NEW WESTMINSTER

November 26, 2021

ENQUIRIES AND RESPONSES #1
NWIT-21-28
Wood Street Canal Rehabilitation
New Westminster, BC

ANSWERS TO SUBMITTED QUESTIONS

Q1 It appears in Section A-A that the pin run fill/excavation would run into the road structure of Wood Street (3.5m min. distance from face of MSE face). What line item should the road restoration be allotted?

A1 Road restoration should be under Item 1.07 – "Supply and place clean pitrun sand/gravel"

Q2 The revegetation specifications - items 8 & 9 – note that soil placement/requirements will be determined by the QEP. How is this to be quantified for tender purposes?

A2 Native riparian planting (a total area of about 921m^2) will occur post-construction to restore the banks of Wood Street Canal. If soil is deemed necessary for adequate planting substrate and is not readily available onsite, the maximum amount of soil required would be 368.4m^3. A Qualified Environmental Professional (QEP) will consult with the contractor to determine topsoil quantities that meet BCSLA/BCLNA standards once works takes place. Refer to Addendum #1 – Revised Appendix A Schedule of Quantities and Prices.

Q3 Is a geotechnical report available?

A3 No.

Q4 Is a report noting the contamination levels of salt & hydrocarbon contamination available? If not, what should be accounted for?

A4 No report is available. Assume all excavated soil is contaminated.

Q5 Will Environmental Monitoring, fish salvage etc. be at City or Contractor cost?

A5 It will be at the contractor's cost.

Q6 Can the City confirm the additional environmental mitigation factors that need to be accounted for construction outside of the noted reduced risk instream works window?

A6 The additional environmental mitigation measures that will be implemented during any works outside the reduced risk instream work window include:

- Retaining a Qualified Environmental Professional (QEP) to conduct a fish and amphibian salvage prior to works.
  - The QEP will ensure applicable permits for salvaging and relocating fish are obtained. Fish salvaged at the work site will be safely relocated to an appropriate location in the same waters.

- Full-time monitoring conducted by a QEP environmental monitoring during instream works (as per the Water Sustainability Act Change Approval). Once the work area is isolated from flow and salvage has taken place, the dry work area is no longer considered "instream works" and regular environmental monitoring can resume.

- Implementing best management practices (BMPs) for working near Wood Street Canal to reduce or eliminate the potential for sediment-related impacts to the riparian and instream habitat (e.g., minimize duration of instream work, isolate area of the watercourse prior to commencement of works, conduct instream work during periods of low flow, avoid instream works during periods of inclement weather, and implement the Erosion and Sediment Control (ESC) Plan for the site). The Contractor and QEP will follow guidelines set out in the following documents:
  - Standards and Best Practices for Instream Works (Ministry of Water Land and Air Protection, 2004);
  - Develop with Care 2014: Environmental Guidelines for Urban and Rural Land Development in British Columbia (Government of British Columbia, 2014);
  - Land Development Guidelines for the Protection of Aquatic Habitat (Fisheries and Oceans Canada, 1992);
  - General Operational Best Practices (Ministry of Environment, 2019); and
  - Provincial Fish Habitat Rehabilitation Procedures.

- The Construction Environmental Management Plan (CEMP) must be followed, which incorporates the above BMPs and ESC Plan (including silt fencing and other erosion control methods), and requirements for environmental monitoring. The Contractor will provide all necessary ESC materials, as well as retain a stockpile of additional supplies to respond to emergencies and malfunctions.

- Note that inclement weather may delay works. The QEP will advise when weather conditions are not suitable for conducting instream works. In general, instream works should occur during periods of dry weather or light rain.

- The Contractor will provide all necessary materials for isolating the Wood Street Canal work area, such as cofferdams, and equipment to pump water around the work site. Only clean water may be pumped around the works site, and pump intakes must comply with Fisheries and Oceans Canada's Interim Code of Practice for End-of-Pipe Fish Protection Screens https://www.dfo-mpo.gc.ca/pnw-ppe/codes/screen-ecran-eng.html

- The Contractor will provide all necessary equipment to treat and manage surface water or groundwater during the construction. Water discharged to the canal or Fraser River must meet BC Water Quality Guidelines for the Protection of Aquatic Life.

- The QEP will provide the Ministry of Forests, Lands, Natural Resource Operations and Rural Development with justification for working outside the instream work window, as per the Water Sustainability Act Change Approval. This information will be provided in the post-construction report, to be prepared by the QEP and submitted within 90 days of completion of the Project. Justification for working outside the instream work window includes providing a description of:
  - Potential fish species present in the watercourse;
  - Life stages of potential fish species and sensitive stages anticipated in the work area (spawning, eggs, hatching);
  - Mitigation measures to prevent impacts to fish and fish habitat; and
  - Environmental monitoring.

Q7 Is there any documentation on water flow and volume within the canal? High/low water levels?

A7 Flow in canal is 2.7 cu.m./sec. High water level is at -0.20m. Low water level is at -0.90m.

Q8 Is construction access along the west side of the canal possible or is all work to occur from Wood Street?

A8 Both sides of the canal will be accessible for the construction purposes. .

Q9 Can a depth or volume for rip rap be specified? Cross-section B-B on page 3 of 3 is NTS for the slope depth and no depth is provided for removals.

A9 Depth of rip rap on slope is 0.50m.

END of Enquiries and Responses #1

Yours truly,

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Intermediate Buyer