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April 8, 2020

Ms. Kelly Green, Administrator
Water Infrastructure Financing - Finance Division
Michigan Department of Energy, Great Lakes and Environment (EGLE)
P.O. Box 30457
Lansing, MI 48909-7957
Attention: Karol Patton, Manager EGLE

Dear Ms. Green:

Subject: Availability Waiver Request from Use of American Iron and Steel Requirements in PL-113-76, Drinking Water Revolving Fund (DWRF No. 7461-01), Phase II- 14 Mile Road Transmission Loop Project

The Great Lakes Water Authority (GLWA) would like to apply for a project waiver pursuant to the "American Iron and Steel" requirements for two (2) triple offset ball valves to be used for Phase II of the 14 Mile transmission loop project. This phase of the project involves construction of approximately 8 miles of 54-inch-diameter water transmission main between 14 Mile Road and 8 Mile Road in the cities of Novi and Farmington Hills, Michigan.

Per AIS requirements, DWRF assistance recipients are required to use specific domestic iron and steel products that are produced in the United States; however, recipients may receive a waiver if certain circumstances are met. For this project, we are requesting a waiver pursuant to condition number two, "Iron and steel products are not produced in the United States in sufficient and reasonably available quantities and of a satisfactory quality". Pursuant to the Environmental Protection Agency (EPA) Availability Request, GLWA is providing the attached general project information and Availability Waiver request information to facilitate the waiver review.

Based on the attached information, we are requesting that a waiver for the use of triple offset ball valves be granted for use on the phase II-14 Mile transmission loop Project. If you have any questions or comments, please contact Sara Mille at (313)-969-4843 (email: sara.mille@glwater.org) or Tim Kuhns at (734) 634-7861 (email: timothy.kuhns@glwater.org) or Francine Duncan-Martin at (313) 964-9489 (email: Francine.Duncan-Martin@glwater.org).

Thank you in advance for your consideration.

Sincerely,

Sue F. McCormick
Chief Executive Officer/DWRF Authorized Representative, GLWA

cc: Ms. Cindy Clendenon [clendenonc@michigan.gov]; Jonathan Wheatley, Francine Duncan-Martin, Jacqueline Morgan, Grant Gartrell, Tim Kuhns, Sara Mille

Attachment: General project information and Availability Waiver request information

This waiver request was submitted to the EPA by the state of Michigan. All supporting correspondence and/or documentation from contractors, suppliers or manufacturers included as part of this waiver request was done so by the recipient to provide an appropriate level of detail and context for the submission. Some referenced attachments with project diagrams, schedules, and supplier correspondence are in formats that do not meet the Federal accessibility requirements for publication on the Agency's website. Hence, these exhibits have been omitted from this waiver publication. They are available upon request by emailing DWSRFWaiver@epa.gov.

14 MILE ROAD TRANSMISSION MAIN LOOP (PHASE 2)
PRE-PURCHASE SPECIFICATION PACKAGE
TRIPLE OFFSET BALL VALVES

Prepared for
Great Lakes Water Authority
March 2020



PART 2 PRODUCTS

2.01 TRIPPLE OFFSET BALL VALVES

- A. Subject to compliance with requirements, provide products from one of the following manufacturers:
 - 1. Double flanged type [REDACTED]
 - 2. Equivalent Product that have been approved by GLWA in writing
- B. Provide valves with materials and coatings in compliance with NSF 61 for all services.
- C. Valve Design:
 - 1. The valve shall utilize a triple offset metal to metal sealing surface for stick free opening and closing and tight closure in both directions.
 - 2. Valve shall be full bore and piggable.
- D. Materials for valve(s):
 - 1. The requirements of ANSI, ASTM, ASME, API, or other standards that have been referenced in this section shall govern the physical and chemical characteristics of the valve components. The valve manufacturer shall conform to test requirements or testing procedures when required in the applicable standard.
 - 2. Valve shall consist of an integrally cast steel body.
 - a. Body
 - 1) ASTM A216 Gr WCB Carbon Steel
 - 2) Internal epoxy lining in compliance with NSF 61
 - 3. Disc:
 - a. ASTM A 351 CF8 - hardened
 - 4. Seat:
 - a. Metal to Metal seat
 - b. Flexible metal sealing ring
 - c. AISI 316 Stainless Steel
 - 5. Stem
 - a. UNS S31803 F51 Duplex Stainless Steel
 - 6. Valve Bolts and Nuts
 - a. Type 316 Stainless Steel
 - 7. Gaskets
 - a. Gaskets shall be NSF certified and shall be vendor recommended for similar valve applications.
 - 8. Packing:
 - a. Stuffing box packing shall be NSF certified and shall be vendor recommended packing for similar valve applications.
 - b. Packing shall be accurately cut into individual rings without gaps and carefully placed in the stuffing boxes to a depth, which will leave the stuffing boxes approximately 80% filled when pressure is applied to the gland.
 - 9. No materials shall contain asbestos.
- E. Valve Construction:

1. Valve(s) shall be rated for a working pressure of 250 psi or greater.
2. Valve components that contact drinking water shall conform to applicable regulations that limit lead content.
3. No loading is permitted on valve flange.
4. End connections:
 - a. Provide Class 150 flat faced flanges in accordance with ASME B16.5.
5. Valve Support:
 - a. Pads shall be provided on the valve body for transmitting the vertical load to a pedestal below the valve. Steel baseplates shall be provided, configured to allow removal of the valve and reinstallation on the concrete pedestal. Pads shall be provided for mounting of the valve operator to the side of the valve body. Provide anchor bolts, nuts, shim plates and keys for connection of the valve body to the pedestals and operator. Baseplate assembly shall incorporate plastic or anti-friction sliding elements to allow the valve to slide on the foundation and relieve the thrust force on the valve. Sliding systems using grease will not be acceptable.

F. Electric Operators

1. Provide electric actuators in accordance with specification 40 05 57.23. Valve manufacturer shall be assigned with the unit responsibility for supplying an electric actuator that meets the performance requirements of the valve.

2.02 VALVE IDENTIFICATION TAGS

- A. Each valve body shall have cast thereon in a conspicuous place the manufacturer's name or initials, valve size, rated working pressure and year of manufacturer. The letters shall be ½-inch in relief and letter heights vary based on the nominal valve size as follows: as large as possible for valves less than 8 inches, minimum ¾-inch for valves 8-10 inches and minimum 1¼-inches for valves 12 inches and larger.
- B. A brass or Type 316 stainless steel tag shall be permanently attached to the valve operator with brass or stainless-steel screws. It shall contain, in deeply stamped 1/8-inch letters, the direction of wrench nut rotation to open and the number of turns required.
 1. The tag shall provide space for one line of purchaser's lettering of at least 8 characters to be applied after delivery.

PART 3 SHOP PROCEDURES

3.01 SHOP PAINTING

- A. Manufacturer standard coating, 3 layers with a total thickness of 210 µm.
- B. Coatings shall be approved for valve service and certified to ANSI/NSF Std. 61.
- C. The coating shall be applied in strict conformity with the coating manufacturer's application direction.
- D. The color of the interior finish shall be white.
- E. The color of the exterior finish shall be safety green.