Attachment 16

Questions and Answers

Question 1: According to Detail 1 on Drawing MA-01 for West Pier Work Area 1, the structural timber piles and collar wales appear to be present at 1.52-metre (5-foot) centre-to-centre spacing and the concrete cross walls are present at 3.05-metre (10-foot) centre-to-centre spacing. According to Drawing MA-04, the static water level is approximately 1.59 metres below grade, which conflicts with Section 02 50 00 3.3.2.2 that indicates the groundwater level is 1.95 metres below grade. According to Section 02 50 00 3.3.2.3, the required depth of excavation in this area is 2.5 metres below grade. Based on this information, the excavation will continue approximately 0.55 to 0.91 metres below the groundwater elevation. Due to the proximity of the Kettle Creek, it is very likely that substantial volumes of water will be encountered at depths at or below the water table, however no specification has been provided for dewatering methods. Vacuum excavation or hydro-vacuuming will not be effective under water, as the water will flow preferentially instead of the soil, filling the truck with water. Does PWGSC require the contractor to excavate under water (without dewatering) between/underneath the structural timber piles (only 5-foot c/c clearance) which cannot be damaged but will not be visible due to water?
Reasoning for Question 1: *Excavation underwater (without dewatering) in the vicinity of tightly-spaced structural elements may result in damage to structural elements since they will not be visible. Vacuum extraction of soil is not possible underwater, as the soil/hydrovac truck will fill preferentially with water. Furthermore, potential undermining of the fill material under the footing of the adjacent building or concrete wall could occur but would not be visible due to water. High-volume dewatering efforts may be necessary in order to enable effective excavation or hydro-vacuuming of contaminated soil in this area, however dewatering has not been included within the specification.*

Answer 1: Does PWGSC require the contractor to excavate under water (without dewatering) between/underneath the structural timber piles (only 5-foot c/c clearance) which cannot be damaged but will not be visible due to water? YES. The contractor will be expected to excavate 0.5 m below the groundwater table as per drawing C-09. The marine engineer will be on site to provide support when working around the dock structure.

Question 2: Section 02 50 00 indicates in several locations that contaminated soil is to be transferred into “dump trucks” for off-site transport and disposal. Will PWGSC accept the use of dump trailers?
Reasoning for Question 2: *Dump trailers are commonly used for bulk soil transport and can hold more weight, resulting in fewer trips and reduced project costs.*

Answer 2: PWGSC will accept the use of dump trailers, but sizing of the trucks will depend on the road capacity of the haul routes (drawings C-11 and C-12), and the Municipality of Central Elgin by-laws. It is the contractors’ responsibility to familiarize themselves with road limits and municipal by-laws.

Question 3: Section 01 11 06 1.12.2 indicates that imported Granular A and Granular B backfill must meet MOECC Table 1 Standards. During the mandatory site visit, it was indicated that Granular A/B backfill could be sourced from a local quarry. It is common for various metals (e.g. zinc) which are naturally occurring in clean granular fill to exceed the MOECC Table 1 Standards, which may eliminate the closest and most cost-effective sources of Granular A and B backfill material. Does PWGSC have an approved quarry where Granular A/B backfill meeting MOECC Table 1 Standards can be purchased for this site?
Reasoning for Question 3: *If sampling results indicate that clean Granular A or B fill from local quarries does not meet MOECC Table 1 Standards, finding an alternative source MOECC Table 1 quality fill may be difficult and could result in increased project costs.*

Answer 3: If the granular fill is not considered soil (as per O. Reg 153 – a crushed material or greater than 2 mm in particle diameter) it is exempt from environmental quality testing. If the granular is a blend of crushed and soil material, or a blend of larger and smaller than 2 mm particles, there is a 50% threshold to determine if a soil or not. If the granular is soil, then it must be tested in accordance with O.Reg 153 at the source prior to importation.

Question 4: Can the existing light post in West Pier Work Area 2, which must be temporarily disconnected/removed, be re-installed following the completion of the remedial work, or is a new light post required?
Reasoning for Question 3: *The specification does not provide details related to the light post.*

Answer 4: The existing light post should be salvaged and re-used.
Question regarding the Milestone timeline following the Notice to Proceed.

Question 5: Regarding the Milestone timeline following the Notice to Proceed

In 1.4 Project Milestone of the specifications, milestones are provided for completion of excavation/backfilling tasks from 5 to 25 days following Notice to Proceed.

H&S Documents (1.2 Action and Informal Submittals) have to be provided to representative within 5 days following Notice to Proceed. Approval will take an additional 2 days minimum. This would put us at the first milestone for excavation at Area 1 – West Headlands.

1.2 Action and Informal Submittals

2. Submit site-specific Health and Safety Plan: Within 5 working days after date of Notice to Proceed and prior to commencement of Work.
3. Departmental Representative will review Contractor's site-specific Health and Safety Plan and provide comments to Contractor within 2 working days after receipt of plan.

Should the milestones be based on date of approval of required submissions instead of Notice to Proceed?

Answer 5: Section 01 35 29 1.2.2 - Should read 5 days following **Notice of Award.** Project milestones follow Notice to Proceed.