

Notice of meeting of the
**SEWER EXTENSION SOUTH LIQUID WASTE MANAGEMENT PLAN ADDENDUM
JOINT TECHNICAL AND PUBLIC ADVISORY COMMITTEES (TACPAC)**

Wednesday, November 22, 2023
CVRD Civic Room, 770 Harmston Ave and Zoom
9:00am – 2:00pm

Join Zoom Meeting

<https://us02web.zoom.us/j/82352793981?pwd=ckdXMmVTRjRpNmhKWS9jem4xT2xqUT09>

Meeting ID: 823 5279 3981

Passcode: 273008

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Item, Time	Description	Owner
4.1 9:00 – 9:05	Welcome and Territorial Acknowledgement	Facilitator
4.2 9:05 – 9:15	Meeting 3.5 <ul style="list-style-type: none"> • Meeting minutes • Follow-up items 	Facilitator
4.3 9:15 – 9:45	Communications Update <ul style="list-style-type: none"> • Overview of public engagement summary report, what we heard • Public engagement plan, upcoming engagement milestones 	CVRD
4.4 9:45 – 10:15	Roundtable <ul style="list-style-type: none"> • TACPAC feedback from public open houses & community engagement 	Facilitator
4.5 10:15 – 10:30	Break	
4.6 10:30 – 11:15	Overview of draft addendum report CVRD LWMP Addendum Report_DRAFT_R5 <ul style="list-style-type: none"> • Report overview (CVRD) • Collection system design update (WSP) • Project cost update (WSP) 	CVRD/WSP

4.7 11:15 – 12:00	Committee Considerations <ul style="list-style-type: none">• Resident cost update• CVRD Staff Report, October 11, 2023 – South Services Projected Tax Escalation	CVRD
4.8 12:00 – 12:30	Lunch	
4.9 12:30 – 1:15	Committee Considerations (continued) <ul style="list-style-type: none">• Collection system design considerations, Discussion Paper 1• Phasing & boundary change requests, Discussion Paper 2• Draft Addendum report	CVRD
4.10 1:15 – 1:45	Updates <ul style="list-style-type: none">• Septic deferral program• Septic maintenance program	CVRD
4.11 1:45 – 2:00	Next Steps <ul style="list-style-type: none">• Steering Committee & Sewage Commission meetings• Public open houses	Facilitator
4.12 2:00	Adjournment	Facilitator

COLLECTION SYSTEM PRELIMINARY DESIGN**November 22, 2023**

The collection system conceptual design, as previously discussed at Technical and Public Advisory Committee (TACPAC) meetings 3 & 3.5, is a primarily gravity-based collection system with a limited application of low-pressure sewer (LPS) grinder pumps where the wastewater plumbing exiting the home was presumed to be lower than the gravity sewer main in the fronting street. This conceptual design also featured several areas where gravity sewer mains traversed private property and would therefore require statutory rights-of-way (SRW) for construction (10-15m wide) and ongoing operations & maintenance access (6m wide). SRWs typically include provisions restricting property owners' use of the SRW area such that future access to the SRW for ongoing operations and maintenance is not constrained.

This conceptual design formed the basis of Royston and Union Bay collection system information shared with residents at the June 2023 open house events, alongside preliminary design information for the Kilmarnock collection system. Common concerns expressed with the collection system design in Royston and Union Bay were related to areas where gravity sewer piping traversed private property. Several residents expressed considerable concern regarding potential disruptions and restrictions to their property during and after project construction. In addition, the Comox Valley Regional District's (CVRD) acquisition of SRWs for other recent projects has included considerable survey, legal and compensation expenses that would add significant costs to the project. Without regular monitoring of SRW areas, future access for maintenance can also become constrained as property owners redevelop their properties over time, inadvertently trespassing into SRW areas.

WSP has now completed preliminary design for the collection systems, as described in the Phase 1A/1B Collection Systems Memo. This design is informed by a review of existing LIDAR and other base mapping data, hydraulic modelling of the collection systems to ensure minimum flushing velocities can be met, and public input received at the June 2023 open house events. Given the schedule and cost risk associated with acquiring SRW from several dozen private property owners along with the public concern expressed regarding gravity sewer piping

traversing private property, the preliminary design keeps collection system piping predominantly within public road rights of way, with only a few areas where gravity sewer piping traverses private property.

The preliminary design’s use of LIDAR and other survey data to assess existing topography in combination with the use of public road rights-of-way to reduce the need for SRWs results in a higher number of properties that would require an LPS grinder pump.

The table below summarizes key differences between the previous conceptual design and the updated preliminary design for the Royston and Union Bay collection systems. The preliminary design previously presented for the Kilmarnock neighborhood includes up to four private property crossings and 46 properties with LPS connections.

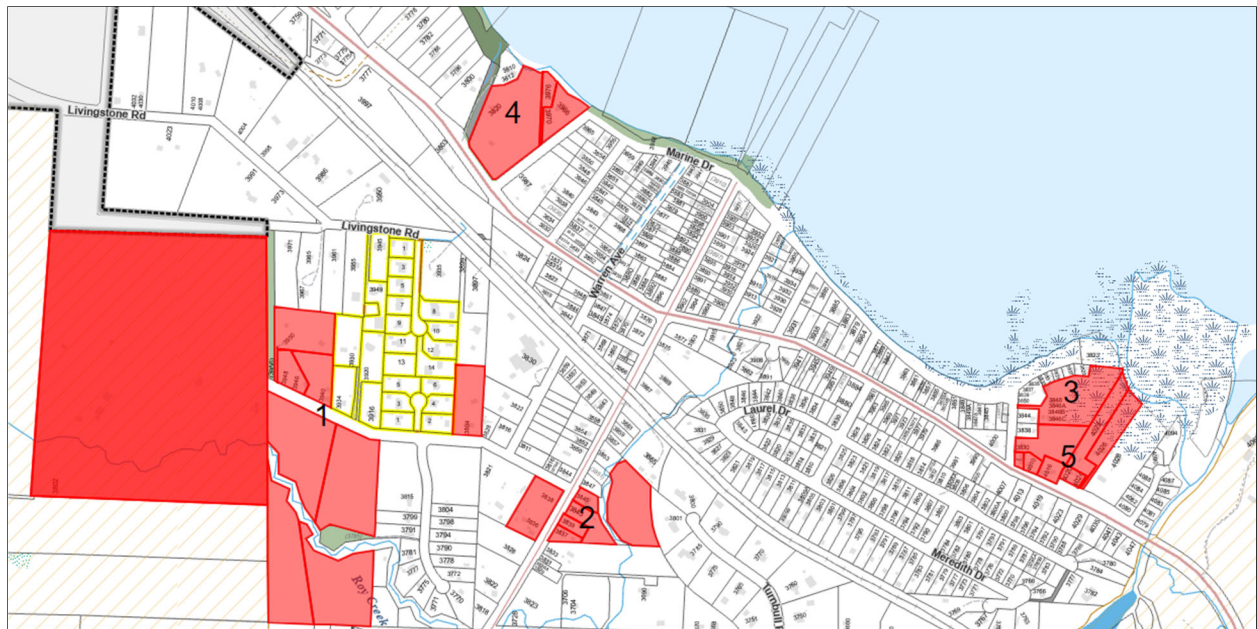
Description	Conceptual Design	Preliminary Design
Private property crossings (SRW’s)	43 (Royston) + 64 (Union Bay)	4 (Royston) + 4 (Union Bay)
Approximate number of LPS connections	20 (Royston) + 44 (Union Bay)	88 (Royston) + 111 (Union Bay)
Cost estimate (2027\$)	\$19.7million	\$20.7million

A summary of the preliminary design is included in the Liquid Waste Management Plan (LWMP) Addendum Stage 1 and 2 draft report. For the Stage 3 LWMP, the preliminary design will form the basis upon which detailed design will proceed. Detailed design will include a full topographic survey of the Phase 1A areas, and verify on a more precise level the location of collection system infrastructure relative to other underground infrastructure and above ground features. Updates to the design will result in further refinements to the estimated number of LPS connections within the Royston and Union Bay collection systems.

PHASING BOUNDARY CHANGE REQUESTS

November 22, 2023

During the public engagement events in June 2023, several requests to consider phasing boundary changes were made, seeking extensions of servicing to areas outside of the proposed service area boundaries and moving properties into an earlier or later project phase. Requests received would see changes in six areas, five of which are in Royston as illustrated on the map below.



1. Hyland Road, Royston – a property owner in this area requested extension of the Phase 1B area to include all of Hyland Road.
2. Royston Road – a property owner in this area requested extension along Royston Road beyond Hyland Road, suggesting several properties here backing onto Roy Creek should be prioritized for servicing.
3. Hayward Ave, Royston – the driveway of one property in this area is shown in Phase 1A, but the remainder of the property is shown in Phase 1B. The property owner expressed interest in being part of Phase 1A.
4. Marine Drive, Royston – a property owner in this area requested to move from future phase to Phase 1A, expressing an interest in installing the necessary private property infrastructure to access Phase 1A sewer infrastructure on Marine Drive.

5. Island Highway, Royston – a property owner in this area requested a move for several properties from Phase 1B to Phase 1A.
6. Kingfisher Resort and Spa – CVRD staff have been approached by representatives of the Kingfisher Resort and Spa, who have expressed interest in sewer connection in an early phase of the project.

Requests 1 and 2 would require extension of the collection system beyond what has been included in the preliminary design to date and would also require extensions of the Comox Valley Sewer Service area boundary. WSP has provided cost estimates for these requested extensions, summarized below alongside the total number of additional properties that could be serviced.

	Cost estimate (2023\$)	Additional properties serviced
1. Hyland Road extension	\$613,000	7 (+ up to 27 if Bear Cat & Little Bear strata subdivisions connected)
2. Royston Road extension	\$217,000	5

Requests 3 & 4 would not require any further sewer infrastructure beyond what has been included in the conceptual design to date, but would require each property owner to finance and install the necessary infrastructure (i.e. grinder pumps & connections) to connect to the sewer mains in the fronting streets.

Request 5 would require advancing the construction of a portion of the Phase 1B collection system between Hayward Road and Carey Place, consisting of approximately 150m of 100mm gravity main and one additional manhole. This would facilitate earlier connection of seven Phase 1B designated properties, at an approximate additional cost of \$175,000. The impact of this requested Phase 1A extension distributed over the entire Phase 1A area would be an approximate 3 per cent increase (\$40/year) in sewer parcel tax rates for all Phase 1A properties.

Request 6 will require additional infrastructure to facilitate the connection of Kingfisher’s existing wastewater infrastructure to the forcemain along Highway 19A. Discussions with representatives of the Kingfisher on sewer connection options are in progress.

A review of these requests and considerations in addressing them is summarized below:

1. Hyland Road	Cost is high for the limited number of properties that would be connected unless the Bear Cat Road and Little Bear Way strata subdivisions expressed an interest in connecting.
2. Royston Road	Several properties in this area back onto Roy Creek, resulting in a high environmental risk if septic systems were to fail.
3. Hayward Ave	This property has frontage on Hayward Avenue, and could connect via LPS to Phase 1A infrastructure at no additional cost to the project.
4. Marine Drive	Properties in this area could connect via LPS to Phase 1A infrastructure at no additional cost to the project.
5. Island Hwy	Extending Phase 1A infrastructure to connect these properties could be completed at an increase in connection costs for Phase 1A of approximately \$40/year. Residents in this area reference seasonal flooding in their properties, elevating the environmental risk from septic systems in this area.
6. Kingfisher	Continue discussions with Kingfisher to determine options and interest in sewer connection as part of an earlier project phase.

In recognition of primary public concerns regarding project costs, a suggested approach is to consider phasing and boundary change requests in areas where changes could be made with little to no overall increase in project costs.