

May 16, 2025

Michael Vidaure
Environmental Program Specialist
Water Infrastructure Finance Authority of Arizona
3300 N.
Suite 1050
Phoenix, AZ 85012

RE: Project CW 019-2024 – Apache Junction Sewer District WRF Expansion

Subject: AIS Availability Waiver Request for two (2) 24-inch plug valves

Dear Mr. Vidaure

On behalf of Apache Junction Sewer District, we are respectfully requesting a waiver from American Iron and Steel provisions requirements evolving Fund Ioan program for two (2) 24-inch plug valves for the Apache Junction Sewer District WRF Expansion project.

Because the valves have excessive lead times when adhering to the AIS standards, an alternative path was required to ensure installation is completed before the 24-inch force main becomes active. This 24- inch force main was installed prior to the start of the project and require these valves to connect to the expanded headworks. The valves will need to be installed before July of 2025 to ensure we precede the flows in the 24-inch force main.

The following items are in EPA's Information Checklist for Waiver Requests and are provided as follows:

1. Supplier information or pricing information from a reasonable number of domestic suppliers indicating availability/delivery date for construction materials

the General Contractor for the project, reached out to multiple suppliers. Their correspondence can be reviewed in Attachment B of their supporting document.



2. Documentation of the assistance recipient's efforts to find available domestic sources, such as a description of the process for identifying suppliers and a list of contacted suppliers

documented their efforts to find sources that could deliver the valves in a timely manner. They have this is Attachment B of their supporting document.

3. Project Schedule

Project Schedule is below for review.

4. Relevant excerpts from project plans, specifications, and permits indicating the required quantity and quality of construction materials.

This information can be found in both Attachments A and B.

Please feel free to reach out with any concerns or questions.

Thank you,

RECLAIMING WATER FOR THE FUTURE

Anne Latimer, E.I.T.

District Engineer

Apache Junction Sewer District
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#### **SECTION 40 05 62 – PLUG VALVES**

### **PART 1 -- GENERAL**

#### 1.01 SUMMARY

- A. The CMAR shall provide plug valves and appurtenances, complete and operable, in accordance with the Contract Documents.
- B. The requirements of Section 40 05 51 Common Requirements for Process Valves apply to this Section.
- C. The requirements of Section 40 05 57 Actuators for Process Valves and Gates apply to this Section.
- D. Plug valves shall have undergone a proof-of-design test to demonstrate that the valve components operate at the service flow, pressure, temperature, and fluid conditions, free from binding, excessive noise, and premature failures. Proof-of-design test results shall be available to the ENGINEER on request. The proof-of-design test shall be conducted in accordance with the applicable provisions of AWWA C517- Resilient-Seated Cast-Iron Eccentric Plug Valves.

## 1.02 REFERENCE SPECIFICATIONS, CODES, AND STANDARDS

## A. Reference Specifications

09 96 00	High-Performance Coatings
40 05 51	Common Requirements for Process Valves
40 05 57	Actuators for Process Valves and Gates

### B. Reference Standards

American Water Works Association (AWWA)	
AWWA C517	Resilient-Seated Cast-Iron Eccentric Plug Valves
ASTM International (ASTM)	
ASTM A 126	Gray Iron Castings for Valves, Flanges, and Pipe Fittings
ASTM A 536	Ductile Iron Castings

## 1.03 CONTRACTOR SUBMITTALS

A. Furnish submittals in accordance with Section 40 05 51 – Common Requirements for Process Valves.

### **PART 2 -- PRODUCTS**

# 2.01 ECCENTRIC PLUG VALVES

A. Construction: Eccentric plug valves shall be of the non-lubricated, eccentric plug design with cast iron bodies conforming to ASTM A 126 - Gray Iron Castings for Valves, Flanges, and Pipe Fittings, with ANSI 125 lb. flanged ends for valves 3-inches and larger, and screwed or flanged ends for smaller sizes. The plugs and shafts shall be of cast iron or ductile iron conforming to ASTM A 536 - Ductile Iron Castings, and

the plugs shall be lined with a resilient coating, best suited for the specific service. The body shall be lined with a suitable elastomer, where required for a special service, or it shall be epoxy-lined in accordance with Section 09 96 00— High-Performance Coatings.

- B. The seats shall be of nickel or stainless steel welded to the body. Top and bottom shaft bearings shall be of permanently lubricated stainless steel or Teflon coated stainless steel. Grit seals of Teflon, Nylatron, or similar suitable material shall be at the top and bottom plug journals.
- C. Valves up to and including 20-inches in size shall have an unobstructed port area of not less than 80 percent of full pipe area, and not less than 70 percent for larger valves. Valves 24-inches and larger shall have an unobstructed port area of 100% of pipe area. Eccentric plug valves shall have a pressure rating of not less than 150 psi WOG, for bubble-tight shut-off in the standard flow direction, and 25 psi WOG in the reverse flow direction. When equipped with worm gear actuator, the pressure rating shall be 150 psi WOG in both directions. The stem seal shall consist of field adjustable packing, replaceable without removal of the actuator, or of self-adjusting U-cup packing.
- D. Actuators: Unless otherwise indicated, eccentric plug valves 3-inches and smaller shall have operating levers; larger valves shall have worm-gear actuators. Valve actuators shall be in accordance with Section 40 05 57– Actuators for Process Valves and Gates.
- E. Manufacturers, or Equal



### **PART 3 -- EXECUTION**

## 3.01 INSTALLATION

- A. Plug valves shall be installed in strict accordance with the Manufacturer's published recommendations and the applicable provisions of Section 40 05 51 Common Requirements for Process Valves.
- B. Eccentric Plug Valves: Unless otherwise directed, the following rules shall be observed for the installation of eccentric plug valves on sewage, sludge, or other liquid systems containing solids, silt, or fine sand:
  - 1. The valves shall be positioned with the stem in the horizontal direction.
  - 2. In horizontal pipelines, the plug shall swing upwards when opening, to permit flushing out of solids.
  - 3. The orientation of the valve shall prevent the valve body from filling up with solids when closed; however, where the pressure differential through the valve exceeds

- 25 psi, the higher pressure for valves without worm gear, electric, or air operators shall be through the valve to force the plug against the seat.
- 4. Valves which may be closed for extended periods (stand-by, bypass, or drain lines) and valves with reversed flow (higher pressure on downstream side, forcing the plug away from its seat), shall be equipped with worm gear operators for the full range of sizes.
- 5. For special applications or when in doubt, consult with the Manufacturer prior to installation.

**END OF SECTION**