Permits and Approvals Ministry of Environment – Core Area Liquid Waste Management Plan (CALWMP) Township of Esquimalt Development Permit Other Permits Other Permits Construction Phase Contracts Harbour Resource Partners Construction Phase Procurement Residual Solids	8 9 9 10 10 10 10 11 11

b.	Project Management Plan	. 13
c.	Reporting Format	. 13
14.	ATTACHMENT 1: DESCRIPTION OF PROJECT	. 15
15.	ATTACHMENT 2: HIGH LEVEL PROJECT SCHEDULE	. 17
16.	ATTACHMENT 3: CONTROL BUDGET AND EXPENDITURES TO-DATE	. 18

1. Introduction

The Core Area Wastewater Treatment Project Board (Project Board) Board was formed by Bylaw in May of 2016. From May to September 2016, in accordance with its terms of reference, the Project Board worked to recommend a project for approval by the CRD. The CRD approved the recommendations in September 2016. In the five months since the approval the Project Board has worked to develop the project to a point where construction could proceed. Activities in this development phase included:

- writing the project Charter;
- finalizing a construction schedule for the McLoughlin Point Wastewater Treatment Plant (the Wastewater Plant);
- finalizing the project agreement for the Wastewater Plant with the contractor, Harbour Resource Partners (HRP);
- developing procurement plans and schedules for the conveyance, collection and residual solids treatment parts of the Project;
- finalizing funding agreements with senior levels of government;
- obtaining necessary zoning and land use approvals;
- obtaining First Nations support; and
- finalizing required permits and licenses.

We are now in a position to begin construction. To that end we are concluding the Development Phase of the project and beginning the Construction Phase. This report provides a summary of the Development Phase activities and outcomes.

2. Project Definition/Approval

On September 14, 2016, the Capital Regional District (CRD) received the report and recommendations from the Project Board and approved the Business Case for a defined wastewater treatment project consisting of a 108 megalitre/day tertiary wastewater treatment plant at McLoughlin Point, conveyance and collection infrastructure including pump station upgrades at Clover Point and Macaulay Point, and a residual treatment facility at Hartland landfill (collectively the Project).

Since that time, the Project team has developed a formal definition of the Project. It is attached as Attachment 1. This definition is consistent with the Business Case, and is the basis for the approvals, permits and licences issued during the Development Phase.

3. Project Funding / Sources and Uses

The Project cost of \$765 million, as noted in the Business Case, remains the same.

The sources of funding (Infrastructure Canada, P3 Canada, the Province of British Columbia and the CRD) remain the same. While finalising the funding agreements, the funding amount from P3 Canada *increased* by \$5 million, from \$36 million to \$41 million.

This is because Federal funding agreements define certain project costs as 'eligible' for funding from Canada. In the case of P3 Canada, more of the Project costs fell within P3 Canada definition of eligible costs than appeared to be the case when the Business Case was approved.

Program Costs (millions)	Wastewater Treatment	Residuals Treatment	Conveyance	Total Costs
Total Capital Costs ^(A)	\$ 350	\$ 170	\$ 179	\$ 699
Owner's Program Management and Land Costs ^(B)	\$ 35	\$ 19	\$ 13	\$ 66
Total Program Costs	\$ 385	\$ 189	\$ 192	\$ 765
Sources of Funding				
PPP Canada ^(c)		\$ 41		\$41
Building Canada Fund ^(D)	\$ 120			\$ 120
Green Initiative Fund ^(E)			\$ 50	\$ 50
Provincial Government (F)	\$ 124	\$ 62	\$ 62	\$ 248
Total Federal and Provincial Funding	\$ 244	\$ 103	\$ 112	\$ 459
Capital Regional District (G)	\$ 141	\$ 86	\$ 80	\$ 306
Total Funding	\$ 385	\$ 189	\$ 192	\$ 765

The final funding sources are:

Notes:

- A. Total Capital Costs include: construction costs; construction contingency, engineering costs; administration and program management costs; Contractor's bid development and special purpose vehicle set-up costs; risk adjustment; Owner's interim financing costs; inflation to the mid-point of construction in Year 2019; Contractor's interest during construction, financing fees and debt service reserve account (DSRA) funding for the Biosolid Treatment Facility.
- B. Owner's Program Management and Land Costs include: additional land purchases; impact consideration and mitigation allowance; development and due diligence costs; Owner's procurement costs; risk adjustment for retained risks; and land.
- C. PPP Canada contributions would be released in a single payment upon the Project's Substantial Completion.
- D. Building Canada Fund contributions would be released upon approving annual progress and performance reports and audits.
- E. Green Initiative Fund contributions would be released upon approving quarterly and annual progress and performance reports and audits.
- F. Provincial Government funding would be released partly during construction and partly upon commissioning, as defined in the Contribution Agreement.

G. Contribution from the CRD is assumed to be the remaining balance of costs that would not be funded by the federal and provincial governments' contributions.

4. Schedule

A high-level Project schedule is attached as Attachment 2. The Project schedule is driven by the need to comply with federal regulations to treat sewage by December 31, 2020. Construction will begin in April 2017. The early activities are centred around the construction of the Wastewater Plant and the undersea forcemain from Ogden Point to McLoughlin Point. Conveyance pipes, pump station upgrades and the residual treatment facility will follow. The construction schedule for the various elements of the Project is a function of the commissioning requirements. As the design of each of the project components is further developed the Project team, in consultation with the contractors, will optimize the schedule.

5. Senior Government Funding

There are three Federal funding agreements:

- a. Infrastructure Canada agreement for the Wastewater Plant and Marine Outfall (Building Canada Fund);
- b. Infrastructure Canada agreement for the Conveyance System (Green Infrastructure Fund);
- c. P3 Canada agreement for the Conveyance System

All funding agreements are complete, and are either executed or circulating for execution.

The terms of the funding agreement with the Province are finalized. The agreement has been submitted by the Project Board to the Core Area Liquid Waste Management Committee for referral to the CRD Board for approval. Consideration of the approval is scheduled for the week of 8 March. Following approval, the Provincial agreement will be executed.

6. First Nations Support Agreements

The Core Area spans the traditional territory of the Lekwungen peoples, known today as Esquimalt Nation and Songhees Nation. As part of the Project and in recognition of the Crown's obligation to consult with the Esquimalt and Songhees Nations and the contribution of the Nations, including to the planning of the wastewater system, the CRD has entered into Support Agreements with the Esquimalt and Songhees Nations. All costs associated with the Support Agreements are included in the Control Budget for the Project.

Key terms of the agreements are:

• The CRD will lease Rock Bay from Matullia Holdings Limited Partnership, a partnership of the Esquimalt Nation and Songhees Nation, for use as a laydown area for four years.

- The CRD will create an Esquimalt Nation liaison position and a Songhees Nation liaison position for the four year term of the Project. The liaisons will assist the CRD and the contractors to ensure that the Nations continue to be informed and engaged during the Project and will provide support and guidance to the CRD and members of the Project Team with respect to cultural protocols between CRD and the Nations, including protocols that may apply in the event of the discovery of ancestral remains during construction.
- The CRD will contribute \$480,000 to Xhamasung Holdings LLP, a corporation jointly owned by the Esquimalt Nation and Songhees Nation, for the upgrading and development of Westbay Village Marina and R.V. park.
- The CRD will cause its contractors to make meaningful efforts to train and employ members of both Nations during construction.
- The CRD will contribute to the legal, professional and administrative costs incurred by the Nations in respect of the Project and the Support Agreements.
- The CRD will make contributions to each Nation for improvements to their reserves and for the re-interment of Aboriginal ancestors whose remains may be disturbed as a result of the construction of the Project.

As part of the agreements, the Nations have each provided letters of support for the Project, agreed to work closely with the liaisons to foster ongoing engagement during construction and agreed to support a process for the re-interment of Aboriginal ancestors. Reaching an understanding in advance of construction will hopefully go some way to minimize the emotional upheaval in the event of the discovery of ancestral remains and as well, mitigate the risk of potential delays in construction.

7. Land Use

In November 2016, the Project team, the Township of Esquimalt, and the City of Victoria developed a schedule to seek the required land use permits in each municipality. As contemplated by the agreed schedule, the municipalities and the Project team concluded the land use permitting before the end of February, 2017. This date was important in order for the Project Board to maintain the schedule to conclude the Project Agreement with HRP for the Wastewater Plant and undersea pipe in early March, such that construction could begin as planned in April.

Each of these processes are detailed below.

a. Township of Esquimalt

i. Zoning

On February 20, 2017, following a public hearing, the re-zoning application of Bylaw 2888 (which was initiated by the Township) and the amenity agreements were unanimously approved by Council.

Prior to the public hearing, the Project team presented to the Township Advisory Planning Commission, and to Council at its meetings to consider first and second reading. The Project team also held extensive discussions with Township staff about the details of the bylaw amendment and the agreements for amenities.

ii. Amenity Agreements

The Amenity Agreements acknowledge the permanent loss of waterfront land use as a result of the Wastewater Plant, and provide amenities valued at \$20 million, as contemplated in the approved Business Case. The amenities include \$17 million which will be given to the Township to be used for capital projects in waterfront parks, recreation facilities and public safety facilities. This contribution must be spent within approximately five years. The Township intends to lead public consultation prior to any finalizing the scope and design of the projects. The amenity agreements also contemplate the expansion and upgrade of the Macaulay Pump Station in Esquimalt, which is part of the Project.

iii. Right of Way (future trail)

As part of the rezoning, in recognition of the fact that the Department of National Defense (DND) owns the land surrounding McLoughlin Point and is not at this time prepared to provide a public trail through its lands, the Township removed the requirement for a walkway around the Wastewater Plant. The CRD agreed to grant the Township a right-of-way over its site to enable the future construction of a trail or walkway should discussions with DND at some point in the future result in an agreement for a trail connected to the Wastewater Plant site.

b. City of Victoria

i. Zoning

In Victoria, on February 23, 2017, following a public hearing, the CRD application to rezone the Clover Point pump station site to allow for the expansion of the existing pump station and related public realm improvements were unanimously approved by Council.

Prior to the public hearing, the Project team presented to the Committee of the Whole, held or attended several public and community association meetings, including public meetings hosted by the Fairfield-Gonzales Community Association Land Use Committee and the James Bay Neighbourhood Association, and met with key stakeholders including the Greater Victoria Harbour Authority (GVHA). Associated with this rezoning, and described below, are two licences of occupation, one for the Clover Point pump station and one for the Clover Point forcemain.

As part of the rezoning, and following extensive discussions with City staff, staff and the Project team agreed on the proposed public realm improvements to be constructed along the conveyance route and around the Clover Point pump station. The City intends to lead public consultation before finalizing the detailed design of these improvements.

8. Land Interests

The Project team also negotiated and executed, or is in the process of executing, a series of agreements with landowners.

Licence/Lease	Project Requirement
City of Victoria Clover Point Licence	 The City of Victoria owns the land on which the Clover Point Pump Station is located. The Project requires a construction licence and a longer term in the existing licence to accommodate the Clover Point expansion.
City of Victoria Dallas Road Licence	 The City of Victoria owns the land along Dallas Road. The Project requires a construction licence and a longer term licence to accommodate the conveyance system under Dallas Road.
Department of National Defence Licence	 DND owns the land surrounding the McLoughlin Point site. The Project requires a construction licence and statutory rights of way to authorise works associated with the Wastewater Plant, Conveyance System, and Macaulay Point Pump Station.
Greater Victoria Harbour Authority Ogden Point and Dallas Road Licence	 The GVHA owns land at 187 Dallas Road. The Project requires a construction licence and statutory rights of way to accommodate the parts of the undersea cross-harbour forcemain and the conveyance system that will be located on GVHA lands. This license is being considered for approval by GVHA on March 3.

Manulife lease	 Manulife owns 1675 Douglas Street. The CRD entered into a lease for Unit 510 in the Douglas Street building in November 2012 for office space for the former Seaterra program. The Project Board has extended the lease term from its current expiration on October 31, 2017, until June 30, 2021. The space requirement has been reduced, and will be unit 510 only. The balance of the space has been sublet to HRP for use as a construction office.
Matullia Holdings Limited Partnership lease	 Matullia owns the land at Rock Bay in the City of Victoria. The Project requires a lease to use the site as a laydown area for the four years of the Project.
Transport Canada Construction Licence	 Transport Canada owns portions of Victoria Harbour. The Project requires a licence to authorise the construction works associated with the McLoughlin Point outfall and the undersea cross-harbour forcemain.
Transport Canada Geotechnical Works Licence and Permit	• The Project requires a licence permit to undertake the geotechnical works associated with the McLoughlin Point outfall and the undersea cross-harbour forcemain.

9. Permits and Approvals

The Project team has obtained the following permits and authorisations:

a. Ministry of Environment – Core Area Liquid Waste Management Plan (CALWMP)

During the development phase, the Project team obtained conditional approval and subsequent clarification of Amendment 11 of the CAWLMP from the Minister of Environment (Minister).

The Project Board submitted Amendment #11 to the Ministry of Environment to approve the Project as presented in the Business Case. On September 30, 2016, the Minister approved Amendment #11, with conditions. Of note was the condition requiring the CRD to submit to the Minister by December 31 2017 a definitive plan for the beneficial reuse of bio-solids. On November 18, 2016 the Minister extended the deadline set out in the original approval of Amendment #11 to the CALWMP from December 31, 2017 to June 30, 2019. The CRD is responsible for the development of the plan.

a. Township of Esquimalt Development Permit

On February 27, 2017, the Project team obtained the Development Permit for the Wastewater Plant on the McLoughlin Point site. Prior to Council's consideration of the Development Permit, the Project team hosted two open houses in Esquimalt and one on the DND base. The Project team also met with the Township's Design Review Committee on three occasions to review the plant design.

b. Other Permits

Additional permits and approvals will be obtained by CRD, HRP and other contractors as construction proceeds.

10. Construction Phase Contracts

a. Harbour Resource Partners

The Project team has finalised the contract for the construction of the Wastewater Plant, which includes the construction of three main components:

- a 108 MI/d tertiary wastewater treatment plant located at Mcloughlin Point,
- the cross harbour undersea forcemain, which consists of a 1 kilometre long pipe, 1050 millimetres in diameter, between Ogden Point and McLoughlin Point in the bedrock under the sea
- a 2100mm diameter marine outfall off McLoughlin Point.

Construction is anticipated to commence on both McLoughlin Point and Ogden Point in April 2017 with an overall completion date of November 30 2020.

11. Construction Phase Procurement

a. Residual Solids

The Project Team initiated the procurement of the Residuals Treatment Facility by issuing a Request for Qualifications (RFQ) in December 2016. An information webinar was conducted during the RFQ period and seven submissions were received. The Project Team is currently evaluating the submissions received and expects to select a shortlist of three qualified proponents in March.

The Project Team has appointed three positions related to the process:

- Fairness Advisor to monitor the procurement. The Fairness Advisor will act as an independent observer of the fairness of the implementation of the Competitive Selection Process, up to the selection of a Preferred Proponent. The Fairness Advisor will provide a written report to the CRD, which will be public;
- Conflict of Interest Adjudicator to provide decisions on conflicts of interest or unfair advantage issues related to the procurement of the Residuals Treatment Facility.
- Due diligence panel, to review aspects of the competitive selection process.

b. Conveyance

The Project team is progressing the design of the collection and conveyance components of the Project. The Project team is planning to procure the collection and conveyance components of the Project through nine contracts as follows:

- Design-bid-build contracts:
 - Residual Solids Pipelines and Pump Stations;
 - Macaulay Point Forcemain;
 - Clover Point Forcemain;
 - Currie Pump Station;
 - o Currie Forcemain;
 - ECI/Trent Twinning; and
 - o Arbutus Attenuation Tank
- Design-build contracts:
 - Macaulay Point Pump Station; and
 - o Clover Point Pump Station

The schedule for the nine procurements is set out on the Schedule attached as Attachment 2.

12. Community Engagement Plan

The Project team continues to actively engage with stakeholders and the community. In its November report the Project Board presented a three-stage plan to engage interested stakeholders and communities and provide timely information. During phase 1 and 2, the Project Board's Chair, Vice Chair and Project team met with representatives of the Core Area municipalities, presented to the Councils of the Township of Esquimalt, City of Victoria and District of Saanich, met on several occasions with staff at DND and GVHA and with Esquimalt and Songhees Nations members and advisors. In addition as noted above, the land use permitting process involved several meetings with community associations, residents and other stakeholder groups in Victoria and Esquimalt.

The Project team is now working through the activities in Phase 3. This Phase is focused on finalizing the engagement plan for the construction phase while continuing to engage with community groups near the areas where early construction works will occur. For example, a multi-stakeholder public meeting related to the early construction works, in particular the work on the cross harbour undersea forcemain at Ogden Point has been planned for April 2017. It will be advertised shortly.

The Project team has developed and commenced executing a comprehensive Project Communications and Engagement Plan (CEP) for the construction phase. The CEP has been informed by the feedback obtained from community and stakeholder engagements undertaken in the previous two phases, and key learnings from the Project's history.

The CEP recognises that the Project is making an important transition from the planning phase, which has been underway for many years, to the construction phase. The CEP:

- defines the Project's communications and engagement goals.
- describes the communications and engagement activities during construction.
- defines the roles and responsibilities of the Project team, and representatives from the contractors for each component of the project.

The CEP's objective is to maintain and strengthen the ongoing two-way communications and engagement program with stakeholders, Esquimalt Nation, Songhees Nation, and communities to provide timely project information and respond to public inquiries.

Key features of the CEP include:

- Communications Planning, which involves developing plans and strategies to support the Project, including integrating the community relations and construction communications functions listed below.
- Community Relations, which involves building relationships with the public and stakeholders, keeping them informed through ongoing, two-way communications regarding the project, and responding to inquiries in an effective and timely manner.
- Media Relations, which involves providing the media with progress reports and updates on the project and the work, and responding to issues raised by the media.
- Construction Communications, which involves keeping the public and stakeholders advised on a timely basis about all matters relating to construction progress, schedules and impacts.

The CEP recognises the many stakeholders with diverse interests in the Project. The CEP highlights the need to utilise various materials and tools to support the Project's communication and engagement objectives, including a public inquiry program, website, social media, community newsletters, construction notifications, community and stakeholder meetings, local government technical working groups, and door-to-door notifications.

13. Project Management and Reporting

The recruitment of the core Project team is now complete. In November and December 2016 respectively, the Project Board recruited the Deputy Project Director and Project Director. The Project team also filled senior management team positions, communications and engagement advisor, and other key advisors. The Project team continues to finalise the establishment of the Project management office, and recruit remaining Project management and staff.

The Project team has developed a Project Charter and is finalizing a Project Management Plan to enable the successful execution of the Project.

a. Project Charter

The Project Charter outlines the Project mission, vision and objectives. It provides a description of roles and responsibilities, and presents a high-level description of the Project budget, schedule, scope, risks, and stakeholders.

b. Project Management Plan

The Project Management Plan will guide and control the execution of the Project. It will provide details of how the project objectives will be fulfilled by outlining the major products, milestones, activities, and resources.

The Project Management Plan will also provide detailed instructions on the execution management and control of the Project, including processes for all core project management functions, for example:

- Project Controls Management
- Risk Management
- Environmental and Regulatory Management
- Communications and Stakeholder Engagement;
- Quality Management;
- Safety Management;
- Engineering Management;
- Construction Management;
- Human Resources Management; and
- Procurement and Contract Management.

The Project Charter will be available to the public in March; the Project Management Plan will follow.

c. Reporting Format

The Project team will prepare monthly reports for the Project Board, the CRD Board and the funding partners, reporting on the status of the Project. The monthly reports will summarise progress and include updates on expenditures against the Control Budget, forecast to complete, schedule and risks. Quarterly reports will also be provided to the CRD board.

14. Budget/Expenditures

The Control Budget is as described in the Business Case. Attachment 3 is a summary of project expenditures to the end of the Development Phase.

ATTACHMENT 1: DESCRIPTION OF PROJECT

WASTEWATER TREATMENT

- 1. A 108 megalitre/day wastewater treatment plant at McLoughlin Point in Esquimalt that will treat sewage to a tertiary level consistent with federal wastewater treatment regulations;
- 2. A cross harbour undersea forcemain from Ogden Point to the McLoughlin Point treatment plant (approximately 1000 metres in length);
- 3. A marine outfall for discharging the effluent from the Treatment Plant into the marine environment.

RESIDUALS TREATMENT

- 4. The residual solids produced by the McLoughlin wastewater treatment plant will be pumped via pipeline to the Residuals Treatment Facility (RTF) located at the Hartland Landfill site, to be processed into Class A Bio-solids for future reuse;
- 5. Two pipelines along with 4 pumping stations will connect the treatment plant to the RTF site; a 200mm pipeline approximately 18.5km in length and 4 inline pumping stations will convey the residual solids from the treatment plant to the RTF. A 350mm pipeline approximately 11,5km in length will return the resulting centrate liquid back to the Marigold pumping station. Flows from the Marigold pumping station will be directed to the McLoughlin Point Treatment Plant through the existing collection system for treatment and then discharge out the new McLoughlin Point marine outfall. These two pipelines will be installed in a common trench where possible.
- 6. The residual solids will be processed into Class A biosolids with biogas and heat as the primary bi-products. The biogas can be used for cogeneration and to offset the RTF's energy needs. The Class A biosolids will be available for beneficial uses.

COLLECTION AND CONVEYANCE COMPONENTS

Macaulay Point Catchment

The Macaulay Point catchment area conveyance upgrades include three main components:

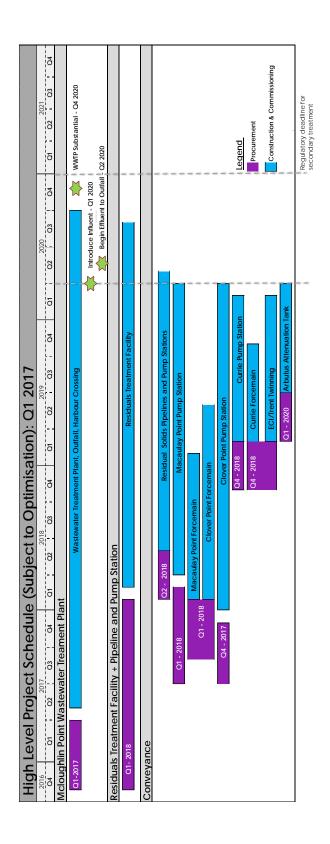
- A new Craigflower pump station (already constructed) replaces an older, smaller lift station to convey the increasing wastewater flows generated by View Royal, Colwood, Langford, Songhees First Nation and Esquimalt First Nation to the Macaulay Point pump station; and
- b. Macaulay Point pump station will be upgraded to increase pumping capacity and upgrade the building and headworks to include grit removal and screening of the wastewater flows conveyed to the treatment plant at McLoughlin Point; and

c. A new forcemain will be constructed from Macaulay Point pump station to convey all wastewater flows from the Macaulay Point catchment area to the treatment plant at McLoughlin Point

Clover Point Catchment

The Clover Point catchment area conveyance upgrades include four main components:

- a. Clover Point pump station will be upgraded to increase pumping capacity and upgrade the headworks to include grit removal and screening to convey the wastewater flows to the treatment plant at McLoughlin Point;
- A new forcemain will be constructed from Clover Point pump station to connect into the Victoria Harbour forcemain crossing at Ogden Point to convey all wastewater flows from the Clover Point catchment area to the treatment plant at McLoughlin Point;
- c. Currie pump station upgrade, pipeline twinning and Trent siphon extension will be completed to increase conveyance capacity for the increasing wastewater flows in the East Coast Interceptor pipeline to Clover Point pump station; and
- d. The Arbutus attenuation tank will be constructed to attenuate the wastewater flows entering the East Coast Interceptor from the Saanich East / North Oak Bay area to alleviate system overflows downstream.



ATTACHMENT 2: HIGH LEVEL PROJECT SCHEDULE

ATTACHMENT 3: EXPENDITURES TO-DATE

CORE AREA LIQUID WASTE MANAGEMENT SUMMARY REPORT MONTH ENDING JANUARY 31, 2017 (in \$ millions)

Program	to 2013	2014	2015	2016*	2017	Total*
Program Expenses						
Wastewater Treatment - McLoughlin	9.71	0.43	0.48	(0.15)	-	10.47
Conveyancing	6.90	7.53	3.01	0.02	0.00	17.45
Biosolids/Energy Centre	2.99	1.66	0.01	0.82	-	5.48
Common Costs*	4.96	3.16	0.24	(1.70)	0.02	6.68
Interim Financing	0.04	0.03	0.19	0.23	0.02	0.51
WMP - Project Board	-	-	-	2.61	0.56	3.17
Total program expenditures	24.60	12.80	3.93	1.83	0.60	43.76

*Fiscal Year 2016 has not been audited.

*2016 values increased by 285K from Draft version distributed February 8, 2017. Change relates to invoices received after reporting date that relate to services rendered in 2016 and were accrued.

	SUMN	IARY OF PROJECT EXPENS						
(in \$ millions)								
	to 2013	2014	2015	2016*	2017	Total *		
	10 2010	2011	2015	2010	2017	10101		
WASTEWATER TREATMENT PLANT								
Marine Outfall - McLoughlin Pnt - CAWTP	210,592	4,843	-	-	-	215,435		
Project Management & Commission	983		-	-	-	983		
Victoria Harbour Crossing - CAWTP	467,794	5,377	102	-	-	473,273		
Wastewater Treatment - McLoughlin Pnt	9,035,692	417,911	476,269	(151,019)	-	9,778,854		
Subtotal Wastewater Treatment Plant	9,715,061	428,131	476,371	(151,019)	-	10,468,545		
CONVEYANCING - PUMP STATIONS & PIPES								
Arbutus Rd Attenuation Tank	3,740,034	552,160	135,860			4,428,054		
Clover Ogden FM	13,840	15,930	133,000			29,771		
Clover Pt PS	318,411	86,020	142,857			547,288		
Craidflower PS	2.616.936	6.805.124	2.684.505	15.976	350	12.122.890		
Currie FM	4,245	588	2,004,000	-	-	4,832		
Currie PS	4,245	-				4,245		
Macaulay - McLoughlin FM	20,993	588				21,581		
Macaulay Pt PS	141,761	50,790	50,000	-	-	242.551		
Trent/ECI Twinning	35,487	14,506		_		49,993		
Subtotal Conveyancing - Pump Stations & Pipes	6,895,951	7,525,706	3,013,222	15,976	350	17,451,205		
RESOURCE RECOVERY CENTRE						-		
Project Management & Commission	596					- 596		
Resource Recovery Ctr	2.930.973	1.530.025	13.223	816.975	-	5.291.196		
Sludge & Concentrate Conveyance	63,463	127,131	13,223	010,975	-	190,593		
Subtotal Resource Recovery Centre	2,995,032	1,657,155	13,223	816,975		5,482,386		
COMMON COSTS						-		
Commission Direct	374.120	144.694	89,199	31.821		639.834		
Project Management	4.583.480	3.013.700	148.393	(1.726.466)	20.285	6.039.392		
Subtotal Common Costs	4,957,600	3,158,394	237,592	(1,694,645)	20,285	6,679,226		
INTERIM FINANCING	36,600	29,916	192,834	226,776	20,044	506,170		
PROGRAM CONTINGENCY	-	-	-	-	-	-		
LWMP - PROJECT BOARD						1		
Project Oversight (Project Board)	-	-	-	554,661	66,144	620,805		
Communications	-	-	-	38,616	73,644	112,259		
Feasibility and Costing Analysis	-	-	-	649,203	-	649,203		
Business Case review	-	-	-	75,630	-	75,630		
Partnerships BC			-	373,042	345,398	718,440		
Project Management (Staff and Wages)	-	-	-	193,600	55,806	249,406		
Miscellaneous and Legal	-	-	-	725,862	17,097	742,960		
Subtotal LWMP - Project Board				2,610,613	558,089	3,168,702		
		40 700 000		4 004 070	500 700	40.750.055		
TOTAL	24,600,244	12,799,303	3,933,242	1,824,676	598,768	43,756,233		

PROGRAM SUMMARY REPORT

*Fiscal Year 2016 has not been audited. *2016 values increased by 285K from Draft version distributed February 8, 2017. Change relates to invoices received after reporting date that relate to services rendered in 2016 and were accrued.

PROGRAM SUMMARY REPORT MONTH ENDING JANUARY 31, 2017 (in \$ millions)

	Budget	Cost to Date	Commitments Unpaid	Total CTD + CU	Forecast to Complete	Forecast to Completion	Variance	Variance from Last report
WASTEWATER TREATMENT PLANT	384.8	10.5	-	10.5	374.3	384.8	-	-
CONVEYANCING -PUMP STATIONS & PIPES	188.5	17.5	-	17.5	171.1	188.5	-	-
RESOURCE RECOVERY CENTRE	191.6	5.5	-	5.5	186.2	191.6	-	-
COMMON COSTS**	-	6.7	-	6.7	(6.7)	-	-	-
INTERIM FINANCING*	-	0.5		0.5	(0.5)	-	-	-
PROGRAM CONTINGENCY*	-	-	-	-	-	-	-	-
LWMP - PROJECT BOARD*	-	3.2	0.3	3.5	(3.5)	-		
TOTAL	765.0	43.8	0.3	44.0	720.9	765.0	-	-

* The budget for common costs, interim financing, program contingency and Project Board are allocated directly to the project components.
** Common costs include salaries & benefits, consultants, building rental, supplies.