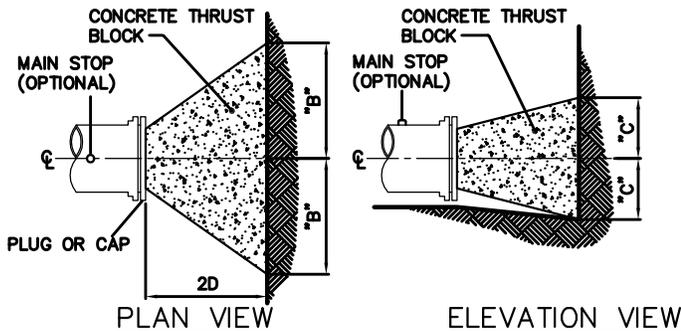


**NOTE:**  
 D = INSIDE DIAMETER OF PIPE  
 OD = OUTSIDE DIAMETER OF PIPE



- NOTES:**
1. ALL CONCRETE THRUST BLOCKS TO BE POURED AGAINST UNDISTURBED GROUND.
  2. CLEARANCE OF 80 mm TO BE MAINTAINED FROM FACE OF BELL TO CONCRETE.
  3. POLYETHYLENE BOND BREAKER TO BE USED BETWEEN CONCRETE AND CORROSION PROTECTION.
  4. THIS BLOCKING DESIGN APPLIES ONLY WHERE 1100 kPa PRESSURE IS NOT EXCEEDED.
  5. PRIOR TO POURING CONCRETE, ALL METALLIC FITTINGS SHALL HAVE CORROSION PROTECTION.

ROCK, GRAVEL, COMPACT SAND

PIPE SIZE (mm)	BEND ANGLE				DEAD END/TEE		MINIMUM DIMENSIONS
	WIDTH		"A" (m)		"B" (m)	"C" (m)	
	11.25°	22.5°	45°	90°			
400	0.3	0.3	0.3	0.3	0.3	0.4	
450	0.3	0.3	0.3	0.3	0.3	0.5	
500	0.3	0.3	0.3	0.3	0.3	0.5	
600	0.3	0.3	0.3	0.3	0.3	0.7	
750	0.3	0.3	0.3	0.3	0.4	0.8	
900	0.3	0.3	0.3	0.3	0.4	1.0	
1050	0.3	0.3	0.4	0.3	0.5	1.1	
1200	0.3	0.3	0.4	0.4	0.6	1.3	

HARD DRY CLAY, COMPACT SAND

PIPE SIZE (mm)	BEND ANGLE				DEAD END/TEE		MINIMUM DIMENSIONS
	WIDTH		"A" (m)		"B" (m)	"C" (m)	
	11.25°	22.5°	45°	90°			
400	0.3	0.3	0.3	0.3	0.4	0.4	
450	0.3	0.3	0.3	0.3	0.4	0.5	
500	0.3	0.3	0.4	0.3	0.5	0.5	
600	0.3	0.3	0.4	0.4	0.6	0.7	
750	0.3	0.3	0.5	0.5	0.7	0.8	
900	0.3	0.3	0.6	0.6	0.8	1.0	
1050	0.3	0.4	0.7	0.7	1.0	1.1	
1200	0.3	0.4	0.8	0.8	1.0	1.3	

FIRM OR STIFF CLAY, MEDIUM COMPACT SAND/SILT

PIPE SIZE (mm)	BEND ANGLE				DEAD END/TEE		MINIMUM DIMENSIONS
	WIDTH		"A" (m)		"B" (m)	"C" (m)	
	11.25°	22.5°	45°	90°			
400	0.3	0.3	0.6	0.6	0.8	0.4	
450	0.3	0.3	0.7	0.6	0.9	0.5	
500	0.3	0.4	0.7	0.7	0.9	0.5	
600	0.3	0.4	0.9	0.8	1.1	0.7	
750	0.3	0.6	1.1	1.0	1.4	0.8	
900	0.3	0.7	1.3	1.2	1.7	1.0	
1050	0.4	0.8	1.5	1.4	1.9	1.1	
1200	0.4	0.9	1.7	1.6	2.2	1.3	

MEDIUM SOFT CLAY, LOOSE SATURATED SAND/CLAY

PIPE SIZE (mm)	BEND ANGLE				DEAD END/TEE		MINIMUM DIMENSIONS
	WIDTH		"A" (m)		"B" (m)	"C" (m)	
	11.25°	22.5°	45°	90°			
400	0.5	0.9	1.8	1.6	2.3	0.4	
450	0.5	1.0	2.0	1.8	2.6	0.5	
500	0.6	1.1	2.2	2.0	2.8	0.5	
600	0.7	1.3	2.6	2.4	3.4	0.7	
750	0.8	1.6	3.2	3.0	4.2	0.8	
900	1.0	2.0	3.8	3.6	5.0	1.0	
1050	1.1	2.2	4.4	4.1	5.8	1.1	
1200	1.3	2.6	5.0	4.7	6.6	1.3	



CONCRETE THRUST BLOCKS  
 FOR TEES, PLUGS,  
 HORIZONTAL BENDS,  
 AND DEAD ENDS

DRAWN BY: WJK/STS/RF	REV No: 2
DATE: 2003-03-03	REV DATE: MAR/2025
SCALE: NTS	CAD/FILE No.: A1966-1 (1 OF 1)
APP'D:	GSSD-1103.030

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