

**LAGUNA MADRE WATER DISTRICT  
PORT ISABEL WASTEWATER TREATMENT FACILITY MODIFICATIONS  
BID NO.: WW-16-10-01**

**ADDENDUM NO. 2**

**BID OPENING TIME:** December 13, 2016 @ 2:00 PM (CDT)

**LOCATION:** Laguna Madre Water District  
105 Port Road  
Port Isabel, TX 78578

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The following additions, deletions, modifications, or clarifications, along with all attachments shall be made to the appropriate sections of the Specifications and Contract Documents and shall become a part of the Contract Documents. **Bidders shall acknowledge receipt of this addendum in the space provided on the Bid Form.**

**CLARIFICATIONS**

- A2-1. Question asked concerning grating and handrail replacement on the existing Aeration Basins. Aeration basin grating and handrail replacement will be performed by Laguna Madre Water District staff. Grating and handrail replacement will not be a Contractor responsibility except as shown on the drawings.
- A2-2. Question asked concerning Drawing 00E04 that suggests the conduit size column and the Blank ID column are in conflict with Duct-bank details and notes on drawings 00E15 and 00E16. Conduits shown in ductbank details 00E15 and 00E16 carry multiple circuit conductors to several areas within the plant. Conduits shown on sheet 00E04 Feeder/Branch Schedule (second column) are conduits that carry its dedicated circuit conductors to each individual load outside the ductbank via a pull box.
- A2-3. Question asked concerning Drawing 00E02, Key Note 3 concerning the re-furbishing of the two existing 100 HP motors if the re-furbishing should be added as an alternative line item and the nameplate information for the motors. At the completion of this project, the plant will be operating on two existing blowers and one new VFD controlled blower. Re-furbishing of the existing motors is not an alternative item. Existing blowers are 240V-3 phase. New service to the facility is 480V-3 phase. Existing blower motors need to be rewound to 480-3 phase. The motor nameplate reads:

Manufacturer: Baldor Reliance, Model #: 1MAS32412-G1-WN, DESIGN: B, HP: 100 hp, Voltage: 240V, 3PH, 60 HZ, INS (B), DP Enclosure, CL&T, Code F, SS 1.15, RPM 3540, 229A.

- A2-4. Question asked concerning maintenance and repair of the street going to the plant site (Woody's Ln) and who would be responsible for the condition of the road. The Contractor is not responsible for maintaining Woody's Ln during construction. Upon completion of Construction, the District will request the City of Port Isabel to proceed with pavement repair.
- A2-5. Question asked concerning the location and distance from the Port Isabel WWTP to other WWTP's that will be used for waste sludge disposal. Distances from Port Isabel WWTP to the other three WWTP's are as follows: Laguna Vista WWTP = 8.0 miles; Isla Blanca = 5.2 miles; Andy Bowie = 8.4 miles. Isla Blanca and Andy Bowie are located on South Padre Island. LMWD reserves the right to decide at the time of the hauling to which of the other plants will be used for waste sludge disposal.
- A2-6. Question asked regarding Drawing 00GS01 requesting confirmation that Note 7 correctly identifies the seismic design class as being "Class E." Note 7 refers to the soil site class per the geotechnical report and not the seismic design category. The seismic design category is "A" for Port Isabel.

## **VOLUME 1 – CONTRACT DOCUMENTS AND TECHNICAL SPECIFICATIONS**

### **A2-7. DOCUMENT 00100 – ADVERTISEMENT FOR BIDS**

- A. In the paragraph "Advertisement For Bids," change the date for the bid opening from "December 6th" to "December 13th." Time of bid opening remains at 2 PM.

### **A2-8. DOCUMENT 00200 – INSTRUCTIONS TO BIDDERS**

- A. In Article 8 – Bid Security, Sub-paragraph 8.01, change the percentage of the bid security from "10 percent" to "5 percent."

### **A2-9. SECTION 09960 - HIGH-PERFORMANCE COATINGS**

- A. After Sub-paragraph 2.03.O., ADD the following in its entirety:  
"P. Epoxy Modified Cementitious Mortar: As manufactured by one of the following or equal:  
1. Tenemec: Mortarclad Series 218."
- B. REPLACE Article 3.13 in its entirety with the following:  
"3.13 EPOXY MODIFIED CEMENTITIOUS MORTAR SYSTEM  
A. Preparation:  
1. Prepare surface by abrasive blast or mechanically abrade to remove laitance, curing compounds, hardeners, sealers and other contaminants and to provide an ICRI-CSP 5 surface profile. Fill large cracks, voids and other surface imperfections.  
B. Application:  
1. Apply filler/surfacer epoxy modified cementitious mortar coating 1/8" thickness.  
2. Apply liner modified aliphatic amine epoxy mortar coating 1/8" thickness."

3. Apply glaze coat modified polyamine epoxy coating 20 mils thickness."
- C. DELETE Sub-paragraph 3.19.C.2 in its entirety.
  - D. DELETE Sub-paragraph 3.19.C.3 in its entirety.
  - E. DELETE Sub-paragraph 3.19.C.4 in its entirety.
  - F. After Sub-paragraph 3.19.C.1, ADD the following in its entirety:
    - "2. Epoxy modified cementitious mortar:
      - a. Grit removal chambers interior walls from one (1) foot below the weir elevation up to the top of the walls.
      - b. Grit Removal Chamber No. 2 effluent box interior walls from floor to top of the walls.
      - c. Headworks Splitter Structure interior walls from floor to top of the walls including the receiving chamber and the four diversion chambers."
  - G. In Sub-sub-paragraph 3.19.D.3.f DELETE the phrase "including galvanized structural steel".
  - H. ADD the following after Sub-paragraph 3.19.D.4:
    - "5. Protective coal tar:
      - a. Miscellaneous underground metals not otherwise specified to receive another protective coating."

## VOLUME 2 – TECHNICAL SPECIFICATIONS

### A2-10. SECTION 11293 – SLIDE GATES

- A. After Sub-Paragraph 2.01.A.4., ADD the following in its entirety:
  - "5. Dynamic Water Control Gates, Inc.
  - 6. WACO Products, Inc."
- B. In the Slide Gate Schedule, change the Mounting Types from "EB" to the following:

GAT-04.5010	FF
GAT-04.5020	FF
GAT-04.5030	FF
GAT-04.5040	FF
GAT-05.5110	NF
GAT-05.5210	NF
GAT-05.5310	NF
GAT-05.5410	NF
- C. In the Slide Gate Schedule, delete Note (2).

### A2-11. SECTION 11371 – DIRECT DRIVE HIGH-SPEED TURBO BLOWER SYSTEM

- A. DELETE Sub-sub-paragraph 1.01.A.1.b in its entirety.

- B. REVISE Sub-paragraph 1.04.G.5 to read as follows:  
"5. Blower Discharge Valve Including Motorized Operators and Control Stations:"
  - C. DELETE Sub-sub-paragraph 1.04.G.5.c in its entirety.
  - D. DELETE Paragraph 2.13 in its entirety.
  - E. DELETE Paragraph 2.14 in its entirety.
  - F. REPLACE Sub-sub-paragraph 2.20.B.2.a. in its entirety with the following:
    - "a. Local Control Mode:
      - 1) In this control mode, the blower start/stop and capacity control shall be adjustable via the VCP LOI panel interface.
      - 2) Capacity control is based on constant pressure. Capacity control setpoints shall be operator selectable at the VCP LOI.
      - 3) The blower shall control the output speed or variable diffuser vanes of the blower to achieve the desired pressure using a PID algorithm to calculate the error in the control variable and adjust the speed or variable diffuser vanes to meet the control setpoint."
  - G. REPLACE Sub-paragraph 2.20.B.3 in its entirety with the following:  
"3. Provide the following control mode for automatic control of the blower. The default VCP control mode for this project shall be Pressure Control."
  - H. DELETE Sub-paragraph 2.20.B.4. in its entirety.
  - I. DELETE Sub-paragraph 2.20.B.5. in its entirety.
  - J. DELETE Sub-paragraph 2.20.B.6. in its entirety.
- A2-12. SECTION 11378A – MEMBRANE DISK FINE BUBBLE DIFFUSED AERATION SYSTEM
- A. After Sub-paragraph 2.01.A.3., ADD the following in its entirety:  
"4. Environmental Dynamics International, Inc. (EDI)."
  - B. REPLACE Sub-sub-paragraph 2.03.D.3.a with the following text:  
"a. Provide PVC or glass fiber reinforced polypropylene (GFPP) baseplate to completely support membrane diffuser element and prevent reverse flexing.
  - C. After Sub-sub-sub-sub-paragraph 2.03.D.4.a.3), add the following:  
"4) EDI: Saddle Mount"

A2-13. SECTION 15052 - COMMON WORK RESULTS FOR GENERAL PIPING

- A. In Sub-paragraph 3.05, PIPING SCHEDULE:
- 1) CHANGE the NPW Underground pipe material from "DIP" to "PVC"
  - 2) CHANGE the Thickness Class from "150" to "C900, DR 25"
  - 3) CHANGE Spec. Section from "15211" to "15244".

A2-14. SECTION 15112 – BUTTERFLY VALVES

- A. REPLACE Sub-paragraph 2.01.C.1. in its entirety with the following:  
"1. Material: Cast iron, nickel aluminum bronze, or ductile iron with Type 316 stainless steel edge that matches seat in valve body."

### VOLUME 3 – TECHNICAL SPECIFICATIONS

A2-15. SECTION 17101 – SPECIFIC CONTROL STRATEGIES

- A. REPLACE Sub-subparagraph 3.04.I.3.d. in its entirety with the following:  
"d. In the future, when the (2) additional turbo aeration blowers are installed the Blower manufacturer shall provide a VCP with a dedicated PLC for each blower and a master control panel (MCP) with a dedicated PLC to start/stop/control speed of each blower. The future MCP shall have the capability to switch between Pressure, Flow, and Dissolved Oxygen (DO) Trim control modes. The MCP will assume all monitoring and control functions of the Aeration Basins equipment and instrumentation including the DO probes, thermal mass flow meters, and modulating butterfly control valves."

A2-16. SECTION 17302 – FLOW MEASUREMENT: MAGNETIC FLOWMETERS

- A. After Sub-paragraph 2.01.A.1, ADD the following in its entirety:  
"2. Endress+Hauser."

A2-17. SECTION 17305 – FLOW MEASUREMENT: THERMAL MASS

- A. After Sub-paragraph 2.01.A.1.c., ADD the following in its entirety:  
"d. Endress+Hauser."

A2-18. SECTION 17506 – ANALYZERS: DISSOLVED OXYGEN (DO)

- A. After Sub-subparagraph 2.01.A.2., ADD the following in its entirety:  
"3. Endress+Hauser Liquiline Transmitter with compatible DO probe."

A2-19. SECTION 17604 – TEMPERATURE MEASUREMENT: RTD

- A. After Sub-subparagraph 2.01.A.4, ADD the following in its entirety:  
"5. Endress+Hauser."

A2-20. SECTION 17730 – CONTROL SYSTEMS: PCS COMPUTER EQUIPMENT

- A. In Sub-subparagraph 2.04.B.3.d, REPLACE "2 TB" with "16 GB DDR4 SDRAM".

**VOLUME 4 – DRAWINGS**

A2-21. DRAWING NO. 10S01

- A. In Platform Framing Plan B, CHANGE the grating material from "galvanized steel" to "Aluminum."

A2-22. DRAWING NO. 10M01

- A. In Section 1, CHANGE the pipe diameter reference callout from "18-NPW" to "4-NPW."

A2-23. DRAWING NO. 05M04

- A. In Partial Plan G, ADD equipment tags for the slide gates:

Basin 1 (left basin) "4."  
Basin 2 (left center basin) "5."  
Basin 3 (right center basin) "6."  
Basin 4 (right basin) "7."

- B. Under the Equipment Tag list, ADD the following:

4. GAT-05.5110  
5. GAT-05.5210  
6. GAT-05.5310  
7. GAT-05.5410

A2-24. DRAWING NO. 00E04

- A. For Conduit 3207, Under Remarks, ADD "Provide with pull string and end cap for future" and under Notes, add, "2."  
B. For Conduits 5007 and 5008, Under Remarks, DELETE "Provide with pull string and end cap for future" and under Notes, delete "2."  
C. For Conduits 5307 and 5308, Under Remarks, ADD "Provide with pull string and end cap for future" and under Notes, add, "2."

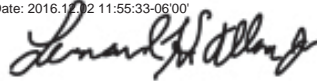
This Addendum No. 2, pages 1 through 7, shall become part of the Contract and all provisions of the Contract shall apply thereto.

The time provided for completion of the Contract is not changed.

Bidders shall acknowledge receipt of all Addenda by number in the space provided in the Proposal.

CAROLLO ENGINEERS, INC.

Digitally signed by Leonard Allen Jr.  
Contact Info: Carollo Engineers, Inc.  
Date: 2016.12.02 11:55:33-06'00'



END OF ADDENDUM NO. 2