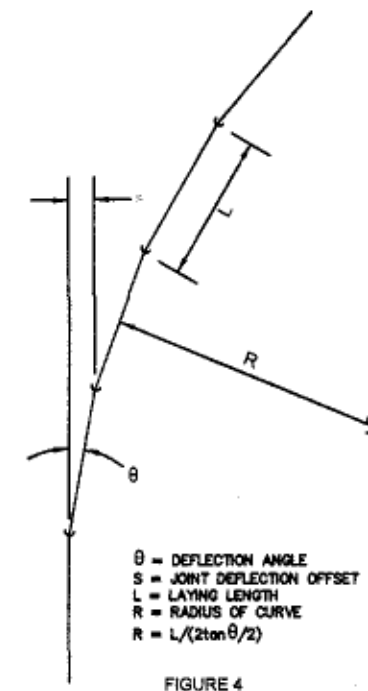
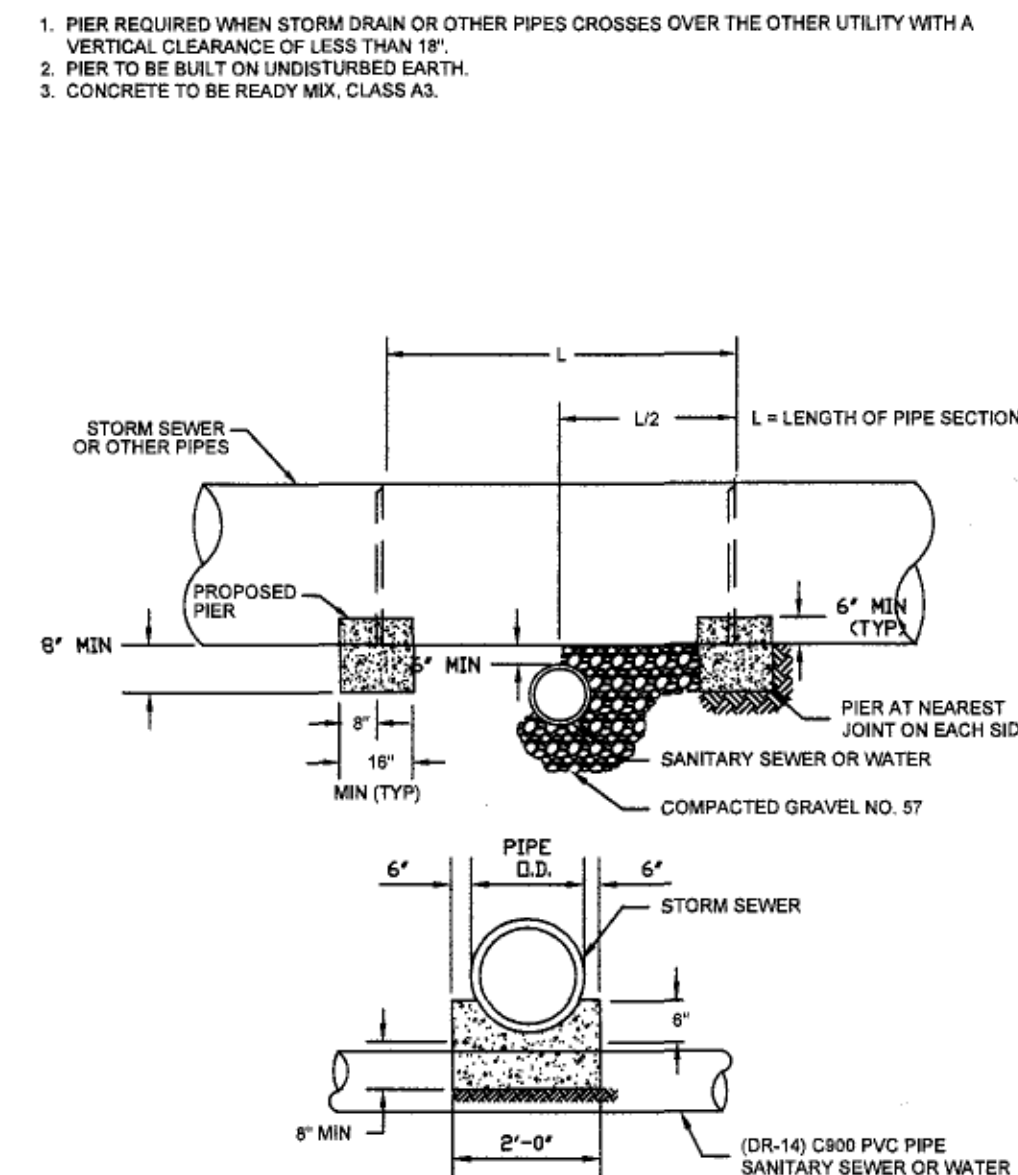
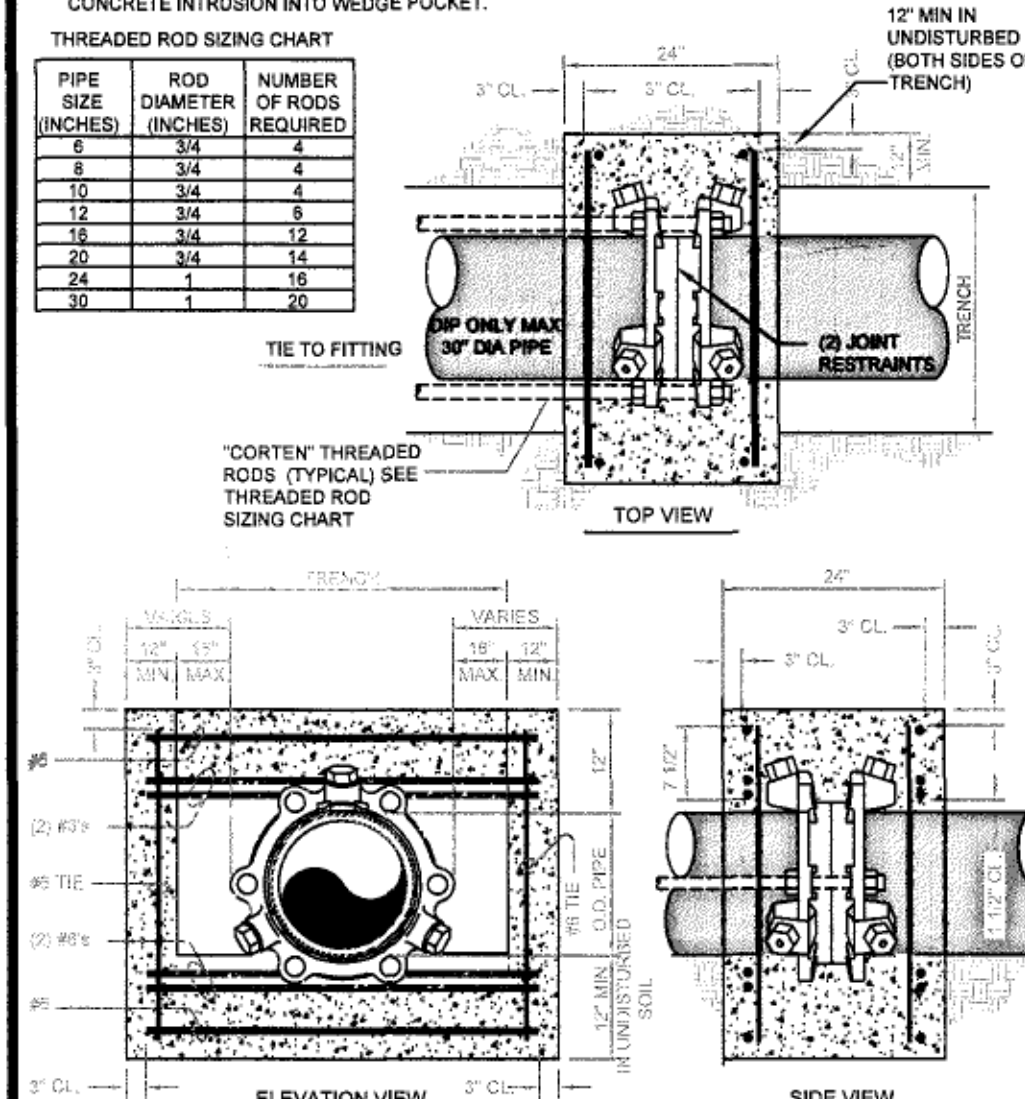


Nominal Pipe Size (inches)	Deflection Angle (°)	Maximum Offset - 5" (inches)		Approximate Range of R ¹ Produced by Succession of Joints	
		Joint Length 18 ft or less	Joint Length 20-60 ft	Joint Length 20-60 ft	Joint Length 20-60 ft
3	3°	19	21	205	230
4	3°	19	21	205	230
6	3°	19	21	205	230
8	3°	19	21	205	230
10	3°	19	21	205	230
12	3°	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



Nominal Pipe Size (inches)	Deflection Angle - R° (degree)	Maximum Offset - S" (inches)		Approximate Ratio of Curve "R" Produced by Succession of Joints	
		Joint Length 18'-0"	Joint Length 20'-0"	Joint Length 18'-0"	Joint Length 20'-0"
3	8°-18'	31	35	123	140
4	8°-18'	31	35	125	140
6	7°-07'	27	30	145	160
8	6°-06'	22	22	155	180
10	5°-21"	20	22	186	220
12	5°-21"	20	22	195	220
14	3°-36"	13.5	16	285	320
16	3°-36"	13.5	16	285	320
18	3°-00"	11	12	340	380
20	3°-00"	11	12	340	380
24	2°-23"	8	10	450	500



WESTERN VIRGINIA REGIONAL - CONSTRUCTION DETAIL

TYPICAL WATER PRESSURE TEST RIG

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WESTERN VIRGINIA REGIONAL - CONSTRUCTION DETAIL

TAPPING SLEEVE AND VALVE

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WESTERN VIRGINIA REGIONAL - CONSTRUCTION DETAIL

DUCTILE IRON PIPE DEFLECTION ALLOWANCE TABLES

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WESTERN VIRGINIA REGIONAL - CONSTRUCTION DETAIL

THRUST COLLAR DETAIL

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WESTERN VIRGINIA REGIONAL - CONSTRUCTION DETAIL

CONCRETE PIER

1. BEDDING, HAUNCHING AND INITIAL BACKFILL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THIS DETAIL AND MANUFACTURER'S RECOMMENDATION.
2. ALL PVC PIPE SHALL BE BEDDED IN COMPACTED VDOT #57 OR #6# STONE, OR CRUSHER RUN.
3. FOR ALL SLOPE APPLICATIONS, THE BEDDING STONE AND FILL SHALL BE PLACED IN 10" LIFTS FROM BOTTOM OF TRENCH TO 1" ABOVE THE PIPE AND THE REMAINING SHALL BE PLACED IN 10" LIFTS AND SHALL BE COMPACTED TO AT LEAST 90% OF MAXIMUM DENSITY AS DETERMINED BY AGR.
4. BEDDING REQUIREMENTS FOR DUCTILE IRON WATER LINE ARE DEPENDENT ON MANUFACTURER'S BEDDING CRITERIA.
5. ALL EXCAVATIONS SHALL COMPLY WITH OSHA TECHNICAL MANUAL, CHAPTER 2, TITLED "EXCAVATIONS: HAZARD RECOGNITION IN TRENCHING AND SHORING."
6. THE TRACER WIRE SHALL BE PLACED ALONG THE LOWER QUADRANT OF THE PIPE. THE WIRE SHALL BE PLACED IN 10" LIFTS OF BEDDING BUT SHALL NOT BE IN CONTACT WITH THE PIPE. NON-METALLIC SPALLS MAY BE USED TO MAINTAIN A SET DISTANCE FROM THE UTILITY.

