

## SECTION 331240 - MISCELLANEOUS PIPING ACCESSORIES

### PART 1 GENERAL

#### 1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

#### 1.2 SUMMARY

- A. Adapter Flanges.
- B. Retainer Glands.
  - 1. Set Screw Type.
  - 2. Wedge Action Type
- C. Solid Sleeves.
- D. Field Lok Gaskets.
- E. Foster Adaptors.
- F. Sampling Station.
- G. Automatic Flushing Station.
- H. Pipe Insulation.
- I. Service Meter
- J. Meter Pit

#### 1.3 RELATED SECTIONS

- A. Section 331113 - Public Water Utility Distribution Piping.
- B. Section 331113.01 - Ductile Iron Pipe.

#### 1.4 SUBMITTALS

- A. Submit Shop Drawings of manhole sections to Engineer for approval.

### PART 2 PRODUCTS

#### 2.1 ADAPTER FLANGES

- A. Use: To Join plain end pipe to valves.
- B. Body: Ductile Iron ASTM A536-77.
- C. Set Screws: AISI 4140 Steel having tensile strength 190,000 psi, minimum. Heat-treated, zinc plated.
- D. Gasket: MJ type gasket; AWWA C111/A21.11-79.

## 2.2 RETAINER GLANDS – SET SCREW TYPE

- A. Use: For restraining standard mechanical joints where shown on the Contract Drawings.
- B. Body: Ductile cast iron fitted with cup point, square head, double heat-treated, parkerized steel set screws.
- C. Flange and gasket: Standardized tee head bolts and gasket conforming to AWWA C111/A21.11. Applicable to smaller pipe sizes and lower pressures.

## 2.3 RETAINER GLANDS – WEDGE ACTION TYPE

- A. Use: For restraining standard mechanical joints where shown on the Contract Drawings.
- B. Body: Ductile iron.
- C. Wedges and wedge actuating components: Ductile iron. Wedges shall be heat treated for hardness.
- D. Wedge action retainer glands shall be used on larger pipe sizes and where higher pressures must be achieved.

## 2.4 SOLID SLEEVES

- A. Use: For cut-in connections to existing water pipe.
- B. Body: Ductile iron, mechanical joint 15” in length conforming to ANSI/AWWA C220/A21.10. Minimum rated working programs.
- C. Ductile iron glands, Cor-ten steel tee-bolts and nuts coated with fluorocarbon SC-1 coating as manufactured by Stanco or equal, rubber gaskets and required joint lubricant.
- D. Solid sleeves as manufactured by U.S. Pipe or equal.

## 2.5 FIELD LOK GASKETS

- A. Use: For restraining push on tyton joint pipe where shown on the Contract Drawings.
- B. Field Lok Gaskets shall be by U.S. Pipe or equal.

## 2.6 FOSTER ADAPTORS

- A. Use: To restrain mechanical joint valves and mechanical joint fittings to other mechanical joint fittings.

- B. Body: Ductile iron ASTM A536.
- C. Coatings: The bolt-through mechanical joint positive restraining device and ductile iron spacers shall be supplied with an NSF61, 7-mil fusion bonded epoxy coating.
- D. Accessories: Supply adaptor with all accessories, including standard SBR mechanical joint gaskets per AWWA C111/A21.11 and blue Teflon coated bolts and nuts per AWWA C111/A21.11.
- E. Manufacturer: Foster adaptors by Infact Corporation or equal.
- F. Foster adaptors shall not be used to make direct connections to hydrants.

## 2.7 SAMPLING STATION

- A. Use: Where shown on Contract Drawings
- B. Sampling Station shall be Eclipse #88 by Kupferle Water Solutions, or approved equal.
- C. Shall be suitable for extreme cold temperatures.

## 2.8 AUTOMATIC FLUSHING STATION

- A. Use: Where shown on Contract Drawings
- B. Automatic Flushing Station shall be Eclipse #9400 by Kupferle Water Solutions, or approved equal.
- C. Size: Shall be 1-inch connection to distribution system.
- D. Startup of flushing station shall be coordinated with the Owner.

## 2.9 PIPE INSULATION

- A. Use: Where shown on Contract Drawings
- B. Pipe shall be insulated with polystyrene foam insulation with a minimum R-value of 10.

## 2.10 SERVICE METER

- A. Use: Where shown on Contract Drawings, including but not limited to within installed meter pits.
- B. Meters shall be Orion radio read style meters, by Bader Meters.

## 2.11 METER PIT

- A. Use: Where shown on Contract Drawings
- B. Meter Pits shall be Thermal-Coil Meter Box by Mueller
  1. 3/4" Service, 15" diameter Meter Pit: Model No. 203CS1572LBBLN
  2. 1" Service, 18" diameter Meter Pit: Model No. 330CS1872LBBLN

- C. Meter Pits shall include locking cover and insulation pad.
  - 1. 15" diameter Meter Pit:
    - a. Locking Cover: Model No. 780068
    - b. Insulation Pad: Model No. 790022
  - 2. 18" diameter Meter Pit:
    - a. Locking Cover: Model No. 780069
    - b. Insulation Pad: Model No. 790153

### **PART 3 EXECUTION**

#### **3.1 INSPECTION**

- A. Contractor shall propose for approval by Engineer manufacturer, model number and other pertinent data necessary for Engineer to determine compliance with Contract Drawings.

#### **3.2 INSTALLATION**

- A. Contractor to install material in accordance with manufacturer's written instructions.
- B. All parts which come into contact with the water stream shall meet NSF-61 certifications.

**END OF SECTION**