



March 20, 2024

1973.043 (13.0 G)

Mr. Eric Karis  
North Carolina Department of Environmental Quality  
Division of Water Infrastructure  
512 N. Salisbury Street, 8<sup>th</sup> Floor  
Raleigh, North Carolina 27604

Subject: City of Laurinburg  
Distribution System Improvements Phase 2  
Project No. WIF-2024  
AIS Availability Waiver Request

Dear Eric,

The City of Laurinburg is requesting an Availability Waiver for the American Iron and Steel (AIS) requirement for restrained joint fittings on the Distribution System Improvements project. The project is located on Johns Road, Pine Street, Vance Steet, 1<sup>st</sup> Street and Caledonia Road in Laurinburg, North Carolina. The waiver request is for all bends, tees and reducers sized 6-inches through 20-inches, which are not available domestically.

Included in the waiver request is thirty-five (35) bends, twenty-six (26) tees, and six (6) reducers. A summary of the fittings by size, quantity, and unit cost is shown on the attached excerpt from the Bid Form for the project. Also attached is a waiver request letter from [REDACTED] and [REDACTED] indicating the fittings are not produced domestically. The fittings are available now and will not have an impact on the overall project schedule. Metcon Construction is currently projecting project completion April 17, 2025.

[REDACTED]

We trust we have adequately addressed the waiver requirements and look forward to your approval. If you have any questions, please let us know.

Yours very truly,

WILLIS ENGINEERS

A handwritten signature in blue ink, appearing to read 'Jim C. Stowe'.

Jim C. Stowe, PE

Attachments

10700 Sikes Place, Suite 115  
Charlotte, North Carolina 28277  
704.377.9844 / NC License F-0114

Contract 13.0 – Distribution System Improvements Phase 2  
Project No. WIF – 2024  
City of Laurinburg Water Facilities  
Willis Engineers

Re: American Iron and Steel (AIS) Certifications Waiver Request for 6" – 20"  
Fittings

To Whom It May Concern,

Pursuant to Subsection 436(a)(2) of the Consolidated Appropriations Act of 2014, receipts of Drinking Water State Revolving Fund (DWSRF) awards must only use iron and steel products produced in the United States. Project No. WIF – 2024 material specifications for ductile iron pipe are outlined below:

**DUCTILE IRON PIPE.**

- A. Ductile iron piping shall include all ductile iron pipe and fittings. All pipe and fittings shall be cast in one piece, except for flanged pipe which shall have screw-on flanges or grooved pipe fittings which shall have cast fittings.
- B. All ductile iron pipe shall be centrifugally cast in accordance with ANSI/AWWA Specifications C151/A21.51, and shall be of Class 350, unless different classes are scheduled herein. Appurtenances for iron pipe shall comply with the following standards or latest revision thereof:
  1. Steel for Bolts, Studs & Nuts - ASTM Designation A 307, Grade "B"
  2. Fittings - AWWA C110, C111, C153 & ANSI A21.11, A21.53
  3. Cement Mortar Lining - AWWA C104 & ANSI A21
  4. All fittings shall be of the short body pattern unless long body fittings are shown on the Contract Drawings.
- C. The following joint types shall be used for ductile iron pipe.
  1. Flanged pipe shall have flanges with long hubs, shop fitted on the threaded end of the pipe. All flanges shall be faced and drilled to the 125-pound American Standard drilling, unless special drilling is shown, specified or required. Where required, flanges shall be tapped for stud bolts. Flanges shall be accurately faced at right angles to the pipe axis and shall be drilled smooth and true, and covered with coal tar pitch varnish or otherwise protected against corrosion of flange faces. Flange faces shall be cleaned to bare metal with wire brushes before installation of the piping.
  2. In general, flanged joints shall be made up with through bolts of the required size. Stud or tap bolts shall be used only where shown or required. Steel bolts and nuts shall be electro-plated zinc, with good and sound, well fitting threads, so that the nuts may be turned freely by hand. Zinc plating shall be by an approved process with a plate thickness of 0.0003 to 0.0005 inches.
  3. Gaskets for flanged joints shall be the ring type, of cloth inserted rubber. Gaskets shall be 1/8-inch thick.

4. Connecting flanges shall be in proper alignment and no external force shall be used to bring them together. Bolts and gaskets shall be furnished by the installer of piping for joints connecting the piping with equipment, as well as for those between pipe and fittings, whether such equipment and piping is furnished by the installer or not.
5. Mechanical joints shall be ANSI/AWWA C111/A21.11. Joints shall be made up in accordance with the industry standard recommendations. All bolts shall be tightened by means of torque wrenches in such a manner that the follower shall be brought up toward the pipe evenly. If effective sealing is not obtained by tightening the bolts to the specified torques, the joint shall be disassembled and reassembled after thorough cleaning.
6. Slip or "push-on" joints shall be manufactured in accordance with ANSI/AWWA C111/A21.11. Bells of "slip" joint pipe shall be contoured to receive a bulb-shaped, circular rubber gasket, and plain ends shall have a slight taper to facilitate installation. The lubricant used in making up the joints shall be furnished by the pipe manufacturer. The jointing shall be done by guiding the plain end into the bell until contact is made with the gasket and by exerting a sufficient compressive force to drive the joint home until plain end makes full contact with the base of the bell. Manufacturer's recommendations for lubricating joints shall be followed.
7. Unless otherwise indicated on the Contract Drawings, all restrained joints shall utilize mechanical locking systems resulting in a metal-to-metal joint restraint that prevents the pipe joint from separating. The restraint system shall be capable of withstanding thrust forces created by internal pressures up to twice the rated pressure of the pipe. The primary means of joint restraint shall be a factory welded ring or lugs on the spigot end of the pipe, interlocked with the bell of the mating pipe. Joints shall be [REDACTED] as manufactured by [REDACTED] Pipe Company, [REDACTED] or [REDACTED] as manufactured by [REDACTED] Pipe Company or approved equal. The use of retaining glands with set screws, cam or wedge locking gaskets or other means of restraint shall not be permitted except where specifically shown on the Contract Drawings.
8. Unless otherwise shown, all water distribution ductile iron pipe and fittings shall have a bituminous exterior coating with a minimum thickness of one mil. The inside coating shall be cement mortar lining in accordance with ANSI A21.4/ AWWA C104.

We would like to request that all restrained [REDACTED] 6 inch through 20 inch bends, Tees and reducers be waived from the AIS Certifications under Subsection 436(a)(2) of the Consolidated Appropriations Act of 2014 due to the fact that these iron and steel products are not produced in the United States in sufficient and reasonably available quantities and of a satisfactory quantity.

Sincerely,



**Aaron Butler, P.E.**  
**Project Manager**  
**Metcon, Inc.**

This waiver request was submitted to the EPA by the state of North Carolina and applies only to the project in the subject line. 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 [DWSRFWaiver@epa.gov](mailto:DWSRFWaiver@epa.gov).