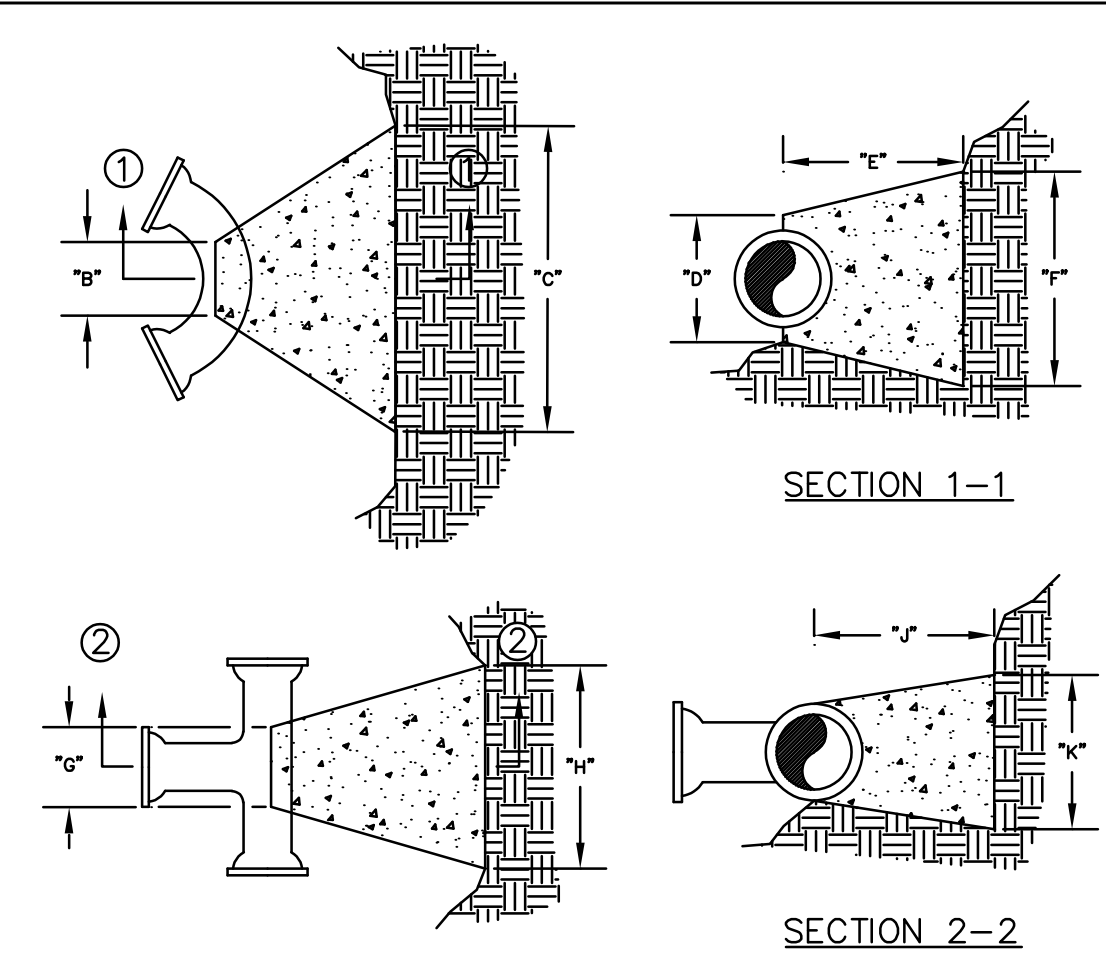


BENDS	"b"	"c"	"d"	"e"	"f"
6"-11 1/4"	8"	15"	12"	24"	10"
6"-22 1/2"	8"	16"	12"	24"	15"
6"-30"	8"	30"	12"	24"	28"
6"-11 1/4"	8"	20"	12"	24"	10"
6"-22 1/2"	8"	30"	12"	24"	15"
6"-30"	8"	30"	12"	24"	28"
12"-11 1/4"	8"	30"	12"	24"	15"
12"-22 1/2"	8"	30"	12"	24"	28"
12"-45"	8"	40"	12"	24"	40"
12"-90"	8"	60"	12"	24"	52"
16"-11 1/4"	TL	28"	20"	24"	28"
16"-22 1/2"	TL	39"	20"	24"	39"
16"-45"	TL	55"	20"	24"	55"
16"-90"	TL	91"	20"	24"	60"
20"-11 1/4"	TL	34"	24"	28"	28"
20"-22 1/2"	TL	46"	24"	28"	39"
20"-45"	TL	74"	24"	28"	55"
20"-90"	TL	136"	24"	28"	60"
24"-11 1/4"	TL	40"	28"	28"	40"
24"-22 1/2"	TL	56"	28"	28"	56"
24"-45"	TL	101"	28"	28"	60"
24"-90"	TL	186"	28"	28"	60"
30"-11 1/4"	TL	49"	34"	30"	49"
30"-22 1/2"	TL	79"	34"	30"	60"
30"-45"	TL	154"	34"	30"	60"
30"-90"	TL	285"	34"	30"	60"

TEES	"c"	"d"	"e"	"f"	"g"
8"x6"x6"	12"	24"	24"	18"	18"
8"x8"x8"	12"	24"	24"	18"	18"
8"x8"x8"	12"	24"	24"	18"	27"
12"x12"x8"	12"	24"	24"	18"	18"
12"x12"x8"	12"	24"	24"	18"	27"
12"x12"x12"	12"	36"	24"	36"	36"
24"x24"x16"	16"	53"	28"	53"	53"

NOTES:  
 1. 2" & 4" FITTINGS EQUIVALENT TO 6" FITTINGS.  
 2. TAPPING SLEEVES TO HAVE BACKING BLOCKS SAME SIZE AS REQUIRED FOR TEES.  
 3. TL = TOTAL LENGTH OF FITTING MINUS CLEARANCE FOR BELLS.

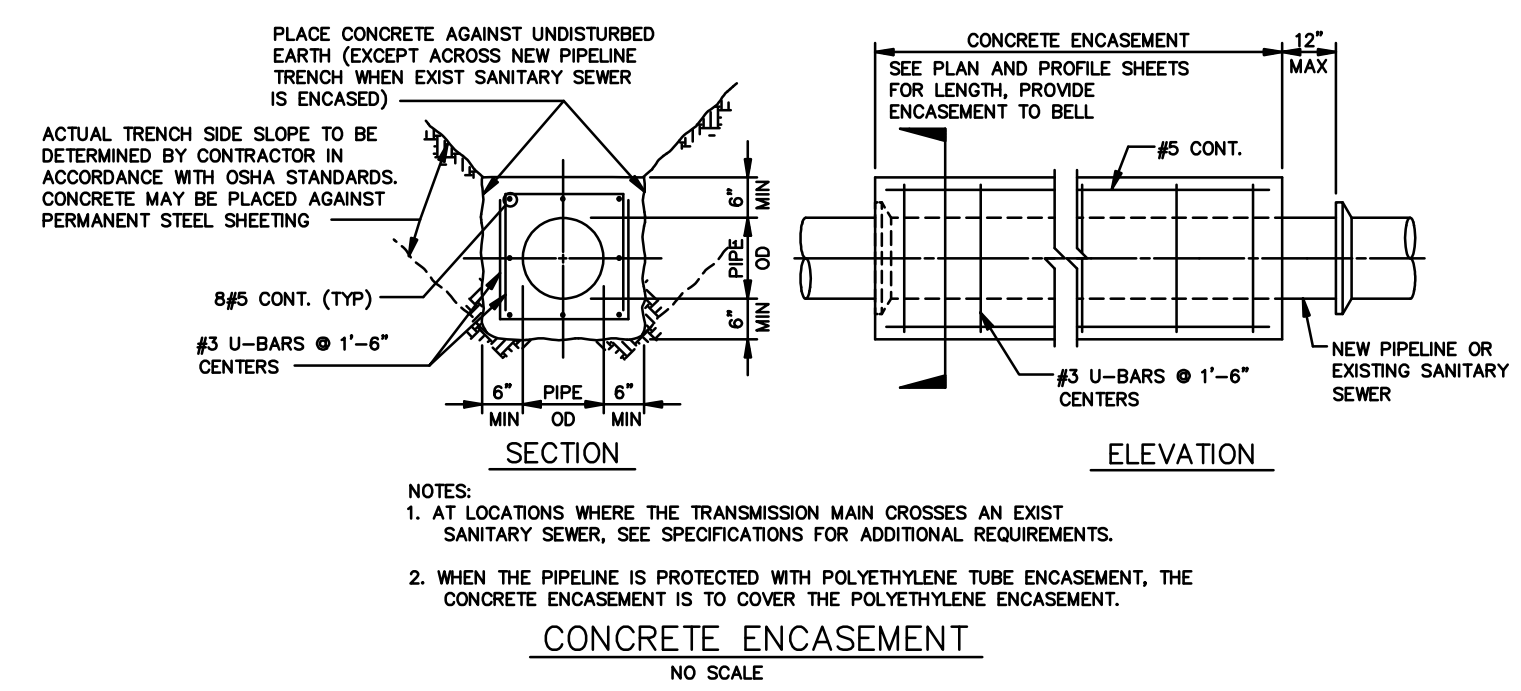


INTERNAL WATER PRESSURE 6" through 12"-200 psi  
 INTERNAL WATER PRESSURE 16" through 30"-210 psi  
 BEARING PRESSURE OF SOIL=2000 psi

**BACKING BLOCKS**  
 NOT TO SCALE

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 ENGINEERING DEPARTMENT  
 O'FALLON, MISSOURI

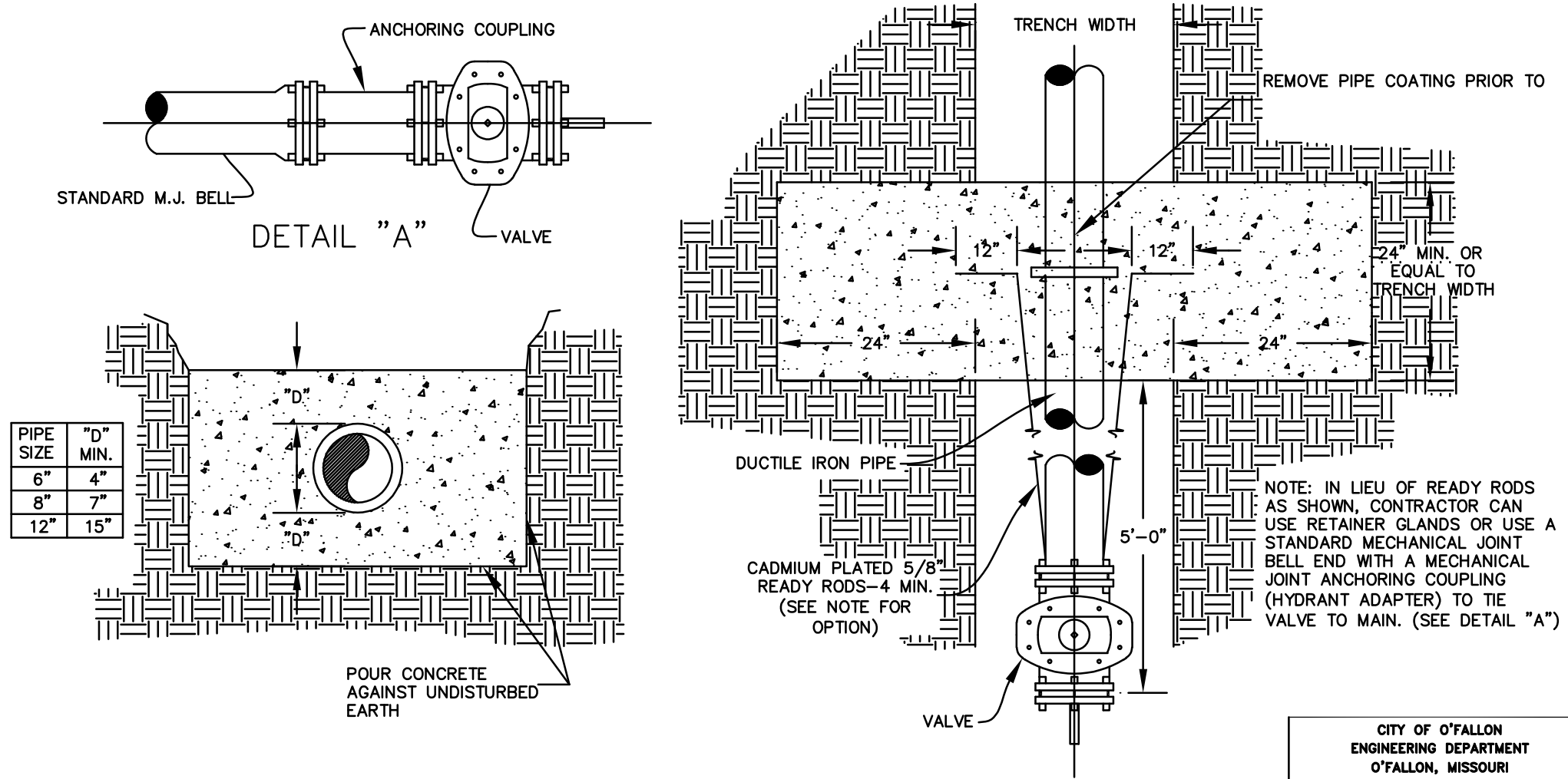
**BACKING BLOCK  
 DETAILS AND LOCATIONS**



CONCRETE ENCASEMENT  
 NO SCALE

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 ENGINEERING DEPARTMENT  
 O'FALLON, MISSOURI

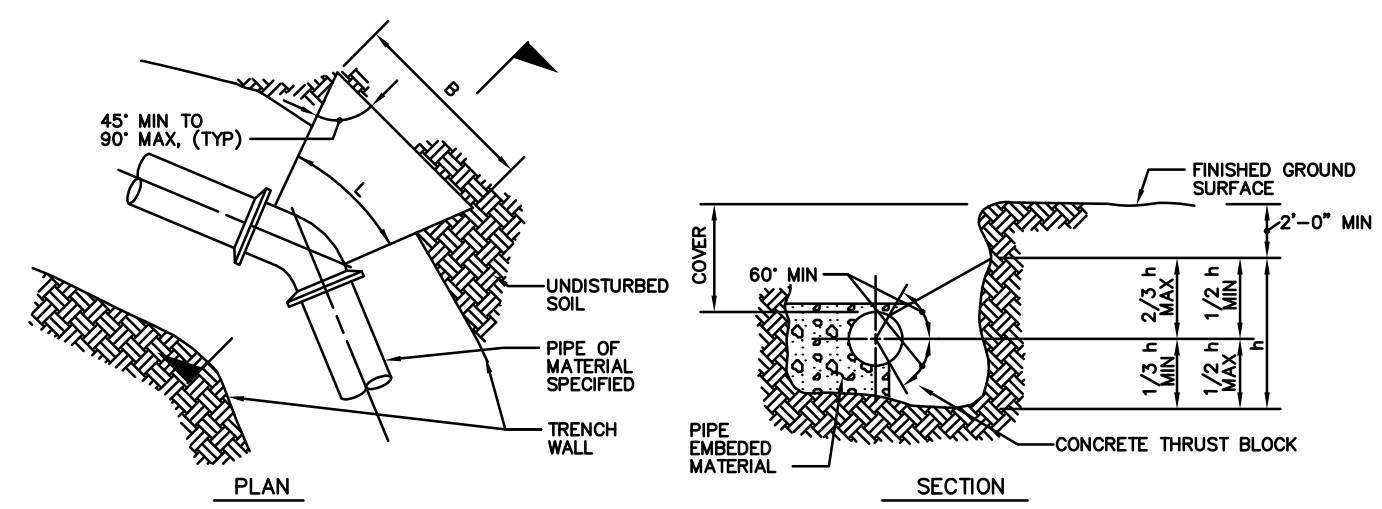
**CONCRETE ENCASEMENT  
 DETAILS**



**STRADDLE BLOCK DETAIL**  
 NOT TO SCALE

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**STRADDLE BLOCK  
 DETAILS**



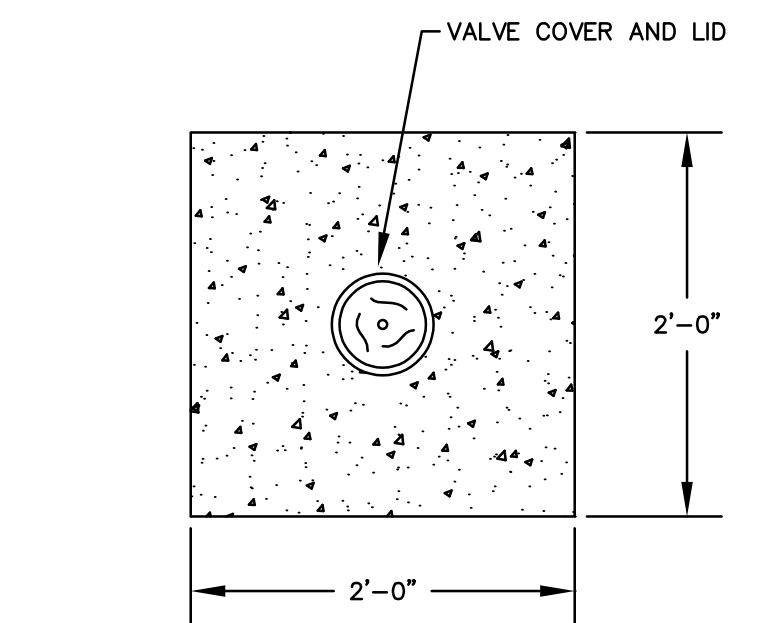
NOTES:  
 1. AREA OF BLOCK, A = BxH, BLOCK AREAS ARE SHOWN ON GENERAL LAYOUT OR TABLE.  
 2. B = H = 1/2 A, EXCEPT WHERE TOP OF BLOCK IS WITHIN 2 FEET FROM GROUND SURFACE, THEN B = A/A.  
 3. MINIMUM BLOCK DIMENSION (B & H) SHALL BE AT LEAST OD OF PIPE OR 1 FOOT FOR PIPE OD 12" OR LESS.  
 4. THE BOTTOM OF THE BLOCK SHALL EXTEND AT LEAST TO THE BOTTOM OF THE TRENCH IN ALL CASES.  
 5. L-FITTING LENGTH MINUS CLEARANCE FOR BELLS.  
 6. DETAIL IS SHOWN FOR CAST IRON PIPE; DETAIL IS SIMILAR FOR OTHER TYPES OF PIPE.  
 7. 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"	45"	8 SF	2.8'	2.8'

**CONCRETE THRUST BLOCKING**  
 NOT TO SCALE

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**CONCRETE THRUST  
 BLOCKING DETAILS**

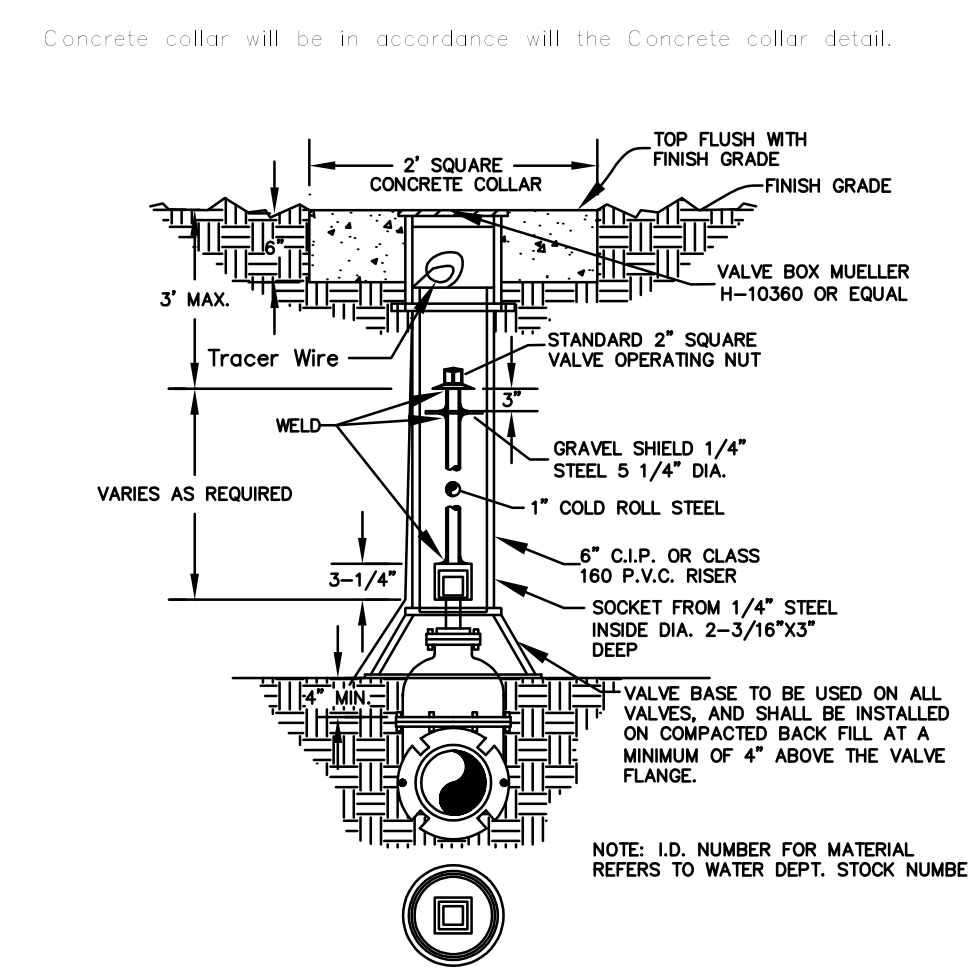


**TOP VIEW  
 CONCRETE COLLAR**  
 NOT TO SCALE

NOTE: 1. Concrete collar joint pattern is required in paved areas such as roadways, driveways, sidewalks or other areas of paved surfaces.  
 2. Concrete collars are optional in other non-paved areas.

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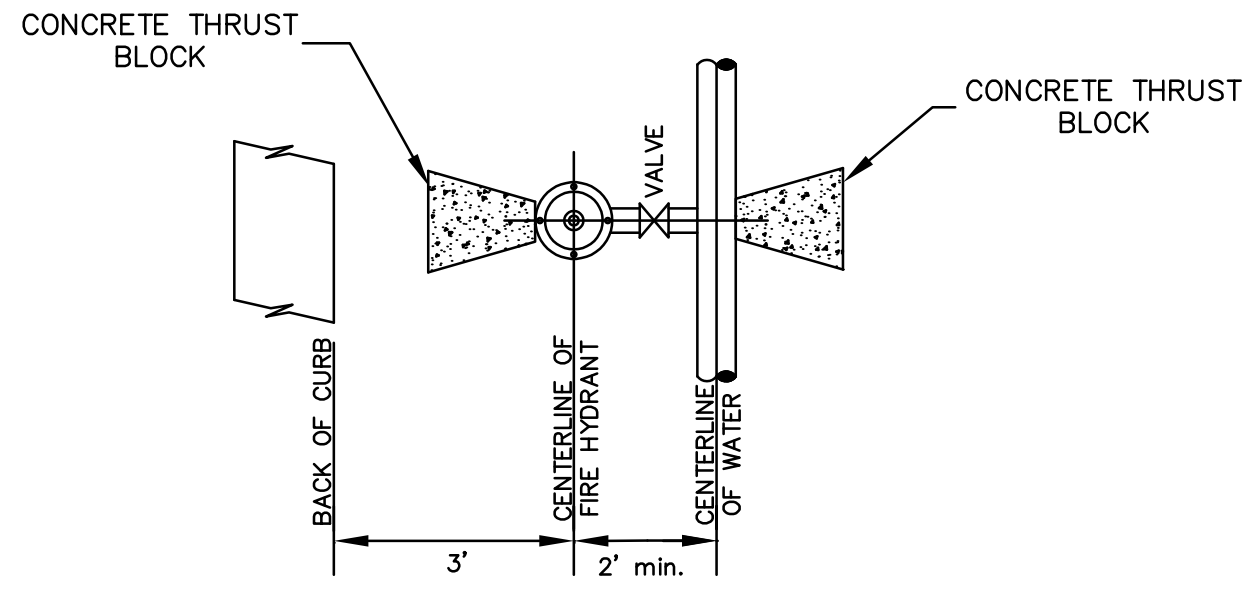
**CONCRETE  
 COLLAR DETAIL**



**WATER VALVE DETAIL**  
 NOT TO SCALE

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**WATER  
 VALVE DETAIL**

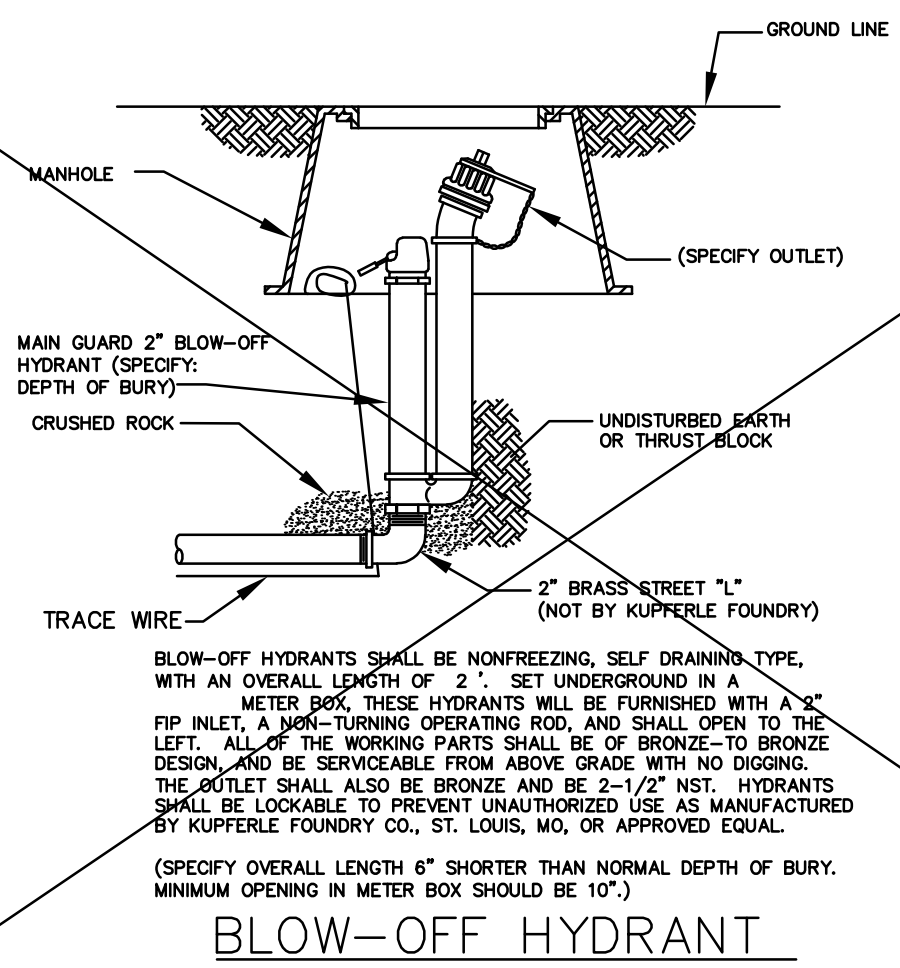


CONFIGURATION  
 ALL FIRE HYDRANTS SHALL BE 3' OFF BACK OF CURB  
 ALL WATER MAINS SHALL BE A MIN. OF 5' OFF BACK OF CURB

**TYPICAL WATER MAIN AND FIRE  
 HYDRANT LOCATIONS**  
 NOT TO SCALE

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**WATER MAIN  
 FIRE HYDRANT DETAIL**



**BLOW-OFF HYDRANT**  
 NOT TO SCALE

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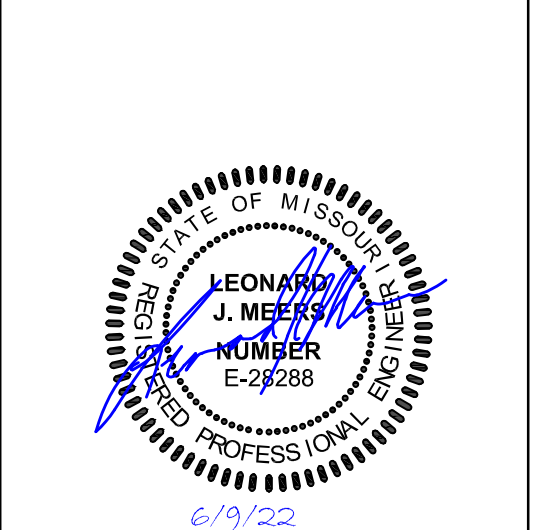
**BLOW-OFF  
 HYDRANT DETAIL**

NO.	DESCRIPTION	DATE
1	CITY COMMENTS	02-24-2022
2	CITY/UTIL COMMENTS	03-14-2022

**PROJECT TITLE**  
 O'FALLON  
 U-HAUL  
 1200 S. OUTER ROAD  
 O'FALLON, MO 63366

**GRIMES CONSULTING, INC.**  
 Civil Engineering & Surveying Services  
 GRIMES CONSULTING, INC.  
 PROFESSIONAL ENGINEER CORPORATION, E-1470-D  
 PROFESSIONAL LAND SURVEYING CORPORATION, LS-543-D

12300 OLD TESSON ROAD  
 SUITE 3000  
 O'FALLON, MO 63328  
 PH: (314) 849-6100  
 PH: (314) 849-6010  
 FAX: (314) 849-6010  
 www.grimesconsulting.com



LEONARD J. MEERS  
 PROFESSIONAL ENGINEER  
 E-28288

**Developer / Owner Information**  
 UHAUL  
 CONTACT: MICHAEL WHITE  
 314-952-6203  
 Email: michael\_white@uhaul.com

**WATER DETAILS**

**P4-Z No.**  
**Approval Date:**  
**City No.**

**Page No.**  
**C8.1**