

3 December 2024

Project No. 22-28

Rob Hillis, Acting Director of Engineering and Operations  
City of West Kelowna  
204-879 Anders Road,  
West Kelowna, BC, V1Z 1K2

## **ANTICIPATED COSTS FOR PHASE 2 – DREDGING OF NAVIGATION CHANNELS IN GREEN BAY, WEST KELOWNA, BC**

Dear Mr. Hillis,

Arsenault Environmental Consulting Ltd. (Arsenault) is pleased to provide a task list and cost estimate to the City of West Kelowna Engineering and Operations Department (the Client). The tasks specifically relate to dredging navigation channels in Green Bay. Permits are well underway. The Province of British Columbia and the Government of Canada have indicated during a site meeting that their permission would be granted during 2024. The Client has asked Arsenault to summarize a list of tasks and an estimate of their costs in order to get the dredging completed during early spring 2025.

Tasks include:

1. Dredging of the bay (estimate based on quote and includes mob/demob)	<b>\$380,000</b>
2. Sorting materials on land (volunteer excavator with local land owner)	<b>\$ 15,000</b>
3. Temporary storage site preparation and cleanup (includes path repair and fence)	<b>\$ 15,000</b>
4. Trucking materials to disposal site (includes spreading material out)	<b>\$ 70,000</b>
5. Miscellaneous costs (traffic control and road cleanup, etc.)	<b>\$ 45,000</b>
6. Project management (Arsenault estimate)	<b>\$ 15,000</b>
7. Engineering monitoring (Tetra Tech estimate)	<b>\$ 32,000</b>
8. Environmental monitoring (Arsenault, including fish salvage)	<b>\$ 38,000</b>
9. Westbank First Nation archaeology monitoring	<b>\$100,000</b>
<b>Total</b>	<b>\$710,000</b>
<b>Total with 25% contingency</b>	<b>\$887,500</b>

It is expected that the contracts for dredging and trucking will be awarded by late February 2025. Dredging will commence during early March 2025 but could be delayed until early April.

Cost estimates assume that the Ministry of Water, Land and Resource Stewardship provides a Change Approval during December 2024 or January 2025. It also assumes that the dredging program does not extend beyond 4-weeks of time.



We trust the information contained in this task outline meets your requirements at this time. If you have any questions, please call the undersigned at 250-300-9206.

Regards,

A handwritten signature in blue ink, appearing to read 'D. Arsenault', with a large loop at the end.

Darryl Arsenault, M.Sc., R.P. Bio.  
Senior Fisheries Biologist

Copy:                   Bea Kline and Wayne Heal (Green Bay Property Association); Aurelien Hospital (Tetra Tech)