

**INVITATION TO TENDER "ITT" NO. PS20172554
PHASE 3 NE CLOSURE AND PHASE 4 LFG SYSTEM EXPANSION - VANCOUVER
LANDFILL**

QUESTIONS AND ANSWERS NO. 3

ISSUED ON APRIL 10, 2018

Q1	The amount of work to be performed in the limited schedule will likely require continuous work, every day of the week for the duration of the contract. Most, if not all works require constant inspection by the engineer or inspection/verification before burial. Will the engineer be onsite twelve hours per day, seven days per week to ensure there are no delays in the inspection/approval of the work, despite the hours of work indicated in GC.35?
A1	The Engineer will be available for all critical stages in the Work in accordance with notification requirements under the Contractor. The Contractor shall keep the Engineer advised on the proposed hours of work so that inspection can be coordinated. Any Work requiring Engineer inspection or supervision under the Contract must be performed in accordance with applicable inspection and/or supervision requirements.
Q2	Section 01 20 00, Part 1.06.A.6.C indicates "Provide field engineering services and close out procedures. Establish locations, elevations, lines, grades and levels necessary for construction of structures and systems, including up to three (3) different layouts and revisions as deemed necessary by the Engineer". So the contractor is expected to employ engineering staff with landfill experience to evaluate the current design provided by the engineer, locate any errors or omissions, provide new improved design (up to three versions), then be subject to the engineer's review and approval during construction and as-built record review? This is much more costly and time consuming than generating accurate IFC design by qualified design engineers, prior to construction. Why would the owner pay the contractor and the engineer to provide the same professional service?
A2	The requirements for field engineering services and close out procedures are detailed under Section 01 71 23 - Field Engineering and Section 01 77 00 - Closeout Procedures within the Specifications, and relevant sections within the Contract. There is no expectation for the Contractor to "evaluate the design provided by the Engineer" or to provide a "new improved design".
Q3	A number of pay items in earthworks include "Owner supplied fill". The contractor is responsible for handling/compacting and placing liner on the fill. Is the owner supplied fill guaranteed to be suitable and available, or shall the contractor allow for delayed availability, screening, moisture conditioning, testing, etc?

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A3	There is no "screening, moisture conditioning, testing" required for the Owner supplied fill. There is not anticipated to be any delay in Owner supplied fill availability. However, the condition, type and location of the fill could vary. From a liner protection perspective and preceding earth work procedures, refer to Contract specifications including, but not limited to, payment items 2.01 - Site Grading, Picking, Smoothing, Proof-rolling" and "3.01 - All Areas - Supply and Place 200 mm Thick 5-25 Recycled Crushed Concrete".
Q4	Measurement & payment descriptions for items 3.01, 3.06, and 3.10 indicate "The gravel can also be hauled to site and stockpiled in areas designated by the Engineer". Please clarify the possible locations. The tendered cannot estimate the costs associated with any/all possible locations.
A4	The three (3) identified "possible contractor stockpile areas" are shown on Drawing 17042-004. It is the Owner's intent to primarily make available the area located immediately north of Legacy Lake, south of Compost. However, as the area is being used on a priority level basis by the Owner and existing contractors, the Contractor shall locate specific stockpiles in any of the "possible contractor stockpile areas" as deemed necessary by the Owner.
Q5	Section 31 23 01 Part 3.06A indicates "Stockpile imported fill materials in areas designated by Engineer". The tenderer cannot estimate unknown aspects of the work that are to be directed by the engineer. Please identify the possible locations and any time-frame constraints.
A5	Imported fill materials may be stockpiled in any of the three (3) designated "possible contractor stockpile areas" shown on Drawing 17042-004. It is the Owner's intent to primarily make available the area located immediately north of Legacy Lake, south of Compost. However, as the area is being used on a priority level basis by the Owner and existing contractors, the Contractor shall stockpile imported fill in any of the "possible contractor stockpile areas" identified by the Engineer. The Engineer shall have the authority to designate alternative locations for imported fill anywhere within the Vancouver Landfill legal boundary (see Drawing 17042-003), however, the identified "possible contractor stockpile areas" will be prioritized for use.
Q6	Section 01 33 00, Part 1.02.P indicates "allow at least ten (10) working days for review by the Owner following receipt of the submittal by the Owner". Ten working days for submittal review/approval will be impossible given the schedule constraints of this project. Can the owner commit to a maximum of two(2) working days to maintain project schedule?
A6	Submittal timelines are to remain as per the Contract Documents. The Owner and Engineer acknowledge the schedule constraints. Efforts will be made to respond as promptly as possible. The Contractor should ensure that the Engineer and Owner are aware of any submittals that are on the schedule

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	critical path.
Q7	Section 01 71 23 indicates as-built records and drawings shall be "in a format acceptable to the Engineer". There are no prescribed bounds to the engineer's expectations, and the tenderer cannot estimate the unknown effort required. Please provide clear prescribed details as to the specific format, content, and contractual obligation so that the tenderer can estimate the required surveyor and CAD technician costs.
A7	The as-built records and drawing requirements are addressed within Specification Section 01 71 23 - Field Engineering, and Schedule 14 - Record Drawing Standards within the ITT. Refer to Sections 01 71 23, Part 2 Products, Items 2.01, 2.02, and 2.03 for supporting details on requirements around general as-built drawings, as-built drawings for monthly progress quantities, and as-built drawings for record documents.
Q8	Section 31 23 01 Part 3.03.H indicates: "For trench excavation, unless otherwise authorized by Engineer in writing, do not excavate more than 20 m of trench in advance of installation operations and cover with minimum 300 mm of clean fill by the end of day's operation." We would understand then that constant presence of the engineer will be provided for ongoing inspection, and the contractor has no obligation to notify or request the engineer's presence? The same is understood for all works subject to Section 31 23 01.
A8	The Engineer will be available for all critical stages in the Work in accordance with notification requirements under the Contract. The Contractor shall keep the Engineer advised on the proposed hours of work so that inspection can be coordinated. Any Work requiring Engineer inspection or supervision under the Contract must be performed in accordance with applicable inspection and/or supervision requirements.
Q9	Section 33 20 83 indicates testing of pipe specimens. The pipe manufacturers have QA/QC programs to ensure their products meet or exceed performance standards. Why do it in the field? Can you remove this requirement?
A9	HDPE pipe testing requirements under Specification Section 33 20 83, Part 2 Products, Item 2.02, A and B are not expected to be performed on-site by the Contractor. The Contractor is responsible for ensuring all required testing and QA/QC requirements have been achieved, and to provide the information to the Engineer.
Q10	Schedule 14 Record Drawing Standards are not consistent with Section 01 71 23. Is the topo survey required to be 10m grid or 5m grid?
A10	Notwithstanding all other Contract requirements regarding survey densifications for break lines, slope crest or toe, ditch centerline, structures, pipe fittings, valves, perforations, changes in material or layers, etc. the

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	<p>minimum survey intervals are:</p> <ul style="list-style-type: none"> • 10m grid for general survey and field stakes • 5m grid for surface and volumetric payment items and as built record purposes • 3m intervals for lineal payment items and as built record purposes.
Q11	Section 01 11 00 and ITT Schedule 17 indicate "Allow 10 working days after submitting site survey information prior to any site work". So no construction work will begin until at least 2-3 weeks after notice proceed (around June 20th.) Can owner/engineer reduce the survey information review to two (2) days to maintain project schedule?
A11	<p>Please refer to Amendment No.3 (PS20172554 -AMD3).</p> <p>Section 01 11 00 - Summary of Work , Subsection 1.05, Item B amended: "Allow minimum 48 hours after submitting site survey information prior to any site work."</p>
Q12	The contractor may use "contaminated fill", but it must meet Urban Park Standard (PL) from the current Contaminated Site Regulation (CSR)? PL standard is not contaminated, and there will be no credit for the owner as indicated in pay item 2.04, particularly with the unlimited quantity adjustment by the owner. Please clarify, is the "contaminated fill" meant to be of a different CSR standard?
A12	<p>Please refer to Amendment No.3 (PS20172554 -AMD3).</p> <p>The fill material can be contaminated soil as defined under the Industrial Standard (IL) from the current Contaminated Site Regulation (CSR), following all other Contract requirements.</p>
Q13	Section 01 71 23 indicates "Employ a Land Surveyor registered in the Province where project surveying will occur and acceptable to the Owners." is required. Is this required, given that the engineer is the sole judge of survey data, as-builts, quantity verification? Why would the owner pay the contractor and the engineer to provide the same professional service? Please confirm.
A13	Experienced and qualified trades and professionals are required and expected for successful contract implementation. This includes, but not limited to surveyor, pipe welders, liner installers, etc.
Q14	Does the owner want or require the SITE HEALTH AND SAFETY OFFICER indicated in Section 00 73 19 Part 1.06 to be a full-time dedicated position, free of other duties?
A14	The Contractor shall assign a Site Health and Safety Officer at the job site at all times during work. The Site Health and Safety Officer shall be responsible, and

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	authorized, to supervise and enforce compliance with the Contractor's established Site Specific Health and Safety Plan. The Site Health and Safety Officer is to be available for consultation with the City of Vancouver and its representatives and shall meet WSBC requirements. It is the responsibility of the Contractor to ensure the identified Site Health and Safety Officer meets the requirements and maintains the responsibilities outlined within Section 00 73 19 of the Specifications and those requirements outlined in the ITT.
Q15	Can you add to the contract, a formal RFI process, turn-around times and form please?
A15	RFI's are encouraged from the Contractor when deemed necessary. Contractors typically have provided their own RFI form for submission of formal inquiries on past City of Vancouver projects, however, a general form can be provided following contract award for the Contractors use on this project. Turn-around times cannot be stipulated for responses to RFI's issued by the Contractor. The time required to address incoming RFI's depends greatly on the complexity of the matter being raised. Efforts will be made by the Engineer to respond as timely as possible. RFIs having higher priority should be identified by the Contractor.
Q16	GC.15 ENGINEER'S ABSENCE and GC.19 INSPECTION OF WORK; are contradictory. Which is accurate/correct?
A16	GC.15 and GC.19 are not in conflict. GC.15 addresses the Engineers authority to designate an assistant, in their absence, to <u>supervise</u> the work and make decisions as to the manner of conducting and executing the work. GC. 19 addresses the Engineers authority to appoint an inspector or surveyor, at their request, to <u>inspect</u> the work. Inspectors and surveyors are not authorized to make decisions or issue instructions contrary to the Drawings or Specifications.
Q17	The 19 leachate wells, are they all different depths?
A17	Yes, the quantities are based on installing pumps in vertical gas wells VGW-001 through VGW-019. However, the actual locations will be determined in the field based on water level measurement after the wells are installed. Refer to ITT Drawings 615, 616, 617, and 618 for details on the vertical gas well profiles and approximate drill boring depths.
Q18	Is there a liner penetration/connection detail required for the condensate drain traps at the perimeter? If so, please provide it so we can allow for proper restoration.

**INVITATION TO TENDER "ITT" NO. PS20172554
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A18	No, there is no cover penetration seal required for the condensate drain trap on the side slope.
Q19	Can you please indicate the diameter of monitoring device that corresponds to each of the vertical gas well, pressure relief pipe, horizontal gas collectors so we can properly capture what diameter of couplings, reducers, flex hose is required for each pay item?
A19	The quantity of the different sizes of monitoring devices, well head adapters, and riser pipe adapters is listed in the Schedule of Quantities. The flex hose is 2" for the 32 mm and 50 mm monitoring devices, and 75 mm flex hose for the 75 mm monitoring devices.
Q20	Is it possible to extend the closing date by 1 week?
A20	The Tender closing date cannot be extended due to set Council dates and the compressed construction schedule.
Q21	Can lock blocks that are removed from existing road crossings be reused for new installations?
A21	The Owner, as a supporter for sustainable engineering and construction practices, will consider all Contractor's requests for integrating into the project any decommissioned materials and structures.
Q22	For the decommissioning of pipe items, does the pay item refer to each cap that is installed or to each excavation location? Some decommissioning locations have one cap and some have two.
A22	Each installed cap represents one individual pay item, regardless of the number of caps at any given location.
Q23	<p>For the road crossing details, can you please confirm these pay items only pertain to the installation of the casing pipes and associated lock blocks, but any cuts/fills to achieve finished grade all be paid under their separate unit rates? ie. Road Crossing Type 12, the filling of the ditch would be paid under the Earthworks quantities in section 2?</p> <p>Also, since there are new road construction pay items (7.06 to 7.08) that account for the full gravel structure, why do we need to account for the road structure gravels in the "Pipe Road Crossing" items as well? Isn't this a double up on the quantity?</p>
A23	The road crossing payment items include all associated earth work. For additional details refer to the relevant pay item descriptions within the Specifications.