

4/2022

W-03-1075



## WATER T&D Construction Standard

### SERVICE CONNECTION - DIRECT TAP, 3/4" & 1", ON POLYETHYLENE ENCASED DUCTILE IRON WATER MAIN

APPLICATION: 3/4" and 1" service connections.

BWL requires the "preferred method" be used when making direct taps in ductile iron and gray-iron water main. As stated in AWWA C600, the "preferred method" of tapping polyethylene-encased ductile iron pipe consists of applying two or three wraps of polyethylene adhesive tape completely around the pipe to cover the area where the tapping machine and chain will be mounted. This method minimizes the possible damage to the polyethylene during the direct tapping procedure. After the tapping machine is mounted, the corporation stop is installed directly through the pipe and polyethylene encasement. After the direct tap is completed, the entire circumferential area shall be inspected for damage and repaired. Unrepaired damage to the polyethylene encasement, in the form of rips and tears, may result in accelerated corrosion of the water main.

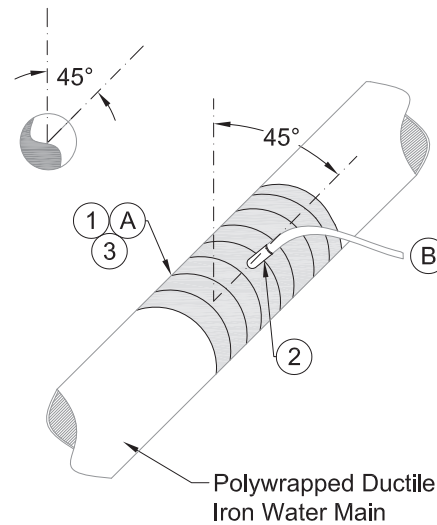
When tapping 3" or 4" ductile iron, only  $\frac{3}{4}$ " direct taps are allowed. 1" taps on 3" or 4" ductile iron will require a saddle. Refer to BWL Engineer.

#### INSTALLATION NOTES:

- Typical service stub is 1" Dia. copper. Other sizes may be specified when required.

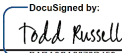
(A) Apply two to three layers of polyethylene adhesive tape around the pipe, directly over the polywrap. The width of the taped area should be several inches wider than the mounting area for the tapping machine chains. Setup the tapping machine directly over the taped off area being careful not to tear any of the surrounding polywrap. Adjust the tapping machine to an approximate angle of 45° (two o'clock or ten o'clock - approximately). Tap directly through the polywrap.

(B) Refer to Water T&D Construction Standard W-03-0015 for service stub installation.



MATERIALS			
REF	ITEM NO.	QTY	DESCRIPTION
1	NON-STOCK	1 ROLL	TAPE, POLYETHYLENE
2	30-03123 OR 30-03446	AS REQ'D	CORP STOP, 3/4" CC X 3/4" CTS COMP OR CORP STOP, 1" CC X 1" CTS COMP
3	37-00__	AS REQ'D	PIPE, ENCASEMENT, __ - __" PIPE

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Manager, Water & Steam Distribution  Date: 8/18/2022

Director of Water Operations  Date: 8/19/2022