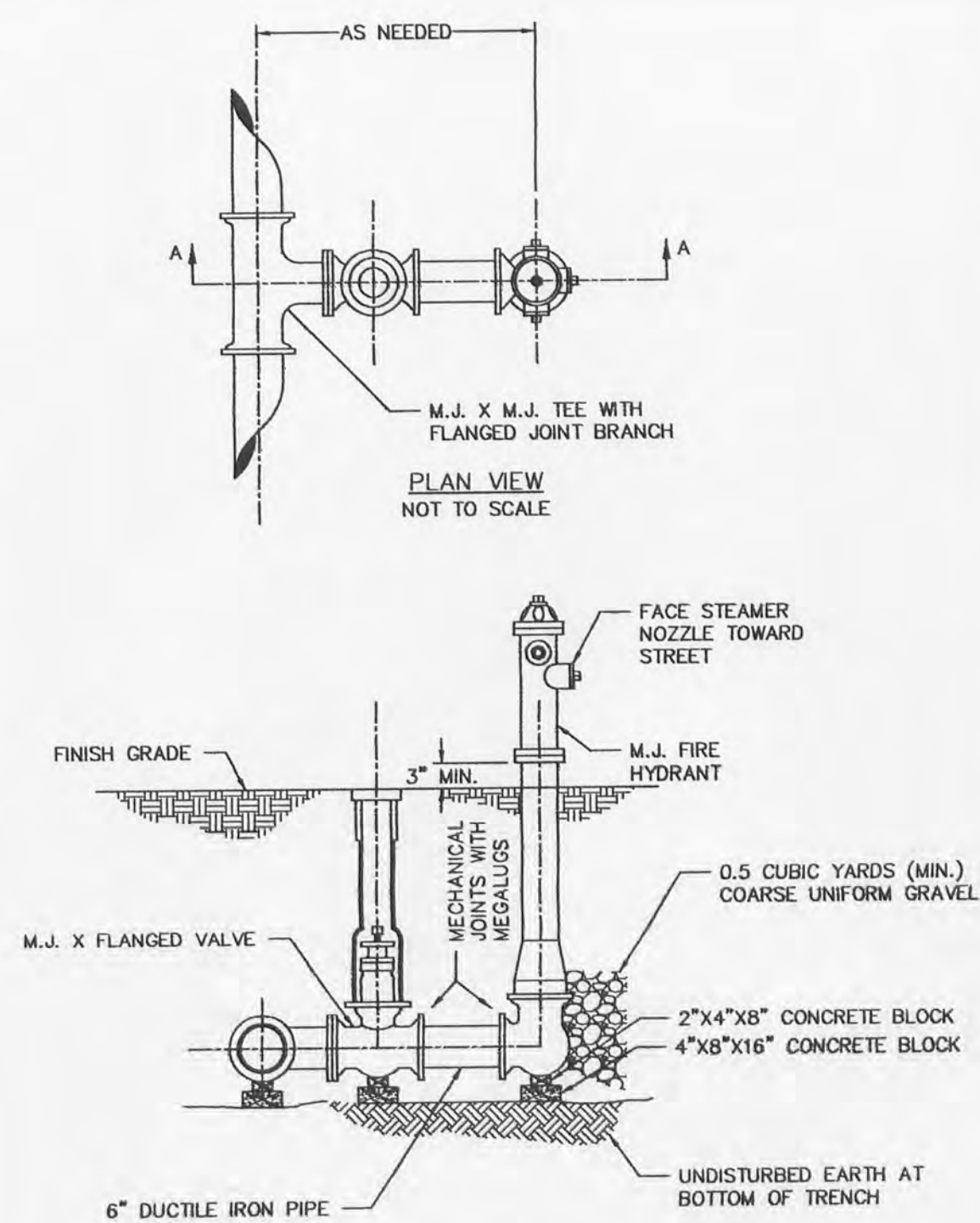


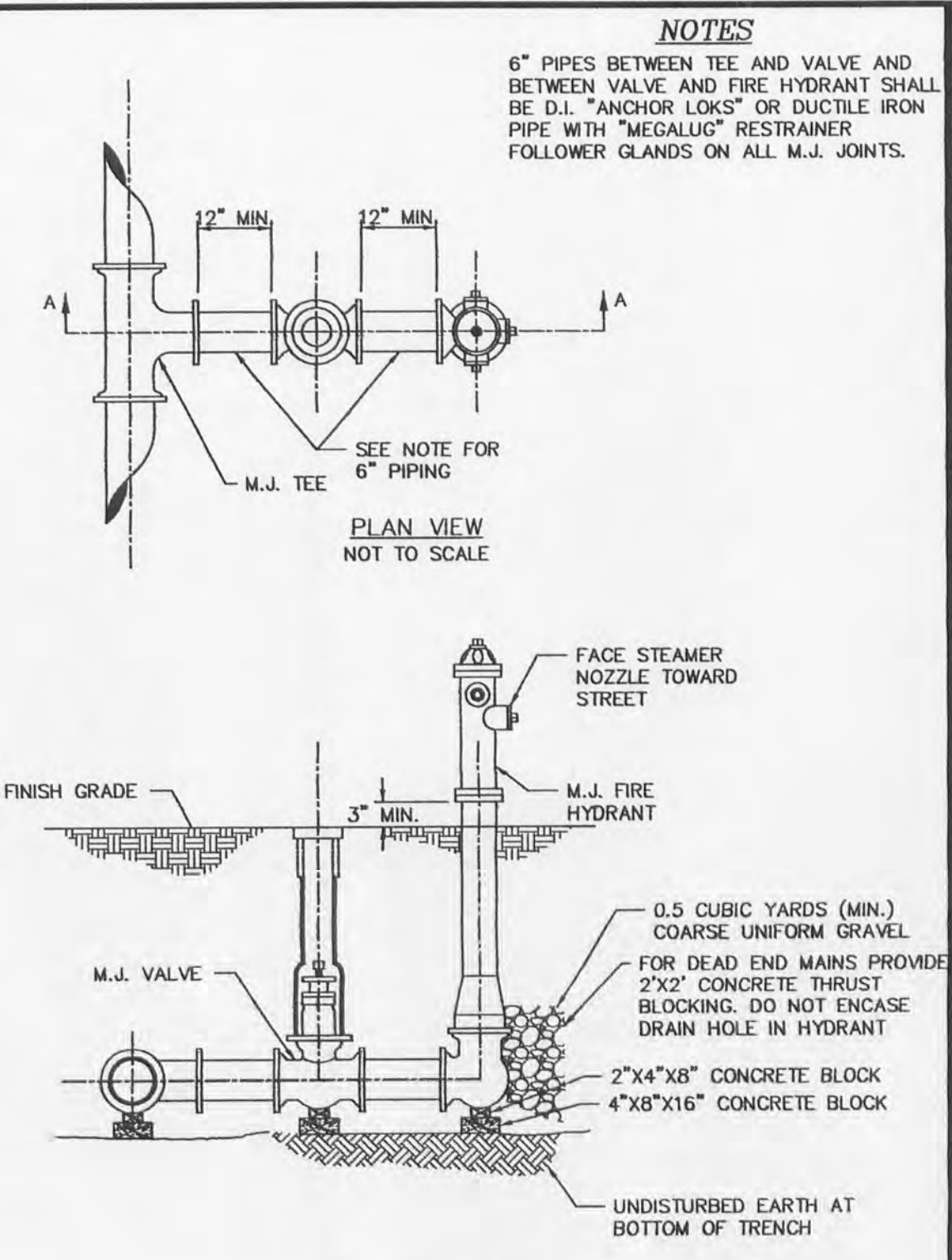
NOTES
SEE SPECIFICATIONS FOR ADDITIONAL DETAILS FOR BEDDING AND BACKFILL.

TYPICAL TRENCH SECTION FOR PVC PIPE
NOT TO SCALE
DETAIL 'A'
PAGE 1 OF 2



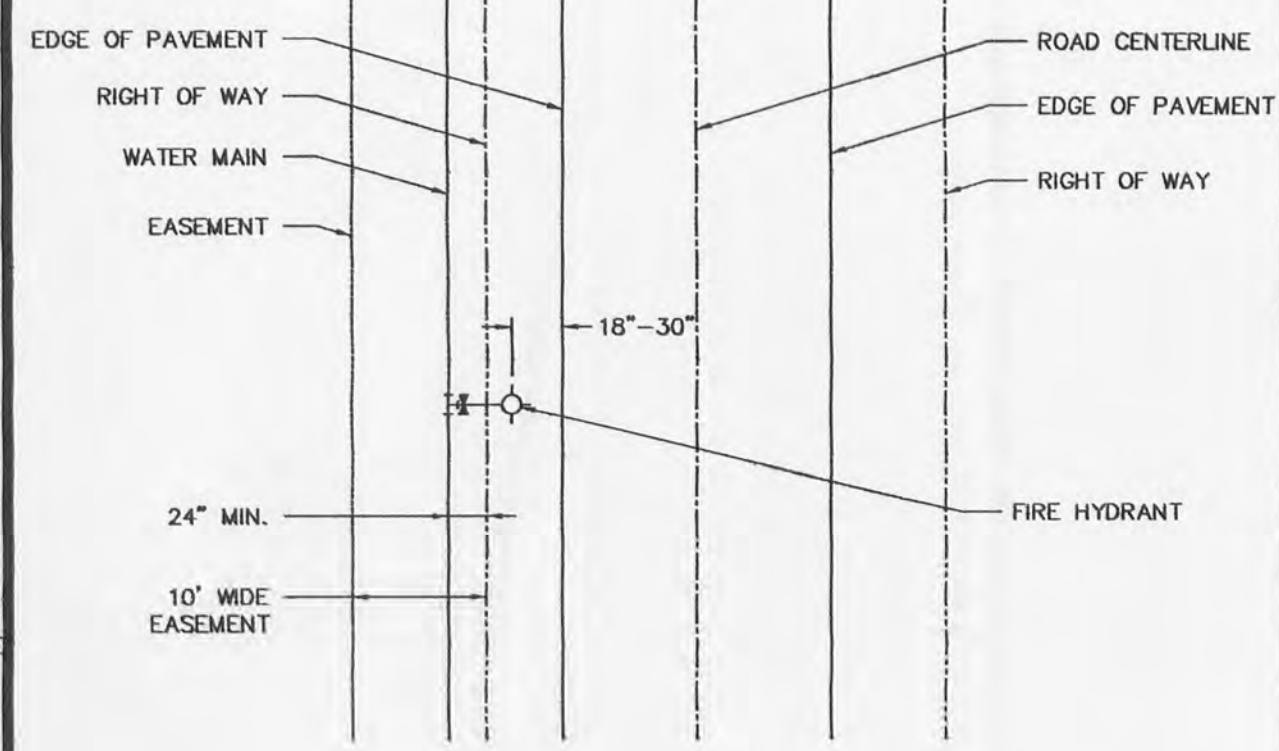
SECTION "A-A"
NOT TO SCALE

STANDARD FIRE HYDRANT DETAIL
DETAIL 'B'
SHEET 1 OF 3



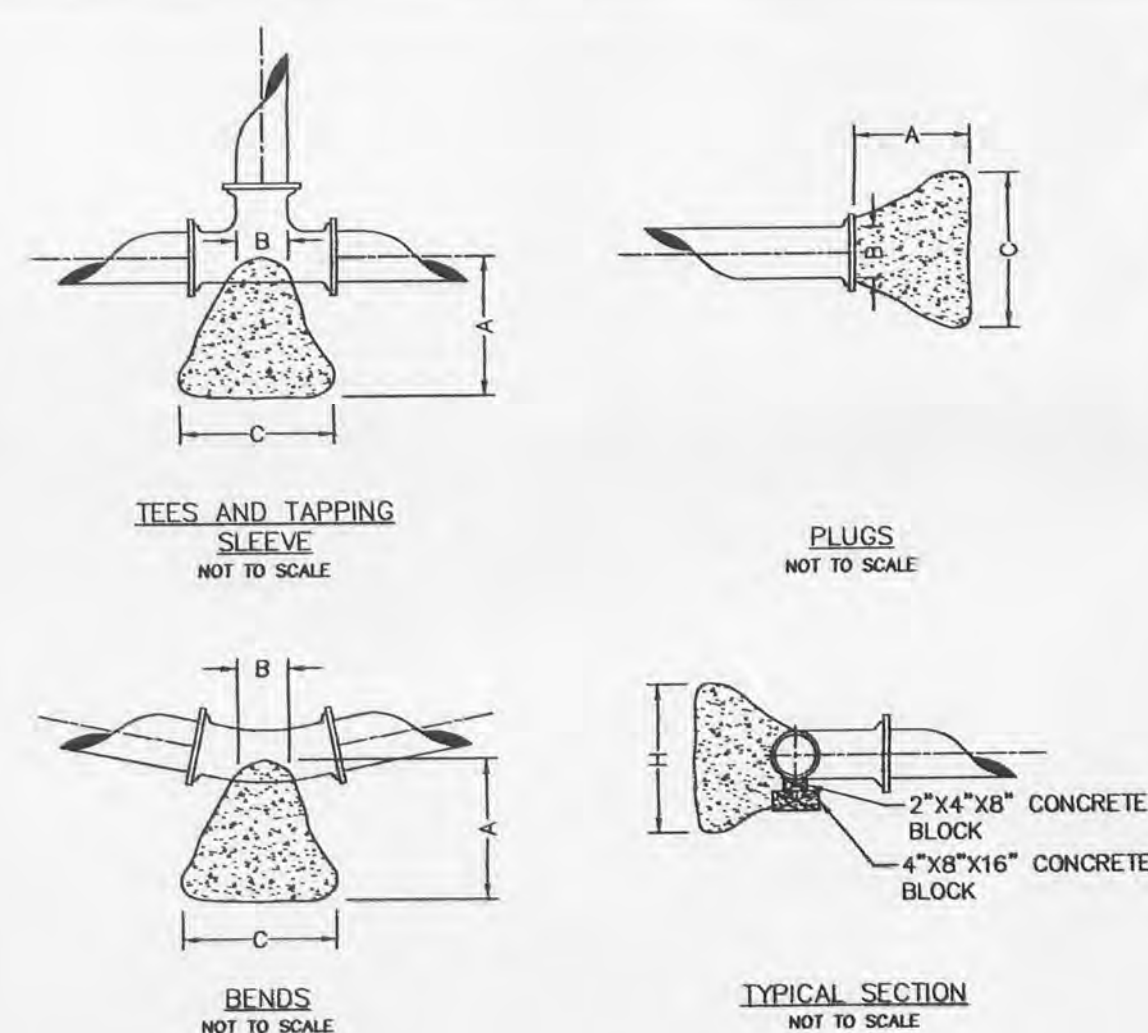
SECTION "A-A"
NOT TO SCALE

OPTIONAL FIRE HYDRANT DETAIL
DETAIL 'B'
SHEET 2 OF 3



FIRE HYDRANT LOCATION
NOT TO SCALE

LOCATION
FIRE HYDRANT DETAIL
DETAIL 'B'
SHEET 3 OF 3

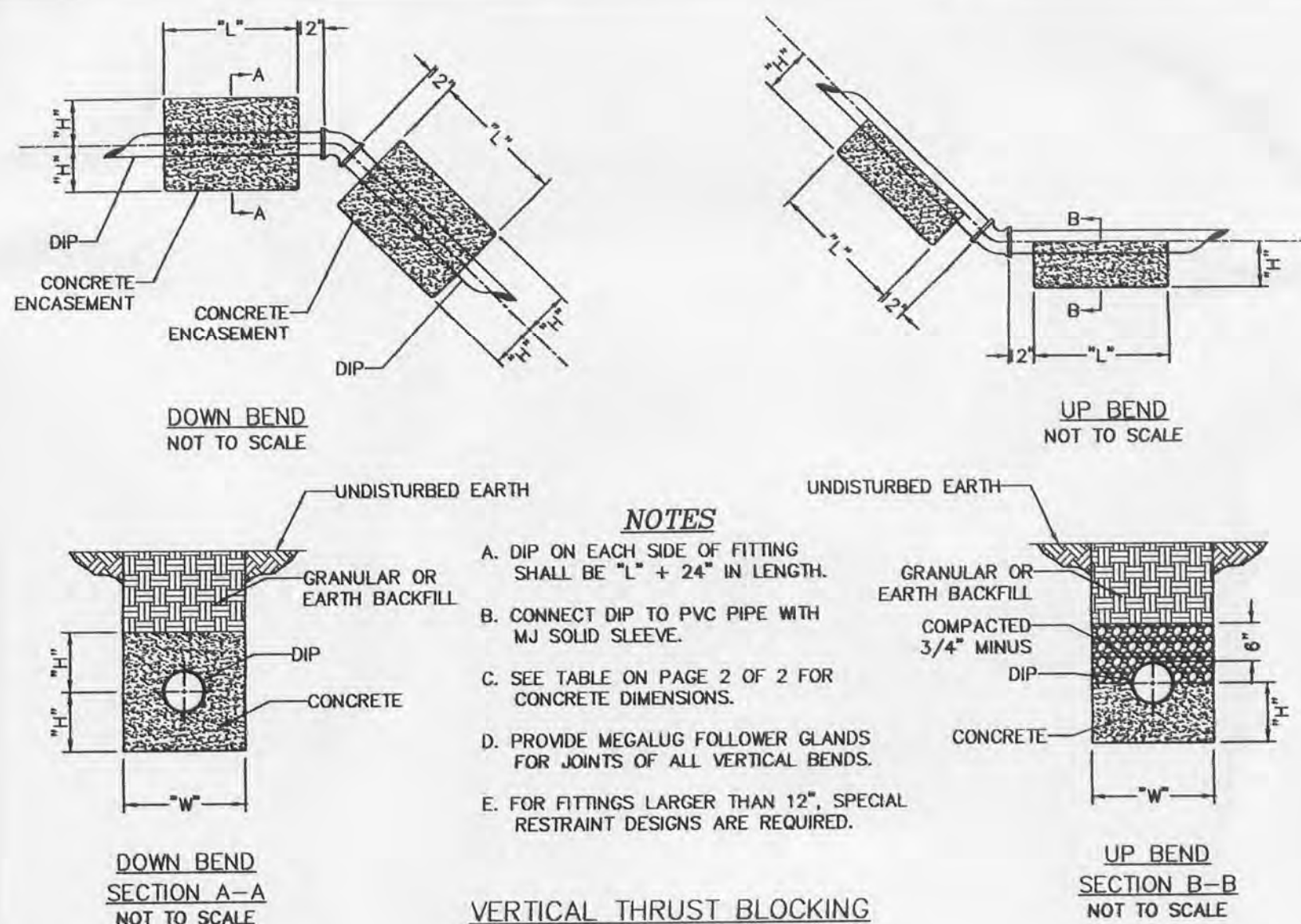


THRUST BLOCK DIMENSIONS - INCHES

PIPE DIA.	ALL FTGS.	TEE PLUG TAPPING		90 DEGREE BEND		45 DEGREE BEND		22-1/2 BEND		11-1/4 BEND	
		A	B	C	H	C	H	C	H	C	H
4	14	4	24	12	26	15	18	12	12	12	12
6	16	6	36	18	36	24	30	18	24	12	12
8	20	8	36	30	42	36	36	24	24	18	18
10	20	10	48	36	66	36	36	28	24	18	18
12	24	12	68	36	82	42	52	36	40	24	18

NOTES
FOR FITTINGS LARGER THAN 12", SPECIAL RESTRAINT DESIGNS ARE REQUIRED.

HORIZONTAL THRUST BLOCKING
DETAIL 'C'



VERTICAL THRUST BLOCKING
DETAIL 'D'
PAGE 1 OF 2

PIPE SIZE	DEGREE BEND	DOWN BENDS			UP BENDS		
		W	H	L	W	H	L
4"	11 1/4"	18	12	18	12	12	12
	22 1/2"	18	18	24	12	12	12
	45°	18	18	30	12	12	18
6"	11 1/4"	24	18	18	12	12	12
	22 1/2"	24	18	24	12	12	12
	45°	24	18	48	12	12	18
8"	11 1/4"	24	18	24	12	12	18
	22 1/2"	24	18	42	12	12	24
	45°	24	18	48	18	12	24
10"	11 1/4"	30	24	24	18	18	18
	22 1/2"	30	24	42	18	18	24
	45°	30	24	72	18	18	36
12"	11 1/4"	30	24	30	18	18	18
	22 1/2"	30	24	54	18	18	24
	45°	30	36	72	24	18	36

DIMENSIONS FOR VERTICAL BENDS
(IN INCHES)
DETAIL 'D'
PAGE 2 OF 2

NOTES

6" PIPES BETWEEN TEE AND VALVE AND BETWEEN VALVE AND FIRE HYDRANT SHALL BE D.I. "ANCHOR LOCKS" OR DUCTILE IRON PIPE WITH "MEGALUG" RESTRAINER FOLLOWER GLANDS ON ALL M.J. JOINTS.

PROJECT TITLE:
O'FALLON DERMATOLOGY
DETAILS

DATE: 3/5/12
DRAWN: J.R.S.
CHECKED: J.R.S.
PROJECT NO.: 11-1244
SHEET NO.: 12 OF 13

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CERTIFICATE OF AUTHORITY: ENGINEERING E-1220-D-5, LAND SURVEYING LS-264-D

DISCLAIMER OF RESPONSIBILITY
I hereby specify that the documents intended to be authorized by my seal are limited to this sheet, and I hereby disclaim any responsibility for other drawings, specifications, estimates, reports or other documents or instruments relating to or intended to be used for any part or parts of the architectural or engineering project or survey.

STATE OF MISSOURI
JEFFREY R. SMITH
REGISTERED PROFESSIONAL ENGINEER
3.6.12
3.15.12
JEFFREY R. SMITH, P.E.
MO. P.E. # E-2001004672

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