



Bull Run TREATMENT PROJECTS

NOTE:

This waiver submission may include references to proprietary items and brand name products. These references have been retained to provide context for the waiver submission. EPA does not evaluate a waiver based on a proprietary item but reviews the performance-based specifications for the project/products. As such, any references to brand or proprietary items are reviewed on an "or equal" basis by EPA.

Items and pages may have been intentionally redacted or excluded by the EPA. Contact WIFIAWaiver@epa.gov for more information if necessary.

Technical Memorandum

Subject: Bull Run Treatment Program Project (WIFIA – N19125OR) American Iron and Steel Waiver Request for Facility Pipe steel and Pipelines Steel Beams (Vertical Jambs)

Date: January 13, 2026

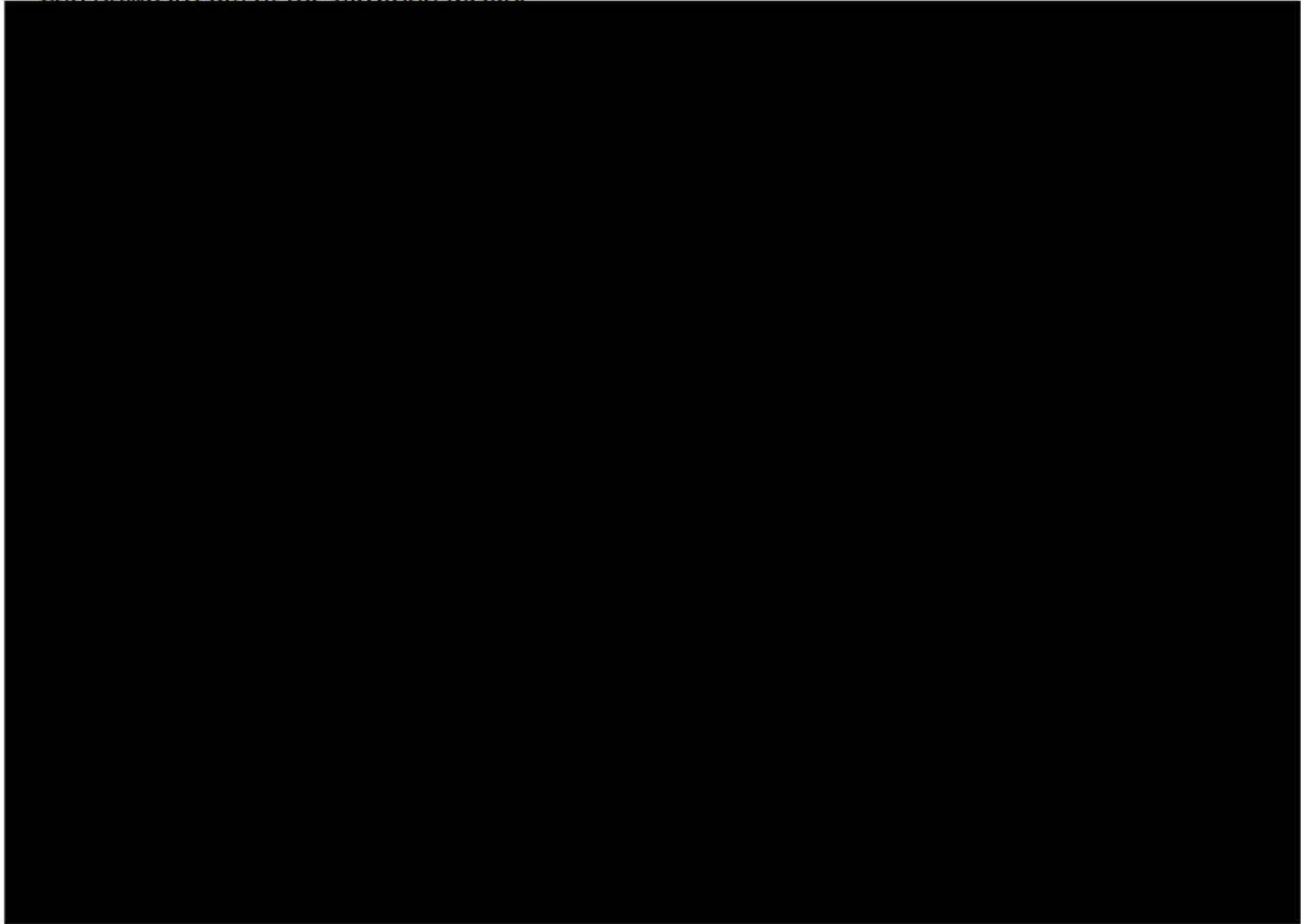
[REDACTED]

[REDACTED]

The City of Portland Water Bureau (Water Bureau) is submitting this letter to request a project waiver pursuant to the "American Iron and Steel" requirements for the purchase and installation of select Schedule 80 Grade A53B pipe steel as well as W36x302 steel beams for use on our Bull Run Treatment Program Projects [REDACTED] to be located southeast of Gresham Oregon. The Water Bureau is planning a new drinking water filtration facility and pipelines to comply with federal and state safe drinking water regulations. The new filtration facility will remove the microorganism *Cryptosporidium*, as well as sediment, organic material, and other potential contaminants from Bull Run water. These lasting improvements to the Bull Run water system will help keep our water safe and abundant for generations to come.

The Filtration Facility Project will construct an approximately 135 million gallon per day (MGD) granular media filtration facility to filter the Bull Run raw water source. On-site buildings will include administration space, laboratory space, general filtration operations, maintenance, general storage, chemical storage, and chemical delivery space. The Pipelines Project will connect the new filtration facility to existing large diameter conduits. Approximately 5 miles of new welded steel pipeline will be constructed, with diameters ranging from 42 inches in diameter to 72 inches in diameter. The Pipelines Project will feature two approximately 9.5-foot diameter tunnels (with 6-foot diameter pipelines), approximately 1,300 feet long, ending in an approximately 240-foot deep reception shaft on the filtration facility site. The Pipelines Project will also include several short trenchless crossings at

environmental features. New connections (interties) will be made to the existing conduits both upstream and downstream of the filtration facility



Additionally, the Water Bureau is requesting a waiver for W36x302 steel beams to be used in the deep reception shaft located in the southwest corner of the facility site [REDACTED], as part of the shaft break out structure. The beams will act as vertical jambs and provide support for the raw water shaft walls over the two 9.5-foot diameter tunnels at this deep location between approximately 225 feet and 238 feet below ground surface. These beams must be left in place because of the impact to structural integrity and associated safety risks, and will be backfilled after construction. According to the AIS requirements, recipients may request and receive a waiver to the AIS requirement in certain circumstances. For this project, we hereby request an availability waiver on the basis that "Iron and steel

products are not produced in the United States in sufficient and reasonably available quantities and of a satisfactory quality," as listed in the EPA's AIS guidance documents. The Water Bureau is requesting waivers for the following:



W36x302 shaft break out steel beams

Three (3) W36x302 steel beams (vertical jambs) are required for the shaft breakout structure [redacted]
[redacted]
[redacted]
[redacted]

- [redacted]
- [redacted]
- [redacted]
- [redacted]
- [redacted]
- [redacted]

[REDACTED]

[REDACTED]

[REDACTED]

Suppliers:

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

Attachment H: Pipelines Structural Steel Framing Specification

SECTION 05 12 00 – STRUCTURAL STEEL FRAMING

PART 1 GENERAL

1.01 SUMMARY

- A. The Contractor shall provide structural steel framing and appurtenant metal parts required for permanent connection of the structural steel system, complete and in place, in accordance with the Contract Documents.
- B. The design, fabrication, and erection of structural steel elements in buildings and non-building structures, and elements thereof, shall be in accordance with the 2022 OSSC, AISC 360 and AISC 341.

1.02 REFERENCES

- A. The edition of the standards applicable to the Work shall be those editions referenced by the 2022 OSSC. If the standard is not referenced by the OSSC, nor an OSSC-referenced standard listed below, the edition of the standard applicable to the Work shall be the edition in effect on the date of award of this Contract.
- B. The following is a list of standards which may be referenced in this section:
 - 1. American Institute of Steel Construction (AISC):
 - a. 303, Code of Standard Practice for Steel Buildings and Bridges.
 - b. 341, Seismic Provisions for Structural Steel Buildings.
 - c. 358, Prequalified Connections for Special and Intermediate Steel Moment Frames for Seismic Applications.
 - d. 360, Specification for Structural Steel Buildings.
 - 2. American Welding Society (AWS):
 - a. B1.5, Standard for the Qualification of Welding Inspectors.
 - b. D1.1, Structural Welding Code – Steel.
 - c. D1.8, Structural Welding Code – Seismic Supplement.
 - 3. ASTM International (ASTM):
 - a. A36, Standard Specification for Carbon Structural Steel.
 - b. A53, Standard Specification for Pipe, Steel, Black and Hot-Dipped, Zinc-Coated, Welded and Seamless.

- c. A193, Standard Specification for Alloy-Steel and Stainless Steel Bolting for High Temperature or High Pressure Service and Other Special Purpose Applications.
 - d. A194, Standard Specification for Carbon and Alloy Steel Nuts for Bolts for High Pressure or High Temperature Service, or Both.
 - e. A307, Standard Specification for Carbon Steel Bolts, Studs, and Threaded Rod 60000 PSI Tensile Strength.
 - f. A500, Standard Specification for Cold-Formed Welded and Seamless Carbon Steel Structural Tubing in Rounds and Shapes.
 - g. A992, Standard Specification for Structural Steel Shapes.
 - h. F3125, Standard Specification for High Strength Structural Bolts, Steel and Alloy Steel, Heat Treated, 120 ksi and 150 ksi Minimum Tensile Strength.
4. RCSC, Specification for Structural Joints Using High-Strength Bolts.

1.03 SUBMITTALS

- A. Submit in accordance with Section 01 33 00, Submittal Procedures.
- B. Shop Drawings, including fabrication and erection drawings for all Work, shall conform to AISC recommendations and specifications and shall show all holes, etc. required for other work. Contract Documents shall include complete details showing members and their connections, anchor bolt layouts, schedules for fabrication procedures, and diagrams showing the sequence of erection.
- C. Testing laboratory certifications for shop and field welders shall be submitted directly to the Engineer with copies to the Contractor and others as required.
- D. Contractor's Statement of Responsibility, as required by the 2022 OSSC Section 1704.4.
- E. Quality Control inspection reports.

1.04 QUALITY ASSURANCE AND QUALITY CONTROL

- A. Quality Assurance shall be provided as required by the 2022 OSSC, AISC 360, and AISC 341.
 - 1. Special Inspections and Tests requirements indicated in the 2021 OSSC Chapter 17, and Quality Assurance requirements indicated in AISC 360 Chapter N and AISC 341 Chapter J, will be provided by the Owner.
 - 2. Contractor Responsibility requirements indicated in the 2022 OSSC Chapter 17 shall be provided by the Contractor.

- B. The Contractor shall be aware of all Quality Assurance requirements and shall provide advance notice and full access to the Owner and Engineer to conduct the inspections, tests, and observations.
 - 1. For inspections and tests at locations away from the Project Site, a minimum of 14 days' notice shall be provided in writing.
 - 2. For inspections, tests and observations at the Project Site, a minimum of 7 days' notice shall be provided in writing.
 - 3. The Contractor shall provide safe access, including fall protection equipment, to all locations necessary to conduct the inspections, tests, and observations.
- C. The Contractor shall supply material for testing at no cost to the Owner and shall assist the Engineer in obtaining material for test samples.
- D. The Contractor shall correct or repair all defective Work. All costs associated with corrections, repairs, and retesting shall be paid for by the Contractor.
- E. Refer to Part 2 for Quality Control requirements.

PART 2 PRODUCTS

2.01 MATERIALS

A. Structural Steel:

Wide Flange Shapes	ASTM A992
Other Shapes, Plates, Bars	ASTM A36
Pipe, Pipe Columns, Bollards	ASTM A53, Type E or S, Grade B standard weight unless noted otherwise
HSS	ASTM A500 Grade B

- B. Bolts for connections shall be ASTM F3125 Grade A325, unless indicated otherwise.
 - 1. ASTM F3125 Grade A490 bolts shall be used where indicated.
 - 2. Use of ASTM F3125 Grade F1852 or Grade F2280 Twist-Off/Tension-Control bolts in place of Grade A325 or Grade A490 Heavy Hex Head bolts, respectively, is subject to Engineer approval.
- C. Bolts used to connect dissimilar metals shall be ASTM A193 and A194, Type 316 stainless steel.
- D. Welded anchor studs shall be headed concrete anchor studs (HAS), or deformed bar anchors (DBA), or threaded studs (TAS), as indicated in the Contract Documents, and as supplied by Nelson Stud Welding Company, Omark Industries, KSM Fastening Systems Division.

- E. Structural steel shall be cleaned and coated in accordance with Section 09 91 14, Exterior Painting (MPI Standard), and Section 09 91 24, Interior Painting (MPI Standard).
- F. Structural members shall be furnished full length without splices unless otherwise indicated or approved by the Engineer.

2.02 QUALITY CONTROL

- A. Quality Control shall be provided as required by AISC 360 and AISC 341.
 - 1. Quality Control requirements indicated in AISC 360 Chapter N and AISC 341 Chapter J shall be provided by and paid for by the Contractor.

PART 3 EXECUTION

3.01 MEASUREMENT

- A. The Contractor shall verify dimensions and shall make any field measurements necessary and shall be fully responsible for accuracy and layout of Work. The Contractor shall review the Contract Documents, and any discrepancies shall be reported to the Engineer for clarification prior to starting fabrication.

3.02 FABRICATION

- A. Structural steel shall be fabricated in accordance with the Contract Documents, AISC Specifications, AWS Codes, and the Shop Drawings.
- B. Materials shall be properly marked and match-marked for field assembly.
- C. Where finishing is required, assembly shall be completed including bolting and welding of units, before start of finishing operations.

3.03 BOLTED CONSTRUCTION

- A. The Contractor shall comply with the requirements of the AISC and RCSC specifications applicable to bolted connections.
- B. Surfaces for slip-critical connections shall be prepared in accordance with RCSC specifications.

3.04 WELDED CONSTRUCTION

- A. Welding shall comply with Section 05 05 23, Welding.
- B. Unless otherwise indicated, butt and bevel welds shall be complete penetration.

3.05 HOLES FOR OTHER WORK

- A. Holes shall be provided as necessary or as indicated for securing other work to structural steel framing, and for the passage of other work through steel framing members. No torch cut holes will be permitted.

3.06 SHOP PAINT PRIMER

- A. Shop paint primer shall be applied in accordance with Section 09 91 14, Exterior Painting (MPI Standards) and Section 09 91 24, Interior Painting (MPI Standards). Omit shop-applied primer at field weld locations, for the portion of a member to be embedded in concrete, and where galvanizing with no further coating is required.

3.07 PRODUCT DELIVERY, STORAGE, AND HANDLING

- A. Structural members shall be loaded in such a manner that they may be transported and unloaded without being excessively stressed, deformed, or otherwise damaged.
- B. Structural steel members and packaged materials shall be protected from corrosion and deterioration. Material shall be stored in a dry area and shall not be placed in direct contact with the ground. Materials shall not be placed on the structure in a manner that might cause distortion or damage to the members or the supporting structures. Repair or replace damaged materials or structures as directed.

3.08 ERECTION

- A. The Contractor shall comply with the AISC Specifications and Code of Standard Practice, and with indicated requirements.
- B. High-strength bolts shall be installed in accordance with the RCSC Specification. The connections shall be the slip-critical, unless indicated otherwise.
- C. Anchor rods and other connectors required for securing structural steel to in-place work and templates and other devices for presetting bolts and other anchors to accurate locations shall be furnished by the Contractor.
- D. The Contractor shall be responsible for designing and installing any temporary bracing required for the safe erection of structural steel members.

3.09 SETTING BASES AND BEARING PLATES

- A. Prior to the placement of non-shrink grout beneath base and bearing plates, the bottom surface of the plates shall be cleaned of all bond-reducing materials, and concrete and masonry bearing surface shall also be cleaned of all bond-reducing materials and be roughened to improve bonding.
- B. Loose and attached baseplates and bearing plates for structural members shall be set on wedges, leveling nuts, or other adjustable devices.
- C. Anchor rods shall be tightened after the supported members have been positioned and plumbed and the non-shrink grout has attained its indicated strength.
- D. Baseplates shall be grouted with non-shrink grout to assure full uniform bearing. Grouting shall be done prior to placing loads on the structure.

3.10 FIELD ASSEMBLY

- A. Structural frames shall be set accurately to the lines and elevations indicated. The various members shall be aligned and adjusted to form a part of a complete frame or structure before permanently fastening. Bearing surfaces and other surfaces that will be in permanent contact shall be cleaned before assembly. Necessary adjustments to compensate for discrepancies in elevations and alignments shall be performed.
- B. Individual members of the structure shall be leveled and plumbed within AISC tolerances.
- C. Required leveling and plumbing measurements shall be established on the mean operating temperature of the structure.

3.11 MISFITS AT BOLTED CONNECTIONS

- A. Where misfits in bolting are encountered, the Engineer shall be immediately notified. The Contractor shall submit a method to remedy the misfit for review by the Engineer. The Engineer will determine whether the remedy is acceptable or if the member must be refabricated.
- B. Incorrectly sized or misaligned holes in members shall not be enlarged by burning or by the use of drift pins.
- C. Correction of misfits is part of the Work.

3.12 GAS CUTTING

- A. Gas cutting torches shall not be used in the field for correcting fabrication errors in the structural framing, except when approved by the Engineer. Gas-cut sections shall be finished equal to a sheared appearance.

3.13 TOUCH-UP PAINTING

- A. Immediately after erection, field welds, bolted connections, and abraded areas shall be cleaned of the shop paint primer. Touch-up paint primer applied by brush or spray shall be the same thickness and material as used for the shop coat. Galvanized surfaces that have been field welded or damaged shall be repaired in accordance with Section 05 50 00, Metal Fabrications.
- B. Finish coating of structural steel shall be as indicated in Section 09 91 14, Exterior Painting (MPI Standards), and Section 09 91 24, Interior Painting (MPI Standards).

END OF SECTION