ADDENDUM NUMBER 6

ESTABROOK DAM
REHABILITATION
Site #687
4400 North Estabrook Park Drive
Milwaukee, WI

Project Number: P063-10605

Notice Number: 7106

Date of Addendum: June 21, 2016

This Addendum to the Contract Documents is issued to modify, explain or correct the original documents, dated May 25, 2016, and is hereby made part of the Contract Documents. Acknowledge receipt of this Addendum in the space provided on the Bid Form, or bid may be rejected.

PROJECT BIDDING, CONTRACT DOCUMENTS, AND DRAWINGS

Project Drawings

1. On Drawing S308 (Addendum No. 2)– Replace Notes on this sheet as follows:

"Notes

1. Contractor shall field verified existing dimensions prior to commencement of the design and installation of a closed loop, glycol gate heating system for Gates 5 through 10 including power source.
2. The design shown on drawings is preliminary for Gates 5 to 10. The design of the gate heating system shall be per the following current design standards and following references, but not limited to:

a. Local codes and regional regulations
b. National Electric Code
c. American Society of Mechanical Engineers
d. National Hydraulic Association
e. National Electrical Manufacturers Association
f. United States Army Corps of Engineers, Chapter 20 of Engineering Manual (EM) 1110-2-1612 – Ice Engineering.

3. The Contractor shall submit design calculations and shop drawings required for the installation of a closed loop, glycol –based hydronic gate heating system for Engineer's review. Heating system shall be designed by a licensed professional engineer in the State of Wisconsin.
4. The gate heating system shall consist of two (2) individual heating units (one unit per three gates).
5. The gate heating system piping shall be stainless steel, with all embedded connections welded and embedded in the concrete on the downstream side of the vertical gate guide plates and beneath existing sill plate as shown on the drawings.
6. The glycol mixture shall be 50-50 propylene glycol mixture.
7. The glycol pump units shall have a micro-processor based control system and multiple heating elements. The heating system shall be set at a pre-set to commence

operation when ambient temperature drops below 32 degrees Fahrenheit with a manual override when operations is not required in non-ice forming conditions (December to April). The fluid shall be warmed to a temperature of 140 to 180 degrees Fahrenheit.

8. The electrical heating units (wall mounted boilers), valves, pumps, tanks and other equipment required for the installation of heating system shall be placed on the top side of the operating deck inside a secured steel enclosure as approved by Owner.
9. The heating system shall be pressure tested after the installation to check for leaks.
10. Contractor shall provide training and operation manual to owner and their personnel on the operation and maintenance of the gate heating system. The gate heating system shall have a standard industry warrantee for each component of the heating system.

2. On Drawing S100 – Revise Note 2 as follows:

Cofferdam System shall be an A-framed type system manufactured by Port-A-Dam, or alternate cofferdam system. All proposed cofferdam systems shall be designed by a licensed professional engineer from Wisconsin and be submitted to the WDNR for review and approval prior to construction. The cofferdam system may be designed to overtop at an elevation compatible with the contractor's means and methods. The cofferdam shall be designed to withstand the forces of a ten year flood water level (approximately 619.0'). An alternate cofferdam system may be provided at no additional cost to the Owner, and no time extensions for the project will be given for delays due to the WNDR review of contractor's alternate design process.

End of Addendum No. 6