



June 16, 2011

Addendum 1

ITB-11-67

The Invitation To Bid – Utility Items for CSX Water Main Project, ITB-11-67, is hereby changed by addition of the following:

1. The Specifications are revised to match the updated technical specifications of the City of Winter Haven, which are included herein. Replaced the specifications with the attached.

All other terms and conditions remain the same.

Sincerely,

CITY OF WINTER HAVEN

A handwritten signature in black ink, appearing to read 'Bob Bishop', is written over a large, faint circular watermark or seal.

Bob Bishop

Procurement Services Division Director

All pipe, fittings and appurtenances shall be manufactured domestically.

3.7.1 PVC PIPE AND FITTINGS

All PVC pipe of nominal diameter 4" through 12" shall be manufactured in accordance with AWWA standard C900, latest edition. The PVC pipe shall have a minimum working pressure rating of 150 psi and shall have a dimension ratio (DR) of 18. Pipe shall be the same O.D. as ductile iron pipe and be compatible for use with ductile iron fittings.

All PVC pipe of nominal diameter 14" through 24" shall be manufactured in accordance with AWWA standard C905, latest edition. The PVC pipe shall have a minimum working pressure rating of 165 psi and shall have a dimension ratio (DR) of 25. Pipe shall be the same O.D. as ductile iron pipe.

All PVC pipe shall be solid blue in color. White pipe is strictly prohibited. All PVC pipe shall bear the approved seal of the National Sanitation Foundation (NSF) that will remain legible during normal handling, storage and installation.

All PVC water mains shall have a suitable electronic locator tape buried over the water main approximately one foot below grade. The tape shall be continuous between valves and secured to each valve. The tape shall be at least 4.5 mils thick, 3-inch minimum width and made with an aluminum material sandwiched between two layers of polyethylene. It shall be imprinted in permanent black ink with 1-inch letters "CAUTION WATER MAIN BURIED BELOW" on blue background.

All non-metallic pipes shall be installed with a 2 insulated 14 gauge copper locating wires attached directly to the water main for location purposes. See STANDARD DRAWINGS for wire location and installation notes. The wire shall be installed through valve boxes, valve pits, manholes, air release structures, etc. and provide sufficient excess such that a loop in the wire can be raised to ground level. Prior to acceptance by the CITY, the CONTRACTOR must demonstrate that the wire is continuous and unbroken through the complete run of the pipe.

Fittings for PVC pipe (4" through 12") shall be ductile iron mechanical joint with a minimum pressure rating of 250 psi and shall conform to the requirements of ANSI A21.10 and A21.4. All PVC pipe shall have provisions for expansion and contraction provided in the joints. All joints shall be integral bell push-on type joints conforming to ASTM D3139.

3.7.2 DUCTILE IRON PIPE AND FITTINGS

All ductile iron pipe of nominal diameter of 4" through 54" shall conform to ANSI/AWWA A21.51/C151. A minimum Pressure Class 350 pipe shall be supplied for all sizes of pipe unless specifically required by the CITY. Pipe shall have an exterior bituminous coating in accordance with ANSI A21.51. Pipe interior shall have a cement mortar lining with an asphaltic seal coat conforming to ANSI/AWWA C104/A21.4. Joints for ductile iron pipe shall be mechanical or push-on joints conforming to ANSI/AWWA A21.53/C111. Flanged joints shall conform to ANSI Standard B 16.1-125 LB. Restrained joints shall conform to Section 3.7. Any fittings required shall be compact mechanical joint ductile iron or gray iron conforming to ANSI/AWWA A21.53/C153, 350 psi minimum pressure rating.

3.7.3 VALVES

All valves shall be products of well-established firms who are fully experienced and qualified in the manufacture of the particular valves to be furnished. All valves shall be the manufacturer's standard design for the service intended and shall bear the maker's name and pressure rating cast on the body, also the valve type, flow direction arrow, if applicable. Valves shall open left (counter clockwise) with an arrow cast in the metal of operating hand wheels or nuts indicating the direction of opening.

Gate Valves: Underground gate valves **4 inches and over** shall be of the resilient seat type meeting the requirements of AWWA C500/C509. These valves shall have non-rising stems, shall be furnished with 2-inch square AWWA operating nuts, and shall open when the nut is turned counterclockwise. Valves shall have an unobstructed waterway equal to or greater than the full nominal diameter of the valve.

Underground gate valves **3 inches and under** shall conform with Federal Specifications WW-V-54 Type I solid wedge disc, non-rising stem, secured joints and of bronze construction. Valves shall have malleable iron hand wheels and shall be American 3FG, Nibco T-113, or equal. Approved manufacturer's gate valves are specified in Section 10 of this MANUAL.

The valve body shall be constructed of close grain cast iron or ductile iron per ASTM A126, Class B or equivalent material. All retaining segments and adjusting devices shall be of corrosion resistant material. Valve seats shall be a natural rubber or synthetic rubber compound. Valve seats 30 inches and larger shall be field adjustable and replaceable without dismantling operator disc or shaft and without removing the valve from the line. All retaining segments and adjusting devices shall be of corrosion resistant material. Valves 24 inches and smaller shall have bonded or mechanically restrained seats as outlined in AWWA C504. The face-to-face dimensions of valves shall be in accordance with AWWA C504 for short-body valve.

Tapping Valve: Tapping valves shall be mechanical joint outlet, non-rising stem, resilient seat gate valves meeting the applicable requirements of AWWA C509. Tapping valves shall be specifically designed for pressure tapping with sufficient seat opening to allow full diameter taps to be made. Tapping valves shall be manufactured with an integral tapping flange having a raised lip design.

Tapping Sleeves: Tapping sleeves for size-on-size connections shall be extra long all stainless steel tapping sleeve with full circumferential gasket compounded for use with water, for non size on size connections the tapping sleeve shall be the standard length all stainless steel tapping sleeve. Tapping sleeves shall be JCM 432 or Romac Style SST or approved equal. The CONTRACTOR shall determine the outside diameter of the existing main before ordering the sleeve. Tapping sleeves shall have an outlet flange with the dimensions of the Class 125 flanges shown in ANSI B16.1, properly recessed for tapping valve. Bolts and nuts shall be Type 304 Stainless Steel. (Revised 06/15/2007)

Service Saddles: Service saddles shall have a body made of ductile iron, fusion plastic coated, be equipped with double stainless steel tie straps, and be suitable for either wet or dry installation. The saddle shall be anchored by a minimum four (4) stainless steel bolt pattern on a ductile iron saddle body. The sealing gasket shall be the O-ring type suitable for the applicable service. Outlet flange shall be ANSI B16.1, 125 lbs. standard. Tie straps and bolts shall be a corrosion resistant alloy steel. Saddles shall be JCM 406, Romac 202NS or approved equal. (Revised 04/01/2011)

Air Release Valve Assembly: Air release valves shall be of the type that will release air from the line when pressurized and keep air from entering the line when not pressurized. Air release valves shall be located at high elevation points on the pipeline and operate automatically. The air release valve shall have a cast iron body, cover and baffle stainless steel float, bronze water diffuser Buna-N or Viton seat, and stainless steel trim. Valves, fittings, and piping shall be rated for a minimum working pressure of 150 psi. The fittings shall be threaded. The air release valves shall be installed in traffic-bearing pre-cast concrete vaults with gravel and concrete bottoms. See STANDARD DRAWINGS for installation details.

Valve Box: All buried valves shall have cast iron three piece valve boxes with a secure cover. Valve boxes shall be provided with suitable heavy bonnets and shall extend to such elevation at or slightly above the finished grade surface as directed by the CITY. The barrel shall be two-piece, sliding type, having a 5 ¼ inch shaft. The upper section shall have a flange at the bottom having sufficient bearing area to prevent settling and shall be complete with cast iron covers. Covers shall have "WATER" cast into the top for all water mains. The actuating nuts for deeper valves shall be extended to come up to 3 foot depth below finished grade. All nuts, bolts, etc. shall be stainless steel.