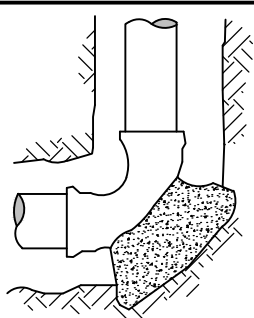
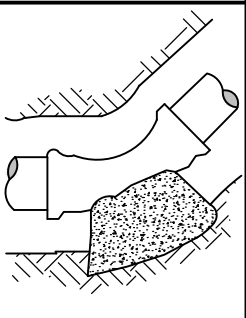
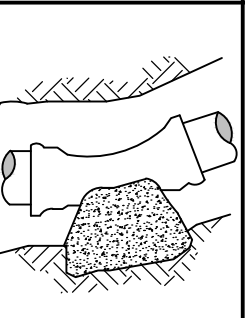
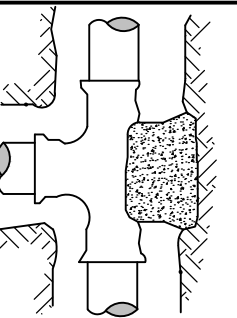
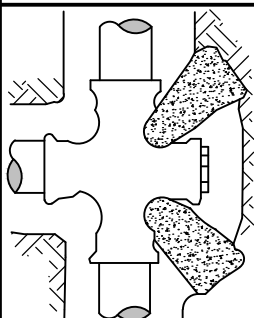
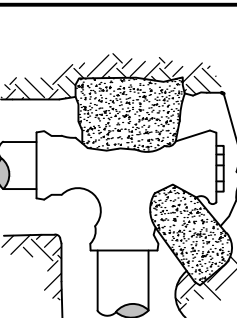


TYPE OF FITTING	90° BEND	45° BEND	11¼° OR 22½° BEND	TEE OR DEAD END
TYPICAL INSTALLATION				

TYPE OF FITTING	CROSS WITH PLUG	TEE WITH PLUG
TYPICAL INSTALLATION		

**MINIMUM THRUST BLOCK BEARING AREA (SQ. FT.) -
SEE NOTE 2, DRAWING No. W-320B**

TYPE OF FITTING	90° BEND	45° BEND	11¼° OR 22½° BEND	TEE OR DEAD END	TEE WITH PLUG	CROSS WITH PLUG	IN-LINE VALVE
SIZE OF PIPE	4"	2	1	1	2	2	2
	6"	4	4	2	4	4	4
	8"	7	4	2	5	7	7
	10"	12	6	3	8	12	12
	12"	16	10	5	12	16	16
	14"	20	12	6	14	20	20
	16"	27	15	8	18	27	27
	18"	45	25	13	32	45	45
	24"	65	35	18	48	65	65

DATE	REVISIONS



STANDARD DETAILS FOR PUBLIC WORKS CONSTRUCTION
THRUST RESTRAINT

SECTION NUMBER: 300
DRAWING NUMBER: W-320A
DATE: 2/21/2022