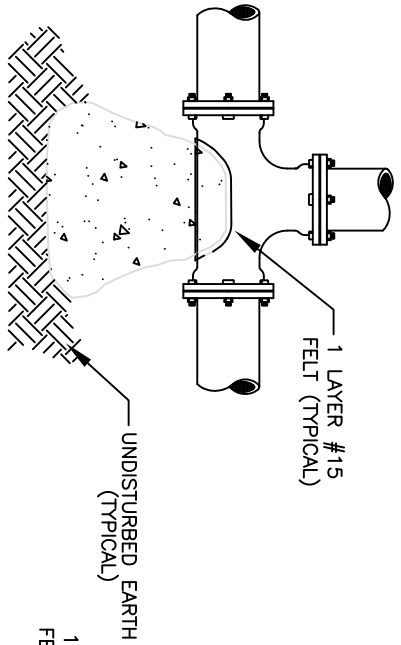


BEARING AREA DIMENSIONS OF THRUST BLOCK, H X B (FT)					
PIPE SIZE	DEAD END OR TEE	90° BEND	45° BEND	22.5° BEND	11.25° BEND
4"	1.0 X 1.5	1.5 X 1.5	1.0 X 1.0	1.0 X 1.0	1.0 X 1.0
6"	1.5 X 2.0	1.5 X 2.5	1.0 X 2.0	1.0 X 1.5	1.0 X 1.0
8"	2.0 X 2.5	2.0 X 3.5	1.5 X 2.5	1.0 X 2.0	1.0 X 1.0
10"	2.5 X 3.5	3.0 X 4.0	2.0 X 3.0	1.5 X 2.0	1.0 X 1.5
12"	3.0 X 4.0	3.5 X 5.0	2.5 X 3.5	2.0 X 2.5	1.0 X 2.0
16"	4.0 X 5.5	4.5 X 6.5	3.0 X 5.0	2.5 X 3.5	1.5 X 2.5

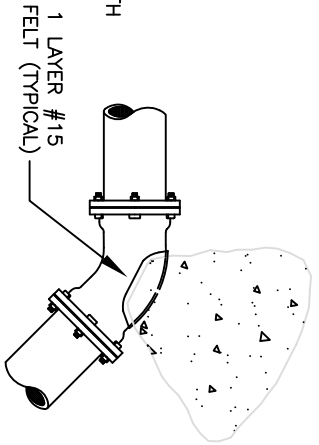
**NOTES:**

1. ONE LAYER OF #15 FELT TO BE USED TO PREVENT ADHESION OF CONCRETE TO FITTING.
2. ALL THRUST BLOCKS TO BE BACKED BY UNDISTURBED SOIL.
3. THRUST BLOCK DIMENSIONS BASED ON SM SOIL CLASSIFICATION WITH A SOIL BEARING PRESSURE OF 3000 LB/FT<sup>2</sup>
4. CONCRETE MIN. 2,500 PSI.
5. BEARING AREAS SHALL BE MINIMUM 1.0 FT<sup>2</sup>
6. JOINT RESTRAINTS ARE TO BE USED ON ALL FITTINGS. THRUST BLOCKS REQUIRED ON 90° BENDS, 45° BENDS, 22.5° BENDS, 11.25° BENDS, TEES, TAPPING SLEEVES AND DEAD ENDS.

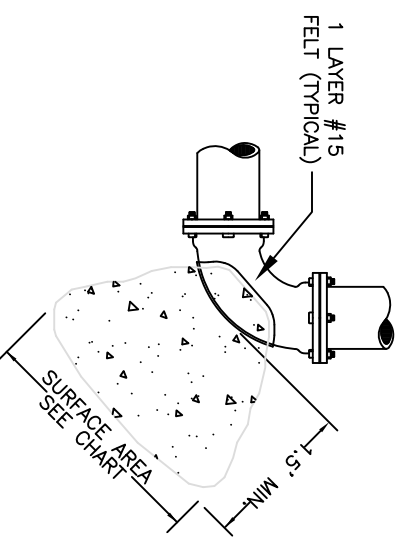
**11.25°, 22.5°, 45° + 90° BEND**



**TEE - M.J.**



**11.25°, 22.5° + 45° BENDS - M.J.**



**90° BEND - M.J.**



**PROPOSED**  
 SCALE: N.T.S.  
 DATE: 12/18/14

**TYPICAL THRUST BLOCK INSTALLATION**

DETAIL

**D-52**