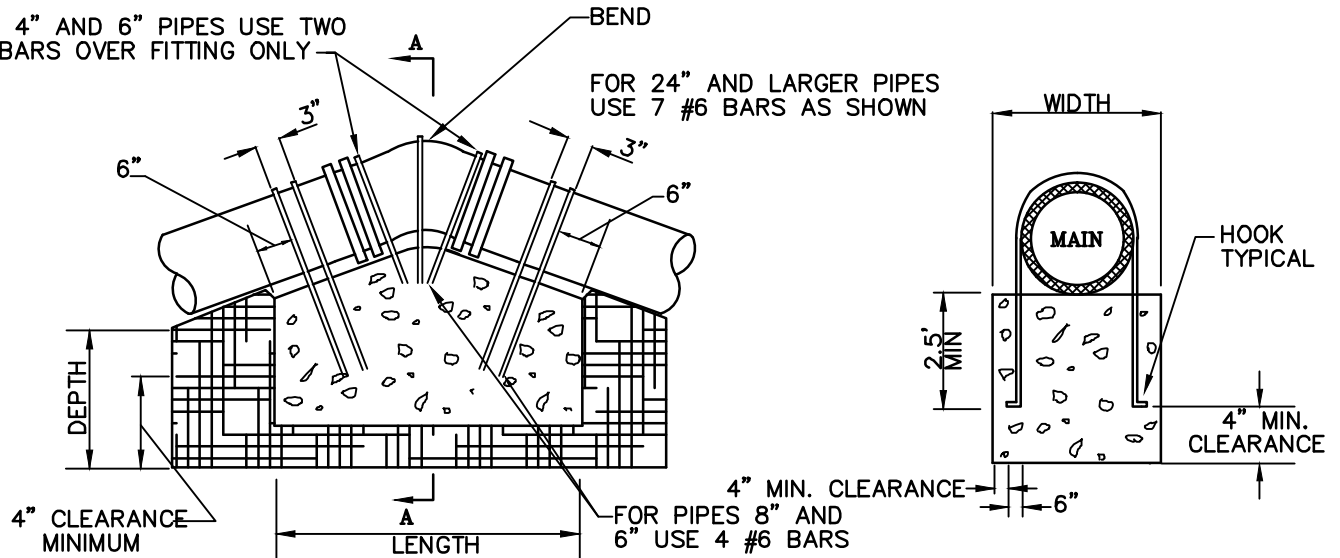


FOR 4" AND 6" PIPES USE TWO #4 BARS OVER FITTING ONLY



TYPICAL SECTION VERTICAL THRUST UPWARD

SECTION A-A

NOTES:

1. ALL CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 3300 P.S.I. AT THE END OF 28 DAYS. (PENNDOT CLASS A)
2. ALL REINFORCING STEEL SHALL BE DEFORMED BARS. (ASTM GRADE 60) AND SHALL BE U-SHAPED AROUND WATER MAIN.
3. ALL FITTINGS AND JOINTS SHALL BE COVERED WITH POLYETHELENE FILM BEFORE PLACING CONCRETE.
4. ALL EXPOSED STEEL SHALL BE COVERED WITH 2 COATS OF BITUUMASTIC, KOPPER 300M OR APPROVED EQUAL.

CONCRETE BLOCKING DIMENSIONS, VERTICAL THRUST UPWARD 100 P.S.I. WORKING PRESSURE									
PIPE SIZES	LENGTH			WIDTH			DEPTH		
	11.25°	22.25°	45°	11.25°	22.25°	45°	11.25°	22.25°	45°
4", 6" & 8"	3.5'	4.5'	6'	3'	3'	3'	2'	3'	4'
10" & 12"	4.5'	7'	8'	3'	3'	4'	3'	4'	5'
14" & 16"	4.5'	7'	9'	4.5'	4.5'	4.5'	3.5'	4'	5'
18" & 20"	5'	7'	11.5'	5'	5'	5'	4'	5'	5.5'
24"	5'	9'	12.5'	5'	5'	6'	4.5'	5'	6'
30"	5.5'	9'	13.5'	5.5'	6'	7'	5.5'	6'	7'
36"	6.5'	11'	14'	5.5'	6.5'	7'	6'	6.5'	7'
42"	9'	13.5'	15'	6'	7'	7'	6'	7'	7'
48"	10'	14'	16'	6'	7'	7'	6'	7'	7'

NOTES:

1. THIS CHART HAS BEEN DEVELOPED FOR D.I.P. WITH A 100 PSI WORKING PRESSURE. A 50% SURGE PRESSURE INCREASE AND 1.5 SAFETY FACTOR. CASE SPECIFIC CALCULATIONS ARE REQUIRED WHERE THE WORKING PRESSURE EXCEEDS 100PSI AND/OR SURGE PRESSURE EXCEEDS 50% OF WORKING PRESSURE.
2. FOR VERTICAL THRUST DOWNWARD, SEE DETAIL W-8 AND W-9.
3. INSTALL MEG-A-LUGS ON ALL FITTINGS - AUTHORITY MAY ACCEPT MEG-A-LUG IN LIEU OF VERTICAL THRUST BLOCKS IN SOME CASES.

**VERTICAL THRUST BLOCK BEARING
ARRANGEMENT AND DIMENSIONS
SCHEDULE**

HORSHAM WATER & SEWER AUTHORITY

DETAIL W22-D

**THRUST BLOCK
DETAILS (4 OF 4)**

DATE:

MARCH 23, 2015

SCALE:

NOT TO SCALE