

SECTION S910 - TEMPORARY CUT AND PLUG EXISTING WATER MAIN

S910-1 DESCRIPTION

Work consists of cutting and temporarily plugging or capping existing water mains, as required in the Contract Documents and as directed by the Project Manager.

Work is to be in conformance with the requirements of Sections S900 General Water Provisions and S901 Water Main Pipe and Fittings.

S910-2 MATERIALS

S910-2.01 Temporary Plugs and Caps

Plugs and caps are to be ductile iron in conformance with the requirements of Section S901 Water Main Pipe and Fittings or bolted sleeve type steel or ductile iron end cap couplings in accordance with ANSI/AWWA C219. PVC caps or plugs are not to be used.

Tapped plugs or caps are to be provided when a temporary blow-off is specified, or when directed by the Project Manager.

S910-2.02 Temporary Blow-off

Blow-off pipe is to be 1 inch minimum diameter Type K copper tubing conforming to the requirements of Section S913 Water Service (2 Inch and Smaller) or Schedule 40 galvanized steel with threaded joints. Ball valve curb stops are to be same size as blow-off pipe and in conformance with the requirements of Section S914 Curb Stop and Box.

S910-3 CONSTRUCTION DETAILS

A section of water main pipe shall be cut and removed. The interior of the new cap or plug and fittings must be spray or swab disinfected with a 1 to 5 percent solution of chlorine no more than 30 minutes prior to installation. The interior and exterior of the cut end of existing pipe which will be plugged or capped shall also be cleaned and disinfected.

Cap or plug shall be restrained and braced in a manner sufficient to support system working pressures, and thrust forces.

When a temporary blow-off is required, the blow-off pipe shall be connected to a tapped plug or cap and a curb stop installed on the blow-off pipe. Tapped plug or cap and blow-off shall be protected from damage by vehicular traffic and vandalism by backfilling or plating the excavation. When freezing temperatures are anticipated, the plug or cap and blow-off must be protected from freezing. The blow-off must be made accessible for use by the Water Bureau as needed.

All joints shall be made watertight. Prior to backfilling or plating, the water main shall be filled with potable water and installation tested for leaks under line pressure in the presence of the Project Manager.

Temporary plug or cap assembly and blow-off shall be removed when no longer needed.

S910-4 METHOD OF MEASUREMENT

The quantity to be measured for payment shall be the number of temporary cuts and plugs made.

S910-5 BASIS OF PAYMENT

The unit price bid shall include the cost of: cutting and removing a section of the existing water main; dewatering and cleaning existing water main; disinfection to prevent contamination of the existing water main and new fittings; furnishing, placing, maintaining and removing the temporary plug or cap, blow-off, mechanical restraints and braces; plugging the abandoned section of water main with concrete; pavement saw cutting; leakage testing; repairing leaks; providing and maintaining protection required to prevent damage by vehicular traffic, vandalism and freezing; providing access to blow-off for operation by Bureau of Water; and furnishing all labor, material and equipment necessary to complete the work.

Excavation, furnishing and placing of select granular backfill and surface restoration will be paid for under separate bid items.

Payment will be made under:

ITEM NO.	ITEM	PAY UNIT
S910.01XX	Temporary Cut and Plug Existing X" Water Main	Each
S910.02XX	Temporary Cut and Plug Existing X" Water Main (Including Blow-Off)	Each

REVISED January 11, 2011