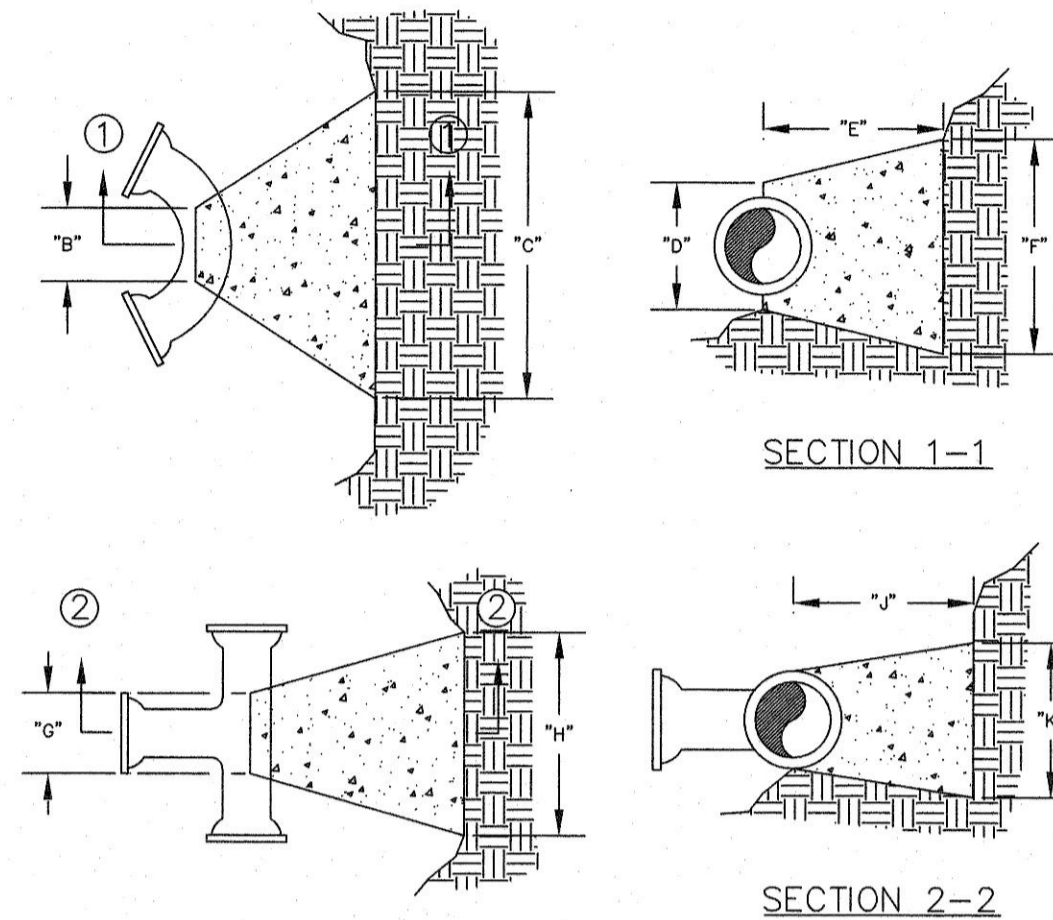


BENDS	"B"	"C"	"D"	"E"	"F"
8"-11 1/4"	8"	15"	12"	24"	10"
8"-22 1/2"	8"	15"	12"	24"	13"
8"-45"	8"	30"	12"	24"	15"
8"-90"	8"	30"	12"	24"	28"
8"-11 1/4"	8"	20"	12"	24"	10"
8"-22 1/2"	8"	22"	12"	24"	18"
8"-45"	8"	31"	12"	24"	24"
8"-90"	8"	38"	12"	24"	55"
12"-11 1/4"	8"	30"	12"	24"	15"
12"-22 1/2"	8"	35"	12"	24"	23"
12"-45"	8"	40"	12"	24"	40"
12"-90"	8"	60"	12"	24"	55"
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	48"	24"	28"	39"
20"-45"	TL	74"	24"	28"	55"
20"-90"	TL	139"	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	185"	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	"G"	"H"	"J"	"K"
6"x6"x6"	12"	24"	24"	18"
8"x8"x8"	12"	24"	24"	18"
8"x8"x8"	12"	24"	24"	21"
12"x12"x6"	12"	24"	24"	18"
12"x12"x6"	12"	24"	24"	21"
12"x12"x12"	12"	36"	24"	36"
24"x24"x18"	16"	53"	28"	53"

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

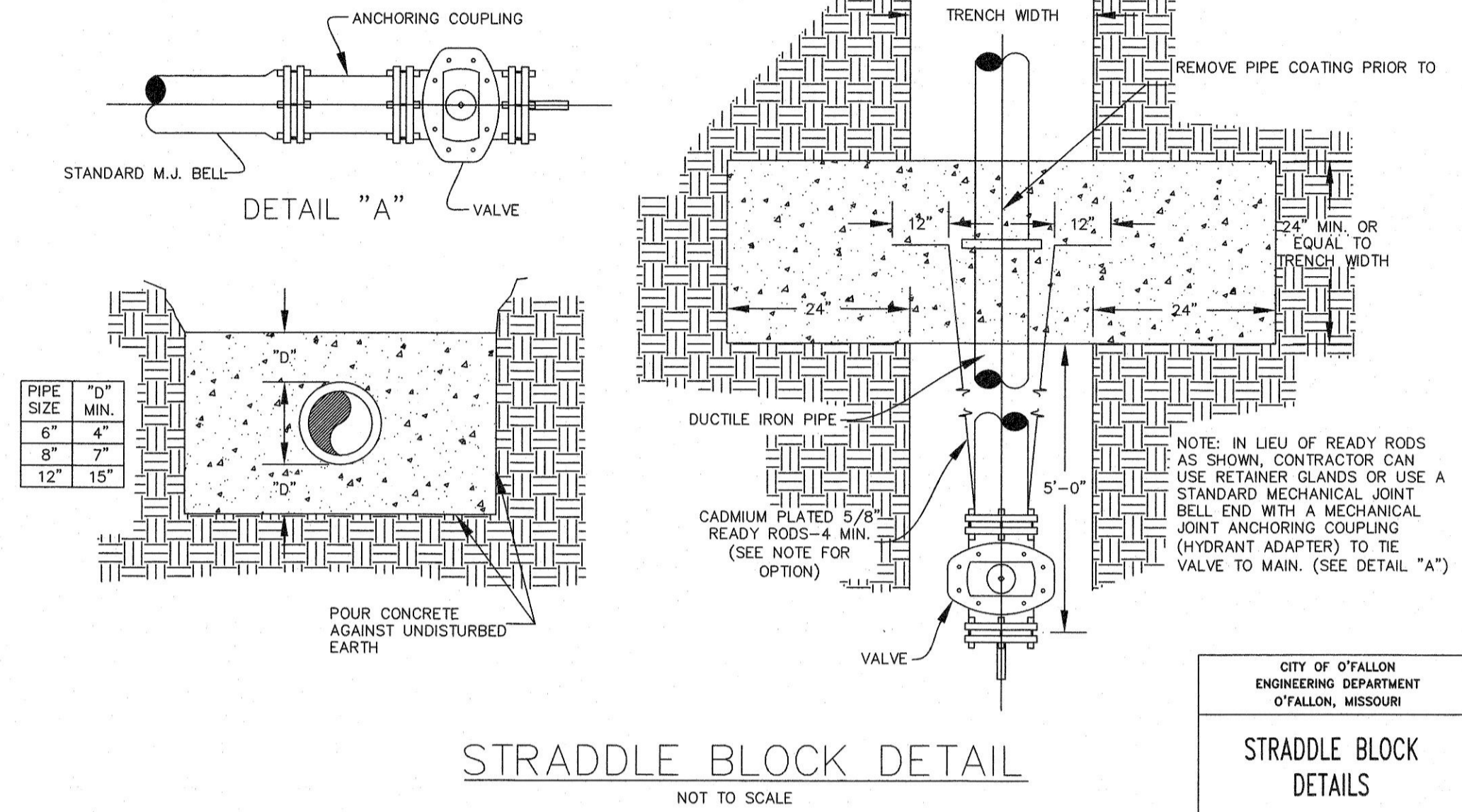


INTERNAL WATER PRESSURE 6" through 12"=200 psi
 INTERNAL WATER PRESSURE 18" through 30"=210 psi
 BEARING PRESSURE OF SOIL=2000 psi

BACKING BLOCKS
 NOT TO SCALE

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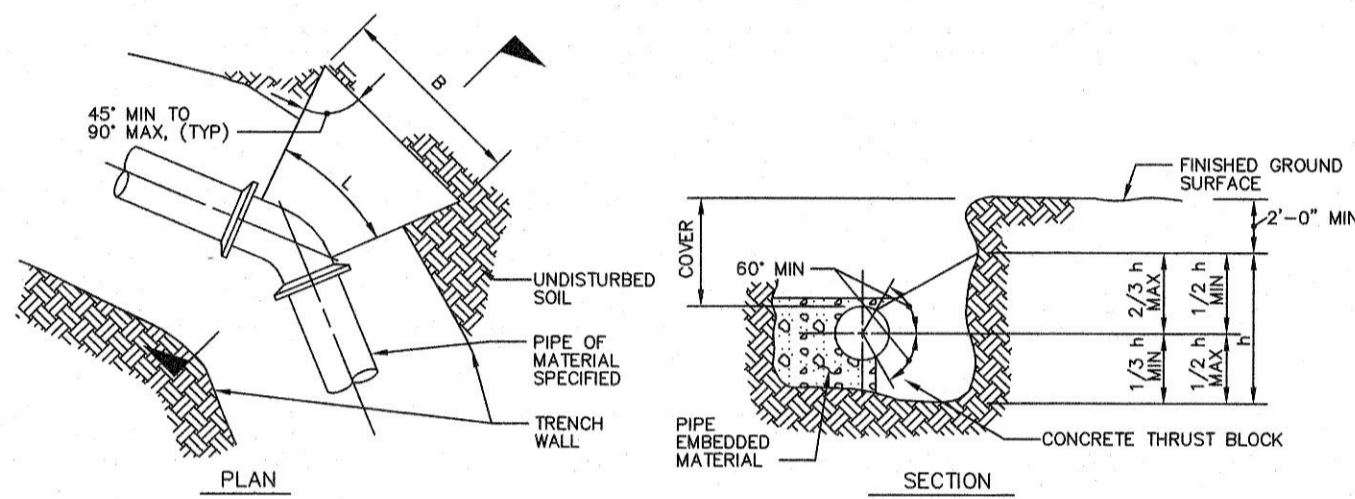
**BACKING BLOCK
 DETAILS AND LOCATIONS**



STRADDLE BLOCK DETAIL
 NOT TO SCALE

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**STRADDLE BLOCK
 DETAILS**



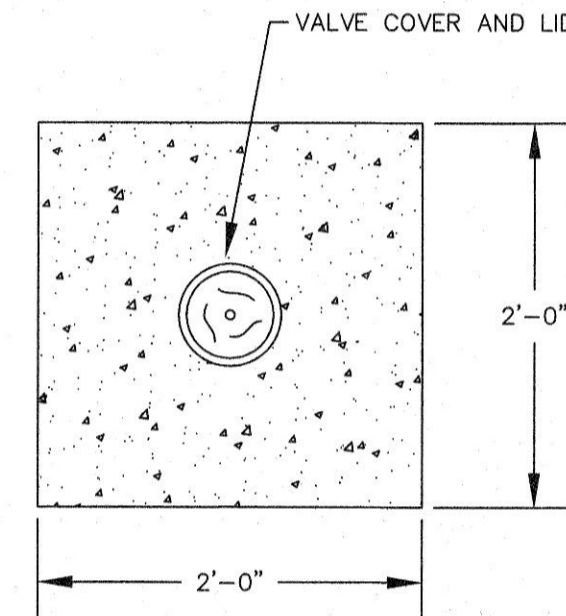
- NOTES:
 1. AREA OF BLOCK, A = BxH. BLOCK AREAS ARE SHOWN ON GENERAL LAYOUT OR TABLE.
 2. B = h = \sqrt{A} , EXCEPT WHERE TOP OF BLOCK IS WITHIN 2 FEET FROM GROUND SURFACE, THEN B = A/h.
 3. MINIMUM BLOCK DIMENSION (B & H) SHALL BE AT LEAST 60 OF PIPE OR 1 FOOT FOR PIPE 12" OR LESS.
 4. THE BOTTOM OF 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"	22 1/2"	8 SF	2.8'	2.8'

CONCRETE THRUST BLOCKING
 NOT TO SCALE

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**CONCRETE THRUST
 BLOCKING DETAILS**

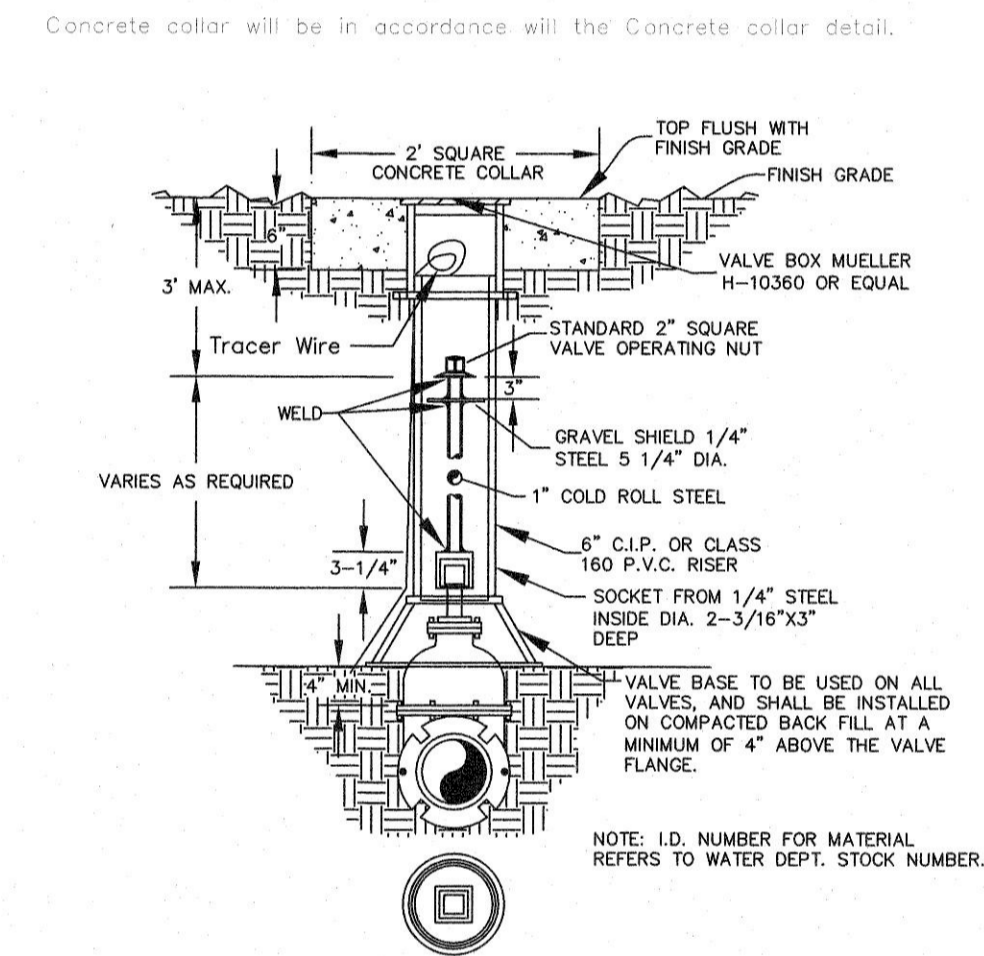


**TOP VIEW
 CONCRETE COLLAR**
 NOT TO SCALE

- 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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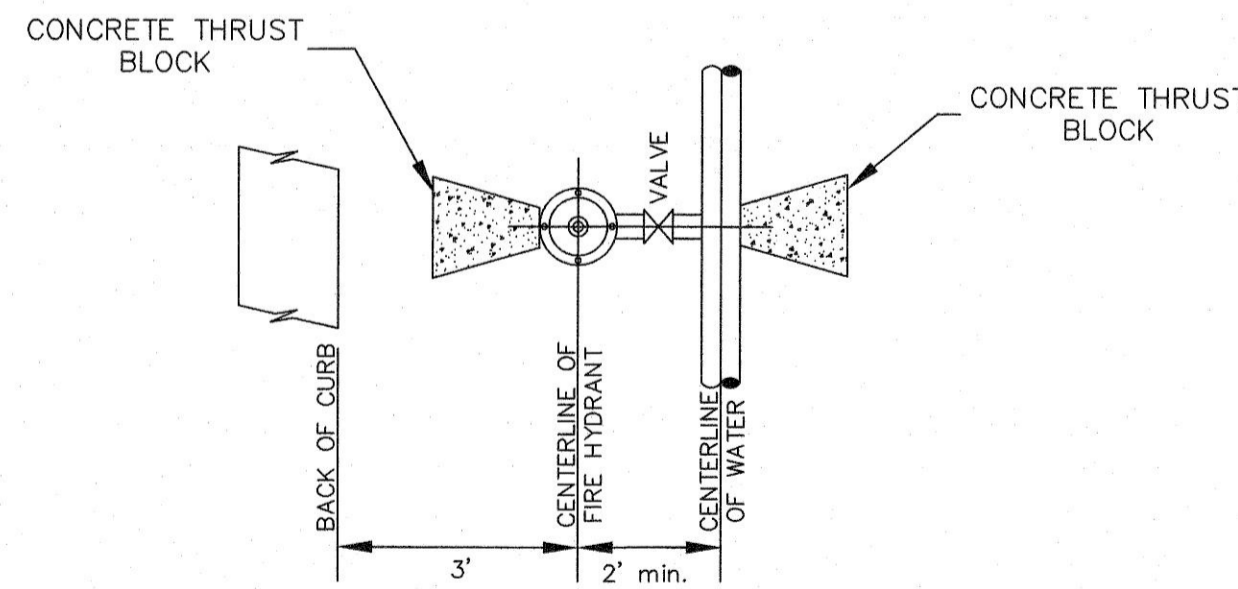
**CONCRETE
 COLLAR DETAIL**



WATER VALVE DETAIL
 NOT TO SCALE

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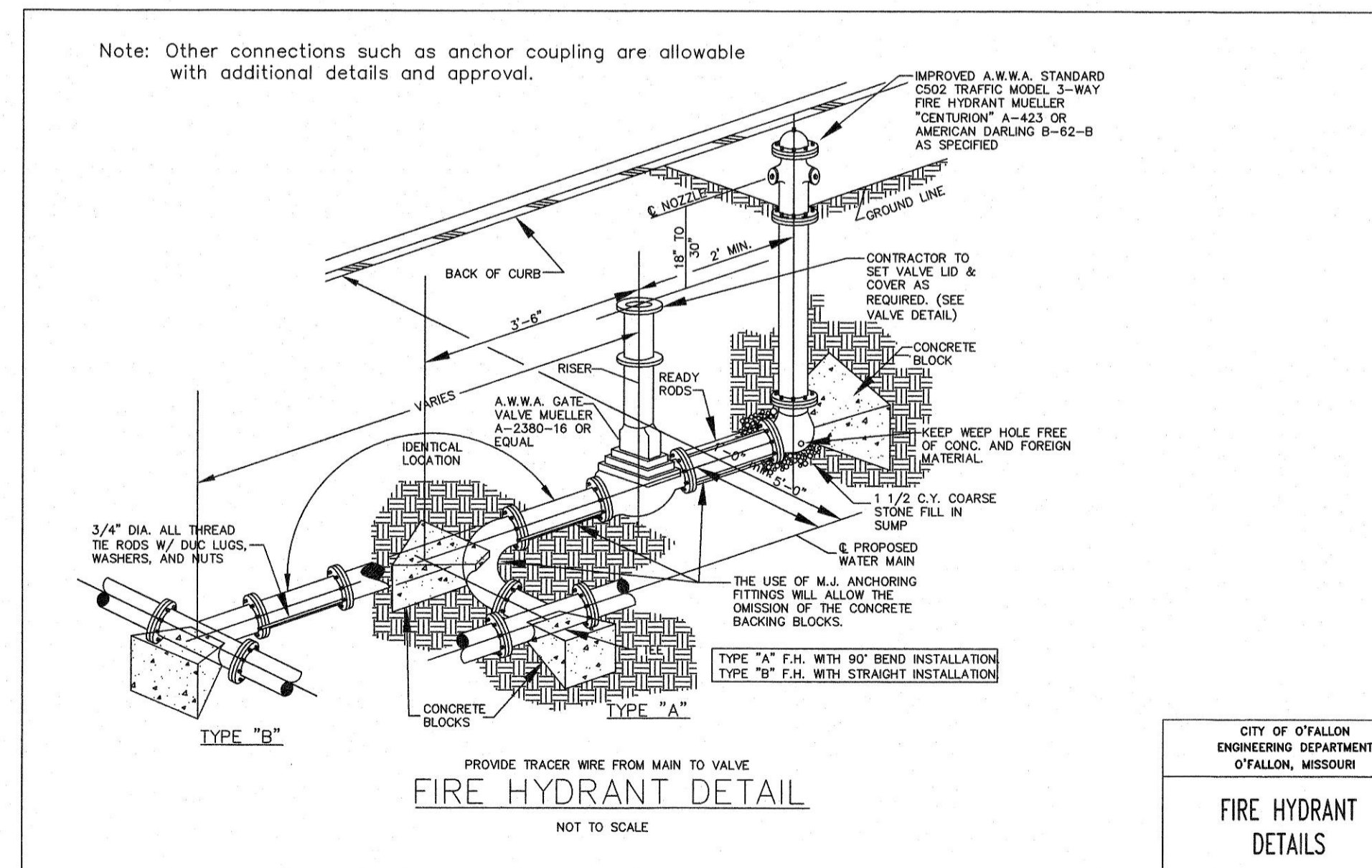
**WATER
 VALVE DETAIL**



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

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**WATER MAIN
 FIRE HYDRANT DETAIL**



FIRE HYDRANT DETAIL
 NOT TO SCALE

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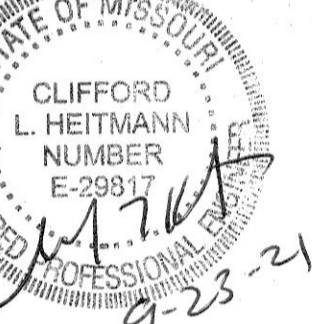
**FIRE HYDRANT
 DETAILS**

PROJECT TITLE:
 COSMOS CORPORATION
 BUILDING ADDITION
 601 PEARL DRIVE
 O'FALLON, MO. 63376

**ENGINEERING
 DRAWING
 SURVEYING**
 Point West Blvd.
 St. Charles, MO 63301
 636-928-5562
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 CIVIL ENGINEER
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REVISIONS

NO.	DATE	DESCRIPTION
9-24-21	city comments	

Developer / Owner:
 POINT WEST PROPERTIES LLC
 103 ENTERPRISE DRIVE
 WENTZVILLE, MISSOURI 63385
 636-327-5575

P+Z No. #21-003877
Approval Date: 6-3-21
City No. #

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