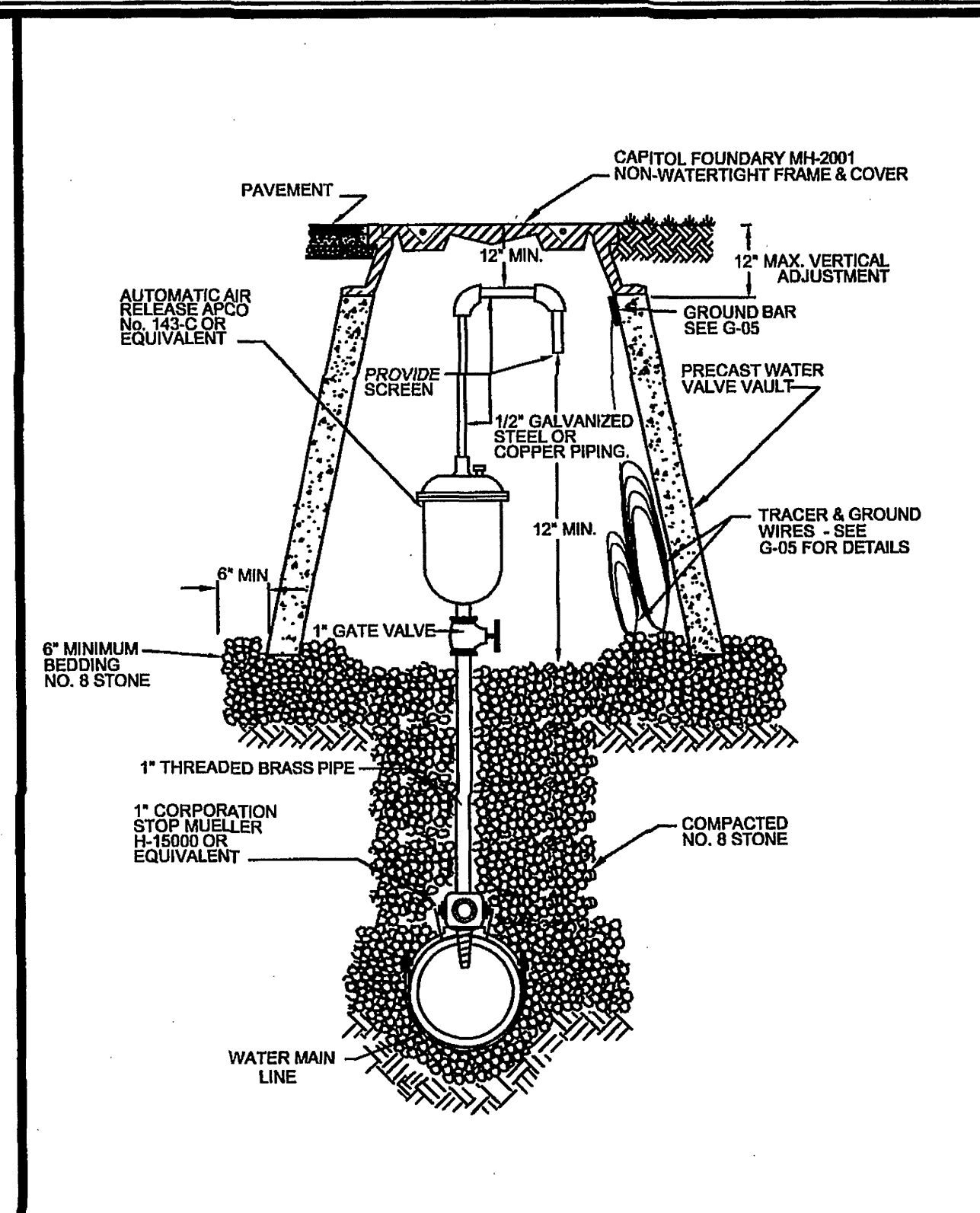
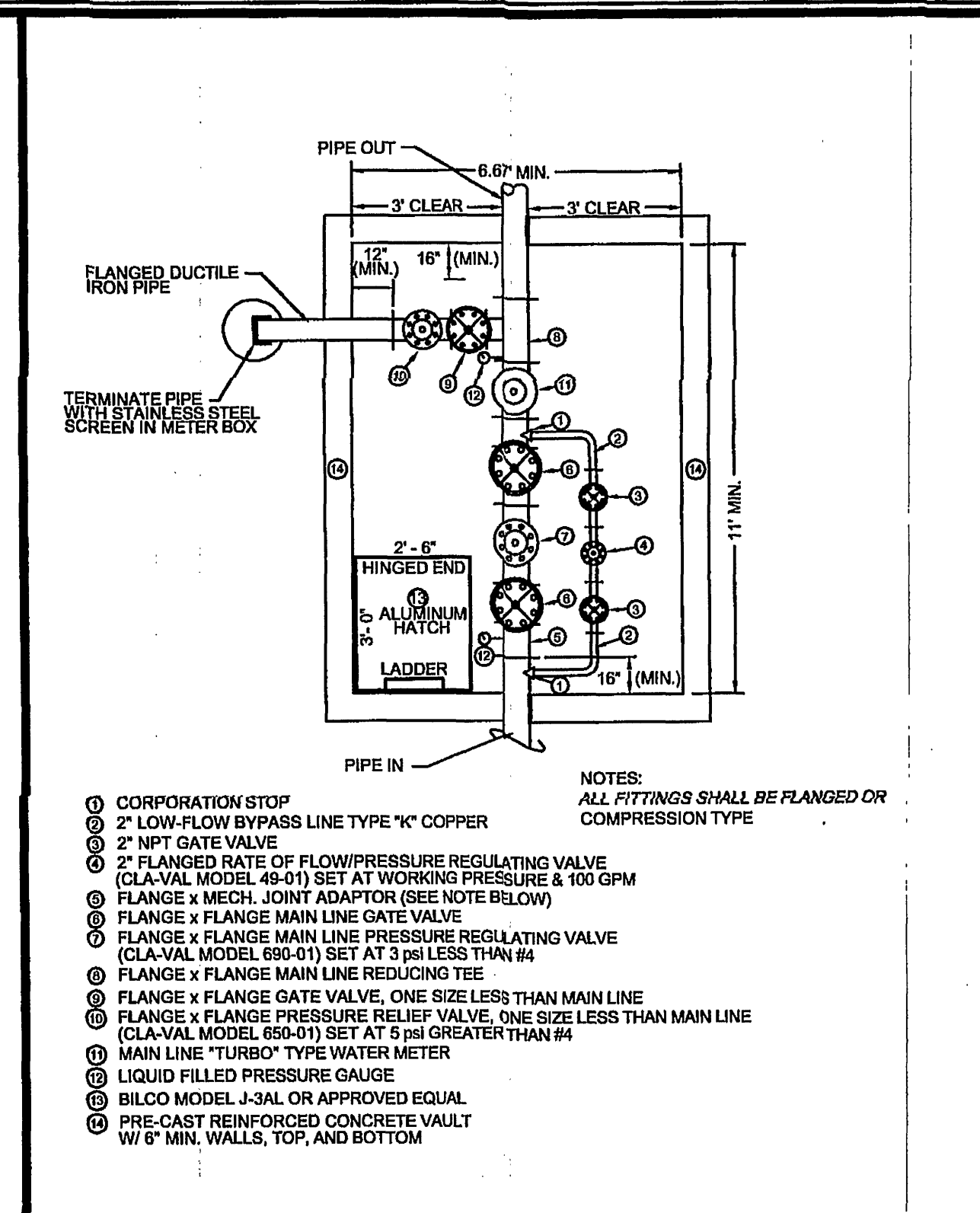


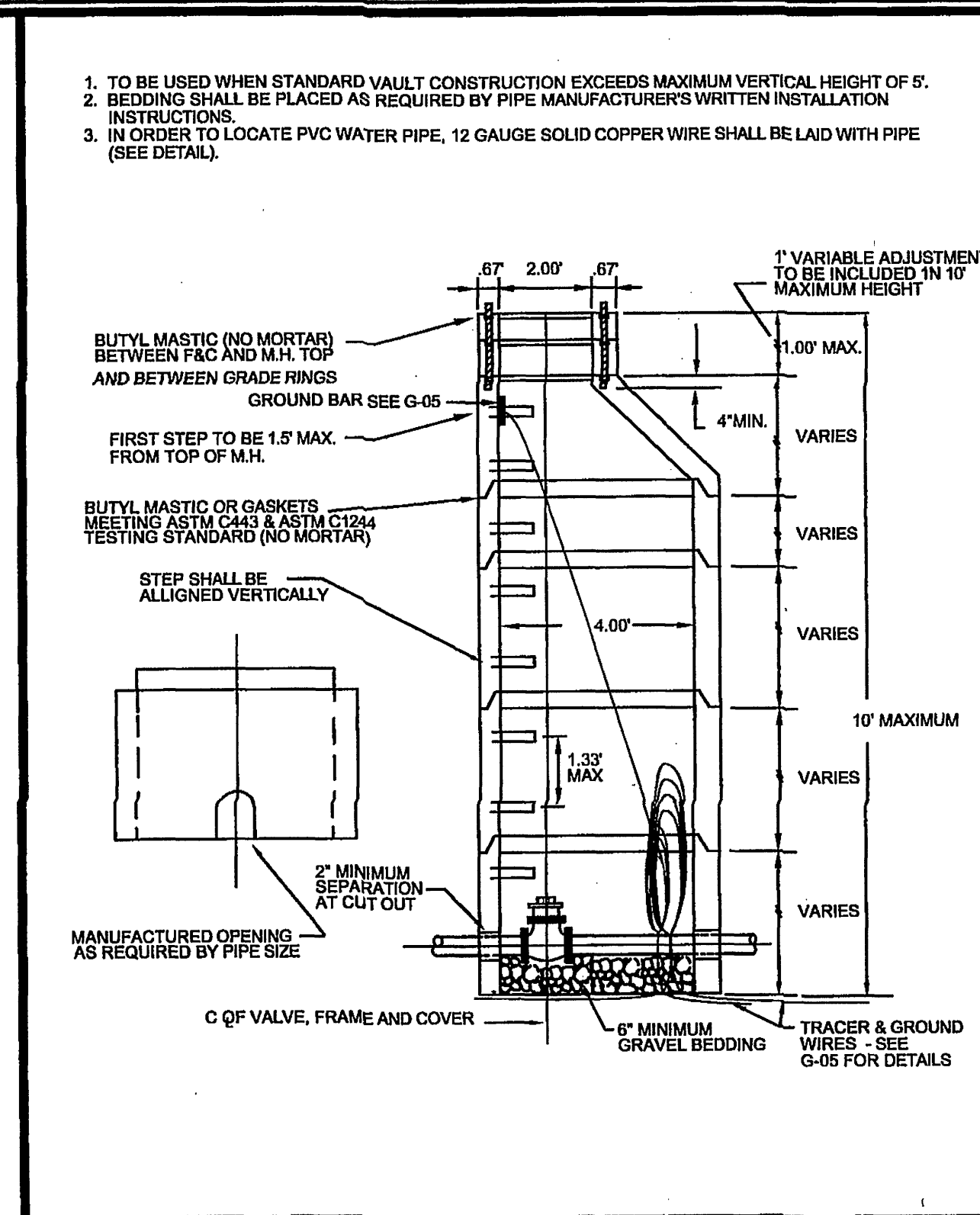
WESTERN VIRGINIA WATER AUTHORITY - CONSTRUCTION STANDARDS			
REVISION DATE			
07/01/04			
03/01/06			
	AUTOMATIC AIR RELEASE ASSEMBLY	W-12	



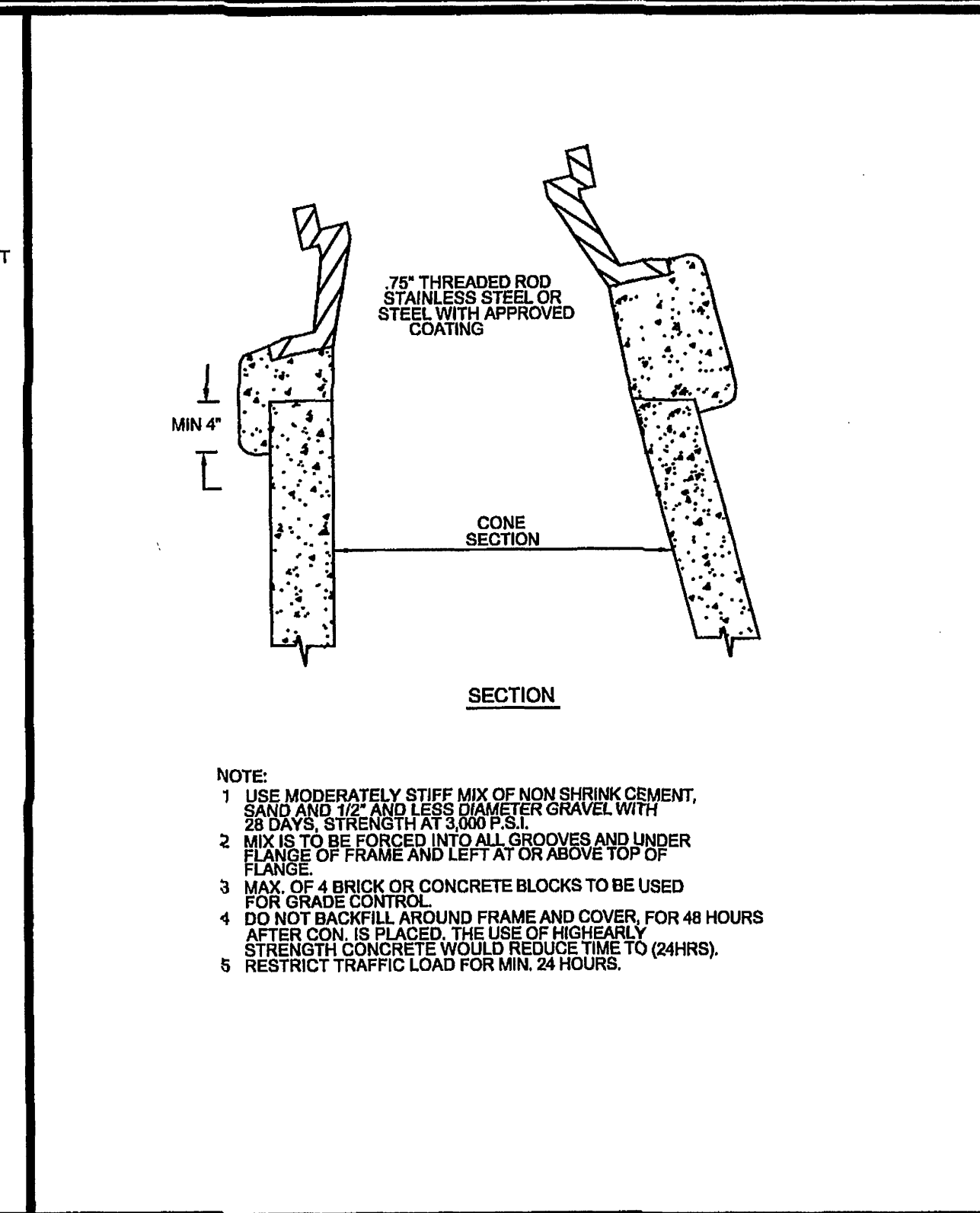
WESTERN VIRGINIA WATER AUTHORITY - CONSTRUCTION STANDARDS			
REVISION DATE			
07/01/04			
03/01/06			
	AUTOMATIC AIR RELEASE ASSEMBLY FOR DEEP WATER LINES	W-13	



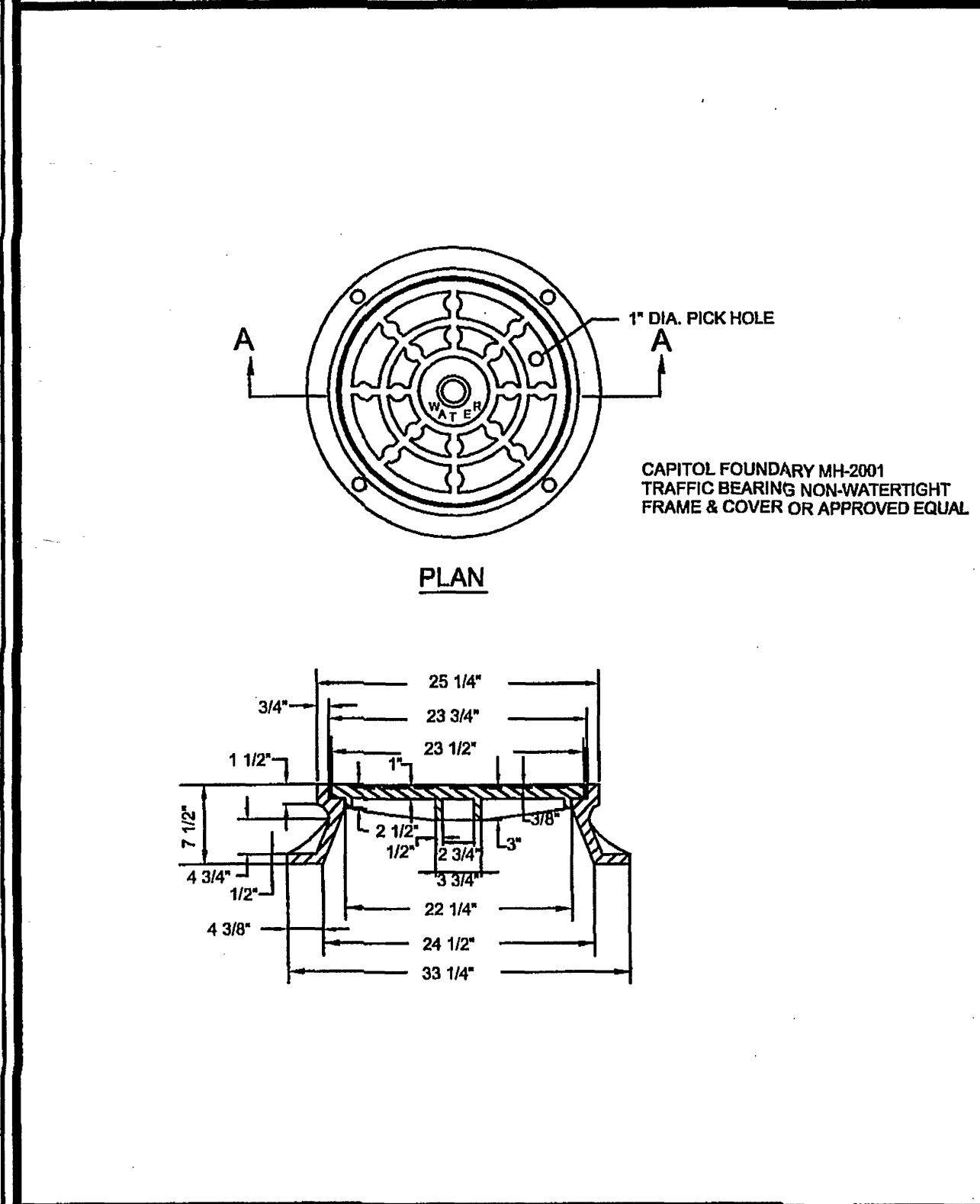
WESTERN VIRGINIA WATER AUTHORITY - CONSTRUCTION STANDARDS			
REVISION DATE			
07/01/04			
03/01/06			
	MAIN LINE PRESSURE REDUCING VALVE ASSEMBLY	W-14	



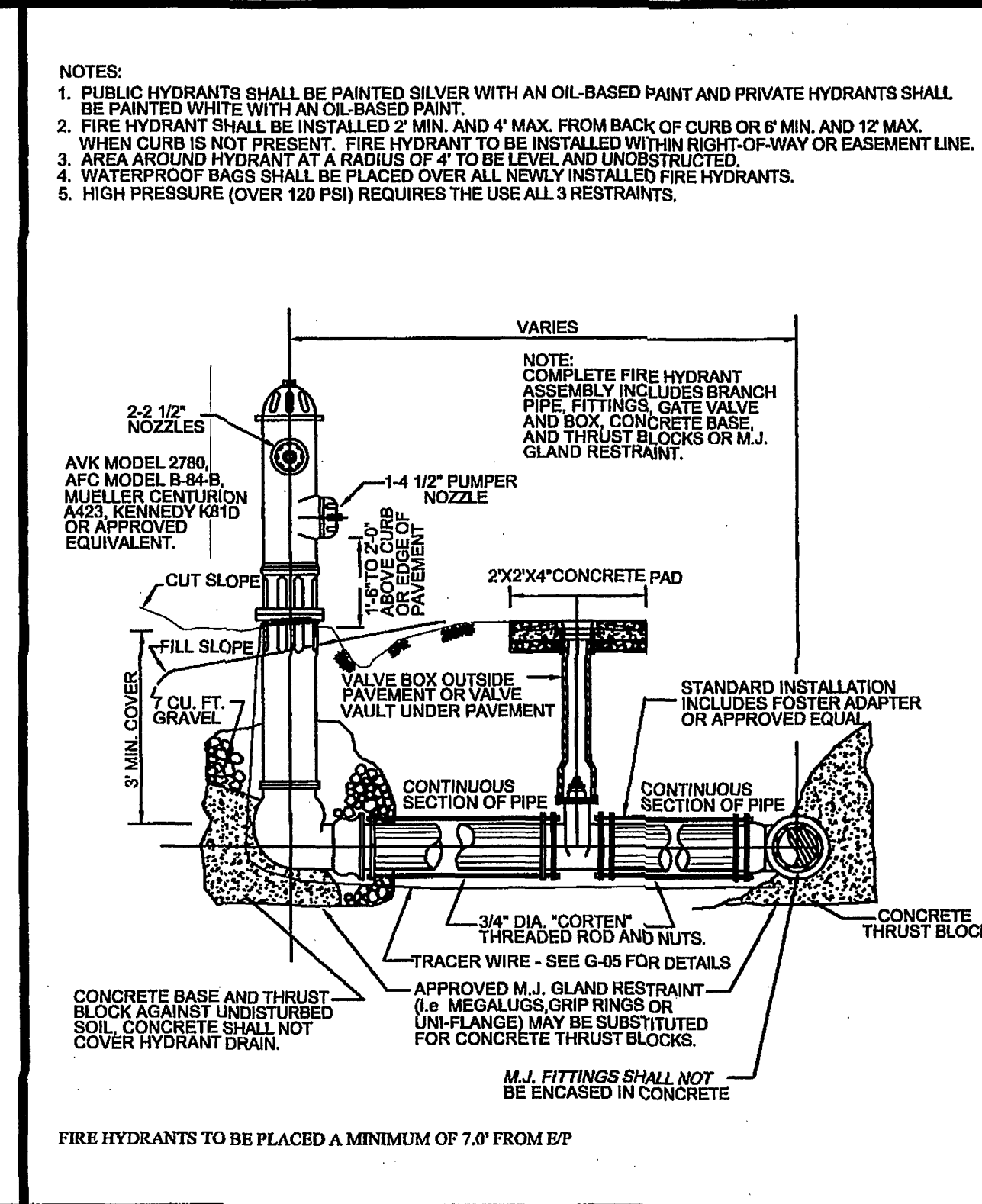
WESTERN VIRGINIA WATER AUTHORITY - CONSTRUCTION STANDARDS			
REVISION DATE			
07/01/04			
03/01/06			
	ALTERNATE VALVE VAULT (MANHOLE)	W-15	



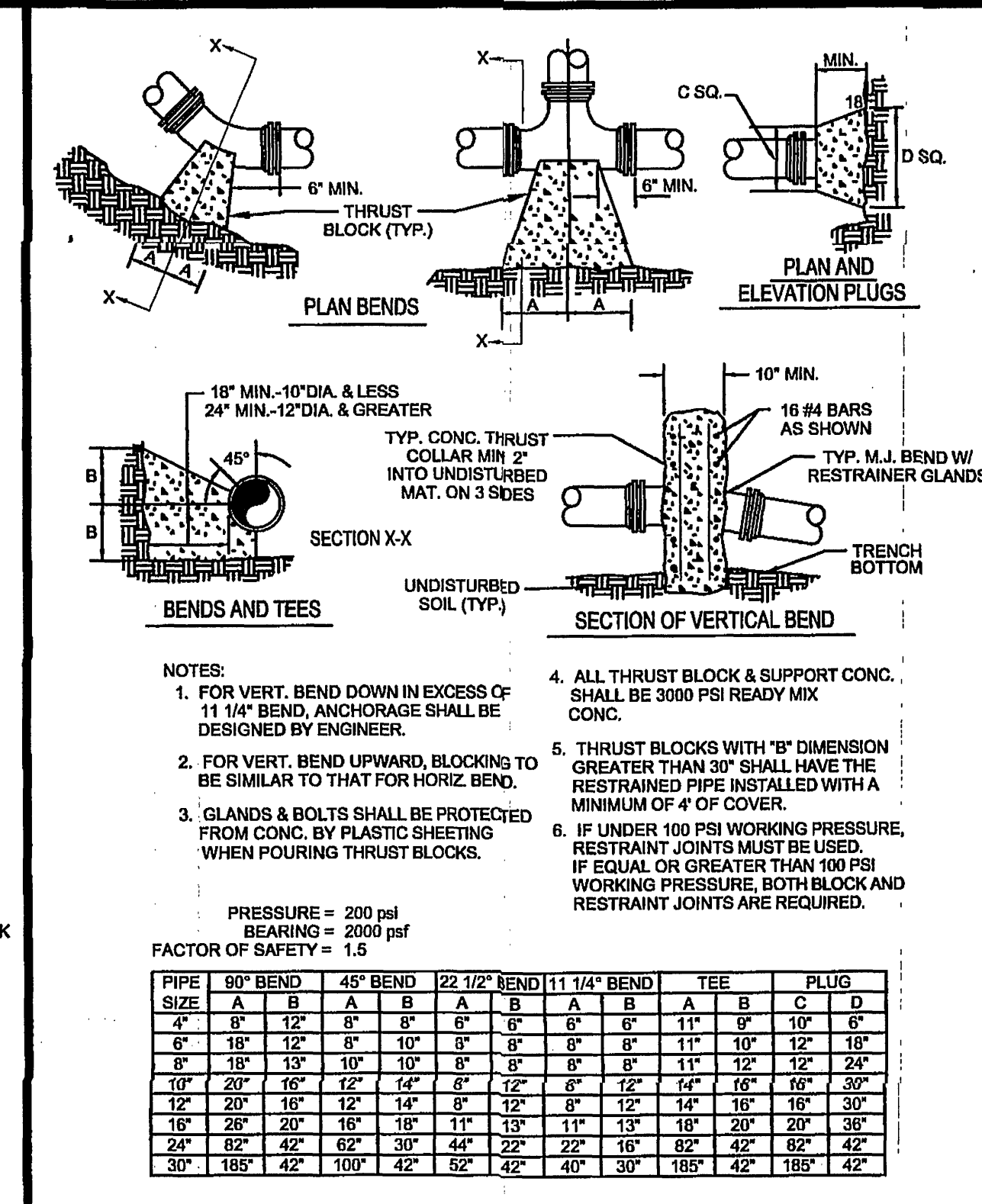
WESTERN VIRGINIA WATER AUTHORITY - CONSTRUCTION STANDARDS			
REVISION DATE			
07/01/04			
03/01/06			
	INSTALLATION DETAIL FOR ALL FRAMES AND COVERS	W-16	



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REVISION DATE			
07/01/04			
03/01/06			
	MANHOLE FRAME AND COVER	W-17	



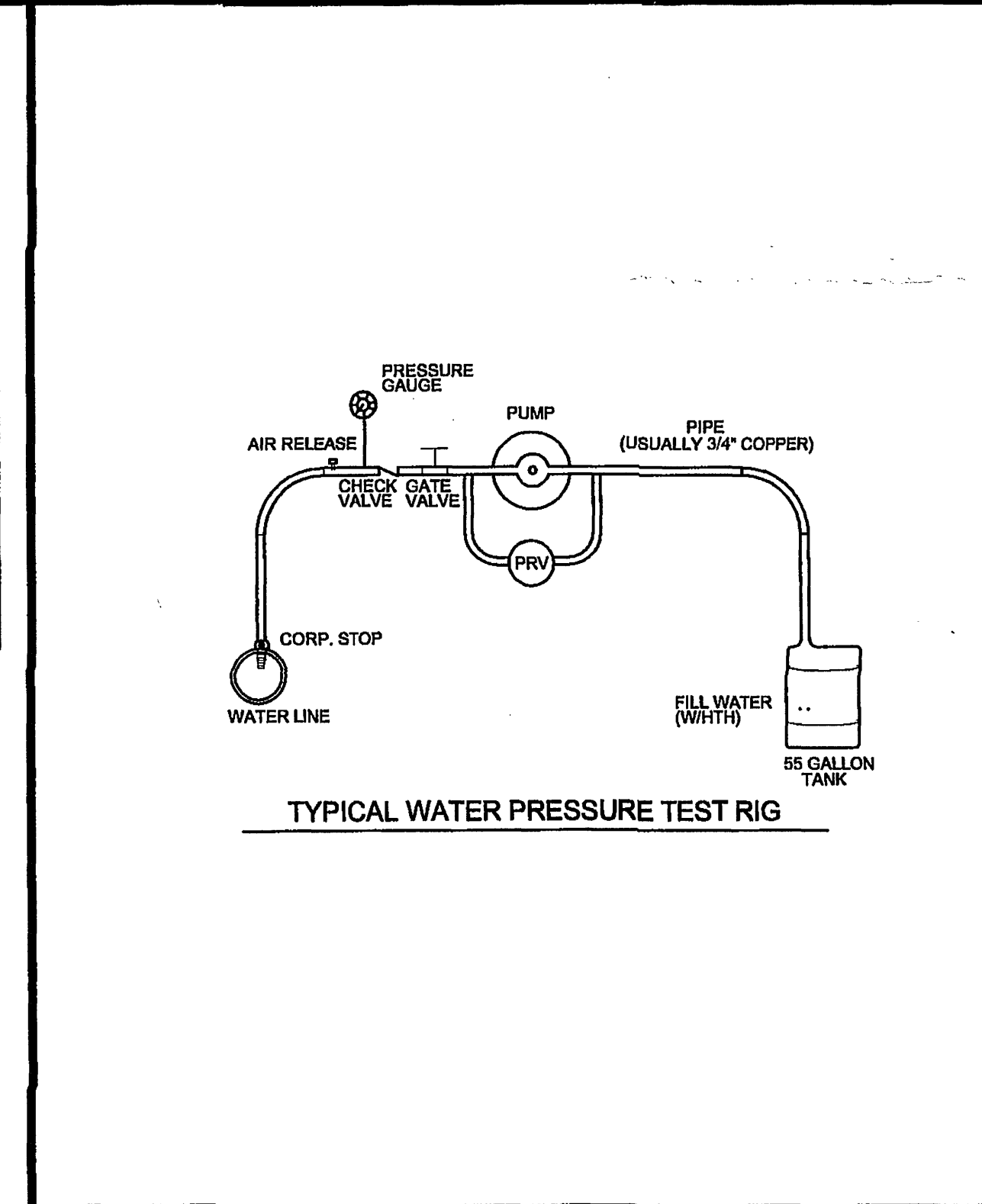
WESTERN VIRGINIA WATER AUTHORITY - CONSTRUCTION STANDARDS			
REVISION DATE			
07/01/04			
03/01/06			
	FIRE HYDRANT ASSEMBLY	W-18	



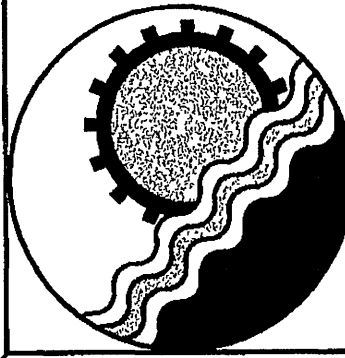
WESTERN VIRGINIA WATER AUTHORITY - CONSTRUCTION STANDARDS			
REVISION DATE			
07/01/04			
03/01/06			
	THRUST BLOCK CONSTRUCTION	W-19	

WESTERN VIRGINIA WATER AUTHORITY - CONSTRUCTION STANDARDS													
FACTOR OF SAFETY = 1.5													
PIPE SIZE	PIPE MAT'L	90° BEND	45° BEND	22 1/2° BEND	11 1/4° BEND	VALVE /PLUG BRANCH	TEE	REDUCER (NOTE 2)	VERT. 45°	VERT. 22 1/2°	VERT. 11 1/4°	VERT. 5°	VERT. 1°
6"	D.I.	28'	12'	6'	3'	38'	34'	20'	23'	11'	5'		
8"	D.I.	37'	15'	7'	4'	51'	47'	21'	30'	15'	7'		
10"	D.I.	45'	19'	9'	4'	61'	57'	20'	37'	18'	9'		
12"	D.I.	53'	22'	11'	5'	73'	69'	38'	43'	21'	10'		
6"	PVC	30'	12'	6'	3'	56'	38'	29'	35'	17'	8'		
8"	PVC	40'	16'	8'	4'	74'	56'	31'	46'	22'	11'		
10"	PVC	47'	20'	9'	5'	89'	82'	30'	56'	27'	13'		
12"	PVC	56'	23'	11'	6'	106'	88'	56'	69'	32'	16'		

WESTERN VIRGINIA WATER AUTHORITY - CONSTRUCTION STANDARDS			
REVISION DATE			
07/01/04			
03/01/06			
	THRUST RESTRAINT OF PIPE JOINTS DESIGN LENGTHS	W-20	

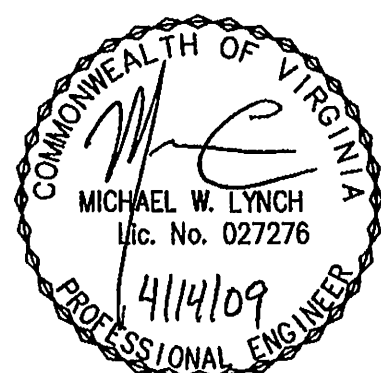


WESTERN VIRGINIA WATER AUTHORITY - CONSTRUCTION STANDARDS			
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03/01/06			
	TYPICAL WATER PRESSURE TEST RIG	W-21	



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Drawn	JSC	WATER DETAILS BRIDLE LANE WATERLINE REPLACEMENT	SCALE: AS NOTED
Designed	JSC		FEBRUARY 11, 2009
Checked	MWL	WESTERN VA. WATER AUTHORITY	PROJECT: 07053
Approved	MWL		8