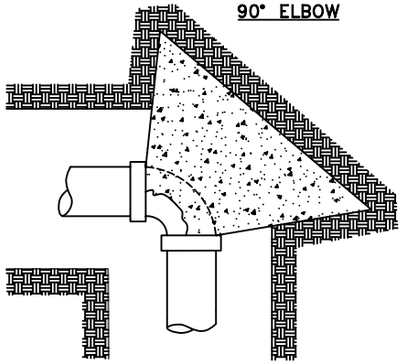
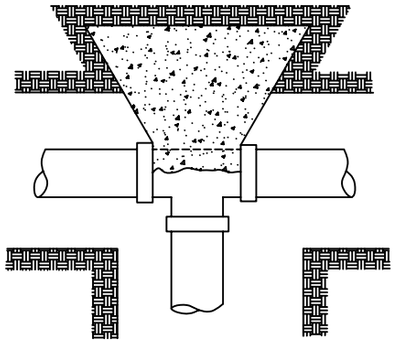
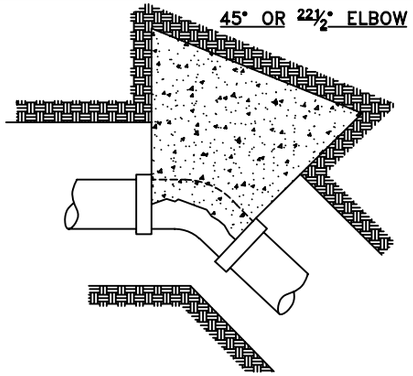
90° ELBOW



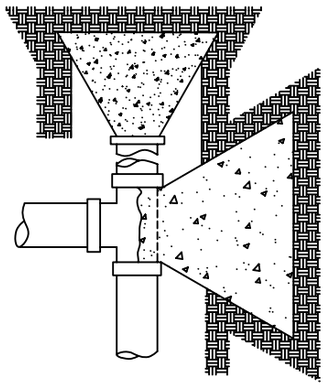
TEE



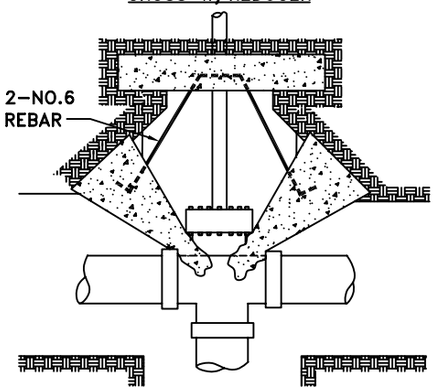
45° OR 22½° ELBOW



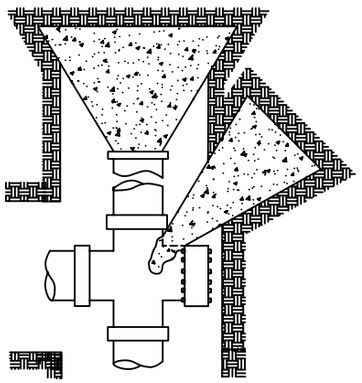
TEE W/CAP



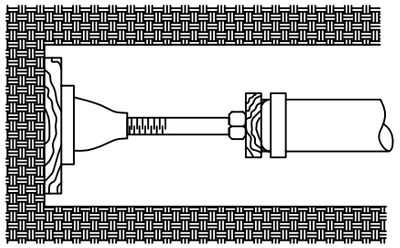
CROSS W/REDUCER



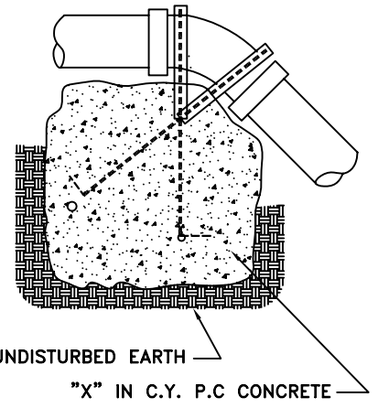
CROSS W/CAP & BLIND FLANGE



TEMPORARY THRUST BLOCK
(SEE TABLE FOR NECESSARY BEARING AREA OF TIMBER AGAINST TRENCH WALL)



45° ELL IN VERTICAL POSITION



PIPE SIZE	"X" IN C.Y.
4"	1.2
6"	2.4
8"	4.0
10"	6.7
	FOR 12" AND
	LARGER SIZES
	SEE PLAN.

NOTE: USE No. 6 REBAR TO ANCHOR FITTING TO TO THRUST BLOCK AS SHOWN. TYPICAL FOR ALL SIZES.

2 YOKES AT EACH FITTING.

THRUST BLOCK AREAS (IN SQUARE FEET)				
PIPE SIZE	DEAD END OR TEE	90ø ELBOW	45ø ELBOW	22 1/2ø ELBOW
4"	2	4	2	2
6"	4	6	4	2
8"	8	10	6	2
10"	12	16	10	6
12"	18	24	14	8
14"	24	34	18	10
16"	30	42	24	12
18"	40	54	30	16
20"	48	68	36	18
24"	70	96	54	26

GENERAL NOTES:

1. AREA SHOWN IS VERTICAL SURFACE AGAINST UNDISTURBED EARTH.
2. AREA SHOW IS FOR 225psi AGAINST 2000psf EARTH RESISTANCE. THRUST BLOCKS FOR OTHER CONDITIONS WILL BE AS SHOWN ON PLANS.
3. CONCRETE USED SHALL BE 5 SK./C.Y., MIN. 2000psi IN 28 DAYS.
4. ALL FITTINGS SHALL BE PROTECTED FROM CONCRETE WITH 6 MIL WRAP OF POLYTHYLENE (VIS–QUEEN).
5. NOT USED.
6. THRUST BLOCKS SHALL BE INSTALLED AT REDUCING FITTINGS AS SHOWN ON THE PLANS, OR AS RECOMMENDED BY THE PIPE MANUFACTURER.
7. WRAP ALL EXPOSED PORTIONS OF REBAR W/5 LAYERS OF 6 MIL VISQUEEN. EXTEND VISQUEEN 6" MINIMUM INTO CONCRETE, TYP.

RICHARD C. SWEET R.C.E. 44,213 EXP. 6/30/07 — 1/20/05 DATE

REVISIONS	BY	APP	DATE

City of Santa Maria
Standard Drawing

DESCRIPTION:

THRUST BLOCK DETAILS

STANDARD NUMBER

WA–13

DRAWN BY: H.P.	DATE DRAWN: 6/69		SCALE: NONE	SHEET 1 OF 1