



# City Of Oxford

April 25, 2019

Mr. Amanjit Paintal  
Project Engineer  
Division of Water Infrastructure  
Department of Environmental Quality  
512 N. Salisbury Street  
Archdale Building 8<sup>th</sup> Floor  
Raleigh, NC 27604

RE: American Iron and Street Waiver Request  
Oxford Water Tank and Associated Mains  
WIF-1872  
City of Oxford, North Carolina

Dear Mr. Paintal:

Please accept this letter to request a project waiver pursuant to the "American Iron and Steel" (AIS) requirements for the purchase and installation of a 14-inch check valve for use in the subject project currently under construction in Oxford, North Carolina. This project includes erection of a new elevated water storage tank, water main installation and updates to the City's two existing tanks.

As this project is funded by a Drinking Water State Revolving Fund (DWSRF) loan it is subject to the Environmental Protection Agency's AIS requirements. Per AIS, recipients may request and receive a waiver under some circumstances. We hereby request a waiver on the basis that "Iron and steel products are not produced in the United States in sufficient and reasonably available quantities and of satisfactory quality," which is condition number two as listed in the EPA's AIS guidance documents.

This project requires the use of check valves in conjunction with altitude control valves to regulate flow into and out of the City's elevated water storage tanks. The 14-inch check valve in question is replacing a non-functioning 14-inch check valve at one of the City's existing storage tanks. The AIS – Compliant DeZurik Valve reviewed and approved during material submittals and has been on order but so far has been unable to meet quality control and quality assurance requirements of the manufacturer. The proposed modifications to the City's other two tanks for this project use a more readily available size valve and both meet the AIS requirements. Additionally, all other valves, fittings, hydrants and structural steel also meet AIS requirements.

The contractor for this project is Phoenix Fabricators and Erectors, with their subcontractor H.G. Reynolds Company performing the work associated with the check valve. The supplier for the check valve is Core & Main located at 121 International Dr. Morrisville, NC 27560, phone number 919-467-8884. An AIS-compliant 14-inch check valve was approved and ordered however the manufacturer after several attempts has yet to produce a casting that will pass their own quality control and quality assurance testing. The supplier has contacted other manufacturers including

Muller, Val-Matic, Clow, M&H, McWane Valve, and American Flow all of which either do not produce the size valve required or have lead times of several months and could have similar quality control issues. Please reference the attached Bid Proposal from Core & Main showing quoted lead times and costs. Also attached is the Bid Proposal from Core & Main showing the Non-AIS compliant check valve, the lead time on this valve is less than a week. As this project is scheduled to be completed in mid-June, time is becoming a factor and it is unlikely that an AIS-compliant valve will be available prior to the completion of all other work.

Based on the information discussed herein, we are requesting that the 14-inch APCO Series 250A Air Cushioned Check Valve be allowed for this project. We request a timely review to minimize any additional delays with the completion of this project.

Please let us know of any questions or comments after reviewing this request. Thank you for your consideration in this matter.

Sincerely,  
CITY OF OXFORD

A handwritten signature in blue ink, appearing to read "Amy L Ratliff".

Amy L Ratliff, PE  
City Engineer

ALR:cm

cc: Mr. Bill Roark, PE, McGill Associates, P.A.  
Mr. Chris Moore, McGill Associates, P.A.

This waiver request was submitted to the EPA by the state of North Carolina. All supporting correspondence and/or documentation from contractors, suppliers or manufacturers included as a part of this waiver request was done so by the recipient to provide an appropriate level of detail and context for the submission. There may be documents with project diagrams, schedules, and supplier correspondence 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 [SRF\\_AIS@epa.gov](mailto:SRF_AIS@epa.gov).

compound rubber gasket. The sleeves shall include split end gasket and two piece mechanical joint glands suitable for the class of pipe around which sleeves are to be placed. Glands will be joined by steel bolts and fastened to the bell openings of the sleeves to form totally enclosed rubber water tight seals around the periphery of the pipe and along the longitudinal joints.

- B. The sleeves shall have flanged outlets which will accommodate the tapping valves. Valves will be identical to resilient wedge gate valves elsewhere specified with inlet and outlet ends adaptable to the tapping machine and to provide mechanical joint connections to discharge pipes.

## **2.14 AIR-CUSHIONED SWING CHECK VALVES**

- A. The valve shall have a heavy duty body shall be constructed of high-strength cast iron conforming to ASTM A126 Class B with integral flanges, faced and drilled per ANSI B16.1 Class 125 and be suitable for horizontal or vertical installation.
- B. The valve body shall be the full waterway type, designed to provide a net flow area not less than the nominal inlet pipe size when swung open no more than 25 degrees. The body seat ring shall be replaceable and shall be constructed of stainless steel only. The stainless steel ring shall be mechanically retained by means of roll pins or stainless steel cap screws.
- C. The valve disc shall be constructed of cast iron per ASTM A126 Class B and be attached to the disc arm by means of a single center pin permitting 360-degree articulation. The disc shall present a convex surface to the direction of flow to compensate for oscillation.
- D. The disc arm shall be ductile iron or steel, suspended from and keyed to an austenitic stainless steel shaft which is completely above the waterway and supported at each end by heavy bronze bushings. The shaft shall rotate freely without the need for external lubrication. The shaft shall be sealed where it passes through the body by means of a stuffing box and adjustable packing. Simple O-ring shaft seals are not acceptable. Hinge shafts shall be constructed of 316 stainless steel
- E. The valve shall be supplied with an outside lever and adjustable counterweight to initiate valve closure. Final closure shall be dampened by means of a single, side-mounted bronze air-cushion assembly directly mounted to the valve body on machined pads. The amount of cushioning shall be easily adjustable without the need for pre-charged air chambers. Commercial air cylinders, which pivot and/or are attached with fabricated brackets, are not acceptable.
- F. The valve shall be GA Industries, Inc. Figure 250-DS, equivalent Ross Valve or approval equal.