



Minutes of the meeting of the Liquid Waste Management Plan (LWMP) Joint Technical and Public Advisory Committees (TACPAC) Meeting #10 held on Monday, September 28, 2020 at the Comox Valley Regional District Civic Room and via Zoom Online Conference, commencing at 9:00 am.

PRESENT:	A. Habkirk,	Chair and Facilitator
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11. Habkirk, Shan and Lacintator	
P. Nash, LWMP Project Coordinator	
K. La Rose, Senior Manager of Water/Wastewater	CVRD
J. Boguski, Branch Assistant – Engineering Services	CVRD
Z. Berkey, Engineering Analyst	CVRD
M. Rutten, General Manager of Engineering Services	CVRD
M. Imrie, Manager of Wastewater Services	CVRD
J. Warren, Deputy Chief Administrative Officer	CVRD
C. Campbell	WSP
E. Wu	WSP
M. Swift, Town of Comox Councillor	PAC
W. Cole-Hamilton, City of Courtenay Councillor	PAC
A. Hamir, Lazo North – Electoral Area B Director	PAC
T. Ennis, CV Conservation Partnership Alternate	PAC
S. Carey, Courtenay Resident Representative	PAC
K. Niemi, Courtenay Resident Representative	PAC
K. van Velzen, Comox Resident Representative	PAC
D. Jacquest, Comox Resident Representative	PAC
R. Craig, Comox Resident Representative	PAC
L. Aitken, Area B Representative Alternate (observer)	PAC
M. Lang, Area B Resident Representative	PAC
J. Steele, Area B Resident Representative	PAC
H. Dewhirst, Comox BIA	PAC
E. Derby, Island Health	TAC
S. Ashfield, Town of Comox Engineering	TAC

ITEM	DESCRIPTION	OWNER
10.1	Call to Order	Allison Habkirk
	Meeting called to order at 9:00am	
10.2	Brief Orientation for Members Attending Virtually	Allison Habkirk
	An introduction and orientation to the meeting process for in-person and	
	virtual attendees.	
10.3	Review of Minutes of Meeting #9	Allison Habkirk
	Request for cumulative cost impacts for sewer capital projects to be	
	presented at TACPAC #11.	
	MOTION: To adopt minutes of meeting #9 – W. Cole-Hamilton SECONDED – M. Swift CARRIED	
10.4	Update on Process and Work to Date	Kris La Rose
	Overview of communications and process delay due to COVID-19. Kris La	
	Rose summarized upcoming public consultation events, including virtual	
	and in-person open houses and the focus on having the public complete the	

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10.4	online survey. An update on additional preliminary technical assessment work that has been completed due to delay, including further geotechnical investigations in and around Comox Road Hill and Lazo Hill was also provided. An update was provided on the Community Benefit Agreement with the	Kris La Rose
	K'ómoks First Nations and timeline for the Sewage Commission Decision on the preferred conveyance option anticipated to be in late November/early December.	
10.5	Review of Implementation Process Due to COVID-19, the business case for reclaimed water was deferred. Recommendation that reclaimed water will be considered as part of the master planning process, and the implementation decision would be a decision of the Sewage Commission.	Paul Nash
	Brief discussion on implementation and splitting of the conveyance from the LWMP process following selection of preferred solution.	
	Will dissenting opinions be provided to the TACPAC? - Yes, dissenting opinions for level of treatment and conveyance will be provided to the TACPAC, for the record. CVRD staff will follow up with the dissenting TACPAC members	
10.6	Short List Options- Conveyance - Technical Presentation on alignments and technical considerations for each of the three short-listed conveyance options. Including description of technical considerations for horizontal directional drilling (HDD).	Carol Campbell and Eric Wu, WSP
	Concern that sea level rise values used within the report are too conservative. - At the time of publication of the Stage 2 report sea level rise projections were developed utilizing the best available information, being the City of Courtenay's Integrated Flood Management Study and official government of BC recommendations for projections. In early October, the CVRD's planning department received the preliminary results from a comprehensive Floodplain mapping study for the region, the results of this updated study work will be reviewed and compared to the assumptions made within the Stage 2 report and will be incorporated into the current flood proofing work underway by WSP.	
	Questions around groundwater and risk assessments on wells. - Once preferred conveyance option is selected, a monitoring program will be developed to establish a baseline for quality and quantity of water in the area. A backgrounder for groundwater is available on the LWMP project page on the CVRD's website.	
	Clarification on Figures 3 and 4 of the GW Solutions Hydrogeological report, provided as Appendix C, incorrectly show the Comox No.2 pump station. No Comox No.2 pump station is being considered in any of the short listed options.	

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10.6	Discussion on HDD alignments, construction considerations including	Carol Campbell
	staging and laydown areas for the pipe and potential for improvements	and Eric Wu, WSP
	along alignment. General comments and discussion are provided below:	
	- For both Options 2 and 3, Goose Spit access via Torrence Road will	
	not be closed during the drilling.	
	- Any concerns with difficulties around encountering cobble along	
	HDD alignments? Can be managed by considerations for size of	
	machine and reamer selected for job. There are cost implications	
	with including within the specifications a larger/better quality	
	reamer.	
	- Potential for large costs being encountered with unexpected ground	
	conditions? For current cost estimates carrying a higher contingency	
	for the HDD sections (60%). Not recommending to do more	
	boreholes in Lazo area as results to date have been uniform. Can	
	manage risk with contract language and development of baseline	
	geotechnical report.	
	- Bentonite is used in the drilling process to keep tunnel from	
	collapsing while drilling, it is a heavy dense fluid that becomes inert	
	clay with low permeability.	
	- Frac out of drilling fluids can be a concern at the entry and exit pits	
	if ground is not strong enough at these two locations. Can be	
	avoided by installing a steel tube to fortify ground during drilling.	
	- For option 3 it is not likely that a reduction in drilling costs may be	
	realized for the phase 2 works in the future due to technology	
	advancements. The majority of costs associated with HDD is for the	
	mobilization of the machinery to site.	
	- What is the process for statutory right-of-way's (SRW) for HDD?	
	Similar process to cut and cover, still require an SRW, typically	
	difference is in terms of the SRW agreement, less restrictive for	
	HDD as the pipe is much deeper. i.e. no restriction on planting trees	
	over top forcemain alignment. Owners could refuse the SRW,	
	options if owner refuses includes expropriation or investigating	
	alternative alignment options.	
	What are the odour control facilities included within the costing for each	
	option?	
	- Odour control to be upgraded or included at each of the pump	
	stations as part of the conveyance project.	
	What is the plan for decommissioning the existing forcemain that will no	
	longer be used?	
	- There are a number of options for decommissioning, including	
	complete removal or abandoning in place. The most cost effective	
	and least environmentally impactful option is abandoning in place,	
	future discussion on the options for the existing forcemain is	
	planned.	
10.7	Short List Options – Conveyance - Financial	Carol Campbell,
	Summary of the capital cost, 30 year and 50 year life cycle costs for each of	WSP
	the short listed conveyance options. Explanation on the assumptions used	
	for the development of the life cycle costs, including asset replacement	
	timelines, power and labour costs.	
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ITEM	DESCRIPTION	OWNER		
	Lunch			
10.8	Evaluating Short List Options - Conveyance Preliminary review and discussion on the financial, local economic benefit, environmental impacts, greenhouse gas emissions and social categories were completed. The technical evaluation will be completed in a subsequent TAC meeting and presented to the TACPAC at the October 27 th meeting.	Paul Nash		
	Discussion of pre-determined evaluation criteria for the financial components and evaluating the financial criteria based on net present value (NPV). Due to the development of Option 3, the NPV criteria no longer seems like the appropriate metric because of the need for evaluating the phased option which maximizes use of existing infrastructure and is in line with regional CVRD policies. Staff to present proposed alternate affordability calculation for consideration at TACPAC #11.			
	MOTION: Recommend restructuring of the financial evaluation criteria to fully reflect the cost impacts for the phased option – D. Jacquest SECONDED: W. Cole-Hamilton CARRIED			
	A summary of the general discussion for the local economic benefit, environmental impact and social categories is below: - Consideration on economic impacts for construction through downtown Comox should be captured in the evaluation. - For social construction category, need to capture impact of laydown area impacts for Option 2 and 3 over and above of construction impacts for Option 1, including longer duration of construction impacts. This was a notable change as it was originally expected that the trenchless options would reduce impacts compared with cut and cover, but the laydown areas and duration of their use is a significant local disruption. - Should consideration be made for future impacts for the second phase of Option 3, more people in future therefore could be causing greater future impacts? - Social amenities, Town of Comox will be looking for additional amenities as part of construction through Comox. - Discussion on social amenity potential – the similar nature of all the options make bike lanes the only probable social amenity for this project. - Groundwater considerations will be evaluated within the technical criteria for resilience to external factors.			
10.9	Preview of TACPAC #11 Summary of what the TACPAC member can expect at the next meeting and a refresher on the open house dates for public consultation.	Paul Nash and Kris La Rose		
10.10	Adjournment The meeting was adjourned at 2:43pm.			