

ITT PS08037
SOUTHEAST FALSE CREEK ENERGY CENTRE AND SEWAGE PUMP STATION

Questions and Answers No.3

Issued August 5, 2008

Q1	On Drawing 162178-P-214, Items 84 and 85 show as a 150 and 200 dia plug valve with electric actuators. However, Drawing 162178-P-121 shows both of these valves as 150 dia. Which is correct?
A1	Drawing 162178-P214, is correct with items 84 and 85. Drawing P-121 is a P&ID drawing which may not be totally consistent with the design drawings.
Q2	On drawing A-403 reference is made to drawing A-602 which is not included in the tender package.
A2	For 1/A602 refer to AD-U01. For 2/A602 refer to AD-U02.
Q3	Please advise room floor finish schedule.
A3	Refer to Addendum #4, Volume #5, Room Finish Schedule.
Q4	It is not clear from the drawings what are the items to be removed/demolished.
A4	Existing building structures will be removed by the City of Vancouver. The Contractor is to demolish remaining foundations down to ground level to make the site usable for laydown. Existing asphalt to be removed by the Contractor to accommodate landscaping up to future east property line of Wylie Street as shown on Drawing A-901. All abandoned power poles within the work area are to be removed and disposed of by the Contractor.
Q5	Please advise the specification section that covers the finishing(s) of the Public Art item(s).
A5	Refer to Amendment #2, Specification 05500 Metal Fabrications, Sections: 1.1, 1.4.4., 2.2, 2.9, 3.5.
Q6	Drawing S-015 is referenced on other drawings, but neither included in the tender documents nor listed in the drawing list.
A6	Refer to Addendum #5, Volume #2, Drawing S-015.
Q7	In view of the amount and the high volume of wires needed for this project could you please give us THE SQUARE FOOT COVERAGE of the project?
A7	An approximate square foot coverage would be above grade - 580 m ² , total structure -

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	1,380 m ² .
Q8	To confirm (from meeting discussions); <ol style="list-style-type: none"> 1. The City will remove the wall on the west side of the site along Spyglass Road 2. The City will allow disposal at the Vancouver landfill free of charge
A8	<ol style="list-style-type: none"> 1. The <u>Contractor</u> will remove the wall on the west side of Spyglass. 2. The City will not charge the Contractor for disposal of excavated material from the site, dumped at the Vancouver Landfill.
Q9	When can we expect the issue of Architectural detail drawings listed in Volume 3 and summarized on DWG 162178-A-002-1 Rev P1.
A9	Ref to Addendum #5, Volume #3.
Q10	When can we expect the issue of Mechanical and Piping Standards listed in Volume 3 and summarized on DWG 162178-A-002-2 Rev P1.
A10	Ref to Addendum #5, Volume #3.
Q11	A-901 - Landscape Drwgs. 1. Is the Landscape scope area only around the new bldg area and nothing on the lay down area? 2. Any details on the Angled Stone Wall and Granite Stone Seat? 3. Specification specifies Chain Link Fence but there's nothing shown on landscape drwg. Please Clarify.
A11	<ol style="list-style-type: none"> 1. The limit of landscaping work includes the meadow area adjacent to the Future Wylie Street. Restoration or landscaping of the laydown area will not be required. Maintenance of the laydown area to accommodate contractor traffic will be required. 2. Refer to Addendum #2, Volume #3. 3. Chainlink fence will be provided by the City of Vancouver along the north limit of the site. Contractor is responsible for temporary fencing on remaining site limits as required to accommodate construction.
Q12	S-008 & S-051. Structural Detail Section & Excavation Plan Drwgs. 1. S -051 Northwest section shows excavate down to Elev (-)0.45 m. S-008 Detail Section T/S005 shows excavation down to Elev (-) 2.00m. Please Clarify?
A12	The elevation shown as -1.5 to the right of bayline A on Section T drawing S-008 should be +1.5, as shown correctly to the left of bayline E.
Q13	S-002 General Notes. 1. Section 02223 Item 14 specifies 200 mm thick base course on interior Slab on Grade. Section details on structural drawings does not show base course on U/S of SOG. Please Clarify?
A13	See note 12 on drawing S-003.
Q14	When can we have the Architectural Details specified on Volume 3?

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A14	Refer to Addendum #5, Volume #3.
Q15	S-002 - Structure Standard Details, Is there any specific spacing (centre to centre) requirements on construction joints for concrete walls, slab on grade & suspended slab?
A15	See Addendum #3, Volume #2, Drawing #S-015.
Q16	Will there be an addendum detailing all of the analytical instruments shown on the drawings for this project?
A16	Field Instrument List 162178-I-002 shows general specifications of all instruments, control devices & control valves to be supplied and installed by Contractor. The list has been revised please refer to Addendum No.3.
Q17	There is a discrepancy in the landscaping limits in A-100 and A-901. On A-100 the north limit is north of bayline D but on A-901 this would eliminate the work over the precast concrete hatches.
A17	A-901 supersedes A-101 for Landscape details.
Q18	Is the hydroseeding included at the south-east corner? If so then who removes the existing structure? We also need this information for asphalt removal and site preparation
A18	Refer to answer A4.
Q19	Who will supply (Refrigerant Alarm System)?
A19	The Contractor.
Q20	Do we have to HW interface Refrigerant Alarm System to the DDC?
A20	Yes.
Q21	Do we have to interface with chiller and boilers?
A21	No.
Q22	Do we need to allow Control Cooling System and Heating System?
A22	Yes.
Q23	Do we need to allow Control for Plumbing?
A23	Yes.
Q24	1, The following mechanical equipment were shown on the drawings but no specification or schedule are issued: a, Odour control unit. b, Building heat recovery chiller (HVAC-C1).

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	<p>c, Boiler feed water pumps (P-201, 202 & 203).</p> <p>d, Economizer feed water pump (P-204).</p> <p>e, Sewage heat recovery HW circulating pump (P-311).</p> <p>f, HW circulating pumps (P-101, 102 & 103).</p> <p>g, System expansion tanks (T-201 & 202).</p> <p>h, Duplex filter (DF-101).</p>
A24	<p>a, Refer to Addendum #7.</p> <p>b, Refer to Addendum #4, Volume #1, Section 15700.</p> <p>c, d, e, f, Refer to Addendum #5 Volume #1, Specification #15360.</p> <p>g, Refer to Addendum #6, Volume #3, Dwg # M-210.</p> <p>h, Refer to Addendum #5, Volume #3, Equipment List.</p>
Q25	<p>Please provide updated information (i.e supplier name, contact, scope of supply, shop drawings, weight, etc.) for the Owner Supplied boilers, sewage heat recovery heat pump and emergency genset.</p>
A25	<p>Boilers Sterling Combustion 150 Armstrong Avenue, Units 8 & 9 Georgetown, ON L7G 5G8 Phone: 905-702-1604</p> <p>Heat Pump Trane BC 3080 Beta Avenue Burnaby, BC V5G 4K4 Phone: 604-473-5616</p> <p>Genset Cummins Western Canada 18452 - 96th Avenue Burnaby, BC V4N 3P8 604-882-5743</p> <p>Electrical Westburne Electric Supply 5700 Kingsland Drive Burnaby, BC V5B 4W6 Phone: (604) 205-2700</p> <p>Refer to Volume #4, Owner Supplied Equipment for Scope. Refer to Addendum #5, Volume #4, Heat Pump Drawings from Trane. Sterling drawings to be provided; Cummins and Westburne drawings not yet available.</p>
Q26	<p>Please provide piping layout for natural gas (NG) and gas vent (VEN) systems</p>

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A26	Refer to answer A10
Q27	Please provide missing (to come) Mechanical and Piping Standards in Volume 3 of the tender document.
A27	Refer to Addendum #2, Volume #3.
Q28	Please provide piping specifications for the following systems: a, Boiler and emergency genset flue (FLU). b, Central heating water (CWC, CWH & CWM). c, Natural gas (NG). d, Refrigerant vent (VEN). e, Process cold and hot water (PCW & PHW).
A28	Refer to Addendum #2, Volume #3.
Q29	Refer to specification Section 15452 - Piping, Valves and Related Equipment (Item3.5.5): - What is the percentage (%) of non-destructive examinations (i.e visual, magnetic particle, etc.) required?
A29	Section 15452 has been revised, please refer to Amendment #6
Q30	Refer to specification Section 15452 - Piping, Valves and Related Equipment (Item3.6.1): - What is the percentage (%) of radiographic examinations required?
A30	Section 15452 has been revised, please refer to Amendment #6 which refers welding and inspection for the sewage piping to ASME B31.3
Q31	Refer to specification Section 15200 - Crane and Hoists and Related Equipment: Only one (1) under running traveling crane was specified but there are more cranes or monorails shown on Mechanical Layout Drawing No. M-202. Please verify?
A31	Currently a total of 1 crane and 7 monorails to be Contractor supplied, as follows: One only - 2t traveling crane in Sewage Pump room. Manual operation. One only - 7.5t monorail with motorized trolley and electric hoist in the Energy room for equipment removal. Five only - 2t monorails with manual trolleys and hoists in the Energy room for maintenance of the HW circulation pumps. One only - 2t monorails with manual trolleys and hoists in the Energy room for maintenance of the duplex filter (DF-101). Structural drawing 162178-S-029 shows the anchoring details of the monorails and crane rails, along with section sizes; Specification Sections 15200 and 15250 detail the requirements.
Q32	More engineering details are required for the Flue / Art Stack assemblies (i.e elbow or tee joint at the flue / stack connection, support between outer carrier pipe and inner flue

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	pipe, supports, seismic, final finishing, etc.).
A32	Refer to Addendum #5, Volume 31, Section 15551.
Q33	<p>Please be advised that volume 2 Design Drawings issued by Addendum 2 has the following errors:</p> <ol style="list-style-type: none"> 1. Drawing S-031 is listed on the drawing list as new drawing, but not included in the package 2. Drawing S-051 is included in the package, but not listed on the drawing list.
A33	Refer to Addendum #5, Volume #2.
Q34	Please advise if the cranes are included in the scope of this contract. There are 2 bridge cranes shown on the drawings and one hoist and beam, but I could not locate any specifications for them as part of the tender documents.
A34	Refer to answer A32 (above).
Q35	<p>The following sections of the technical specifications were not issued:</p> <ol style="list-style-type: none"> 1. 08331 Overhead Doors 2. 08710 Finish Hardware 3. 10520 Fire Protection Specialties 4. 00800 Supplementary General Conditions <p>Please advice when we can expect the items listed above.</p>
A35	<ol style="list-style-type: none"> 1. Refer to Addendum #4, Volume #1, Section 08331. 2. Refer to Addendum #4, Volume #1, Section 08710. 3. Refer to Amendment #5, not issued. 4. Refer to Addendum #3, Volume #1, Section 00800.
Q37	The tender form is asking for a lot of separate and unit prices. Is it possible to submit these 24 hours later as we have seen on other projects? By doing this it ensures that we have the correct and most competitive prices for the Client.
A37	Please follow the instructions set out in this Tender document.