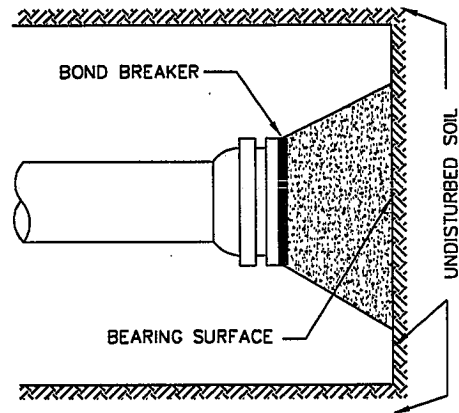
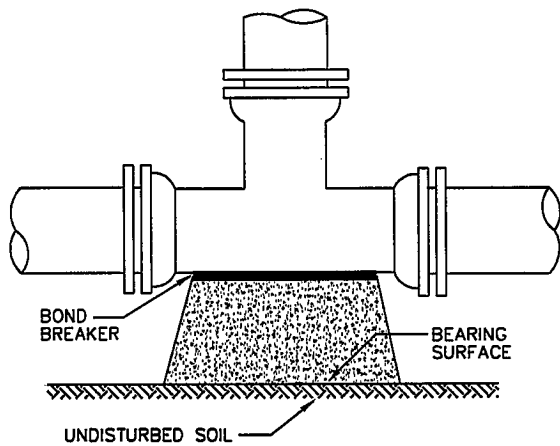


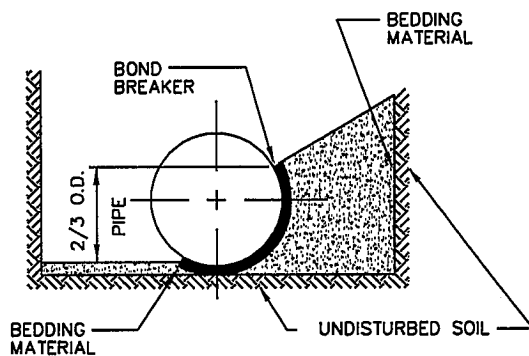
11 1/4°, 22 1/2°, 45° AND 90° BENDS



DEAD END



TEE



TYPICAL CROSS SECTION

NOTES:

MINIMUM BEARING SURFACE AREA (FT²)

PIPE SIZE	B E N D S				TEE OR DEAD END
	11 1/4°	12-22 1/2°	23-45°	46-90°	
6"	1.0	1.5	2.5	4.5	3.5
8"	1.0	2.5	4.5	8.0	5.5
10"	2.0	3.5	7.0	12.5	9.0
12"	2.5	5.0	9.5	17.5	12.5
16"	4.5	8.5	17.0	31.0	22.5
18"	5.5	11.0	21.5	39.5	28.5
20"	7.0	13.5	27.0	49.0	35.0
24"	10.0	19.5	38.5	70.5	50.0

- ON 16" AND LARGER TRANSMISSION MAINS BENDS SHALL BE BOTH RODDED AND THRUST BLOCKED.
- BEARING SURFACES SHOWN IN CHART ARE MINIMUM.
- BASED ON 150 PSI INTERNAL PIPE PRESSURE PLUS WATER HAMMER = 150PSI.
12" WATER HAMMER = 110 PSI.
16" AND LARGER WATER HAMMER = 70 PSI.
- SOIL BEARING CAPACITY = 3,000 LB./SQ. FT.
- ALL 90 DEGREE BENDS SHALL BE RODDED AND THRUST BLOCKED.
- NA = NOT APPLICABLE.

REVISED 10-08-03 CADD DRAWING BY GTS CONSULTANTS, INC.

DATE: JAN. 1991
DRAWN: G.G.&J.T.R.
SCALE: NONE

LAKWOOD TOWNSHIP
MUNICIPAL UTILITIES AUTHORITY

CONCRETE THRUST
BLOCK DETAIL