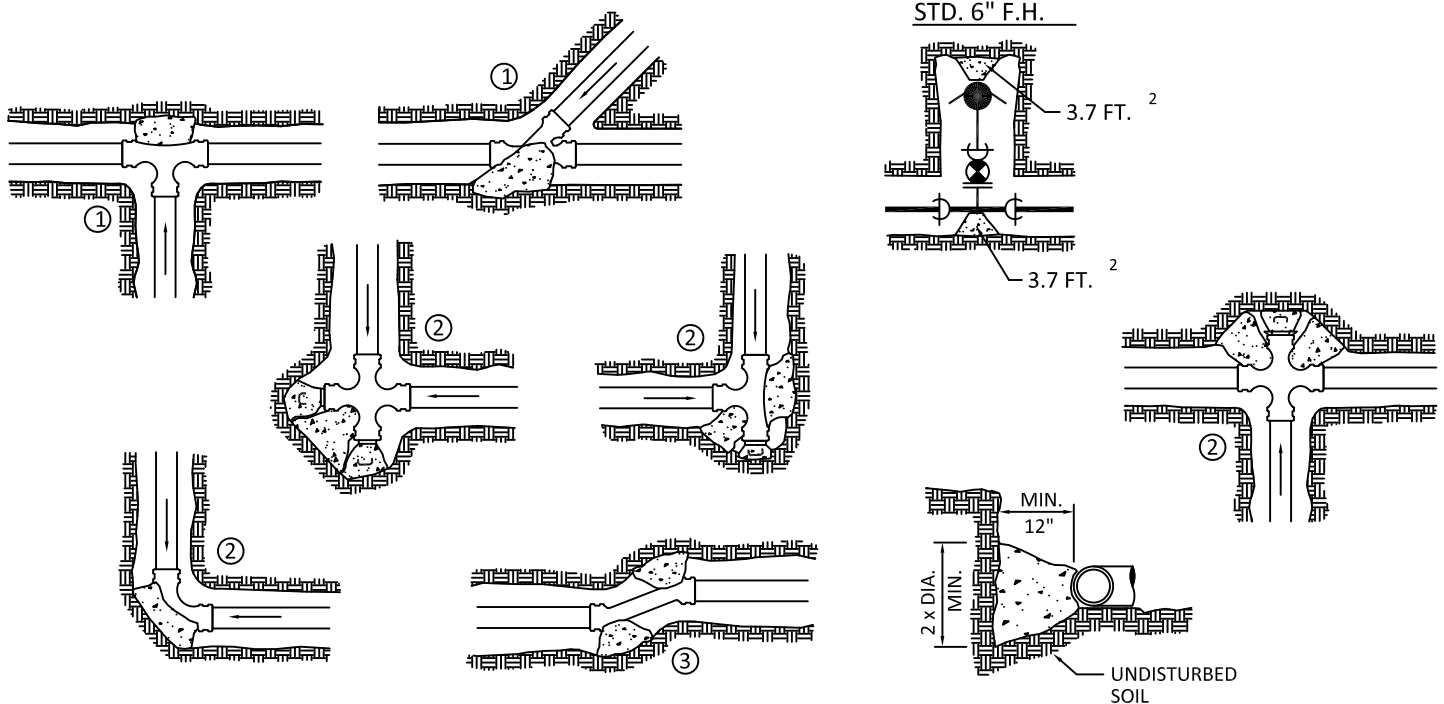


FITTING SIZE (Inches)	TEE, WYE, & ① HYDRANTS	90° BEND ② PLUGGED CROSS TEE PLUGGED-RUNS	45° BEND ③	22 1/2° BEND ④	11 1/4° BEND ⑤
2	*	*	*	*	*
4	1.7	2.4	1.3	*	*
6	3.7	5.3	2.9	1.5	*
8	6.7	9.5	5.1	2.7	1.3
10	10.5	14.8	8	4.1	2
12	15.1	21.3	11.6	5.9	2.9
18	33.9	47.9	25.9	12.8	6.7
LARGER	* *	* *	* *	* *	* *
BEARING AREA OF THRUST BLOCKS (sq. ft.)					

- THRUST BLOCKS SHALL BE PROVIDED AT FIRE HYDRANTS, WET TAPS, AND ALL UN-RESTRAINED WATER SYSTEM APPURTENANCES ONLY, UNLESS OTHERWISE DIRECTED BY THE CITY'S AUTHORIZED REPRESENTATIVE.
- ALL VALUES ARE BASED ON THE FOLLOWING ASSUMPTIONS:
 - AVG. PRESSURE = 100 PSI X 2 (SAFETY FACTOR)
 - 1500 PSF SOIL BEARING CAPACITY
- ALL FITTINGS SHALL BE WRAPPED IN PLASTIC (8 MIL. MINIMUM) PRIOR TO PLACEMENT OF CONCRETE.
- BEARING SURFACE OF THRUST BLOCKING SHALL BE AGAINST UNDISTURBED SOIL.
- CONCRETE SHALL BE COMMERCIAL MIX, MIN. COMPRESSIVE STRENGTH OF 3000 PSI AT 28 DAYS.
- ALL PIPE ZONES SHALL BE GRAVEL FILLED AND COMPACTED.
- THRUST BLOCKS FOR PLUGGED CROSS AND PLUGGED TEE SHALL HAVE #4 REBAR LIFTING LOOPS INSTALLED AS SHOWN.
- VERTICAL THRUST DETAILS-SEE DWG. WT-3005.
- STRADDLE BLOCK DETAILS-SEE DWG. WT-3010.

* BLOCK TO UNDISTURBED TRENCH WALLS

** THRUST BLOCKS WILL BE INDIVIDUALLY DESIGNED AND STAMPED BY THE ENGINEER.



Horizontal Thrust Block

CITY OF WILSONVILLE



DRAWING NUMBER: WT-3000

DRAWN BY: SR

SCALE: N.T.S.

FILE NAME: WT-3000.DWG

APPROVED BY: NK

DATE: 6/4/14

PUBLIC WORKS STANDARDS