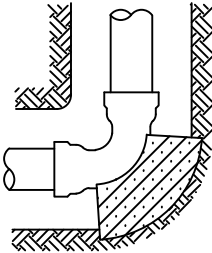
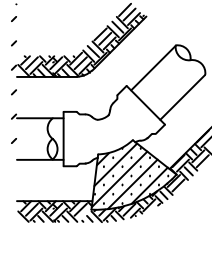
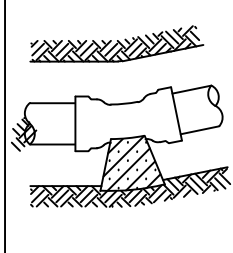
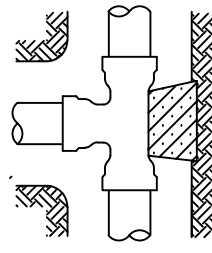
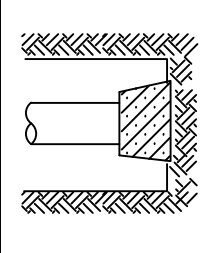
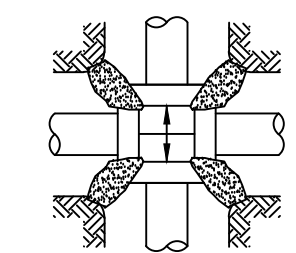



REQUIRED BEARING AREA IN TOTAL SQUARE FEET

TYPE OF FITTING	90° BEND	45° BEND	11-1/4° BEND 22-1/2° BEND	TEE	DEAD END	CROSS	TEE OR CROSS WITH PLUG	
TYPICAL INSTALLATION								
SIZE OF PIPE	4"	1	1	1	2	2	1,0 (EA. LEG)	THRUST BLOCKS NOT ALLOWED. USE RESTRAINED JOINTS WITH RESTRAINED LENGTH PER OV-4 FOR "DEAD END"
	6"	3	2	1	4	4	2,4 (EA. LEG)	
	8"	5	3	2	6	6	4,2 (EA. LEG)	
	10"	7	4	2	9	9	6,6 (EA. LEG)	
	12"	10	6	4	13	13	9,5 (EA. LEG)	

NOTES:

1. THRUST BLOCKS ARE TO BE CONSTRUCTED OF CONCRETE.
2. BEARING AREAS GIVEN ARE FOR TEST PRESSURES OF 150 PSI IN SOIL PLUS 50% SURGE ALLOWANCE (225 PSI TOTAL) WITH A MINIMUM 2,000 PSF BEARING CAPACITY. IF TEST PRESSURE IS HIGHER OR SOIL BEARING CAPACITY IS LOWER, THRUST BLOCK SIZE SHALL BE APPROVED BY OVWC.
3. THRUST BLOCK SHALL BE POURED AGAINST UNDISTURBED SOIL. IF THIS CANNOT BE DONE, USE RESTRAINED JOINTS TO RESIST THRUST OVER RESTRAINED LENGTHS APPROVED BY OVWC (FOR A DEAD END, USE RESTRAINED LENGTH PER OV-4).
4. PIPE JOINTS SHALL BE KEPT CLEAR OF CONCRETE.
5. POLYWRAP ALL VALVES AND FITTINGS.
6. FOR OTHER CONDITIONS: $REQUIRED\ BEARING\ AREA = ((\pi \times D^2/4) \times P \times \sin(\Delta/2))/B$
 WHEN D = PIPE DIAMETER (INCHES)
 P = LINE PRESSURE PLUS SURGE (PSI)
 Δ = LINE DEFLECTION
 B = ALLOWABLE SOIL BEARING CAPACITY

ORANGE VALE WATER COMPANY	
	THRUST BLOCK BEARING AREA
SCALE: NONE DATE: 05/12	OV-3