



899-2015 ADDENDUM 2

SOUTH END SEWAGE TREATMENT PLANT (SEWPCC) UPGRADING/EXPANSION PROJECT - CONTRACT 3 - BIOREACTOR, BLOWER BUILDING, AND SECONDARY CLARIFIERS STRUCTURAL CONCRETE & MISCELLANEOUS WORK

ISSUED: February 29, 2016
BY: John Wiebe, P.Eng.
TELEPHONE NO. 204 488-2214

URGENT

**PLEASE FORWARD THIS DOCUMENT TO
WHOEVER IS IN POSSESSION OF THE BID
OPPORTUNITY**

**THIS ADDENDUM SHALL BE INCORPORATED
INTO THE BID OPPORTUNITY AND SHALL
FORM A PART OF THE CONTRACT
DOCUMENTS**

Template Version: A20150806

Please note the following and attached changes, corrections, additions, deletions, information and/or instructions in connection with the Bid Opportunity, and be governed accordingly. Failure to acknowledge receipt of this Addendum in Paragraph 10 of Form A: Bid may render your Bid non-responsive.

PART A – BID SUBMISSION

Replace: 899-2015 Bid Submission with Addendum 2 - Bid Submission. The following is a summary of changes incorporated in the replacement Bid Submission:

Form B(R1): Revise item A.3

Page numbering on some forms may be changed as a result.

PART E – SPECIFICATIONS

Replace: NMS Division 01, Section 01 11 00 with 899-2015_Addendum_2-NMS_Section_011100

Revise: NMS Division 07
Section 07 21 00
Clause 2.1.A

Perimeter Insulation: Polystyrene Insulation: CAN/ULC S701, Type 4, rigid, expanded, extruded polystyrene board insulation, RSI=0.87 per 25 mm thickness and a minimum compressive strength of 240 kPa at 10 percent deformation or yield; shiplapped edges.
Thickness 50mm thick.

Revise: NMS Division 10
Section 10 80 00
Clause 2.2.A.8.b.2

Nominal Size: 750 mm x 900 mm. Quantity: **Thirty three (33)** units, at Roof of Bioreactors Tanks.

Add: NMS Division 10
Section 10 80 00
Clause 2.2.B

Gas Tight Floor Door: Single leafs floor door, Model-GT, aluminum construction, angle frame by MSU Mississauga LTD., or equivalent by Bilco Canada,

1. Performance characteristics:
 - a. Covers: Reinforced to support a minimum live load of 300 psf (14.4 kPa) with a maximum deflection of 1/150th of the span. 6.3 mm minimum aluminum diamond pattern.

- b. Frame: Angle frame, extruded aluminum with cast anchors or wedge anchors for surface installed applications.
 - c. Gasket: Continuous EPDM/ Neoprene gasket mechanically attached to frame.
 - d. Lifting mechanisms: Provide the required number and size of compression spring operators enclosed in telescopic tubes.
2. Hardware:
 - a. Hinges: Specifically designed for horizontal installation and shall be through bolted to the cover with tamperproof Type 316 stainless steel lock bolts.
 - b. Covers equipped with hold open arm which automatically locks the cover in the open position.
 - c. Compression latches with integrated lifting handles in type 316 stainless steel provide positive hold of lid onto frame
 3. Finishes: Factory finish shall be mill finish aluminum with bituminous coating applied to the exterior of the frame.
 - a. Size: Nominal opening 750 mm x 900 mm.
 - b. Quantity: One Unit, at Gallery 8A in the Bioreactors/Blower Building.

DRAWINGS

Replace: 899-2015_DRAWING_1-0102-ADTL-R001-Sht002_R00 with 899-2015_Addendum_2-DRAWING_1-0102-ADTL-R001-Sht002_R01

899-2015_DRAWING_1-0102-CGAD-R001_R00 with 899-2015_Addendum_2-DRAWING_1-0102-CGAD-R001_R01

899-2015_DRAWING_1-0102-MGAD-R507_R00 with 899-2015_Addendum_2-DRAWING_1-0102-MGAD-R507_R01

899-2015_DRAWING_1-0102-MGAD-R508_R00 with 899-2015_Addendum_2-DRAWING_1-0102-MGAD-R508_R01

899-2015_DRAWING_1-0102-MGAD-R609_R00 with 899-2015_Addendum_2-DRAWING_1-0102-MGAD-R609_R01

899-2015_DRAWING_1-0102-MGAD-S503_R00 with 899-2015_Addendum_2-DRAWING_1-0102-MGAD-S503_R01

899-2015_DRAWING_1-0102-MGAD-S504_R00 with 899-2015_Addendum_2-DRAWING_1-0102-MGAD-S504_R01

899-2015_DRAWING_1-0102-MGAD-S505_R00 with 899-2015_Addendum_2-DRAWING_1-0102-MGAD-S505_R01

899-2015_DRAWING_1-0102-MGAD-S506_R00 with 899-2015_Addendum_2-DRAWING_1-0102-MGAD-S506_R01

899-2015_DRAWING_1-0102-MGAD-S507_R00 with 899-2015_Addendum_2-DRAWING_1-0102-MGAD-S507_R01

899-2015_DRAWING_1-0102-MGAD-S602_R00 with 899-2015_Addendum_2-DRAWING_1-0102-MGAD-S602_R01

899-2015_DRAWING_1-0102-MGAD-S603_R00 with 899-2015_Addendum_2-DRAWING_1-0102-MGAD-S603_R01

899-2015_DRAWING_1-0102-MGAD-S606_R00 with 899-2015_Addendum_2-DRAWING_1-0102-MGAD-S606_R01

- 899-2015_DRAWING_1-0102-MGAD-S612_R00 with 899-2015_Addendum_2-DRAWING_1-0102-MGAD-S612_R01
- 899-2015_DRAWING_1-0102-PGAD-R002_R00 with 899-2015_Addendum_2-DRAWING_1-0102-PGAD-R002_R01
- 899-2015_DRAWING_1-0102-PGAD-R003_R00 with 899-2015_Addendum_2-DRAWING_1-0102-PGAD-R003_R01
- 899-2015_DRAWING_1-0102-PGAD-R004_R00 with 899-2015_Addendum_2-DRAWING_1-0102-PGAD-R004_R01
- 899-2015_DRAWING_1-0102-PGAD-R006_R00 with 899-2015_Addendum_2-DRAWING_1-0102-PGAD-R006_R01
- 899-2015_DRAWING_1-0102-PGAD-R014_R00 with 899-2015_Addendum_2-DRAWING_1-0102-PGAD-R014_R01
- 899-2015_DRAWING_1-0102-PGAD-R015_R00 with 899-2015_Addendum_2-DRAWING_1-0102-PGAD-R015_R01
- 899-2015_DRAWING_1-0102-PGAD-R017_R00 with 899-2015_Addendum_2-DRAWING_1-0102-PGAD-R017_R01
- 899-2015_DRAWING_1-0102-PGAD-R022_R00 with 899-2015_Addendum_2-DRAWING_1-0102-PGAD-R022_R01
- 899-2015_DRAWING_1-0102-PGAD-S011_R00 with 899-2015_Addendum_2-DRAWING_1-0102-PGAD-S011_R01
- 899-2015_DRAWING_1-0102-SDTL-A001_R04 with 899-2015_Addendum_2-DRAWING_1-0102-SDTL-A001_R05
- 899-2015_DRAWING_1-0102-SDTL-A005_R01 with 899-2015_Addendum_2-DRAWING_1-0102-SDTL-A005_R02
- 899-2015_DRAWING_1-0102-SDTL-A007_R01 with 899-2015_Addendum_2-DRAWING_1-0102-SDTL-A007_R02
- 899-2015_DRAWING_1-0102-SDTL-A015_R00 with 899-2015_Addendum_2-DRAWING_1-0102-SDTL-A015_R01
- 899-2015_DRAWING_1-0102-SDTL-R002_R00 with 899-2015_Addendum_2-DRAWING_1-0102-SDTL-R002_R01
- 899-2015_DRAWING_1-0102-SDTL-S001_R00 with 899-2015_Addendum_2-DRAWING_1-0102-SDTL-S001_R01
- 899-2015_DRAWING_1-0102-SDTL-S002_R00 with 899-2015_Addendum_2-DRAWING_1-0102-SDTL-S002_R01
- 899-2015_DRAWING_1-0102-SDTL-S003_R00 with 899-2015_Addendum_2-DRAWING_1-0102-SDTL-S003_R01
- 899-2015_DRAWING_1-0102-SDTL-S004_R00 with 899-2015_Addendum_2-DRAWING_1-0102-SDTL-S004_R01
- 899-2015_DRAWING_1-0102-SDTL-S005_R00 with 899-2015_Addendum_2-DRAWING_1-0102-SDTL-S005_R01
- 899-2015_DRAWING_1-0102-SDTL-S006_R00 with 899-2015_Addendum_2-DRAWING_1-0102-SDTL-S006_R01

- 899-2015_DRAWING_1-0102-SDTL-S007_R00 with 899-2015_Addendum_2-DRAWING_1-0102-SDTL-S007_R01
- 899-2015_DRAWING_1-0102-SDTL-S008_R00 with 899-2015_Addendum_2-DRAWING_1-0102-SDTL-S008_R01
- 899-2015_DRAWING_1-0102-SDTL-S009_R00 with 899-2015_Addendum_2-DRAWING_1-0102-SDTL-S009_R01
- 899-2015_DRAWING_1-0102-SDTL-S010_R00 with 899-2015_Addendum_2-DRAWING_1-0102-SDTL-S010_R01
- 899-2015_DRAWING_1-0102-SDTL-S011_R00 with 899-2015_Addendum_2-DRAWING_1-0102-SDTL-S011_R01
- 899-2015_DRAWING_1-0102-SDTL-S012_R00 with 899-2015_Addendum_2-DRAWING_1-0102-SDTL-S012_R01
- 899-2015_DRAWING_1-0102-SDTL-S013_R00 with 899-2015_Addendum_2-DRAWING_1-0102-SDTL-S013_R01
- 899-2015_DRAWING_1-0102-SDTL-S014_R00 with 899-2015_Addendum_2-DRAWING_1-0102-SDTL-S014_R01
- 899-2015_DRAWING_1-0102-SDTL-S015_R00 with 899-2015_Addendum_2-DRAWING_1-0102-SDTL-S015_R01
- 899-2015_DRAWING_1-0102-SGAD-R001_R00 with 899-2015_Addendum_2-DRAWING_1-0102-SGAD-R001_R01
- 899-2015_DRAWING_1-0102-SGAD-R003_R01 with 899-2015_Addendum_2-DRAWING_1-0102-SGAD-R003_R01
- 899-2015_DRAWING_1-0102-SGAD-R005_R00 with 899-2015_Addendum_2-DRAWING_1-0102-SGAD-R005_R01
- 899-2015_DRAWING_1-0102-SGAD-R006_R00 with 899-2015_Addendum_2-DRAWING_1-0102-SGAD-R006_R01
- 899-2015_DRAWING_1-0102-SGAD-R007_R00 with 899-2015_Addendum_2-DRAWING_1-0102-SGAD-R007_R01
- 899-2015_DRAWING_1-0102-SGAD-R008_R00 with 899-2015_Addendum_2-DRAWING_1-0102-SGAD-R008_R01
- 899-2015_DRAWING_1-0102-SGAD-R009_R00 with 899-2015_Addendum_2-DRAWING_1-0102-SGAD-R009_R01
- 899-2015_DRAWING_1-0102-SGAD-R010_R00 with 899-2015_Addendum_2-DRAWING_1-0102-SGAD-R010_R01
- 899-2015_DRAWING_1-0102-SGAD-R011_R00 with 899-2015_Addendum_2-DRAWING_1-0102-SGAD-R011_R01
- 899-2015_DRAWING_1-0102-SGAD-R012_R00 with 899-2015_Addendum_2-DRAWING_1-0102-SGAD-R012_R01
- 899-2015_DRAWING_1-0102-SGAD-R013_R00 with 899-2015_Addendum_2-DRAWING_1-0102-SGAD-R013_R01
- 899-2015_DRAWING_1-0102-SGAD-R014_R00 with 899-2015_Addendum_2-DRAWING_1-0102-SGAD-R014_R01

899-2015_DRAWING_1-0102-SGAD-R016_R00 with 899-2015_Addendum_2-DRAWING_1-0102-SGAD-R016_R01

899-2015_DRAWING_1-0102-SGAD-R022_R00 with 899-2015_Addendum_2-DRAWING_1-0102-SGAD-R022_R01

899-2015_DRAWING_1-0102-SGAD-R023_R00 with 899-2015_Addendum_2-DRAWING_1-0102-SGAD-R023_R01

899-2015_DRAWING_1-0102-SGAD-R027_R00 with 899-2015_Addendum_2-DRAWING_1-0102-SGAD-R027_R01

899-2015_DRAWING_1-0102-SGAD-R037_R00 with 899-2015_Addendum_2-DRAWING_1-0102-SGAD-R037_R01

899-2015_DRAWING_1-0102-SGAD-R038_R00 with 899-2015_Addendum_2-DRAWING_1-0102-SGAD-R038_R01

899-2015_DRAWING_1-0102-SGAD-S001_R00 with 899-2015_Addendum_2-DRAWING_1-0102-SGAD-S001_R01

899-2015_DRAWING_1-0102-SGAD-S002_R00 with 899-2015_Addendum_2-DRAWING_1-0102-SGAD-S002_R01

899-2015_DRAWING_1-0102-SGAD-S003_R00 with 899-2015_Addendum_2-DRAWING_1-0102-SGAD-S003_R01

899-2015_DRAWING_1-0102-SGAD-S004_R00 with 899-2015_Addendum_2-DRAWING_1-0102-SGAD-S004_R01

899-2015_DRAWING_1-0102-SGAD-S005_R00 with 899-2015_Addendum_2-DRAWING_1-0102-SGAD-S005_R01

899-2015_DRAWING_1-0102-SGAD-S008_R00 with 899-2015_Addendum_2-DRAWING_1-0102-SGAD-S008_R01

899-2015_DRAWING_1-0102-SGAD-S009_R00 with 899-2015_Addendum_2-DRAWING_1-0102-SGAD-S009_R01

899-2015_DRAWING_1-0102-SGAD-S010_R00 with 899-2015_Addendum_2-DRAWING_1-0102-SGAD-S010_R01

899-2015_DRAWING_1-0102-SGAD-S011_R00 with 899-2015_Addendum_2-DRAWING_1-0102-SGAD-S011_R01

899-2015_DRAWING_1-0102-SGAD-S012_R00 with 899-2015_Addendum_2-DRAWING_1-0102-SGAD-S012_R01

899-2015_DRAWING_1-0102-SGAD-S013_R00 with 899-2015_Addendum_2-DRAWING_1-0102-SGAD-S013_R01

899-2015_DRAWING_1-0102-SGAD-S014_R00 with 899-2015_Addendum_2-DRAWING_1-0102-SGAD-S014_R01

899-2015_DRAWING_1-0102-SGAD-S015_R00 with 899-2015_Addendum_2-DRAWING_1-0102-SGAD-S015_R01

899-2015_DRAWING_1-0102-SGAD-S016_R00 with 899-2015_Addendum_2-DRAWING_1-0102-SGAD-S016_R01

899-2015_DRAWING_1-0102-SGAD-S017_R00 with 899-2015_Addendum_2-DRAWING_1-0102-SGAD-S017_R01

- 899-2015_DRAWING_1-0102-SGAD-S018_R00 with 899-2015_Addendum_2-DRAWING_1-0102-SGAD-S018_R01
- 899-2015_DRAWING_1-0102-SGAD-S019_R00 with 899-2015_Addendum_2-DRAWING_1-0102-SGAD-S019_R01
- 899-2015_DRAWING_1-0102-SGAD-S020_R00 with 899-2015_Addendum_2-DRAWING_1-0102-SGAD-S020_R01
- 899-2015_DRAWING_1-0102-SGAD-S021_R00 with 899-2015_Addendum_2-DRAWING_1-0102-SGAD-S021_R01
- 899-2015_DRAWING_1-0102-SGAD-S022_R00 with 899-2015_Addendum_2-DRAWING_1-0102-SGAD-S022_R01
- 899-2015_DRAWING_1-0102-SGAD-S023_R00 with 899-2015_Addendum_2-DRAWING_1-0102-SGAD-S023_R01
- 899-2015_DRAWING_1-0102-SGAD-S024_R00 with 899-2015_Addendum_2-DRAWING_1-0102-SGAD-S024_R01
- 899-2015_DRAWING_1-0102-SGAD-S025_R00 with 899-2015_Addendum_2-DRAWING_1-0102-SGAD-S025_R01
- 899-2015_DRAWING_1-0102-SGAD-S026_R00 with 899-2015_Addendum_2-DRAWING_1-0102-SGAD-S026_R01
- 899-2015_DRAWING_1-0102-SGAD-S027_R00 with 899-2015_Addendum_2-DRAWING_1-0102-SGAD-S027_R01
- 899-2015_DRAWING_1-0102-SGAD-S028_R00 with 899-2015_Addendum_2-DRAWING_1-0102-SGAD-S028_R01
- 899-2015_DRAWING_1-0102-SGAD-S029_R00 with 899-2015_Addendum_2-DRAWING_1-0102-SGAD-S029_R01
- 899-2015_DRAWING_1-0102-SGAD-S030_R00 with 899-2015_Addendum_2-DRAWING_1-0102-SGAD-S030_R01
- 899-2015_DRAWING_1-0102-SGAD-S031_R00 with 899-2015_Addendum_2-DRAWING_1-0102-SGAD-S031_R01
- 899-2015_DRAWING_1-0102-SGAD-S032_R00 with 899-2015_Addendum_2-DRAWING_1-0102-SGAD-S032_R01
- 899-2015_DRAWING_1-0102-SGAD-S033_R00 with 899-2015_Addendum_2-DRAWING_1-0102-SGAD-S033_R01
- 899-2015_DRAWING_1-0102-SGAD-S050_R00 with 899-2015_Addendum_2-DRAWING_1-0102-SGAD-S050_R01
- 899-2015_DRAWING_1-0102-SGAD-S051_R00 with 899-2015_Addendum_2-DRAWING_1-0102-SGAD-S051_R01
- 899-2015_DRAWING_1-0102-SGAD-S052_R00 with 899-2015_Addendum_2-DRAWING_1-0102-SGAD-S052_R01
- 899-2015_DRAWING_1-0102-SGAD-S053_R00 with 899-2015_Addendum_2-DRAWING_1-0102-SGAD-S053_R01
- 899-2015_DRAWING_1-0102-SGAD-S054_R00 with 899-2015_Addendum_2-DRAWING_1-0102-SGAD-S054_R01

899-2015_DRAWING_1-0102-SSCH-S001_R00 with 899-2015_Addendum_2-DRAWING_1-0102-SSCH-S001_R01

Add: 899-2015_Addendum_2-DRAWING_1-0102-BGAD-S050_R00

899-2015_Addendum_2-DRAWING_1-0102-MGAD-R510_R00

899-2015_Addendum_2-DRAWING_1-0102-MGAD-S508_R00

899-2015_Addendum_2-DRAWING_1-0102-MGAD-S609_R00

899-2015_Addendum_2-DRAWING_1-0102-PDTL-R001_R00

QUESTION AND ANSWER

Q1: Reference Section 01 35 13 Special Project Procedures, Leakage Testing; can the plant effluent water be used for leakage testing.

A1: Water for leakage testing is available from local hydrants. Water used for leakage testing will be metered and paid for by the Contractor.

Q2: Will the City be draining and flushing the following lines prior to demolish and tie ins. See Drawings PGAD-S004 & PGAD- S013 for piping and tie-in locations. Lines to be tied in are 300-PD-SS01 (x2 locations), 350-RAS-SS01 & 600-RAS-SS01. Please clarify.

A2: All work including draining and flushing is the responsibility of the Contractor.

Q3: Re: As per Spec Section 35 20 16.25 – Clarifier Stop Logs and Slide Gates. Are there any additional Stop Logs +/-or Slide Gates required as part of this contract? There are many stop logs & slide gates shown on the Bioreactor drawings. Are these stop logs & slide gates part of this contract?

A3: Stop log and stop gates noted in the schedules provided 35 20 16.25 are Supply and Install. For all other stop logs and stop gates provide blockouts only.

Q4: Re: Clarifier Drawings PGAD-S003, S004, S005 and S013. Is any of the thatched piping shown (cut back piping) on these drawings to be removed under this contract? (Existing 250-FSW-CS01 & Existing 300-PD-CS01 lines) Please clarify.

A4: Removal of piping on these drawings is by others.

Q5: For PGAD-R003: On the drawing at the end of 200-PD-SS01 is HV-115E Mud Valve. We require termination detail for this line, flange, plain end pipe or part of the valve?

A5: Mud Valve is Supply and Install.

Q6: Drawing A014 – Slab and Wall Expansion Jt. And Drawing A004 – Expansion Joint details. There are 2 details provided for the rebar configuration shown at an expansion Jt.. Which one governs ?

A6: Detail 0315-232 only applies to specific locations where a smooth bar crossing the joint is required. These are called out on specific drawings.

Q7: There is a discrepancy in the bioreactors upper slab reinforcing. Most sections say 25M @ 300 T&B EW, however section C contracts this by calling for the BLL to be 25M @ 150, and the remaining three layers are 25M @ 300. Can you please clarify the correct reinforcing.

A7: The elevated slab reinforcement shown in Section C applies to the area bound by gridlines Br to Rr and 6r to 7r.

Q8: There does not appear to be a section through the effluent conduit walls. I would assume that waterstop is required at the top and bottom of the effluent conduit walls at the clarifier, but can you confirm?

A8: Yes waterstops are required.

Q9: Drawing SGAD-S017 has a note adjacent to GL 7s that indicates "pipe encasement see M/S30". Where is this detail found? This does not follow the drawing numbering system that is indicated on the rest of the sheets. In addition, the only pipe in this area is the roof drains on drawing MGADS507. Is this what is supposed to be concrete encased? Is any of the other roof drain piping to be concrete encased?

A9: Yes, roof drains in the electrical room are encased.

Q10: Can you clarify where we are to provide the W2 vs. W5 wall finish? Both of these would appear to apply to the same areas. W2 references walls that are "exposed", but then W5 references walls in buildings, pipe galleries and other dry areas, which are also "exposed". Where are we to use W5 finish and not W2?

A10: See schedule in Specification Section 03 39 00.

Q11: For standard detail 0315-806 on drawing SDTL-A003, both of the sections refer to wall and slabs in dry areas. What is the detail we are to use for the expansion joint sealant for wall and slabs in liquid retaining (i.e.) wet areas?

A11: Refer to notes on Detail 0315-804.

Q12: Is the topping on the double T's at the blower building to be a bonded topping?

A12: Yes, refer to Specification Section 03 30 00.

Q13: 1. Re: Drawing PDDL-A004 Detail 4027-623 – Pipe Expansion Joint Poured In Place with Building Slab. Section 40 27 01 Process Piping Specialties Item 2.3.A.4 notes that harnessed thrust restraint is not required if provided by other means. All concrete encased Flexible Sleeve Couplings are to be as per Item 2.3.B.2, manufactured by Straub. Is additional harnessed thrust restraint required, or do the waterstop rings shown on drawing act as the thrust restraint?

A13: Harnessed thrust restraint are not required for detail 4027-623

Q14: 2. Re: Section 40 27 01 Item 2.3.H. There are 2 -12" exposed (not concrete encased) grip type flexible sleeve type couplings required. Do these require additional harnessed restraint?

A14: Yes

Q15: PGAD-R002-SHT-001: Bullet 1 of the summary of work for this drawing is "900-ML-SS01 from east of gridline 3r to tank TK-R103".

a. Pump P-R156 appears to be mounted to an embed at gridline 3r but this embed is not in the summary of work. Should it be?

b. Are we to start this contract at the beginning of the elbow that drops into the encased line? Or, should this contract start at the mounting flange for P-R156?

c. The end of this line at TK-R103 terminates with a slide gate, SG-R103A. Is there a detail for the flange connection this contract should provide?

A15a: Pump P-R156 will be flanged to the concrete wall under a different contract. Under contract 3, the scope includes a 800 mm spool embed in the wall welded to a 800 x 900 reducer welded to the 900- ML-SS01 pipe.

A15b: This contract starts from the embedded 800 mm diameter spool in the wall at grid line 3r

A15c: The pipe ends flush with the wall. There is no flange.

Q16: PGAD-R002-SHT-001: At the East wall of TK-R300 WAS Sump, a line is identified as 25-DR-SS01. The ISO Detail 1 on PGAD-R021 shows this line as 50-DR-SS01. Which is correct, 25mm or 50mm?

A16: The drain line is 50 mm.

Q17: At gridline Fr and 7r on line 250-PD-SS01 a 4027-605 sleeve is shown. This item appears to be drawn in as a 4027-623 Expansion Joint as labeled on dwg. PGAD-R003, please confirm.

A17: The item referred to is a flexible connection detail 4027-623 as shown on drawing PGAD-R003.

Q18: PGAD-R002-SHT-001:Bullet 6 of the Summary of Work for this dwg is "900 dia access manway between tank TK-R103 and Pipe gallery on gridline 7r". Please provide a detail for these 900dia. Internal Hinge Manways and associated sleeve.

A18: Manway is specified in section 05 50 03.

Q19: ADTL-R003: Missing information for sleeve detail required.

- a. Please provide the pipe size for sleeve/flange shown in the detail.
- b. Is a Seep Ring required for this sleeve?

A19a: Pipe size is 100 mm as shown on detail 1 on drawing PGAD-R021. Assumed question is referencing Detail A and not Detail B on ADTL-R003

A19b: yes a seep ring is required per typical detail of pipe penetration through wall (detail 4027-605 on drawing PDDL-A004)

Q20: ADTL-R001-001 / PGAD-R018: Conflicting Details. The instrument list in addendum 1 lists detail B on ADTL-R001-001 to be used for the multiple sensor assembly. Drawings PGAD-R010, R011 & R012 make reference to detail 2 on PGAD-R018. Please clarify which detail we are to provide for these 6 locations.

A20: detail 2 on PGAD-R018 shall be followed for the works under this contract.

Q21: PGAS-R014 Summary of Work under section B for 250-PD-SS01. This summary of work mentions the valve to be part of the scope. Valves are not mentioned in the summary of work for plans PGAD-R002, R003 and R004. Please confirm that all plug valves on line 250-PD-SS01 prior to the tank walls are to be included in contract 3 scope of work.

A21: The plug valves are included in C3. They are shown on the manual valve schedule in specification section 40 27 02.