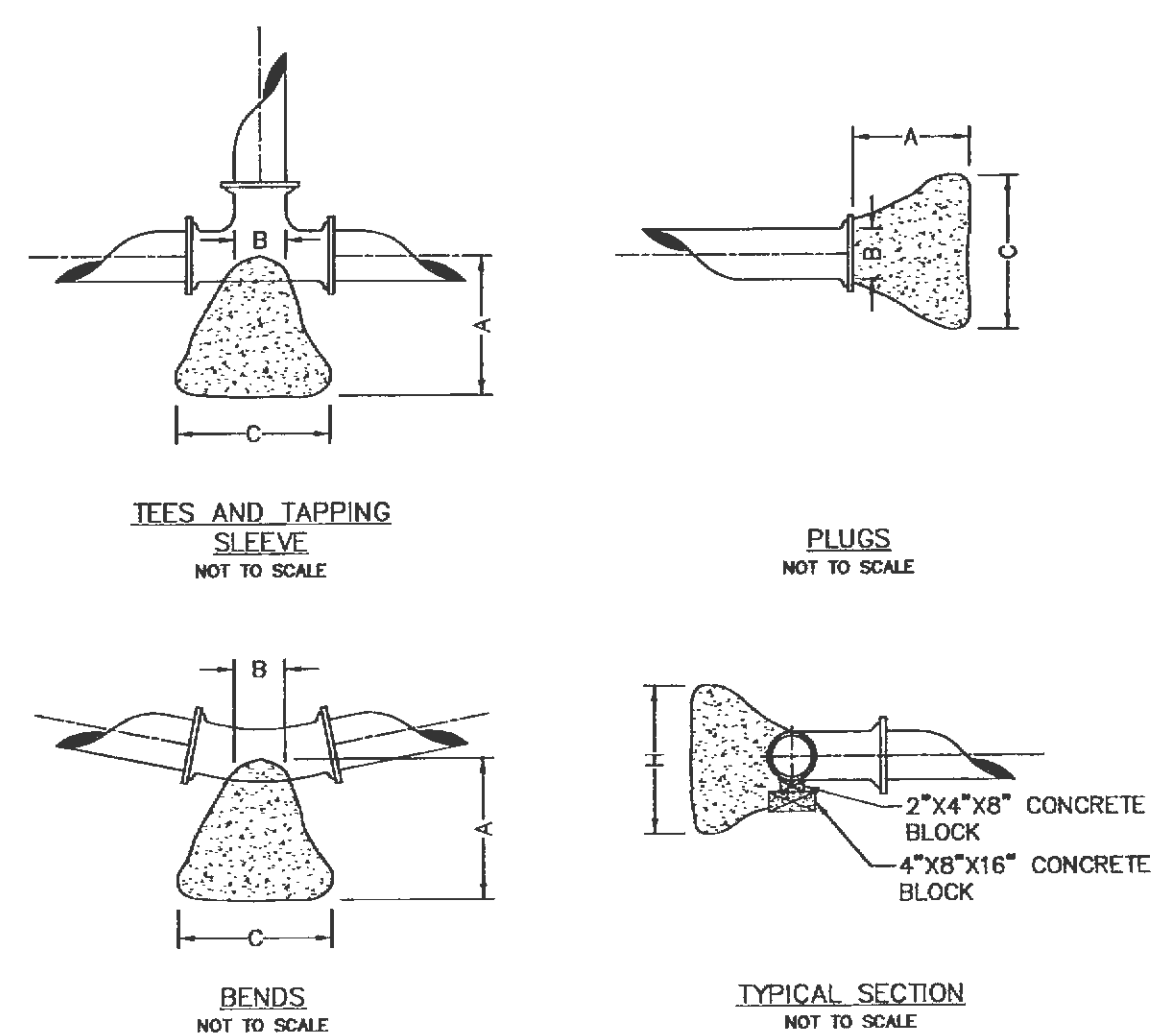
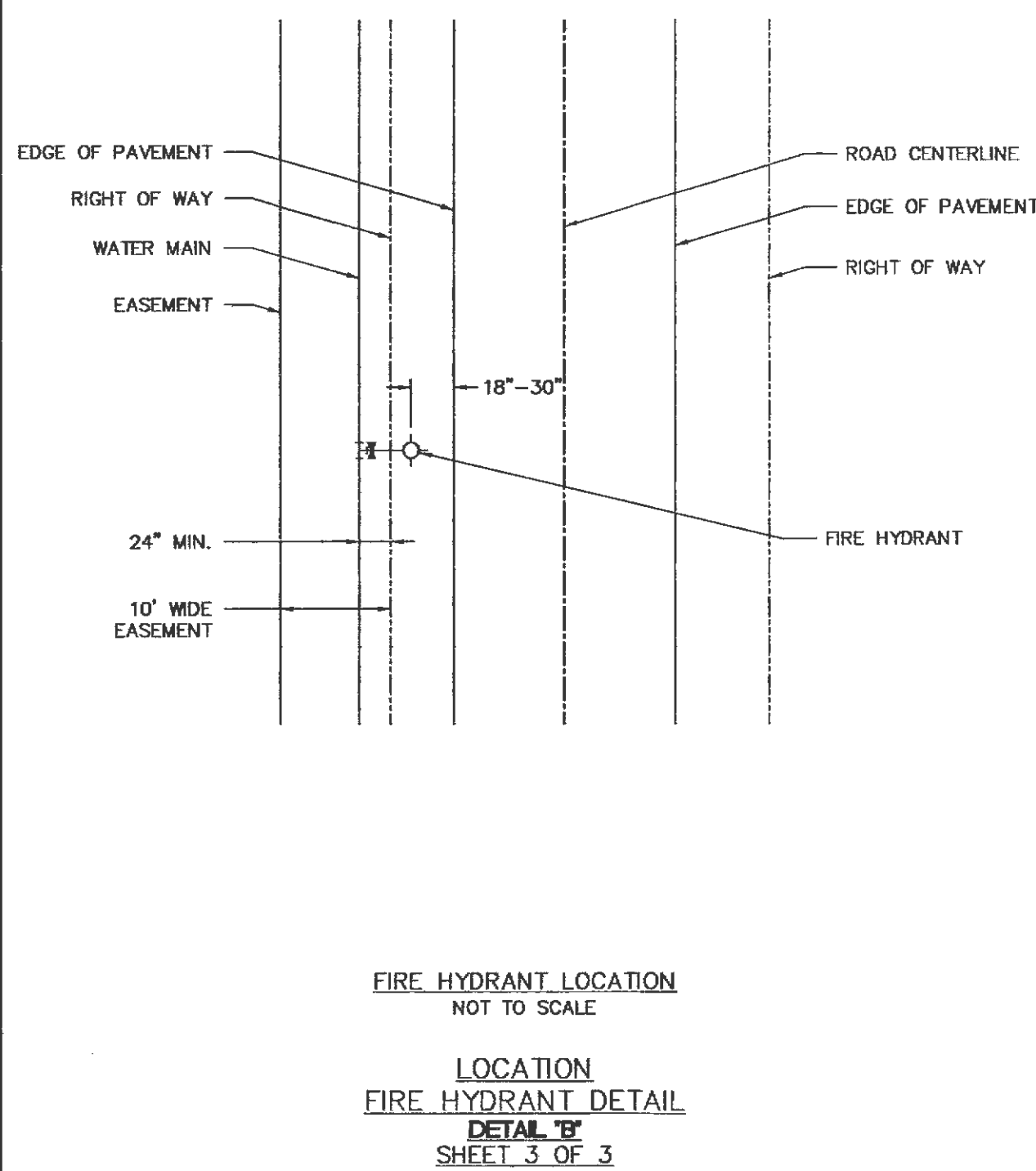
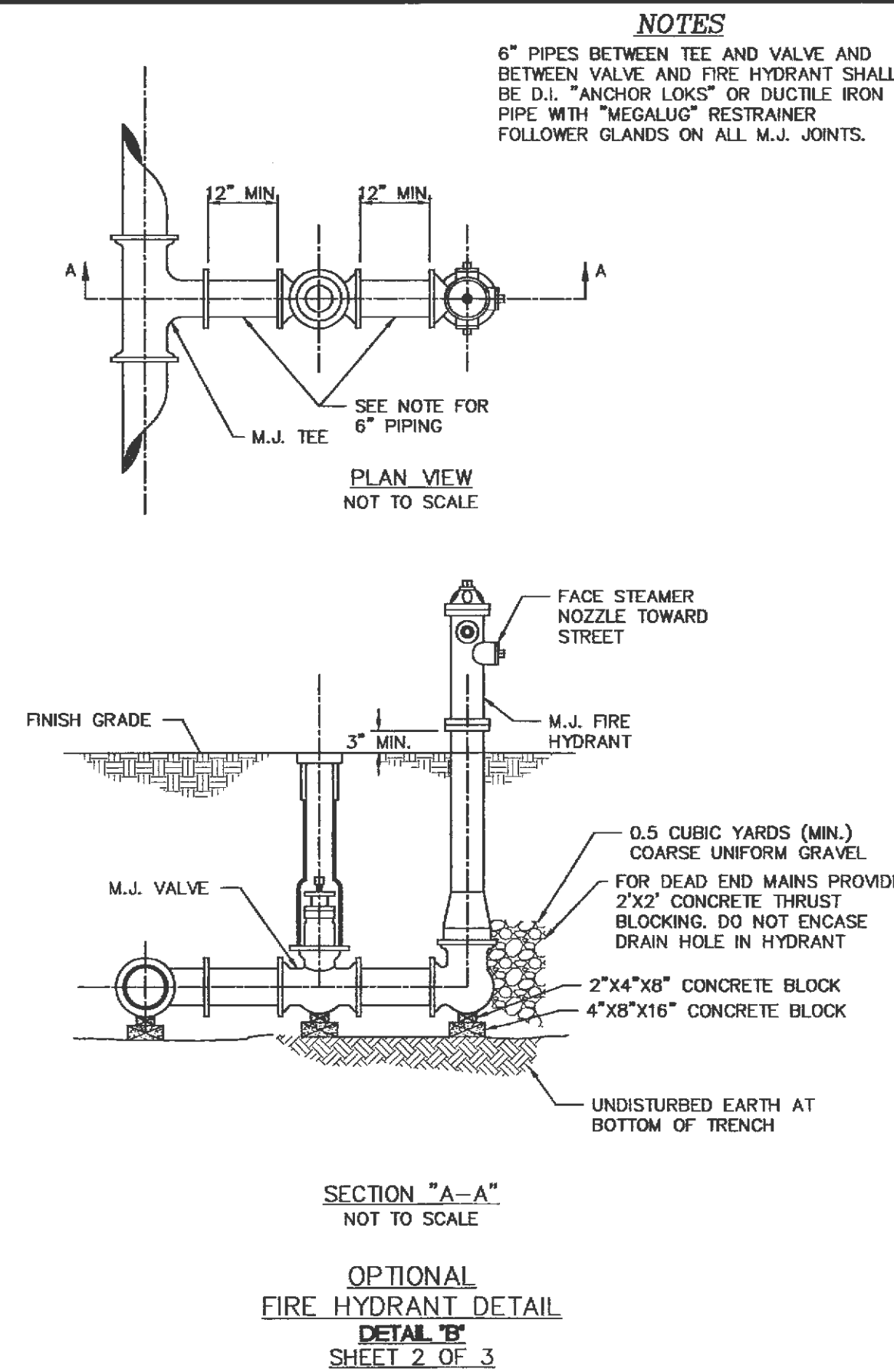
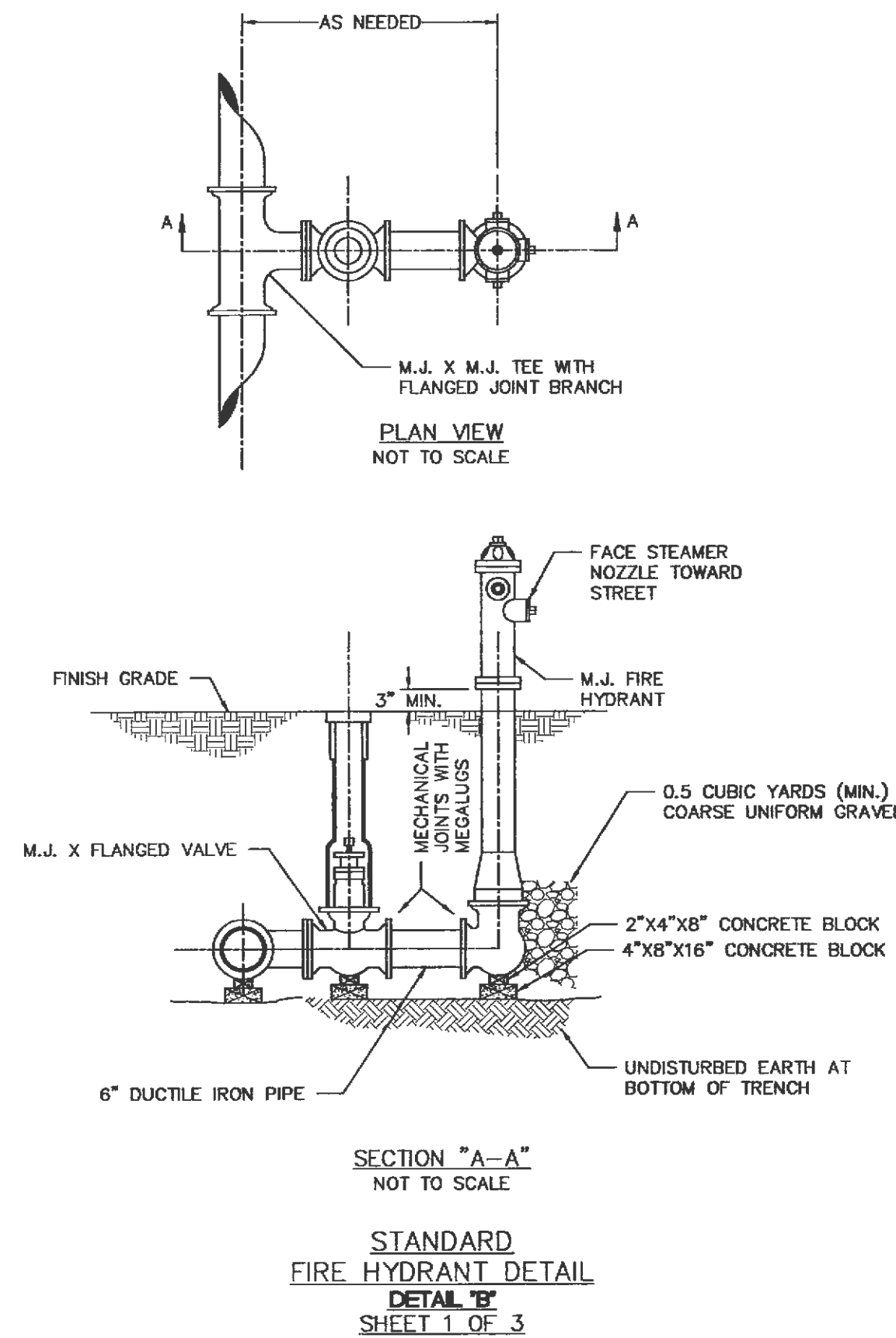


NOTES
SEE SPECIFICATIONS FOR ADDITIONAL DETAILS FOR BEDDING AND BACKFILL

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

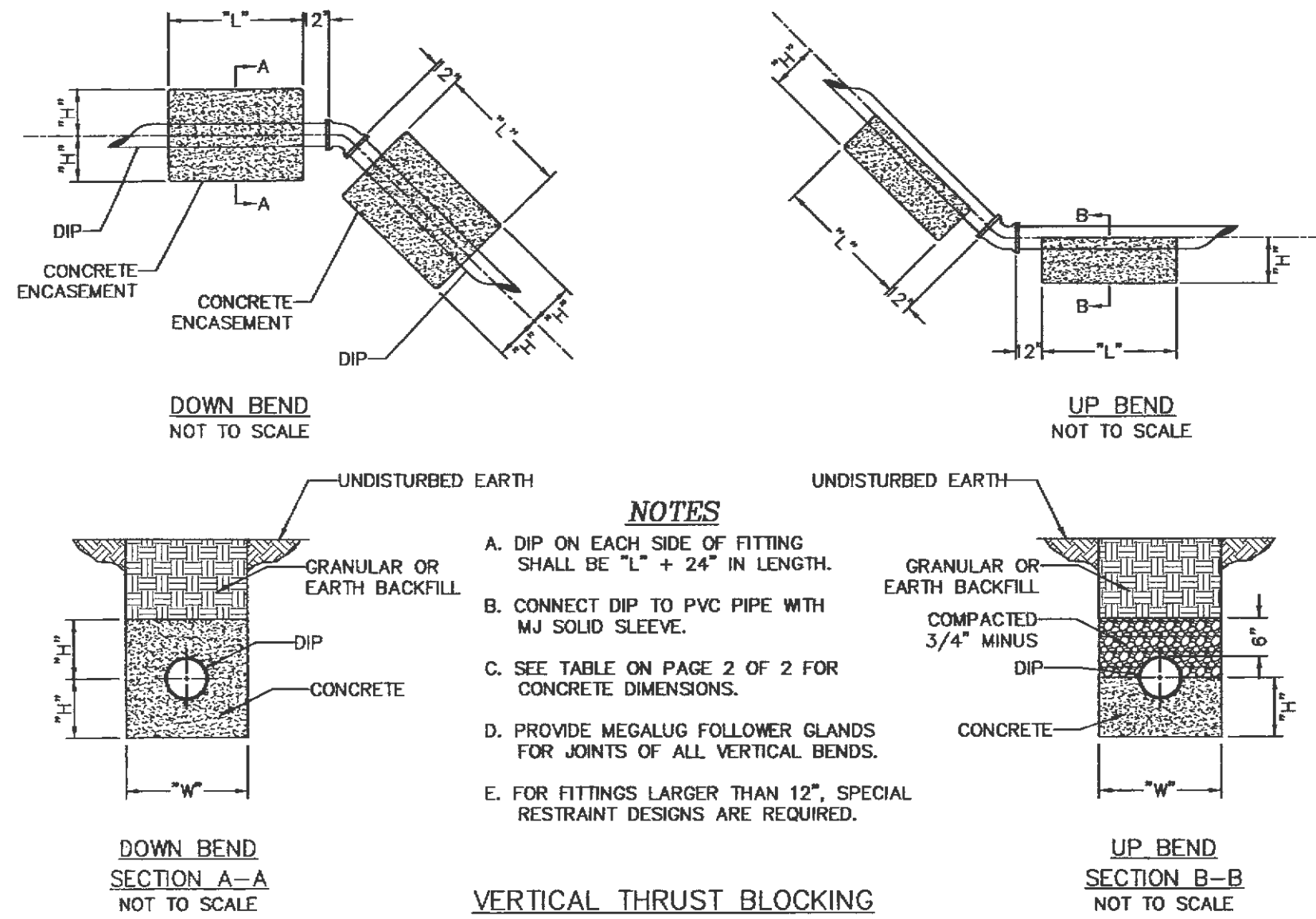


THRUST BLOCK DIMENSIONS - INCHES

PIPE DIA.	ALL FTGB.			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	C	H	
4	14	4	24	12	26	15	18	12	12	12	12	12	
6	16	6	36	18	36	24	30	18	24	12	12	12	
8	20	8	36	30	42	36	36	24	24	18	18	12	
10	20	10	48	36	66	36	36	36	28	24	18	18	
12	24	12	68	36	82	42	52	36	40	24	28	18	

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

HORIZONTAL THRUST BLOCKING
DETAIL 'C'



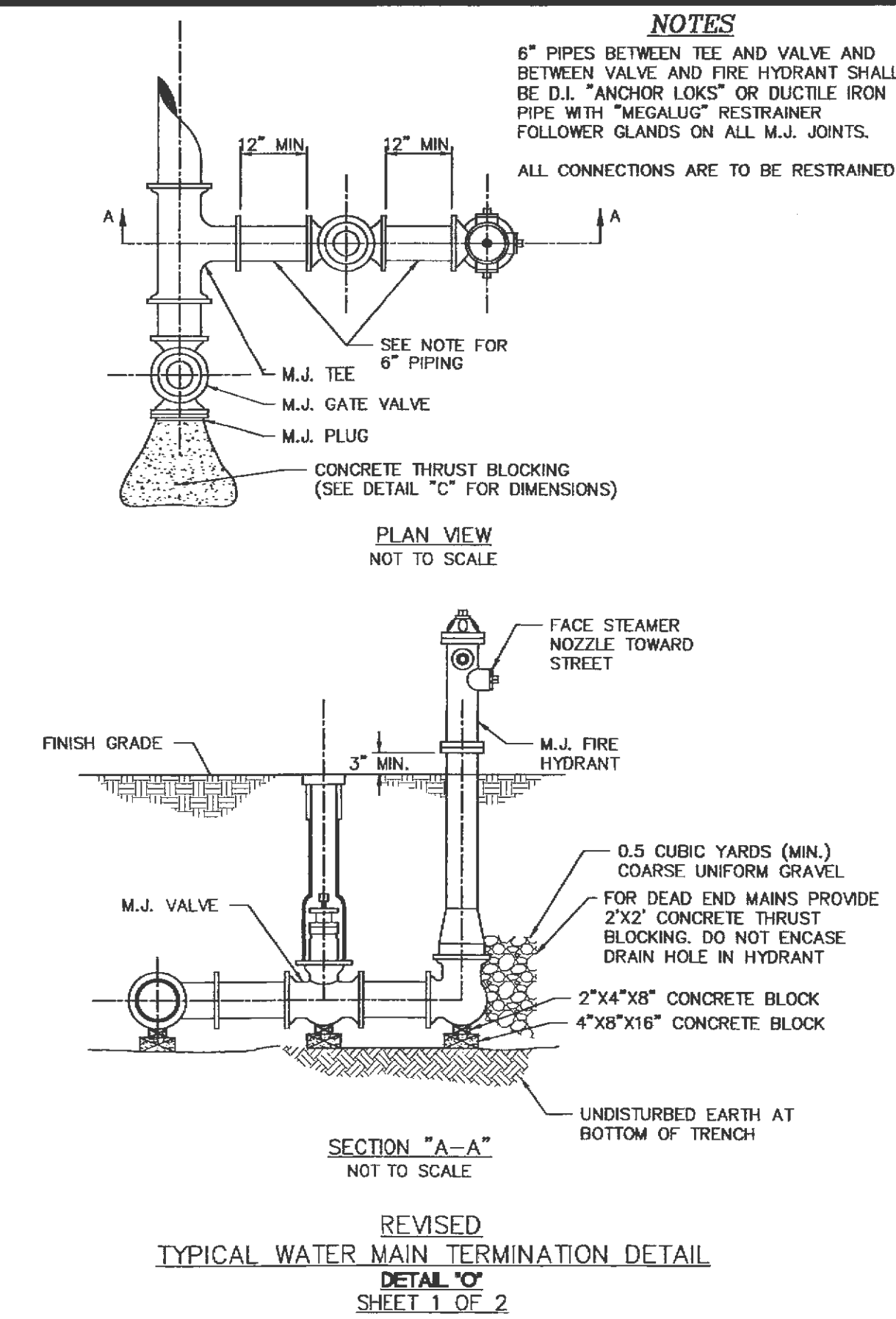
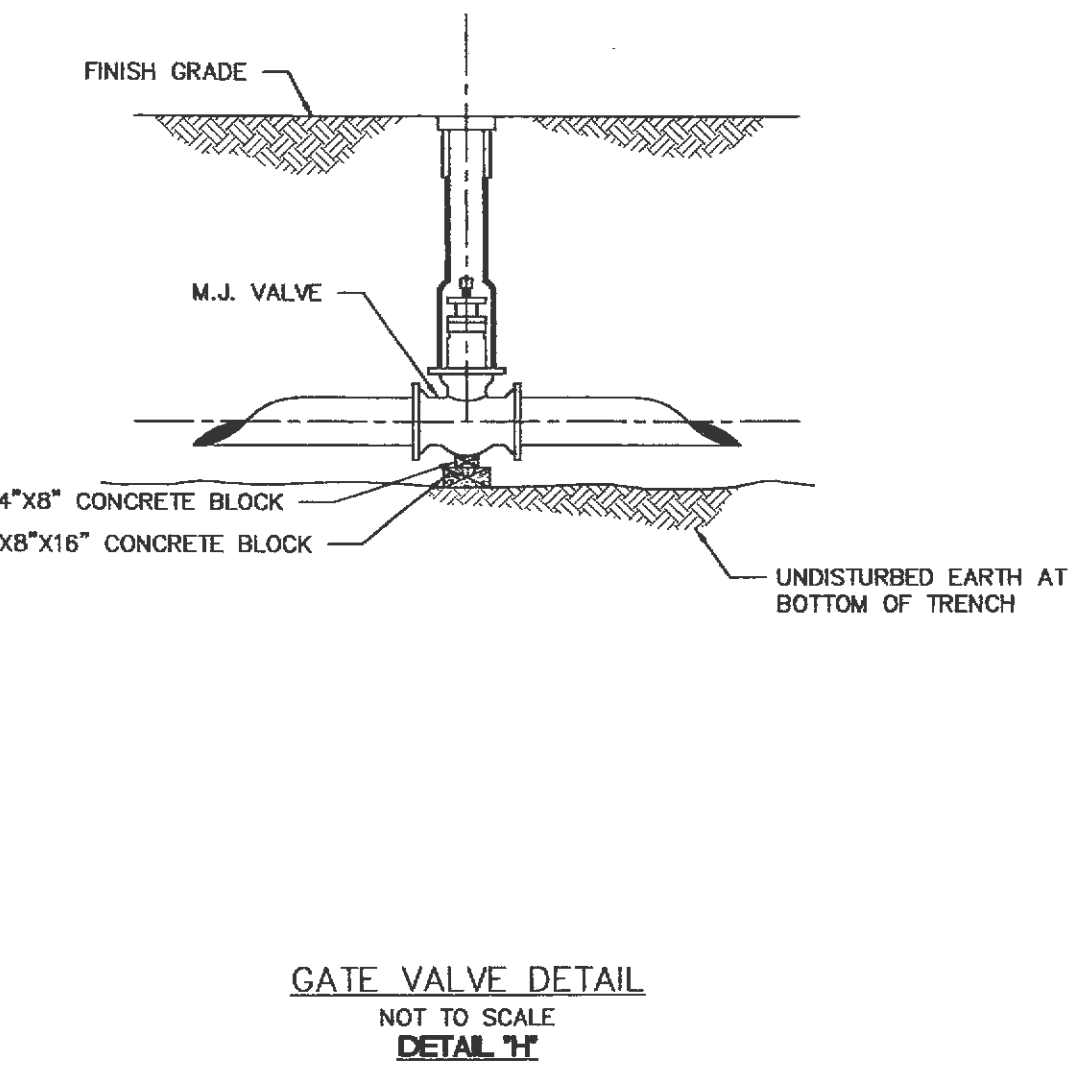
VERTICAL THRUST BLOCKING
DETAIL 'D'
PAGE 1 OF 2

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 LOKS" OR DUCTILE IRON PIPE WITH "MEGALUG" RESTRAINER FOLLOWER GLANDS ON ALL M.J. JOINTS.

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



PROJECT TITLE:
J & A RETAIL
DETAILS

DATE: NO. 11
REVISION: 11
MUSLER ENGINEERING COMPANY
CIVIL ENGINEERING - PLANNING - LAND SURVEYING
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DATE: AUG. 2014
DRAWN: J.R.S.
CHECKED: J.R.S.
PROJECT NO.: 13-1387
SHEET NO.: 11 OF 12

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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 all 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.

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