Headquarters - Procurement Department
225 North Pearl Street
Jacksonville, Florida 32202

January 31, 2024

ADDENDUM NUMBER: Five (5)

TITLE: Construction Services for Monterey Wastewater Treatment Facility (WWTF) Improvements.

JEA SOLICITATION NUMBER: 1411527446

BID DUE DATE: February 13, 2024; ~~February 06, 2024~~; ~~January 30, 2024~~; ~~January 9, 2024~~

TIME OF RECEIPT: 12:00 PM

TIME OF OPENING: 02:00 PM

THIS ADDENDUM IS FOR THE PURPOSE OF MAKING THE FOLLOWING CHANGES OR CLARIFICATIONS:

Attachments:

a. 1411527446 Addendum 4 Appendix A - Sheet Revisions
b. 1411527446 Addendum 4 Appendix B - Bid Workbook

Change: The Bid Due Date has been extended to February 13, 2024. The question period is closed.

Changes: Bid Workbook:

a. Bid Item #40 has been updated with units of tons in lieu of cubic yards.

Changes: Drawing Sheet Revisions:

a. C-01:
   - The existing odorous air piping (OA) has been added.
b. C-03:
   - The existing odorous air piping (OA) has been added.
   - The demolition limits of the existing 16” stainless steel (SS) forcemain (FM) have been clarified.
c. C-05 (Whole Sheet Revision):
   - Proposed 12” OA-FRP (fiberglass resin pipe) off the existing odor control system has been added.
   - Proposed 4” Drain-PVC off the existing odor control system has been added.
   - The sanitary sewer layout has been changed. MH-18 has been deleted.
   - The routing and callouts of the 20” existing bypass pipe has been updated; pipe material shall be PVC (DR25) with mechanical joint fittings.
d. C-06:
   - Sludge pump orientation has been updated.
   - Proposed transformer has been included on this sheet for clarity.
e. C-07:
   - Proposed 12” OA-FRP (fiberglass resin pipe) off the existing odor control system has been added.

- Proposed 4” Drain-PVC off the existing odor control system has been added.
- The sanitary sewer layout has been changed. MH-18 has been deleted.
- Manhole Schedule has been updated.
- The routing and callouts of the 20” existing bypass pipe has been updated; pipe material shall be PVC (DR25) with mechanical joint fittings.
- The 20” FM-HDPE leaving the new IPS has been updated.

f. C-08:
- Plant water pipe callouts have been updated for clarity.
- Proposed transformer has been included on this sheet for clarity.

g. C-09 (Whole Sheet Revision):
- Plant water pipe callouts have been updated for clarity.
- Proposed 12” OA-FRP (fiberglass resin pipe) off the existing odor control system has been added.
- Proposed 4” Drain-PVC off the existing odor control system has been added.
- The sanitary sewer layout has been changed. MH-18 has been deleted.
- The routing and callouts of the 20” existing bypass pipe has been updated; pipe material shall be PVC (DR25) with mechanical joint fittings.
- The 20” FM-HDPE leaving the new IPS has been updated.

h. C-19:
- Pipe Profile Section A has been updated.
- Callouts for the 20” FM-HDPE leaving the new IPS have been updated in Pipe Profile Sections B and C for clarity.
- Pipe Profile Section D has been updated.

i. C-20:
- Pipe Profile Section E has been updated.
- Manhole Schedule has been updated.

j. M-01:
- Existing odorous air piping has been included for demolition work.

k. M-02.1 (New Sheet):
- Existing odorous air piping photos have been included for demolition work.

l. M-02.1:
- Existing odorous air piping photos have been included for demolition work.

m. M-03 (Whole Sheet Revision):
- Proposed 12” OA-FRP off the existing odor control system has been added.
- Proposed 4” Drain-PVC off the existing odor control system has been added.
- Proposed 2” Potable Water (PW)-PVC piping work connected to the existing odor control system has been added.
- The sanitary sewer layout has been changed. MH-18 has been deleted.
- The routing and callouts of the 20” existing bypass pipe has been updated; pipe material shall be PVC (DR25) with mechanical joint fittings.

n. M-03.1 (New Sheet):
- Proposed 12” OA-FRP off the existing odor control system has been added.
- Proposed 4” Drain-PVC off the existing odor control system has been added.
- Proposed 2” PW-PVC piping work connected to the existing odor control system has been added.

o. M-03.1 (New Sheet):
- Proposed odor control section view has been added.

p. M-04:
- The upper and lower plan views have been updated with proposed 12” OA-FRP.
- Hose wash down station added in the bottom right corner of the upper-level plan view.

- The routing and callouts of the 20” existing bypass pipe has been updated; pipe material shall be PVC (DR25) with mechanical joint fittings.

q. M-05:
- Section views 1, 2, and 3 have been updated with proposed 12” OA-FRP.

r. M-06:
- The sanitary sewer layout has been updated.
- Pipe callouts have been changed for clarity.
- The number and configuration of face mounted slide gates in the new IPS’s influent collection box have been changed.

s. M-07:
- The sanitary sewer layout has been updated.
- Pipe callouts have been changed for clarity.
- The number and configuration of face mounted slide gates in the new IPS’s influent collection box have been changed.

t. M-08:
- Pipe callouts have been changed for clarity.
- The number and configuration of face mounted slide gates in the new IPS’s influent collection box have been changed.

u. M-13:
- Demolition hatching has been added for clarity.

v. M-14:
- Demolition hatching has been added for clarity.

w. M-15:
- Callouts for the plant water system piping have been changed for clarity.
- The configuration of the 6” WAS-DI piping adjacent to the proposed WAS pumps have been changed increase offset from exterior SBR basin wall.

x. M-16:
- Callouts for the plant water system piping have been changed for clarity.
- The configuration of the 6” WAS-DI piping adjacent to the proposed WAS pumps have been changed increase offset from exterior SBR basin wall.

y. M-17:
- Callouts for the plant water system piping have been changed for clarity.

z. M-18:
- Callouts for the plant water system piping have been changed for clarity.
- The configuration of the 6” WAS-DI piping adjacent to the proposed WAS pumps have been changed increase offset from exterior SBR basin wall.
- Note 1 has been added to clarify Class I Division 2 Classified Area envelope requirements.

aa. M-19:
- Callouts for the plant water system piping have been changed for clarity.
- The configuration of the 6” WAS-DI piping adjacent to the proposed WAS pumps have been changed increase offset from exterior SBR basin wall.
- Note 1 has been added to clarify Class I Division 2 Classified Area envelope requirements.

bb. M-20:
- Callouts for the plant water system piping have been changed for clarity.
- The Sludge Pumps have been upsized, inlet and outlet flanges are now 6”. Layout of adjacent piping for the upsized sludge transfer pumps has been changed.
- Note 1 has been added to clarify Class I Division 2 Classified Area envelope requirements.

cc. M-21:
- Callouts for the plant water system piping have been changed for clarity.

- Note 1 has been added to clarify Class I Division 2 Classified Area envelope requirements.

dd. M-22:
- The Sludge Pumps have been upsized, inlet and outlet flanges are now 6". Layout of adjacent piping for the upsized sludge transfer pumps has been changed.
- Note 1 has been added to clarify Class I Division 2 Classified Area envelope requirements.

ee. M-23:
- The configuration of the 6" WAS-DI piping adjacent to the proposed WAS pumps have been changed increase offset from exterior SBR basin wall.
- Note 1 has been added to clarify Class I Division 2 Classified Area envelope requirements.

ff. M-24:
- The configuration of the 6" WAS-DI piping adjacent to the proposed WAS pumps have been changed increase offset from exterior SBR basin wall.
- Note 1 has been added to clarify Class I Division 2 Classified Area envelope requirements.

gg. MD-1:
- Concrete Pipe Support (Detail I) has been added.

hh. MD-5:
- Safety Shower (Detail E) has been added.

ii. S-13:
- Sheet updated to reflect electrical changes. See sheet revisions below.

jj. E-05:
- Comment 13 has been changed.

kk. E-06:
- PWR-GEN-ATS-003 has been updated.

ll. E-07:
- Manufacturer-provided cables added to the influent pumps from Demarcation box.
- The SBR WAS pump size was updated to 7.5hp.
- Effluent pump updated to existing pump.
- Sludge transfer pump updated to 10hp.
- Load calculation summary updated to reflect load adjustment.

mm. E-08:
- Manufacturer-provided cables added to the influent pumps from Demarcation box.
- The SBR WAS pump size was updated to 7.5hp.
- Sludge transfer pump updated to 10hp.
- Effluent pump updated to existing pump.
- UV 2 power feed removed, already fed from MCC-3.
- Centrifuge number updated to 1.
- Load calculation summary updated to reflect load adjustment.

nn. E-09:
- Power Cable Schedule I has been updated.

oo. E-10:
- Power Cable Schedule II has been updated.

pp. E-11:
- Control Cable Schedule I has been updated.

qq. E-14:
- Duct Bank Schedule II has been updated.

rr. E-15:

- Panel Schedules have been updated.

ss. E-16:

- Control Schematics I have been updated.

tt. E-17:

- Control Schematics II has been updated.

uu. E-18:

- Control Schematics III has been updated.

vv. E-19:

- Control Schematics IV has been updated.

ww. E-20:

- Control Schematics V has been updated.

xx. E-21:

- Electrical Site Plan has been updated.

yy. E-22:

- Electrical Site Plan has been updated.

zz. E-23:

- Existing Electrical Building layout has been updated. ACCU-3 has been updated.

aaa. E-24:

- New Electrical Building layout has been updated.

bbb. E-26:

- Existing IPS Electrical layout has been updated.

ccc. E-27:

- New IPS Electrical layout has been updated.

ddd. E-30:

- Note 6 has been added to clarify Class I Division 2 Classified Area envelope requirements.

fff. E-31:

- Note 5 has been added to clarify Class I Division 2 Classified Area envelope requirements.

ggg. E-32:

- Centrifuge Electrical layout has been updated.

hhh. E-33:

- Effluent Pump Station Electrical layout has been updated.

iii. I-01:

- Line type update.

jjj. I-04 (Whole Sheet Revision):

- FP-2-1 shown now as existing.
- Tagging name changes.
- MCC-A and MCC-B shown on drawing now.
- Generator enclosure updated.
- Self-Cleaning Strainer Control Panel (6-I-ICP-2) removed from drawing. Equipment will be hardwired.
- Fiber from Effluent Pump Station RIO Panel line type changed to “New”.

- Centrifuge Panel tag changed to 11-5-ICP-2.
- Six SBR Blower control panels added to drawing with PROFINET.
- Centrifuge 1 Field Operator panel changed to Fiber.
- Generator Enclosure shown with a RIO and manufacturer panel.

kkk. I-05 (Whole Sheet Revision):

- Bar Screen LCP added.
- LIT moved to inside Bar screen control panel.
- Screen over rotate proximity switches added.
- Check valves added on blower discharges.
- PLC line types updated.
- LCP added for bar screen.
- Bar screen MCP updated.
- Collection system tag changed to plant drain system.
- Integral fan added to blower with thermostat.
- Pressure switches added to blowers.
- IO updated.
- Check and butterfly valves added to blowers.

lll. I-06 (Whole Sheet Revision):

- Level switches added.
- Alarm lights added to panels.
- Level transmitters moved to inside control panel.
- Control panel, panel mounted instruments updated.
- Torque switches added.
- I/O updated.
- Future removed from 2-3-2 and M 2-4-2

mmm. I-07 (Whole Sheet Revision):

- I/O updates, removed a limit switch indication, updated.
- LAG3 float tagged, added Lag 2 2-1-C.
- Schematic callout updated.

nnn. I-08 (Whole Sheet Revision):

- Motive pumps updated with VFD details.
- Line size changes
- Process flow updates to SBR's
- IO updated with tag Main control being removed and replaced with SCADA for clarification.
- Minor piping changes
- Plug valves relocated to different lines for motive pumps.
- Line size change for influent
- Off page connectors updated

ooo. I-09 (Whole Sheet Revision):

- Process flow and instrumentation relocations.
- Line size changes, decant header off page connector updated.
- Instrument line types updated.

- Electrical schematic call outs updated.
- Blind flange added to sludge transfer pump discharge.
- Plug valve and cam lock fitting, and plug valve added to line from influent to sludge holding tanks.

ppp. I-10 (Whole Sheet Revision):

- Blowers changed to represent complete packages with integral controllers, vfd, blow off valves, discharge valves, profinet communications back to sbr main plc. Typical for six (6) blowers.

qqq. I-12 (Whole Sheet Revision):

- ZSO's shown wired back to pump station RIO instead of vfd's.
- Interlocks added from pump float control panel to vfd's.
- TSH's shown terminating to MCC's.

rrr. I-13 (Whole Sheet Revision):

- Pressure transmitter's locations changed to upstream and downstream of filters.
- Strainer control panel modified to show as hardwired instead of networked back to RIO.
- Strainer control panel quantity changed to (2).
- Differential pressure switches added to filters.
- IO updates.

sss. I-15 (Whole Sheet Revision):

- FIT-11-5-1 updated and shown wired to 11-5-ICP.
- Existing equipment panels and wiring shown as existing.
- Minor process line changes.
- Discharge chute after diverter gate shown as existing.

ttt. I-16 (Whole Sheet Revision):

- Generator drawing adding to package showing equipment and I/O.

Changes: Specifications:

a. Specification Section 11317: Double Disk Sludge Transfer Pumps - <u>Change</u> items in Table 1 in the specification to the following:
   1. Maximum Capacity – Each Pump (GPM) – 200
   2. Rated Discharge Head in Feet – 40
   3. Maximum Motor Horsepower – 10.0
   4. Suction & Discharge Port Size – 6", 150 lbs., flanged

   (All other items in Table 1 remain the same.)

b. Specification Section 11374: Sequencing Batch Reactor (SBR) – Paragraph 2.02, D. Vacflush/Waste Sludge System. <u>Add</u> paragraph as follows:
   1. The inverter duty motors will be supplied and installed by the motive pump manufacturer under the overall SBR contract.
   2. The inverter duty motors will meet the requirements of the JEA Water & Wastewater Standards Manual, Volume VI: Water Reclamation Facility Specifications, 2023 Edition, Section II.9.9 – Motors.
   3. The pump manufacturer will provide startup services to coordinate the operation of the pumps with the VFDs to be supplied by the Contractor (or Electrical Contractor) and the overall SBR control system. Proper installation of the motors

and acceptable operation of the pumps in automatic, reversing mode will be certified by the pump manufacturer as part of the installation and startup services.

c. Specification Section 15200: Valves and Accessories – Add paragraph as follows:
C. Automatic motor operated stainless steel ball valves shall be provided for the centrifuge wash water system and the influent band screen wash water system. The valves and actuators shall meet the specified JEA standards.

General Clarification:

a. Addendum 4, answer of question 9 should be read: "*Bidder (Contractor) to include in its bid all the applicable information in these Bid Documents and per Site Visit. The Bid Documents consist of Solicitation, Construction Drawings, Construction Specifications, Addendums generated during the Bid Process, JEA Water and Wastewater Standards Manual 2023 and JEA Facilities Manual 2023. Any unforeseen, unknown conditions, material changes (excluding question 8), cardinal changes, design changes, design errors and omission, owner changes, etc. will be addressed as a SWA as indicated in the JEA Solicitation Document for this project.*"

c. Addendum 4, answer of question 14 should be read: "*Please refer to answer of question 9.*"

d. Addendum 4, answer of question 17 should be read: "*See answer to question 11.*"

e. The interior of existing buildings, the interior of the effluent pump station wetwell, and the interior of the SBR tanks will not be painted. The interior of the new electrical building will be painted (Include in Bid Item #27).

f. Bid Item #56 is for surface preparation and painting of existing structures/buildings that paint works are not indicated in the bid documents. Existing structures/buildings that the bid document indicate paint works must be included in Bid Item #27.

g. Odor Control: The existing odor control system shall be modified to maintain operation during construction until the existing Influent Pump Station is taken out of service for renovation. New FRP ductwork and stainless-steel duct supports shall be provided as shown on the drawings provided as part of this addendum. FRP ductwork shall meet JEA standards (III.17. Odor Control, Volume VI: Water Reclamation Facility Specifications, 2023 Edition) and meet the following requirements:

- Duct working pressure not to exceed 20 inches of W.C. positive pressure, and 10 inches W.C. negative pressure.
- Ductwork 18-inches in diameter or less shall have a filament wound thickness of 0.25 inches, and ductwork above 18-inches shall have a filament wound thickness of 0.375 inches.
- The inner surface of the duct shall be free of cracks and crazing with a smooth finish with sufficient resin to expose the inner surface of the fiberglass fibers.

1. **Question:** REF: Sheet M-06 – Calls out concrete pipe supports for the pump discharge piping but detail C/MD-1 is for steel saddle type supports. Confirm which is required.

   Answer: Please see revised sheet M-06. The concrete saddle support type will be required for this application.

2. **Question:** REF: Sheet C-09 – Note 5 says to use C-900 PVC for all 4" plant water. Sheets M-15 & M-16 shows the buried 4" plant water as ductile iron and above ground as PVC. Confirm what material to use for buried 4" plant water and if all buried pipe joints are to be restrained.

   Answer: All piping shall be in conformance with Table II.7, page 33 of JEA Water & Wastewater Standards Manual, Volume VI: Water Reclamation Facility Specifications, 2023 Edition. All fittings will be restrained in accordance with JEA standards. The 4" plant water piping shall be DR18 PVC pipe with DI-MJ fittings for below ground, and Class 53 flanged ductile iron piping above ground.

3. **Question:** REF: Sheets M-15, M-16 & M-17 – Confirm what type of PVC is to be used for the above ground 4" plant water. Also, on M-17 confirm what type of pipe support is required for the above ground 4" plant water.

   Answer: See sheet revision for pipe support clarification. The above ground 4" plant water lines shall be flanged Class 53 ductile iron pipe. All new above ground piping shall be painted and labeld per JEA Standards.

4. **Question:** REF: Sheet C-09 – Says to install a PVC/HDPE transition coupling on the 20" FM. Since the existing pipe is HDPE does this mean the new section of pipe is C-900 PVC?

   Answer: This piping segment has changed. Please see sheet revisions for more detail. The PVC section has been replaced with HDPE. Connection to the 90-degree DI-MJ bend will be made with a MJ/HDPE adapter fitting. The new HDPE forcemain will then connect to the existing HDPE forcemain with an HDPE to HDPE flange adapter.

5. **Question:** REF: Sheet M-06 – Confirm the 20" wall pipe is ductile iron and not HDPE.

   Answer: Please see revised sheet M-06. The 20" wall pipe will be ductile iron, not HDPE.

6. **Question:** REF: Sheet C-09 – Shows the pipe between Manhole 16 and the new pump station is HDPE. Sheets M-06 & M-07 show this pipe as PVC. Which is correct?

   Answer: See sheet revisions for pipe material clarification.

7. **Question:** For SHT1, we recommend the IDSC header be run straight out from the wall penetration and under the nearest jet header. This will prevent air from being entrapped within the IDSC header and hindering the motive pump. Please alter the plans to show this feature.

   Answer: This approach is acceptable and will be handled during shop drawing review.

8. **Question:** REF: Sheet E-21 – The existing electrical ductbank from MH-7, through MH-8, to the existing Operations Building is in direct conflict with the new sanitary manholes and piping. Where shall this ductbank be relocated? What is the dimension and elevation of this ductbank? Are there other electrical or fiber ductbank(s) or direct buried conduits in this area that will need relocated?

   Answer: The new sanitary sewer network has been changed to accommodate the ductbank running from Electrical MH-7 to Electrical MH-8, and on to the Operations building. The ductbank's depth is unknown at this time. The Contractor will be required to hand dig near Electrical MH-7 and Electrical MH-8 to determine the depth of the existing ductbank. Based on the record drawings, the ductbank's cross sectional dimensions are approximately 2' L x 1.5 W' but conditions on site may differ from the record drawings.

9. **Question:** REF: Sheet C-09 – Can the existing 15" Drain-PVC between MH-5 and MH-6 be rerouted temporarily?

   Answer: A re-routing of the 15" pipe between MH-5 and MH-6 will be allowed, but the system would have to be designed to current JEA standards for sanitary sewer systems.

10. **Question:** REF: Sheet M-02, Detail 1 Demolition of Existing Bypass Pump – The note requires a temporary influent pump. Please clarify where the temporary pump is to be located and which construction sequence requires this temporary pumping.

Answer: The new engine driven pump (P-2-2-1) will serve as the temporary emergency influent pump. The pump will be installed, and the discharge piping will be installed to connect to the new discharge piping at the new influent pump station. Temporary suction piping or hose will be provided and connected to the engine-driven pump suction and will be placed into the new influent pump station wetwell. This pump will then serve as the emergency backup pump for the new influent pump station during modification and renovation of the existing influent pump station. Final influent piping will be installed once the work at the existing influent pump station is completed.

11. **Question:** REF: Addendum 3, Question 13 – The current contract documents do not provide enough information to quantify the painting scope as defined in this addendum answer. Please provide plan and section views of all existing structures (not already in the drawings) showing the interior and exterior surfaces to be painted. Please provide plan and section views of all miscellaneous equipment and piping (not already in the drawings) to be painted. Is the existing Effluent Pump Station being painted inside and outside? Please confirm that the interior and exterior of all SBR's are to be painted.

    Answer: Please refer to Addendum 4 Item 3-b. Also, this Addendum (5), General Clarification items **e** and **f** answer this question.
    A painting allowance has been provided. The following surfaces will <u>not</u> be painted:
    - Interior of SBR tanks.
    - Interior of existing buildings.
    - Interior and exterior of the effluent pump station wetwell.

12. **Question:** The Amiad filter model called out, Model 4" SAF-X 3000 has 4" Flanged inlet and outlet. Please confirm 4" flanged inlet and outlet is acceptable.

    Answer: 4" flanged inlet and outlet is acceptable.

13. **Question:** The drain size for model 4" SAF-X 3000 is 2". Please confirm 2" drain is acceptable.

    Answer: 2" Drain is acceptable.

14. **Question:** Please confirm epoxy coated carbon steel housing with 316 stainless steel screen is acceptable.

    Answer: Provide the optional type 316 stainless steel housing with the 316 stainless steel screen.

15. **Question:** Please confirm that 3 – 316 stainless steel replacement screens is acceptable for spare parts.

    Answer: This is acceptable.

16. **Question:** Who is responsible for measuring sludge/mud quantities coming out of SBR's #1-4?

    Answer: Contractor is responsible for quantifying. JEA Inspector, JEA Project Representative and/or JEA Project Manager will review the information/documentation submitted for final review, approval and payment.

17. **Question:** Is this to be measured in the wet or dry?

    Answer: Regarding question 16 of this Addendum (5), will be measured in the wet (Bid Item #40).

18. **Question:** Can the bid form be altered to measure units as tons in lieu of cubic yards?

    Answer: Bid Form Item #40 has been revised to accommodate this change.

19. **Question:** Please confirm that the WAS dry-pit pumps are not required to be FM rated EXP?

    Answer: They do not have to be if the electrical motor and electrical connections are 18 inches above the slab and 18 inches away from the exterior wall of the SBR.

20. **Question:** REF: Sheets E-04 & E-05 – Contractor is required to replace the existing motive pump motors with new inverter duty rated motors. We cannot find a specification for these motors. Please furnish information on motors that will be compatible with these existing pumps.

    Answer: The Contractor will not provide the motors but will provide the VFDs for the Motive Pumps. Please refer to the changes to Specification Section 11374: Sequencing Batch Reactor.