**SECTION S923 - BELL JOINT LEAK CLAMP**

**S923-1 DESCRIPTION**

Work consists of the installation of new bell joint leak clamps on existing cast iron water main bell and spigot joints as required in the Contract Documents and as directed by the Project Manager.

Work is to be in conformance with the requirements of Section S900 General Water Provisions.

**S923-2 MATERIALS**

**S923-2.01 Bell Joint Leak Clamp**

Bell joint leak clamp bell and spigot rings shall be ductile iron in conformance with the requirements of ASTM 536, with fusion bonded epoxy coating.

Gaskets are to be SBR or Nitrile (Buna N) rubber or other rubber compound suitable for use with potable water.

Bolts and nuts shall be fluorocarbon coated, cold formed, high strength, low alloy steel in accordance with ANSI/AWWA C111/A21.11.

**S923-3 CONSTRUCTION DETAILS**

Prior to ordering the bell joint leak clamp, the Contractor shall be responsible for measuring the outside diameter of the existing water pipe for proper sizing of the clamp. Excavation is normally required to obtain this measurement. Extended lead time may be required for delivery of clamp from the manufacturer.

Contractor shall locate the existing water pipe joint, and carefully excavate to expose the water pipe joint enough to install the new bell joint leak clamp. Existing water pipe shall be braced and supported as directed by the Project Manager to maintain the structural integrity of the existing water pipe. Clean pipe joint thoroughly on back of bell, on bell face and on spigot where gasket will seat. Dirt, loose rust and scale must be removed from the gasket seating area. On caulked lead joints, if the caulking material extends beyond the face of the bell, excess caulking should be carefully removed. If the caulking is recessed more than 1/8-inch, it should be faced up to the bell with a suitable material.

New bell joint leak clamps shall be installed according to the manufacturer’s instructions and as directed by the Project Manager. All bolts and nuts on each bell joint leak clamp shall be evenly tightened with the proper torque, with no evidence of leakage occurring at the joint.

Placement of the pipe bedding material and backfilling of the trench shall be done in a manner so as to avoid damage to the water pipe and bell joint leak clamp, and in accordance with Section S901 Water Main Pipe and Fittings.

**S923-4 METHOD OF MEASUREMENT**

The quantity to be measured for payment shall be the number of bell joint leak clamps installed.

**S923-5 BASIS OF PAYMENT**

The unit price bid shall include the cost of: furnishing and installing bell joint leak clamp; pavement saw cutting; excavation including additional excavation necessary to measure outside diameter of existing water pipe; locating existing pipe joint; cleaning and repairing existing water pipe and joint; bedding and backfill materials; bracing and support of existing water pipe; and furnishing all labor, material and equipment necessary to complete the work.

Payment will be made under:

**ITEM NO. ITEM PAY UNIT**

S923.01XX X" Bell Joint Leak Clamp Each

REVISED February 13, 2014