SECTION S911 - PITOMETER TAP AND CONNECTION

S911-1 DESCRIPTION

Work consists of the installation of pitometer tap and connection 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.

S911-2 MATERIALS

S911-2.01 Service Saddle

Service saddle shall be all brass with Buna-N (Nitrile) or EPDM rubber gaskets and AWWA taper threads. For ductile iron water pipe, saddle shall be double strap. For PVC/PVCO water pipe, saddle shall be wide strap.

S911-2.02 Corporation Stop

Corporation stop shall be 1-1/2 inch ball corporation stop, cast brass conforming to AWWA Standard C800, inlet with AWWA taper threads and FPT at outlet. Furnish with 1-1/2 inch MPT x 1-1/4 inch FPT brass bushing on outlet.

S911-2.03 Ball Valve

Ball valve shall be 1 inch cast bronze, rubber seats and O-rings with 1-1/4 inch MPT inlet and 1-1/4 inch FPT outlet.

S911-2.04 Miscellaneous

Multi-directional brass angled handle for ball valve with cotter pin

Operating rod for handle – 3/8 inch stainless steel, specify length

Pipe – brass cut to length, threaded 1-1/4 inch MPT both ends

Cap – brass 1-1/4 inch FPT

S911-2.05 Valve Box

3 piece Buffalo Style, 7 inch diameter, cast iron shaft with adjustable screw type extension

S911-3 CONSTRUCTION DETAILS

The pitometer tap and connection shall be installed in accordance with the requirements of ANSI/AWWA C600 for ductile iron pipe, ANSI/AWWA C605 for polyvinyl pipe, and for Sections S901 Water Main Pipe and Fittings and S912 Corporation Stop and Connection; Abandon Existing Water Service at Tap (2 inch and smaller). Pitometer taps made on water mains that are encased in polyethylene shall be made in accordance with the requirements of ANSI/AWWA C105/A21.5.

For ductile iron pipe, service saddle shall be required for water mains that are less than 16 inches in diameter. Service saddle shall be required for all PVC/PVCO pipe.

The pitometer tap shall be made at the 12 o'clock position on the water main. Only equipment specially designed for the work shall be used to make the tap. For ductile iron pipe, the tap shall require 1-3/8 inch minimum diameter hole cutter. For PVC/PVCO pipe, the tap shall require 1-3/8 inch minimum diameter core cutter. When coring the water main pipe, care shall be taken to completely core through the water main pipe wall. The installation of the corporation stop shall be made watertight.

The bushing, ball valve, riser pipe, and cap shall be assembled to the corporation stop. Teflon tape shall be used at all threaded joints. The operating handle shall be fastened to the ball valve. The handle shall be positioned so that the operating rod is pulled up to open the ball valve and pushed down to close it. The corporation stop and ball valve shall be opened, and the assembly checked for leaks under full line pressure. Prior to backfilling, a representative of the Water Bureau must inspect the pitometer tap and verify that a pitometer blade can be inserted into the water main.

The valve box shall be placed on a concrete brick foundation and positioned so as to enclose the pitometer tap assembly. The sections of the valve box shall be centered around the pitometer tap assembly making certain that there is sufficient room to operate the ball valve with the operating rod.

The valve box shall be braced and checked for proper inside clearance during backfilling operation. The height of the valve box shall be adjusted so that the top is flush with the finished surface grade.

S911-4 METHOD OF MEASUREMENT

The quantity to be measured for payment shall be the number of pitometer taps and connections made.

S911-5 BASIS OF PAYMENT

The unit price bid shall include the cost of: pavement saw cutting; tapping, cutting or coring water main pipe; furnishing and installing pitometer tap assembly; service saddle; corporation stop; bushing; ball valve; angled handle; operating rod; riser pipe; cap; valve box; checking pitometer tap assembly for leaks; and furnishing all labor, material and equipment, necessary to complete the work.

Excavation, rock excavation, furnishing and placing bedding and backfill, and surface restoration will be paid for under separate bid items.

Payment will be made under:

ITEM NO.	ITEM	PAY UNIT
S911.01	Pitometer Tap and Connection	Each

REVISED February 19, 2015