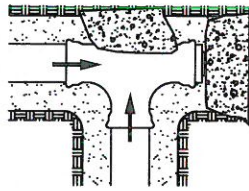
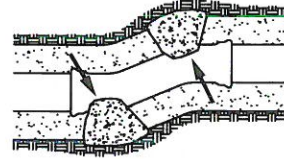


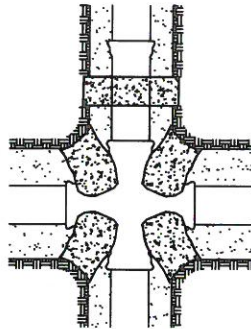
**TEE**



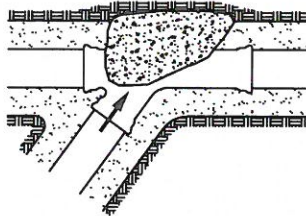
**90°/TEE**



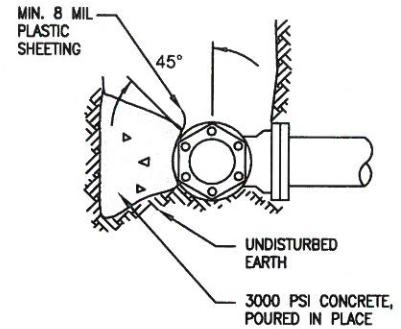
**BEND**



**CROSS**



**WYE**



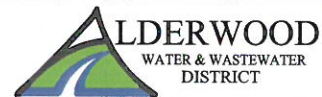
**SECTION VIEW  
BENDS AND TEES**

FOR VERTICAL THRUST  
BLOCKING SEE DETAIL WD-12

HORIZONTAL THRUST BLOCKS						
MIN. BEARING AREA IN SQUARE FEET						
Pipe Size in Inches	Tees, Wyes & Dead Ends	90° Bend/Tee	45° Bend	22 1/2° Bend	11 1/4° Bend	CROSS
6	7.00	9.00	5.00	3.00	2.00	7.00
8	12.00	17.00	9.00	5.00	2.00	12.50
10	18.00	26.00	14.00	7.00	4.00	19.50
12	26.00	37.00	20.00	11.00	5.00	28.20
16	47.00	66.00	36.00	19.00	9.00	50.00
18	59.00	84.00	46.00	24.00	12.00	58.50
24	106.00	149.00	81.00	42.00	21.00	65.00

**NOTES:**

1. BEARING AREA TABLE BASED ON 300 PSI PRESSURE AND 1500 PSF SOIL BEARING. IF PRESSURE IS GREATER OR SOIL BEARING IS LESS, THE THRUST BLOCK SIZE SHALL BE INCREASED.
2. ALL THRUST BLOCKING SHALL BE IN ACCORDANCE WITH AWWA AND THE STANDARD SPECIFICATIONS.
3. ALL THRUST BLOCK & SUPPORT CONC. SHALL BE 3000 PSI READY MIX CONC.
4. GLANDS & BOLTS SHALL BE PROTECTED FROM CONC. WITH 8 MIL. PLASTIC SHEETING WHEN POURING THRUST BLOCKS.
5. CONCRETE THRUST BLOCKING TO BE POURED AGAINST UNDISTURBED EARTH.



**THRUST BLOCK DETAILS**

DATE: 11-2015

DWG. WD-11

APPROVED BY: DLH  
DISTRICT ENGINEER