

BENDS	"8"	"12"	"18"	"24"
8"-11 1/4"	8"	18"	12"	10"
8"-22 1/2"	8"	18"	12"	13"
8"-45"	8"	30"	12"	15"
8"-90"	8"	30"	12"	28"
12"-11 1/4"	8"	20"	12"	10"
12"-22 1/2"	8"	22"	12"	18"
12"-45"	8"	31"	12"	24"
12"-90"	8"	31"	12"	53"
16"-11 1/4"	TL	28"	20"	28"
16"-22 1/2"	TL	39"	20"	38"
16"-45"	TL	55"	20"	54"
16"-90"	TL	91"	20"	60"
20"-11 1/4"	TL	34"	24"	28"
20"-22 1/2"	TL	48"	24"	38"
20"-45"	TL	74"	24"	52"
20"-90"	TL	136"	24"	60"
24"-11 1/4"	TL	40"	28"	28"
24"-22 1/2"	TL	56"	28"	56"
24"-45"	TL	101"	28"	60"
24"-90"	TL	186"	28"	60"
30"-11 1/4"	TL	49"	34"	49"
30"-22 1/2"	TL	70"	34"	50"
30"-45"	TL	154"	34"	60"
30"-90"	TL	285"	34"	60"

TEES	"0"	"4"	"8"
8"x8"x8"	12"	24"	18"
8"x8"x8"	12"	24"	18"
12"x12"x8"	12"	27"	27"
12"x12"x8"	12"	27"	27"
12"x12"x12"	12"	36"	36"
24"x24"x12"	16"	53"	38"

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.

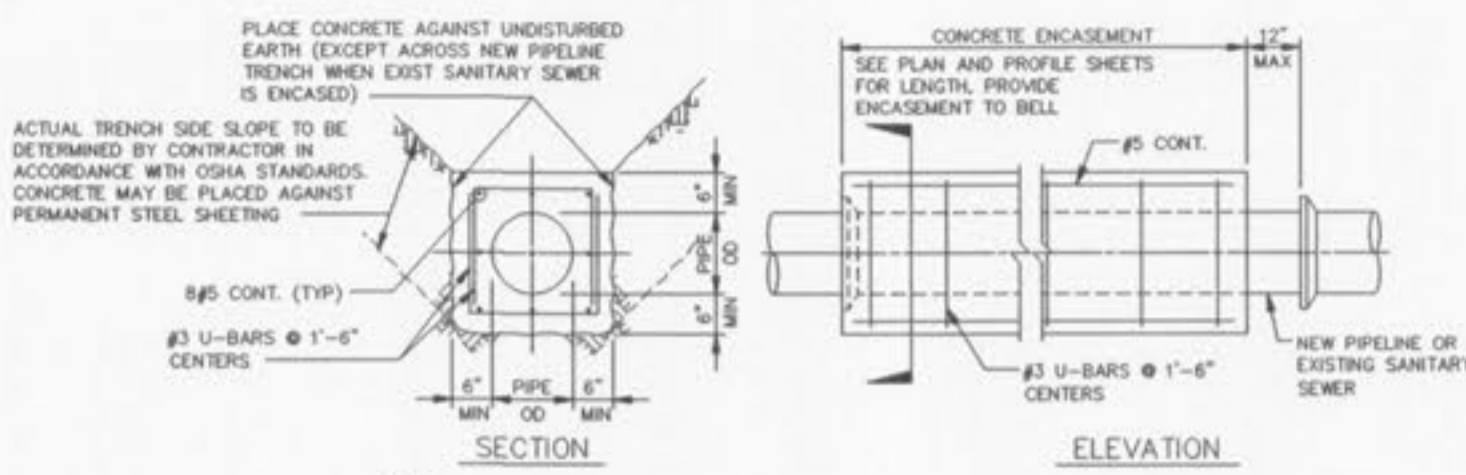
INTERNAL WATER PRESSURE 6" through 12"=200 psi
 INTERNAL WATER PRESSURE 16" through 30"=210 psi
 BEARING PRESSURE OF SOIL=2000 psi

BACKING BLOCKS

NOT TO SCALE

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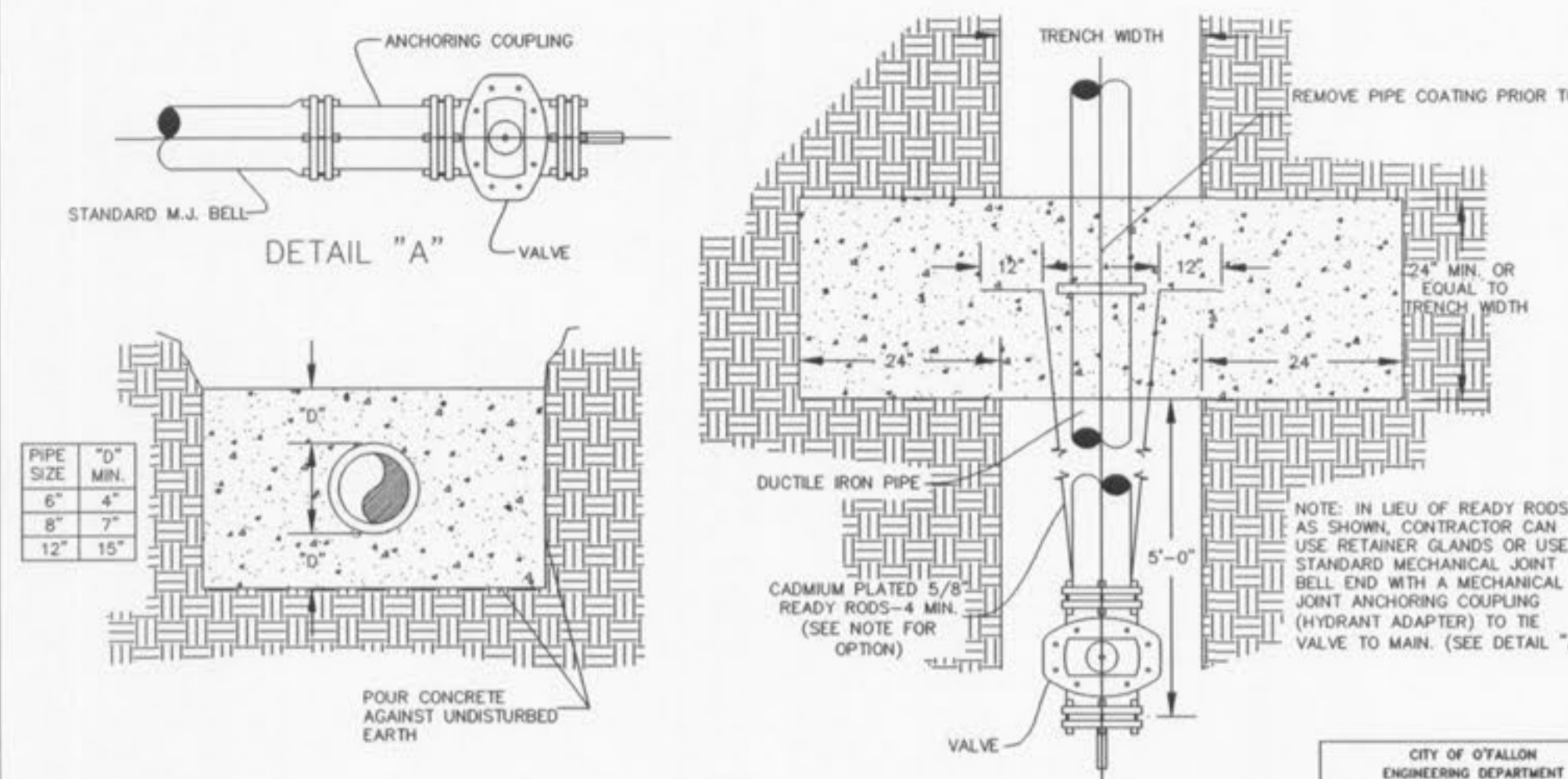
BACKING BLOCK DETAILS AND LOCATIONS



PLACE CONCRETE AGAINST UNDISTURBED EARTH (EXCEPT ACROSS NEW PIPELINE TRENCH WHEN EXIST. SANITARY SEWER IS ENCASED)
 SEE PLAN AND PROFILE SHEETS FOR LENGTH. PROVIDE ENCASEMENT TO BELL.
 CONCRETE ENCASEMENT
 NO SCALE

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CONCRETE ENCASEMENT DETAILS

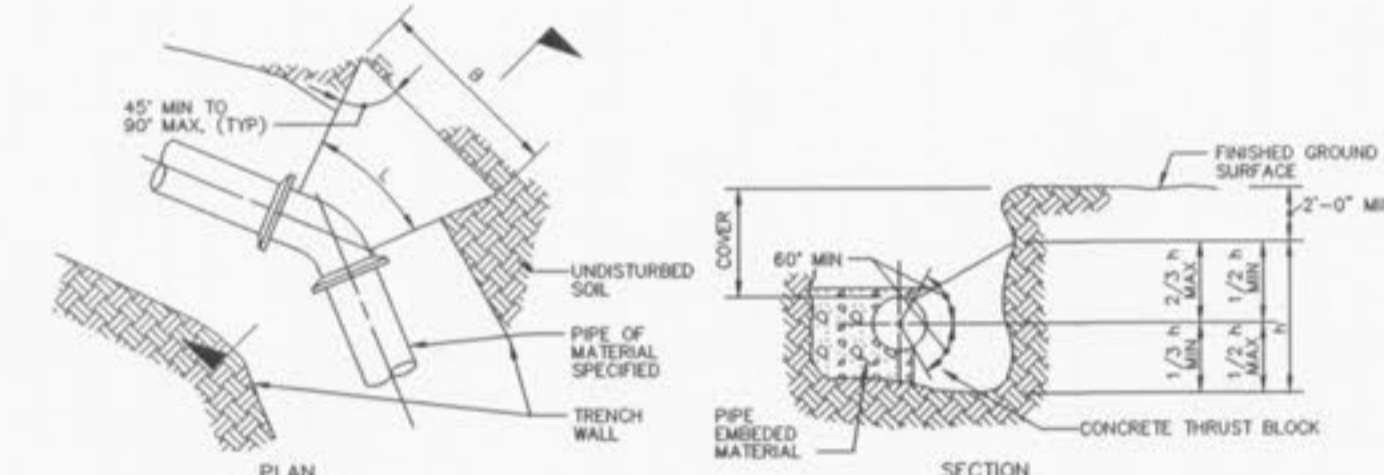


STRADDLE BLOCK DETAIL

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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.

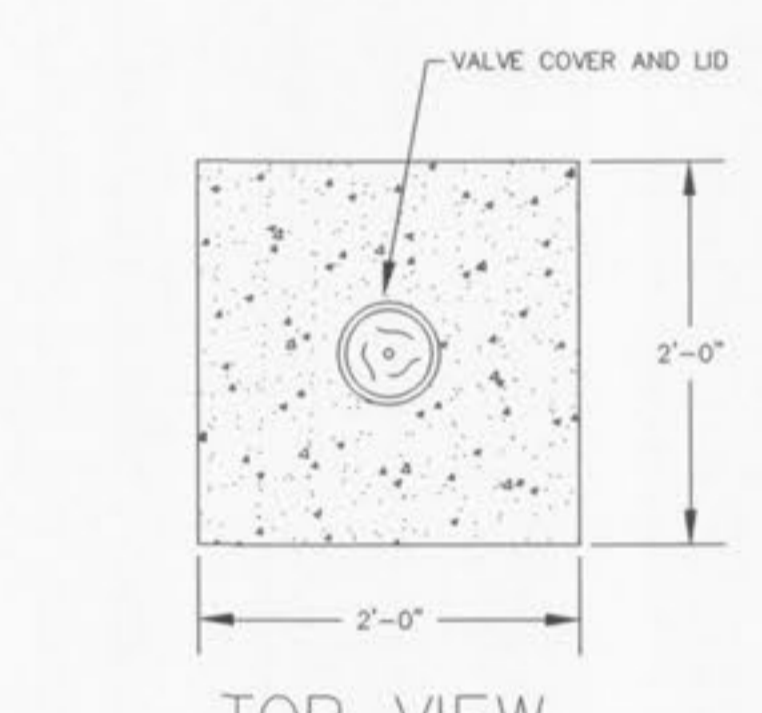
SIZE	BEND	PURIST AREA	B	H
16"	11 1/2"	4 SF	2'	2'
16"	45"	8 SF	2.8'	2.8'

CONCRETE THRUST BLOCKING

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CONCRETE THRUST BLOCKING DETAILS



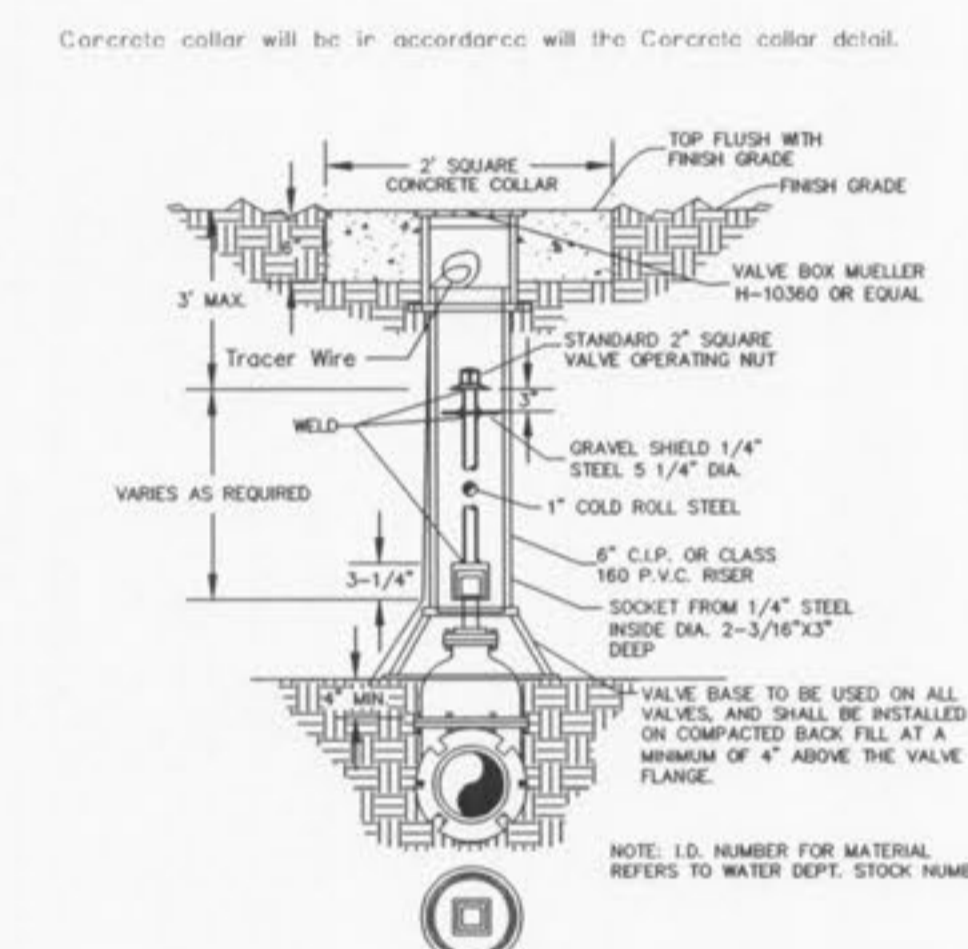
TOP VIEW CONCRETE COLLAR

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

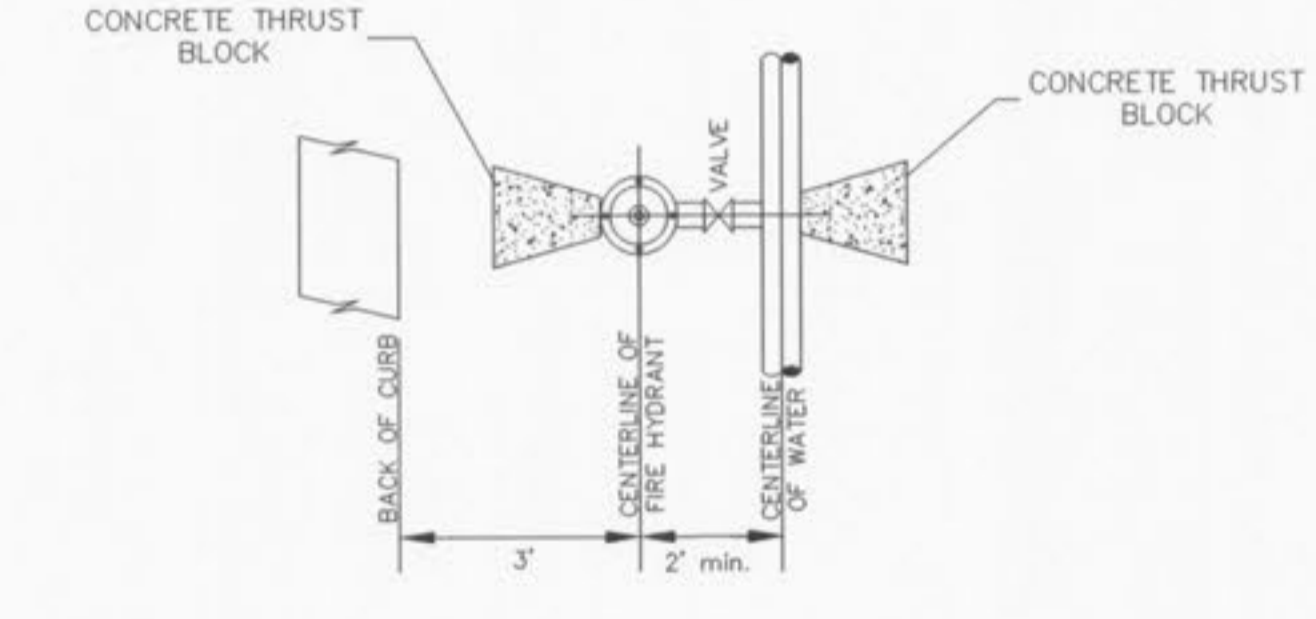


WATER VALVE DETAIL

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WATER VALVE DETAIL



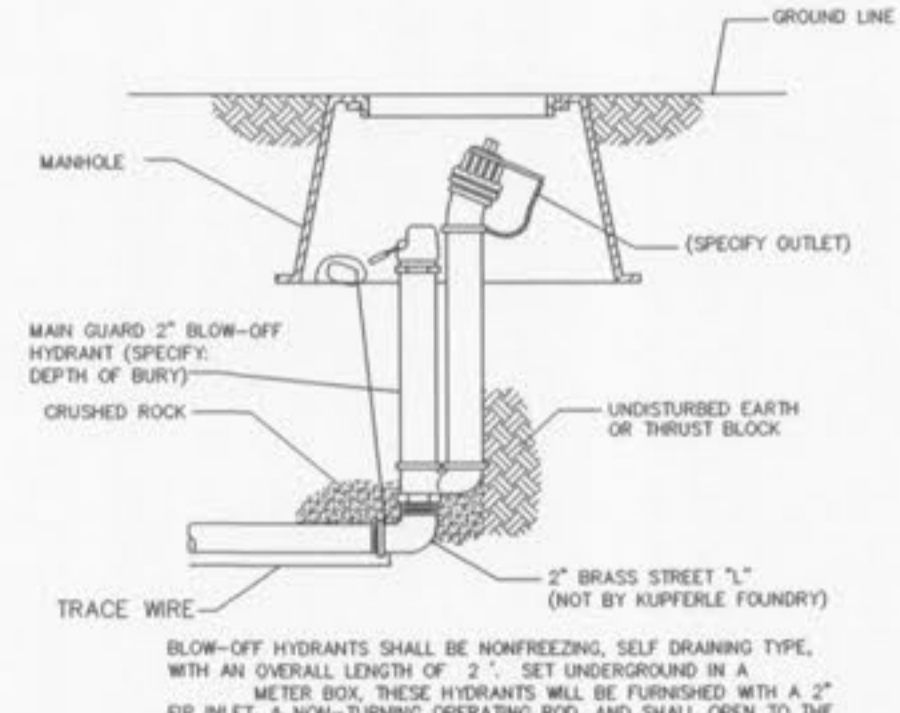
CONFIGURATION
 ALL FIRE HYDRANTS SHALL BE 3' OFF BACK OF CURB
 ALL WATER MAINS SHALL BE A MIN. OF 5' OFF BACK OF CURB

TYPICAL WATER MAIN AND FIRE HYDRANT LOCATIONS

NOT TO SCALE

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WATER MAIN FIRE HYDRANT DETAIL

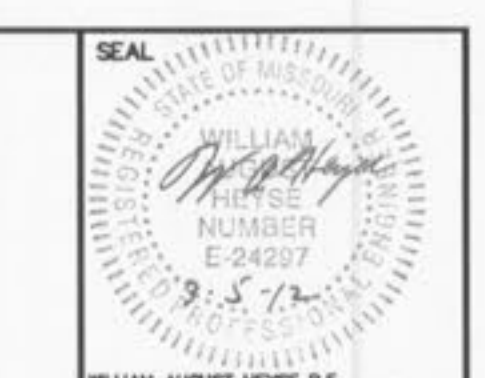


BLOW-OFF HYDRANT

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BLOW-OFF HYDRANT DETAIL



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 SERIAL NO. E-1596-D

LDC
 INCORPORATED

PROJECT
 REVISION
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 CHECKED BY: JPT
 DATE: 1/20/2012
 JOB NO.: 11.700
 SCALE: NO SCALE
 P&Z NO.: 24-11
 CITY NO.:
 SHEET: **C7**

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