

BENDS	"6"	"8"	"10"	"12"	"14"	"16"
6"-11 1/4"	8"	10"	12"	14"	16"	18"
6"-22 1/2"	8"	10"	12"	14"	16"	18"
6"-45"	8"	10"	12"	14"	16"	18"
6"-90"	8"	10"	12"	14"	16"	18"
8"-11 1/4"	10"	12"	14"	16"	18"	20"
8"-22 1/2"	10"	12"	14"	16"	18"	20"
8"-45"	10"	12"	14"	16"	18"	20"
8"-90"	10"	12"	14"	16"	18"	20"
12"-11 1/4"	12"	14"	16"	18"	20"	24"
12"-22 1/2"	12"	14"	16"	18"	20"	24"
12"-45"	12"	14"	16"	18"	20"	24"
12"-90"	12"	14"	16"	18"	20"	24"
16"-11 1/4"	16"	18"	20"	24"	28"	32"
16"-22 1/2"	16"	18"	20"	24"	28"	32"
16"-45"	16"	18"	20"	24"	28"	32"
16"-90"	16"	18"	20"	24"	28"	32"
20"-11 1/4"	20"	24"	28"	32"	36"	40"
20"-22 1/2"	20"	24"	28"	32"	36"	40"
20"-45"	20"	24"	28"	32"	36"	40"
20"-90"	20"	24"	28"	32"	36"	40"
24"-11 1/4"	24"	28"	32"	36"	40"	48"
24"-22 1/2"	24"	28"	32"	36"	40"	48"
24"-45"	24"	28"	32"	36"	40"	48"
24"-90"	24"	28"	32"	36"	40"	48"
30"-11 1/4"	30"	36"	42"	48"	54"	60"
30"-22 1/2"	30"	36"	42"	48"	54"	60"
30"-45"	30"	36"	42"	48"	54"	60"
30"-90"	30"	36"	42"	48"	54"	60"

TEES	"6"	"8"	"10"	"12"	"14"	"16"
6"x6"x6"	8"	10"	12"	14"	16"	18"
6"x8"x6"	10"	12"	14"	16"	18"	20"
6"x12"x6"	12"	14"	16"	18"	20"	24"
6"x18"x6"	16"	18"	20"	24"	28"	32"
6"x24"x6"	20"	24"	28"	32"	36"	40"
8"x8"x8"	10"	12"	14"	16"	18"	20"
8"x12"x8"	12"	14"	16"	18"	20"	24"
8"x18"x8"	16"	18"	20"	24"	28"	32"
8"x24"x8"	20"	24"	28"	32"	36"	40"
12"x12"x12"	16"	18"	20"	24"	28"	32"
12"x18"x12"	20"	24"	28"	32"	36"	40"
12"x24"x12"	24"	28"	32"	36"	40"	48"
16"x16"x16"	20"	24"	28"	32"	36"	40"
16"x24"x16"	24"	28"	32"	36"	40"	48"
16"x32"x16"	28"	32"	36"	40"	48"	56"

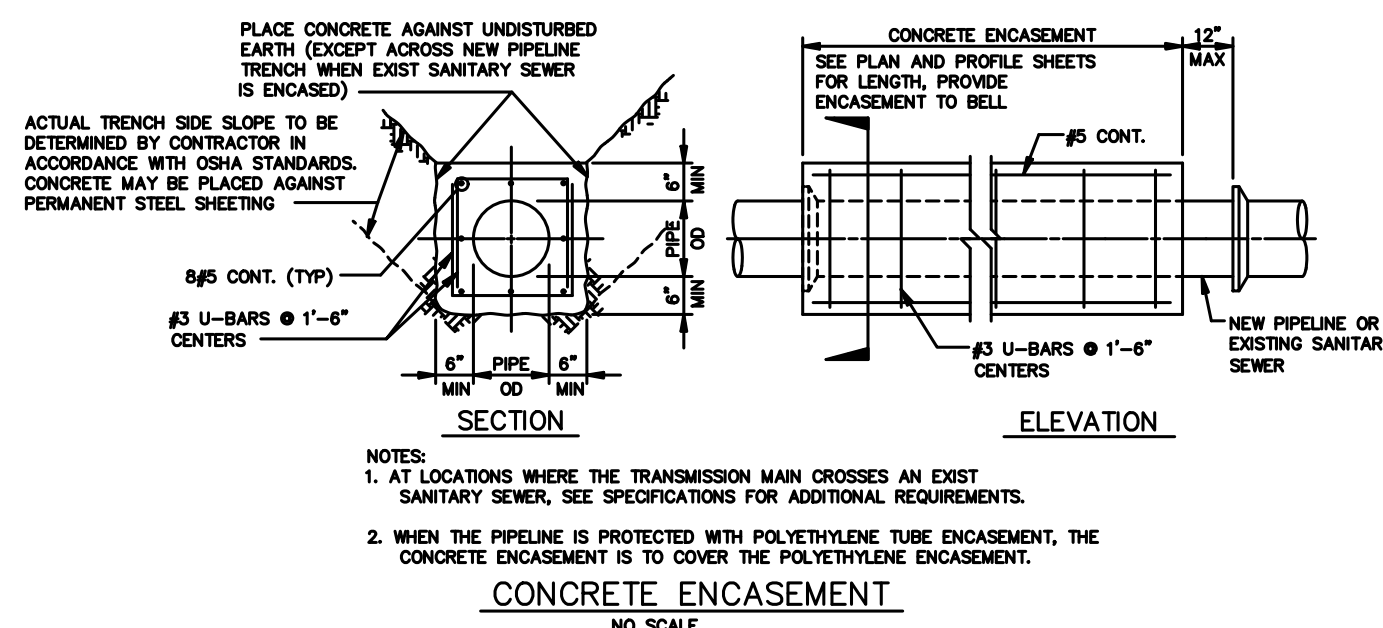
NOTES:
 1. 2" & 4" FITTINGS EQUIVALENT TO 6" FITTINGS.
 2. TAPPING SLEEVES TO HAVE BACKING BLOCKS SAME SIZE AS REQUIRED FOR FITTING.
 3. "TL" = TOTAL LENGTH OF FITTING MINUS CLEARANCE FOR BELLS.

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

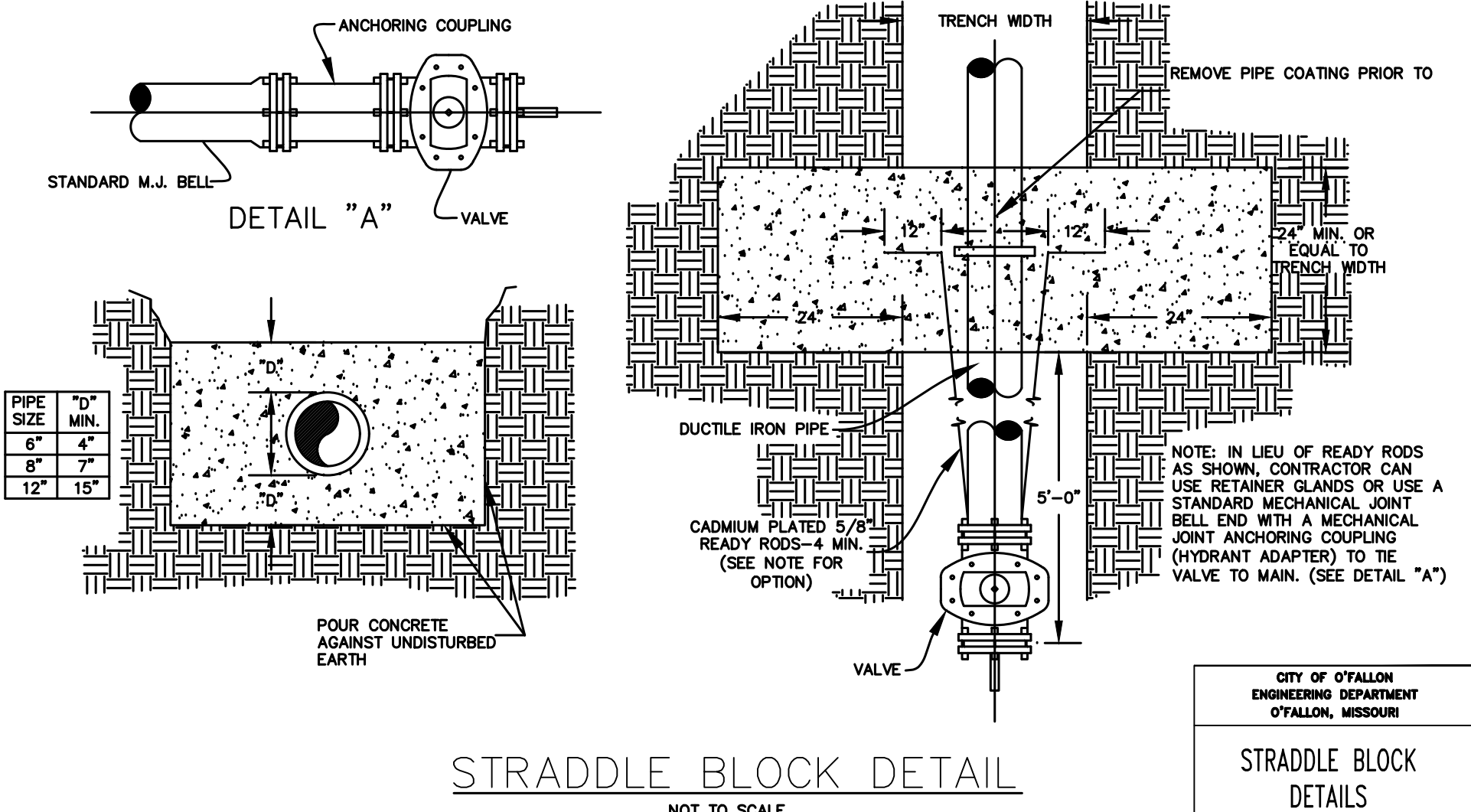
CITY OF O'FALLON
 ENGINEERING DEPARTMENT
 O'FALLON, MISSOURI

BACKING BLOCK
 DETAILS AND LOCATIONS



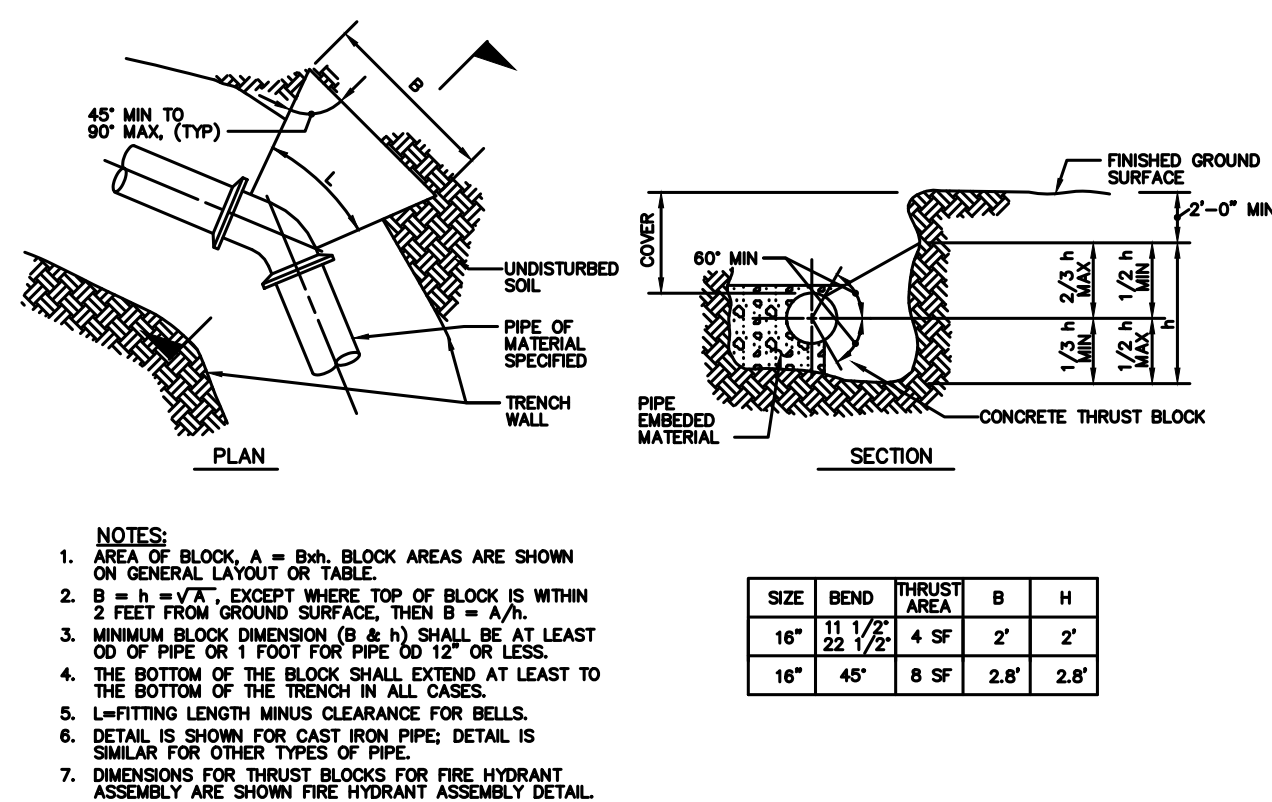
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 ENGINEERING DEPARTMENT
 O'FALLON, MISSOURI

CONCRETE ENCASEMENT
 DETAILS



CITY OF O'FALLON
 ENGINEERING DEPARTMENT
 O'FALLON, MISSOURI

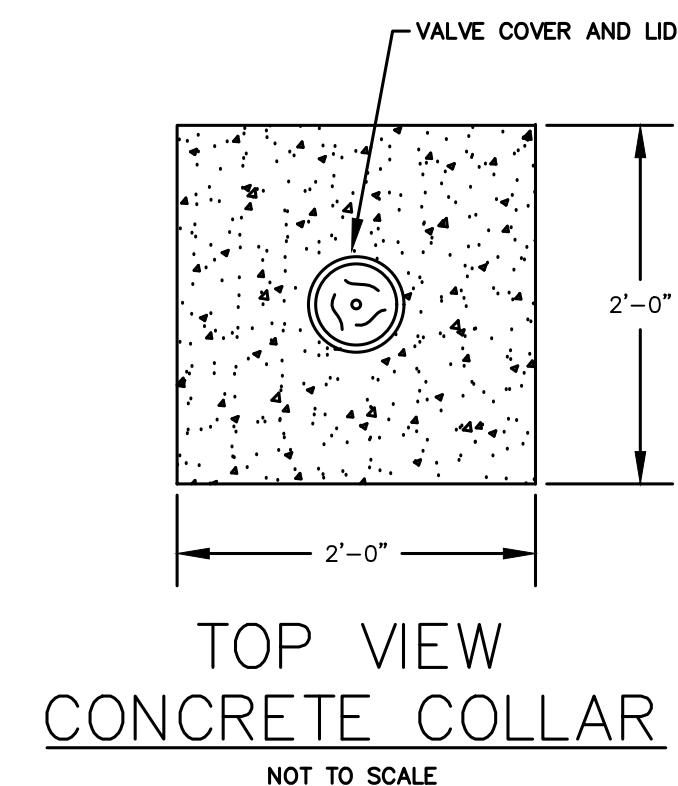
STRADDLE BLOCK
 DETAILS



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

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 ENGINEERING DEPARTMENT
 O'FALLON, MISSOURI

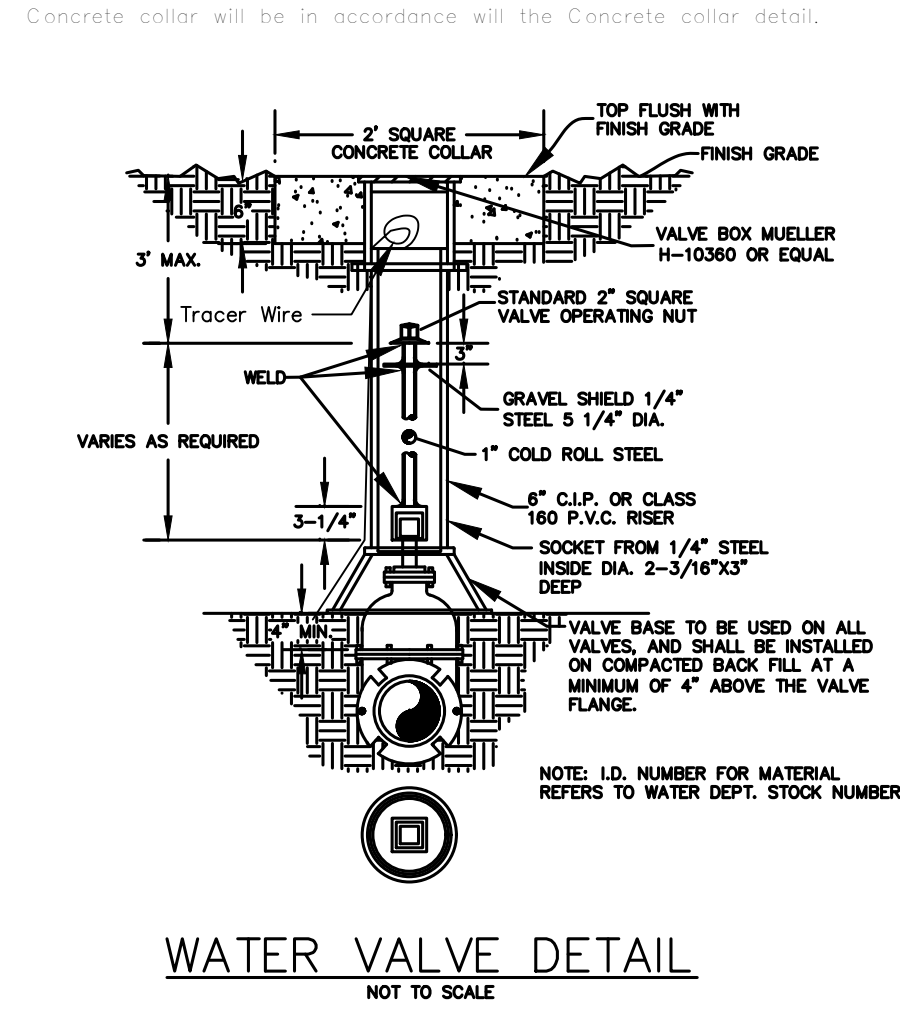
CONCRETE THRUST
 BLOCKING DETAILS



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.

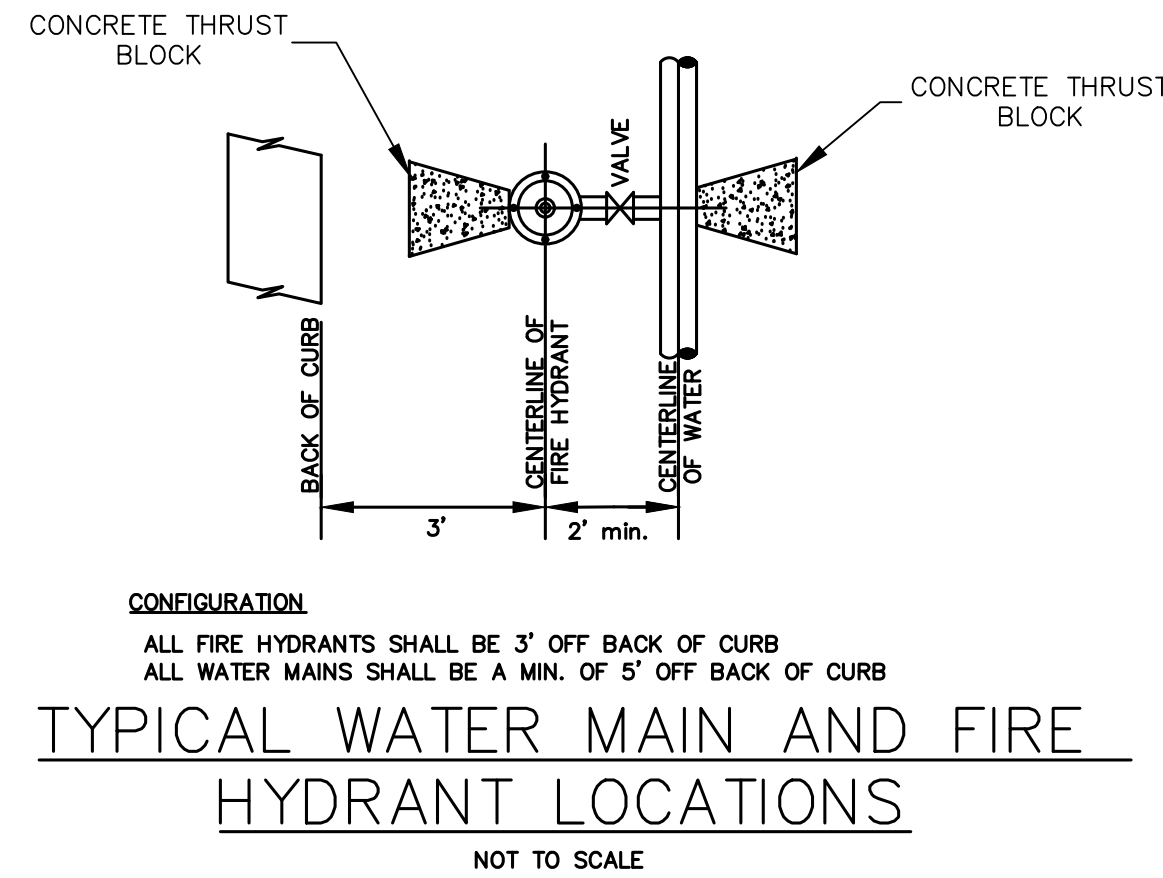
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 O'FALLON, MISSOURI

CONCRETE
 COLLAR DETAIL



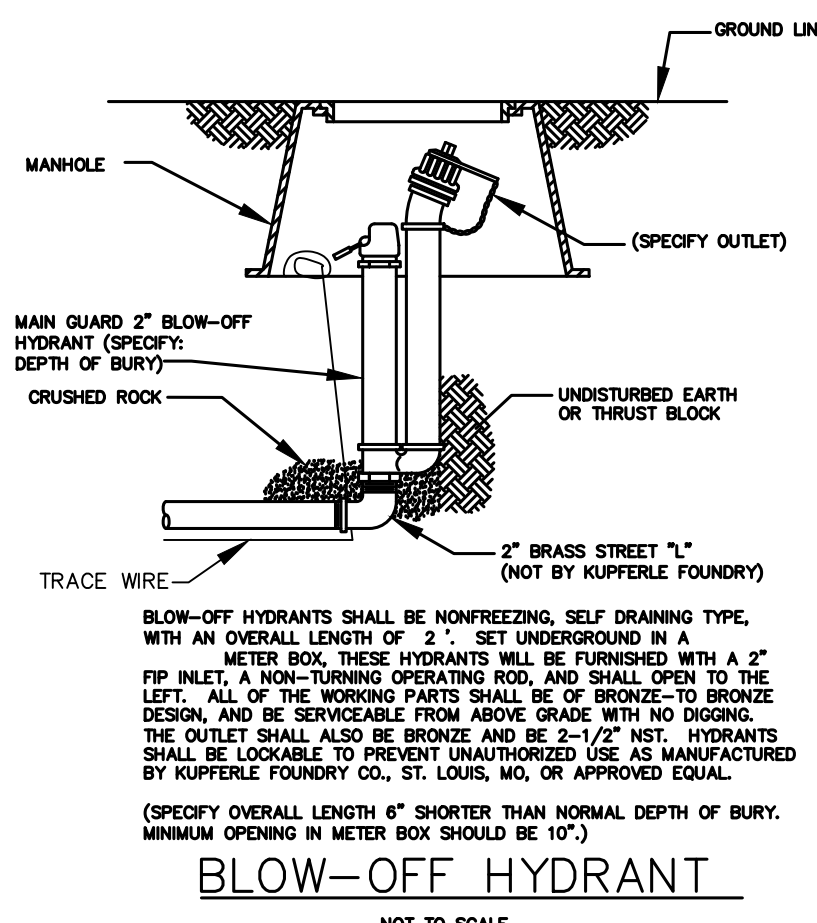
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WATER
 VALVE DETAIL



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 O'FALLON, MISSOURI

WATER MAIN
 FIRE HYDRANT DETAIL



CITY OF O'FALLON
 ENGINEERING DEPARTMENT
 O'FALLON, MISSOURI

BLOW-OFF
 HYDRANT DETAIL

Revised	Comment
6/7/17	1ST SUB TO CITY OF O'FALLON
8/3/17	Rev. Per. O'Fallon Comments
9/28/17	Rev. Per. O'Fallon Comments
10/29/17	Rev. Per. Modot comments
10/29/17	Rev. Per. city comments
11/25/17	Rev. Per. O'Fallon comments
2/22/18	Revised submittal on Autozone

Engineered By:

DOERING ENGINEERING Inc.
 CIVIL ENGINEERING • PLANNING • SURVEYING

Missouri Office
 5020 Cahill Rd.
 St. Louis, Missouri 63128
 Telephone: (314) 481-6913
 Fax: (314) 661-1716

Seal

STATE OF MISSOURI
 MARK A. DOERING
 CIVIL ENGINEER E-23059

4/26/18

MARK A. DOERING
 CIVIL ENGINEER E-23059

4/26/18
 MO. EXPIRATION DATE:
 DECEMBER 31 2018
 IL. EXPIRATION DATE:
 APRIL 30 2019
 MO. CORPORATE
 LICENSE NO. 001347
 IL CORPORATE
 LICENSE NO. 184.003035

BLUE IGUANA CAR WASH
 1008 HIGHWAY K
 O'FALLON, MO 63366
 DETAILS

Date: 6/7/17
Project Number: 16028
File Name: 16028.cdw
Drawn By: JAD
Check By: MAD

C13