

<b>METROPOLITAN UTILITIES DISTRICT</b>	<b>Construction Standard</b>	No:	<b>1.6.2</b>
	<b>Sample Taps on Ductile Iron, Cast Iron, HDPE and PVC Water Mains 16" and Smaller</b>	Page:	1 of 3
Prepared by: Rich Baird		<a href="#">Supersedes:</a>	2-9-23
Approved by: James Bartels		Effective:	3-18-26

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## GENERAL

This standard covers the procedure for installing sample taps on water mains through 16" in size.

## SAMPLE TAP SIZE

All sample taps shall be 3/4" in size.

## LOCATION

Sample taps shall be installed on all dead-end sections of main, at chlorine tubes, approximately every 1200' and at locations indicated on the drawing. Sample taps shall remain exposed until bacteriological tests have passed.

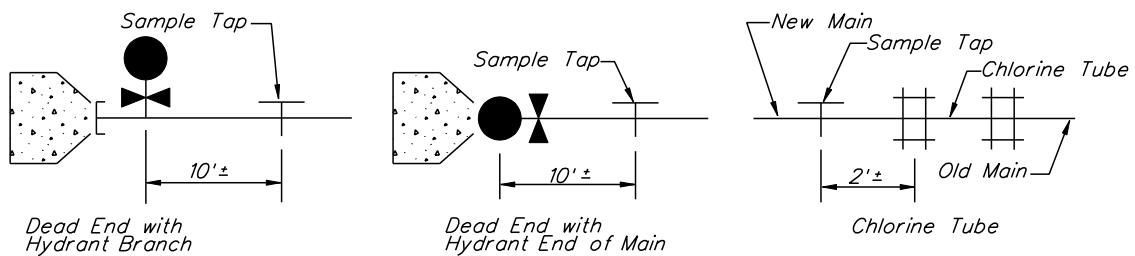


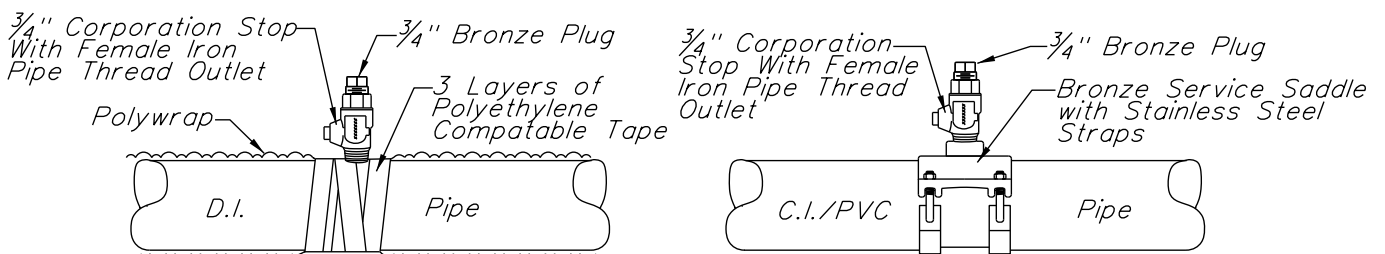
Fig 1

## TAP PROCEDURE

Pipe with Polywrap shall be wrapped with 3 complete layers of polyethylene compatible adhesive tape at the tap location. Width of area wrapped with tape shall be wide enough to protect Polywrap from damage caused by tapping machine (6" minimum width). Tap shall be made through tape, Polywrap, and pipe. After tapping, repair any damage to tape and/or Polywrap.

**Note:** Thread sealant shall be NSF 61 approved Teflon tape or pipe dope (Rectorseal #5). The NSF 61 designation (not just NSF) shall be shown on the container to be approved.

Taps on cast iron and PVC mains shall utilize a bronze tapping saddle per MUD 119.



**NOTE:** Tap shall be made with a tapping machine and appropriate bit for drilling and tapping D.I./C.I. Hand-held drills shall not be used.

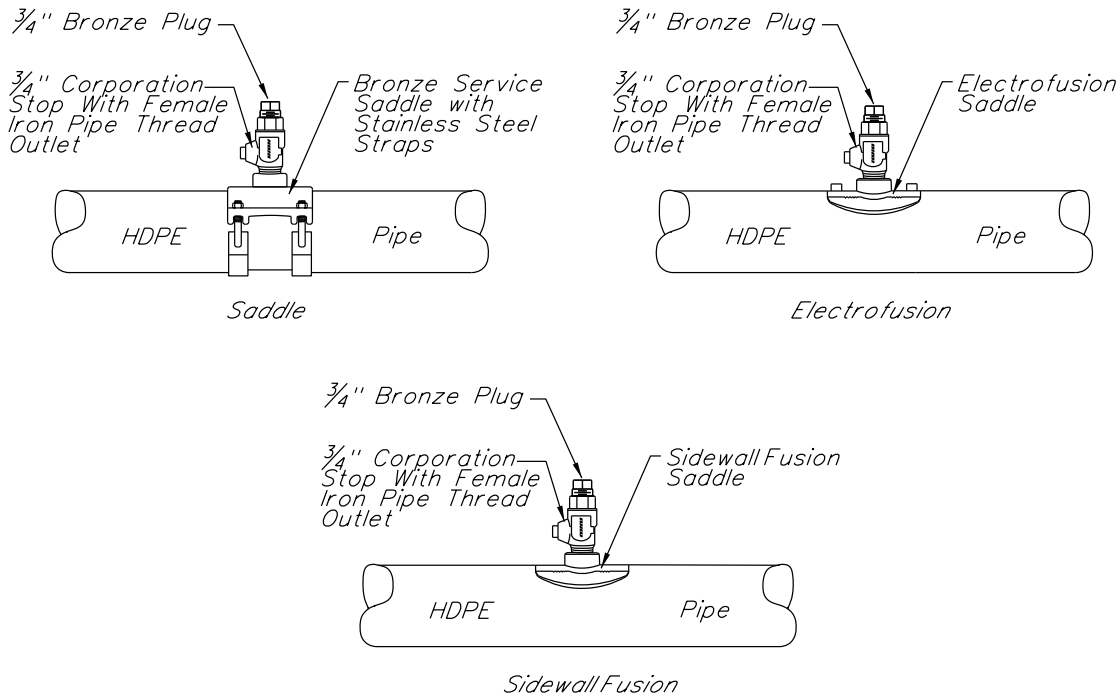
**NOTE:** Tap shall be made with a manual tapping machine and a shell-type cutting bit designed for cast iron or PVC. Hand-held drills shall not be used.

Fig 2

Taps on HDPE mains shall utilize either a bronze tapping saddle, or electrofusion tapping saddle or sidewall fusion tapping saddle per MUD 119.

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NOTE: For all three processes, tap shall be made with a manual tapping machine and a shell-type cutting bit designed for HDPE. Hand-held drills shall not be used.

Fig 3

### **EXTENSION TUBING (Optional)**

Contractors or District crews may choose to install copper tubing and an additional valve to extend the sample tap outside the excavation for water sample collection. See [Fig 4](#). If freezing conditions are anticipated, the copper tubing shall be insulated, and appropriate measures shall be taken to protect the exposed water main from freezing temperatures.

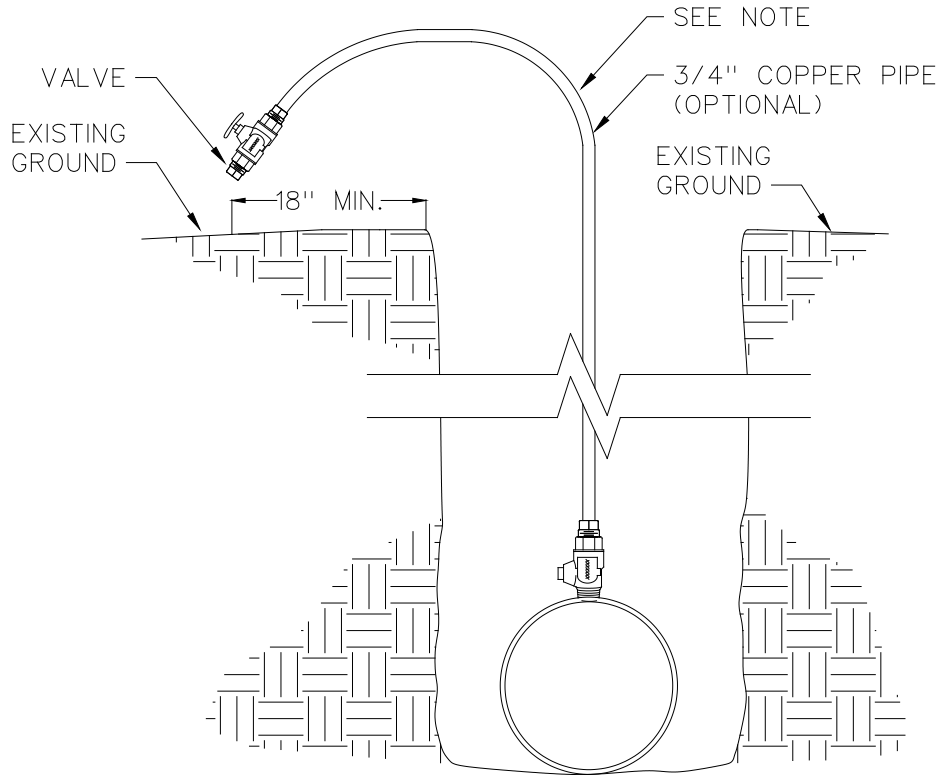
Contractors or District crews may elect to temporarily backfill around the sample tap when copper tubing is used. Regardless of whether temporary backfill is provided, the sample tap valve at the end of the copper tubing shall extend a minimum of 18" beyond the limits of excavation protection. If temporary backfill is not provided, the contractor or District crew shall implement all necessary safety measures to adequately protect the excavation (i.e. safety fence). If copper tubing is not utilized, sample tap excavation shall meet District's shoring requirements. See C.S. [0.3.0](#) (District crews) or [Standard Specifications for Water Main Construction](#) (Contractors) for shoring requirements.

Contractors or District crews shall disinfect the copper tubing and hand chlorinate all fittings prior to installation.

After two consecutive passing bacteriological samples, the 3/4" copper pipe and valve shall be removed from the corporation stop. The threads of the corporation stop shall then be plugged per [Fig 2](#) and [Fig 3](#) above using NSF 61-approved Teflon tape.

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NOTE: HAND CHLORINATE COPPER PRIOR TO INSTALLATION

*Fig 4*

## Revision

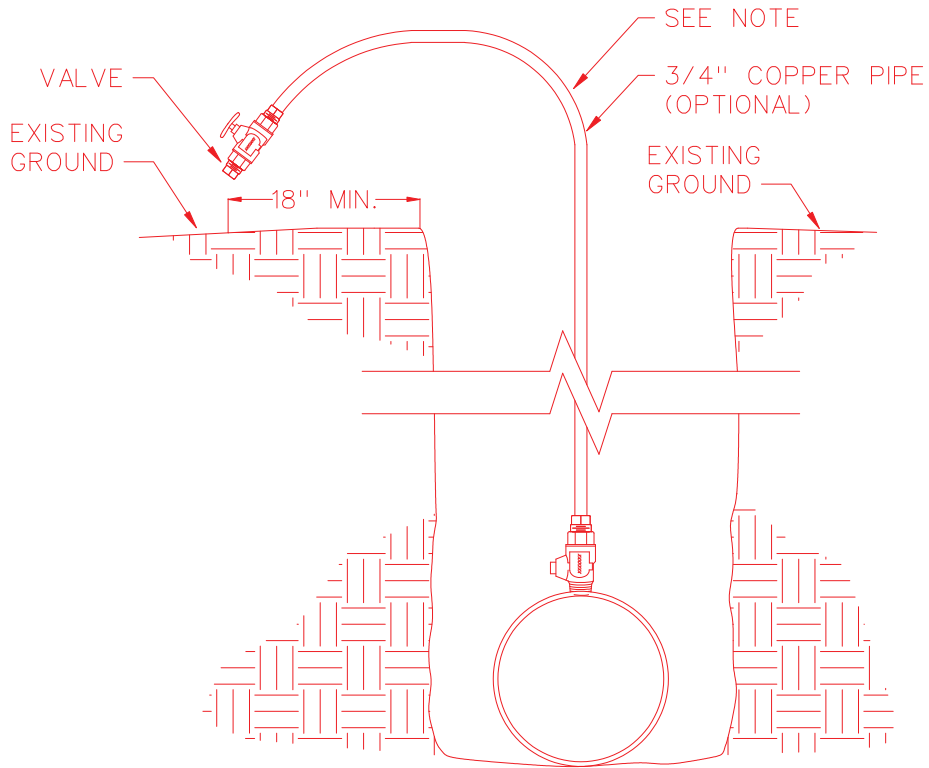
The latest revision is detailed on the following page(s).

Pages affected: **#2 & #3** \_\_\_\_\_



<b>METROPOLITAN UTILITIES DISTRICT</b> Prepared by: <u>D.J. Satterfield</u> Approved by: <u>Jeff Schevane</u>	<b>Construction Standard</b>	No: <b>1.6.2</b>
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*Fig 4*

\*\* Added Drawing/Text