

REQUEST FOR A WAIVER FROM THE AMERICAN IRON AND STEEL REQUIREMENT

This request for a waiver from the American Iron and Steel requirement was completed with the City of Columbus and its consultants to document a need to use foreign made iron/steel component and verify that the conditions of Section 436 are met.

This waiver request is necessary due to (highlight):

- Public Interest (complete sections A and B below)
- Availability (complete sections A and C below)
- Cost (complete sections A and D below)

Section A – General

Describe the unit process which contains the proposed foreign-made iron/steel component.

The City of Columbus closed a loan in the amount of \$21,500,000 with the IFA on November 30, 2022 (with Non-Equivalency/ Non-Federal funding).

The loan includes the Woodside Phase 2 project, which will complete improvements to the Woodside South Lift Station and Walesboro Lift Station to increase the capacity of both lift stations. The Woodside South Lift station was last upgraded in 1989 and needs rehabilitation due to age and condition. Additionally, the capacity of both lift stations is expected to be exceeded within the 20-year planning period.

To complete the project a 10" plug valve and a 16" plug valve will be required. The quoted lead time to secure domestic plug valves is 34-42 weeks and 34-52 weeks respectively.

Non-domestic valves meeting the project specification can be secured within 6 weeks. The purchase of non-domestic valves will reduce project delays, protect critical infrastructure, and meet the needs of the project.

Section B – Public Interest (N/A)

Why is the use of the product in the public interest? For example, is the use of a foreign made iron/steel component necessary because of compatibility with existing components in the wastewater system or other reason?

Section C – Availability

Describe requirements in the project plans, specifications or permits which describe the required quantity and quality of the product:

Columbus' supplier approached material suppliers to purchase domestic 10" and 16" plug valves. These manufacturers cannot meet the required timeline of the project. The timeline and correspondence are included in this request.

- Product requirements: Specifications for both valves are included in the attached documentation from Columbus.

- The model noted in the attached spec is included in the Columbus City Utilities' standard specification requirements. The Contractor explored alternative manufacturers and collected quotes after discovering the availability issue for the preferred valves. These are summarized below, and quotes from these valves are attached.
- The [REDACTED] is noted to include a bronze plug and doesn't meet the project specifications.
- Quantity: One 10" plug valve and one 16" valve
- Domestic product timelines:
 - [REDACTED] 10" Plug Valve: 42 weeks
 - [REDACTED] 16" Plug Valve: 52 weeks
 - [REDACTED] 10" Plug Valve: 34-36 weeks
 - [REDACTED] 16" Plug Valve: 34-36 weeks
 - [REDACTED] Plug Valve: Bronze plug does not meet specifications
 - [REDACTED] Plug Valve: Bronze plug does not meet specifications
- Nondomestic product Timeline 4-6 weeks
 - [REDACTED] 10" Plug Valve - \$3,457
 - [REDACTED] 16" Plug Valve - \$6,972
 - [REDACTED] non-AIS valves

Section D – Cost (N/A)

Cost of project with domestic components \$_____

Cost of project with foreign made components \$_____

Will the use of domestic components increase the project cost by more than 25%?

___Yes ___No

If No, cost is not a valid basis. If Yes, attach a detailed cost comparison of the domestic and foreign made options.

Woodside Phase 2 LS AIS Availability Information

- Please provide a brief description of the valves (location/purpose in project)
 - The 10” plug valve for the Woodside lift station will serve the purpose of closing off any wastewater from the downstream side of the lift station to prevent any back feeding into the station when the pumps and electromagnetic flow meter aren’t running for maintenance or shutdown scenarios. The 16” plug valve at the Walesboro lift station will serve the same purpose.
- Please provide a copy of the valve specification.
 - Please see the attached valve specification below.
- Please briefly discuss why a waiver is needed (AIS-compliant valve meeting project needs not manufactured, AIS-compliant valve lead time didn’t meet project schedule, etc.). If delivery/availability issues, please provide any correspondence with the specified manufacturer documenting compliant valves were/are not available in a reasonable time.
 - AIS-compliant valve lead time did not meet the project schedule. We were given an estimated lead time of 42 weeks for the AIS-compliant 10” plug valve and 52 weeks for the 16” plug valve.
 - Please see manufacturer documentation regarding the unavailable valve castings and their lead time.
- What was the originally desired installation date for the valve (assuming no lead time issues encountered)?
 - We plan to install the 10” plug valve in Mid-February 2025 and the 16” plug valve in Mid-April 2025.
 - The AIS 10” and 16” plug valves were not available until June-August of 2025.
- Will the critical path construction schedule be negatively impacted by delay of installation? If so, can you elaborate?
 - Installation of these valves is necessary to make all necessary piping connections inside of the valve vaults at both of these sites. Without installation of the valves, startup of the lift station would be impossible and would be delayed by several months.

- C. Store materials according to manufacturer instructions.
- D. Protection:
 - 1. Protect materials from moisture and dust by storing in clean, dry location remote from construction operations areas.
 - 2. Protect valve ends from entry of foreign materials by providing temporary covers and plugs.
 - 3. Provide additional protection according to manufacturer instructions.

1.6 EXISTING CONDITIONS

- A. Field Measurements:
 - 1. Verify field measurements prior to fabrication.
 - 2. Indicate field measurements on Shop Drawings.

1.7 WARRANTY

- A. The Manufacturer shall warrant all supplied equipment and parts to be free from defective material and workmanship for a period of one (1) year after date of substantial completion. In the event that the manufacturer's guarantee period exceeds the above period, the manufacturer's guarantee period will stay in effect and shall not be replaced by that previously stated.

PART 2 - PRODUCTS

2.1 PLUG VALVES

- A. Plug valves shall be of the non-lubricated, eccentric type with resilient faced plugs and shall be furnished with flanged end connections, manual worm-gear operator handwheel (4" and larger) or lever (3" and smaller). Valves shall have flanged ends faced and drilled to ANSI B16.1 125-lb. Standard.
- B. Valves shall be rated for bi-directional working pressure up to 175 psig for valves up to 12" and 150 psig for 14" through 36". Valves shall provide drip-tight shutoff up to the full pressure rating. Every valve shall be given a certified hydrostatic and seat test, with test reports being available upon request.
- C. Valve bodies shall be of ASTM A536, Grade 65-45-12 ductile iron. Bodies shall be furnished with a 1/8" welded overlay seat of not less than 95% pure nickel. Seat area shall be 1/2" wide with raised surface completely covered with weld to ensure that the plug face only contacts the nickel. Screwed in seats shall not be acceptable.
- D. Port areas shall be unobstructed when open and shall open to 100% of the standard class pipe area. All plug valves shall be provided with limit stops and

rotate 90° from fully opened to fully closed.

- E. Plugs shall be of the ASTM A536 ductile iron and rectangular. The plug shall have a cylindrical seating surface eccentrically offset from the center of the plug shaft. Plug shall not contact the seat prior to 90% closed. The interference between the plug face and body seat, with the plug in the closed position, shall be externally adjustable in the field with the valve in the line under pressure. Plug shall be resilient faced with NBR or Chloroprene (CR), suitable for use with raw sewage.
- F. Valves shall have sleeve type metal bearings and shall be of sintered, oil impregnated permanently lubricated type 316 stainless steel ASTM A743 Grade CF-8M for valves up to 36". Non-metallic bearings shall not be acceptable.
- G. Valve shaft seals shall be of the multiple V-ring type, with a packing gland follower. Shaft seals shall permit inspection, adjustment or complete replacement of packing without disturbing any part of the valve or actuator assembly except the packing gland follower. Grit excluders shall be PTFE and provided to prevent the entry of grit and solids into the bearing areas.
- H. All valves 6" and larger shall be equipped with gear actuators. All gearing shall be enclosed in a cast iron housing and be suitable for running in a lubricant with seals provided on all shafts to prevent entry of dirt and water into the actuator. The actuator shaft and the quadrant shall be supported on permanently lubricated bronze bearings. Actuators shall clearly indicate valve position and an adjustable stop shall be provided to set closing torque and to provide adjustment to compensate for change in pressure differential or flow direction change. All exposed (non-submerged) nuts, bolts and washers shall be zinc plated.
- I. Plug valves shall be base bid as manufactured by [REDACTED] No alternates or substitutions allowed.

2.2 SWING CHECK VALVES

- A. Check valves shall be ductile iron body and domed access cover per ASTM A536 Grade 65-45-12, and flexible internal disc, rated for 250 psi working pressure. Flanges shall be faced and drilled in accordance with ANSI B16.1, Class 125 Standard. Valve shall be designed, manufactured, tested and certified to AWWA C508.
- B. Valve body shall have a full-flow equal to nominal pipe diameter at all points through the valve. The seating surface shall be on a 45-degree angle to minimize disc travel. A threaded port with pipe plug shall be provided on the bottom of the valve to allow for installation of a backflow actuator without special tools or removing the valve from the pipeline.
- C. The top access port shall be full size, allowing for removal of the disc without removing the valve from the pipeline. The access cover shall be domed in shape to provide flushing action over the disc for operation in lines containing high solids content.