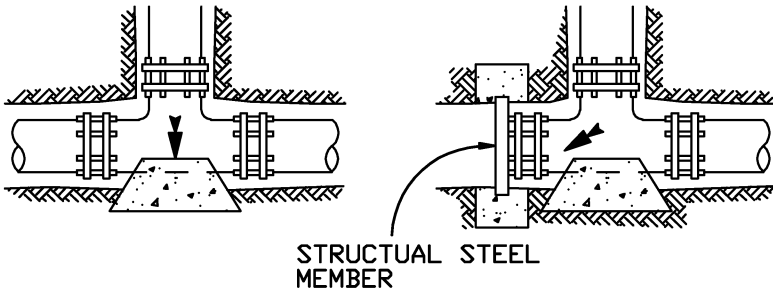
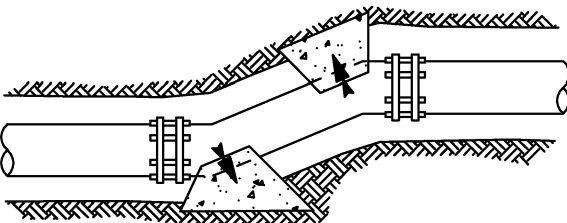
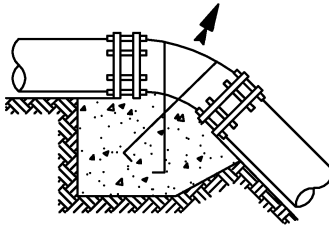
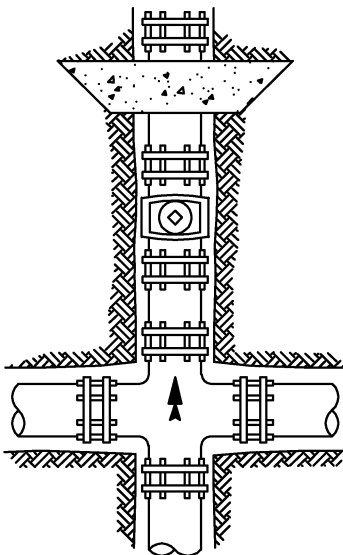
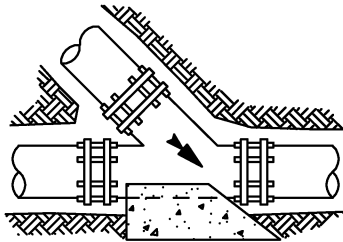
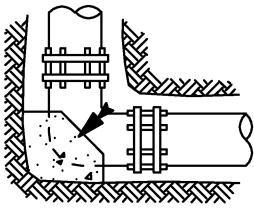


XXV



XXIV

UTILIZE: TO DETERMINE THE THRUST
TO BE RESTRAINED BY A THRUST BLOCK



ARROW INDICATES
THE DIRECTION OF THE
RESULTANT THRUST FORCE

RESULTANT THRUST AT FITTINGS AT 100 PSI WATER PRESSURE
TOTAL POUNDS

NOM. PIPE DIA. IN.	DEAD END	90° BEND	45° BEND	22 1/2° BEND	11 1/4° BEND
4	1,810	2,559	1,385	706	355
6	3,739	5,288	2,862	1,459	733
8	6,433	9,097	4,923	2,510	1,261
10	9,677	13,685	7,406	3,776	1,897
12	13,685	19,353	10,474	5,340	2,683
14	18,385	26,001	14,072	7,174	3,604
16	23,779	33,628	18,199	9,278	4,661
18	29,865	42,235	22,858	11,653	5,855
20	36,644	51,822	28,046	14,298	7,183
24	52,279	73,934	40,013	20,398	10,249
30	80,425	113,738	61,554	31,380	15,766
36	115,209	162,931	88,177	44,952	22,585
42	155,528	219,950	119,036	60,684	30,489
48	202,683	286,637	155,127	79,083	39,733
54	256,072	362,140	195,989	99,914	50,199

TO DETERMINE THRUST AT PRESSURES OTHER THAN 100
PSI, MULTIPLY THE THRUST OBTAINED IN THE TABLE BY
THE RATIO OF THE PRESSURE TO 100

FOR EXAMPLE, THE THRUST ON A 12 INCH, 90° BEND AT

$$125 \text{ PSI IS } 19,353 \times \frac{125}{100} = 24,191 \text{ POUNDS}$$

**CITY OF
STAUNTON, VA**

**THRUST BLOCK
TABLES XXV, XXIV**

**Draw No.
W-13**