

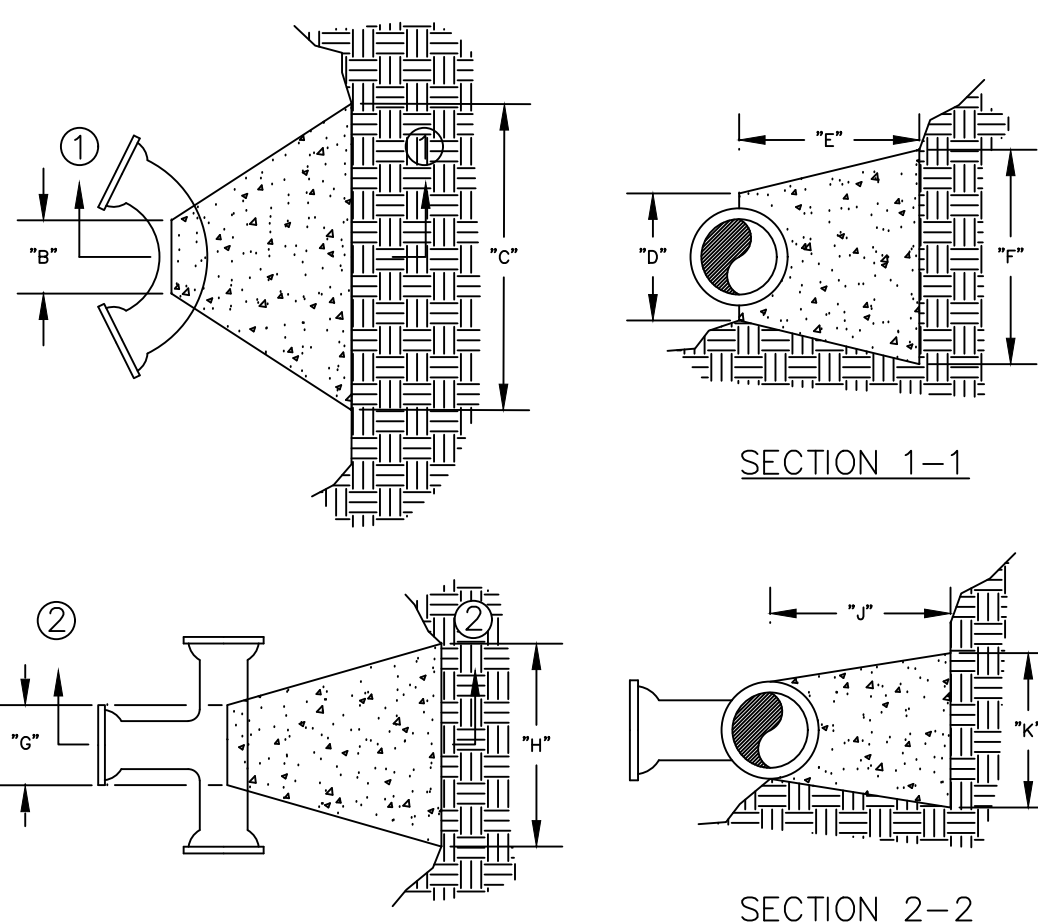
BENDS	"0"	"1"	"2"	"3"
6"-11 1/4"	8"	15"	12"	10"
6"-22 1/2"	8"	19"	12"	13"
6"-45"	8"	30"	12"	15"
6"-90"	8"	30"	12"	28"
8"-11 1/4"	8"	20"	12"	10"
8"-22 1/2"	8"	22"	12"	18"
8"-45"	8"	31"	12"	24"
8"-90"	8"	38"	12"	36"
12"-11 1/4"	8"	30"	12"	15"
12"-22 1/2"	8"	35"	12"	20"
12"-45"	8"	40"	12"	40"
12"-90"	8"	60"	12"	52"
16"-11 1/4"	TL	28"	20"	24"
16"-22 1/2"	TL	39"	20"	24"
16"-45"	TL	55"	20"	35"
16"-90"	TL	91"	20"	60"
20"-11 1/4"	TL	34"	24"	28"
20"-22 1/2"	TL	48"	24"	39"
20"-45"	TL	74"	24"	55"
20"-90"	TL	136"	24"	60"
24"-11 1/4"	TL	40"	28"	40"
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	79"	34"	60"
30"-45"	TL	154"	34"	60"
30"-90"	TL	285"	34"	60"

TEES	"0"	"1"	"2"	"3"
6"x6"x6"	12"	24"	24"	18"
8"x8"x8"	12"	24"	24"	18"
8"x8"x8"	12"	27"	24"	21"
12"x12"x6"	12"	24"	24"	18"
12"x12"x6"	12"	27"	24"	21"
12"x12"x12"	12"	36"	24"	36"
24"x24"x16"	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. TL = TOTAL LENGTH OF FITTING MINUS CLEARANCE FOR BELLS.

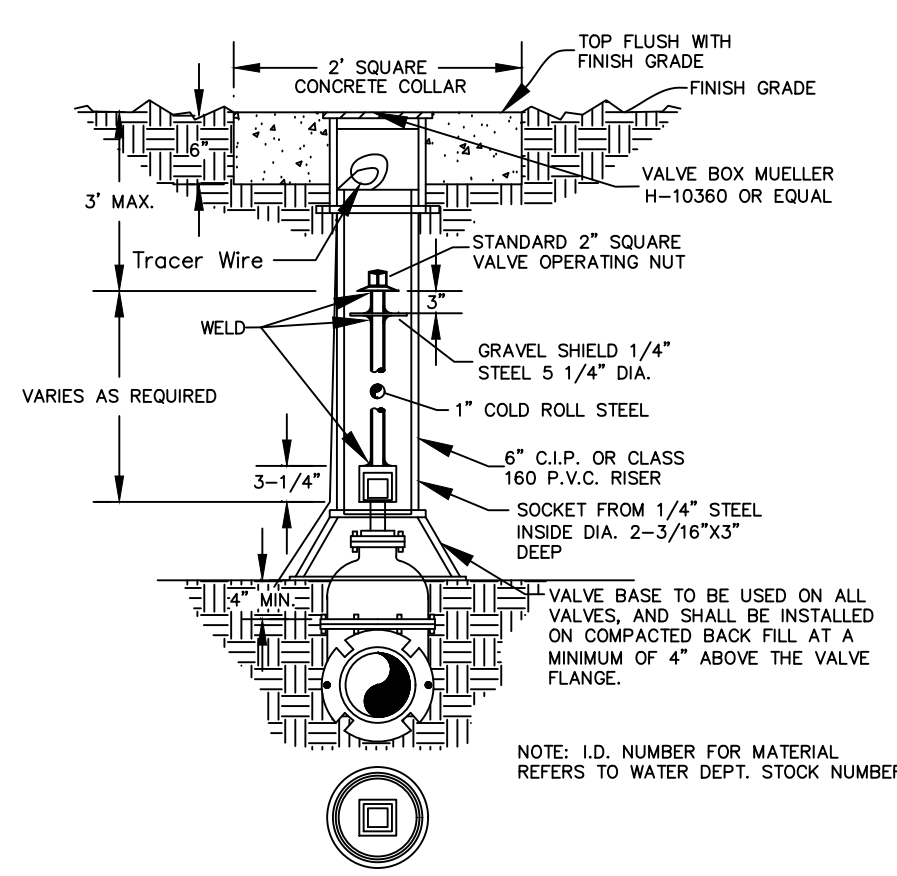
INTERNAL WATER PRESSURE 6" through 12"=200 psi  
 INTERNAL WATER PRESSURE 16" through 30"=210 psi  
 BEARING PRESSURE OF SOIL=2000 psi

**BACKING BLOCKS**  
 NOT TO SCALE



CITY OF O'FALLON  
 ENGINEERING DEPARTMENT  
 O'FALLON, MISSOURI  
**BACKING BLOCK  
 DETAILS AND LOCATIONS**

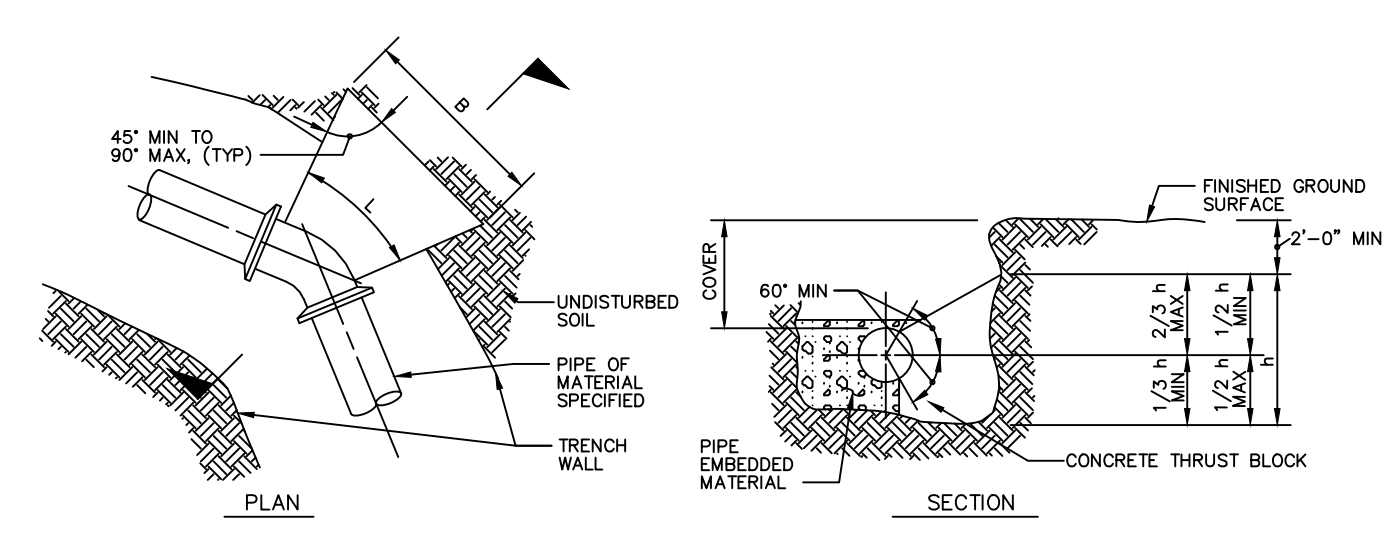
Concrete collar will be in accordance with the Concrete collar detail.



NOTE: I.D. NUMBER FOR MATERIAL REFERS TO WATER DEPT. STOCK NUMBER.

**WATER VALVE DETAIL**  
 NOT TO SCALE

CITY OF O'FALLON  
 ENGINEERING DEPARTMENT  
 O'FALLON, MISSOURI  
**WATER  
 VALVE DETAIL**

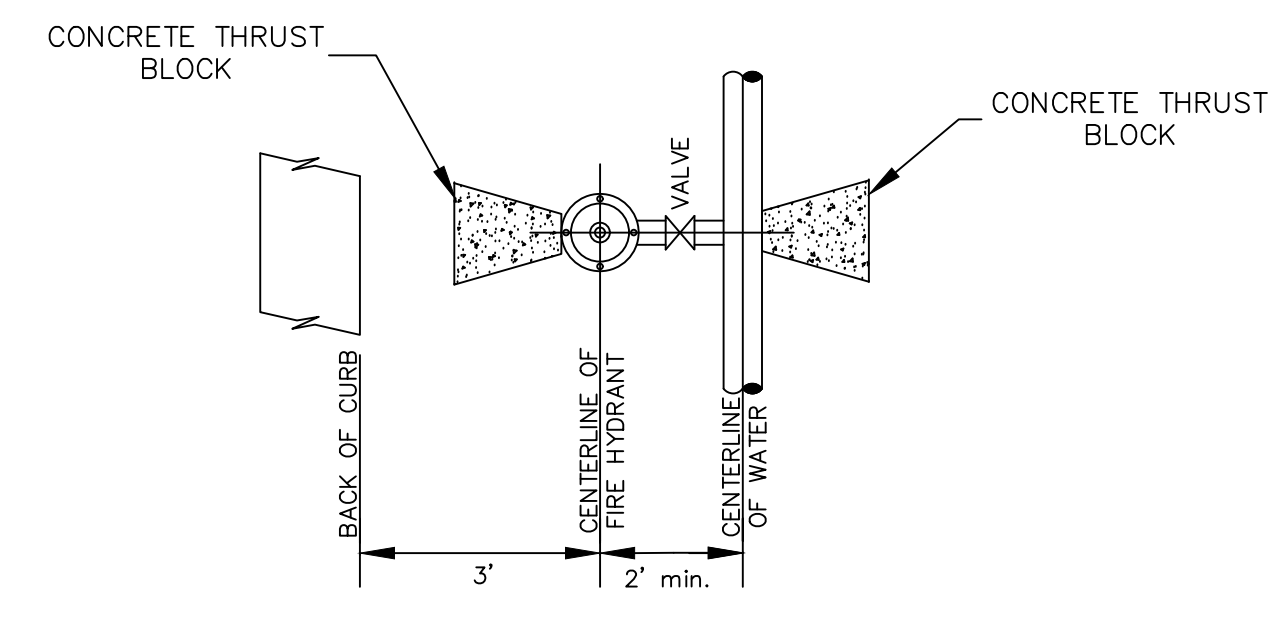


- NOTES:  
 1. AREA OF BLOCK, A = Bxh. BLOCK AREAS ARE SHOWN ON GENERAL LAYOUT OR TABLE.  
 2. B = h = 1/2 L, EXCEPT WHERE TOP OF BLOCK IS WITHIN 2 FEET FROM GROUND SURFACE, THEN B = A/h.  
 3. MINIMUM BLOCK DIMENSION (B & h) SHALL BE AT LEAST OD OF PIPE OR 1 FOOT FOR PIPE OD 12" OR LESS.  
 4. THE BOTTOM 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

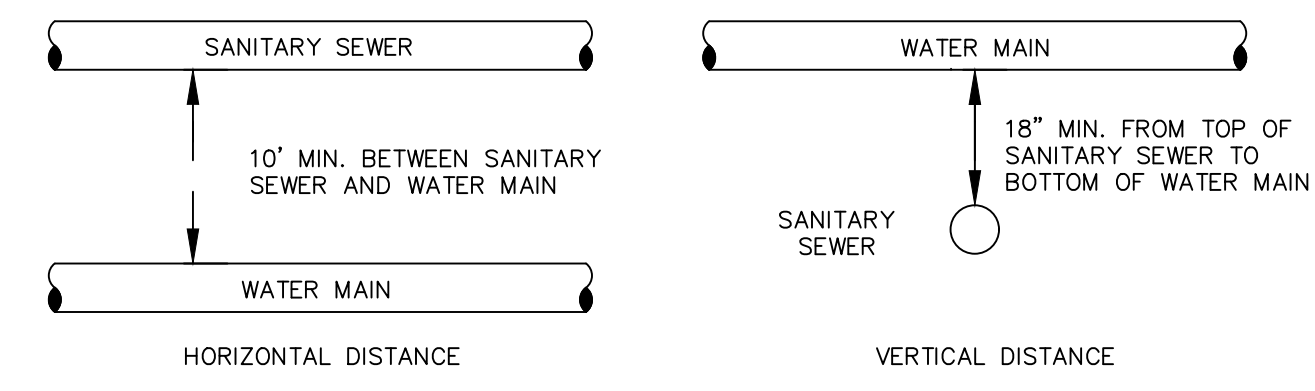
CITY OF O'FALLON  
 ENGINEERING DEPARTMENT  
 O'FALLON, MISSOURI  
**CONCRETE THRUST  
 BLOCKING DETAILS**



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

CITY OF O'FALLON  
 ENGINEERING DEPARTMENT  
 O'FALLON, MISSOURI  
**WATER MAIN  
 FIRE HYDRANT DETAIL**



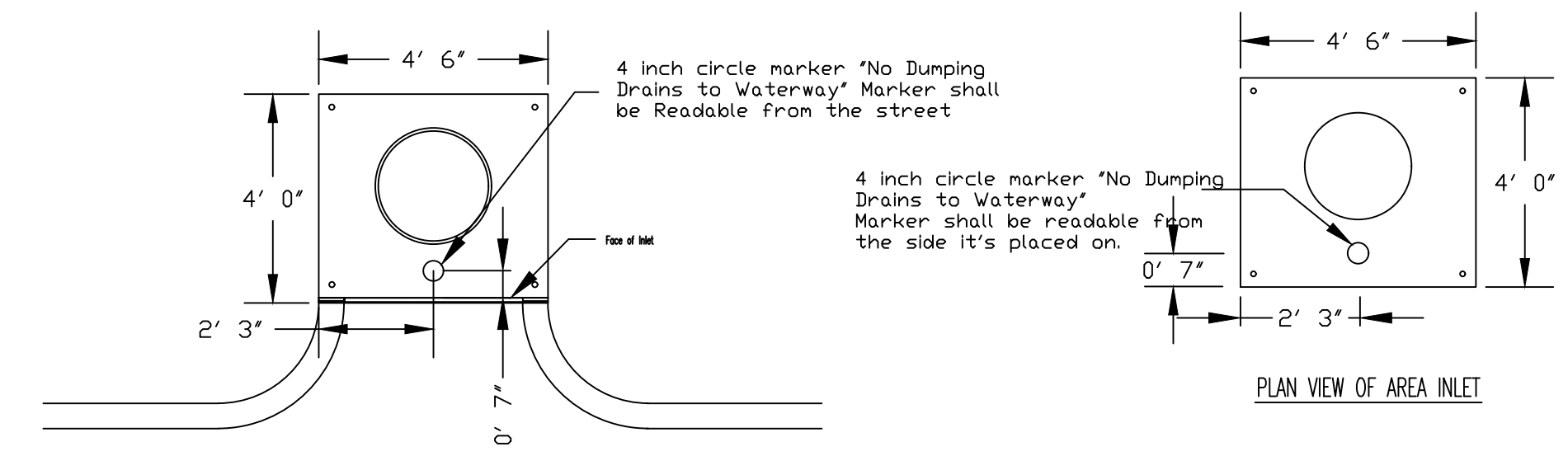
**TYPICAL WATER AND SEWER  
 SEPARATION**  
 NOT TO SCALE

CITY OF O'FALLON  
 ENGINEERING DEPARTMENT  
 O'FALLON, MISSOURI  
**WATER AND SEWER  
 SEPARATION DETAIL**

\* Use ACP International 3 1/2 inch Epoxy Crystal Cap 'No Dumping Drains to Waterways' (SD-W-CC) or DAS Manufacturing, Inc. 4 inch Epoxy Standard Style 'No Dumping to Stream' (#SDS) or equal. The City of O'Fallon must be provided with a symbol/medallion for review and approval prior to installation. Contact the City if any information is needed.

Size	Style	Adhesive	Message (Part #)
3 7/8" TO 4"	Crystal Cap OR Standard Style	Epoxy	No Dumping Drains to Waterway

City will also allow the precast inlet stone with a similar message as an approved alternate to the marker.



**Public or Private inlets**

CITY OF O'FALLON  
 ENGINEERING DEPARTMENT  
 O'FALLON, MISSOURI  
**STORM DRAIN  
 MARKER LOCATION**

**REFERENCE  
 ONLY**

REVISIONS

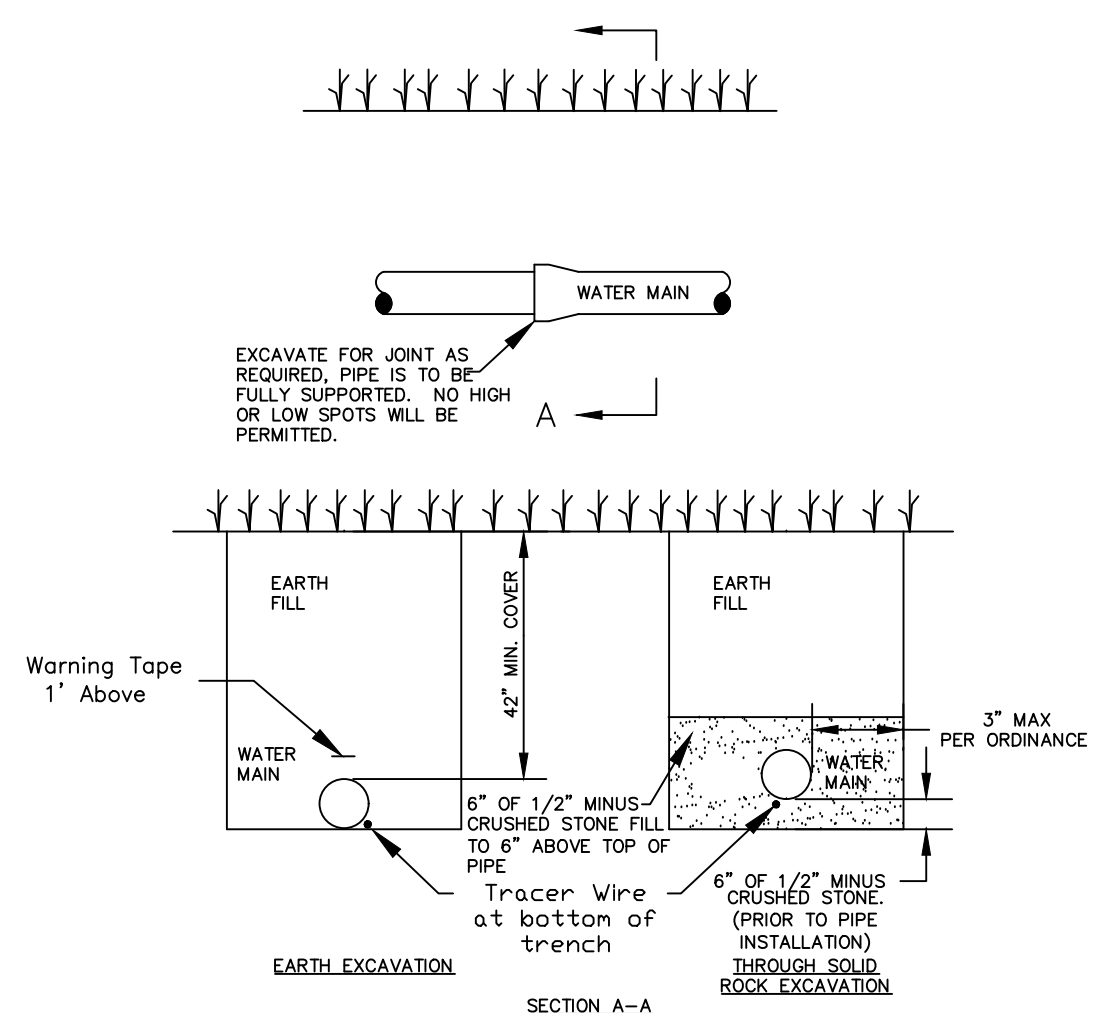
06-09-22	CITY COMMENTS
06-27-22	CITY COMMENTS
07-06-22	CITY COMMENTS
08-23-22	CITY COMMENTS
09-16-22	CITY COMMENTS
11-22-22	CLIENT REVISIONS
12-01-22	CITY COMMENTS
01-25-23	CLIENT REVISIONS

DISCLAIMER OF RESPONSIBILITY  
 I hereby specify that the documents intended to be authorized by my seal are limited to this sheet, and I hereby disclaim any responsibility for all other drawings, specifications, estimates, reports or other documents or instruments relating to or intended to be used for any part or parts of the architectural or engineering project or survey.

**ENGINEERING  
 PLANNING  
 SURVEYING**  
 221 Point View Blvd.  
 St. Charles, MO 63301  
 636-928-5562  
 FAX 928-1718

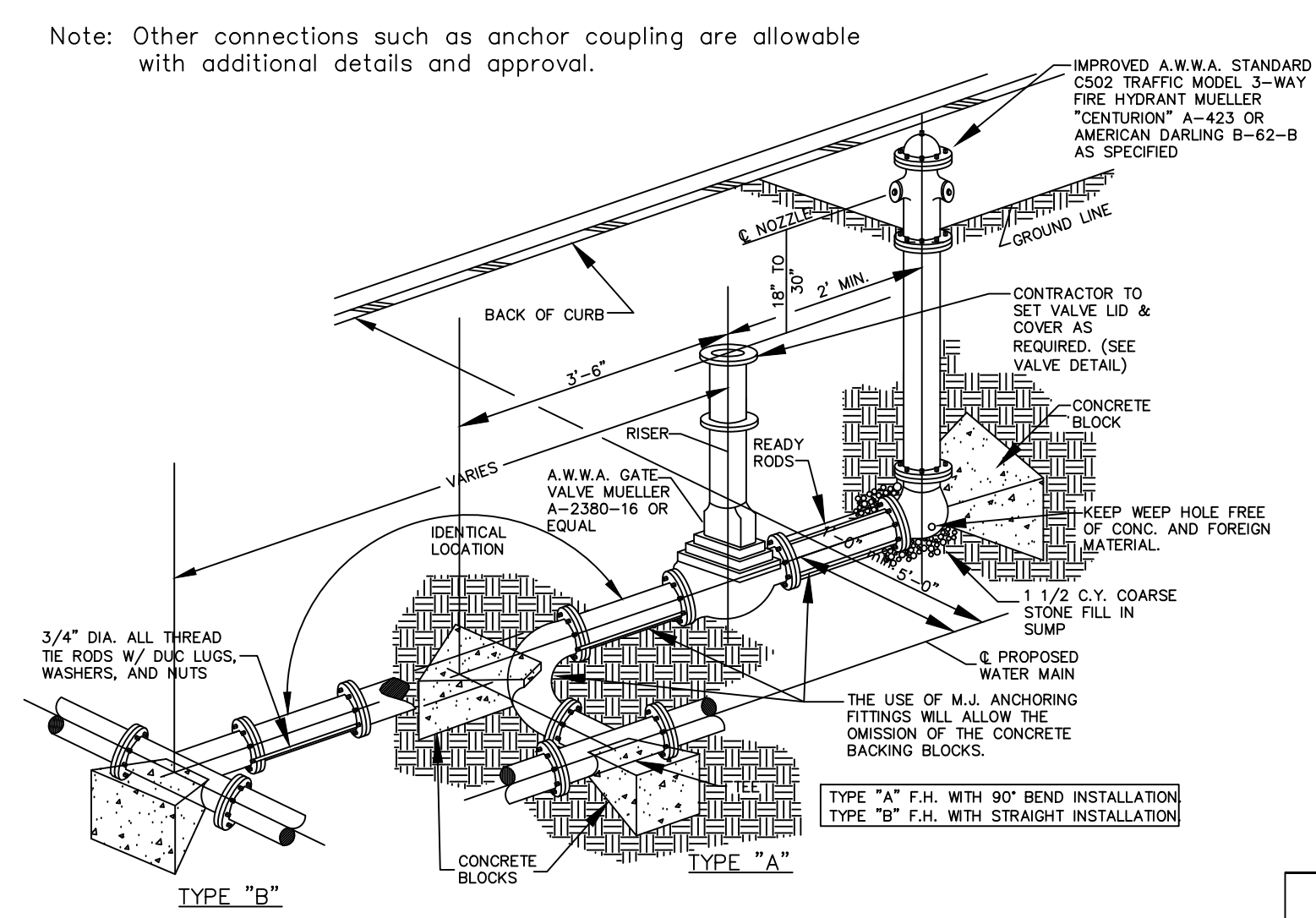
**PROJECT TITLE:**  
 Anjon Manufacturing  
 South Cool Springs Road

Box Project # 99-06393 Issue Date: 04/01/2022



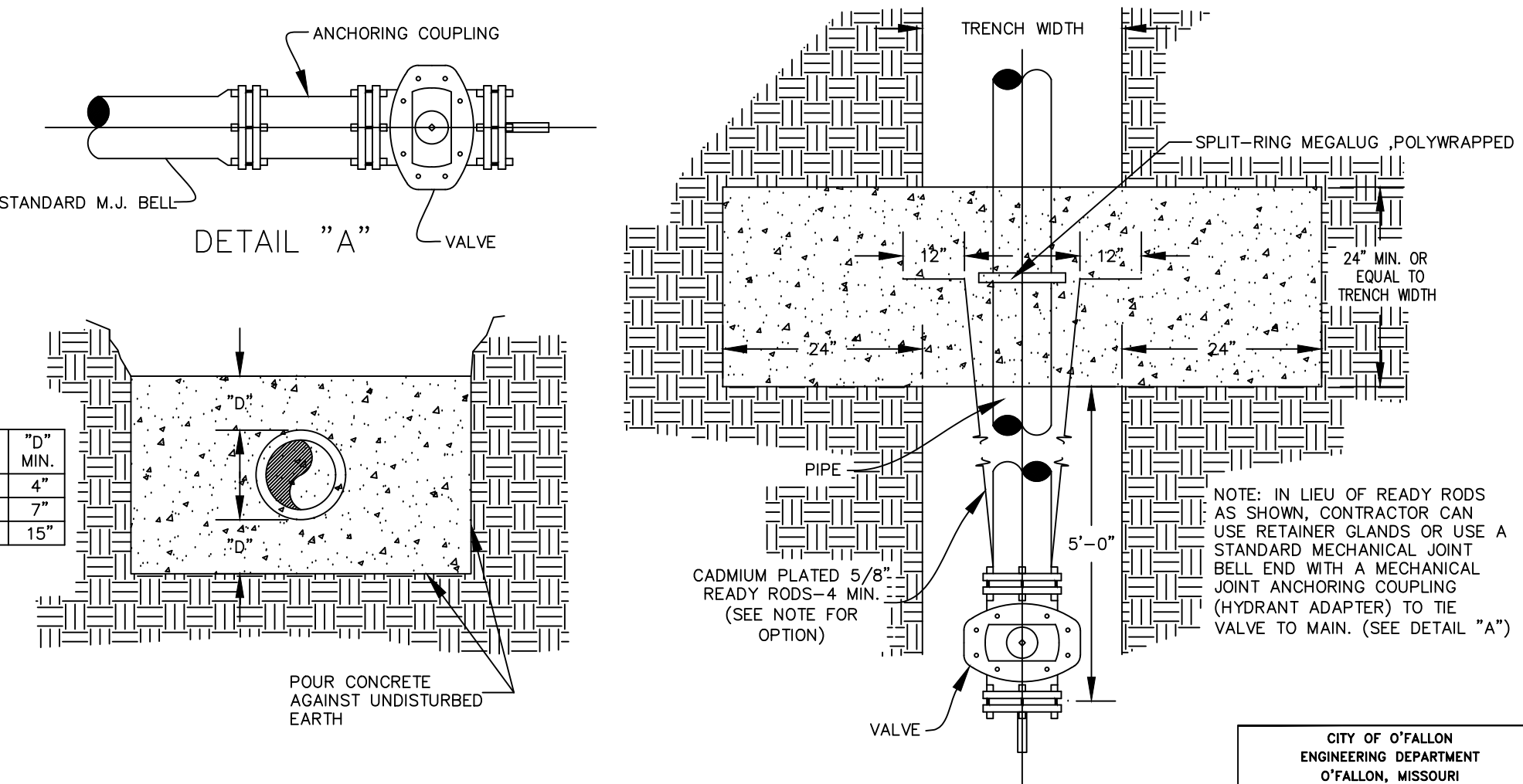
**TYPICAL WATER MAIN  
 INSTALLATION DETAILS**  
 NOT TO SCALE

CITY OF O'FALLON  
 ENGINEERING DEPARTMENT  
 O'FALLON, MISSOURI  
**WATER MAIN  
 INSTALLATION DETAIL**



**FIRE HYDRANT DETAIL**  
 NOT TO SCALE

CITY OF O'FALLON  
 ENGINEERING DEPARTMENT  
 O'FALLON, MISSOURI  
**FIRE HYDRANT  
 DETAILS**



**CROSS BLOCK DETAIL**  
 NOT TO SCALE

CITY OF O'FALLON  
 ENGINEERING DEPARTMENT  
 O'FALLON, MISSOURI  
**CROSS BLOCK  
 DETAILS**

**ENGINEER SEAL DOES  
 NOT APPLY TO CITY OF  
 O'FALLON DETAILS**

**Owner:**  
 Lottes Springs, LLC  
 1000 Liberty Industrial Drive  
 O'Fallon, MO 63366  
 800-553-5605

**P+Z No.** #21-011066  
**Approval Date:** 02-07-22

**City No.**

**Page No.**

**C12**

**DETAILS**