City of Austin
PUBLIC WORKS DEPARTMENT
Project Management Division
505 Barton Springs Road, Suite 900, Austin, TX 78704

Date: August 31, 2016

PROJECT: Montopolis Water Reclamation Initiative (WRI) Storage Reservoir and Pump Station Project
CIP ID: 5267.035
IFB# 6100 CLMC601

SUBJECT: Answers to Bidders Questions Number 2

The following are answers to Bidders received on the above project. These answers do not modify the Contract. Any modifications to the Contract will be through Addenda

Q-28: The very well written specifications clearly call for insert type Venturi tubes as described in 13400 supplement pages -9 and -10. However, the mechanical drawings on pages M-2, M-3, and M-4 show full flanged Venturi tubes. To avoid any misunderstandings of the type Venturi tubes required would you please verify that we should only quote the insert type Venturi tubes to the bidding contractors?
A-28: See Addendum No. 3 Section 13400 Process and Instrumentation Controls Systems (PICS) Supplemental Information – Component Specifications.

Q-29: Is the reclaimed water likely to contain suspended particulate that might be of an abrasive in nature?
A-29: The reclaimed water is not abrasive.

Q-30: Questions in reference to Section 11211:
1.01, A, 1 - are API Standards really required? That is typically for industrial and or specialty pumps for pumping chemicals in the industrial market.
A-30: See Section 11211 Horizontal Split-Case Pumps subsection 1.01 A.

Q-31: Questions in reference to Section 11211:
1.01, A, 4 - NSF/ANSI 61 and NSF-ANSI 372 is for drinking water. Aren't we pumping NPW water here? If we need to meet the intent of these standards than bronze isn't allowed and the impeller, wear rings, and other components of the pumps shall be "compatible for drinking water". I.E. Bronze is specified and bronze isn't allowable for these items. Bronze is specified for the impeller wear ring and impeller in 11211-12 datasheets. These impellers shall be cast iron, cast iron casing wear rings (spec currently says that), 316SST shafts (spec currently says that), and 316SST impeller wear rings for drinking water standards.
A-31: See Section 11211 Horizontal Split-Case Pumps subsection 1.01 A.

Q-32: Questions in reference to Section 11211:
2.02, A - states vertical turbine pumps. This should be changed to Horizontal Split Case pumps.
A-32: See Addendum No. 3 Section 11211 Horizontal Split-Case Centrifugal Pumps.

Q-33: Questions in reference to Section 11211:
2.02, B, 1 - states no shaft sleeves whereas 11211-12 datasheets says 410SS shaft sleeves. Shaft sleeves are required on mechanical seals for split case pumps.
A-33: See Section 11211 Horizontal Split-Case Pumps subsection 2.02 A and subsections Supplemental Pump Data Sheets for seal type. See Section 11211 Horizontal Split-Case Pumps subsection 2.02 B for the requirements of the seal listed in in the Pump Data Sheets.

Q-34: Questions in reference to Section 11211:

2.02, B, 3, d - states 400 PSI seal rating. 2.02, B, 8, b. - states 600 PSI seal rating
On a horizontal split case pump the best and highest rated mechanical seal we can use is a John Crane Type 1 XFD1, Carbon rotating, Tungsten stationary face o-ring, Viton bellows or elastomers (2), 200 PSI max suction pressure, and 250 deg. F.
We are operating at 150' TDH with a shutoff head of 178' TDH. So, we would recommend a 100 PSI rated seal for this shut off pressure of 77 PSI which would be a John Crane Type 21 XF171, Carbon rotating, Ni-Resist stationary face o-ring, Viton bellows or elastomers (2), 100 PSI max suction pressure, and 250 deg. F

A-34: No change to the specification, See Section 00700 General Conditions, subsection 6.2.4.

Q-35: Questions in reference to Section 11211:
2.02, B, 3, 10, b - states the mechanical seals are to be fitted with Enviroseal SpiralTrac Version F, N, or D. Crane Deming can supply an abrasive separator including two (2) cyclo-clean Kynar plastic separators with pipe nipples, brass tubing, and fittings. The Enviroseal SpiralTrac is typically used on vertical turbine pumps.

A-35: No change to the specification, See Section 00700 General Conditions, subsection 6.2.4.

Q-36: Questions in reference to Section 11211:
3.03, A, 1 - won't City of Austin require a "laser-alignment" field performed by the Authorized Representative? This is typical of Austin projects and we have the tools to do this in the field.

A-36: No change to the specification, See Section 00700 General Conditions, subsection 6.2.4.

Q-37: Questions in reference to Section 11211:
11211-12 - states a split type mechanical seal is required. We can only supply John Crane single seals on Crane Deming split case pumps type 21 or type 1 seals. Please confirm that is acceptable? We have supplied those to City of Austin before. We physically don't have room in the pump to mount a split seal from John Crane or Chesterton.

A-37: No change to the specification, See Section 00700 General Conditions, subsection 6.2.4.

Q-38: Paragraph 2.03-A.1 calls out two (2) air compressors. However, plans drawing I-4 shows only one compressor mounted on the receiving air reservoir (receiver). Could please confirm if 2 compressors are to be mounted on air receiver?

A-38: Correct. See Section 15208 Hydropneumatic Tank and Control System subsection 2.03 A.1.

Q-39: 2.03.A.3 & 2.03.B say that compressor system shall be sound attenuated to not exceed 70 dba. Is this 70 dba (maximum allowed) sound level to be measured inside the building where compressor is located or at another location such as the plant perimeter? How's the sound attenuation to be accomplished? Is it via a sound enclosure that cover the compressor?

A-39: See Addendum No. 3 Section 15208 Hydropneumatic Tank and Control System subsection 2.03 A.3.

Q-40: In Section 11150 – Grinder Pump Station, the model number called out for the grinder pump is a Goulds M/N RGS2012. 460 volt, 3 phase power is called out. That pump is only available with a single phase motor. Would you accept a Zoeller M/N 7012-0008, 2HP,460 volt, 3 phases pump? This pump will meet the conditions of service required.

A-40: See Section 00700 General Conditions, subsection 6.2.4.

Q-41: Section 11211 – Under Horizontal Split Case Centrifugal Pump data Sheet it calls out Pump P003 Condition of service required, but I don't see a data sheet for Pumps P002 & P001. The plan sheets state these pumps will operate at a lower GPM. Can you clarify the operating conditions for these pumps?

A-41: See Addendum No. 2.

Q-42: Section 11211 – In Horizontal Split Case Pumps, confirm you are requiring witness performance test of the pumps with the job motors?

A-42: See Section 11211 Horizontal Split-Case Centrifugal Pumps subsection 2.06 B.

Q-43: Received request for assistance to complete "Operating Conditions" excel file from Vendor.

A-43: City will not complete Vendor documents.

Q-44: Vendor IPM Systems for tablet chlorinator TC90 would like to be considered as an approve equal on this project.
A-44: See Section 00700 General Conditions, subsection 6.2.4.

Q-45: Our documents do not have a Special Technical Specification for Landscaping and Irrigation. Is this an oversight or does the Engineer feel what is given on the plan sheets to be adequate?
A-45: See City of Austin Standard Specifications Series 600 and Drawing C-25 Landscaping Plan.

Q-46: When is the deadline for questions?
A-46: See Section 00100 Instructions to Bidders subsection 1.i..

Q-47: When do you expect the addenda to be issued?
A-47: Up to August 30, 2016.

Q-48: Is there any discussion on extending the bid date?
A-48: See Addendum No. 1.

Q-49: On plan sheet G-6, in the valve schedule, there are three, 30" gate valves listed for reservoir outlet lines. However, there are only two, 30" outlet lines for the reservoir. In the valve schedule, I think the third, 30" valve should be a 16" valve because there are three, 16" valves on the pump station bypass/pressure relief line shown on plan sheet M-2. Only two are in the valve schedule. Please clarify.
A-49: See Addendum No. 3 Replacement Drawing G-6.

Q-50: On plan sheet G-6, in the valve schedule, there's only one, 12" gate valve listed for the pump station bypass/pressure relief line. However, there are two, 12" gate valves shown on plan sheet M-2 and plan sheet M-5, Section A. Please Clarify.
A-50: See Addendum No. 3 Replacement Drawing G-6.

Q-51: On plan sheet Y-1, at station 5 + 60, a ½" air valve assy is called out off of the 2" W1 line. It reference detail 511S-1BR on plan sheet Y-12. The detail calls out for 1" or 2" air valve assys. Please clarify the size of this air valve assy.
A-51: See Addendum No. 3 Replacement Drawing G-6.

Q-52: On plan sheet G-6, in the valve schedule, the backflow preventer is listed as 1" in size. However, on plan sheet M-2, lower left, it's called out as 2" in size. Please clarify.
A-52: See Addendum No. 3 Replacement Drawing G-6.

Q-53: On plan sheet G-6, in the valve schedule, there are two, 8" pressure reducing valves listed at the existing SAR plant. However, on plan sheet Y-5, there's only one, 8" pressure reducing valve. Please clarify.
A-53: See Addendum No. 3 Replacement Drawing G-6.

Q-54: Section 13122 [Pump Station Metal Building Systems] - Proposed Modifications

1) Design Criteria:
   IBC 2012, Cat. IV
   20 PSF LL NON-RED.
   120/93 MPH, EXP. B
   10 PSF CLL
   3.5 PSF DL
   H/360 DRIFT
   L/240 ALL ROOF MEMBERS

2) ROOF DECK NOT REQD. FOR STANDING SEAM ROOF.

WE ARE PROVIDING COMMERCIAL SS STD. 24 GA. KYNAR ROOF PANEL W/ MAX. PURLIN SPACING OF 4'.
WE ARE PROVIDING AN R-30 BANDED ROOF INSULATION INCLUDING ALL OVERHANGS.
ALL TRIMS & SOFFIT STD. 26 GA. KYNAR.

3) WE ARE ADDING (4) TUBE COLUMNS EACH AT GRIDS A & D.
THIS WILL CLEAN UP ROOF PRIMARY AND SECONDARY ATTACHMENTS.
FOUNDATION FOOTINGS NEED TO BE REVIEWED FOR ANCHOR BOLTS PLACEMENT.

4) WE ARE ADDING LONITUDINAL BRACING.
PORTAL FRAME AT GRID B AND "X" BRACING AT GRID C.
FOUNDATION FOOTINGS NEED TO BE REVIEWED FOR ANCHOR BOLTS PLACEMENT.
WINDOW AND DOOR LOCATIONS AT GRID B NEED TO BE REVIEWED.

5) WE MOVED EW FRAME SETBACK TO ALLOW FOR LEAN-TO FRAMES TO LINE UP.
FOUNDATION FOOTINGS NEED TO BE REVIEWED FOR ANCHOR BOLTS PLACEMENT
WINDOW AND DOOR LOCATIONS AT GRID B NEED TO BE REVIEWED.

A-54: No change to the specification, See Section 00700 General Conditions, subsection 6.2.4.

Q-55: Sheet C-25 states: "trees removed from this site are to be mitigated by payment of $83,225 to the Urban Forest Replenishment Fund." Please advise if the Contractor is responsible for this Payment.
A-55: Mitigation payment paid by Owner.

Q-56: We are seeking prior product approval for the Translucent fiberglass sandwich panel scope of work.
A-56: See Section 00700 General Conditions, subsection 6.2.4.

Q-57: Page 13315-4 (page 4 of 12): The Cisco 3250 specified was end of life in 2011 and is no longer available. We would like to quote an alternative, but I need a better understanding of your application in order to do so. Can you provide more specifics about its function? What do you need this device to do?
A-57: See Addendum No. 3 Section 13315 PLC Network Requirements subsection 2.04.

Q-58: Ref: C-4, C-16: Sheet C-4 has a written call out that states the 3' Valley Gutter for the access road begins at STA 1+50.00 but it is illustrated to begin at approx STA 5+25. STA 5+25 is also the end point for having a cross slope on the road.
A-58: See Addendum No. 2 Replacement Drawing C-4.

Q-59: Ref: G-6, Y-2: The Valve Schedule on G-6 does not contain Tag #'s that allow for cross referencing valves that are tagged on the other Plan Sheets. It would be beneficial to have the Tag # for the valves listed in the schedule.
A-59: Tag Numbers have not been assigned. See Addendum No. 3 Replacement Drawing G-6.

Q-60: Ref: Y-2, SR-207: Sheet Y-2 indicates that the two suction lines coming from the reservoir are 36" with a 30" inline valve and only one reducer. Sheet SR-207 indicates one suction line (adjacent to access road) at 30" into the Tank and the other line at 36"
A-60: See Addendum No. 3 Replacement Drawing Y-2.

Q-61: Section 03315, Page 2, Article 1.03.F.9, please provide the design fill rate for the vent.
A-61: See Addendum No. 3 Section 03315 Prestressed Concrete Tank subsection 1.03 F. 8.

Q-62: Section 03315, Page 2, Article 1.03.F.10, states the maximum foundation bearing pressure is 3,000 psf. Please confirm the maximum allowable net bearing pressure is 4,000 psf as indicated on Page 4-5 of the geotechnical report.
A-62: See Addendum No. 3 Section 03315 Prestressed Concrete Tank subsection 1.03 F. 10.

Q-63: Section 03315, Page 2, Article 1.03.F.12, states the foundation soils are classified as Class C. Please confirm the site is classified as D as indicated on page 4-7 of the geotechnical report.
A-63: See Addendum No. 3 Volume 5 Geotechnical Report Section 4.8.4.

Q-64: Section 03315, Page 9, Article 3.02.A, states indicates the prestressing operations cannot commence until the core wall has obtained a compressive field strength of 4,000 psi or higher as determined by tests. Please confirm prestressing operations can commence once the core wall has attained a strength of at least 1.8 times the compressive stress being applied in accordance with AWWA D110-13.
A-64: No change to the specification, See Section 00700 General Conditions, subsection 6.2.4.2.

Q-65: Section 03315, Page 9, Article 3.03.B.7, indicates the measurements of the wire stress shall be measured continuously on a tensioning drum. Please confirm a calibrated stress-measuring device can be used frequently and immediately after application of the die stressed wire on the tank wall in accordance with AWWA D110-13.
A-65: No change to the specification, See Section 00700 General Conditions, subsection 6.2.4.2.

Q-66: Section 03315, Page 10, Article 3.03.D.1, states a maximum of 22 wires per foot. Per AWWA D110, the minimum clear space between wires shall be 5/16 in. or 1.5 wire diameters, whichever is greater. Based on this spacing requirement, please confirm a maximum of 24 wires per foot will be acceptable for this project.
A-66: See Addendum No. 3 Section 03315 Prestressed Concrete Tank subsection 3.03 D. 1.

Q-67: Section 03315, Page 11, Article 3.04.J, states the outer layer of shotcrete cover shall be 1-inch and applied in a minimum of three coats. Please confirm the 1-inch of shotcrete may be applied in a single coat in accordance with AWWA D110-13.
A-67: See Addendum No. 3 Section 03315 Prestressed Concrete Tank subsection 3.04 J.

Q-68: Please confirm if the Owner will be paying for both the concrete and shotcrete testing.
A-68: See Section 00700 General Conditions Article 13.3.

Q-69: Section 03315, Page 13, Article 3.08.B, states to perform the water leakage test on tank as specified in City Standard Technical Specifications Series 400. Please provide this specification section and confirm that the liquid volume loss for a period of twenty-four hours shall not exceed 1/20th of 1% of the tank capacity, 0.0005 x tank volume in accordance with AWWA D110-13.
A-69: See Addendum No. 3 Section 03315 Prestressed Concrete Tank subsection 3.08 B.

Q-70: Sheet 33, indicates the final grade around the tank to be at El. 598.00. Sheet 79, Elevation – Storage Tank (Reservoir), indicates a 24" compacted clay cap above the tank foundation elevation of 598.50. The geotechnical report recommends the tank foundation bear at least 1.5 feet below finish grade and provide a 12" clay cap around the perimeter of the exposed footings. Please confirm a 24" clay cap around the perimeter of the exposed footing is required yielding a finish grade elevation of 600.50 around the perimeter of the tank.
A-70: See Addendum No. 3 Replacement Drawing SR-201.

Q-71: Sheet 60, shows a striped painted exterior for the storage tank. No other reference is made in the drawings or specifications to a striped paint finish. Please confirm that the tank will need to be finished with an exterior coat of TAMMS as per the Contract Specifications section 03315, page 12, Section 3.07.
A-71: See Addendum No. 3 Section 03315 Prestressed Concrete Tank subsection 3.07.

Q-72: Sheet 79, we recommend running the dome handrail entirely along the flat portion of the dome ring and not along the sloped dome rise. Please confirm this is acceptable.
A-72: See Addendum No. 3 Replacement Drawing SR-201.

Q-73: Sheet 85, 36" Dia. Inlet/Outlet (Equalizer) Elevation, details a 24" Standard Elbow with a 17 degree bend. Please confirm a standard bend of 11.25 or 22.5 degrees will be acceptable for this project.
A-73: No change to detail.

8-31-16

OWNER

ENGINEER/ARCHITECT