

February 20, 2017

NOTICE OF ADDENDUM ADDENDUM 2

CONTRACT NO. 7500 PROJECT NO. 10434 UNIT WELL 31 WATER TREATMENT PLANT

Revise and amend the contract document(s) for the above project as stated in this addendum, otherwise, the original document shall remain in effect.

CHANGES TO THE SPECIFICATIONS MANUAL:

1. Section 00 01 10 – Table of Contents:

Replace with attached revised Table of Contents

- 2. Section 01 77 00 Closeout Procedures:
 - 1.02, A, 1, Revise with the following: "Deadline for beneficial occupancy will be June 1, 2018"
 - 1.03, A, 1, Revise with the following: "Deadline for substantial completion will be July 1, 2018"
- 3. Section 01 57 12 Erosion Control:
 - 1.01, Add item D:
 - **D:** Permit Compliance:
 - Erosion control and storm water management permit coverage under both the WI-DNR WPDES General Permit and the City of Madison Engineering Division Erosion Control Permit has been approved and established for this project. Contact the Owner for copies of existing permit approvals and associated documents.
 - 2. Contractor is responsible to abide by all conditions of the Erosion Control permits associated with this project.
 - 3. The City of Madison Erosion Control Permit for this project requires erosion control inspections and online reporting, which will be the responsibility of the Contractor. Inspections shall be conducted a minimum of once per week and also after every 24-hour rain event of 0.5" or more precipitation. The results of these inspections shall be entered on the City's permit and inspection tracking system.
 - 4. The City system for inspection reporting is Accela Citizen Access (ACA). Prior to proceeding with any land disturbing activities on site, the Contractor shall coordinate with Owner to re-activate the existing permit status, designate the Authorized



Inspector(s), and review administrative procedures related to the ACA permit system.

4. Section 04 20 00 - Unit Masonry Assemblies:

2.02, D, Add item 3:

3: Additional approved stone manufacturer: MarcStone, LLC PO Box 52,

Hampton, MN 55031

Phone 651-437-7972 Fax 651-437-4821

E-Mail: sales@marcstone.com. www.marcstone.com

- 5. Section 22 10 06 Plumbing Specialties:
 - 2.13, A, Revise the first sentence as follows: "Trench drains shall be Zurn, ACO Drain or ABT, Inc., trench drain system....."
- 6. Section 22 07 19 Plumbing Piping Insulation:
 - 2.01, C, Revise the first sentence as follows: "Fittings on all water piping shall be....."
- 7. Section 26 32 12.12 Packaged Diesel Engine Generator System for Exterior Installation:

Replace with the attached section 26 32 12.12

- 8. Section 31 11 00 Clearing and Grubbing:
 - 1.01, B (Basis of payment): Replace with: "All clearing and grubbing work considered incidental."
- 9. Section 31 22 20 Earthwork for Building Sites:
 - 1.01, C, 1, Replace with the following: "Excavation related to structures shall be included in bid item 1 (CONSTRUCTION OF UNIT WELL NO.31 WATER TREATMENT PLANT)"
- 10. Section 31 23 16- Structure Excavations and Backfills:
 - 1.01,D, 1, Replace with the following: "Excavation related to building, foundation and structures shall be included in bid item 1 (CONSTRUCTION OF UNIT WELL NO.31 WATER TREATMENT PLANT)"
- 11. Section 31 23 30- Excavation, Backfilling and Compacting:
 - 1.01, Add item D:
 - D: Related Sections: Section 32 91 00 Topsoil Placement
 - 1.02, B, Delete in its entirety and replace with the following:
 - **B:** Method of Measurement:
 - 1. Measurement of Excavation
 - a. Contractor will be responsible for the completion of a pre-construction site topographic survey of entire site for generation of a new existing site surface model.



- b. Upon completion of subbase, contractor will be responsible for a "finished subbase" topographic survey for generation of a finished subgrade site surface model.
- c. The difference between the two surface models will be calculated by the Engineer and confirmed with contractor for estimate of material excavated.

2. Excavation:

- a. Measure by volume of material in its original position.
- Compute volumes in cubic yards by average end area method determined from original and final cross sections.
- c. Includes placement on-site.
- 3. Remove excess materials:
 - a. Measure by volume of material in its original position.
 - b. Compute volumes in cubic yards by average end area method determined from original and final cross sections.
- 4. Excavate Organic Materials:
 - a. Measure by volume of material in its original position.
 - b. Compute volumes in cubic yards by average end area method determined from original and final cross sections.
 - c. Includes placement on-site.
- 5. Remove excess topsoil:
 - a. Measure by volume in cubic yards.
 - Basis of measure will be Loose Volume (vehicle measure) of material removed from site
- 6. Granular Borrow Material
 - a. Measure only materials that are accepted for use. (outside of building footprint)
 - b. Measure by volume in cubic yards.
 - Basis of measure will be Loose Volume (vehicle measure) of material delivered to site.
- 7. Trenching for sanitary sewers, water main, and appurtenances, including excavation, backfill, and compaction Considered incidental
- 12. Section 31 25 10 Temporary Erosion Control:

1.01, C, Add item 7:



- 7: Tracking Pads: Measure by cubic yards of material placed.
- 13. Section 32 11 26 Crushed Aggregate Base Course:
 - 1.01, Add items C and D:
 - C: Method of Measurement: Measure by the cubic yard of material acceptably placed.
 - D: Basis of Payment: Payment for acceptable quantities of a subbase shall be at the Contract Unit Price as listed on the Bid Form. All associated work items shall be considered incidental.
- 14. Section 32 18 40 Concrete Sidewalks, Safety Islands and Steps:
 - 1.01, C, Add item 3:
 - 3: Payment for construction of other concrete related site items including concrete driveway entrances, slide gate paths and slope stabilization shall be at the contract unit price as listed on the Proposal Page Bid Form. All associated work items shall be considered incidental.
- 15. Section 32 91 00 Topsoil Placement:
 - 1.01, C, Delete in its entirety and replace with:
 - C: Basis of payment: See section 31 23 30
- 16. Section 32 92 00 Lawns and Grasses:
 - 1.01, Add item D:
 - D: Basis of payment: See section 32 92 12 Turf Establishment
- 17. Section 32 92 12 Turf Establishment:
 - 1.01, D, Replace with the following:
 - D: All materials and labor necessary for the establishment of turf or native grasses shall be measured and paid for as a unit price, listed on Proposal Page Bid Form for the following items/unit of measure
 - i. Lawn Seeding: Square yards planted and established
 - ii. Native Seeding: Square yards planted and established
 - iii. Seed and Mulch during construction: Square yards planted and established
- 18. Section 32 31 13 Chain Link Fence:
 - 1.01, C, Add item C:
 - C: Basis of Payment: Payment for acceptable quantities of Chain link fence including steel fabric, framing, accessories and installation shall be at the Contract Unit Price as listed on the Bid Form. All associated Work items shall be considered incidental.
- 19. Section 32 31 33 Security Fence:

1.01, Add item C:



- C: Basis of Payment: Payment for acceptable quantities of Security fence including fence materials, setting materials and all associated items shall be at the Contract Unit Price as listed on the Bid Form. All associated Work items shall be considered incidental.
- 20. Section 32 31 43 Electrically Operated Sliding Gate:
 - 1.01, B, 3, Add the following to the list of allowable gate contractors:

Patriot Fence PO Box 596 Sussex, WI 53089 926 Silvernail Rd. Pewaukee, WI 53072 (262)521-0029 Phone/Fax (Office)

1.01, C, 1, Revise with the following: "The gate and gate controller shall be furnished and installed to complement each other as a system."

1.01, Add item D:

D: Or equal contractor meeting the above specified qualifications and experience requirements.

1.01, Add item E:

- E: Basis of Payment: Payment for each fence gate and associated items shall be at the Contract Unit Price as listed on the Bid Form. All associated Work items shall be considered incidental.
- 21. Section 32 93 00- Exterior Plants:
 - 1.01, D, 1, Replace with the following:
 - 1: All materials and labor necessary for the installation of all plant material shall be measured and paid for as a unit price, listed on Bid Form for the following items/unit of measure."
 - a. Shade Trees: Each tree successfully planted
 - b. Evergreen Trees: Each tree successfully planted
 - c. Ornamental Trees: Each tree successfully planted
 - d. Shrubs: Each shrub successfully planted
 - e. Ornamental Grasses: Each planting
 - f. Mulch: Cubic yards placed
- 22. Section 33 16 30 Disinfection of Water Storage Facilities:
 - 3.01, B, Add the following:
 - a. Though the existing storage tank is not currently in service, it is currently and will be filled with water upon commencement of construction (estimated depth of 6-ft).
 - b. There is a 2-inch corporation stop connection currently connected to the outlet piping that will be available to drain the tank as required for disinfection and or other activities.
- 23. Section 33 41 00 Storm Sewer Systems:



1.01, C, Add the following:

- a. Special Structures (backwash tank overflow structure and casting): Measure each as a lump sum.
- b. Pond Riser outlet structure and casting: Measure each as a lump sum.
- 24. Section 40 92 13 Process Regulating Valves:
 - 2.02, Valve note in title should read "V-PSV-2" in lieu of "V-PSA-1"
- 25. Section 44 44 15 Gas Chlorination System:
 - 2.02, E, 1, Revise to read "Provide 1.5-inch NPT ball valve main connection complete with diffuser"
 - 2.02, J, (Chlorine Gas Detector), Delete in its entirety
 - 2.02, N (Emergency Shutoff System), Delete and replace with the following:

N: Emergency Shutoff System:

- 1. Provide one emergency shutoff system for chlorination system. The emergency shutoff system shall be Halogen Gemini Emergency Shutoff System as manufactured by Halogen Valve Systems, Inc., or equal, for chlorine cylinder valves.
- 2. The emergency shutoff system shall be comprised of two electrically-driven actuators that act directly upon the cylinder valve stem with a control panel. Motors shall be 12 Vdc powered by an uninterruptible 12-volt battery power supply in the control panel.
- 3. Actuators shall mount upon the cylinder valve and yoke assemblies by means of a drive bushing with parallel rods. Provide adapter, if necessary, for utilizing the actuator with the chlorine regulator. The actuator shall be powered only in the closing direction. The actuator shall allow the plant operator to open or close the valve on the 150-pound cylinder using a twisted wrench when the actuator is installed.
- 4. Provide storage bracket for temporary placement of actuator during cylinder changeout. One twisted chlorine wrench shall be provided. CONTRACTOR shall mount storage brackets in a convenient location adjacent to the chlorine cylinders. Gemini control panel shall be contained within a single electrical enclosure of NEMA 4X rating.
- 5. Control panel shall contain a microprocessor programmed to control the valve closing cycle and torque applied, monitor and display status of battery, charging system and system readiness, as well as provide diagnostic system checks during the test cycles. Control panel shall detect a declining battery charge and close actuators on sustained power loss.
- 6. The control panel shall house the battery and charging system. Status lights on the face of the controller shall indicate status of charger, battery, armed condition, and fault condition. Actuator test buttons for each actuator shall be mounted externally on the control panel.
- 7. The control panel shall be designed to receive an external dry contact input signal from the emergency push button and chlorine leak detector in chlorine room or the



test button on the control panel. The control panel shall provide output signals which initiate the actuators. The control panel shall be 120 Vac.

- 8. The control panel and emergency push buttons shall be provided as part of this system and mounted in the location as shown on the drawings. Provide cable from control panel to actuators. Coordinate cable length with CONTRACTOR.
- 9. Provide optional relay interface module and exterior reset switch.

CHANGES TO THE DRAWINGS:

- 1. Drawing C6, Add the following notes:
 - 1. Earthwork items provided on bid form are estimated, payment will be made for completed work as defined in section 32 23 30
 - 2. Existing condition of site has changed since original site survey due to the construction of the 1.5 MG reservoir, See Section 31 23 30 regarding guidance related to new site topographic survey and calculation of earthwork items.
- 2. Drawing CD2, Detail A, Add: ABY Polydrain PDX10 as equal.
- 3. Drawing GP2, Clarification: Valve (VFW-1) is an exterior site valve near the reservoir.
- 4. Drawing DM2, Detail 3/DM2, Add: Check valve in chilled water supply branch pipe to cooling coil.
- 5. Drawing M01, Add: 4" hub drain near well to be located not closer than 24" from concrete well base.
- 6. Drawing M02, Add: 4" hub drain near well to be located not closer than 24" from concrete well base.
- 7. Drawing GM2, Revise the drawing as follows:
 - a. Exhaust Fan Schedule, Revise motors for EF-1 and EF-2 to TEFC type motors.
 - b. Motorized Damper Schedule, Revise actuator enclosure types for MD-1, 2 & 5 to NEMA 4X in lieu of NEMA 4.
- 8. Drawing E10, Keyed note 14: Add the following:
 - a. PROPOSED CARD READER CONTROL PANEL(S) WITH MANDOORS AND GATE ACCESS CARD READERS FURNISHED AND TERMINATED BY THE OWNER'S SECURITY CONTRACTOR.
 - b. THE ELECTRICAL CONTRACTOR SHALL MOUNT THE CARD READER CONTROL PANEL(S) ON THE WALL INSTALL THE CONDUITS AND CONDUCTORS. THE ELECTRICAL CONTRACTOR SHALL COORDINATE ALL WORK WITH THE OWNER'S SECURITY CONTRACTOR.
 - c. THE DOOR INTRUSION SWITCHES SHALL BE FURNISHED BY THE SYSTEM INTEGRATOR AND INSTALLED AND WIRED BY THE ELECTRICAL CONTRACTOR. SEE THE DOOR ACCESS AND MONITORING CONTROL DIAGRAM FOR ADDITONAL INFORMATION.
 - d. THE 24 VOLT DC ELECTRIC DOOR STRIKES ARE PROVIDED BY THE DOOR MANUFACTURER AND SHALL BE WIRED BY THE ELECTRICAL CONTRACTOR.



- e. THE ELECTRICAL CONTRACTOR SHALL INSTALL 4 INCH SQUARE X 2-1/8 INCH DEEP BACK BOXES SHOWN FOR EACH DOOR CARD ACCESS READER NEAR EACH ENTRY DOOR AS SHOWN AND ROUTE A 3/4 INCH CONDUIT WITH A CAT 6 CABLE FROM THE CARD READER CONTROL PANEL TO EACH CARD ACCESS READER AS REQUIRED BY THE SECURITY CONTRACTOR.
- f. THE CARD READER TERMINATIONS AT THE CARD READERS AND CARD READER CONTROL PANEL(S) SHALL BE MADE BY THE OWNER'S SECURITY CONTRACTOR.
- g. THE DOOR STRIKES ARE 24VDC FOR EACH DOOR SHOWN. THE ELECTRICAL CONTRACTOR SHALL ROUTE A 3/4 INCH CONDUIT WITH A 2/C #18AWG SHIELDED CABLE FROM THE 4 INCH SQUARE X 2-1/8 INCH DEEP SAME BACK BOX TO EACH DOOR STRIKE AND TERMINATE AS REQUIRED AT THE DOOR. THE TERMINATIONS AT THE CARD READER CONTROL PANEL SHALL BE MADE BY THE OWNER'S SECURITY CONTRACTOR.
- h. THE HOERUN CONDUITS FOR THE CAT 6 CABLE AND 2/C #18AWG SHIELDED CABLE SHALL BE ROUTED IN 1 INCH CONDUIT FROM THE BACK BOXES TO THE CARD READER CONTROL PANEL.
- i. THE ELECTRICAL CONTRACTOR SHALL ROUTE A 2 INCH CONDUIT WITH 6 CONDUCTOR #12AWG CONTROL CABLE OR INDIVIDUAL CONDUCTORS FROM EACH GATE CONTROLLER AS SHOWN ON THE PLANS TO THE CARD READER CONTROL PANEL(S).
- j. THE ELECTRICAL CONTRACTOR SHALL ROUTE A 3/4 INCH CONDUIT WITH 2 #12 AND 1 #12 GROUND FROM PANELBOARD L1, CKT #39 TO EACH CARD READER CONTROL PANEL.
- k. THE ELECTRICAL CONTRACTOR SHALL ROUTE A 1 INCH CONDUIT WITH 2 #14 CONDUCTORS, 2 #14 SPARE AND 1 #14 GROUND FROM EACH DOOR INSTRUSION SWITCH TO THE SCADA CONTROL PANEL.
- 1. THE ELECTRICAL CONTRACTOR SHALL ROUTE 1 INCH AND 2 INCH CONDUITS WITH THE CABLES SHOWN ON THE DOOR ACCESS AND MONITORING CONTROL DIAGRAM FROM THE CARD READER CONTROL PANEL(S) TO THE SCADA CONTROL PANEL.
- m. SEE PROPOSED DOOR ACCESS AND MONITORING CONTROL DIAGRAM FOR ADDITIONAL INFORMATION.

9. Drawing E24:

a. For the proposed door access and monitoring control diagram located on this page 24, please delete the lower paragraph where it states the following:

"PROPOSED 1 INCH CONDUITS FURNISHED AND INSTALLED FOR THE OWNERS SECURITY CONTRACTOR TO INSTALL (TWO) 2/C #18 AWG CABLES FOR EACH ELECTRIC DOOR STRIKE AND A 6/C #22 SHIELDED CABLE FOR EACH PROPOSED CARD READER."

b. For the same control diagram where it states the following:

"PROPOSED 1 INCH CONDUITS FURNISHED AND INSTALLED FOR THE OWNERS SECURITY CONTRACTOR TO INSTALL 2/C #18 AWG CABLES FOR EACH



ELECTRIC DOOR STRIKE AND A 6/C #22 SHIELDED CABLE FOR EACH PROPOSED CARD READER"

Delete and replace with the following:

"PROPOSED 1 INCH CONDUITS EACH WITH ONE (1) 2/C #18 AWG CABLE FOR EACH ELECTRIC DOOR STRIKE AND A ONE (1) 6/C #22 SHIELDED CABLE FOR EACH PROPOSED CARD READER FURNISHED AND INSTALLED BY THE ELECTRICAL CONTRACTOR AND TEMRINATED AT EACH END BY THE OWNER'S SECURITY CONTRACTOR."

CHANGES TO (BID EXPRESS) SECTION B: PROPOSAL PAGE BID FORM:

1. The Bid Express online Proposal Page Bid Form has been revised as part of Addendum 2. Bids shall be submitted prior to the bid deadline, using the revised Proposal Page issued with Addendum 2. Access the revised Proposal Page and bid online at https://bidexpress.com.

Please acknowledge this addendum on page E1 of the contract documents and/or in Section E: Bidder's Acknowledgement on Bid Express.

Electronic version of these documents can be found on the Bid Express web site at:

http://www.bidexpress.com

If you are unable to download plan revisions associated with the addendum, please contact the Engineering office at 608-266-4751 receive the material by another route.

Ian L. Larson, PE, BCEE

Principal Engineer, Madison Water Utility

2-21-17



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