January 3, 2025

To: All Planholders

RE: Hardin WWTP Upgrades (WPCSRF Project #C301316)
City of Hardin Public Works Department, Hardin, Montana

Attached is Addendum No. 3 for the above-referenced project. On the Bid Form, Specification Section 00300, acknowledge this addendum by writing the number and date in the first available blank line in Paragraph 3.01 A.

Note that the Bid date has been changed to January 16, 2025.

Sincerely,

HDR ENGINEERING, Inc.

Jacob Ostrander
Project Manager

cc: File

ADDENDUM NO. 3
TO
CONTRACT DOCUMENTS AND SPECIFICATIONS
FOR
HARDIN WWTP UPGRADES
WPCSRF PROJECT #C301316
FOR
CITY OF HARDIN, MONTANA

Montana Department of Environmental Quality
These plans and specifications have been reviewed and are in compliance with applicable rules and regulations promulgated and/or administered by the Montana Department of Environmental Quality and are hereby approved. These plans and specifications employ sound engineering design principles. All engineering details and operations performance are the responsibility of the design engineer and the owner.
Michele Mavis 1/5/2025
Authorized Signature Date

Prepared by: HDR Engineering, Inc.
970 South 29th Street West
Billings, MT 59102

Owner: City of Hardin
Public Works Department

Date: DATE

TO ALL PLANHOLDERS:

This addendum shall become a part of the Contract Documents as if originally included. The Bidders shall acknowledge receipt of the Addendum on the Bid Form.

The Specifications and Drawings shall be modified as required by the following items:

SPECIFICATIONS

AD-3 Item 1. Section 00 10 00, INVITATION TO BID. **The Bid Date has been moved to January 16, 2025.** Page 1, Line 6 and Page 2, Line 9. DELETE January 9, 2025 and REPLACE with January 16, 2025.

AD-3 Item 2. Section 00 20 00, INSTRUCTIONS TO BIDDERS. Page 9, ARTICLE 15, Section 15.2.e), DELETE January 9, 2025 and REPLACE with January 16, 2025.

AD-3 Item 3. Section 01 45 33, CODE-REQUIRED SPECIAL INSPECTIONS AND PROCEDURES. Page 3, Paragraph 1.4.F.1. DELETE this paragraph in its entirety and REPLACE with the following:

1. Payment indicated below is for any Owner furnished/elected Special Inspector costs and does not include the Contractor furnished Special Inspection costs or the Contractor's costs listed in Paragraph 1.4 A of this Section. Contractor shall pay all costs associated with the Testing Agency.

AD-3 Item 4. Section 03 05 05, CONCRETE TESTING AND INSPECTION. Page 1, Paragraph 1.2. DELETE this paragraph in its entirety and REPLACE with the following:

1.2 RESPONSIBILITY AND PAYMENT

A. Owner will hire an independent Testing Agency/Service Provider to perform the following testing and inspection and provide test results to the Engineer and Contractor.
   1. Quality assurance testing of tests performed by testing agency hired by the Contractor.
   2. Owner will pay for services defined in Paragraph 1.2A.1.
   3. See Specification Section 01 45 33.

B. Contractor shall hire a qualified testing agency to perform the following testing and provide test results to the Engineer.
   1. Testing of materials and mixes proposed by the Contractor for compliance with the Contract Documents and retesting in the event of changes.
   2. Additional testing and inspection required because of changes in materials or proportions requested by Contractor.
   3. Testing and inspection of concrete and grout produced for incorporation into the work during the construction of the Project for compliance with the Contract Documents.
   4. Additional testing or retesting of materials occasioned by their failure, by test or inspection, to meet requirements of the Contract Documents.
   5. Strength testing on concrete required by the Engineer or Special Inspector when the water-cement ratio exceeds the water-cement ratio of the typical test cylinders.
   6. In-place testing of concrete as may be required by Engineer when strength of structure is considered potentially deficient.
   7. Other testing services needed or required by Contractor such as field curing of test specimens and testing of additional specimens for determining when forms, form shoring or reshoring may re-removed.
   8. Contractor shall pay for services defined in this Paragraph.
   9. See Specification Section 01 45 33.

C. Duties and Authorities of Testing Agency/Service Provider:
   1. Any Testing Agency/Service Provider or agencies and their representatives retained by Contractor or Owner for any reason are not authorized to revoke, alter, relax, enlarge, or release any requirement of Contract Documents, nor to reject, approve or accept any portion of the Work.
   2. Testing Agency/Service Provider shall inform the Contractor and Engineer regarding acceptability of or deficiencies in the work including materials furnished and work performed by Contractor that fails to fulfill requirements of the Contract Documents.
   3. Testing Agency to submit test reports and inspection reports to Engineer and Contractor immediately after they are performed.
      a. All test reports to include exact location in the work at which batch represented by a test was deposited.
      b. Reports of strength tests to include detailed information on storage and curing of specimens prior to testing.
   4. Owner retains the responsibility for ultimate rejection or approval of any portion of the Work.

AD-3 Item 5. Section 03 42 00, PRECAST AND PRESTRESSED CONCRETE BUILDING. Page 5, Paragraph 2.1.A.1. ADD the following.

d. Taracon precast

e. SteinBauer LLC

AD-3 Item 6. Section 12 35 53.13, METAL LABORATORY CASEWORK. Page 2, Paragraph 2.1.A. ADD the following.

1. BMC Metal-ARC, Inc. is also an acceptable manufacturer for laboratory casework.

AD-3 Item 7. Section 46 21 10, AUTOMATIC SELF-CLEANING STRAINER. Page 2, Paragraph 2.1.A. ADD the following.

5. Amiad Water Systems

AD-3 Item 8. Section 46 23 23, GRIT REMOVAL EQUIPMENT VORTEX. Page 2, Paragraph 1.4.C.1. DELETE the Chamber Diameter, ft line and REPLACE with the following.

Chamber Diameter, ft	9, minimum

AD-3 Item 9. Section 46 23 23, GRIT REMOVAL EQUIPMENT VORTEX. Page 3, Paragraph 2.1.A. ADD the following.

5. Envirodyne Systems Inc.
6. Smith and Loveless

AD-3 Item 10. Section 46 23 23, GRIT REMOVAL EQUIPMENT VORTEX. Page 5, Paragraph 2.4.B. ADD the following after HW-GRT-GU-1:

Pending manufacturer's grit equipment, impeller or propeller assembly, gear motor, and mechanical drive as specified below may not be required.

AD-3 Item 11. Section 46 23 23, GRIT REMOVAL EQUIPMENT VORTEX. Page 6, PART 2 – PRODUCTS, ADD the following paragraphs.

2.6 ELECTRICAL CONTROLS DEVICES

A. All controls necessary for a fully automatic operation of the Grit Removal System shall be provided by the manufacturer. Grit Removal System consists of:
   1. Vortex grit removal equipment.
   2. Grit removal pump.
   3. Grit classifier.

B. The electrical control system shall provide for automatic control of the grit removal system based on a pre-determined time sequence. If manufacturer has an alternate preferred control method necessary to meet overall system performance requirements provide preferred control method as an alternate control scenario in addition to the time sequence method.

C. The grit removal system control system shall incorporate a programmable logic controller and panel-mounted operator interface terminal with can be used for equipment monitoring and operator adjustments.

D. Control Panel:
   1. Painted steel enclosure with NEMA 12 rating:
      a. Continuous seam welded.
      b. Single front door with continuous hinge, neoprene gasket.
      c. Mechanism designed for securing enclosure with padlock.

d. Wall-mounted.
2. Incoming power: 480 VAC, 3-phase.
3. Main circuit breaker with external circuit breaker operating handle:
   a. Handle shall include locking tabs that prevent the door from being opened with the breaker in the ON position.
4. Combination-type motor controller:
   a. Motor protective circuit breaker without external circuit breaker operating handle:
   b. Motor starter with overloads:
      1) NEMA rated, full-voltage non-reversing type.
      2) 3-pole ambient compensated bimetal overload relay.
   c. Motor current sensing relay shall be used to generate a HIGH TORQUE alarm.
   d. Control transformer with line and load fuses.
   e. Surge arrestor.
   f. Automatic controls for the valves.
   g. Programmable Logic Controller, timers, control relays, and other devices as necessary for manufacturer to provide control preferred control methodology.
   h. Include a terminal strip for control panel connections to external devices, such as the solenoid valves and the Plant Control System.
5. Operator controls and indicators located on panel exterior.
   a. Vortex grit removal unit
      1) HOA switch for motor.
      2) Open – Close – Auto switch for grit fluidizing solenoid valve.
      3) Hour meter for motor
      4) Run indicating lights
      5) Alarm lights indicating overcurrent and starter overload.
      6) Alarm reset push button.
   b. Grit removal pump.
      1) HOA switch for pump.
      2) Hour meter for pump.
      3) Run indicating lights
      4) Alarm lights indicating overcurrent and starter overload.
      5) Alarm reset push button
   c. Grit classifier.
      1) HOA switch for classifier.
      2) Hour meter for motor.
      3) Run indicating lights
      4) Alarm lights indicating overcurrent and starter overload.
      5) Alarm reset push button
   d. Emergency Stop pushbutton.
6. Pilot devices:
   a. Heavy-duty type.
   b. Oiltight, NEMA 4X rating.
   c. Mounting hole: 30.5 mm.
   d. Knob type operators.
   e. Push-to-test pilot lights, lens color as indicated.
   f. Legend plates:
   g. Laminated, phenolic plastic with white field and black letters.
      1) 2 IN x 2 IN.
7. All internal wiring shall be neat and color coded. Each wire shall be labeled at both ends with a heat-shrinkable wire label. All incoming wires shall terminate into a box clamp type terminal block. All control wires shall be 14 Ga. Type TEW, tinned copper, rated for 105 DegC.
8. A schematic diagram (showing wire color) shall be permanently fastened to the inside of the enclosure. An Installation and Service Manual shall also be included with each control panel.
9. Apply corrosion inhibitors inside the panel after fabrication and prior to shipment to the jobsite. Inhibitor shall consist of agents that vaporize and then condenses on all internal surfaces of the enclosure.

10. Panel shall be factory wired and tested.
11. The control panel shall be U.L. listed as an assembly.

E. Local Control Station:
1. Enclosure rating: NEMA 7.
   a. Suitable for Class I, Division 2 Hazardous Locations
2. Operator control devices:
   a. E-STOP pushbutton:
      1) Red, mushroom head operator.
      2) Maintained contact, push-pull.

F. Wash/Fluidization Valves: Provide electric actuated ball valves or solenoid valves as required to operate wash/fluidization zones. Electric actuator shall be suitable for area classification.

2.7 OPERATION, MONITORING, AND CONTROL

A. Vortex grit removal unit:
1. Hand Operation: Unit to run continuously.
2. Automatic Operation: Operation of the vortex grit removal unit shall run when initiated by a set time interval and shall continue operations until the time interval expires. Time intervals start and duration to be field adjustable.

B. Vortex grit removal unit wash/fluidization system:
1. Hand Operation: System shall run continuously.
2. Automatic Operation: System shall run when initiated by a set time interval and shall continue operations until the time interval expires. Time intervals start and duration to be field adjustable.

C. Grit Pump:
1. Hand Operation: Pump to run continuously.
2. Automatic Operation: Pump operation shall run when initiated by a timer and shall continue operations until a set time interval expires. Time intervals start and duration to be field adjustable.

D. Grit Classifier:
1. Hand Operation: Unit to run continuously.
2. Automatic Operation: Operation of the Grit Classifier shall run when initiated by a set time interval and shall continue operations until the time interval expires. Time intervals start and duration to be field adjustable.

E. Fault Conditions:
1. Momentary motor over current shall trip the current monitor, stop the motor, and illuminate the alarm indicating light. Reset shall be manual on the outside of the control panel.
2. Excessive motor current shall trip the starter overload relays, stop the motor, and illuminate the alarm indicating light. Overload relays shall be reset manually on the inside of the control panel.

F. Plant Control System interface requirements:
1. Each interface point shall be in the form of a dry relay contact wired to terminal blocks.
2. The following is a list of interface points required between the Local Control Panel and the Plant Control System:
   a. Status and Alarms to Plant Control System:
      1) Status Display:
         a) Grit Unit Running
         b) Grit Unit Fault
         c) Grit Pump Running
         d) Grit Pump Fault
         e) Grit Classifier Running
         f) Grit Classifier Fault
      2) Operator Entries
         a) None
      3) Alarms
         a) Grit Unit Fault

b) Grit Pump Fault
c) Grit Washer Fault

DRAWINGS

AD-3 Item 12. Sheet 00C004, GENERAL NOTES:, ADD the following.

2. ALL NEW AND REPLACEMENT SIDEWALK SHALL BE PER MONTANA DEPARTMENT OF TRANSPORTATION (MDT) DETAILED DRAWING NO. 608-05. ALL SIDEWALK SHALL BE 6-INCH THICKNESS.

AD-3 Item 13. Sheet 00C005, GENERAL NOTES:, ADD the following.

8. PROVIDE THRUST BLOCKS ON ALL BURIED DUCTILE IRON PIPING SYSTEMS PER MONTANA PUBLIC WORKS STANDARD DRAWING NO. 02660-1 / NO. 02660-3.

AD-3 Item 14. Sheet 00C006, GENERAL NOTES:, ADD the following.

8. PROVIDE THRUST BLOCKS ON ALL BURIED DUCTILE IRON PIPING SYSTEMS PER MONTANA PUBLIC WORKS STANDARD DRAWING NO. 02660-1 / NO. 02660-3.

AD-3 Item 15. Sheet 00C007, GENERAL NOTES:, ADD the following.

8. PROVIDE THRUST BLOCKS ON ALL BURIED DUCTILE IRON PIPING SYSTEMS PER MONTANA PUBLIC WORKS STANDARD DRAWING NO. 02660-1 / NO. 02660-3.

AD-3 Item 16. Sheet 00C007, KEY NOTES: ADD the following. Key Note 4 should be added on the drawing to the pipe exiting the South Wall of the RAS/WAS Vault.

4. ROUTE 4”-SCM PIPE SOUTH AND TEE INTO EXISTING LIFT STATION DISCHARGE PIPE. APPROXIMATE CONNECTION POINT IS 65 LF SOUTH OF RAS/WAS VAULT. CONTRACTOR POTHOLE AND VERIFY EXISTING PIPE ELEVATION AND MATERIAL PRIOR TO ROUTING NEW SCM PIPE. REFERENCE SHEET 00C002 FOR APPROXIMATE ROUTING OF LIFT STATION DISCHARGE PIPE.

AD-3 Item 17. Sheet 00C008, GENERAL NOTES:, ADD the following.

8. PROVIDE THRUST BLOCKS ON ALL BURIED DUCTILE IRON PIPING SYSTEMS PER MONTANA PUBLIC WORKS STANDARD DRAWING NO. 02660-1 / NO. 02660-3.

This addendum is made part of the specifications and contract documents and shall be noted on the Bid Form. Bidders must acknowledge receipt and acceptance of this Addendum No. 3 by indicating such acknowledge in the Bid Form. FAILURE TO ACKNOWLEDGE RECEIPT AND ACCEPTANCE MAY RESULT IN REJECTION OF THE BID.

HDR ENGINEERING, INC.

Jacob Ostrander, P.E.

DATE: DATE