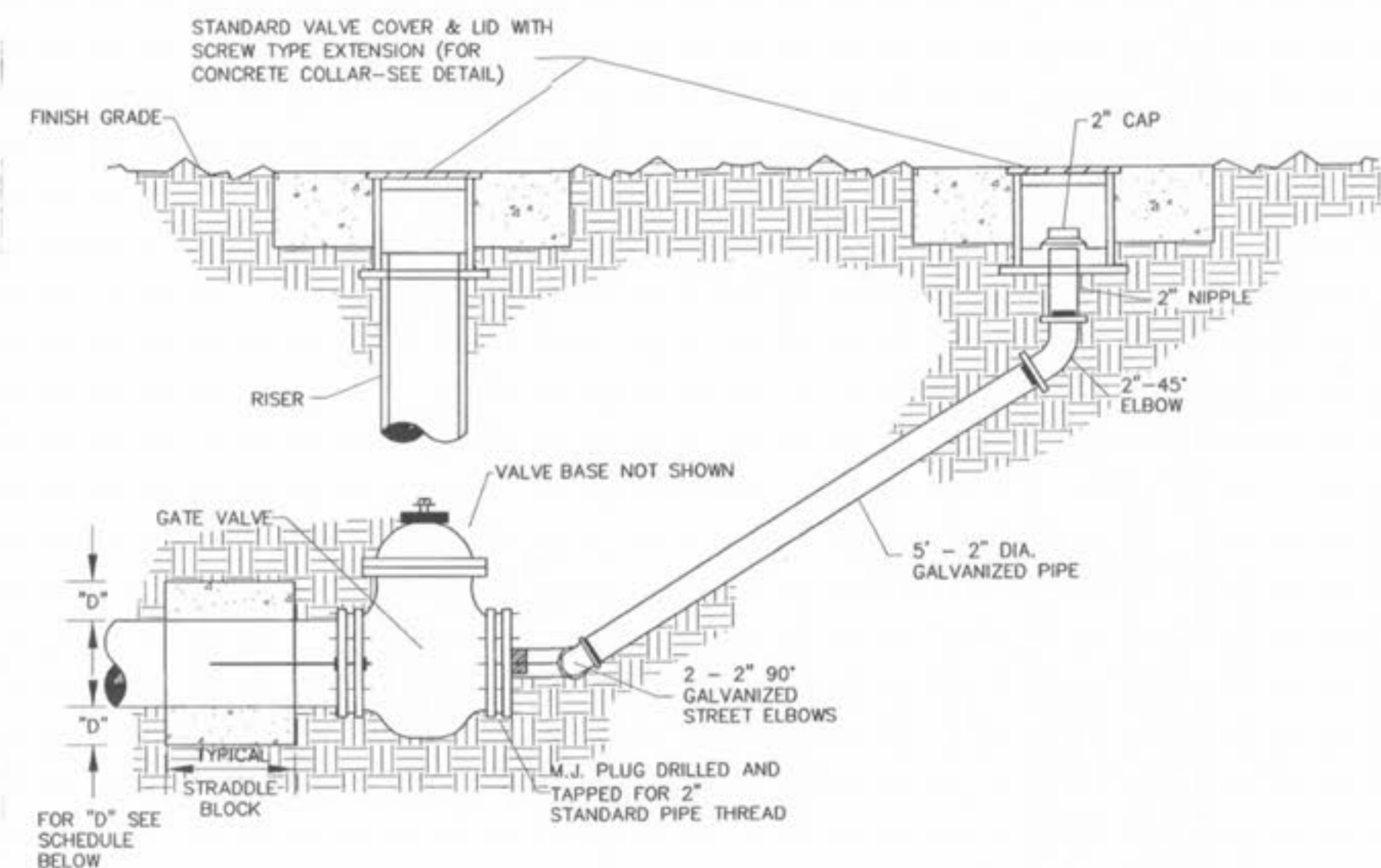


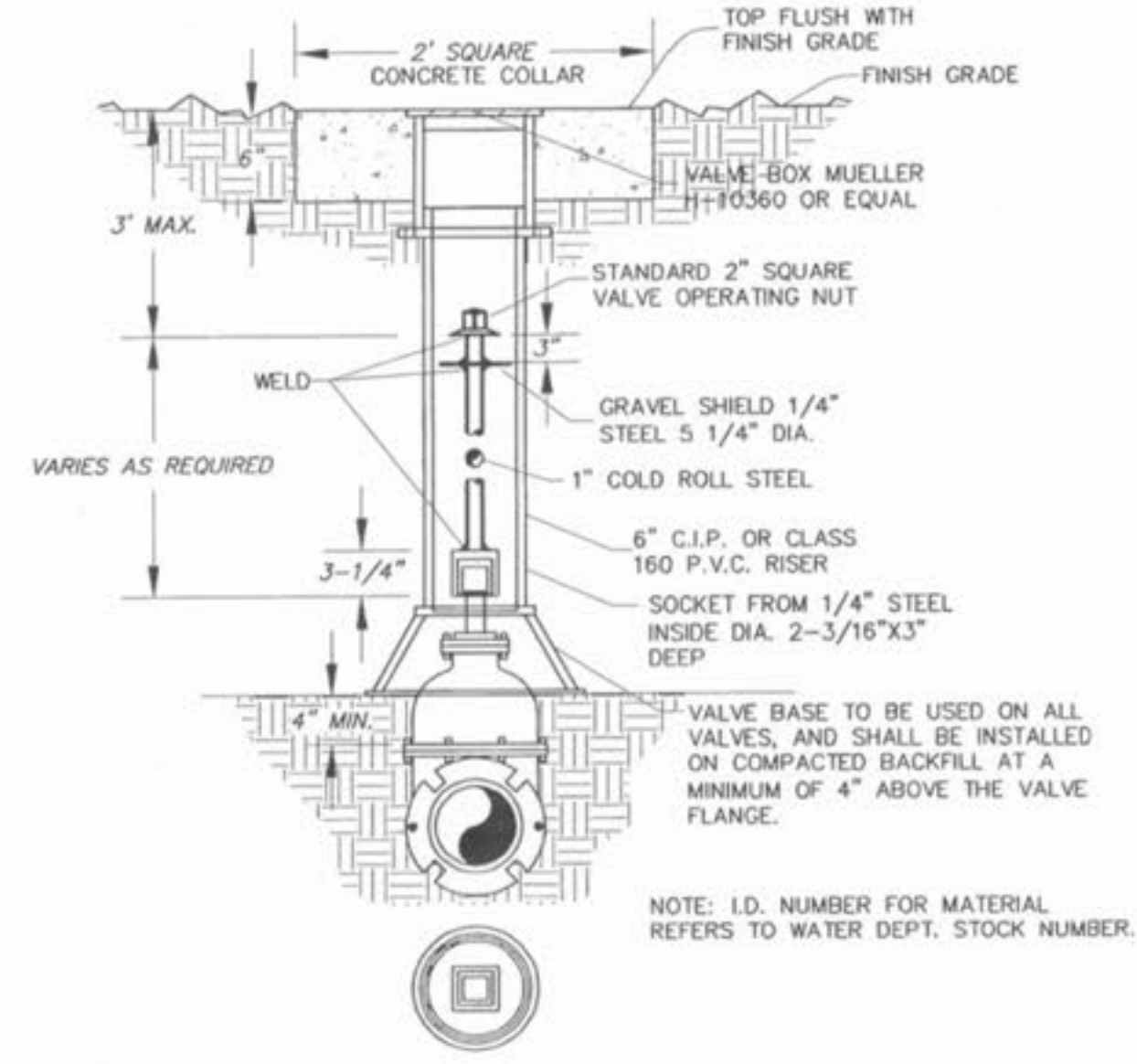
MANUAL AIR VALVE DETAIL

NOT TO SCALE



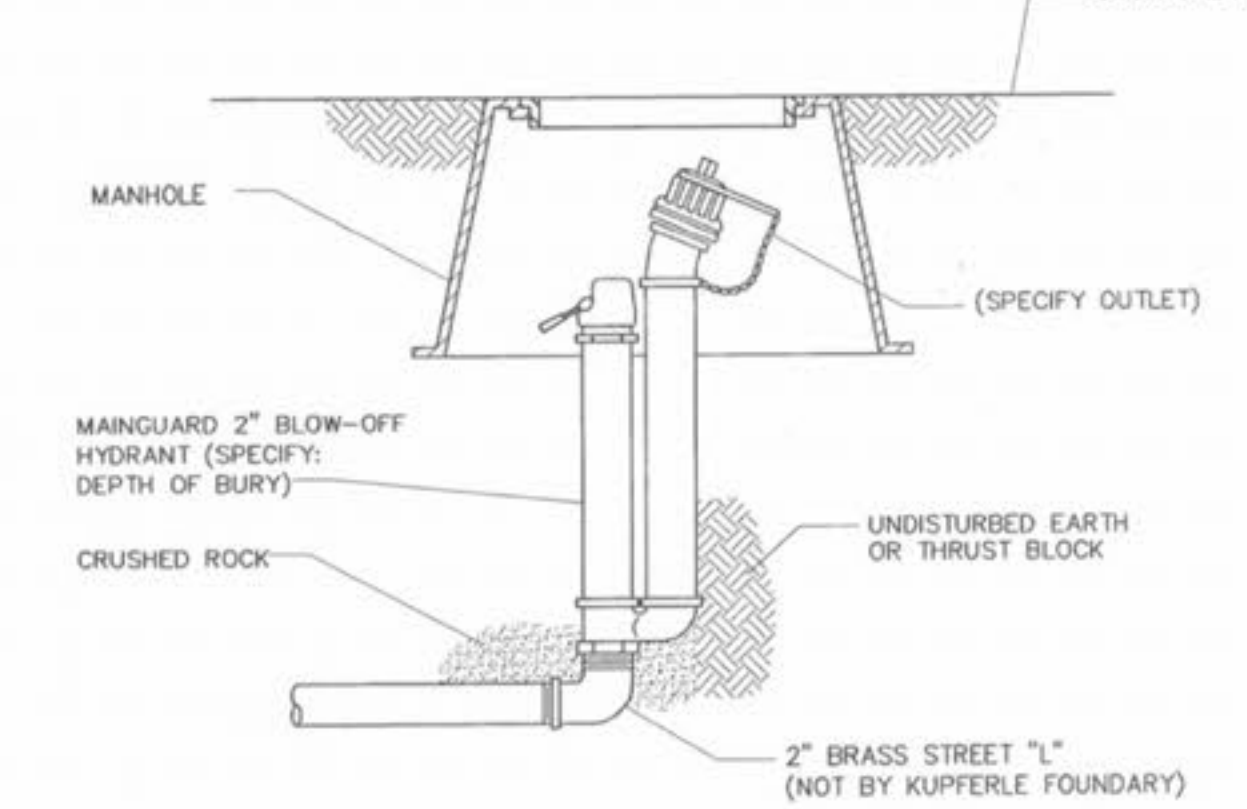
FLUSHING ASSEMBLY

NOT TO SCALE



WATER VALVE DETAIL

NOT TO SCALE

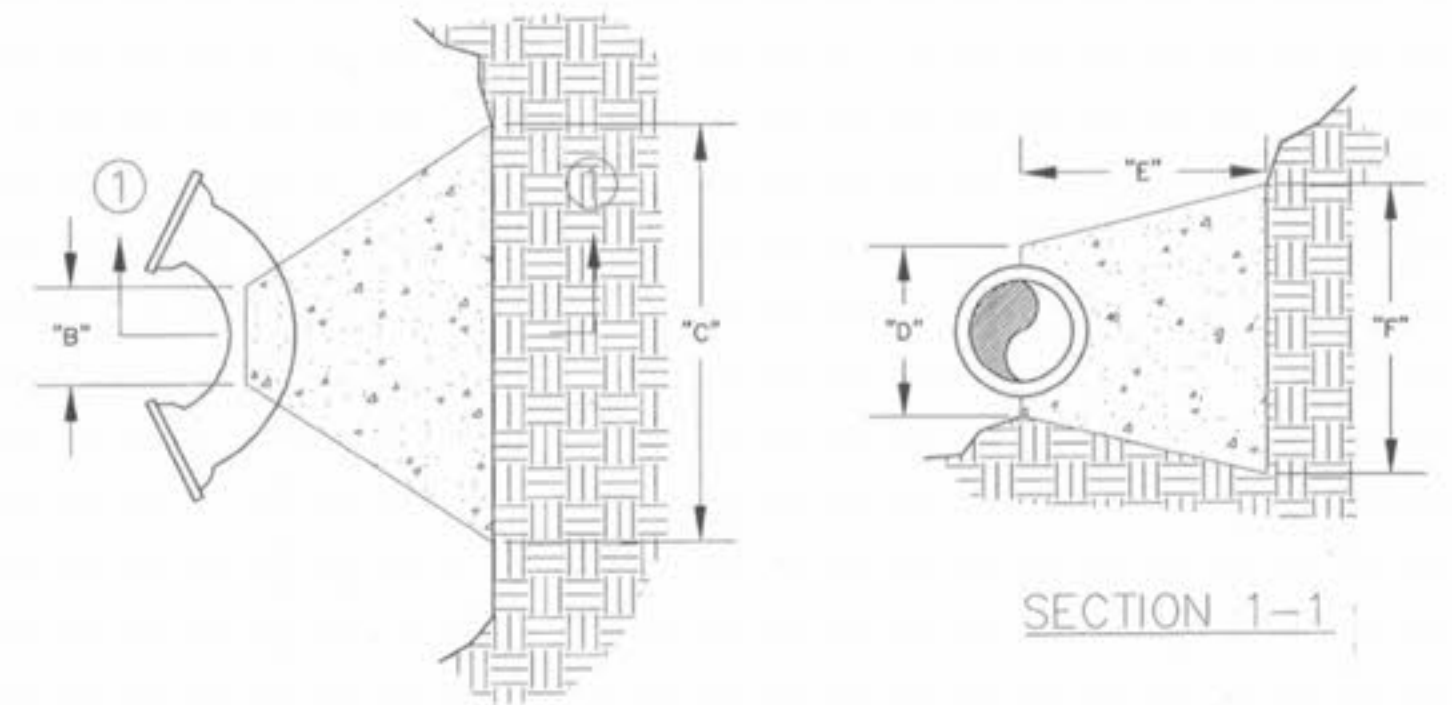


BLOW-OFF HYDRANT

NOT TO SCALE

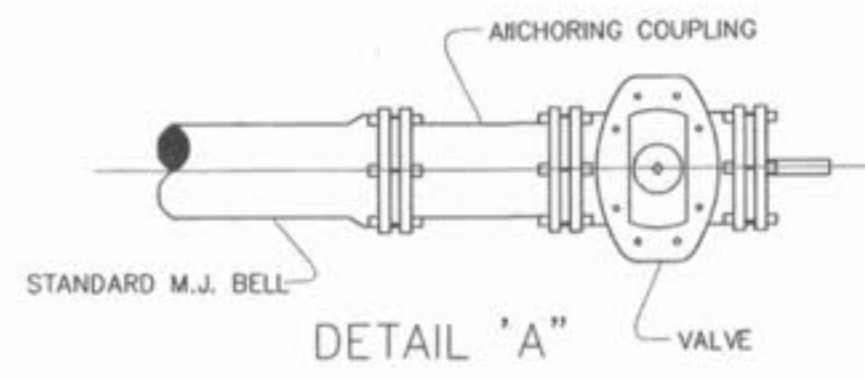
BLOW-OFF HYDRANTS SHALL BE NON-FREEZING, SELF DRAINING TYPE, WITH AN OVERALL LENGTH OF 6\"/>

(SPECIFY OVERALL LENGTH 6\"/>

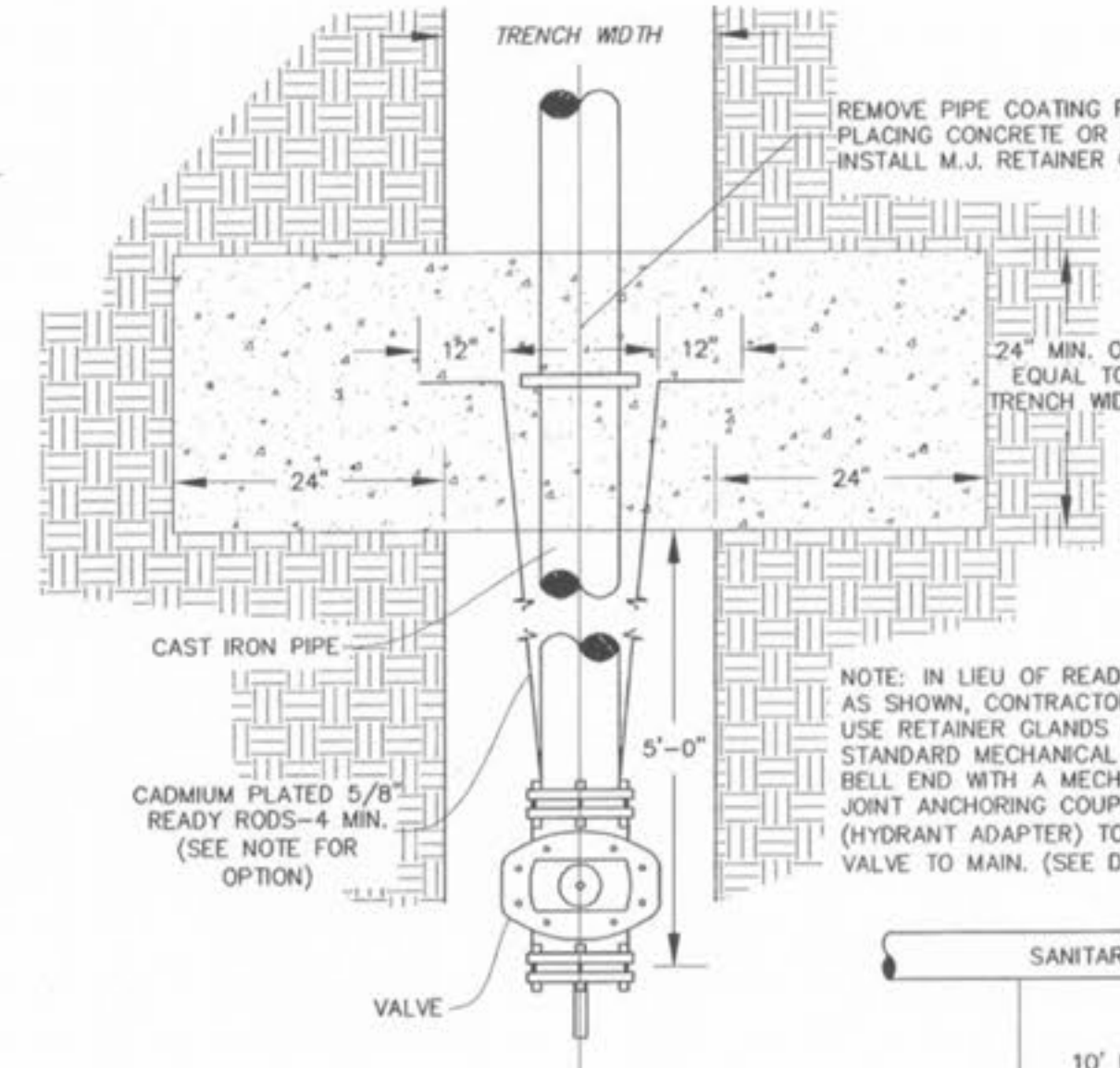


SECTION 1-1

SECTION 2-2

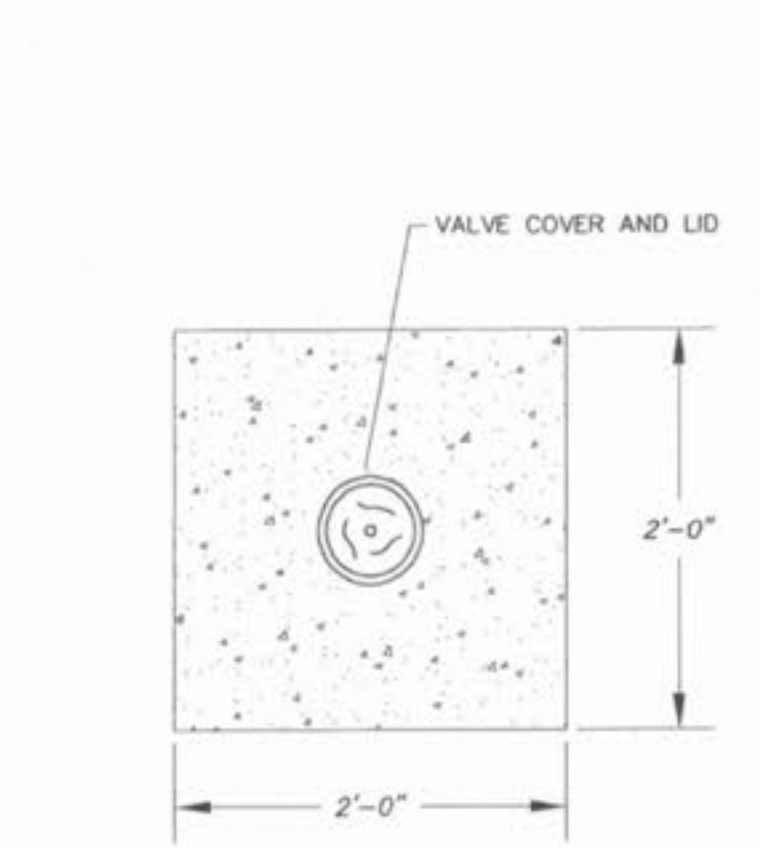


DETAIL 'A'



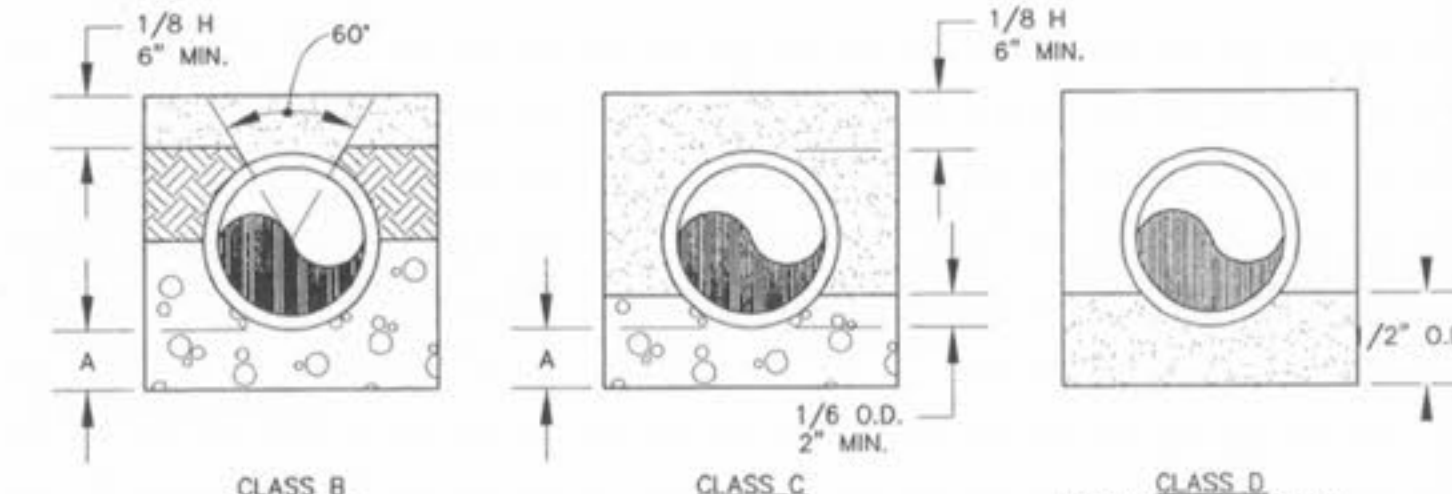
STRADDLE BLOCK DETAIL

NOT TO SCALE



TOP VIEW CONCRETE COLLAR

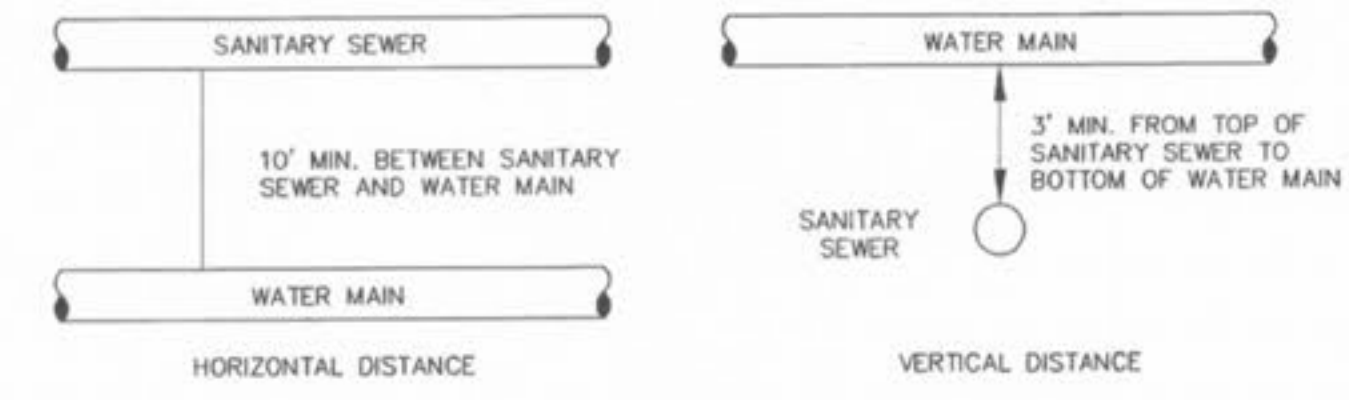
NOT TO SCALE



LEGEND

L.D. - NOMINAL PIPE SIZE  
O.D. - OUTSIDE DIAMETER OF PIPE  
H - COVER ABOVE TOP OF PIPE  
A - EMBEDMENT BELOW PIPE (SEE TABLE)

L.D.	A MIN. SOIL	A MIN. ROCK
27\"/>		



TYPICAL WATER AND SEWER SEPARATION

NOT TO SCALE

WATER MAIN EMBEDMENT

NOT TO SCALE

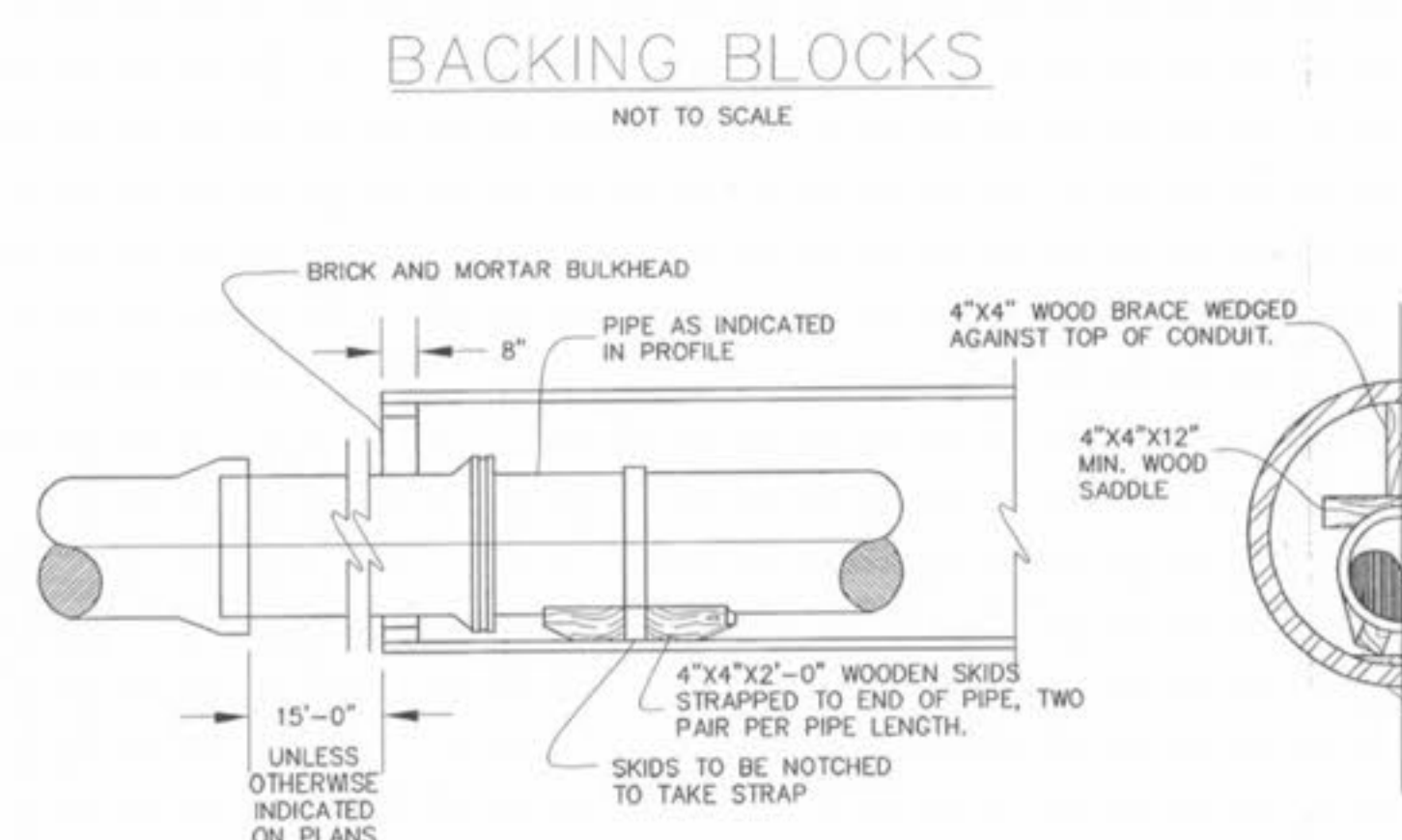
BENDS	"B"	"C"	"D"	"E"	"F"
6"-11 1/4"	8"	15"	12"	24"	10"
6"-22 1/2"	8"	19"	12"	24"	13"
6"-45"	8"	30"	12"	24"	14"
6"-90"	8"	30"	12"	24"	27"
8"-11 1/4"	8"	20"	12"	24"	10"
8"-22 1/2"	8"	22"	12"	24"	17"
8"-45"	8"	30"	12"	24"	24"
8"-90"	8"	38"	12"	24"	36"
12"-11 1/4"	8"	30"	12"	24"	15"
12"-22 1/2"	8"	35"	12"	24"	25"
12"-45"	8"	40"	12"	24"	40"
12"-90"	8"	60"	12"	24"	52"

TEES	"G"	"H"	"J"	"K"
6"x6"x6"	12"	24"	24"	18"
8"x8"x8"	12"	24"	24"	18"
8"x8"x8"	12"	24"	24"	24"
12"x12"x8"	12"	24"	24"	18"
12"x12"x8"	12"	24"	24"	24"
12"x12"x12"	12"	36"	24"	36"

CUBIC FEET OF CONCRETE REQUIRED	BEND	11 1/4"	22 1/2"	45"	90"
6"	1.7	2.4	3.5	5.5	
8"	2.1	3.1	5.0	8.5	
12"	3.7	5.9	9.7	17.5	

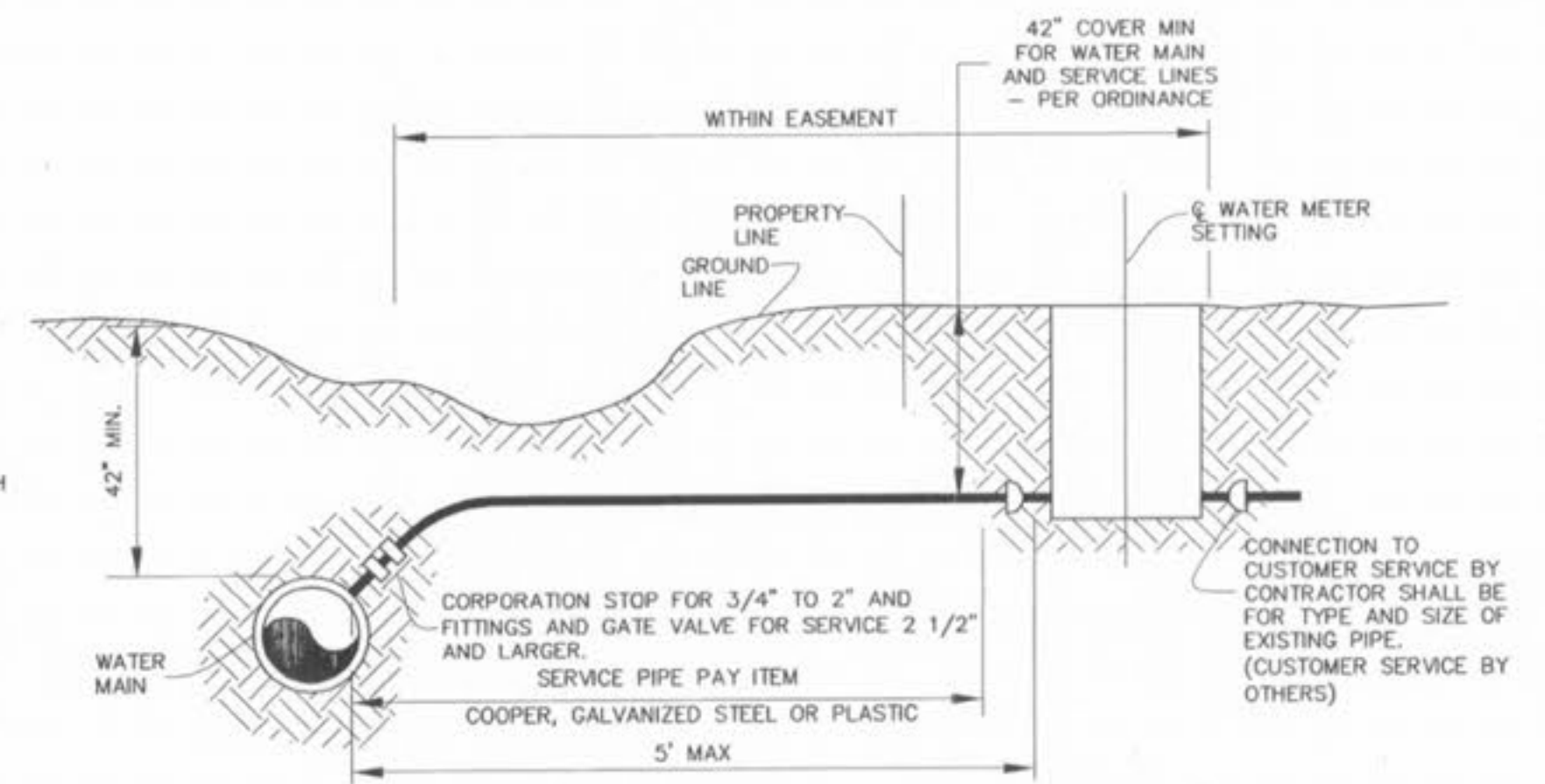
TEE X	6"	8"	12"	PLUG
6"	4.0	~	~	4.0
8"	4.0	5.0	~	5.0
12"	4.0	5.5	10.5	10.5

NOTES:  
1. 2" & 4" FITTINGS EQUIVALENT TO 6" FITTINGS.  
2. TAPPING SLEEVES TO HAVE BACKING BLOCKS SAME SIZE AS REQUIRED FOR TEES.



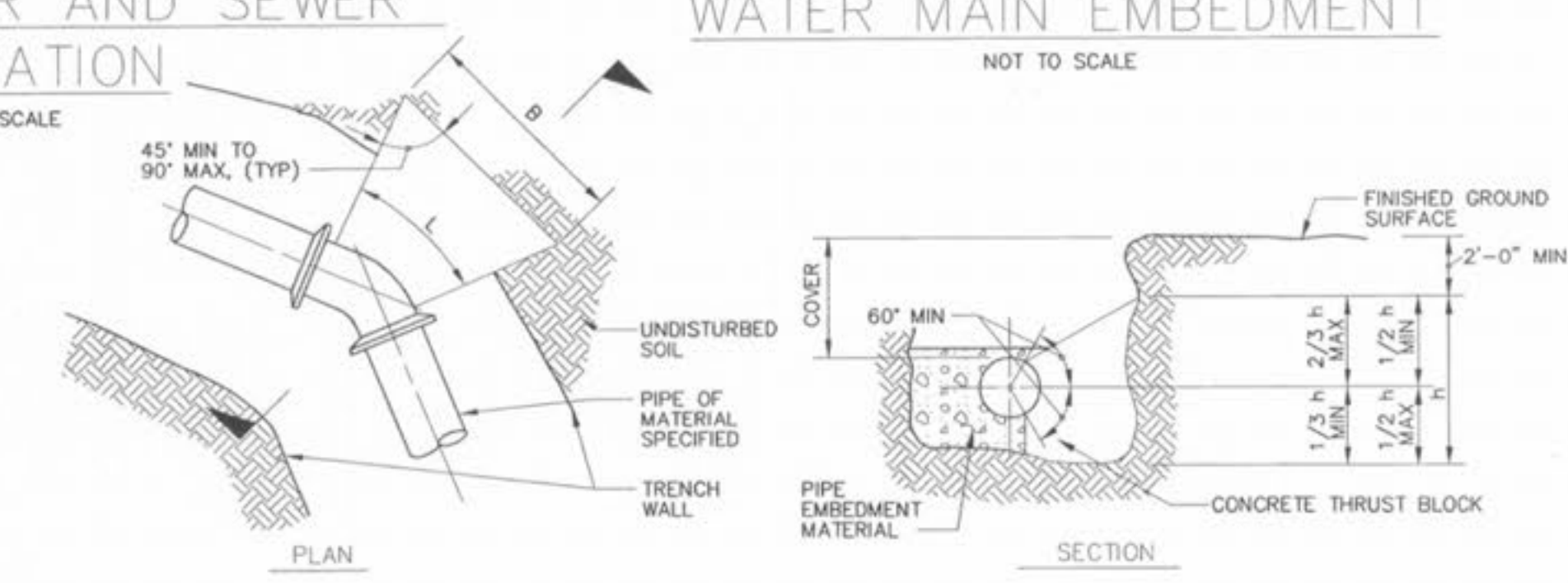
TUNNEL LINER DETAIL

NOT TO SCALE



TYPICAL SERVICE ASSEMBLY

NOT TO SCALE



CONCRETE THRUST BLOCKING

NOT TO SCALE

- NOTES:
- AREA OF BLOCK, A = Bwh, BLOCK AREAS ARE SHOWN ON GENERAL LAYOUT OR TABLE.
  - B = h =  $\sqrt{A}$ , EXCEPT WHERE TOP OF BLOCK IS WITHIN 2 FEET FROM GROUND SURFACE, THEN B = A/h.
  - MINIMUM BLOCK DIMENSION (B & h) SHALL BE AT LEAST OD OF PIPE OR 1 FOOT FOR PIPE OD 12" OR LESS.
  - THE BOTTOM OF THE BLOCK SHALL EXTEND AT LEAST TO THE BOTTOM OF THE TRENCH IN ALL CASES.
  - L=FITTING LENGTH MINUS CLEARANCE FOR BELLS.
  - DETAIL IS SHOWN FOR CAST IRON PIPE; DETAIL IS SIMILAR FOR OTHER TYPES OF PIPE.
  - DIMENSIONS FOR THRUST BLOCKS FOR FIRE HYDRANT ASSEMBLY ARE SHOWN FIRE HYDRANT ASSEMBLY DETAIL.

SIZE	BEND	THRUST AREA	B	H
16"	11 1/2"	4 SF	2'	2'
16"	22 1/2"	8 SF	2.8'	2.8'

**PICKETT RAY & SILVER**  
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Fax (636) 397-1104

**CROSSINGS INDUSTRIAL PHASE 2**  
CONSTRUCTION DETAILS  
239 FOX HILL ROAD  
ST. CHARLES, MO. 63301  
(636) 940-9300  
Prepared For:  
**SUMMIT POINTE L.C.**

REVISIONS	DATE	PER CITY COMMENTS
1	09/23/03	

**ENGINEERS AUTHENTICATION**  
The responsibility for professional engineering liability on this project is hereby limited to the set of plans authenticated by the seal, signature, and date hereunder attached. Responsibility is disclaimed for all other engineering plans involved in this project and specifically excludes revisions after this date (unless reauthenticated).  
PICKETT, RAY & SILVER, INC.  
HAROLD J. BARTCH  
REGISTERED PROFESSIONAL ENGINEER  
NUMBER E-17751

DRAWN	DATE
E.J.S.	03/20/03
CHECKED	DATE
D.W.D.	03/20/03

PROJECT # 01212.SUPD.01R  
TASK # 2 FIELD 826  
BOOK

CROSSINGS INDUSTRIAL PHASE 2  
CONSTRUCTION DETAILS  
SHEET 9 OF 9  
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