[redacted]

City of Petersburg
135 N Union Street
Petersburg, VA 23803

NOTE: Information in this waiver may have been redacted or removed due to issues of proprietary business information or incompatibility with Federal accessibility requirements. To request the information redacted for purposes of accessibility requirements, please email CWSRFWaiver@epa.gov.

ATTN: Brian Copple, City of Petersburg – Engineer

RE: Poor Creek Force Main
Contract No. 25-01-70191
AIS Waiver – Plug Valves and ARVs

Brian,

Due to the current construction market and demand for AIS compliant products, our valve supplier has informed us that AIS compliant valves have a lead time upwards of 40 weeks. This would mean that plug valves (30", 24", 20") and combination Air Release Valves intended for this project would not be available until Fall 2025. I will also note that it has been our recent experience that AIS compliant valves may possibly be delayed further because of availability issues.

Our supplier has found equal products that are made of imported materials that have current in stock availability or an 18-week lead time if found out of stock.

To avoid a delay in getting this project started, we request that an application for an AIS Project Waiver be submitted to the EPA for the Poor Creek Force Main Project for 30" (6ea), 24" (2ea), and 20" (1ea) Plug Valves as well as 3" (6ea) and 2" (ea) Combination Air Release Valves. The non-AIS valves, if approved, also have a cost savings associated with them totaling, $[redacted]

Please feel free to reach out to discuss this request.

Regards,

[redacted]

[redacted]

[redacted]

AIS COMPLIANT LEAD TIMES

[redacted]	[redacted]	[redacted]	[redacted]
45 WEEKS	45 WEEKS	36 WEEKS	42 WEEKS

6ea- 30 MJ Plug Valve L/A
2ea- 24 MJ Plug Valve L/A
1ea- 20 MJ Plug Valve L/A

6ea- 3 Comb Air Release Valve (Threaded FIP Inlet)
8ea- 2 Comb Air Release Valve (Threaded FIP Inlet)

working pressure rating of 250 psi. Unless indicated otherwise on the drawings, pipe shall have Class 125 flanged joints meeting the requirements of ANSI B 16.1, outside coating shall be red primer, and gaskets for flanged pipe shall be 1/8 inch thick full face red rubber. Fittings shall have a single cement-mortar lining and a bituminous seal coat conforming to the requirement of AWWA C104. Fittings subject to hydrogen sulfide attack shall have an interior lining of [redacted] ceramic epoxy or approved equal.

2. Flange adaptors shall only be used for final connections to equipment or to allow for disassembly of pipe for equipment maintenance in approved locations. Flange adaptors are not to be used to make up for misaligned pipe. Flanged Adapters shall be [redacted] flanged coupling adaptors model [redacted] or approved equal. Uniflanges are not permitted.

C. PVC Pipe and Fittings

1. PVC pipe shall only be used for chemical piping in sizes 1" and smaller without special approval by the City Engineer. All PVC pipe and fittings shall be socket weld schedule 80. When transitioning from metal to PVC, the PVC adaptor shall always be a male NPT fitting inside of a female NPT metal fitting. Should the metal fitting be a male thread, a metal coupling shall be installed to provide a female thread for the PVC adaptor.

D. Stainless Steel Pipe and Fittings

1. All stainless steel pipe shall be Schedule 40 type 304 unless specified by equipment manufacturers or for chemical compatibility to be 316. Stainless steel pipe shall be threaded with threaded fittings.

2.06 PLUG VALVES

A. Plug Valves shall be the non-lubricated eccentric type with resilient faced plugs. Port area shall be at least 80 percent of the full pipe area for gravity applications and 100 percent of the full pipe area for pumped applications. Bodies shall be cast iron with welded nickel, raised seats. Valves shall have permanently lubricated corrosion resistant bearings in the bonnet and body.

B. Packing and packing glands shall be accessible without having to disassemble valves. Packing shall be adjustable.

C. Valves shall have resilient plug facings suitable for the service intended and shall provide dead-tight shutoff. Opening the valve shall cause the plug to be raised off the seat without scraping the seat or body walls.

D. Plug valves shall be gear operated unless otherwise shown or specified and shall open counterclockwise. Exposed plug valves (located above ground, inside buildings, valve vaults, etc.) shall be flanged and provided with gear operated hand wheel actuators complete with valve position indicators.

E. Plug valves for direct burial service shall be provided with right angle worm gear operators. Buried valves shall be provided with adjustable cast-iron valve boxes with extension stems to within 12” of grade.

F. Valve boxes shall meet the requirements of the Standard Details.

G. Inside iron or steel surfaces of valves and exterior surfaces of valves which are to be buried in the ground shall be given two coats of asphalt varnish meeting the

2.9 ABOVE GROUND OR EXPOSED TAPS

A. All taps on exposed pipe, flanged pipe, or above ground pipe shall be made on fitting bosses. No tapping saddles or tapping of pipe will be allowed unless specifically called for on the drawings.

2.10 VALVE BOXES

A. Valve boxes for buried valves shall be cast iron, screw adjustable shaft boxes, with a minimum shaft diameter of 5-1/4 inches, unless otherwise specified on the Drawings.

B. Valve box covers shall be marked with the word “WATER”.

C. Valves with valve boxes shall have an extended shaft pinned to the 2-inch operating nut. The extension shall terminate 12 inches below finish grade.

D. Valve boxes outside pavement shall have a 24-inch by 24-inch by 4-inch concrete collar around top of the valve box as per Standard Details.

E. A Valve Box Adaptor shall be installed between the valve and the valve box.

2.11 AIR RELEASE VALVES

A. Air release valves shall have a minimum of a 1-inch N.P.T. inlet for pipe sizes 16 inches and smaller with a 3/32-inch minimum size outlet orifice. For pipes 18” and larger, a 2-inch N.P.T. inlet with a 3/16-inch minimum size outlet orifice shall be used.

B. Valves shall have a cast iron body and cover, stainless steel float, Buna-N seat, Delrin lever frame and all other internal part shall be stainless steel or bronze.

C. Air release valves shall be suitable for 150 psi working pressure at a minimum.

D. All air release valve installations shall contain an isolation valve to allow removal of the air release valve for maintenance or replacement while the line is under pressure.

E. Air release valve shall have a manual valve on the body to allow manual venting of the pipeline without removal of the air release valve.

2.12 Reduced Pressure Zone Backflow Preventer

A. Reduced Pressure Zone Backflow Preventer assembly shall consist of an internal pressure differential relief valve located in a zone between two positive seating check modules with captured springs and silicone seat discs. Service of all internal components shall be through a single access cover secured with stainless steel bolts. The assembly shall also include two resilient seated isolation valves, for resilient seated test cocks, a protective bronze wye strainer with a 20-mesh screen and an air gap drain fitting.

B. The assembly shall meet the requirements of: the latest available American Water works Association (AWWA) standards including Std. C511; hold current University of Southern California Foundation for Cross Connection Control and Hydraulic Research (USC) approval and hold the American Society of Sanitary engineers (ASSE) listing.

C. All RPZ backflow preventers shall be installed in strict accordance with manufacturer's instructions.

2.13 SAMPLE TAPS

A. All sample taps shall be threadless, lead-free hose bibs unless indicated otherwise on the drawings.

2.14 HOSE BIBBS