

SECTION S922 – PERMANENT BLOW-OFF ASSEMBLY

S922-1 DESCRIPTION

Work consists of installation of a blow-off assembly at the end of an existing or new water main, 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.

S922-2 MATERIALS

S922-2.01 Blow-Off Pipe and Fittings

Blow-off pipe is to be C230 Red Brass, Schedule 40, 2 inch nominal diameter with threaded ends. Fittings, including elbows and caps, shall be threaded brass.

S922-2.02 Service Saddle

Service saddle is to be 2 inch in conformance with S912 Corporation Stop and Connection; Abandon Existing Water Service at Tap (2 Inch and Smaller). For blow-off connected to cast or ductile iron water main, service saddle is to be double strap all brass saddle with Buna-N (Nitrile) or EPDM rubber gaskets and AWWA taper threads. For blow-off connected to PVC/PVCO water main, service saddle is to be wide strap all brass saddle with Buna-N (Nitrile) or EPDM rubber gaskets and AWWA taper threads.

S922-2.03 Corporation Stop

Corporation stop for blow-off is to be 2 inch cast brass ball valve type with AWWA taper thread inlet and female iron pipe thread outlet.

S922-2.04 Stop and Waste Ball Valve

Stop and waste ball valve is to be 2 inch cast brass body, with "O" ring seals and female iron pipe thread inlet and outlet, rated to 150 pounds per square inch. Waste feature shall allow the downstream line to drain when the valve is in the closed position. Furnish with 2 inch gate valve operating nut firmly secured to top of valve with brass hardware.

S922-2.05 5-1/4 Inch Valve Box

5-1/4 inch valve box is to be two piece Buffalo Style, 5-1/4 inch shaft, cast iron box with a slip type extension and flange at top of upper section, in conformance with the requirements of Section S909 Water Valve Box.

S922-2.06 7 Inch Valve Box

7 inch valve box is to be three piece Buffalo Style, 7 inch shaft with a screw type extension, in conformance with the requirements of Section S909 Water Valve Box (Pitometer).

S922-2.07 Miscellaneous

Blow-off drain material is to be washed stone or gravel, size designation No. 1 in accordance with NYSDOT Table 703-4.

Plastic barrier material around stone or gravel is to be 6 mil polyethylene.

S922-3 CONSTRUCTION DETAILS

The blow-off shall be located as close as possible to the end of the water main and downstream from all service connections. Exercise caution when excavating around the existing water main. Disturbance of concrete thrust blocks and damage to joint restraint devices shall be repaired by the Contractor.

Blow-off assembly shall be installed in accordance with the requirements of ANSI/AWWA C600 for iron pipe and ANSI/AWWA C605 for polyvinyl pipe, Section S901 Water Main Pipe and Fittings and S912 Corporation Stop and Connection; Abandon Existing Water Service at Tap (2 Inch and Smaller). Blow-off assemblies installed on water mains that are encased in polyethylene shall be made in accordance with the requirements of ANSI/AWWA C105/A21.5.

The tap for the blow-off assembly shall be made at the 3 o'clock or 9 o'clock positions on the water main. Only equipment specially designed for the work shall be used to make the tap. 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.

Blow-off assembly shall be connected to the corporation stop. Concrete block supports shall be provided under stop and waste ball valve and elbow fitting. The corporation stop and ball valve shall be opened and the assembly checked for leaks under full line pressure. All joints shall be made watertight. A 2 inch gate valve operating nut shall be firmly secured to the top of the stop and waste ball valve using brass hardware.

Install washed stone or gravel around the stop and waste ball valve and along trench to end of blow-off pipe and cover with plastic polyethylene barrier. Attach one 5 pound magnesium anode to the brass pipe near base of elbow fitting using a bronze ground clamp. Bedding and backfill immediately surrounding anode shall be native material. Install valve boxes centered over the valve and vertical blow-off pipe and backfill remaining portion of excavation. The valve boxes shall be braced and checked for alignment during backfilling operation. The height of the valve boxes shall be adjusted so that the top is flush with the finished surface grade.

S922-4 METHOD OF MEASUREMENT

The quantity to be measured for payment shall be the number of blow-off assemblies installed.

S922-5 BASIS OF PAYMENT

The unit price bid shall include the cost of: pavement saw cutting; tapping water main pipe; furnishing and installing blow-off assembly; service saddle; corporation stop; stop and waste ball valve; brass pipe and fittings; valve boxes; checking blow-off assembly for leaks; washed stone or gravel; polyethylene barrier; and furnishing all labor, material and equipment necessary to complete the work.

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

Payment will be made under:

ITEM NO.	ITEM	PAY UNIT
S922.02XX	2 Inch Blow-Off Assembly on Existing or New X" Water Main	Each

ISSUED February 25, 2014