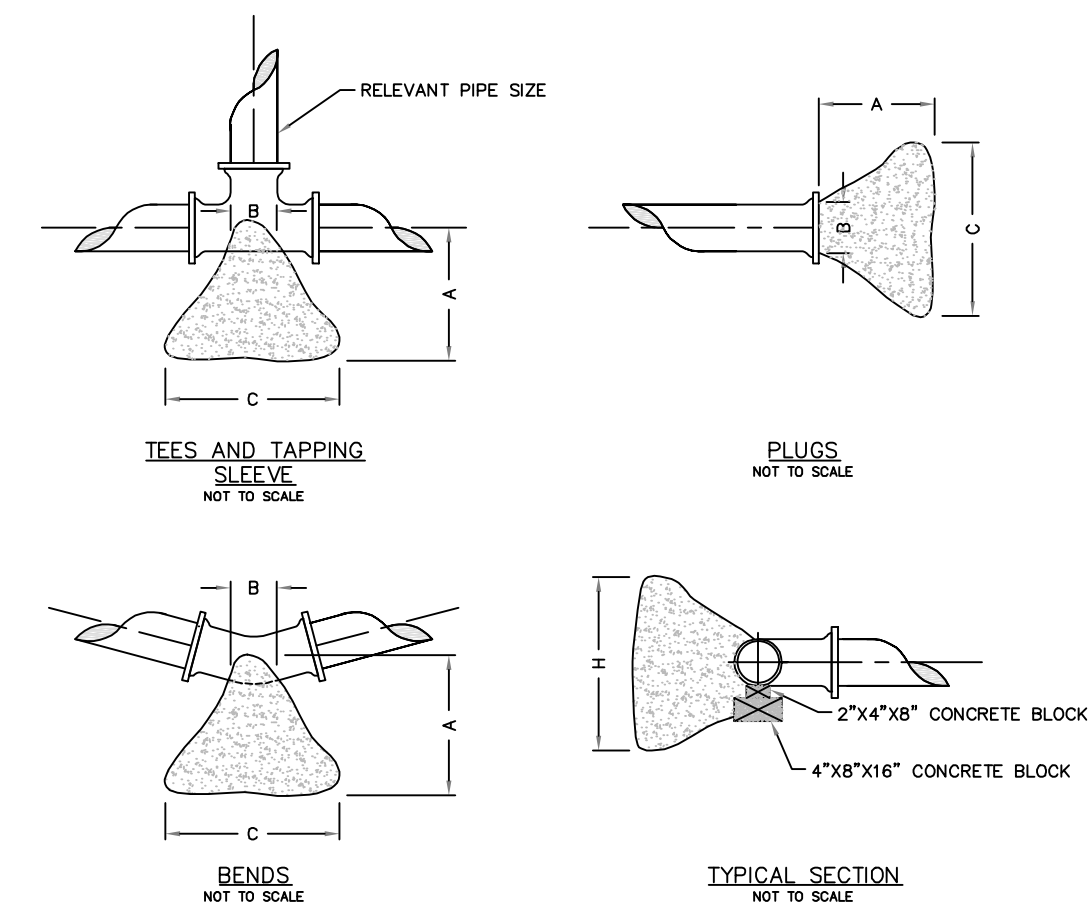


NOTE: THIS DETAIL IS FROM PWSD#2



THRUST BLOCK DIMENSIONS - INCHES

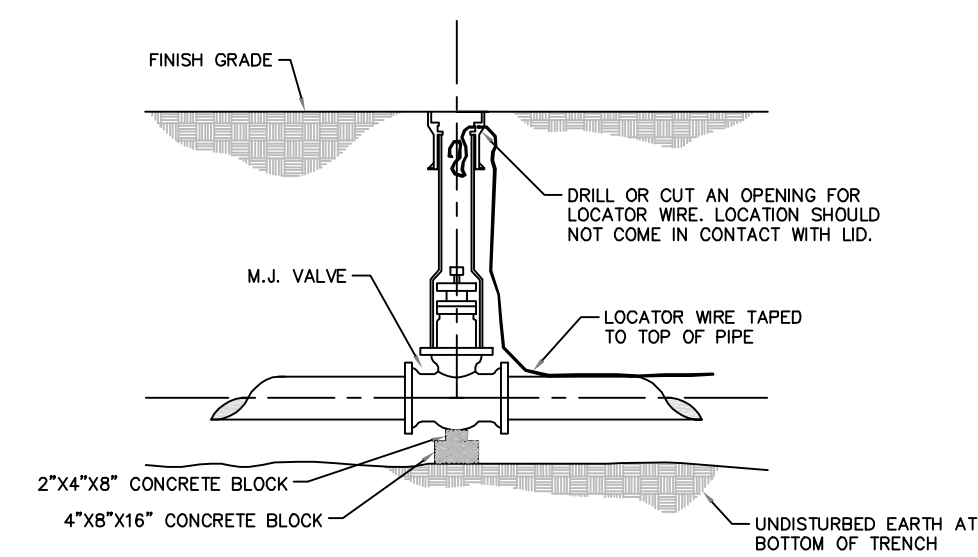
PIPE DIA.	ALL FTGS.		TEE PLUG TAPPING		90 DEGREE BEND		45 DEGREE BEND		22-1/2 BEND		11-1/4 BEND	
	A	B	C	H	C	H	C	H	C	H	C	H
4	14	4	24	12	26	15	18	12	12	12	12	12
6	16	6	36	18	36	24	30	18	24	12	12	12
8	20	8	36	30	42	36	36	24	24	18	18	12
10	20	10	48	36	66	36	36	36	28	24	18	18
12	24	12	66	36	82	42	52	36	40	24	28	18

NOTE
FOR FITTINGS LARGER THAN 12", SPECIAL RESTRAINT DESIGNS ARE REQUIRED.

HORIZONTAL THRUST BLOCKING
DETAIL "C"

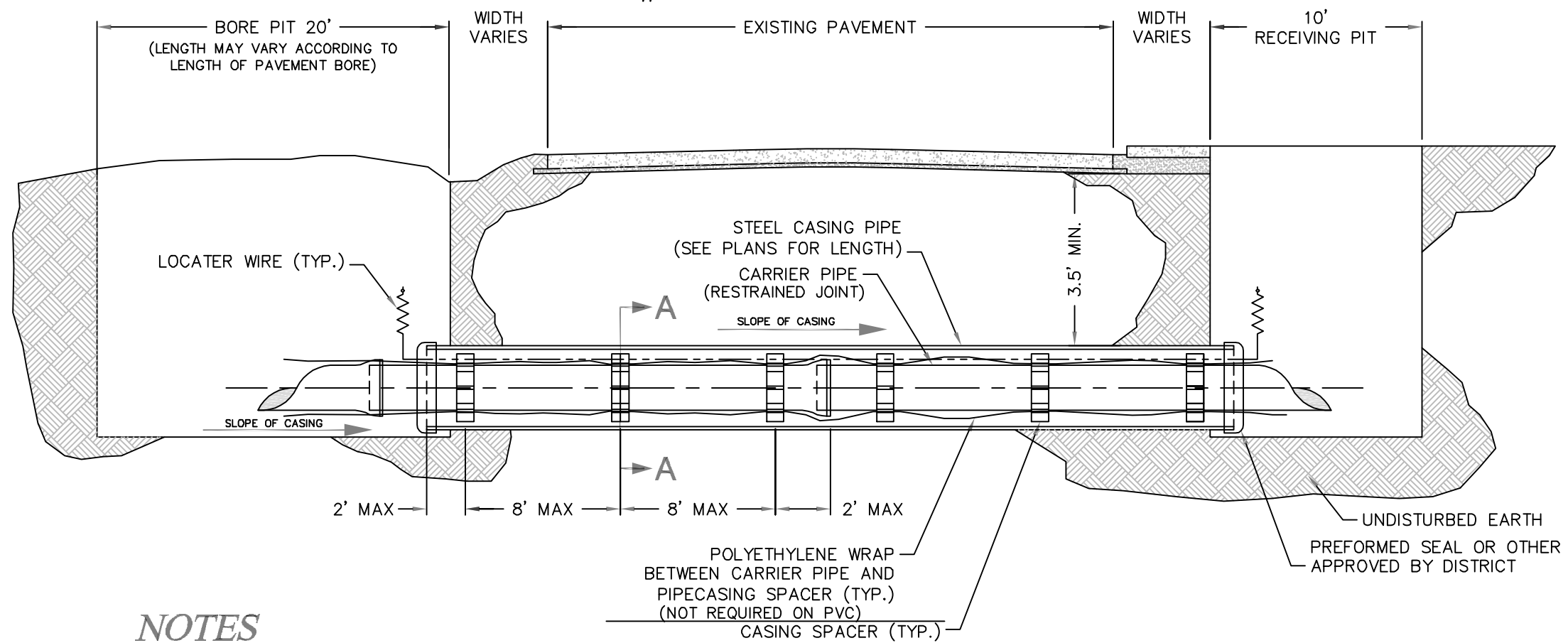
NOTE: THIS DETAIL IS FROM PWSD#2

Buffalo box is an acceptable product to use.
Tyler 562-S and 564-S are acceptable products.

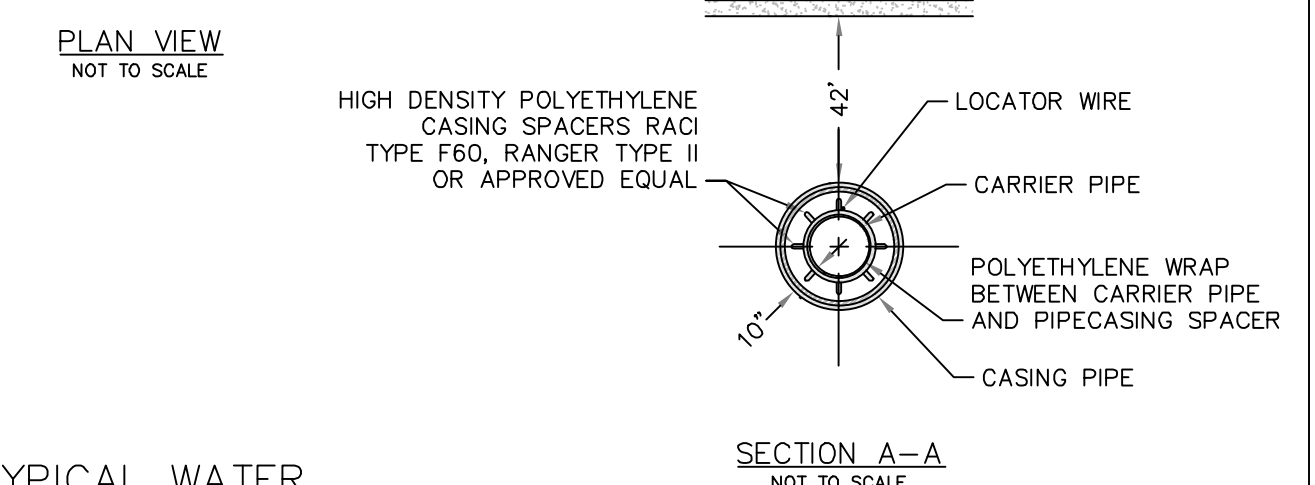


GATE VALVE DETAIL
NOT TO SCALE
DETAIL "D"

NOTE: THIS DETAIL IS FROM PWSD#2

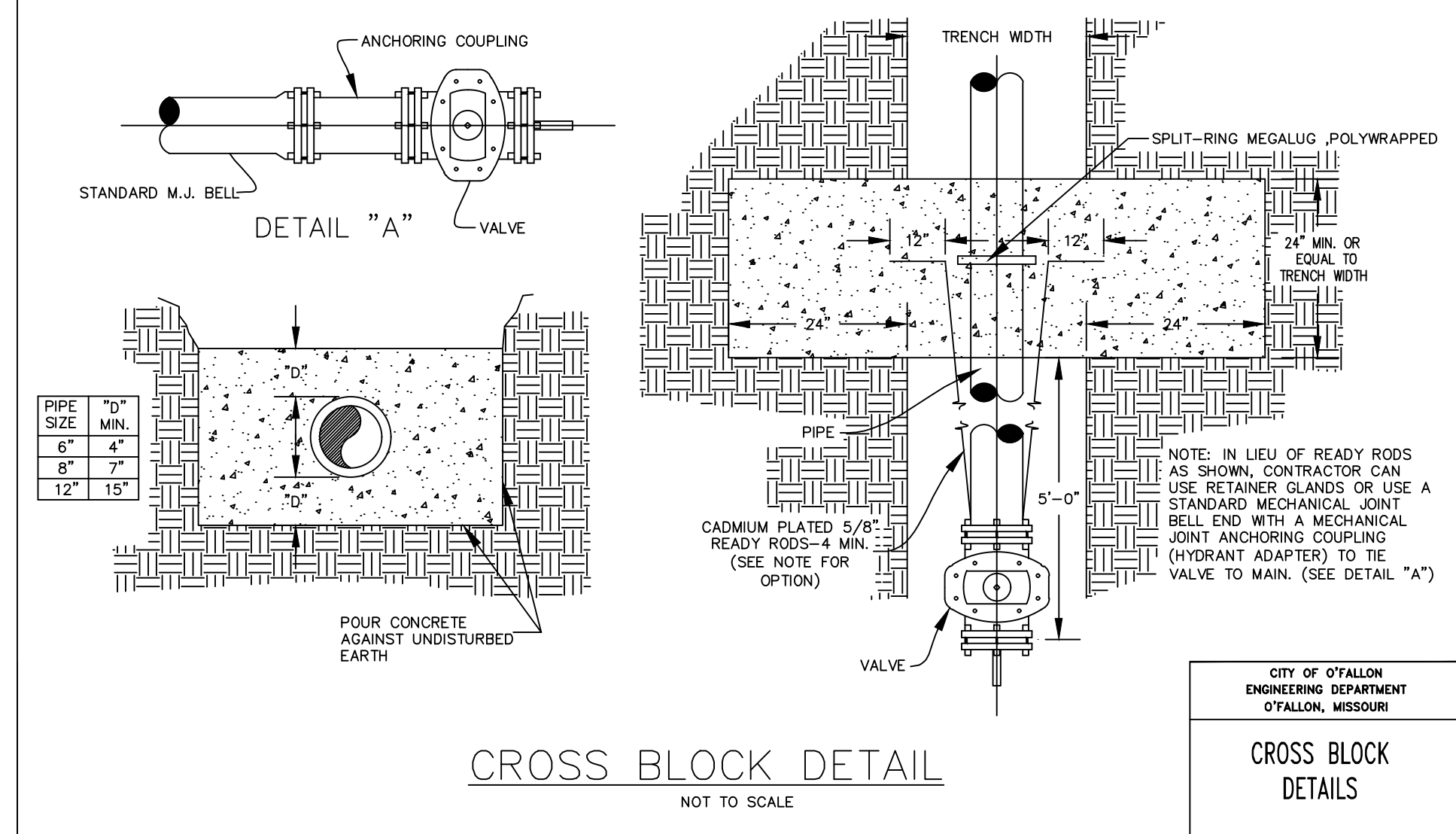


- NOTES**
- INSTALLATION OF THE CASING AND CARRIER PIPES SHALL MEET THE REQUIREMENTS OF PUBLIC WATER SUPPLY DISTRICT No. 2 OF ST. CHARLES COUNTY.
 - CASING PIPES FOR ROAD AND HIGHWAY CROSSINGS SHALL BE WELDED STEEL PIPE WITH A MINIMUM WALL THICKNESS OF 1/4" NON-COATED AND SHALL HAVE A MINIMUM DIAMETER OF 10" LARGER THAN THE NOMINAL SIZE OF THE CARRIER PIPE.
 - THE CARRIER PIPE SHALL BE RESTRAINED JOINT PIPE

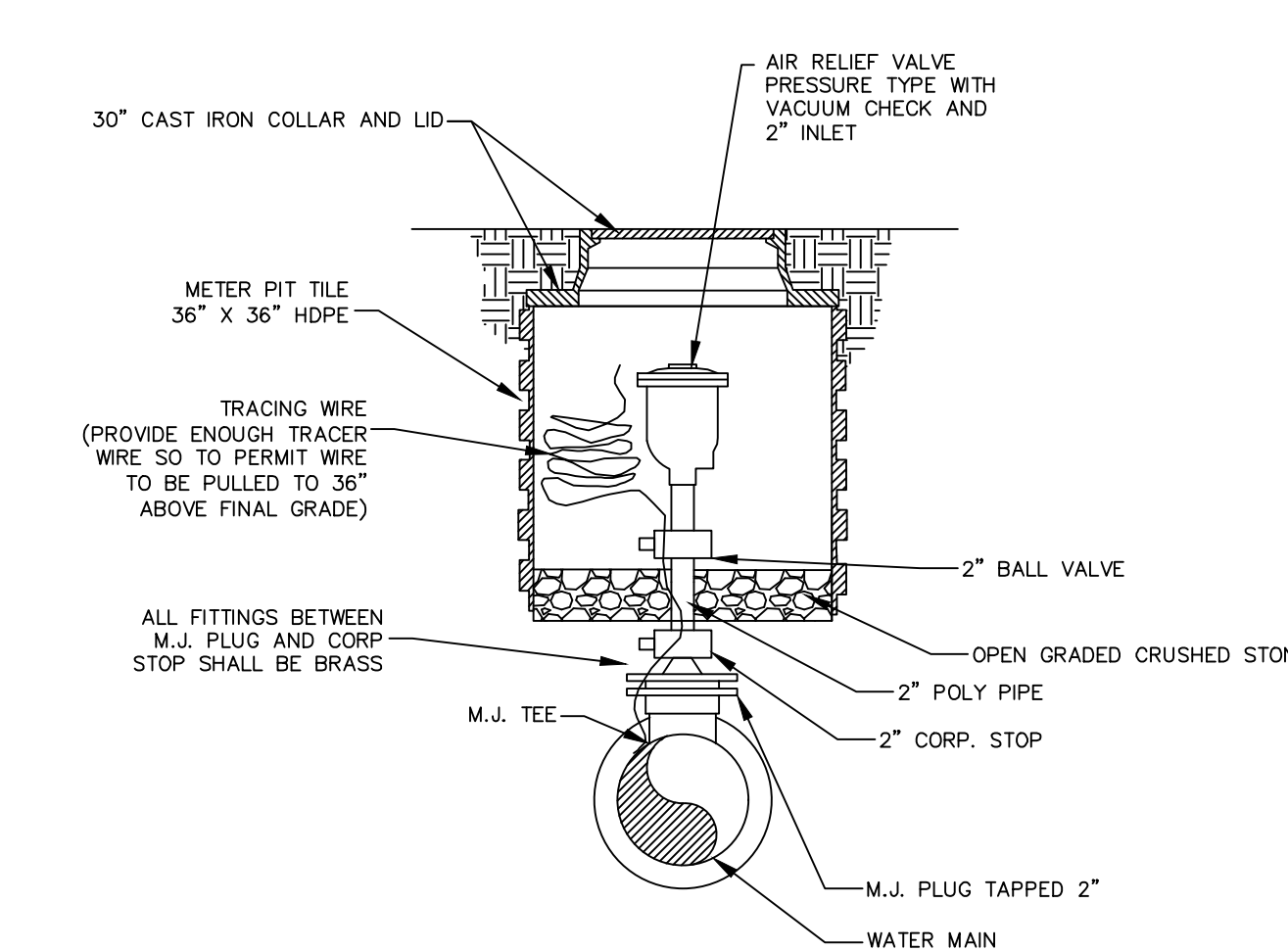


TYPICAL WATER BORE AND ENCASEMENT
DETAIL "H"

FOR SANITARY SEWER BORES, SEE THE MSD DETAIL

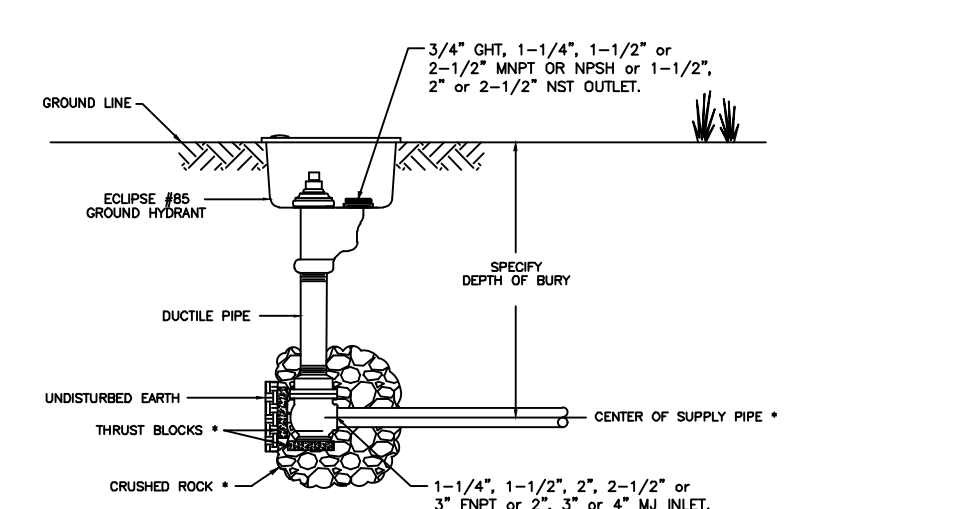


CROSS BLOCK DETAIL
NOT TO SCALE



AIR RELIEF ASSEMBLY
NOT TO SCALE

ECLIPSE NO. 85 GROUND HYDRANT



Ground Hydrants shall be self-draining, non-freezing, compression type with a 1-3/8" main opening, and operated with a "T" handle operating handle. Inlet shall be (2", 2-1/2" & 3" FNPT, or 2", 3" or 4" M). Outlet shall be (3/4" GHT or 1", 1-1/4", 1-1/2", 2" or 2-1/2" MNPT or 1-1/2", 2" or 2-1/2" NST).

Hydrants shall have a (ductile iron (STD), galvanized steel, stainless steel, or brass) exterior casing pipe, a galvanized (STD), stainless steel or brass) interior non-turning operating rod with a heavy wall (cast iron (STD), or brass) box and locking lid.

Principal interior operating parts shall be brass, bronze and aluminum and be removable for servicing without excavating the hydrant.

Ground Hydrants shall be set in 4 cubic feet of crushed stone to allow for proper drainage of the hydrant. Recommendations of the AWWA should followed when installing the hydrant.

Hydrants shall be Eclipse No. 85 Eclipse Blow-Off Hydrant as manufactured by John C. Kupferle Company, St. Louis, MO or approved equal.

BLOW-OFF DETAIL

THIS DRAWING IS THE PROPERTY OF THE KUPFERLE COMPANY. IT IS NOT TO BE USED OR REPRODUCED WITHOUT PERMISSION OF THE OWNER.

DATE: 8-26-09
PART NO. 85 BLOW-OFF HYDRANT SCALE TO FIT

McDONALD'S CONSTRUCTION PLAN
A TRACT OF LAND BEING LOT 4 OF BRYAN ROAD COMMERCIAL, PLAT 1" RECORDED AS DOCUMENT 2023R-038185 IN THE ST CHARLES COUNTY RECORDS, BEING IN THE SOUTHWEST QUARTER OF FRACTIONAL SECTION 30, TOWNSHIP 47 NORTH, RANGE 3 EAST OF THE FIFTH PRINCIPAL MERIDIAN, CITY OF OFALLON, ST. CHARLES COUNTY, MISSOURI

Civil & Environmental Consultants, Inc.
3000 Little Hills Expressway, Suite 102
St. Charles, MO 63301
314-656-4566 · 866-250-3679
www.cecinc.com

PATRICK T. BENNETT
(MO PE# 2002003134)
PROFESSIONAL CIVIL ENGINEER
*HAND SIGNATURE ON FILE

DRAWN BY:	MML
CHECKED BY:	GAS
APPROVED BY:	PTB
PROJECT NO:	388-966

Developer / Owner Information
McDONALD'S RESTAURANT
NSN 43008 (024-1305)
962 BRYAN ROAD
O'FALLON, MISSOURI

P+Z No. 24-00803
Approval Date 04/08/2024
Permit No.
Page No. **C807**