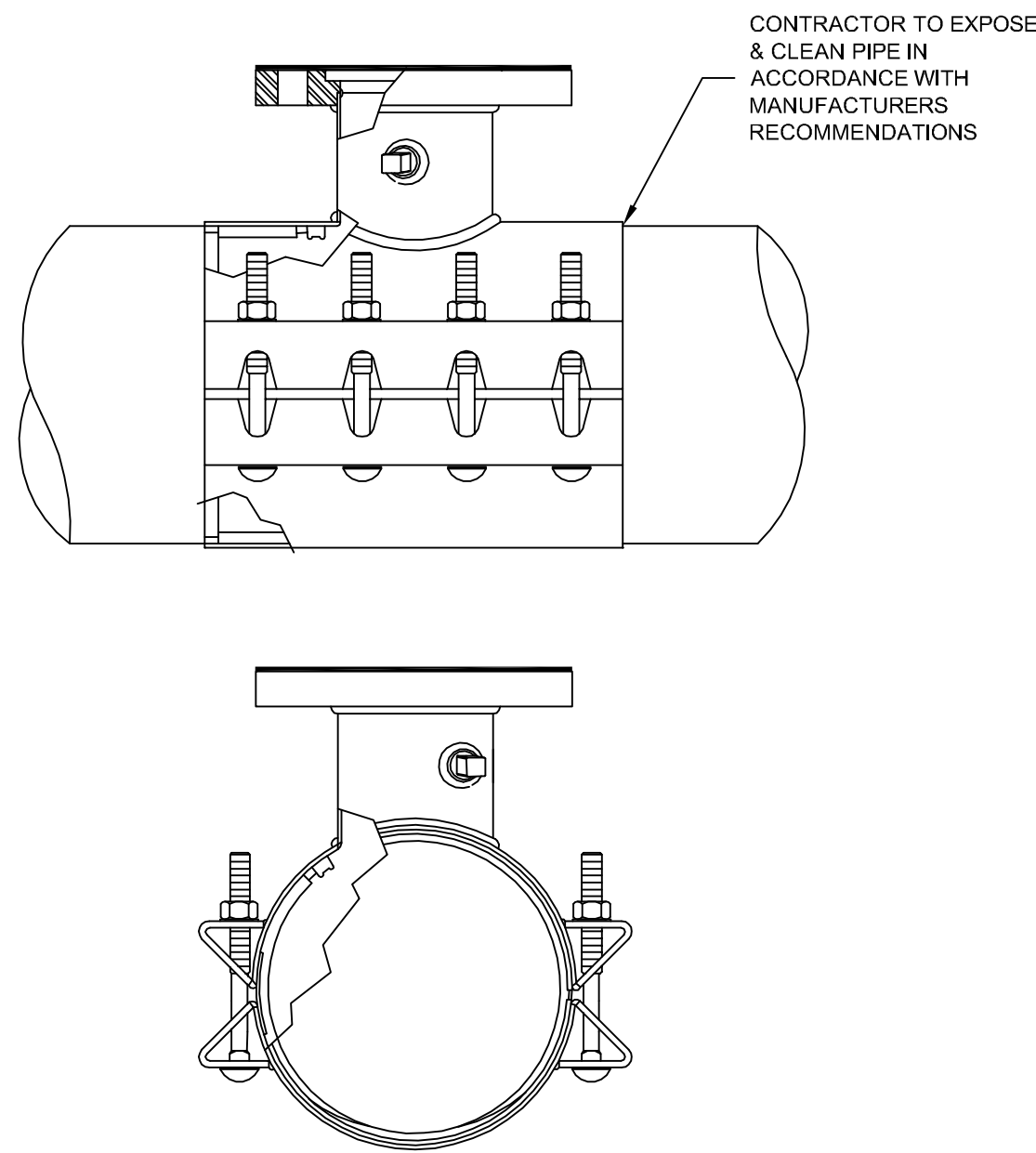


1. TAPPING SLEEVE SHALL BE POWERSEAL MODEL 3490 TYPE 304 STAINLESS STEEL WITH CARBON STEEL FLANGE, ROMAC'S MODEL SST III, FORD MODEL FTSS WITH CARBON STEEL FLANGE OR APPROVED EQUIVALENT. SLEEVE SHALL BE RATED AT 100 PSI OVER WORKING PRESSURE AND MUST HAVE A TEST PLUG.
2. TAPPING VALVE SHALL BE A/KK RESILIENT SEATED GATE VALVE SERIES 26 MJFL OR MUELLER T-2360 RESILIENT WEDGE TAPPING VALVE WITH MJFL. VALVE SHALL BE RATED AT 250 PSI.
3. TAPPING SLEEVE AND VALVE SHALL BE FULL PORT TO ACCEPT FULL SIZE SHELL CUTTER.
4. STEEL FLANGE SHALL MEET AWWA C207.
5. SIZE-ON-SIZE TAPPING NOT ALLOWED UNLESS APPROVED BY PARTICIPATING UTILITY.



WESTERN VIRGINIA REGIONAL - CONSTRUCTION DETAIL

TAPPING SLEEVE
AND VALVE

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INSTALLATION OF DUCTILE IRON WATER MAINS					
TABLE 3 AWWA C600-05					
Maximum Joint Deflection Full Length of Pipe - Push on Type Joint					
Nominal Pipe Size (inches)	Deflection Angle - θ (degree)	Maximum Offset - S* (Inches)		Approximate Radius of Curve - R* Produced by Succession of Joints	
		Joint Length 18-Feet	Joint Length 20-Feet	Joint Length 18-Feet	Joint Length 20-Feet
3	5°	19	21	205	230
4	5°	19	21	205	230
6	5°	19	21	205	230
8	5°	19	21	205	230
10	5°	19	21	205	230
12	5°	19	21	205	230
14	3°	11	12	340	380
16	3°	11	12	340	380
18	3°	11	12	340	380
20	3°	11	12	340	380
24	3°	11	12	340	380
30	3°	11	12	340	380

* SEE FIGURE 4.
For 14-inch and larger push-on joints, maximum deflection angle may be larger than shown above. Consult the manufacturer.

INSTALLATION OF DUCTILE IRON WATER MAINS					
TABLE 4 AWWA C600-05					
Maximum Joint Deflection Full Length of Pipe - Mechanical Joint Pipe					
Nominal Pipe Size (inches)	Deflection Angle - θ (degree)	Maximum Offset - S* (Inches)		Approximate Radius of Curve - R* Produced by Succession of Joints	
		Joint Length 18-Feet	Joint Length 20-Feet	Joint Length 18-Feet	Joint Length 20-Feet
3	8°-18°	31	35	125	140
4	8°-18°	31	35	125	140
6	7°-07°	27	30	145	160
8	5°-21°	20	22	195	220
10	5°-21°	20	22	195	220
12	5°-21°	20	22	195	220
14	3°-35°	13.5	15	285	320
16	3°-35°	13.5	15	285	320
18	3°-00°	11	12	340	380
20	3°-00°	11	12	340	380
24	2°-23°	9	10	450	500

* SEE FIGURE 4.

WESTERN VIRGINIA REGIONAL - CONSTRUCTION DETAIL

DUCTILE IRON PIPE
DEFLECTION ALLOWANCE TABLES

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01/01/12

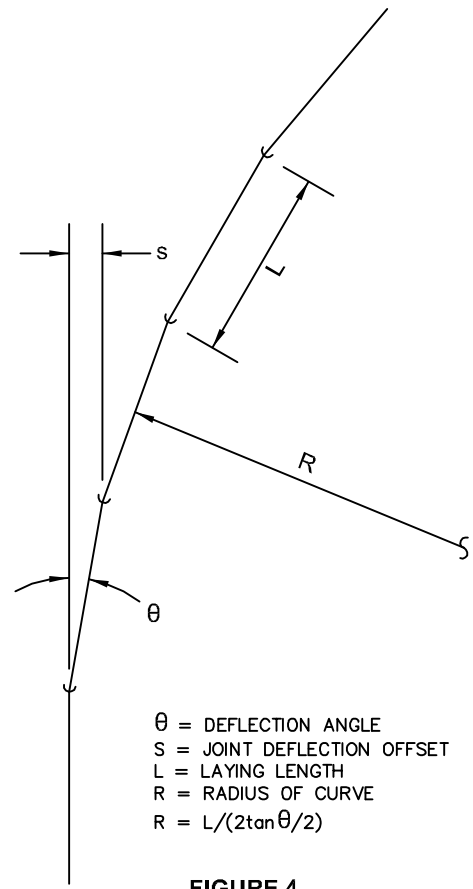


FIGURE 4

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ANDERSON & ASSOCIATES, INC.
Professional Design Services
www.andassoc.com

100 Ardmore St.
Blacksburg, Va. 24060
540-552-5592

DATE : 13 APR 12
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COMMENTS
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DATE
06 JUL 12
04 SEP 13

SOUTH PEAK DEVELOPMENT
PHASE I WATER SYSTEM IMPROVEMENTS

WWWA WATER STANDARD DETAILS 2

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