

From: Verrelli, Beth A @alaska.gov
Sent: Monday, July 24, 2017 6:57 PM
To: Soni, Sejal
Cc:
Subject: FW: CBJ Headworks Improvements CW Loan No. - AIS Question
Attachments: Vic 24inch 45 NON-AIS Submittal

Hi Sejal,

I have an AIS question from the City & Borough of Juneau on the headworks contract for the Biosolids Treatment CW
The project has already been delayed in their efforts to get AIS 24-inch ductile iron pipe fittings, and now with a failure in casting, a 3 month wait is expected in order to obtain. The specs for the fittings is attached.

The two AIS compliant 24-inch 45 degree fittings are valued at \$5,000 a piece for a \$10,000 total. The materials total for this project is close to \$1,000,000. The non-AIS 45 degree joints could be provided by the end of August, which would enable the bypass work to take place outside of the high rainfall period for Juneau. This work was suppose to have happened earlier this summer to avoid high flow events but previously mentioned material problems have already slowed the project. If the work isn't done as soon as possible, the project could be pushed off for months depending on the rainfall in Juneau this fall/winter.

So, for the following reasons, a waiver is requested:

1. Due to the failure of the first casting effort, the AIS pipe fittings needed in a timely manner for this project are not available in sufficient quantities and satisfactory quality
2. Delaying the project an additional 3 months for the AIS fittings, which in turn may cause further problems/delays if fall/winter rainfall cause bypass issues, would likely increase the costs of the overall project
3. Although the fittings are a necessary component of the project, the \$5,000 per item and \$10,000 total costs fits within the de minis value requirements

Please let me know if you have any questions.

Sincerely,

Beth Verrelli
Project Engineer
Municipal Grants & Loans/Anchorage

From: Lori Sowa @juneau.org
Sent: Friday, July 21, 2017 11:28 AM
To: Verrelli, Beth A @alaska.gov

Subject: CBJ Headworks Improvements

Hi Beth-

To recap our phone conversation, I'd like to request a waiver from AIS requirements for two 45 degree pipe fittings that would be part of the new influent pipe network at the Mendenhall Treatment Plant in Juneau Alaska. Here's my reasoning:

CBJ specified that all iron and steel materials for this project meet AIS requirements as required under our grant. Despite planning ahead for extended lead times, we have still run into project delays while trying to meet these requirements. For many of the fittings, the supplier (Victaulic) has had to first make the mold for the fitting, and then produce the AIS fittings. We originally planned to install the new influent piping in May of 2017. Due to the delays in manufacture, the pipe fittings were scheduled to be shipped to Juneau on July 24, pushing our installation into August. On July 17, we were informed that there were problems with the casting and many of the parts had to be recast. Our current delivery date is August 29, which means installation in September 2017.

To install the new piping, we have developed a temporary bypass plan to route influent wastewater around the current headworks for a short time period. The influent piping installation needs to happen during drier weather, which is typically Spring and summer here in Juneau. We cannot install the piping during high flow events. October, November, and December in particular are very wet months here in Juneau, which would preclude installation. So we have already pushed the installation out as far as it can be without putting the project off until next year.

Last week, while field verifying distances, the contractor discovered that they will need to install an additional bend in the new pipe to clear a wall. We've contacted the manufacturer, Victaulic, and in order to produce AIS-compliant parts needed, the lead time will be 3 months. This will delay the project until next year. They can provide non-AIS compliant fittings that would meet our needs for the August 29 shipment.

The cost of these two bends is approximately \$10,000 total. The total materials cost for the project is around \$1,000,000.

Thank you for your consideration, and let me know if you need anything further.

Sincerely,
Lori

Lori Sowa, PE
CBJ Project Engineer
155 S. Seward St
Juneau, AK 99801

Ductile Iron AWWA (Cast) Fittings



NON-AIS Victaulic Elbow Submittal
 page 1 of 2
Standard Tnemec 37 Coated, Cement Lined

AWWA FITTINGS

Victaulic fittings for AWWA size pipe are supplied with rigid radius grooves in accordance with ANSI/AWWA C-606. Fittings conform to ANSI A21.10/AWWA C-110 for center-to-end dimensions and AWWA C-153 or ANSI A21.10/AWWA C-110 for wall thickness.

While most requirements are specified “black” or non-coated, fittings can be supplied with an alkyd-phenolic primer, or bituminous coating. Coal tar epoxy and other coatings are also available. The standard black asphalt coating used on our cement lined AWWA size fittings is NSF 61 Listed. Cast surfaces will be provided with surface equivalent to SSPC-SP6 prior to coating unless specified otherwise. Fittings are available with flanged ends wherever grooved ends are shown.

Linings include cement/mortar Type 2 (standard) and others. Fittings can readily be prepared for glass lining by others.

Fittings are rated for working pressures to 350psi/2400kPa (ductile iron) in 3 – 12”/80 – 300mm sizes and to 250psi/1725kPa (gray iron) in sizes 3 – 12”/80 – 300mm, and to 250psi/1725kPa (ductile iron), or 150psi/1035kPa (gray iron) for 14”/350mm and larger. Victaulic fittings shown have an end-to-end dimension tolerance of ±1/8” in all sizes and styles.

CAST FITTINGS – TAPPED

Victaulic can supply tapped fittings on order to ANSI B16.1 dimension locations. Specify fitting size, tap location by letter on order.

BASE FITTINGS

Grooved end base 90° elbows and base tees are available with dimensions to ANSI B16.1.

MATERIAL SPECIFICATIONS

Fitting: Ductile iron conforming to ASTM A-536, Grade 65-45-12. Ductile iron conforming to ASTM A-395, grade 65-45-15 is available upon special request.

Fitting Coating: (specify choice*)

- **Standard on request:**
 - Non-coated
 - • Alkyd-phenol primer
 - Bituminous coating

- **Optional:**
 - • Coal tar epoxy coating
 - Cement/mortar lining – Type II
 - Glass Lining
 - Other linings available. Contact Victaulic.

* Coatings are applied per manufacturer’s recommended mils.

JOB/OWNER

System No. _____
 Location _____

CONTRACTOR

Submitted By _____
 Date _____

ENGINEER

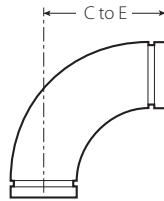
Spec Sect _____ Para _____
 Approved _____
 Date _____

Ductile Iron AWWA (Cast) Fittings

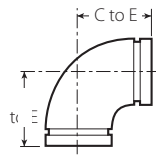
DIMENSIONS

Elbows

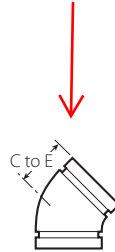
- NO. 100-C 90° Long Radius Elbow
- NO. 10-C 90° Elbow
- NO. 11-C 45° Elbow
- NO. 12-C 22½° Elbow
- NO. 13-C 11¼° Elbow



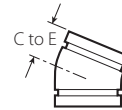
NO. 100-C



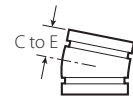
NO. 10-C



NO. 11-C



NO. 12-C



NO. 13-C

Size		No. 100 C 90° Long Radius Elbow		No. 10 C 90° Elbow		No. 11 C 45° Elbow		No. 12 C 22½° Elbow		No. 13 C 11¼° Elbow	
Nominal Size Inches/ mm	Actual Outside Dia. Inches mm	C to E Inches mm	Approx. Weight Each Lbs kg	C to E Inches mm	Approx. Weight Each Lbs. kg	C to E Inches mm	Approx. Weight Each Lbs. kg	C to E Inches mm	Approx. Weight Each Lbs. kg	C to E Inches mm	Approx. Weight Each Lbs. kg
3 80	3.960 100.6	7.75 197	19.3 8.8	5.50 140	8.6 3.9	3.00 76	5.8 2.6	3.00 76	12.5 5.7	3.00 76	9.0 4.1
4 100	4.800 121.9	9.00 229	28.0 12.7	6.50 165	12.0 5.4	4.00 102	8.4 3.8	4.00 102	11.5 5.2	4.00 102	11.5 5.2
6 150	6.900 175.3	11.50 292	55.0 25.0	8.00 203	22.0 10.0	5.00 127	15.0 6.8	5.00 127	25.0 11.3	5.00 127	21.5 9.8
8 200	9.050 229.9	14.00 356	83.0 37.7	9.00 229	38.0 17.2	5.50 140	28.8 13.1	5.50 140	39.5 17.9	5.50 140	39.0 17.7
10 250	11.100 281.9	16.50 419	160.0 72.6	11.00 279	76.0 34.5	6.50 165	43.3 19.6	6.50 165	67.0 30.4	6.50 165	77.0 34.9
12 300	13.200 335.3	19.00 483	210.0 95.3	12.00 305	92.0 41.7	7.50 191	72.0 32.7	7.50 191	108.0 49.0	7.50 191	120.0 54.4
14 350	15.300 388.6	21.50 546	261.0 118.4	14.00 356	174.0 78.9	7.50 191	104.0 47.2	7.50 191	92.0 41.7	7.50 191	101.0 45.8
16 400	17.400 442.0	24.00 610	337.0 152.9	15.00 381	239.0 108.4	8.00 203	142.0 64.4	8.00 203	112.0 50.8	8.00 203	121.0 54.9
18 450	19.500 495.3	26.50 673	451.0 204.6	16.50 419	328.0 148.8	8.50 216	186.0 84.4	8.50 216	145.0 65.8	8.50 216	146.0 66.2
20 500	21.600 548.6	29.00 737	588.0 266.7	18.00 457	413.0 187.3	9.50 241	246.0 111.6	9.50 241	200.0 90.7	9.50 241	202.0 91.6
24 600	25.800 655.3	34.00 864	909.0 412.3	22.00 559	668.0 303.0	11.00 279	414.0 187.8	11.00 279	282.0 127.9	11.00 279	284.0 128.8
30 750	32.000 762.0	41.50 1054	2136.0 968.9	25.00 635	1002.0 454.4	15.00 381	720.0 326.6	15.00 381	681.0 308.9	15.00 381	699.0 317.1
36 900	38.300 914.4	49.00 1245	3120.0 1415.2	28.00 711	1608.0 729.4	18.00 457	1152.0 522.6	18.00 457	975.0 442.3	18.00 457	1124.0 509.8