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ENGINEER'S SUPPLEMENTAL INSTRUCTIONS NO. SEVEN (007)
(Via Posting to FTP Site and Electronic Mail)

TO: Wes Weaver
John Jacob
Jeff Burst
Weaver General Construction Co.

DATE: May 27, 2011

FROM: Roger J. Sams, P.E.
Mark A. Morton, P.E.
GMS, Inc.

RE: Harold D. Thompson Regional Water Reclamation Facility (HDTRWRF)-Phase 1
ENGINEER'S SUPPLEMENTAL INSTRUCTIONS NO. SEVEN (007) (ESI-007)

This ESI-007 addresses modifications to the project drawings relative to the Headworks Building which were issued May 17, 2011 for the preparation of the final CMO for the Headworks Building scope of work. The modifications described in this ESI will appear on the Pikes Peak Regional Building Department (PPRBD) building permit submittal drawings. Should any of these modifications require changes to project specification sections that have been issued, the specification changes will be covered in a separate addendum. In the meantime, please distribute this information to any and all suppliers and subcontractors so these items may be accounted for in the final CMO prepared for the Headworks Building scope of work. The following is a list of drawing modifications arranged by sheet number.

- Sheet HW-1
 - The downspout shown in the East Building Elevation at the northeast corner of the building shall be relocated 36 feet from the south face of the building so it discharges directly into the finish grade swale at that location.
- Sheet HW-2
 - The total number of mechanical pushbutton security locks required at the Headworks Building, and the specific doors designated for these security locks, shall be decided upon in Design Team Conference No. 42 to be held on May 27, 2011. The desired manufacturer and model number of the mechanical pushbutton security locks shall also be decided at DTC No. 42.
- Sheet HW-5
 - Sheet Note No. 4 shall be revised to read as follows:

"4. PROVIDE A TOTAL OF ONE HOIST TROLLEY AND ONE MANUAL CHAIN HOIST FOR THIS BUILDING. THE HOIST TROLLEY AND MANUAL CHAIN HOIST SHALL

BE DELIVERED TO THE OWNER FOR STORAGE IN A SUITABLE ENVIRONMENT."

- A new Sheet Note No. 7 shall be added to read as follows:

"7. ALL EQUIPMENT BEAMS AND THEIR CONNECTIONS SHALL BE FIELD-PAINTED SAFETY YELLOW WITH THE EPOXY COATING SYSTEM SPECIFIED FOR CHEMICAL FEED AREAS IN THE PROJECT MANUAL."
- Sheet HW-11
 - Regarding modifications to the roof framing plan, any changes suggested by truss suppliers shall be discussed and reviewed with the Owners prior to modifying the Drawing. Should any revisions be deemed advantageous by the Owner and Engineer, the Drawings will then be revised at that time.
- Sheet HW-14
 - The composite sampler located in the Electrical and Control Room has been relocated to the northeast corner of that room. This location change, in turn, requires the relocation of LCP GW-1, LCP CV-1, LCP GP-2 and LCP GP-1. The new positions of these pieces of equipment are as follows; beginning along the north wall of the Electrical and Control Room, at the east side of the east interior window, and following clockwise around to the south wall of the room, the order of the equipment is LCP GW-1, then composite sampler, then LCP CV-1, then LCP GP-2, then LCP GP-1.
- Sheet HW-17
 - A new note will be added to Section A/HW-17 requiring the Contractor to verify the final location of the rear screenings container guiderails with the Owner, Engineer and supplied equipment.
- Sheet HW-21
 - A new Note No. 5 shall be added to the Drawing to read as follows:

"5. THE NONPOTABLE WATER SUPPLY SYSTEM SHOWN IS APPLICABLE TO THE DESIGN BASIS EQUIPMENT SPECIFIED IN THE PROJECT MANUAL. THE CONTRACTOR SHALL VERIFY THE WATER SUPPLY REQUIREMENTS OF ALL EQUIPMENT FURNISHED. ALL WATER SUPPLY REQUIREMENTS OF ALTERNATIVE EQUIPMENT MODELS AND/OR MANUFACTURERS SHALL BE PRESENTED TO THE OWNER AND ENGINEER PRIOR TO APPROVAL AND INSTALLATION OF THAT ALTERNATIVE EQUIPMENT.
- Sheet EL-1
 - The following three items have been added to the Electrical Abbreviations Schedule:
 - FVNR = Full voltage non-reversing
 - LCP = Local control panel
 - SPD = Surge protection device, aka transient voltage surge suppressor (TVSS)

- Detail 2/EL-1, revise the grounding conductor note to read as follows:

"PROVIDE #6 AWG BARE COPPER GROUNDING CONDUCTOR, MINIMUM 6'-0" OF WIRE COILED IN BOTTOM OF HOLE. DO NOT ENCASE WIRE COIL IN CONCRETE."
- Sheet ED-1
 - Corrected typographical error in the panel label for Panel HW-H1.
 - Corrected typographical error for connected kW load from Switchboard EDB-1 to the Blower Building.
 - Revise the scope of work boundary for the PPRBD Headworks Building permit approval to include just the Headworks Building itself. A new scope of work boundary was also included to indicate equipment shown for reference only relative to the Headworks Building permit approval, as these referenced items will be further refined and approved by PPRBD under separate, future submittals.
- Sheet ES-2
 - Revised Master Luminaire Schedule to indicate fixtures B1 and C to be wall mounted.
 - Revised Panel Schedule for Panel HW-H1 to account for the following changes:
 - Change the security gate operator power from 480 volt, 3-phase to 120 volt, single-phase power.
 - Change the mechanical screen motors from 2 horsepower to ½ horsepower.
 - Revise Panel Schedule for Panel HW-L1 according to the following changes:
 - Delete all explosion-proof receptacles from the screen/process area.
 - Provide one (1) additional receptacle in the Electrical and Control Room.
 - Change the security gate operator power from 480 volt, 3-phase to 120 volt, single-phase power.
- Sheet EHW-1
 - Revise the security gate operator power source to be 120 volt, single-phase.
 - Revised motor horsepower to ½ horsepower for mechanical screens SC-1 and SC-2.
- Sheet EHW-2
 - Revise location of composite sampler in Electrical and Control Room. Refer to previous description for this item given under Sheet HW-14.
 - Add one (1) receptacle along the south wall of the Electrical and Control Room between Panel HW-H1 and Panel HW-L1.
 - Add an interior light switch in the Electrical and Control Room to operate the lights in the upper operating level of the process/screen area.

- Delete one (1) exterior light fixture over Door D-HW2 and relocate the exterior light fixture over Door D-HW1 to be centered between these 2 doors.
- Revise the motor horsepower rating to ½ horsepower for mechanical screens SC-1 and SC-2.
- Add a sentence to General Note A to read as follows:

"...IN ADDITION TO SUITABILITY FOR CLASS 1, DIVISION 2 CODE COMPLIANCE, ALL CONDUIT AND DEVICES SHALL BE CORROSION RESISTANT TO A MOIST, HYDROGEN SULFIDE ATMOSPHERE."
- Revised Keyed Note No. 17 so the required dimensions of the main ground bar are now 12-inches long by 2-inches wide by ¼-inch thick.
- Sheet EHW-3
 - Revise Keyed Note No. 1 so the ground ring shall be installed at the bottom of the grade beam foundation walls.

Attachment: None

ec: Lower Fountain Metropolitan Sewage Disposal District
Fountain Sanitation District
Colorado Centre Metropolitan District
cc: Jerry L. Miller, Resident Project Representative, GMS, Inc.