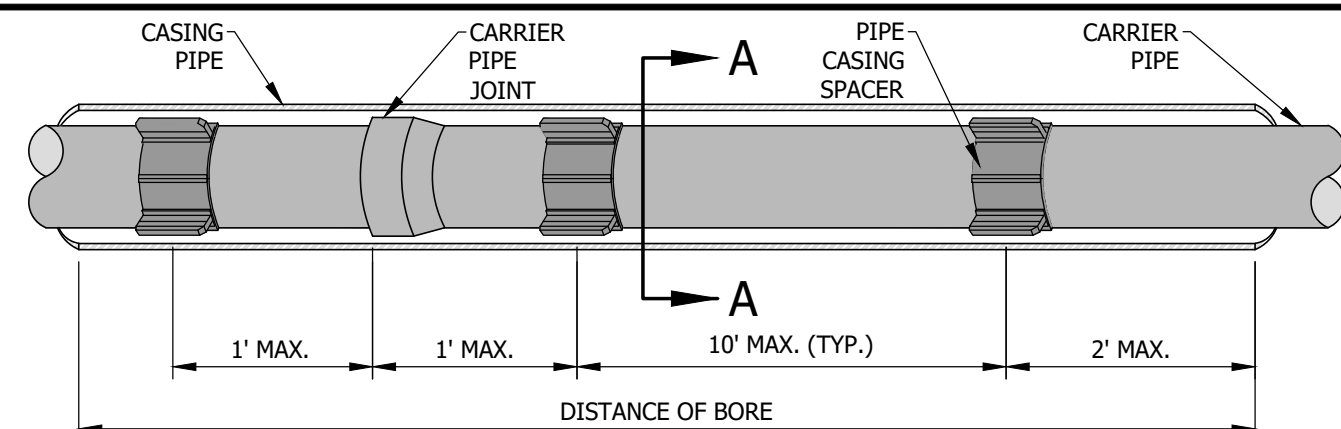


WELDING:
STEEL CASING SECTIONS SHALL BE CONNECTED BY WELDING. WELD SHALL CONFORM TO AWWA C206.

- NOTE:**
1. ALL PIPE JOINTS WITHIN THE CASING ARE TO BE RESTRAINED.
 2. TRACING WIRE TO BE INSTALLED THROUGH ALL CASED BORINGS AND CONNECTED TO MARKING POSTS.
 3. STEEL PIPE CASING SHALL CONFORM TO THE REQUIREMENTS OF ASTM A283, GRADE B, C, OR D. ALL JOINTS SHALL BE WELDED. ALL WELDING SHALL BE PERFORMED IN ACCORDANCE WITH AWWA C206, "AWWA STANDARD FOR FIELD WELDING OF STEEL WATER PIPE". COATING FOR STEEL CASING IS NOT REQUIRED.
 4. STEEL PIPE CASING SHALL BE INSTALLED SYMMETRICAL ABOUT WATER MAIN CENTERLINE (TYP.). PIPE CASING SHALL BE LAID TRUE TO LINE AND GRADE WITH NO BENDS OR CHANGES IN GRADE FOR THE FULL LENGTH OF THE CASING.

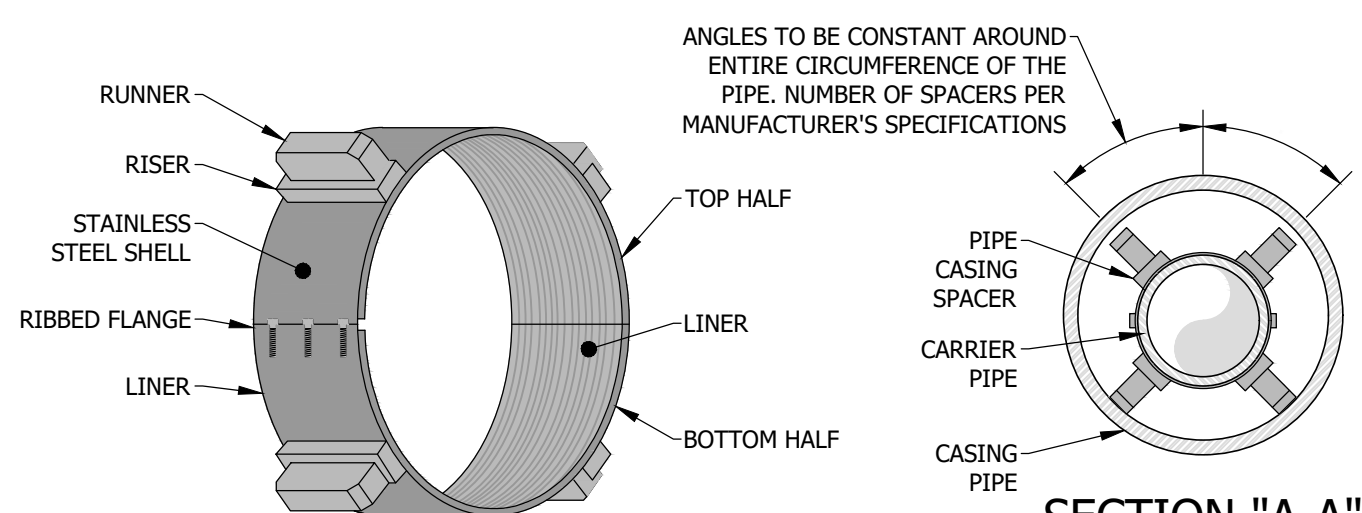
DW17 - TYPICAL JACK AND BORE CASING PIPE

SCALE: N.T.S.



PIPE SIZE	CASING O.D.	THICKNESS *
6"	16"	1/4"
8"	18"	1/4"
10"	20"	5/16"
12"	24"	5/16"
16"	30"	3/8"
18"	30"	3/8"
20"	36"	1/2"
24"	42"	1/2"

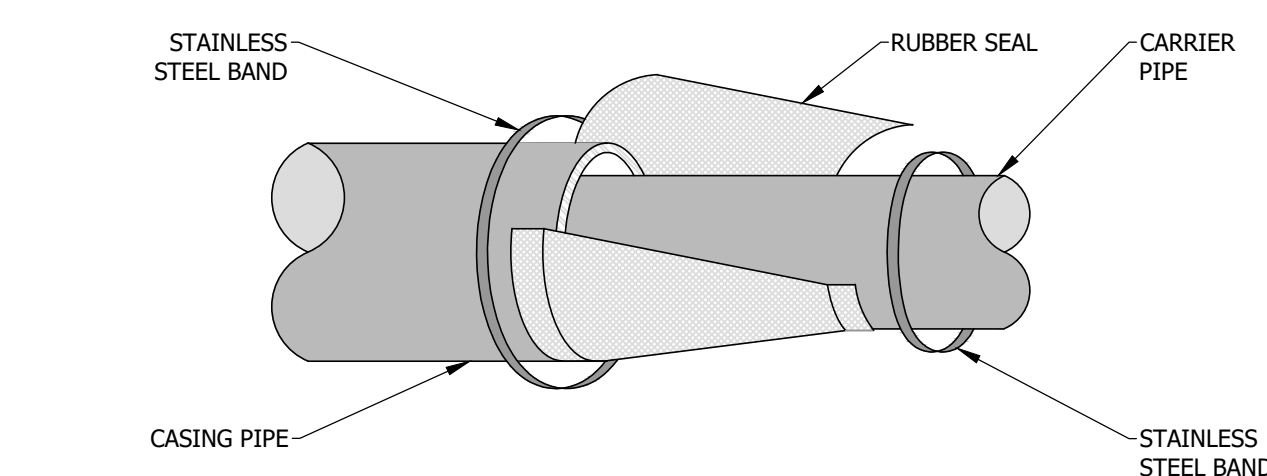
* UNLESS OTHERWISE REQUIRED BY IN.D.O.T., RAILROAD OR OTHER SUCH GOVERNING AUTHORITY.



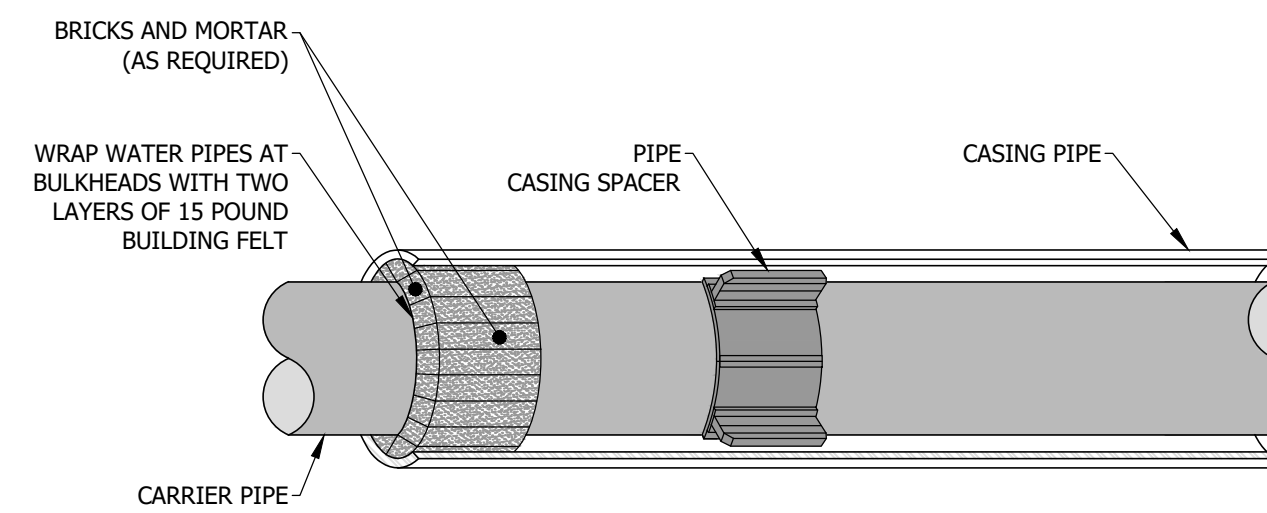
- NOTE:**
1. CASING SPACERS SHALL BE CCS SERIES BY CASCADE WATERWORKS MFG. ALTERNATE CASING SPACERS MAY BE USED WITH PRIOR APPROVAL FROM CITY UTILITIES PROJECT ENGINEER.
 2. CITY UTILITIES APPROVED CASING SPACERS AND END SEALS SHALL BE INSTALLED PER MANUFACTURER'S SPECIFICATIONS. USE A "CENTERED" CONFIGURATION AND PROVIDE THE MANUFACTURER WITH THE FOLLOWING INFORMATION: CARRIER PIPE O.D., CASING PIPE I.D., AND CASING LENGTH.

DW18 - TYPICAL CASING SPACERS

SCALE: N.T.S.



METHOD 'A'

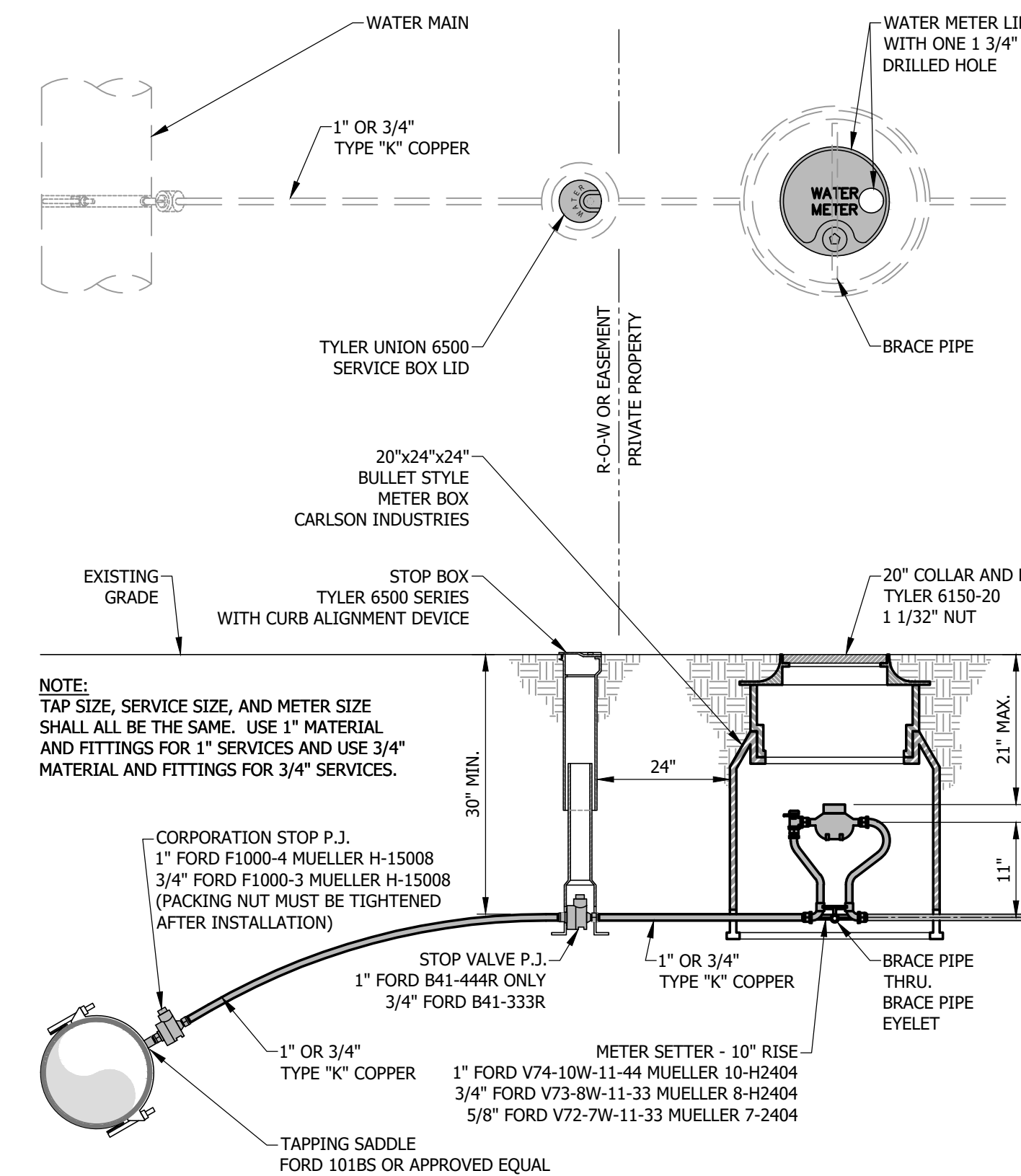


METHOD 'B'

- NOTE:**
1. THIS STANDARD IS APPLICABLE FOR 4" DIAMETER AND LARGER CARRIER PIPE.

DW19 - TYPICAL CASING END SEALS

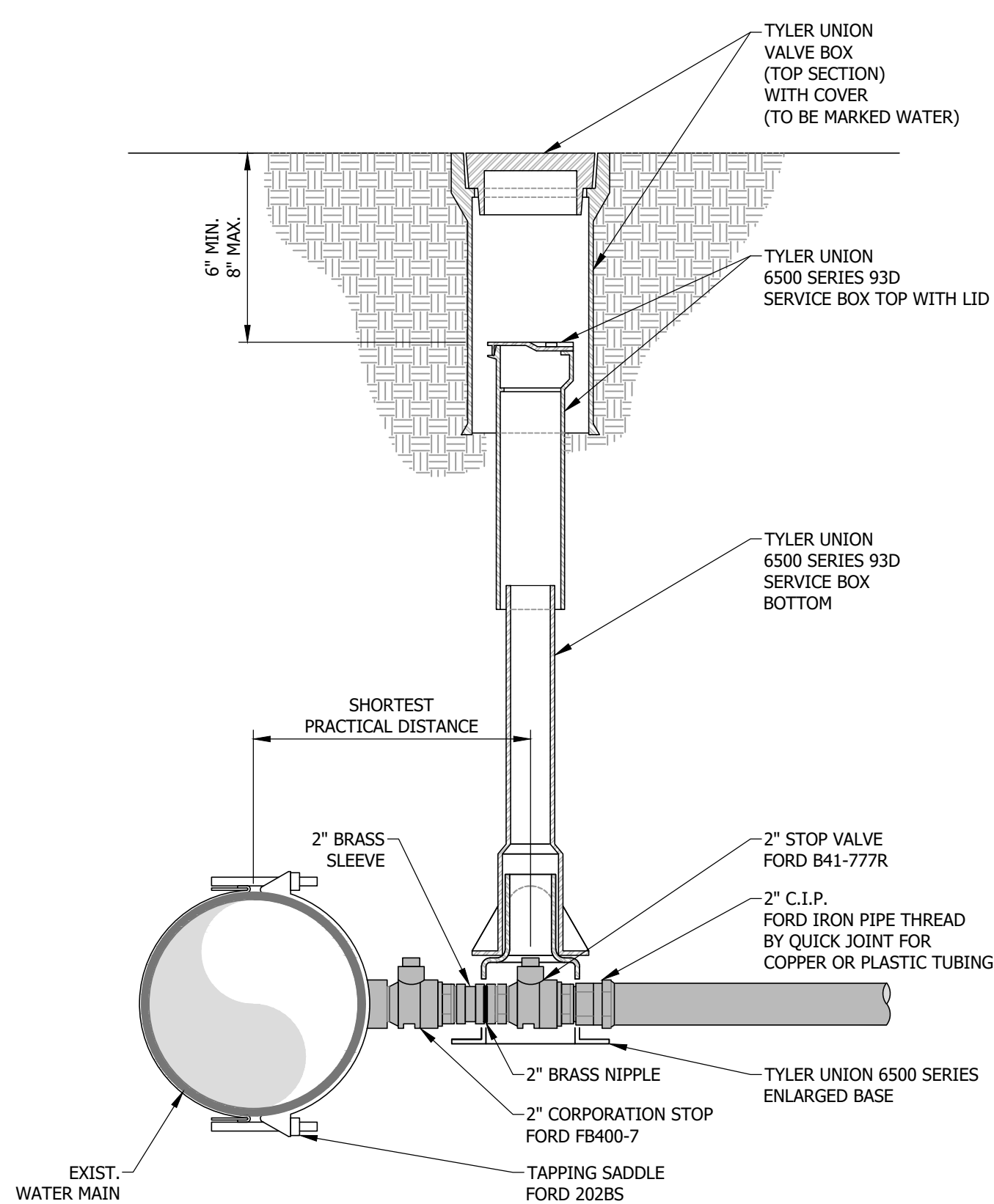
SCALE: N.T.S.



- NOTE:**
TAP SIZE, SERVICE SIZE, AND METER SIZE SHALL ALL BE THE SAME. USE 1" MATERIAL AND FITTINGS FOR 1" SERVICES AND USE 3/4" MATERIAL AND FITTINGS FOR 3/4" SERVICES.

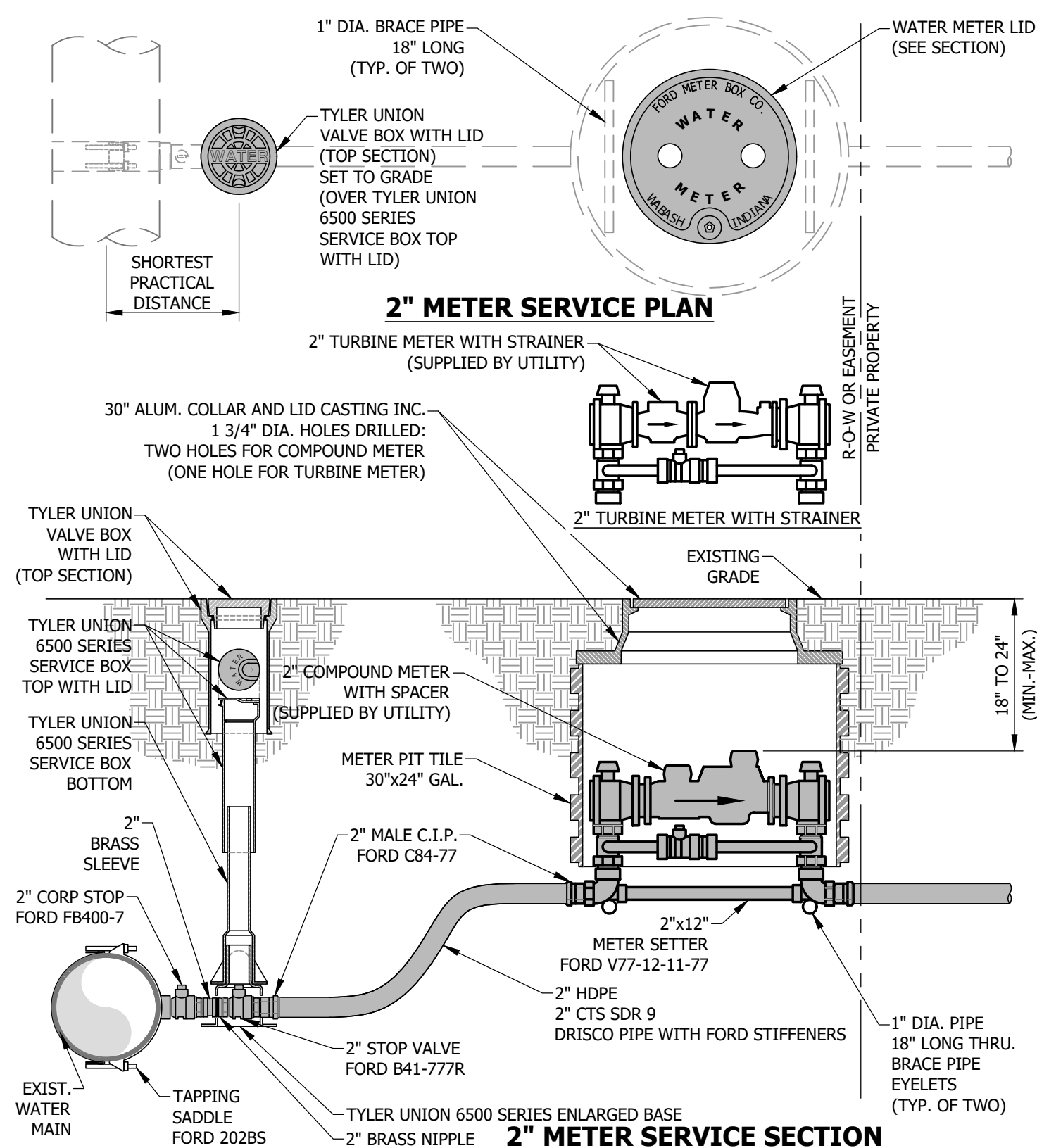
DW20 - 3/4" OR 1" METER SERVICE CONNECTION

SCALE: N.T.S.



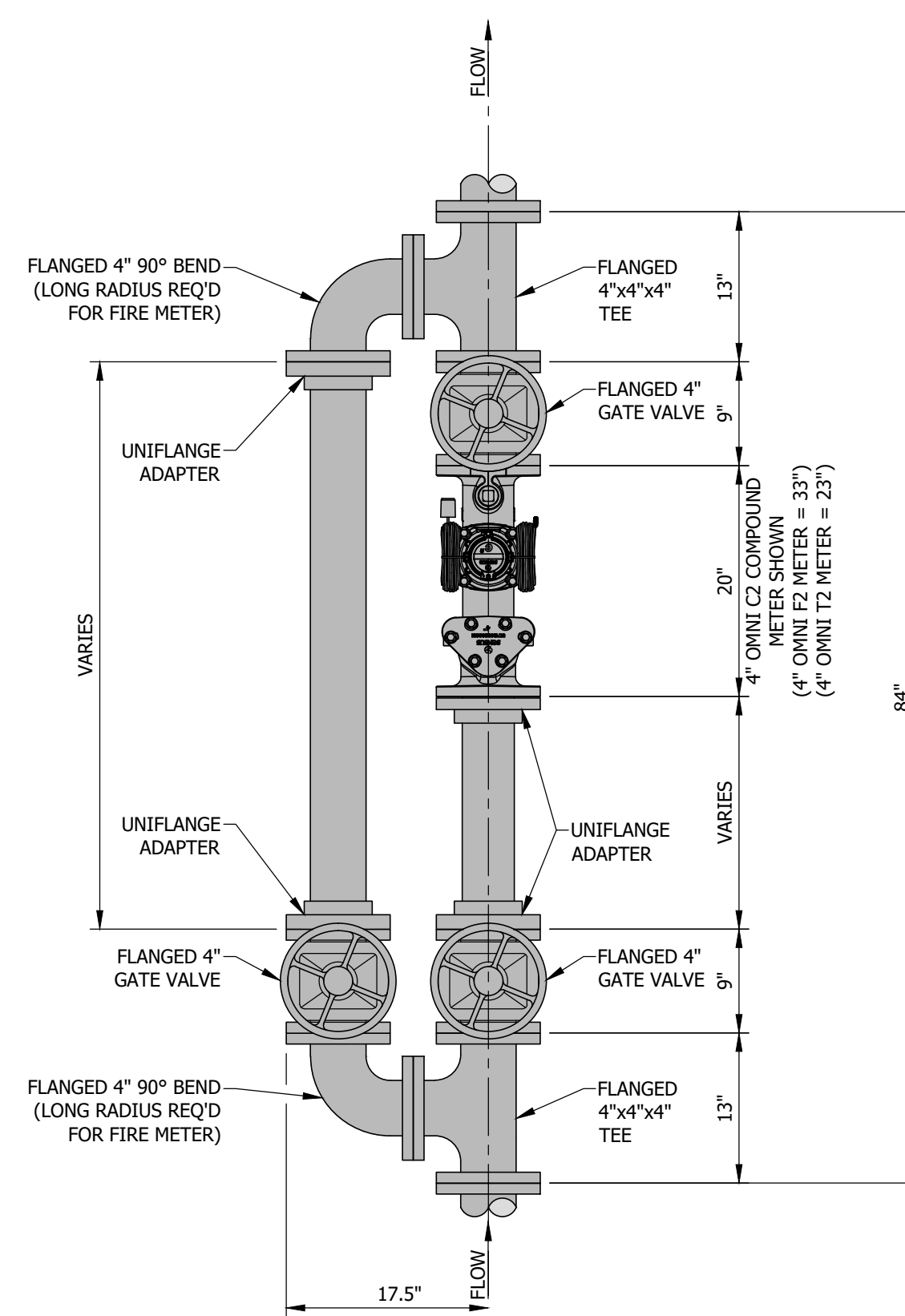
DW21 - 2" TAP DETAIL

SCALE: N.T.S.



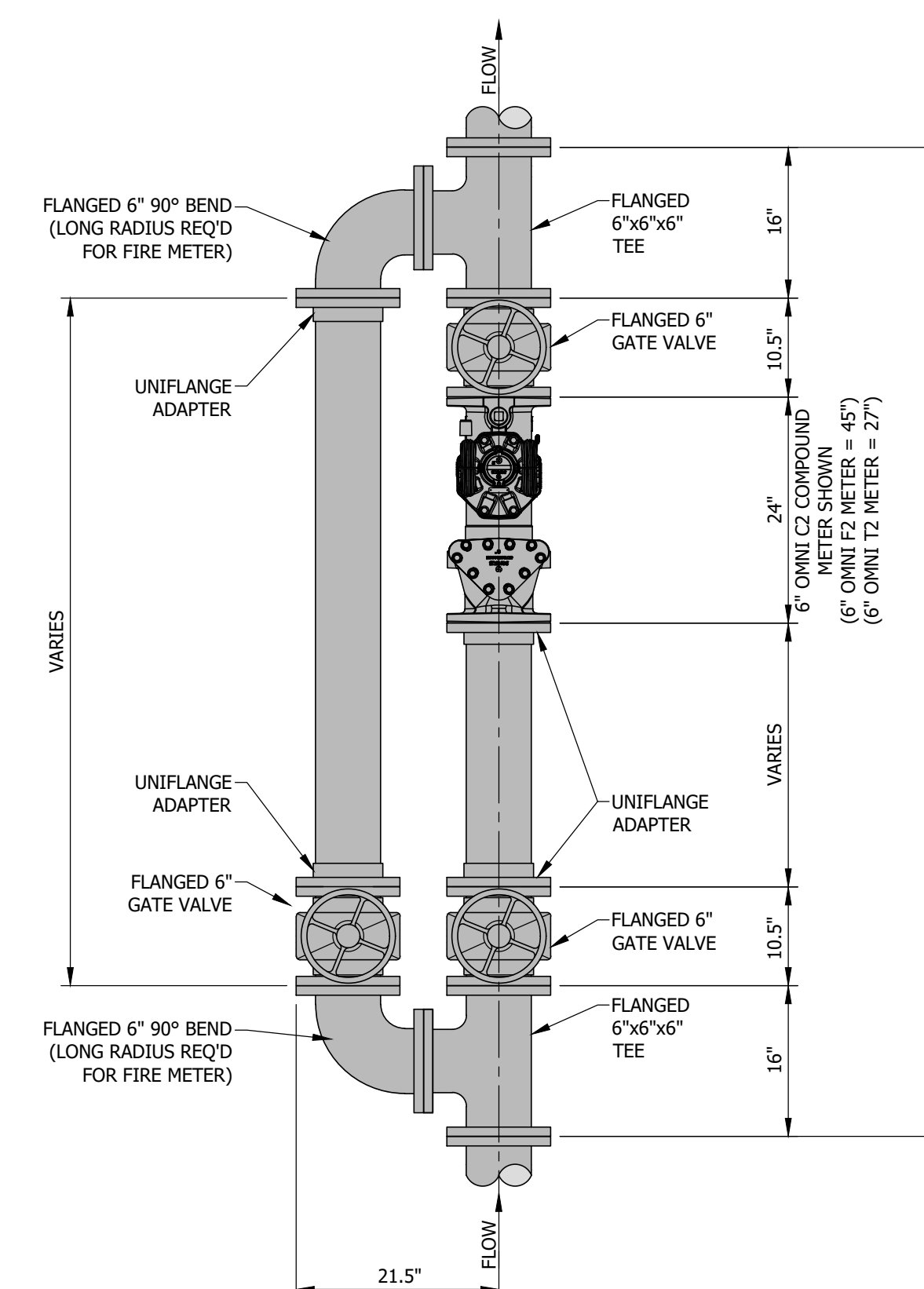
DW22 - 2" METER SERVICE CONNECTION

SCALE: N.T.S.



DW23 - 4" METER SERVICE CONNECTION

SCALE: N.T.S.



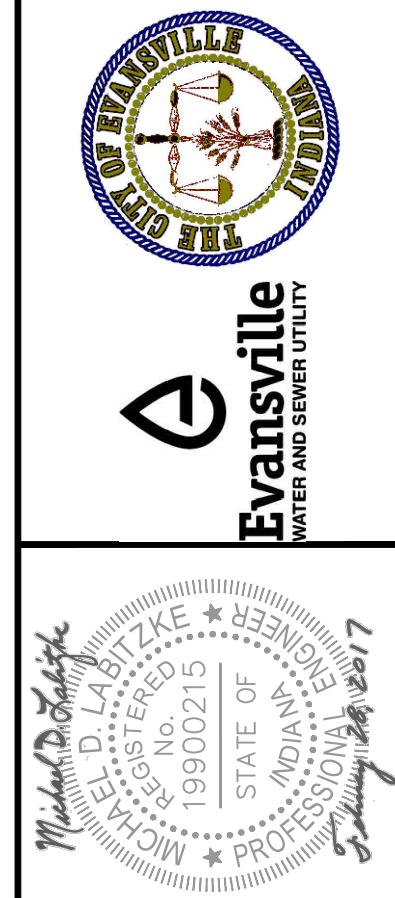
DW24 - 6" METER SERVICE CONNECTION

SCALE: N.T.S.

APPROVED:	02/28/17	ADAPTED:	02/28/17
APPROVED BY:	M.D.L.	SCALE:	N.T.S.
FIGURES:	DW-17 THROUGH DW-24		
APPROVED:		TITLE:	DATE:

EVANSVILLE WATER AND SEWER UTILITY
1831 Aliens Lane - Evansville, IN 47720 (812) 421-2126

STANDARD WATER DETAILS



REVISIONS	APPROVED
DATE	DESCRIPTION

DRAWING NO: _____
SHEET NO: 3 of 5

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