TA LOVING

400 Patetown Rd
Goldsboro, NC 27530

P: 919.734.8400
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May 2, 2025

State of North Carolina
Department of Environmental Quality
Division of Water Infrastructure

Ref: Sanford Water Filtration Facility 30MGD Expansion- Contract 2

Subject: Provide Waiver of American Iron and Steel Requirements for 30" Butterfly Valves

To whim it may concern,

To meet the referenced projects technical specifications and scheduled milestones for 30 inch Butterfly Valves, we must submit and obtain a Project Waiver to the American Iron and Steel requirement. The waiver request is specific to the 30" Butterfly Valves [redacted]. To avoid delays and extraordinary lead times we request the specific availability waiver for butterfly valves only.

The Following supporting documentation is included for review.

General

1. Description of foreign and domestic construction materials
2. Unit of Measure
3. Quantity
4. Price
5. Time of delivery or availability
6. Location of the construction Project

[redacted]

Cost Waver Request, we are not submitting for a waiver based on cost

Availability Waiver Requests

1. Supplier Information or pricing information from a reasonable number of domestic suppliers indicating availability/Delivery date of construction materials
2. Documentation of the assistance recipients' efforts to find available domestic sources, such as a description of the process for identifying suppliers and a list of contact suppliers
3. Project Schedule
4. Relevant Excerpts from project plans, specifications, and permits indicating the required quantity and quality of the construction materials

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5. Waiver request includes a statement from the prime contractor and/or supplier confirming the non-availability of the domestic construction materials for which the waiver is sought
6. Has the state received other waiver requests for the materials described in the waiver request, for comparable projects?

Sincerely,

T. A. Loving Company

Gus McLean
Gus McLean
Project Manager

[redacted]

[redacted]

400 Patetown Rd.

Goldsboro, NC 27530

P: 919.734.8400

F: 919.731.7538

Date: 5/8/2025

RE: Sanford Water Filtration Facility 30MGD Expansion – Contract 2

To Whom it May Concern,

T.A. Loving company requests the usage of import 30" butterfly valves based on a time-based availability concern. The Sanford WFF 30MGD Expansion Contract 2 has several critical milestones. Due to the extraordinary lead times, domestic butterfly valves will significantly delay the installation, testing, and certification of the 30" FM associated with this project. Schedule and milestones were set in place for getting the pipe in the ground during the spring months of 2025. It was our original plan to install through the wetlands during dryer spring/summer months. With approximately 30-35 weeks lead time on domestic butterfly valves, not only would that delay us extra lead time, but it would also push us into winter months causing seasonal delays. Import Butterfly valves with a 4–6-week lead time will allow the job to continue on schedule. T.A. Loving company also has in-house schedules that we are trying to meet within conveyance and infrastructure divisions. We are requesting the usage of imported 30" butterfly valves to maintain the progress of Contract 2. Please let us know if you have any concerns or if more information is needed.

Respectfully,

T. A. Loving Company

Gus McLean

Gus McLean

Project Manager

Thursday, April 10, 2025
Contract 1

State of North Carolina

Sent via email

Department of Environmental Quality

Division of Water Infrastructure

Sanford Water Treatment Facility

Subject: Project Waiver of American Iron and Steel Requirements for 16”-24” Ductile Iron Pipe Fittings

To whom it may concern,

In order to meet the reference project’s technical specifications for restrained joint ductile iron pope fittings consisting of a factory manufactured restraint system identical to the factory restrained joint pipe, we must submit and obtain a Project Waiver to the American Iron and Steel Requirement. The waiver request is specific to ductile iron pipe fittings sizes 16” through 24” [redacted] type joints as manufactured by [redacted] The project may consist of all [redacted] manufacturers due to the bidding and award process.

The following supporting documentation is included for review and is presented in the listed order.

General

1. Description of the foreign and domestic construction materials
2. Unit of Measure
3. Quantity
4. Price
5. Time of delivery or availability
6. Location of the construction project

[redacted]

Cost Waiver Request, we are not submitting for a waiver based on cost.

Availability Waiver Requests

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

4. Relevant excerpts from project plans, specifications, and permits indicating the required quantity of construction materials
5. Waiver request includes a statement from the prime contractor and/or supplier confirming the non-availability of the domestic construction materials for which the waiver is sought
6. Has the State received other waiver requests for the materials described in this waiver request, for comparable projects?

Sincerely,

Kimany Means
Senior Project Manager
Thalle Construction Co., Inc.

cc: THALLE: Troy Carter

Wharton-Smith, Inc.
CONSTRUCTION GROUP

April 25, 2025

State of North Carolina
Department of Environmental Quality
Division of Water Infrastructure

RE: City of Sanford
Sanford WFF 30 MGD Expansion – Contract 3 & 4
Project Waiver of American Iron and Steel Requirements for Ductile Iron Pipe Fittings

Dear State of North Carolina,

In order to meet the referenced project's technical specifications for restrained joint ductile iron pipe fittings consisting of a factory manufactured restraint system identical to the factory restrained joint pipe, we must submit and obtain a Project Waiver to the American Iron and Steel Requirement. The waiver request is specific to ductile iron fitting sizes [redacted] type joints as manufactured by [redacted]. The project may consist of all [redacted] manufacturers due to the bidding and award process.

The following supporting documentation is included for review and is presented in the order listed.

General

1. Description of the foreign and domestic construction materials
2. Unit of Measure
3. Quantity
4. Price
5. Time of delivery or availability
6. Location of the construction project
7. [redacted]
8. [redacted]

Cost Waiver Request, we are not submitting for a waiver based on cost.

Availability Waiver Requests

1. Supplier information or pricing information from a reasonable number of domestic suppliers indicating availability/delivery date for construction materials
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
3. Project Schedule
4. Relevant excerpts from project plans, specifications, and permits indicating the required quantity and quality of construction materials
5. Waiver request includes a statement from the prime contractor and/or supplier confirming the non- availability of the domestic construction materials for which the waiver is sought
6. Has the State received other waiver requests for the materials described in this waiver request, for comparable projects?

Wharton-Smith, Inc.
CONSTRUCTION GROUP

Sincerely,
Wharton-Smith, Inc.

Frank DiPaolo
Project Manager

CC: Sean Stanford WS – Director of Operations

SECTION 40 05 64
BUTTERFLY VALVES

PART 1 – GENERAL

1.01 THE REQUIREMENT

A. Reference Section 40 05 00 – Basic Mechanical Requirements.

B. Reference Section 40 05 57 – Valve Operators and Electric Valve Actuators

PART 2 – PRODUCTS

2.01 BUTTERFLY VALVES (WATER SERVICE)

A. Butterfly valves (water service) shall be of the rubber-seated, tight-closing type conforming to the latest revision of AWWA C504. The manufacturer shall have a minimum of 5 years of experience in manufacturing butterfly valves of the sizes required in accordance with AWWA C504. All butterfly valves shall be the product of one manufacturer. Butterfly valves shall be as manufactured by [redacted] or equal. Each valve shall be performance and leak tested as specified in AWWA C504 revised as follows: In addition to the testing requirements of AWWA C504, each butterfly valve shall be thoroughly cleaned and opened and closed at least three (3) times prior to testing. Certified copies of the test results shall be submitted to the Engineer for approval prior to shipment of the valve.

B. Butterfly valves shall be Class 150B, unless otherwise indicated in the valve schedules, and of the short body design with mechanical joint or flanged ends, as shown on the Drawings. All butterfly valves on the raw water transmission main, shown on the PP sheets, shall be mechanical joint.

C. Valve bodies shall be epoxy coated cast iron conforming to ASTM A-126, Grade B, ASTM A-48, Class 40 or Ductile Iron ASTM A536, Grade 65-45-12. Where required to meet design operating conditions, valve bodies shall be manufactured of higher strength materials. Valve bodies shall have integral hubs for housing shaft bearings and seals.

D. Butterfly valves shall be of the concentric or eccentric shaft types. Valve discs shall be constructed of epoxy coated ductile iron, ASTM A536, Grade 65-45-12. Discs shall provide a full 360 degree seating surface with no external ribs transverse to flow, and shall comply with the latest revision of AWWA C504. The valve manufacturer shall furnish Shop Drawings which include end clearance dimensions when the disc is in the fully open position.

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E. The resilient valve seat shall be synthetic rubber designed to seat against a pressure differential of 150 psi on either side of the valve, unless otherwise indicated. The resilient

seat shall be mechanically attached to the valve disc or valve body. Any required seat attachment hardware shall be stainless steel. The resilient seat shall be capable of being adjusted or replaced in the field without moving the valve disc along the shaft axis or removing the valve from the line. The mating seat surface shall be stainless steel or monel.

1. The seats shall be factory tested as per AWWA C504 at a test pressure of 150 psig, unless otherwise indicated, and post adjusted for differential pressures indicated herein.

F. Valve shafts shall be one-piece or two-piece units of stainless steel construction suitably sized to transmit the torques required to operate the valves under the conditions listed in the valve schedule with appropriate safety factor. Shafts shall be securely attached to valve disc by means of conservatively sized corrosion-resistant taper pins, threaded at one end and secured with lockwashers and nuts (i.e.: mechanically attached). Provide O-ring seal on taper pin if required to prevent leakage. Shaft key shall be constructed of corrosion-resistant material.

G. Shaft bearings shall be contained in the integral hubs of the valve body and shall be the permanently self-lubricated, corrosion resistant, sleeve type of teflon or heavy-duty bronze. The valve assembly shall be furnished with a factory set two-way thrust bearing designed to center the valve disc in the valve seat at all times. End cover bolts shall be of stainless steel construction.

H. The shaft seal shall be either the bronze cartridge type with at least two O-rings, monolithic V-Type, U-Cup Type, or pull down packing type. If monolithic V-Type, U-Cup Type, or pull down packings are utilized, it shall be self-adjusting, self-compensating type. Packing shall be as manufactured by [redacted] or equal. Butterfly valves with pull down packings shall be designed with an extension bonnet so that repacking can be done without removal of the actuator. For buried valves with pull down packing the packing gland cover assembly shall be heavy duty, soil and water resistant. Stuffing boxes for pull down packing shall have a depth sufficient to accept at least four rings of self-compensating type packing specifically selected for the operating pressures to be encountered. Stuffing box bolts, studs and nuts shall be stainless steel.

I. The "O" ring type shaft seal shall be contained in a removable bronze cartridge. The bronze cartridge shall be manufactured from ASTM B505 copper alloy UNS #C93200 and shall meet the requirements of AWWA C504 for bronze, Grade E. The "O" ring material shall be nitrile, BUNA-N rubber, as intended for use with potable water or wastewater and per ASTM D-2000 with a hardness of 70 Shore A Durometer.

J. Manual operators for butterfly valves 18-inches in diameter or larger shall be the worm gear type conforming to AWWA C504. Manual operators for butterfly valves mounted above 6 feet from the operating floor shall be equipped with worm gear chainwheel actuators. Operators shall be equipped with adjustable AWWA limit stops, shall be sized according to Table IV for Class 150B, and shall require a minimum of 15 turns for 90

degrees or full stem valve travel. The capacity of the manual operator shall be adequate to drive the valve under the differential pressure of 150 psi and maximum anticipated flow, unless otherwise indicated in the appropriate valve schedule.

K. The manufacturer shall certify that the butterfly valves are capable of operating in continuous duty service under these pressures and flow conditions.

L. Each valve shall by hydrostatically tested and tested for bubble tightness after the operator has been mounted and adjusted. Copies of the hydrostatic and leakage test certification and certification of conformance shall be submitted to the Engineer prior to shipment.

M. All internal and external ferrous components and surfaces of the valves, with the exception of stainless steel and finished or bearing surfaces, shall be shop painted with two coats (10 mils min. dry film thickness) of the manufacturer's premium epoxy for corrosion resistance. Damaged surfaces shall be repaired in accordance with the manufacturer's recommendations.

N. Contractor shall reference Specification 40 05 57 for all manual valve operator and electric operator requirements.

2.02 BUTTERFLY VALVES (LOW PRESSURE AIR SERVICE)

A. Valves less than 30 inches shall be flanged or have a wafer or lug style body and be compatible with ASME B16.1 flanges. The Contractor shall coordinate flange connections upstream and downstream of wafer valves. Valves 30 inches or larger shall have flanged end connections conforming to ASME B16.1, 125-pound rating.

B. Manually operated isolation valves shall be provided with a handwheel or chainwheel, as required and/or as shown on the drawings, operator and shall provide for tight shut-off. A mechanical dial indicator shall be provided on the operator to continuously indicate valve positions. Where specified and/or as shown on the drawings, the Contractor shall provide motor actuators meeting the requirements of Section 40 05 57 – Valve Operators and Electric Valve Actuators. Motor actuators for throttling valves shall provide for modulating operation. Cycle time from full open to full closed shall be approximately 60 seconds. 4-20 ma position feedback signals shall be provided for each actuator. Contractor shall wire 4-20 ma position signals to the PLC.

PART 3 – EXECUTION (NOT USED)

END OF SECTION

SECTION 40 05 19

DUCTILE IRON PIPE

PART 1 – GENERAL

1.01 THE REQUIREMENT

A. All ductile iron pipe and specials shall be marked with the manufacturer's name or trademark, size, weight, thickness class, the date of manufacture, and the word "Ductile".

B. Ductile iron pipe (DIP) of the sizes shown or specified shall conform to ANSI A21.51 (AWWA C151), Grade 60-42-10 for ductile iron pipe centrifugally cast in metal molds or sand-lined molds. All ductile iron pipe shall conform to ANSI A21.50 (AWWA C150) for thickness design and shall be supplied in 18 or 20 foot nominal lengths or as required to meet the requirements of the Drawings. Fittings and specials shall be cast iron or ductile iron, conforming to the requirements of ANSI A21.10 (AWWA C110) or ANSI A21.53 (AWWA C153).

C. Minimum Class 53 pipe shall be used for flanged spools.

D. Reference Section 40 05 00 – Basic Mechanical Requirements

E. Reference Section 40 06 20 – Process Pipe, Valve, and Gate Schedules, for pressure rating requirements for specific applications.

PART 2 – PRODUCT

2.01 DUCTILE IRON PIPE AND FITTINGS

A. All pipe and fittings, with the exception of glass lined pipe and sleeves, shall be cement mortar lined. Linings shall conform to American Standard Specifications for Cement Mortar Lining for Cast Iron Pipe and Ductile Iron Pipe and Fittings, ANSI A21.4 (AWWA C104) and shall be standard thickness. The mortar lining shall be protected with the bituminous seal coat. All buried DIP and fittings shall have a bituminous coating, with the exception of raw water transmission main (as shown in the PP drawings – Applicable to Contract 2 only), on the exterior surfaces in accordance with ANSI A21.51 (AWWA C151). All exposed DIP and fittings shall have a shop applied prime coat in accordance with Section 09 90 00 – Painting.

Raw water transmission main buried DIP and fittings (as shown in the PP drawings – Applicable to Contract 2 only) shall be coated with a layer of arc-sprayed zinc per ISO 8179-1. The mass of the zinc applied shall be 200 g/m^2 of pipe surface area. A finishing layer topcoat shall be applied to the zinc. The mean dry film thickness of the finishing layer shall not be less than 3 mils with a local minimum not less than 2 mils. All raw

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water transmission main DIP and fittings shall be encased in V-Bio Polyethylene or equivalent.

B. Glass-lined ductile iron pipe shall be furnished and installed where specified in the Exterior Piping System Schedule per ASTM B1000. The finished lining shall be from 0.008-inch to 0.012-inch thick, hardness of from 5 to 6 on the Mohs Scale, density of from 2.5 to 3.0 grams per cubic centimeter as measured in accordance with the requirements of ASTM D792 and be capable of withstanding a thermal shock of 350ºF without crazing, blistering, or spalling. The lining shall be [redacted], or equal.

C. Cutting of glass-lined pipe in the field shall be limited to only one piece per run of pipe, and this shall be for closure purposes only. Spalling of the glass liner shall be no more than 1/8-inch back from the cut. Flanges and bolt holes on spool pieces shall be aligned prior to glassing and shall be sealed and tested prior to shipment in accordance with the manufacturer's recommendation. Warping of flanges and/or pipe may be cause for rejection as determined by the Engineer.

D. Requirements for various types of joints are described in the following paragraphs. UNLESS OTHERWISE NOTED HEREIN OR ON THE DRAWINGS, ALL EXPOSED DUCTILE IRON PIPING SHALL HAVE FLANGED JOINTS.

E. Flanged joints and fittings shall have a minimum pressure rating of 250 psi with 125 lb. American Standard flanges. All flanges and fittings shall conform to the requirements of ANSI B16.1. Flanges shall be ductile iron and shall be of the threaded or screw on type. The face of the flanges shall be machined after installation of the flange to the pipe. No raised surface shall be allowed on flanges. Flanged pipe shall conform to the requirements of ANSI Specification A21.15, (AWWA C115). Pipe lengths shall be fabricated to meet the requirements of the Drawings.

F. Gaskets shall be the "Ring Gasket" type, 1/8-inch minimum thickness, cloth inserted rubber, red rubber or neoprene and shall be suitable for the service intended. Gaskets for glass lined pipe shall be [redacted] flange gasket, or equal. Bolts shall be of the size and length called for and in accordance with the "American Standard" and comply with the requirements of the ANSI/AWWA Standards. The bolts for flanged joints shall be a minimum ASTM A307; Grade B carbon steel and be in accordance with ANSI A21.10, (AWWA C110). Bolts used for flanged joints in submerged applications shall be Type 316 stainless steel and installed with dielectric isolation flange kits and anti-seize. The bolts shall have hexagonal heads and nuts, no washers shall be used.

G. Bell and spigot pipe shall be provided with push on, O-ring rubber gasket, compression type joints and shall conform to the requirements of ANSI A21.11 (AWWA C111). Fittings and specials shall be supplied with mechanical joints as specified for mechanical joint pipe. If required by installation conditions, pipe shall have cast-on lugs for adequately tying it together.

H. Mechanical joints and fittings shall conform to the requirements of ANSI A21.11, (AWWA C111). Joints shall be made employing a tapered rubber gasket forced into a

tapered groove with a ductile iron follower ring. If required by installation conditions, pipe and fittings shall have cast-on lugs for adequately tying the pipe and fittings together. These shall be in conformance with standard practice and as outlined under the appropriate AWWA Specifications.

I. Bolts for mechanical joints shall be high strength corrosion resistant low-alloy steel tee-head bolts with hexagonal nuts.

J. Mechanical coupling joint pipe and fittings shall be split type, shouldered end. Coupling materials shall be malleable iron. Couplings shall have a minimum pressure rating and service equal to that of the connected piping. Gaskets shall be of rubber. Bolts and nuts shall be heat treated carbon steel track bolts and shall be plated. After installation, buried couplings shall receive two heavy coats of coal tar epoxy (min. 24 mil thickness) which is compatible with the finish of the couplings. Couplings shall be as manufactured by [redacted], or equal.

K. Restrained joint pipe shall consist of factory manufactured bolted retainer rings, ductile iron locking segments held in place by rubber retainers, or ductile iron retaining rings that lock over the bell of the joint and are secured to prevent rotation, and factory welded retainer beads or rings on the spigot of the pipe. All components of the bolted or snap ring assemblies shall be constructed of corrosion-resistant, high strength, low-alloy steel. Restrained joint pipe shall be [redacted] type joints as manufactured by [redacted] or approved equal.

L. Restrained fittings for piping systems 16-inches in diameter and greater shall have factory restraint systems identical to the factory restrained joint pipe specified in Item K above. All fittings shall be minimum pressure Class 250 unless otherwise specified.

M. Restrained fittings for pipe systems 14-inches in diameter and smaller shall be Mechanical Joint fittings with restraint assemblies such as [redacted] or approved equal. Where threaded-rods are allowed, the rods and tabs shall be designed for the specified restraint system design pressure, shall have lengths less than 10 feet between fittings, and shall be painted with two heavy coats of coal tar epoxy after installation.

N. The manufactured systems for thrust restraint indicated above shall be used where restrained joint ductile iron pipe and fittings are specified or indicated on the drawings. Gripping gaskets are not an acceptable form of restraint. Thrust restraint and harnessing systems such as threaded-rods, friction clamps, retainer glands shall be used only where specifically specified herein, indicated on the drawings or if allowed by the Engineer in isolated applications where conditions warrant and necessitate their use. Concrete thrust blocks may be used in accordance with the schedule indicated on the drawings, if applicable.

O. Cast Iron Soil Pipe shall conform to the standards of the Cast Iron Soil Pipe Institute (CISPI) Specification HS-67, and also ANSI Specification A-112.5.2 for Hub & Spigot pipe or A.112.5.1 for Hub & Spigot pipe or A.112.5.1 for No-Hub Pipe. Pipe class shall be "Extra Heavy:(XH).

P. For buried applications, where ductile iron pipe transitions to carbon steel piping, transition shall be made via the use of a flanged connection.

Q. In locations where piping transitions to work by another contract, Contract 1 contractor is responsible for providing and installing a solid sleeve coupling to complete the tie-in of piping between contracts. Adjacent contractor is responsible for providing appropriate piping to allow for the connection of the solid sleeve coupling being supplied and installed by Contract 1 contractor. All contractors are fully responsible for coordination with the adjacent contractor. No claims will be entertained for the failure of a contractor to coordinate accordingly.

R. Where indicated on the Contract Drawings, ductile iron piping shall be encased in concrete prior to backfill.

2.02 POLYETHYLENE ENCASEMENT

A. All raw water transmission main buried ductile iron pipes, valves and fittings (as shown in the PP drawings – Applicable to Contract 2 only) shall be wrapped with polyethylene encasement per ANSI A21.5/AWWA C-105. Polyethylene encasement shall be provided in tube rolls, accordion bundles or sheets, and shall be manufactured of virgin polyethylene material conforming to ANSI/ASTM D1248. The specified nominal thickness for low-density polyethylene film is 0.008 in. (8 mils). The specified nominal thickness for high-density cross-laminated polyethylene film is 0.004 in. (4 mils). The minus thickness tolerance shall not exceed 10% of the nominal thickness on both material types Repair polyethylene if damaged during installation.

END OF SECTION