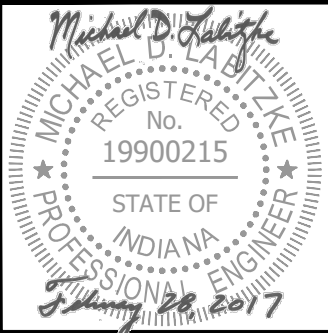


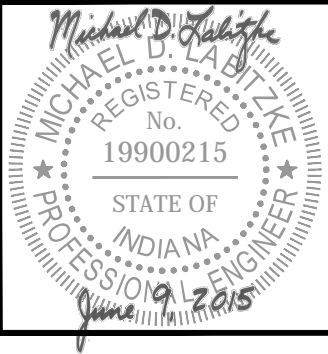
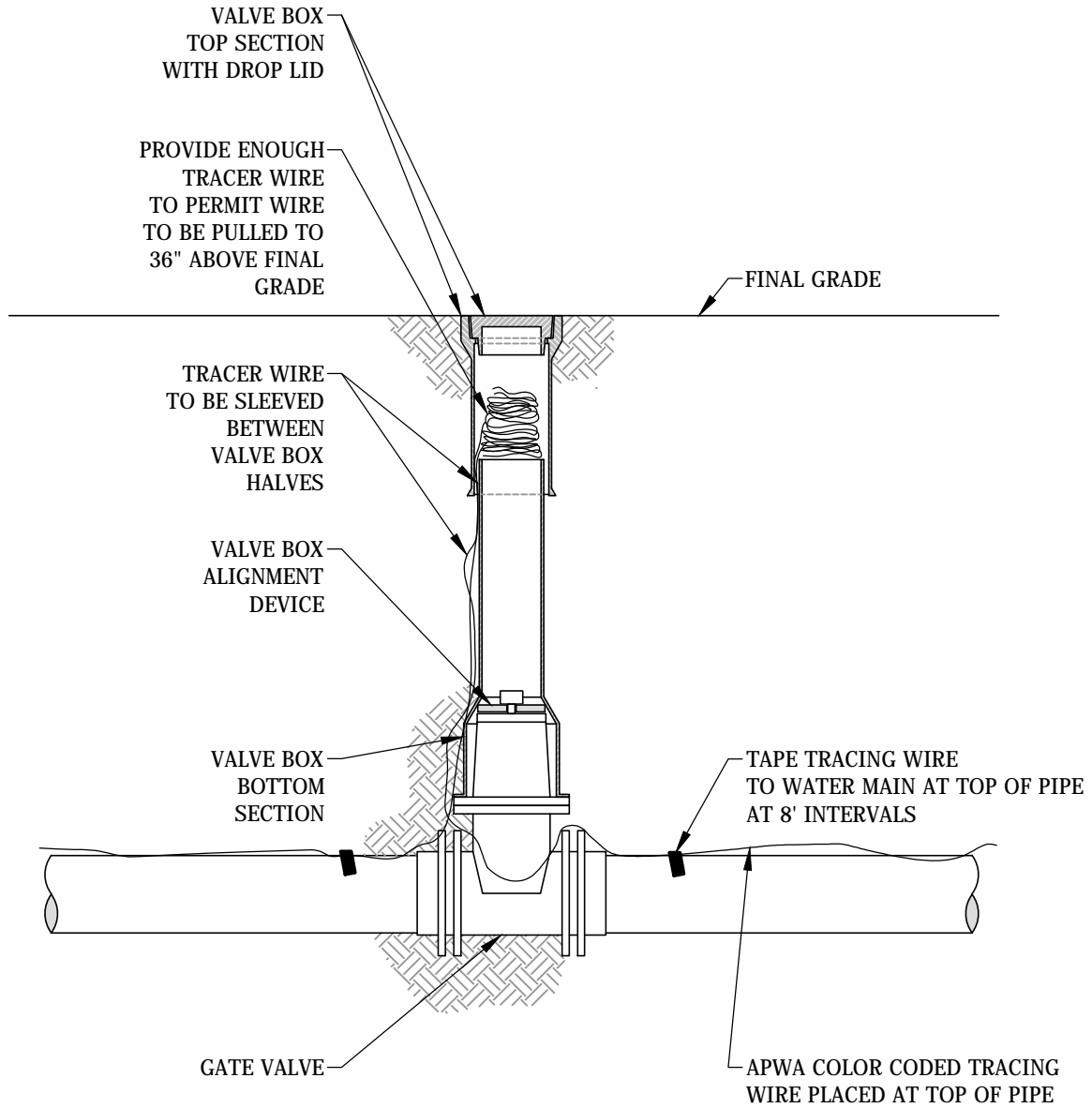
File: J:\ENGINEER\AUTOCAD\Standards\Detail Drawings\Water\DW01R--Typical Water Main Trench.dwg



TYPICAL WATER MAIN TRENCH

Approved: 02/28/17	Adopted: 02/28/17	Figure DW01
Approved By: Michael D. Labitzke, P.E.	Scale: N.T.S.	

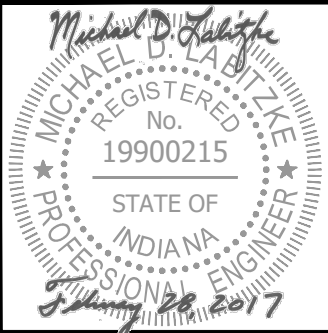
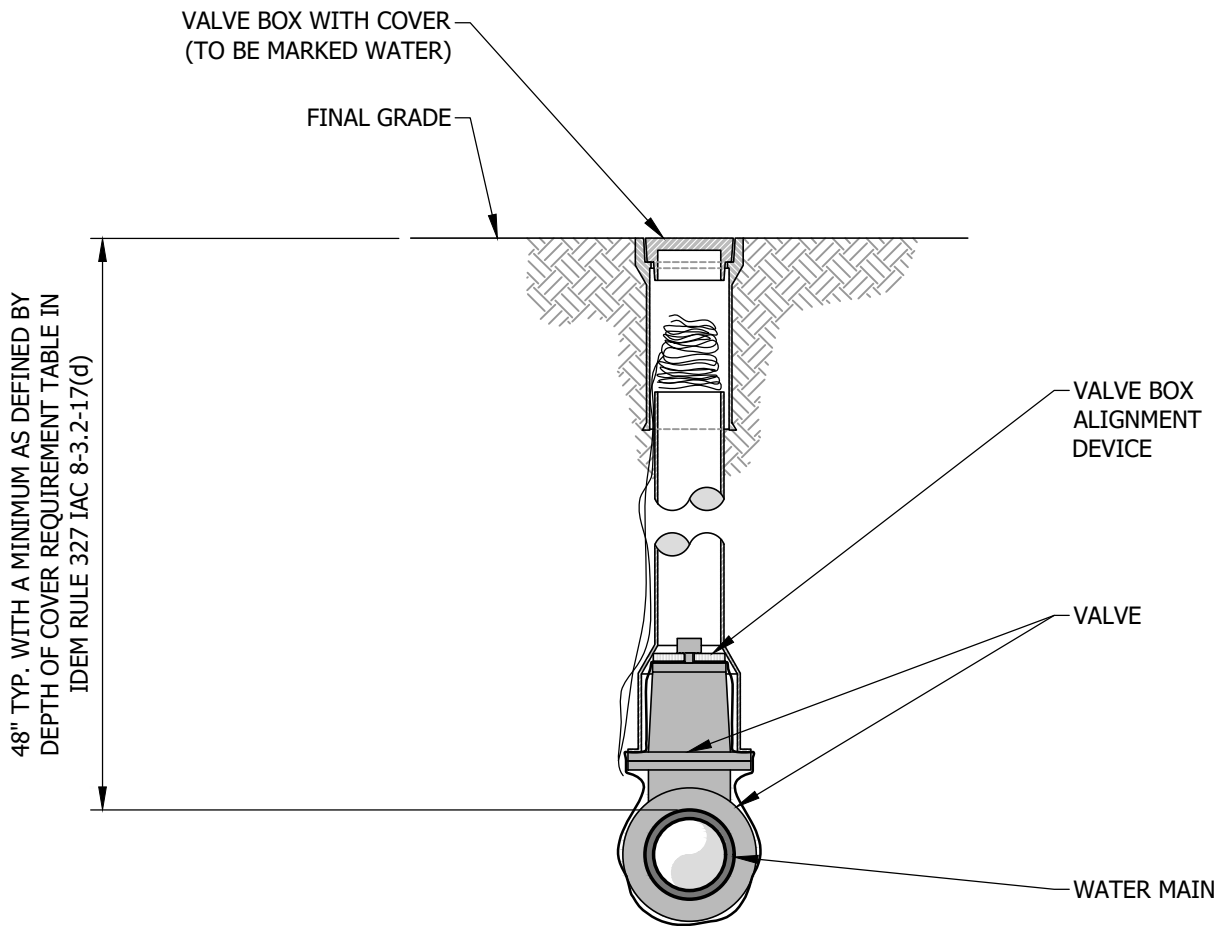
File: J:\ENGINEER\AUTOCAD\Standards\Detail Drawings\Water\DW02- Tracing Wire Detail.dwg



TRACING WIRE DETAIL

Approved: 06/09/15	Adopted: 06/09/15	Figure DW02
Approved By: Michael D. Labitzke, P.E.	Scale: N.T.S.	

File: J:\ENGINEER\AUTOCAD\Standards\Detail Drawings\Water\DW03R- Gate Valve Installation Detail.dwg



GATE VALVE INSTALLATION DETAIL

Approved: 02/28/17

Adopted: 02/28/17

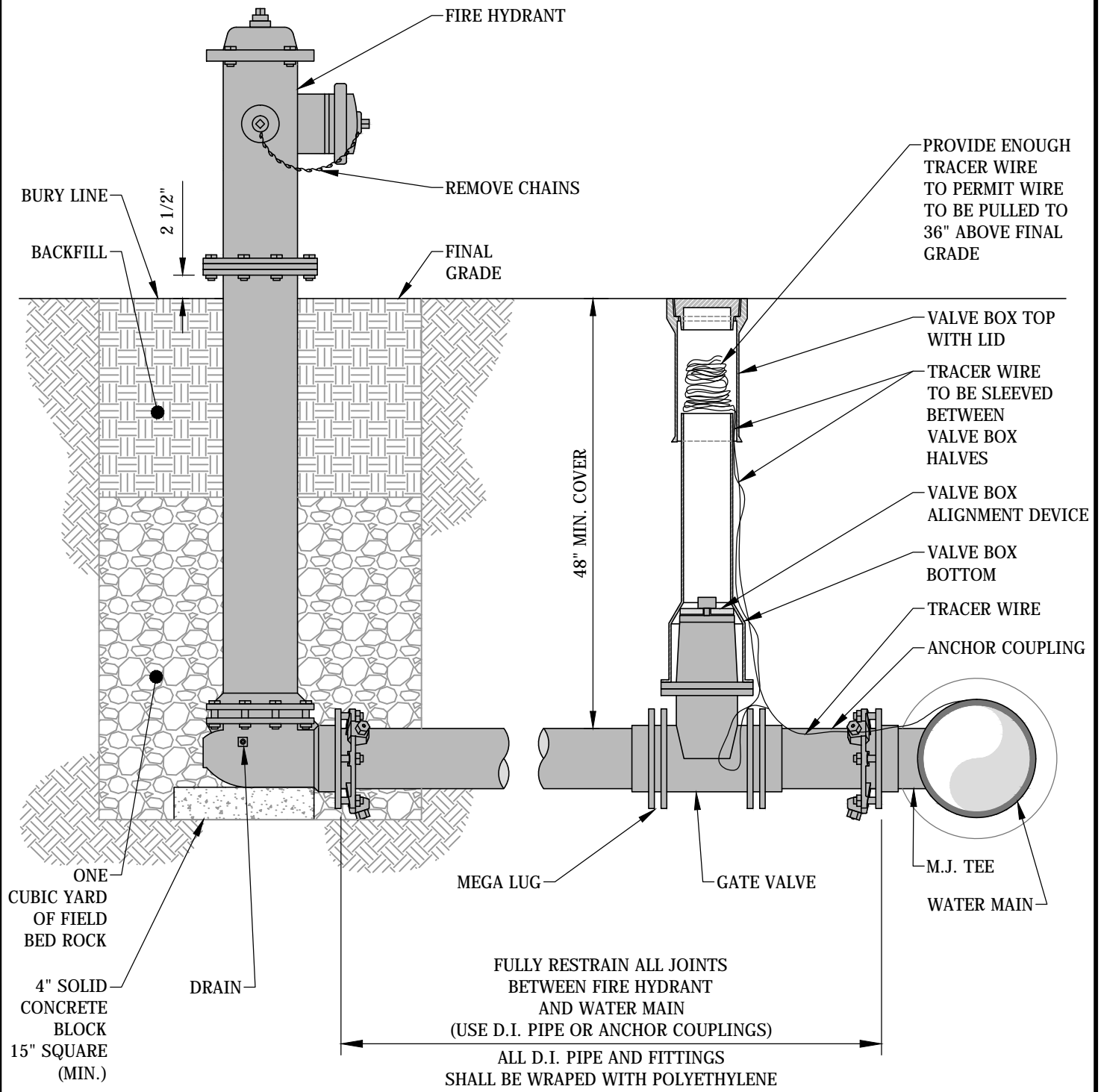
Figure

Approved By: Michael D. Labitzke, P.E.

Scale: N.T.S.

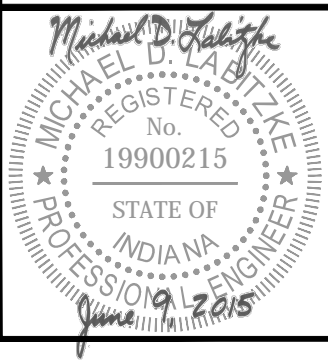
DW03

File: J:\ENGINEER\AUTOCAD\Standards\Detail Drawings\Water\DW04-Fire Hydrant Assembly.dwg



ONE CUBIC YARD OF FIELD BED ROCK
4" SOLID CONCRETE BLOCK 15" SQUARE (MIN.)
DRAIN

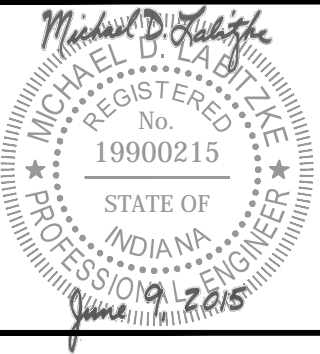
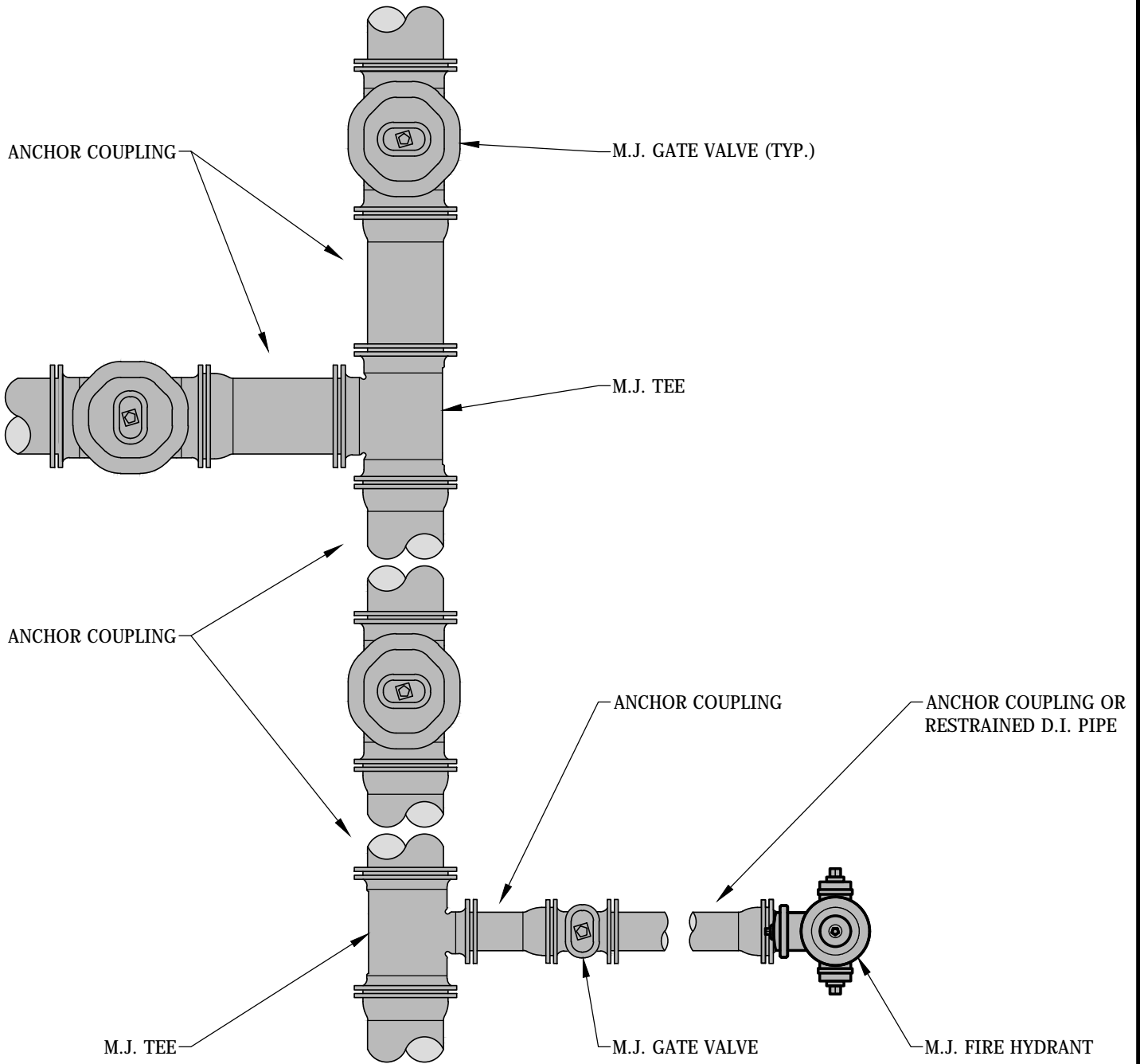
FULLY RESTRAIN ALL JOINTS BETWEEN FIRE HYDRANT AND WATER MAIN (USE D.I. PIPE OR ANCHOR COUPLINGS)
ALL D.I. PIPE AND FITTINGS SHALL BE WRAPPED WITH POLYETHYLENE



FIRE HYDRANT ASSEMBLY

Approved: 06/09/15	Adopted: 06/09/15	Figure DW04
Approved By: Michael D. Labitzke, P.E.	Scale: N.T.S.	

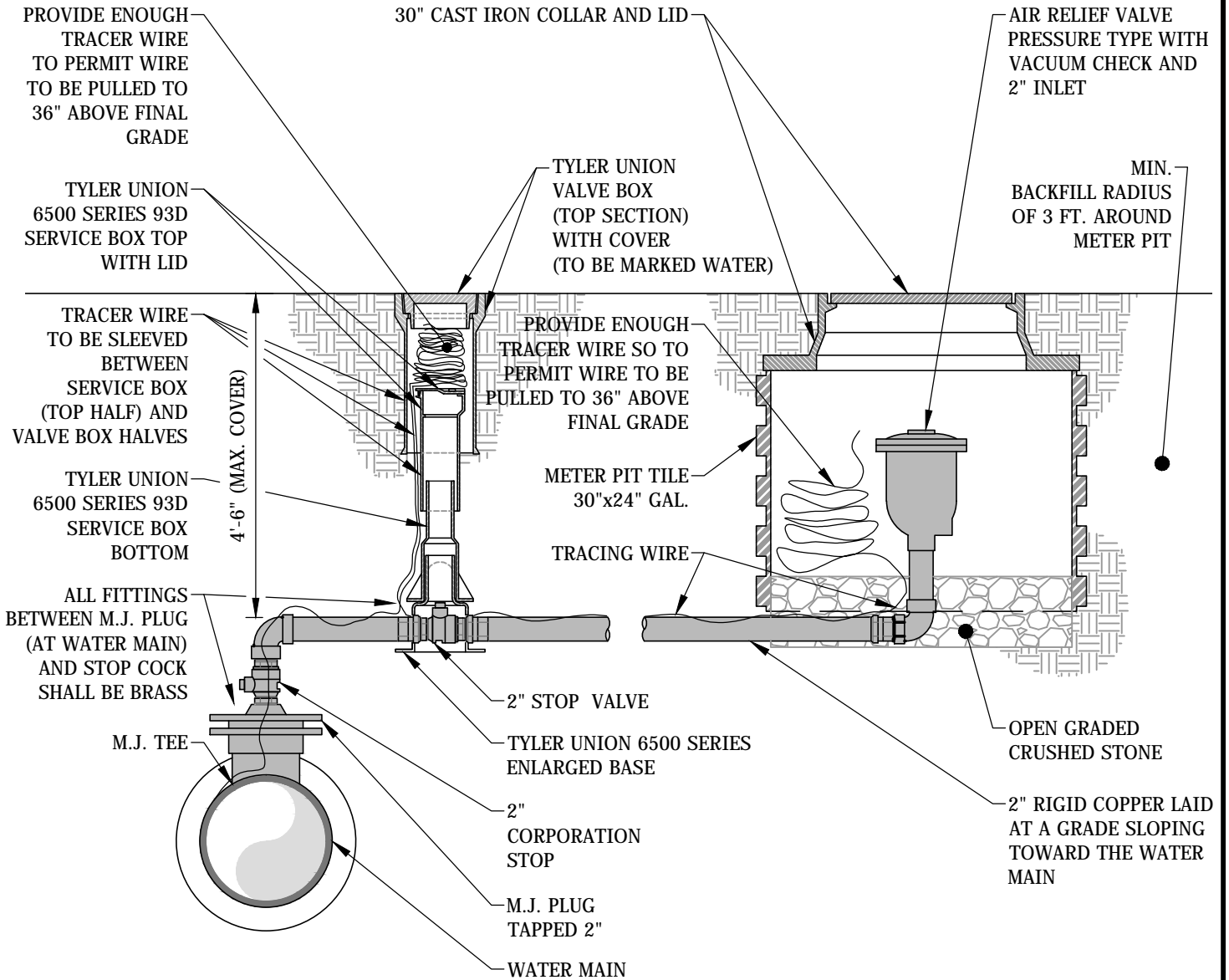
File: J:\ENGINEER\AUTOCAD\Standards\Detail Drawings\Water\DW05-Anchor Coupling Detail.dwg



ANCHOR COUPLING DETAIL

Approved: 06/09/15	Adopted: 06/09/15	Figure DW05
Approved By: Michael D. Labitzke, P.E.	Scale: N.T.S.	

File: J:\ENGINEER\AUTOCAD\Standards\Detail Drawings\Water\DW06-Air Relief Assembly (non-traffic rated).dwg



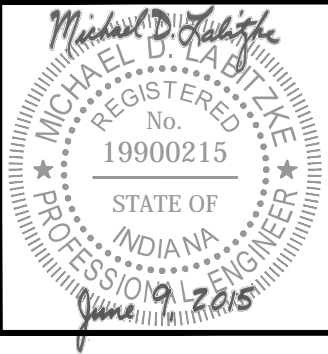
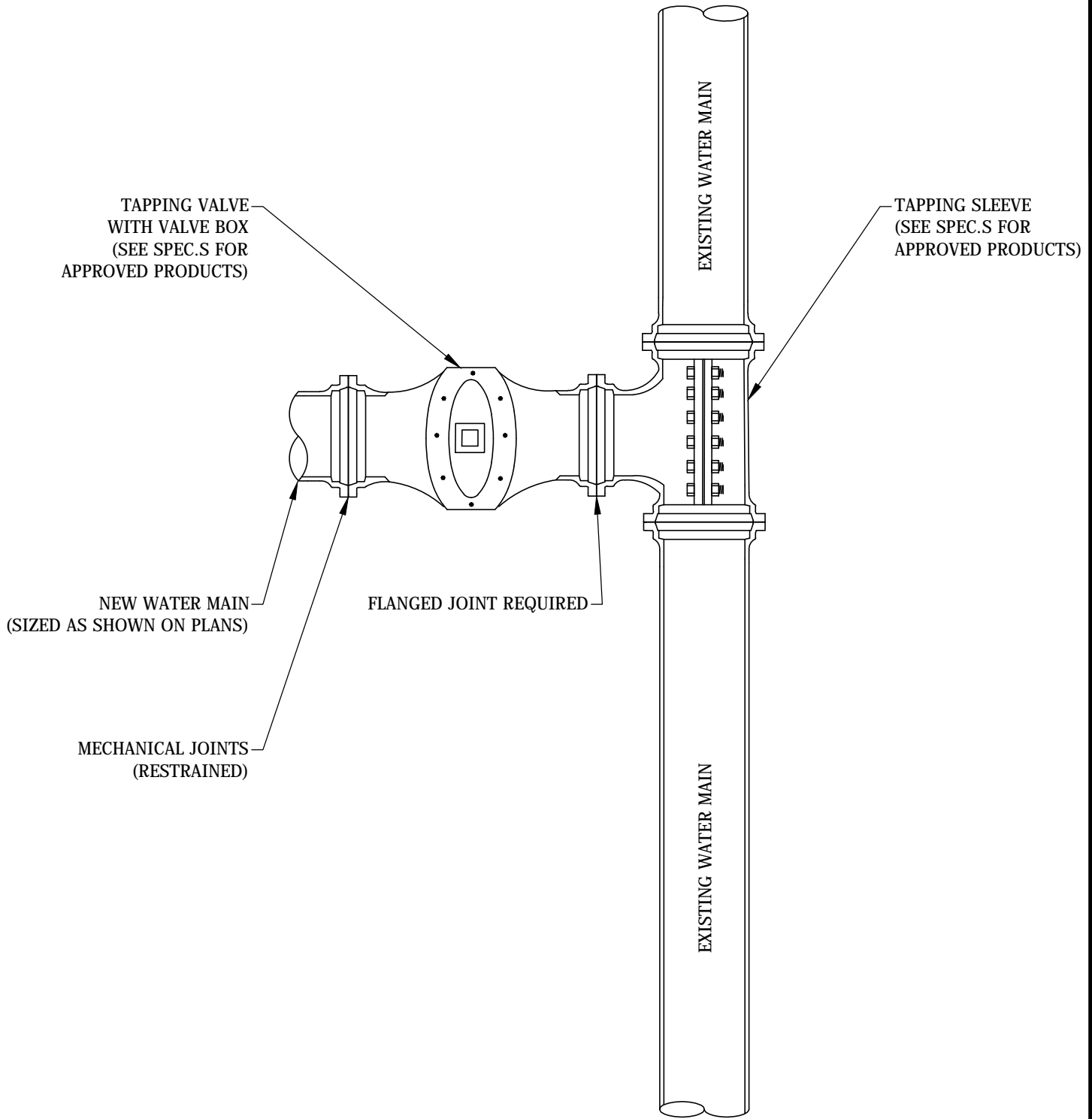
Michael D. Labitzke
 REGISTERED
 No. 19900215
 STATE OF INDIANA
 PROFESSIONAL ENGINEER
 June 9, 2015



AIR RELIEF ASSEMBLY (NON-TRAFFIC RATED)

Approved: 06/09/15	Adopted: 06/09/15	Figure DW06
Approved By: Michael D. Labitzke, P.E.	Scale: N.T.S.	

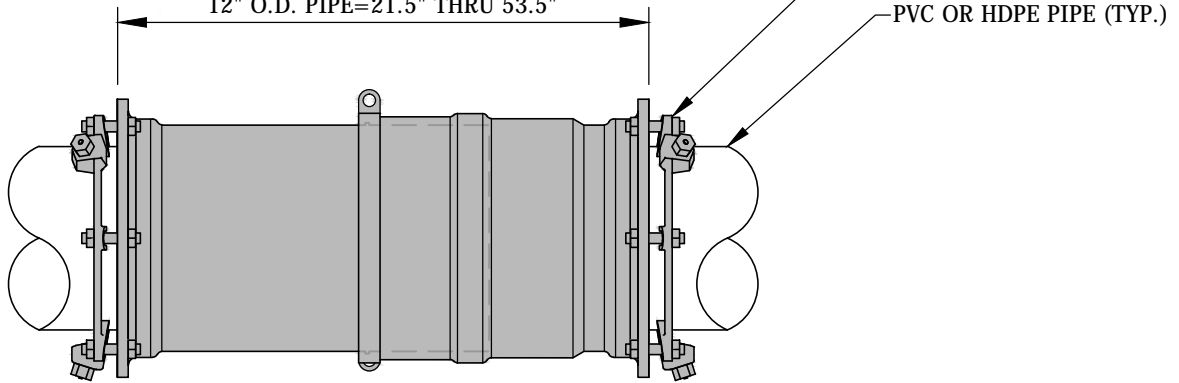
File: J:\ENGINEER\AUTOCAD\Standards\Detail Drawings\Water\DW07-Pressure Tapping Detail.dwg



PRESSURE TAPPING DETAIL

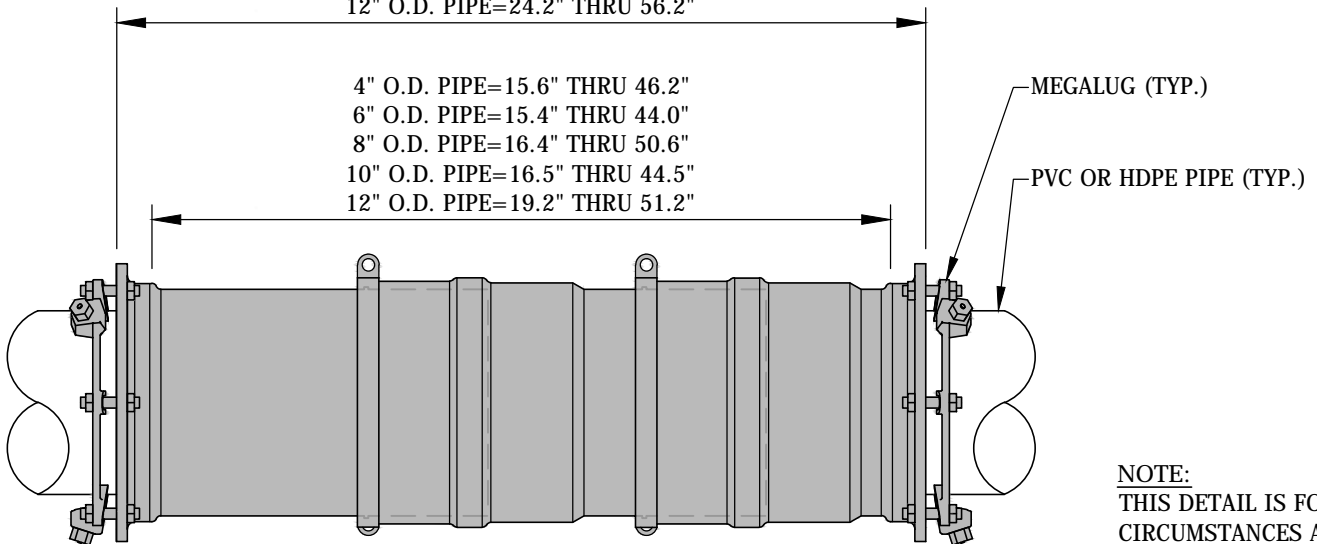
Approved: 06/09/15	Adopted: 06/09/15	Figure DW07
Approved By: Michael D. Labitzke, P.E.	Scale: N.T.S.	

4" O.D. PIPE=18.2" THRU 48.8"
 6" O.D. PIPE=19.5" THRU 48.1"
 8" O.D. PIPE=20.7" THRU 54.9"
 10" O.D. PIPE=21.0" THRU 52.6"
 12" O.D. PIPE=21.5" THRU 53.5"



STANDARD UNIT (2.5" MOVEMENT MAX.)

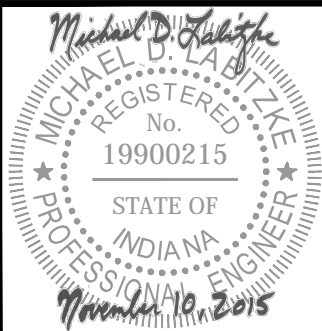
4" O.D. PIPE=20.6" THRU 51.2"
 6" O.D. PIPE=20.4" THRU 49.0"
 8" O.D. PIPE=21.4" THRU 55.6"
 10" O.D. PIPE=21.5" THRU 49.5"
 12" O.D. PIPE=24.2" THRU 56.2"



UNIT WITH ONE ADDITIONAL SLEEVE (5" MOVEMENT MAX.)

NOTE:
 THIS DETAIL IS FOR SPECIAL CIRCUMSTANCES AND ONLY INTENDED FOR AREAS THAT HAVE EXHIBITED EXPANSION OR CONTRACTION ISSUES. E.W.S.U. WILL MAKE FINAL DETERMINATION IF NEEDED.

File: F:\ENGINEER\AUTOCAD\Standards\Detail Drawings\Water\DW08 Expansion Coupling 4in Through 12in.dwg



EXPANSION COUPLING (4" THROUGH 12")

Approved: 11/10/15

Adopted: 11/10/15

Figure

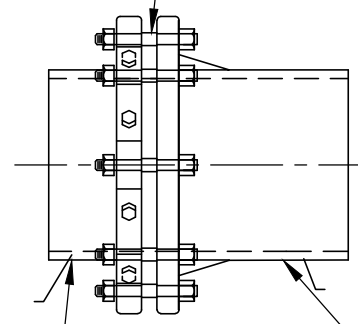
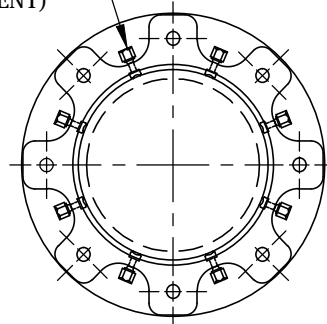
Approved By: Michael D. Labitzke, P.E.

Scale: N.T.S.

DW08

SERRATED TORQUE-LIMITING SCREWS SUFFICIENT TO HOLD WORKING AND TEST PRESSURES (EBAA IRON SERIES 2000 PV FOR PVC PIPE AND MEGALUG FOR D.I. PIPE OR APPROVED EQUIVALENT)

SUFFICIENT No./DIA. OF DUCTILE TIE BOLTS OR TIE RODS TO RESTRAIN WORKING AND TEST PRESSURES



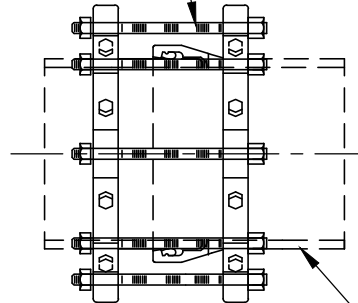
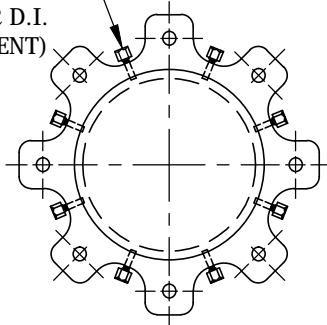
PVC OR D.I. PIPE

MECHANICAL JOINT PIPE

RESTRAINED JOINTS ON MECHANICAL JOINT PIPE & FITTINGS

SERRATED TORQUE-LIMITING SCREWS SUFFICIENT TO HOLD WORKING AND TEST PRESSURES (EBAA IRON SERIES 2000 PV FOR PVC PIPE AND MEGALUG FOR D.I. PIPE OR APPROVED EQUIVALENT)

SUFFICIENT No./DIA. OF DUCTILE TIE BOLTS OR TIE RODS TO RESTRAIN WORKING AND TEST PRESSURES



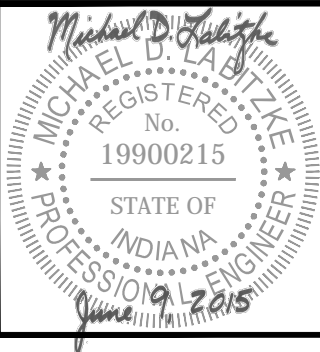
SLIP JOINT PIPE

RESTRAINED JOINTS ON SLIP JOINT PIPE

(USING GRIPPING TYPE RETAINERS)

MINIMUM FOOTAGE OF RESTRAINED PIPE FOR VARIOUS DIAMETERS & DEGREES CAST & DUCTILE IRON ELBOWS									
COVER DIA. MAIN	DEGREE OF ELBOW					VERTICAL OFFSET 45°		BRANCH OF TEE	REDUCER (LARGE SIDE ONLY)
	11 1/4°	22 1/2°	45°	90°	UPPER BEND (3')	LOWER BEND (3')			
	6"	3'	3'	3'	3'	49'	10'	3'	3'
10"	2'	5'	10'	25'	77'	15'	9'	159'	
12"	4'	8'	16'	39'	90'	36'	119'	107'	
	5'	9'	19'	47'			163'	N/A	

File: J:\ENGINEER\AUTOCAD\Standards\Detail Drawings\Water\DW09- Restrained Joints (Mechanical Joint & Slip Joint Pipes).dwg



RESTRAINED JOINTS (MECHANICAL JOINT AND SLIP JOINT PIPES)

Approved: 06/09/15

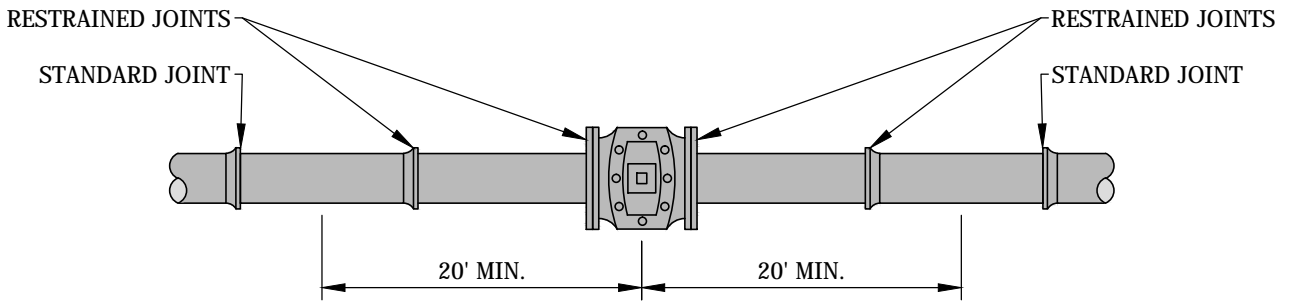
Adopted: 06/09/15

Figure

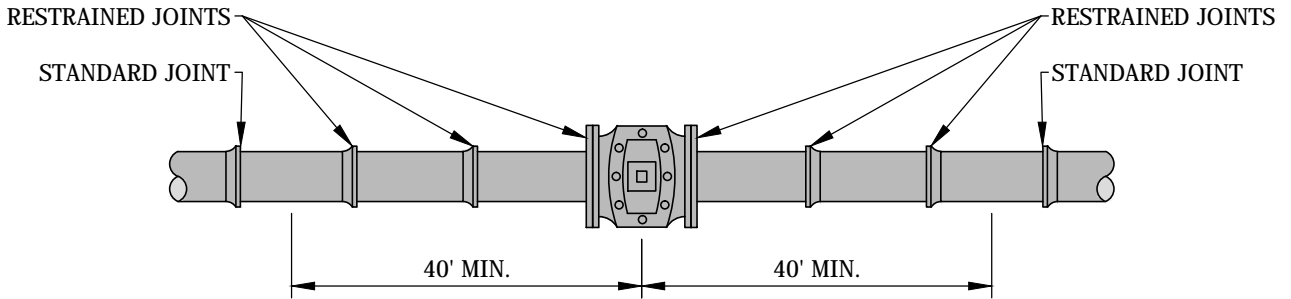
Approved By: Michael D. Labitzke, P.E.

Scale: N.T.S.

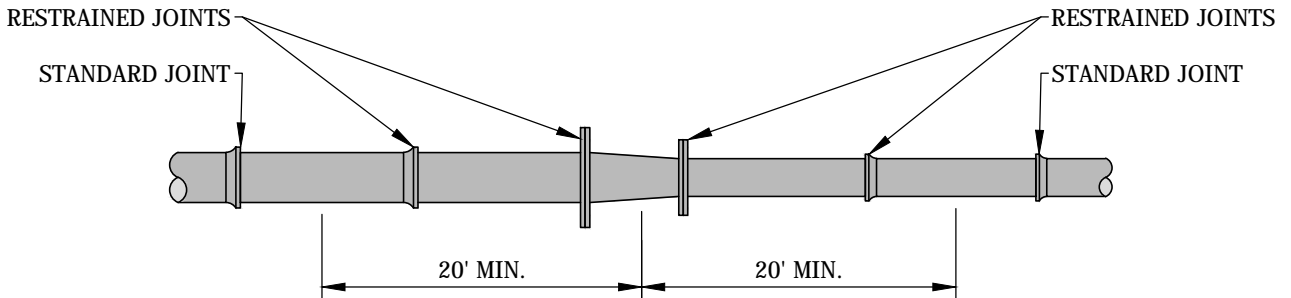
DW09



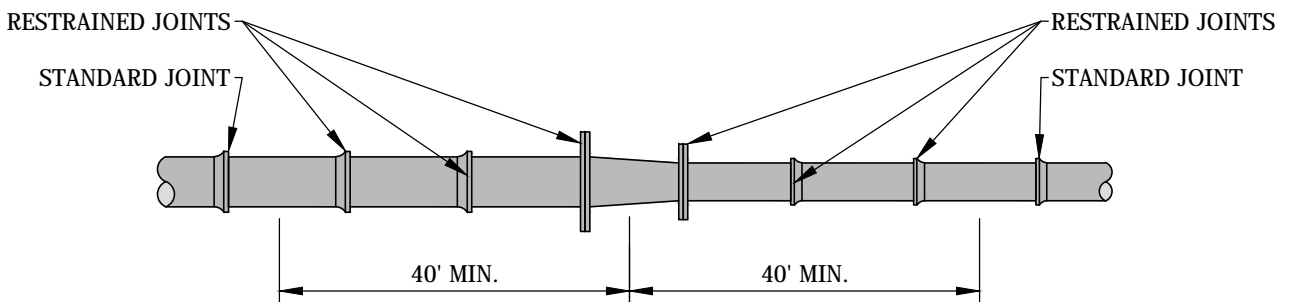
VALVES (NON-DEAD END) 8" AND SMALLER



VALVES (NON-DEAD END) 12" AND LARGER

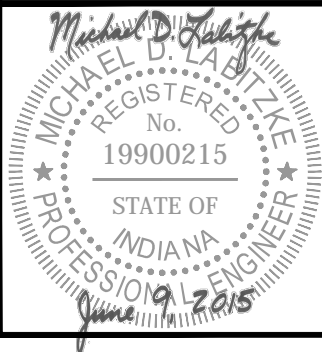


REDUCERS - LARGER PIPE DIAMETER IS 8" OR SMALLER



REDUCERS - LARGER PIPE DIAMETER IS 12" OR LARGER

File: F:\ENGINEER\AUTOCAD Standards\Detail Drawings\Water\DW10\Typical Restraining for Valves and Reducers.dwg



**TYPICAL RESTRAINING
FOR VALVES AND REDUCERS**

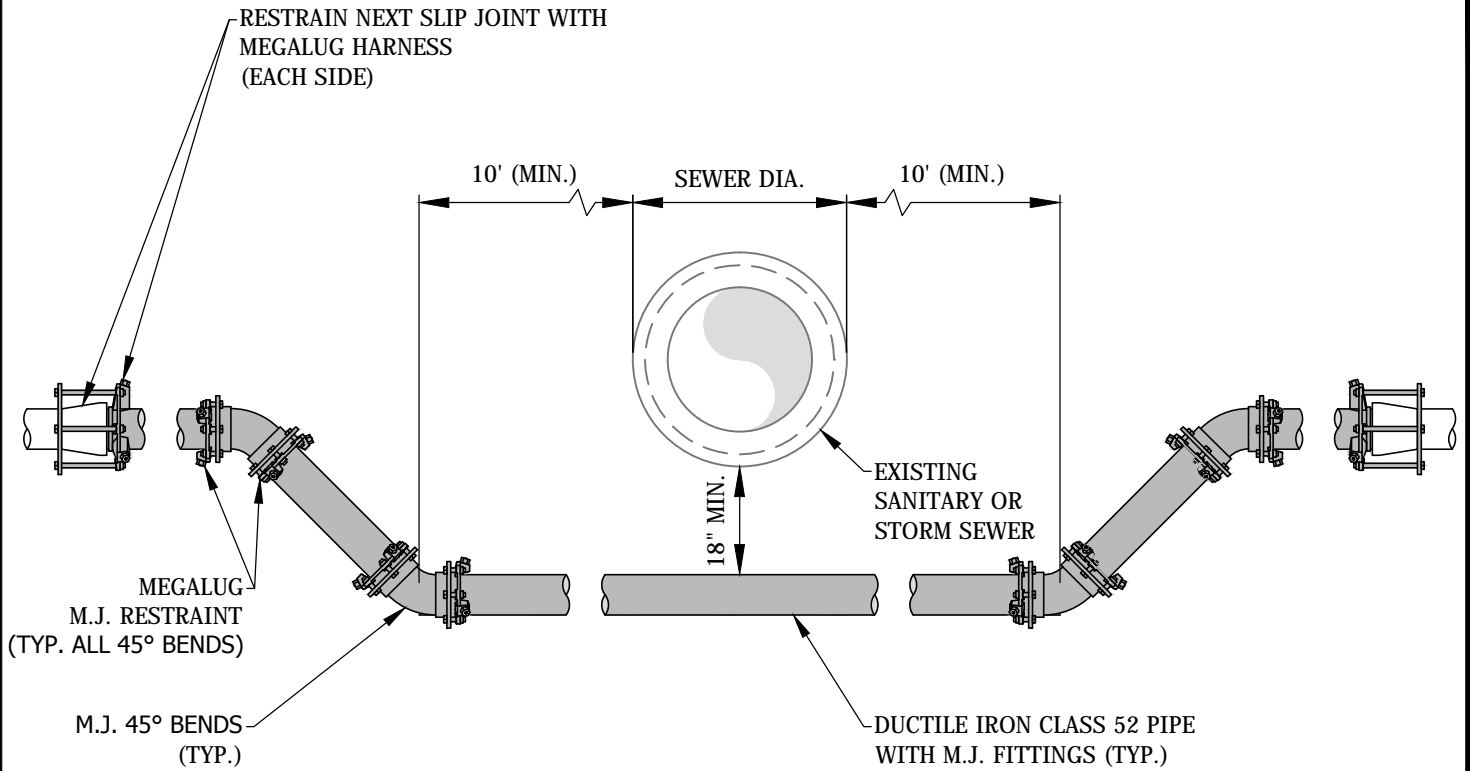
Approved: 06/09/15

Approved By: Michael D. Labitzke, P.E.

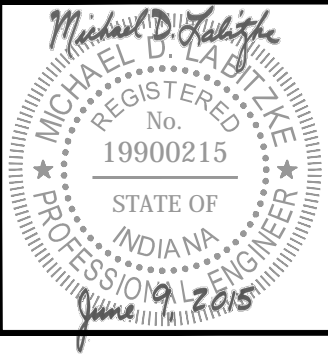
Adopted: 06/09/15

Scale: N.T.S.

Figure
DW10

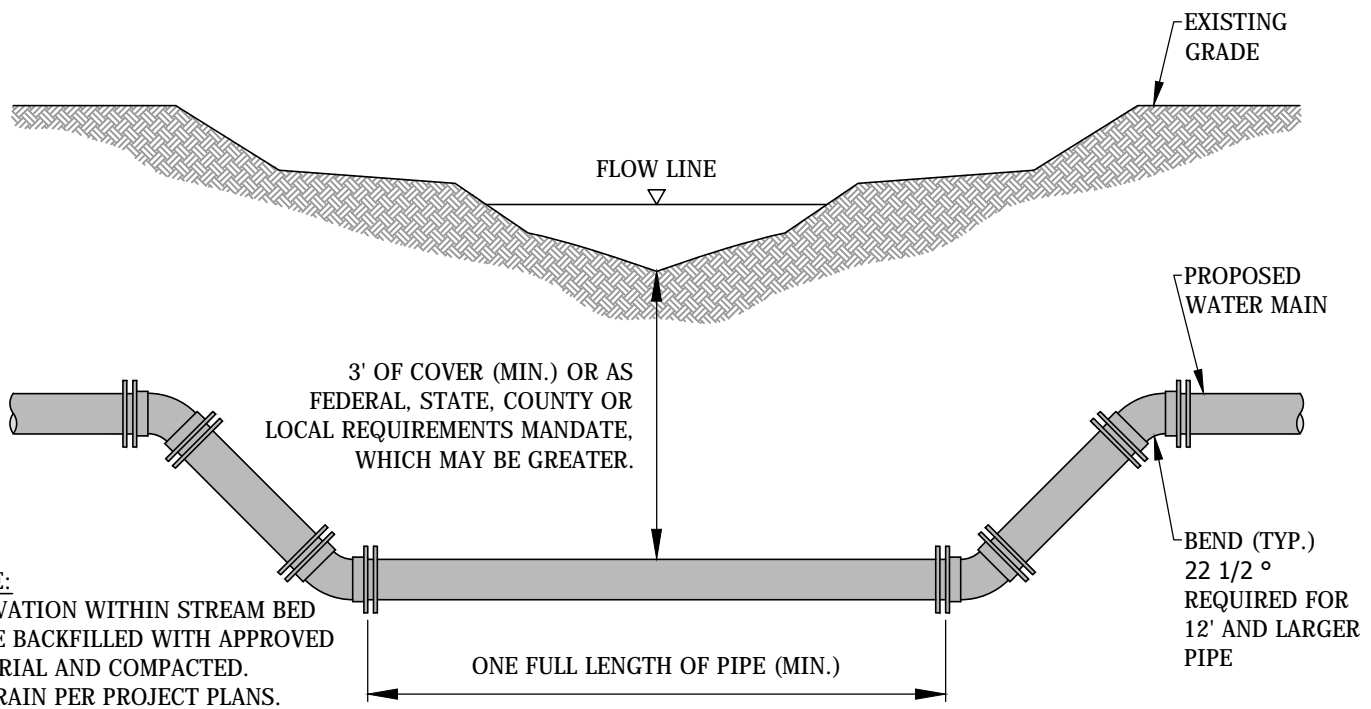
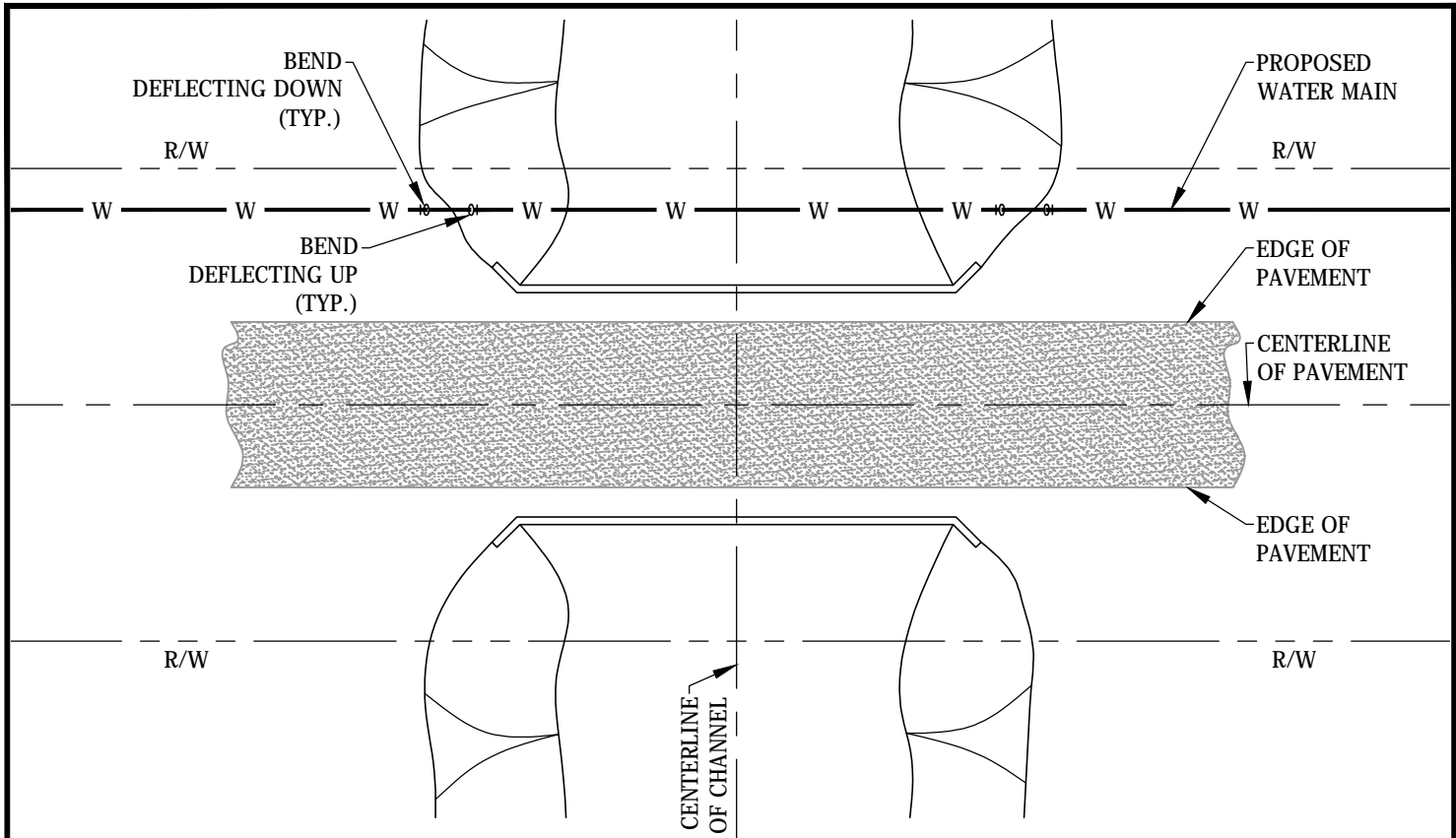


File: F:\ENGINEER\AUTOCAD\Standards\Drawings\Water\DW11\Typical Offset Assembly (Stm or San Crossing).dwg



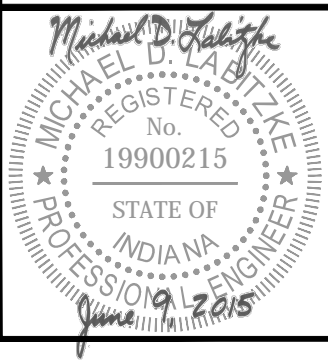
TYPICAL OFFSET ASSEMBLY (STORM OR SANITARY CROSSING)

Approved: 06/09/15	Adopted: 06/09/15	Figure DW11
Approved By: Michael D. Labitzke, P.E.	Scale: N.T.S.	



NOTE:
 EXCAVATION WITHIN STREAM BED
 TO BE BACKFILLED WITH APPROVED
 MATERIAL AND COMPACTED.
 RESTRAIN PER PROJECT PLANS.

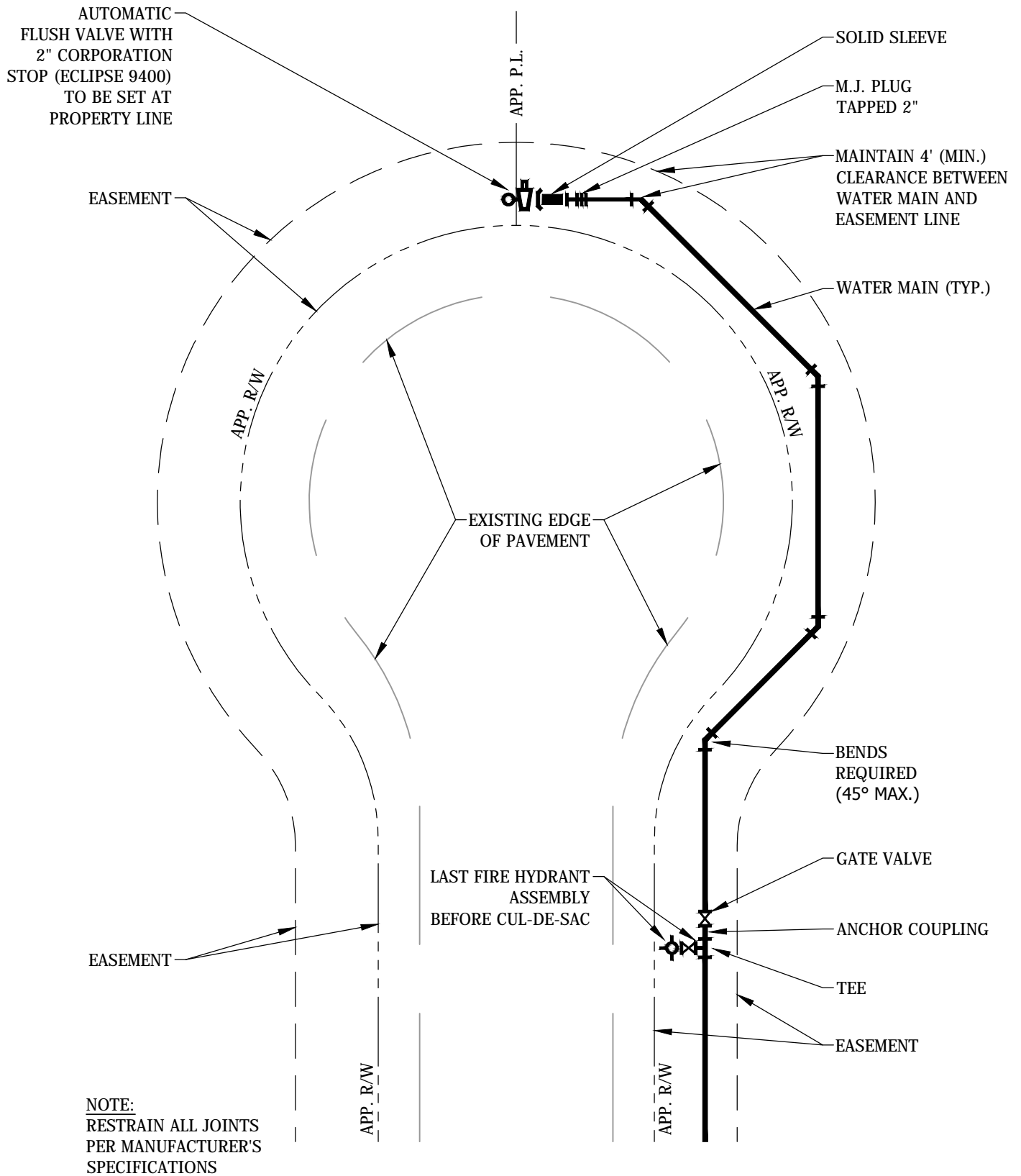
File: F:\ENGINEER\AUTOCAD Standards\Detail Drawings\Water\DW12-Typical Channel Crossing.dwg



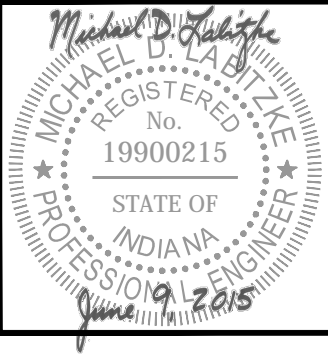
TYPICAL CHANNEL CROSSING

Approved: 06/09/15	Adopted: 06/09/15	Figure DW12
Approved By: Michael D. Labitzke, P.E.	Scale: N.T.S.	

File: J:\ENGINEER\AUTOCAD\Standards\Detail Drawings\Water\DW13-Water Line Location for Cul-De-Sac (8in. or 12in. pipe).dwg



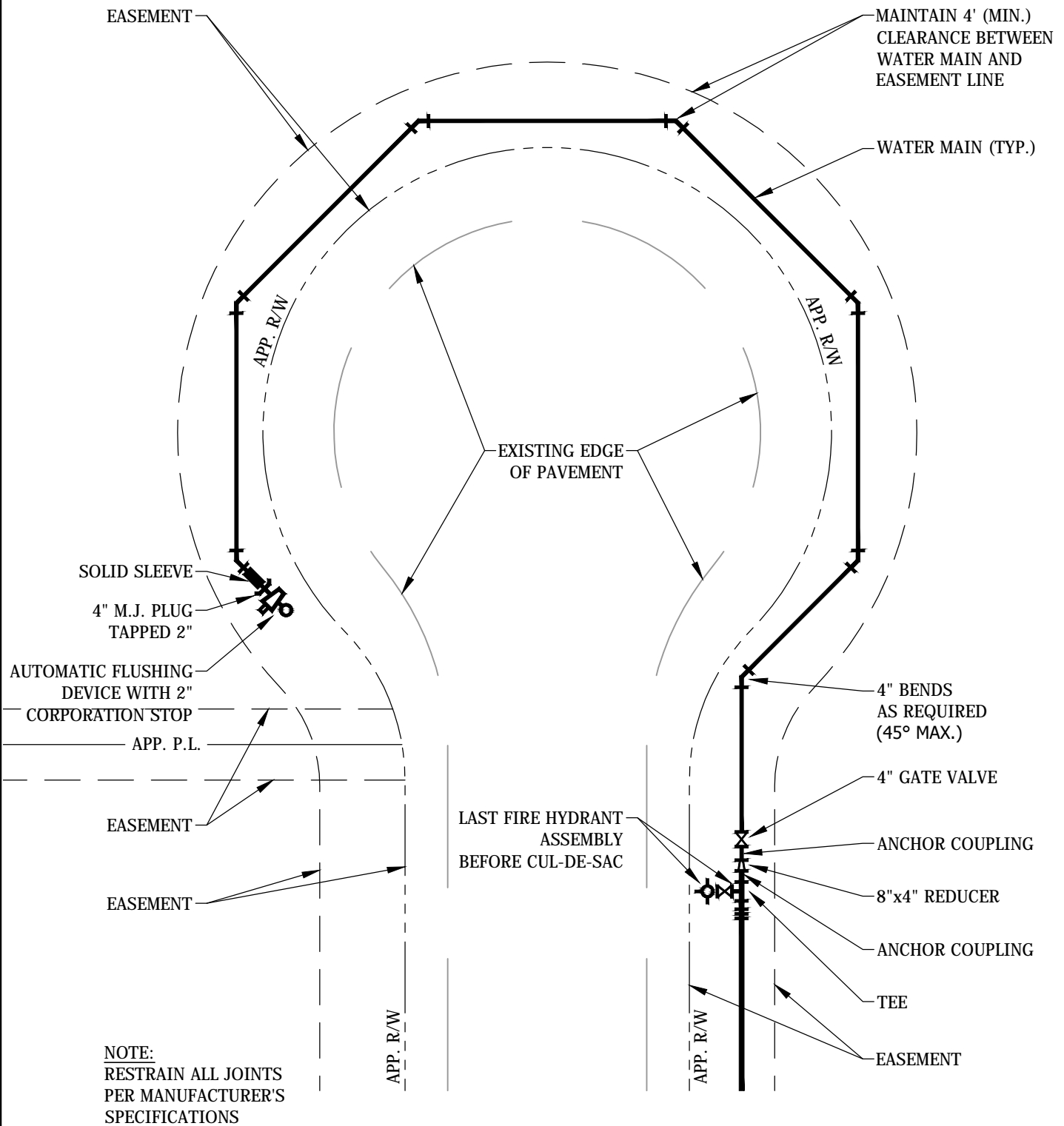
NOTE:
RESTRAIN ALL JOINTS
PER MANUFACTURER'S
SPECIFICATIONS



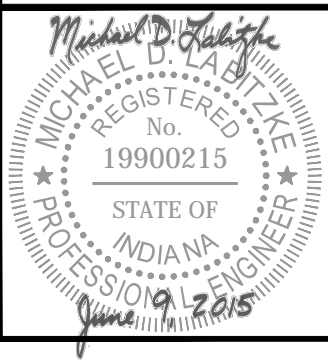
WATER LINE LOCATION FOR CUL-DE-SAC (8" OR 12" PIPE)

Approved: 06/09/15	Adopted: 06/09/15	Figure DW13
Approved By: Michael D. Labitzke, P.E.	Scale: N.T.S.	

File: J:\ENGINEER\AUTOCAD\Standards\Detail Drawings\Water\DW14-Water Line Location for Cul-De-Sac (4in pipe).dwg



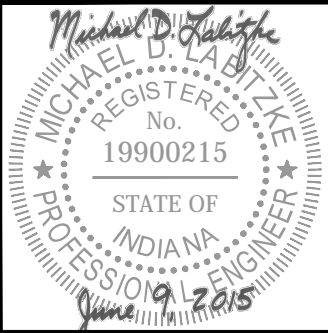
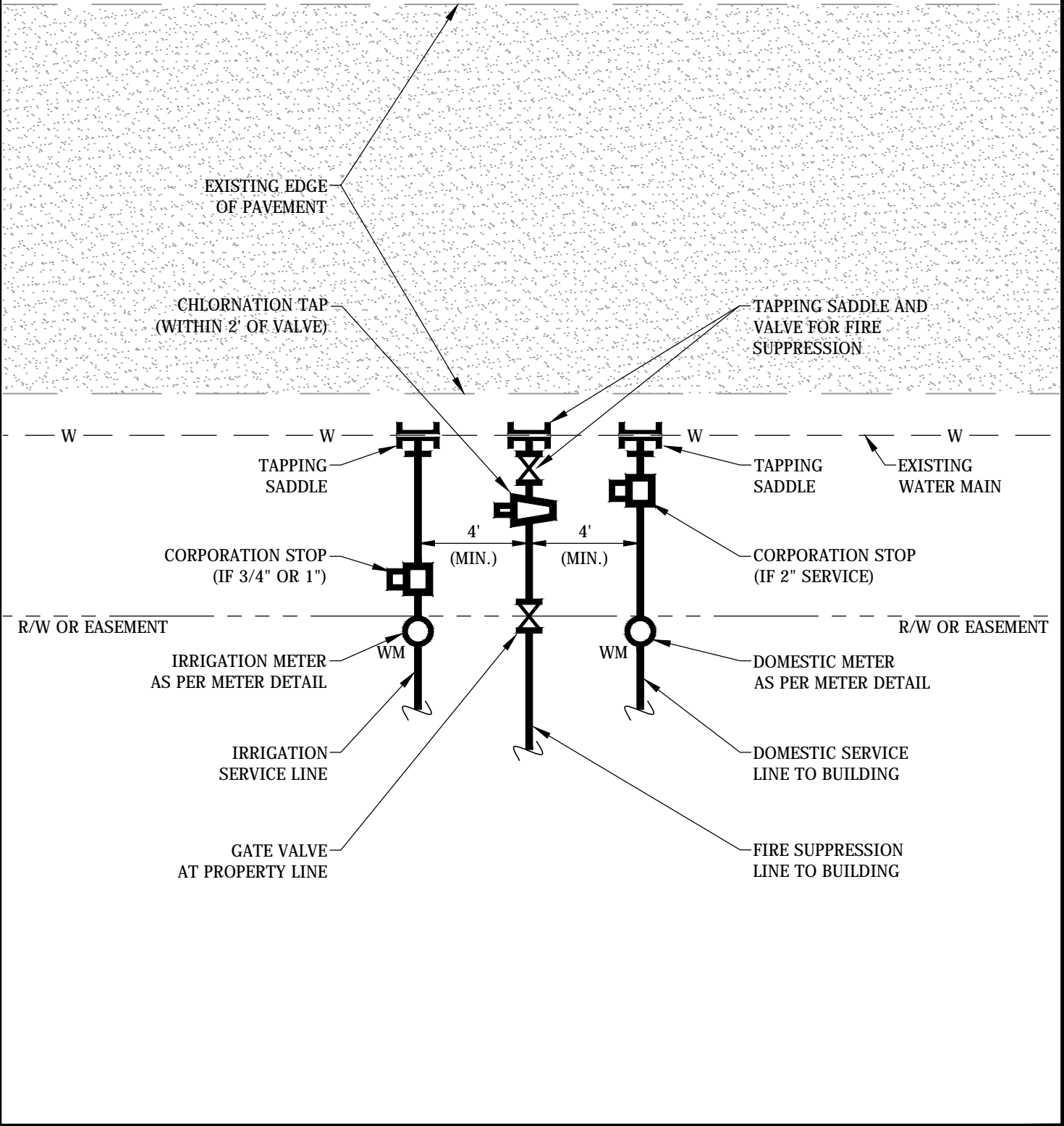
NOTE:
 RESTRAIN ALL JOINTS
 PER MANUFACTURER'S
 SPECIFICATIONS



WATER LINE LOCATION FOR CUL-DE-SAC (4" PIPE)

Approved: 06/09/15	Adopted: 06/09/15	Figure DW14
Approved By: Michael D. Labitzke, P.E.	Scale: N.T.S.	

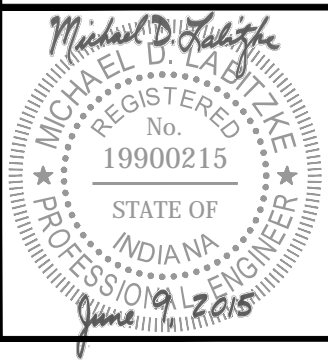
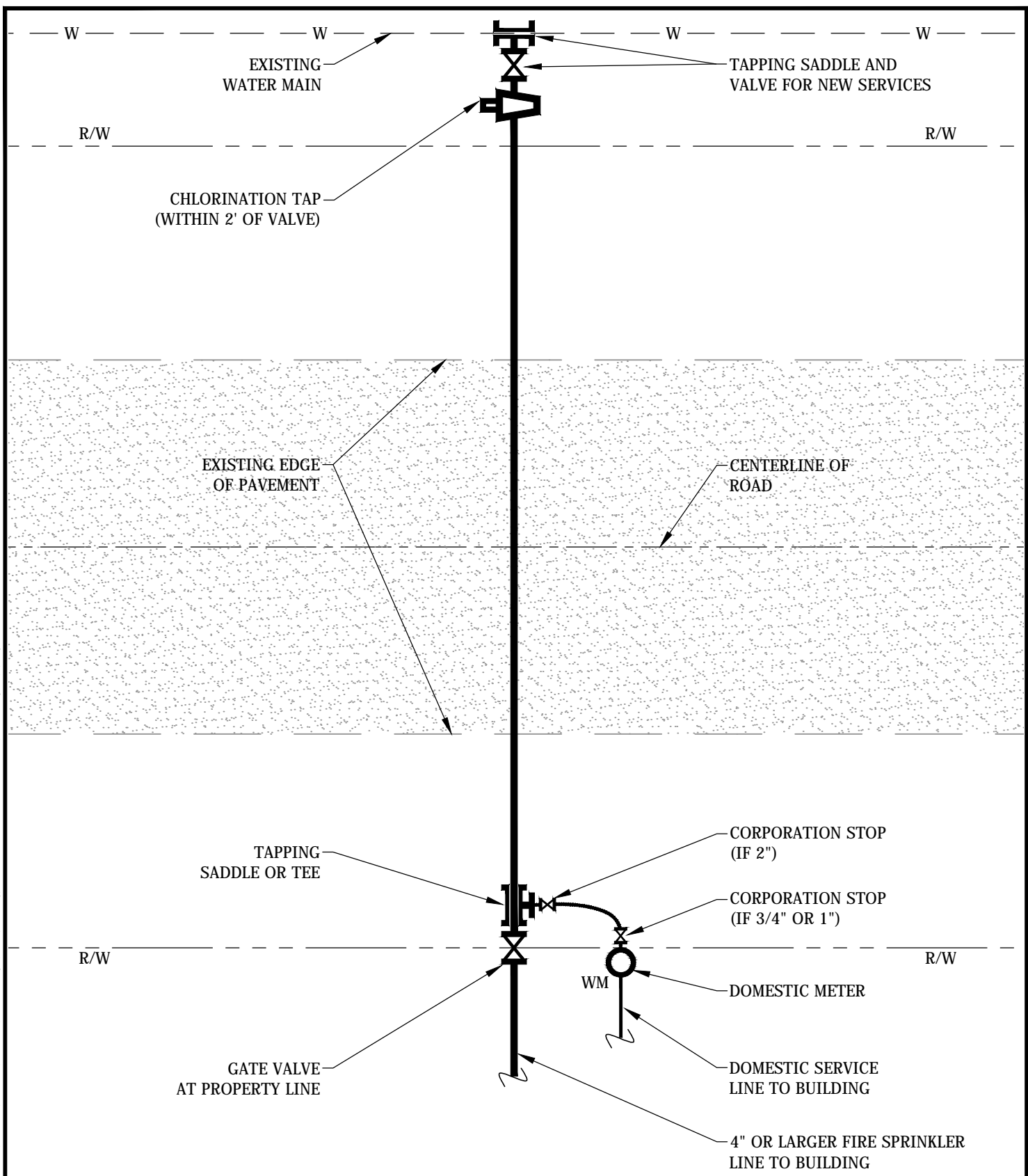
File: J:\ENGINEER\AUTOCAD\Standards\Detail Drawings\Water\DW15- Typical Commercial Service Connections (Same Side of Roadway).dwg



TYPICAL COMMERCIAL SERVICE CONNECTIONS (SAME SIDE OF ROADWAY)

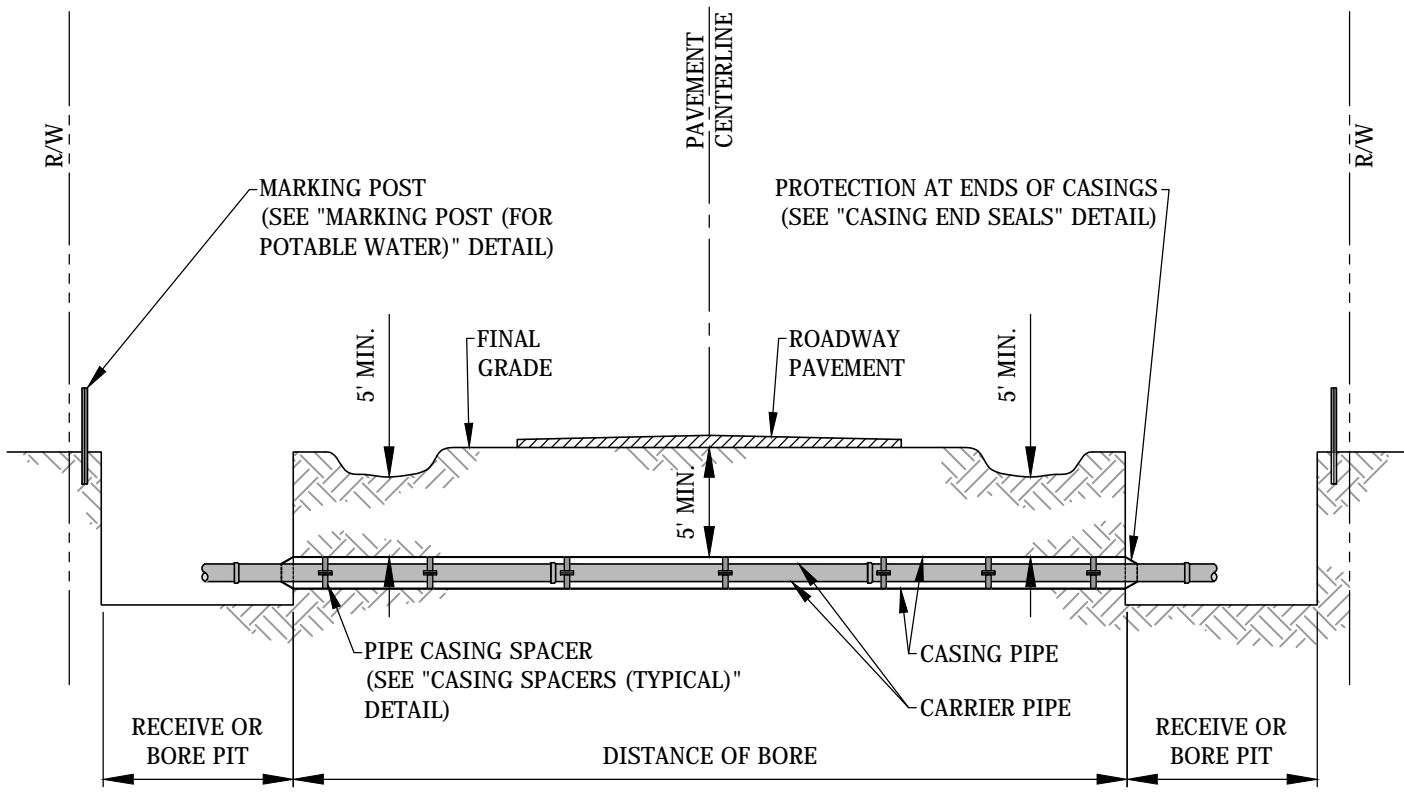
Approved: 06/09/15	Adopted: 06/09/15	Figure DW15
Approved By: Michael D. Labitzke, P.E.	Scale: N.T.S.	

File: J:\ENGINEER\AUTOCAD\Standards\Detail Drawings\Water\DW16- Typical Commercial Service Connections (Road Boring Req'd).dwg



TYPICAL COMMERCIAL SERVICE CONNECTIONS (ROAD BORING REQUIRED)

Approved: 06/09/15	Adopted: 06/09/15	Figure DW16
Approved By: Michael D. Labitzke, P.E.	Scale: N.T.S.	



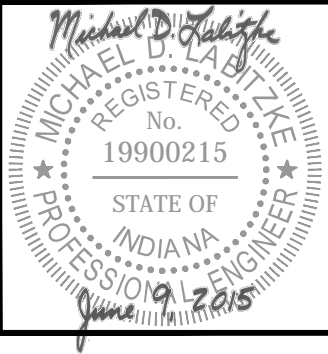
WELDING:

STEEL CASING SECTIONS SHALL BE CONNECTED BY WELDING. WELD SHALL CONFORM TO AWWA C206.

NOTE:

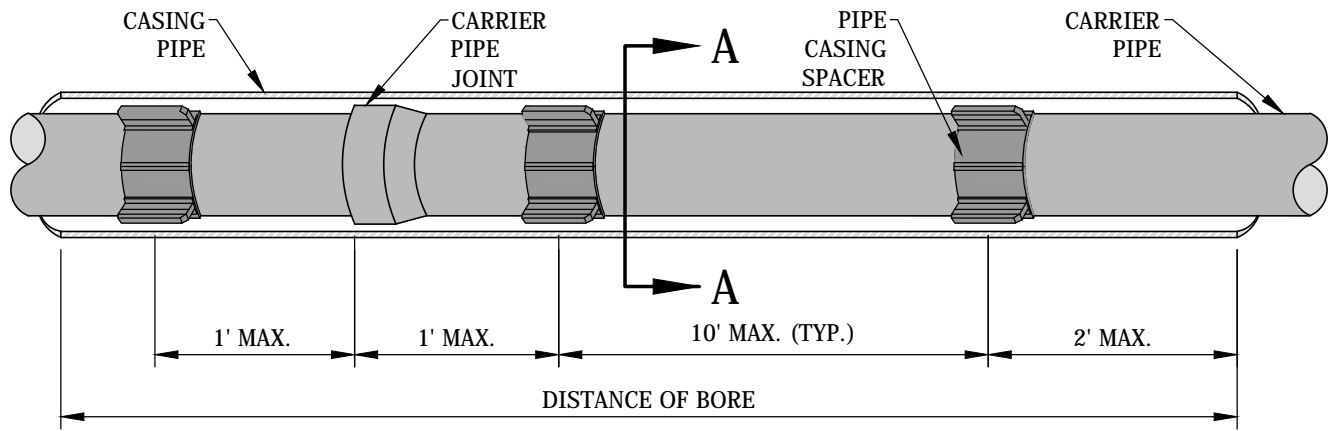
1. ALL PIPE JOINTS WITHIN THE CASING ARE TO BE RESTRAINED.
2. TRACING WIRE TO BE INSTALLED THROUGH ALL CASED BORINGS AND CONNECTED TO MARKING POSTS.
3. STEEL PIPE CASING SHALL CONFORM TO THE REQUIREMENTS OF ASTM A283, GRADE B, C, OR D. ALL JOINTS SHALL BE WELDED. ALL WELDING SHALL BE PERFORMED IN ACCORDANCE WITH AWWA C206, "AWWA STANDARD FOR FIELD WELDING OF STEEL WATER PIPE". COATING FOR STEEL CASING IS NOT REQUIRED.
4. STEEL PIPE CASING SHALL BE INSTALLED SYMMETRICAL ABOUT WATER MAIN CENTERLINE (TYP). PIPE CASING SHALL BE LAID TRUE TO LINE AND GRADE WITH NO BENDS OR CHANGES IN GRADE FOR THE FULL LENGTH OF THE CASING.

File: F:\ENGINEER\AUTOCAD Standards\Drawings Water\DW17 Typical Jack and Bore Casing Pipe.dwg



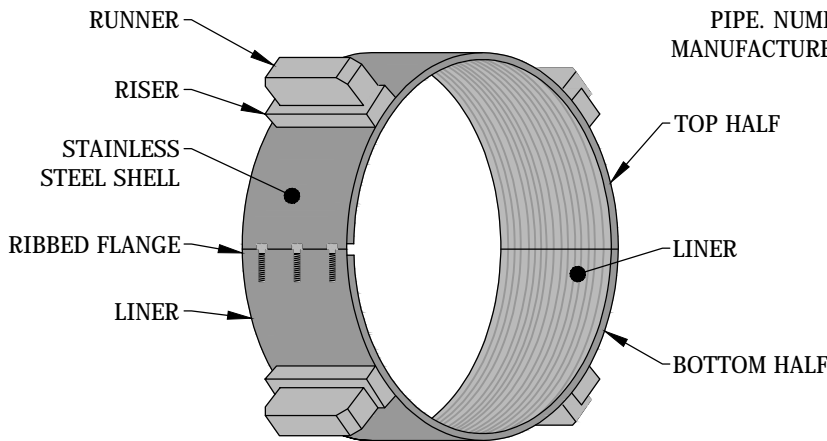
TYPICAL JACK AND BORE CASING PIPE

Approved: 06/09/15	Adopted: 06/09/15	Figure DW17
Approved By: Michael D. Labitzke, P.E.	Scale: N.T.S.	

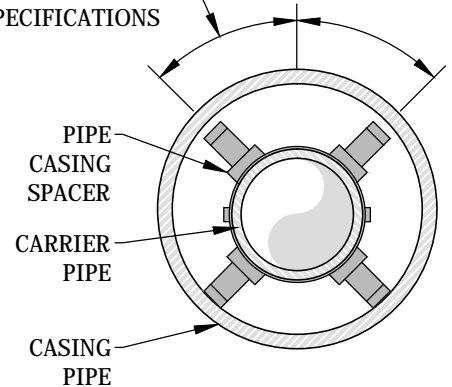


CARRIER PIPE		
PIPE SIZE	CASING O.D.	THICKNESS *
6"	16"	1/4"
8"	18"	1/4"
10"	20"	5/16"
12"	24"	5/16"
16"	30"	3/8"
18"	30"	3/8"
20"	36"	1/2"
24"	42"	1/2"

* UNLESS OTHERWISE REQUIRED BY IN. D.O.T., RAILROAD OR OTHER SUCH GOVERNING AUTHORITY.



ANGLES TO BE CONSTANT AROUND ENTIRE CIRCUMFERENCE OF THE PIPE. NUMBER OF SPACERS PER MANUFACTURER'S SPECIFICATIONS

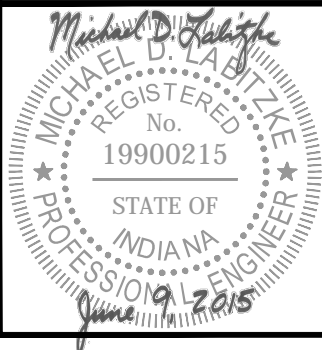


SECTION "A-A"

NOTE:

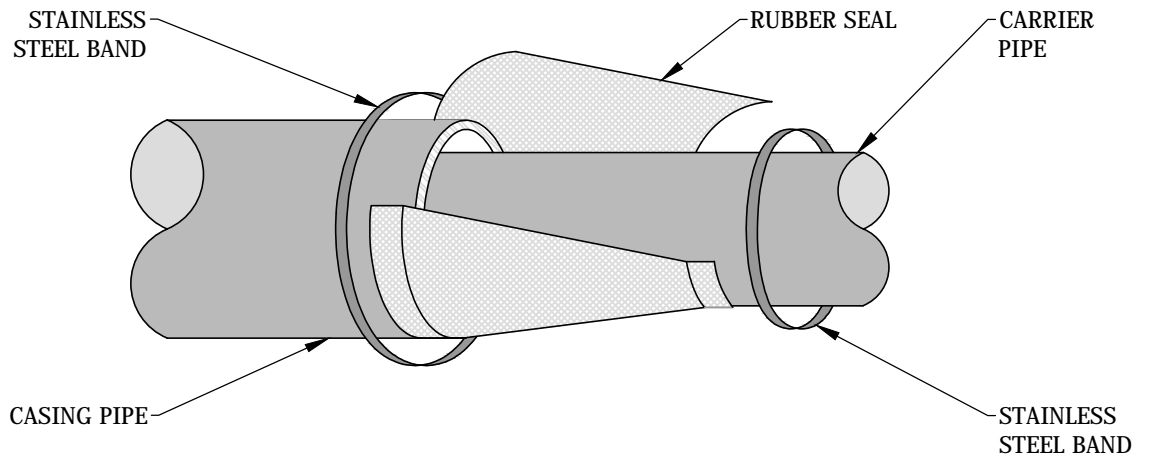
- CASING SPACERS SHALL BE CCS SERIES BY CASCADE WATERWORKS MFG. ALTERNATE CASING SPACERS MAY BE USED WITH PRIOR APPROVAL FROM CITY UTILITIES PROJECT ENGINEER.
- CITY UTILITIES APPROVED CASING SPACERS AND END SEALS SHALL BE INSTALLED PER MANUFACTURER'S SPECIFICATIONS. USE A "CENTERED" CONFIGURATION AND PROVIDE THE MANUFACTURER WITH THE FOLLOWING INFORMATION: CARRIER PIPE O.D., CASING PIPE I.D., AND CASING LENGTH.

File: F:\ENGINEER\AUTOCAD\Standards\Detail Drawings\Water\DW18-Typical Casing Spacers.dwg

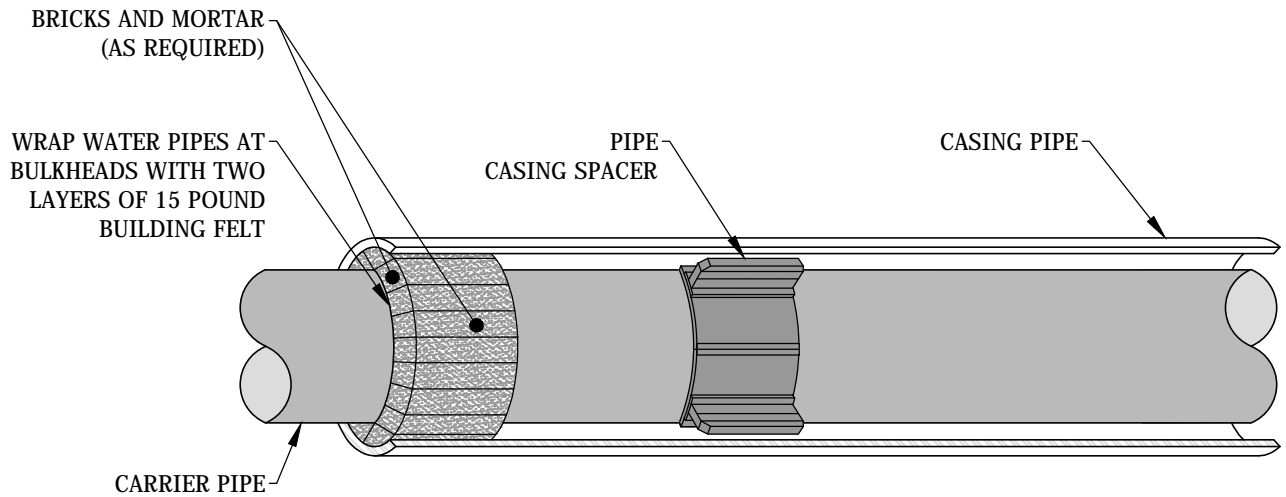


TYPICAL CASING SPACERS

Approved: 06/09/15	Adopted: 06/09/15	Figure DW18
Approved By: Michael D. Labitzke, P.E.	Scale: N.T.S.	



METHOD 'A'

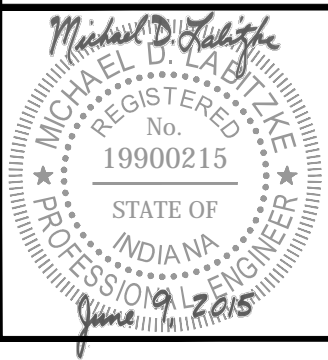


NOTE:

1. THIS STANDARD IS APPLICABLE FOR 4" DIAMETER AND LARGER CARRIER PIPE.

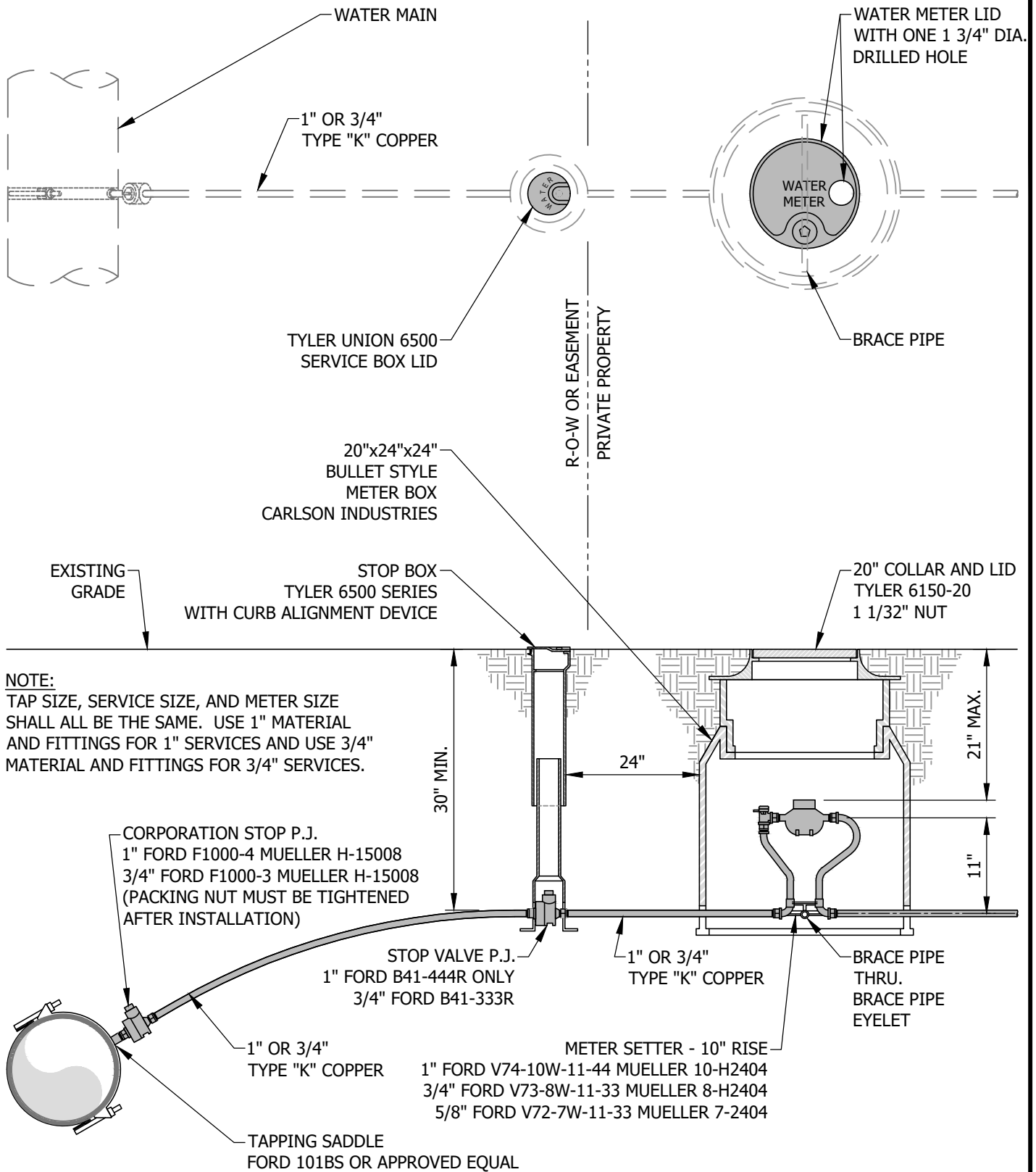
METHOD 'B'

File: F:\ENGINEER\AUTOCAD Standards\Detail Drawings Water\DW 19 Typical Casing End Seal.dwg



TYPICAL CASING END SEALS

Approved: 06/09/15	Adopted: 06/09/15	Figure DW19
Approved By: Michael D. Labitzke, P.E.	Scale: N.T.S.	



File: J:\ENGINEER\AUTOCAD\Standards\Detail Drawings\Water\DW20R - .75in or 1in Meter Service Connection.dwg



3/4" OR 1" METER SERVICE CONNECTION

Approved: 02/28/17

Adopted: 02/28/17

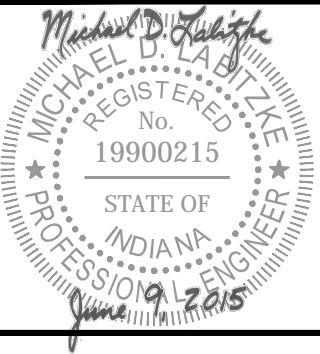
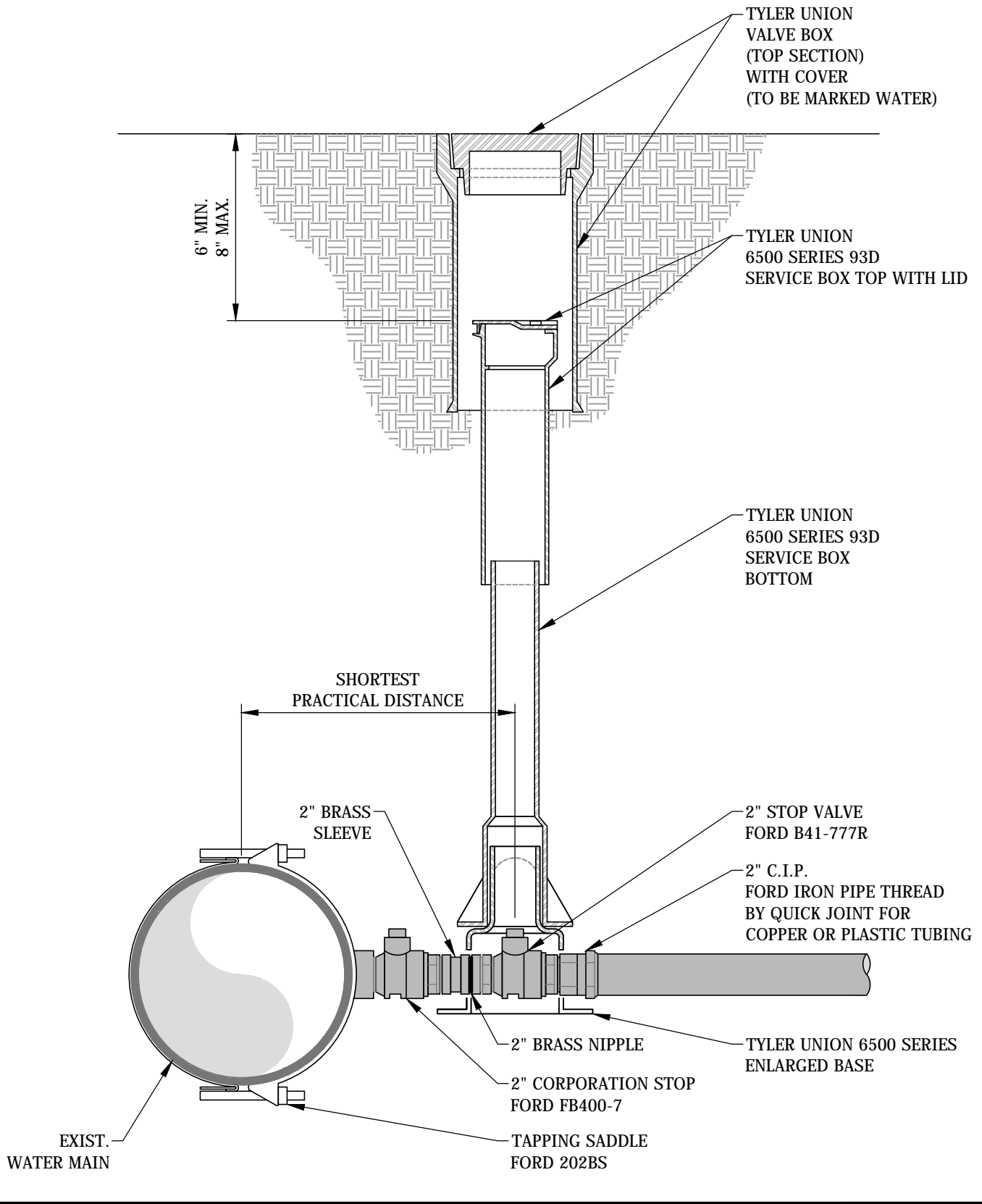
Figure

Approved By: Michael D. Labitzke, P.E.

Scale: N.T.S.

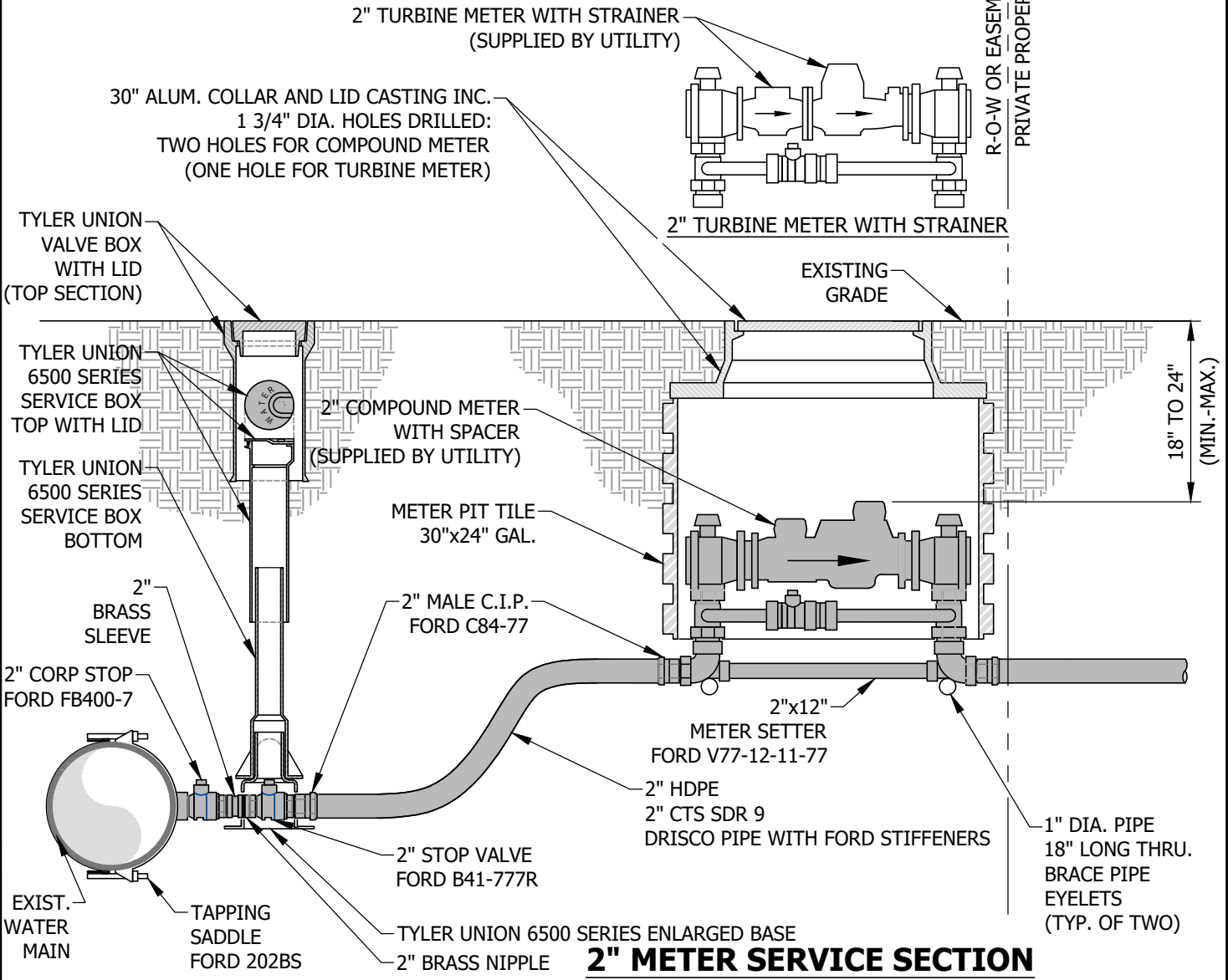
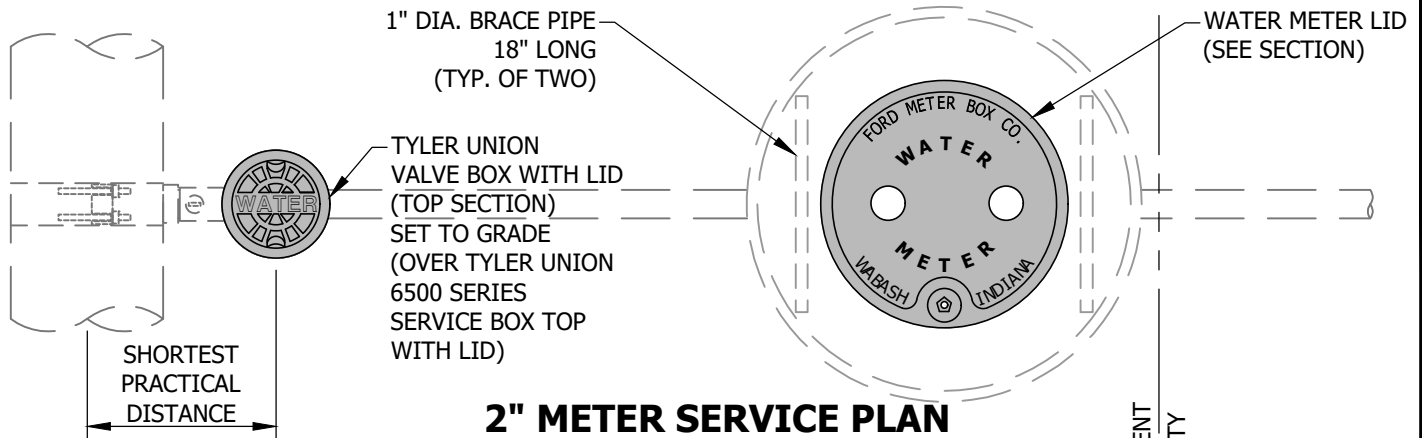
DW20

File: J:\ENGINEER\AUTOCAD\Standards\Detail Drawings\Water\DW21-2in Tap Detail.dwg

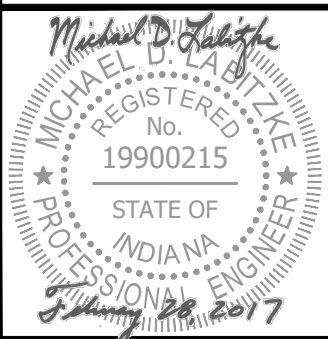


2" TAP DETAIL

Approved: 06/09/15	Adopted: 06/09/15	Figure DW21
Approved By: Michael D. Labitzke, P.E.	Scale: N.T.S.	



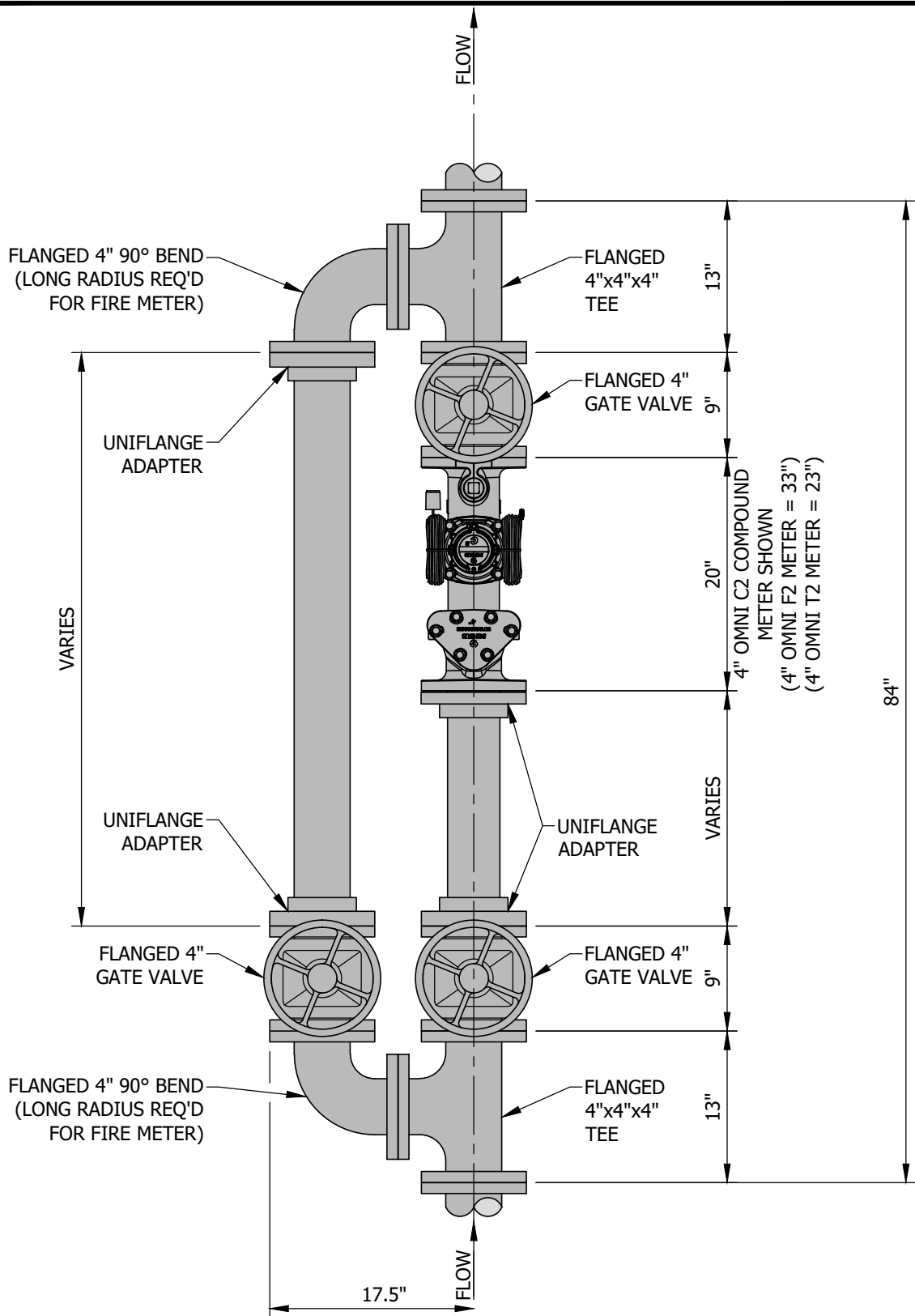
File: J:\ENGINEER\AUTOCAD\Standards\Detail Drawings\Water\DW22R-2in Meter Service Connection.dwg



2" METER SERVICE CONNECTION

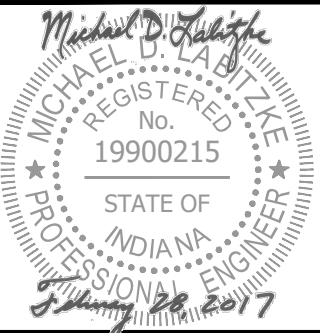
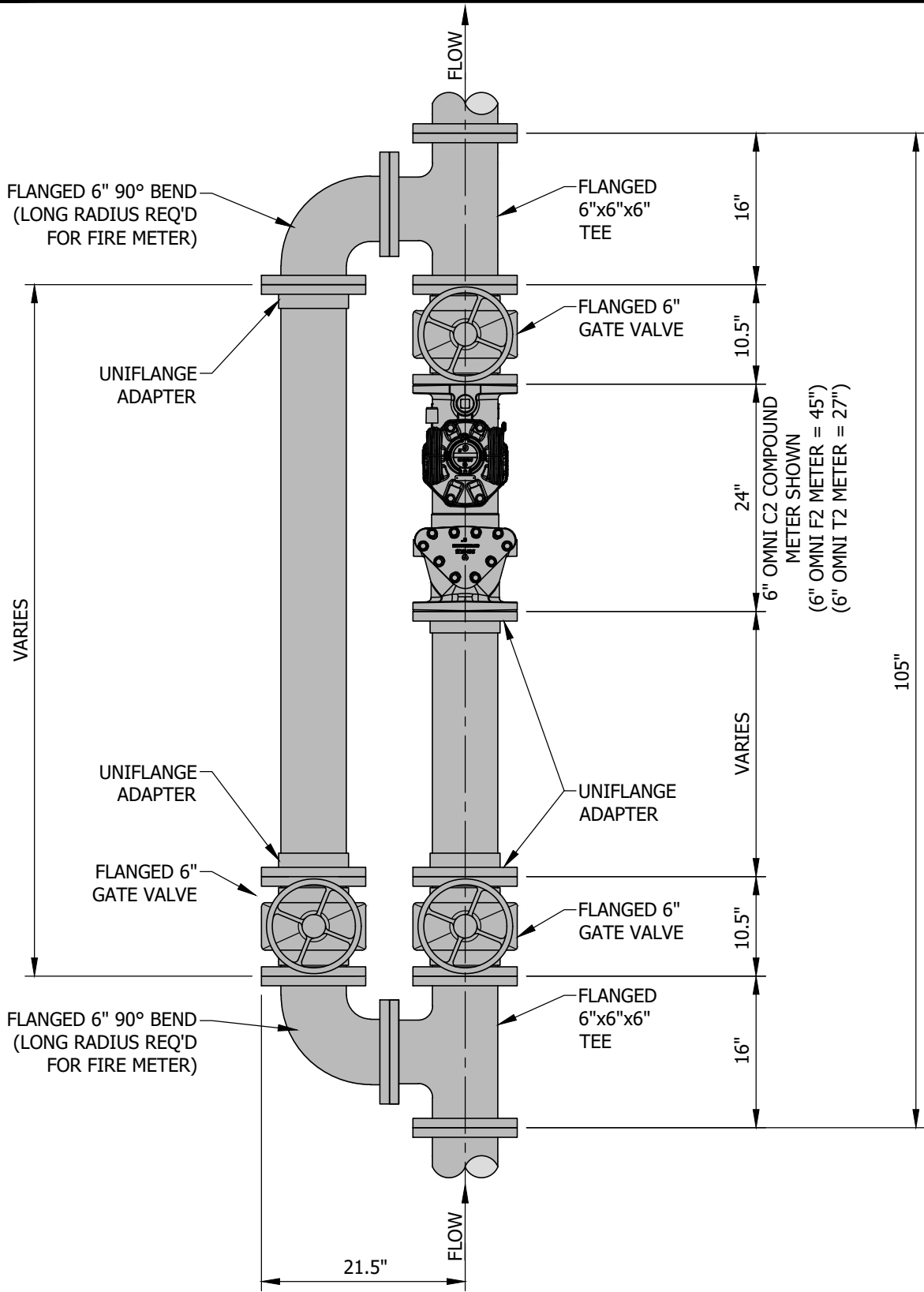
Approved: 02/28/17	Adopted: 02/28/17	Figure DW22
Approved By: Michael D. Labitzke, P.E.	Scale: N.T.S.	

File: J:\ENGINEER\AUTOCAD\Standards\Detail Drawings\Water\DW23R-4P Meter Service Connection.dwg



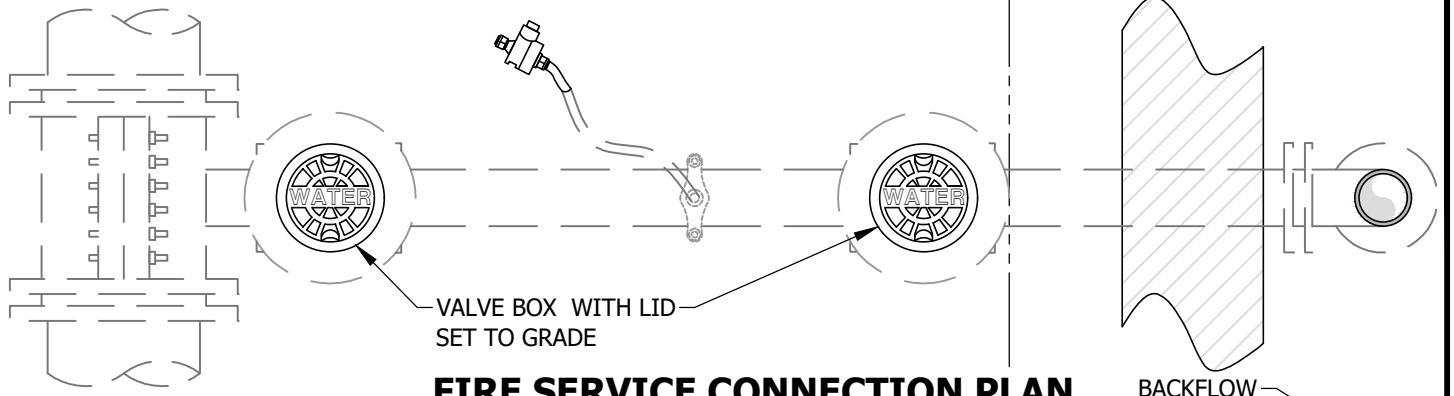
4" METER SERVICE CONNECTION

Approved: 02/28/17	Adopted: 02/28/17	Figure DW23
Approved By: Michael D. Labitzke, P.E.	Scale: N.T.S.	



6" METER SERVICE CONNECTION

Approved: 02/28/17	Adopted: 02/28/17	Figure DW24
Approved By: Michael D. Labitzke, P.E.	Scale: N.T.S.	



FIRE SERVICE CONNECTION PLAN

PROVIDE ENOUGH TRACER WIRE TO PERMIT WIRE TO BE PULLED TO 36" ABOVE FINAL GRADE (TYP.)

3/4" F.I.P.
3/4" STOP COCK (CHLORINATION TAP)

EXISTING GRADE

LOCATED AT R-O-W, EASEMENT OR PROPERTY LINE

R-O-W OR EASEMENT
PRIVATE PROPERTY

BACKFLOW PREVENTER
2" BLOW OFF IN BUILDING

VALVE BOX TOP WITH LID (TYP.)
TRACER WIRE TO BE SLEEVED BETWEEN SERVICE BOX HALVES
VALVE BOX ALIGNMENT DEVICE

VALVE BOX BOTTOM (TYP.)
VALVE BOX BASE (TYP.)

VALVE BOX ALIGNMENT DEVICE

EXISTING OR PROPOSED BUILDING WALL
EXISTING OR PROPOSED BUILDING FLOOR

24" MIN.

TRACING WIRE

AFTER TESTING HAS PASSED REMOVE CORP. STOP INSTALL BRASS PLUG

CLASS 52 DUCTILE IRON PIPE OR DR 18 C-900 PLASTIC PIPE WITH TRACING WIRE

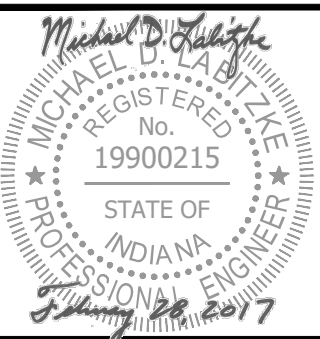
EXIST. WATER MAIN
TAPPING VALVE
TAPPING SLEEVE

MEGA LUG

MEGA LUG

FIRE SERVICE CONNECTION SECTION

File: J:\ENGINEER\AUTOCAD\Standards\Detail Drawings\Water\DW25R-Fire Service Connection.dwg



FIRE SERVICE CONNECTION

Approved: 02/28/17	Adopted: 02/28/17	Figure DW25
Approved By: Michael D. Labitzke, P.E.	Scale: N.T.S.	

COVER DRILLED WITH
1 3/4" DIAMETER HOLES
(TWO HOLES FOR COMPOUND METER
AND ONE HOLE FOR ALL OTHER METERS)

EJ #1480C
HEAVY DUTY COVER
MARKED "WATER"

EJ FRAME #1480Z

FINAL GRADE

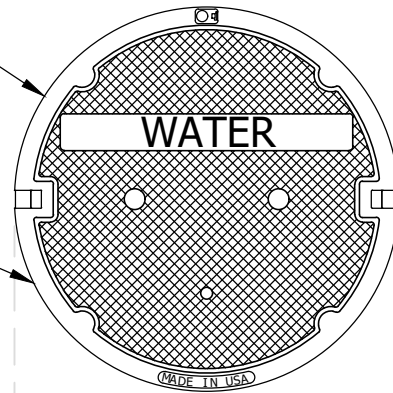
STAINLESS STEEL WEDGE
ANCHOR 1/2"x3 3/4"
WITH S.S. NUT AND WASHER
(TYPICAL OF TWO)

30" RCP

METER SETTER
(TYPE VARIES)

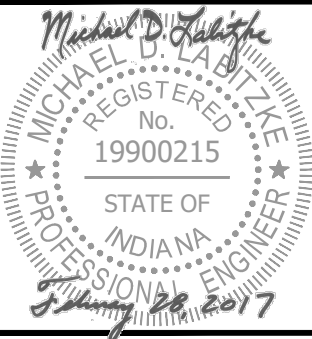
#4 BARS @ 12" O.C.
EACH WAY

POURED CONCRETE BASE



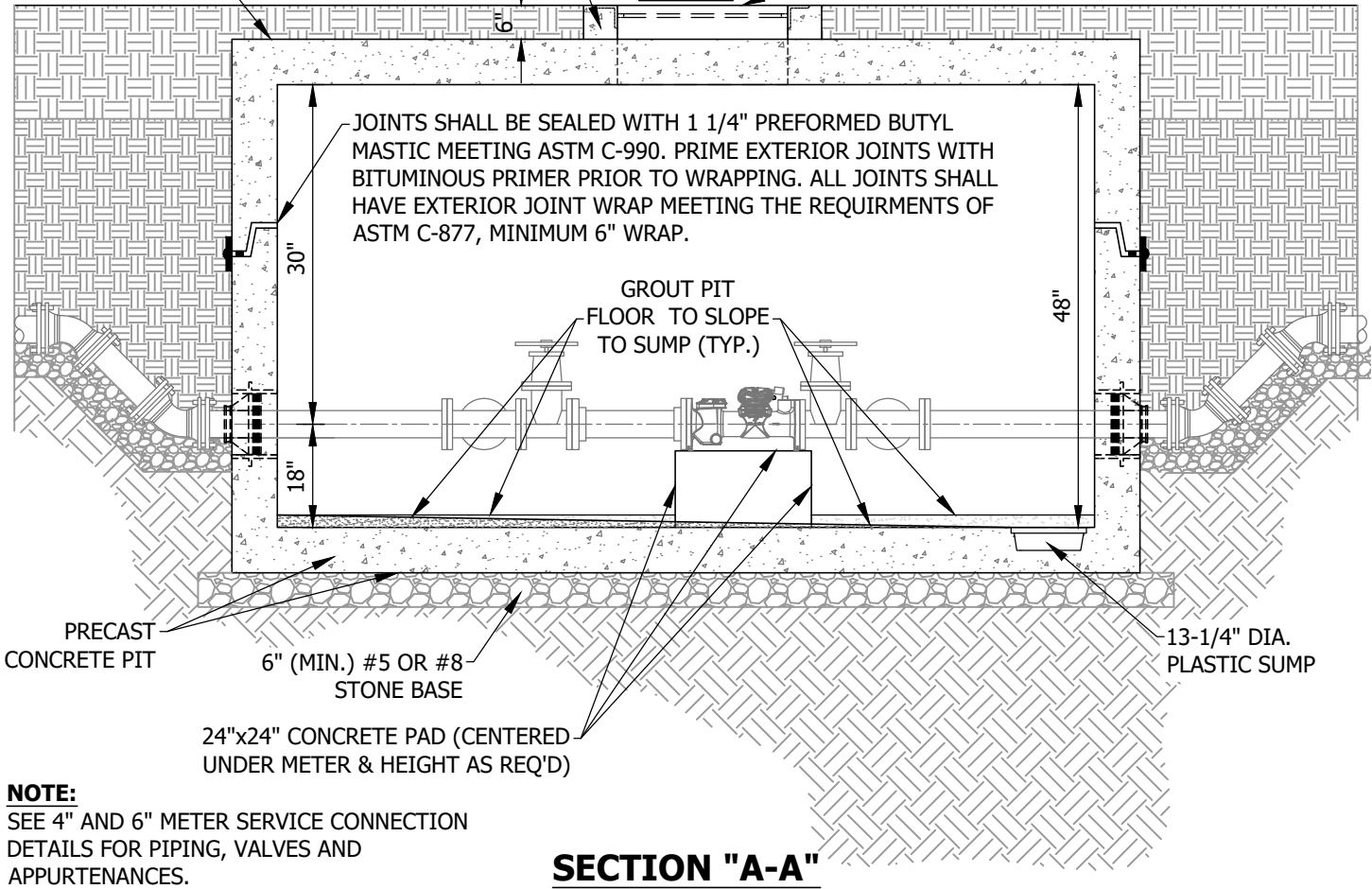
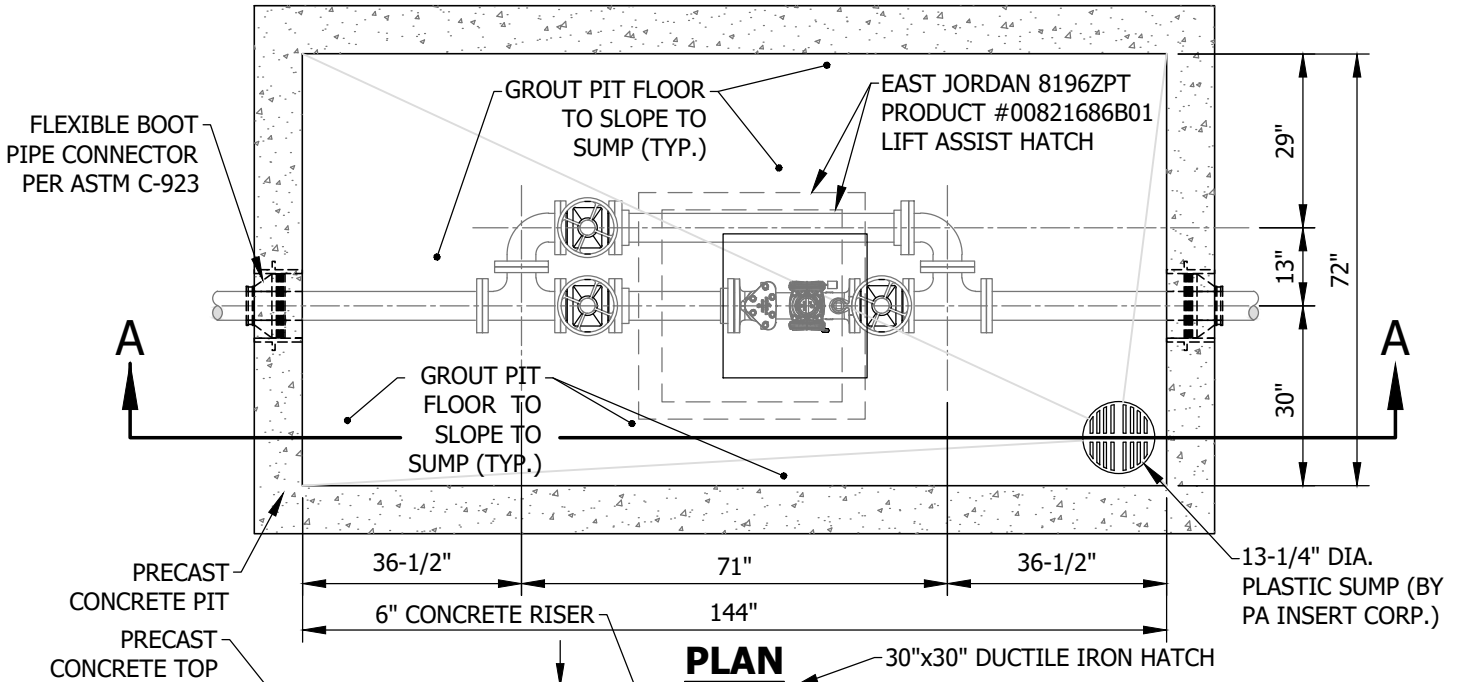
18" MIN.
24" MAX.
VARIES
6"
10"

File: J:\ENGINEER\AUTOCAD\Standards\Detail Drawings\Water\DW26R--Traffic Rated Meter Pit.dwg



TRAFFIC RATED METER PIT

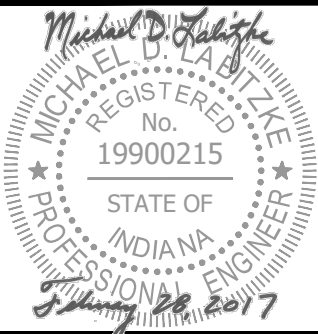
Approved: 02/28/17	Adopted: 02/28/17	Figure DW26
Approved By: Michael D. Labitzke, P.E.	Scale: N.T.S.	



NOTE:
SEE 4" AND 6" METER SERVICE CONNECTION
DETAILS FOR PIPING, VALVES AND
APPURTENANCES.

SECTION "A-A"

Fig. 2: ENGINEER AUTOCAD Standards Detail Drawings Water DW27-4n Meter Pit.dwg



4" METER PIT

Approved: 02/28/17

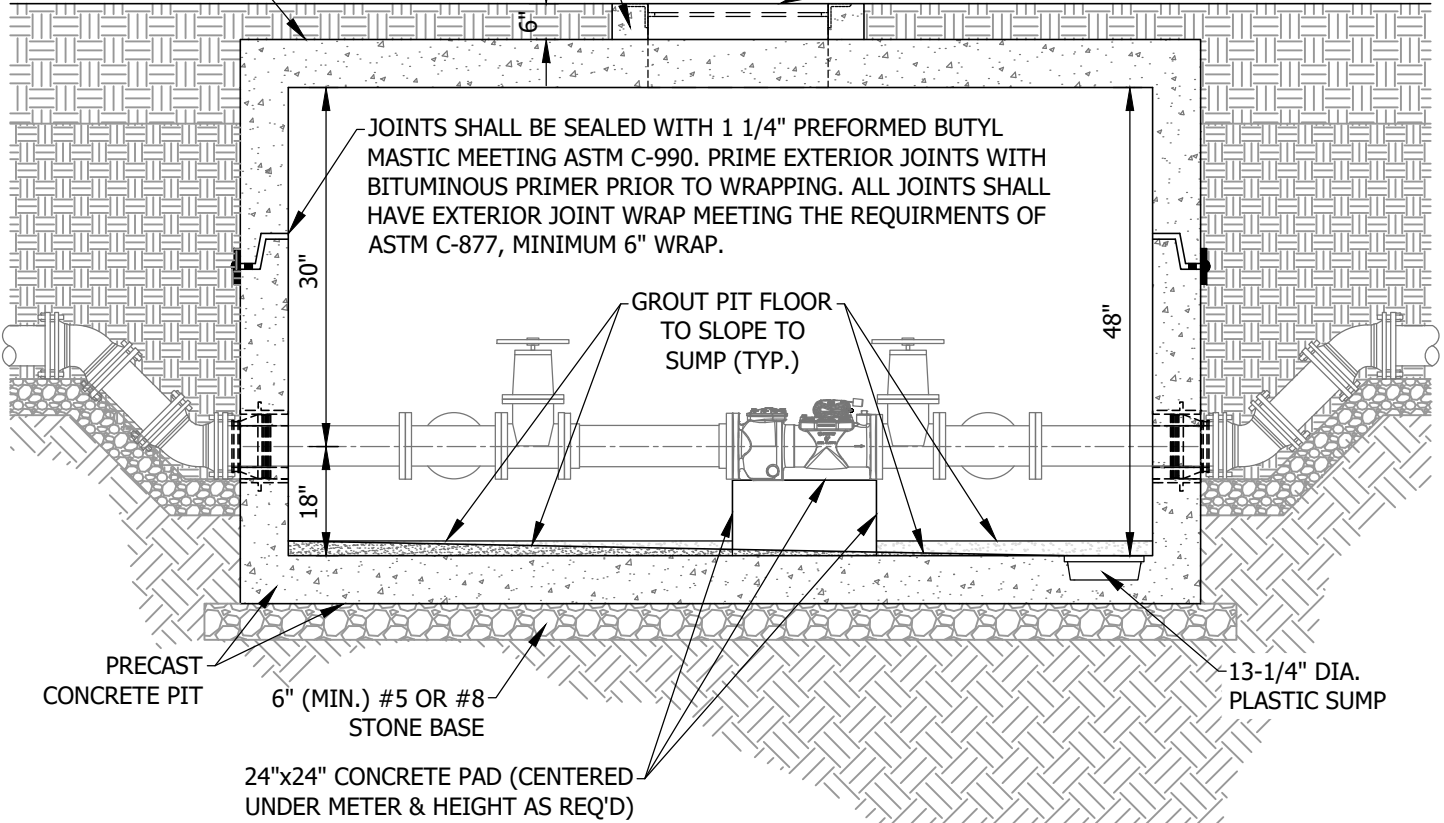
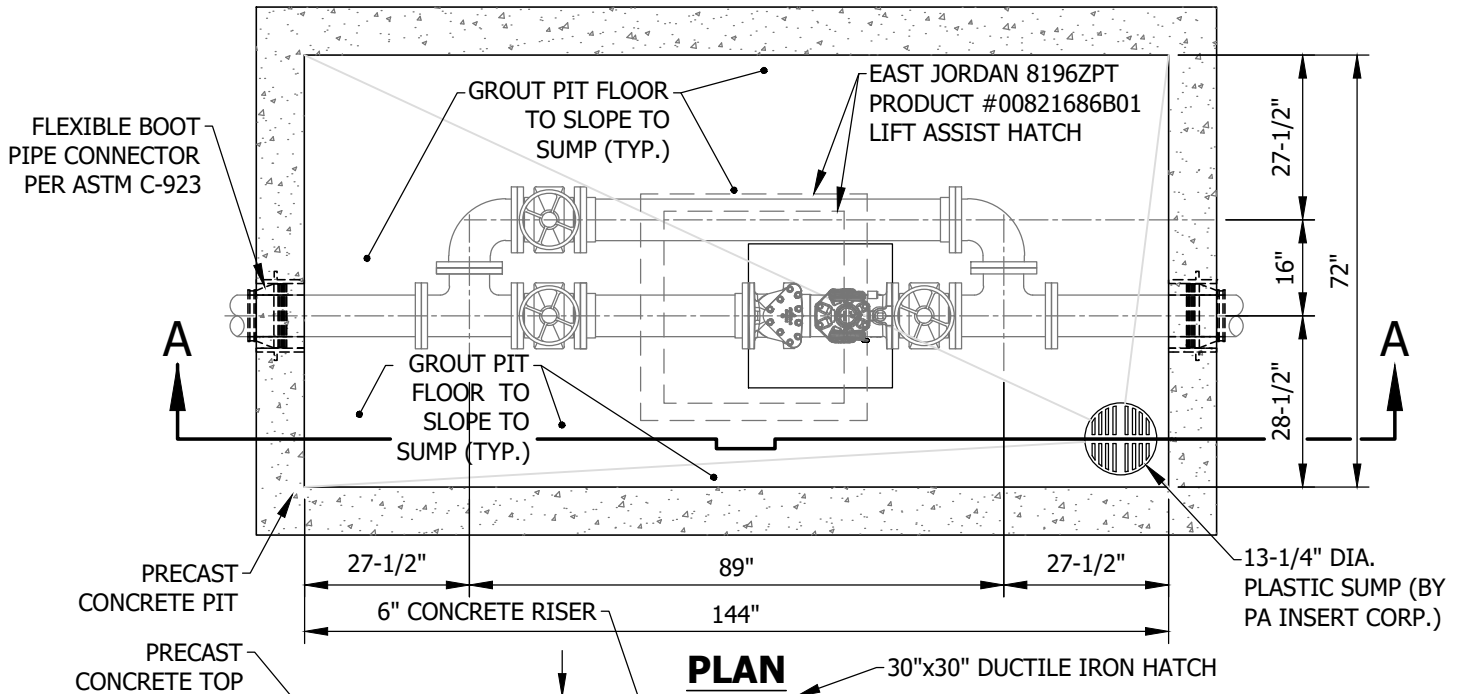
Adopted: 02/28/17

Figure

Approved By: Michael D. Labitzke, P.E.

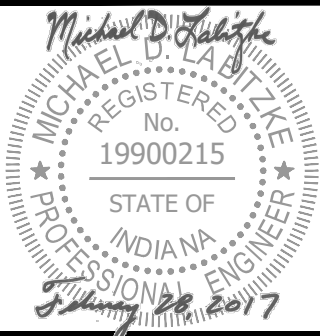
Scale: N.T.S.

DW27



NOTE:
 SEE 4" AND 6" METER SERVICE CONNECTION
 DETAILS FOR PIPING, VALVES AND
 APPURTENANCES.

Fig. 2: ENGINEER AUTOCAD Standards Detail Drawings\Water\DW28-6m Meter Pit.dwg



6" METER PIT

Approved: 02/28/17

Adopted: 02/28/17

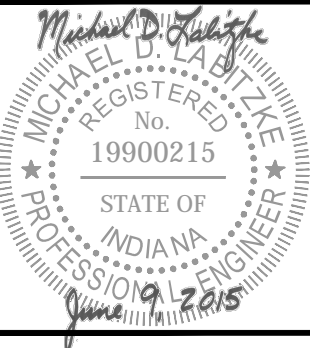
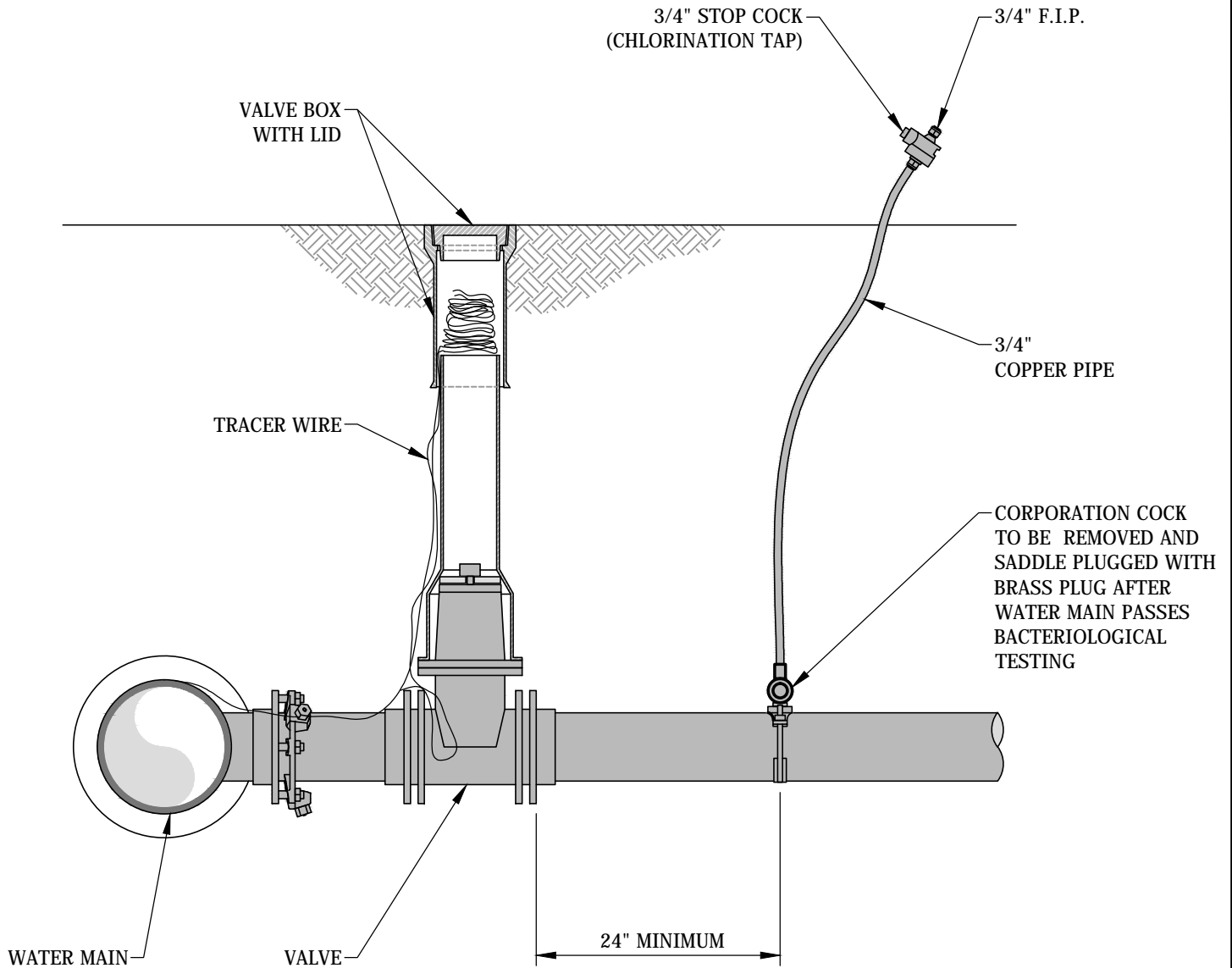
Figure

Approved By: Michael D. Labitzke, P.E.

Scale: N.T.S.

DW28

File: J:\ENGINEER\AUTOCAD\Standards\Detail Drawings\Water\DW29- Chlorination - Disinfection Tap.dwg



CHLORINATION / DISINFECTION TAP

Approved: 06/09/15

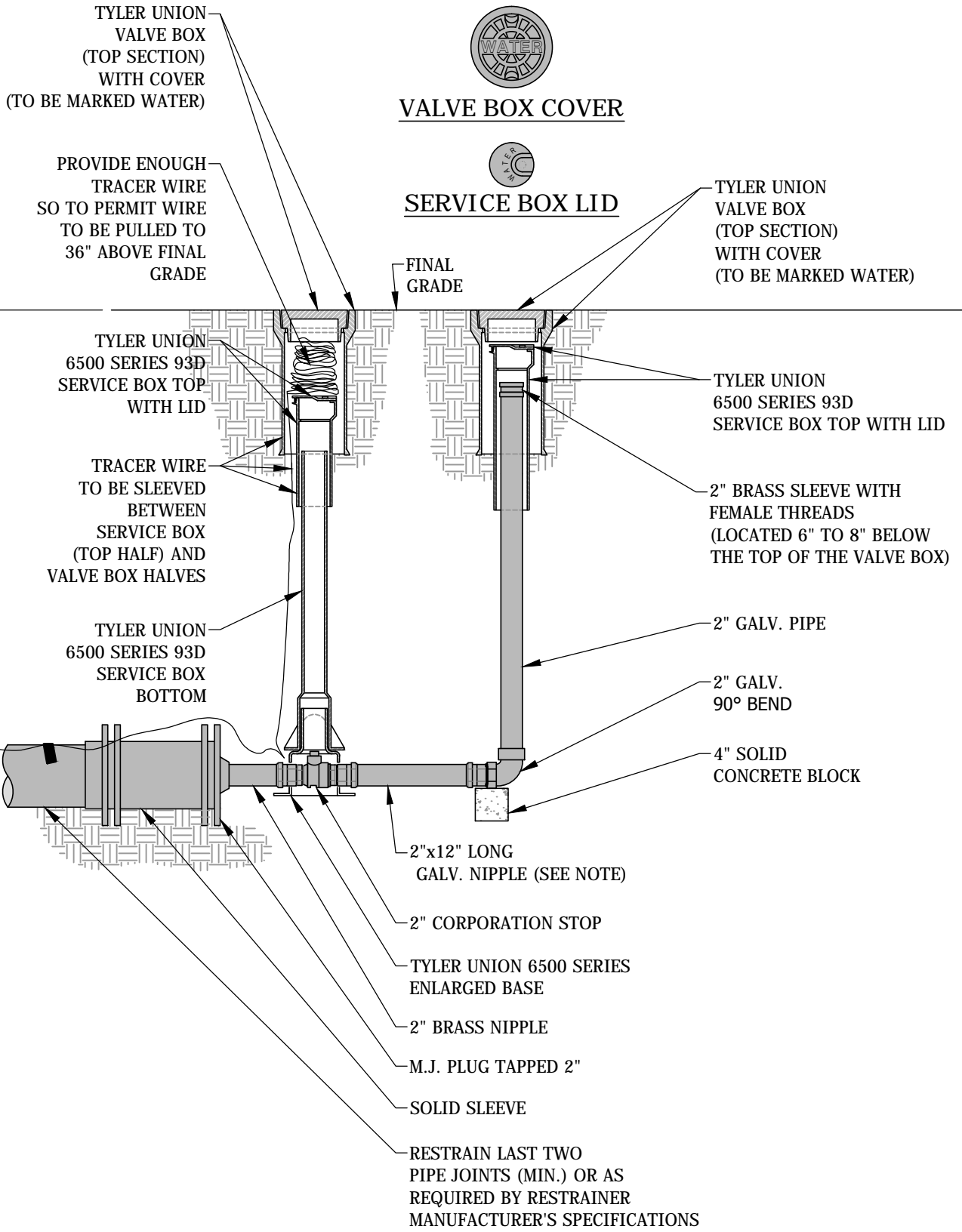
Adopted: 06/09/15

Figure

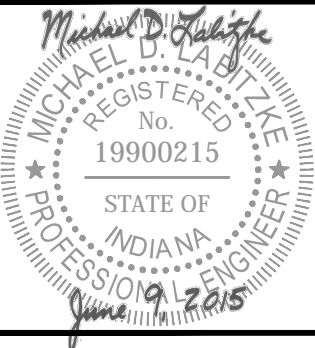
Approved By: Michael D. Labitzke, P.E.

Scale: N.T.S.

DW29



File: J:\ENGINEER\AUTOCAD\Standards\Detail Drawings\Water\DW30-Permanent Blowoff Assembly with 2in. Corp. Stop.dwg



PERMANENT BLOWOFF ASSEMBLY WITH 2" CORPORATION STOP

Approved: 06/09/15

Adopted: 06/09/15

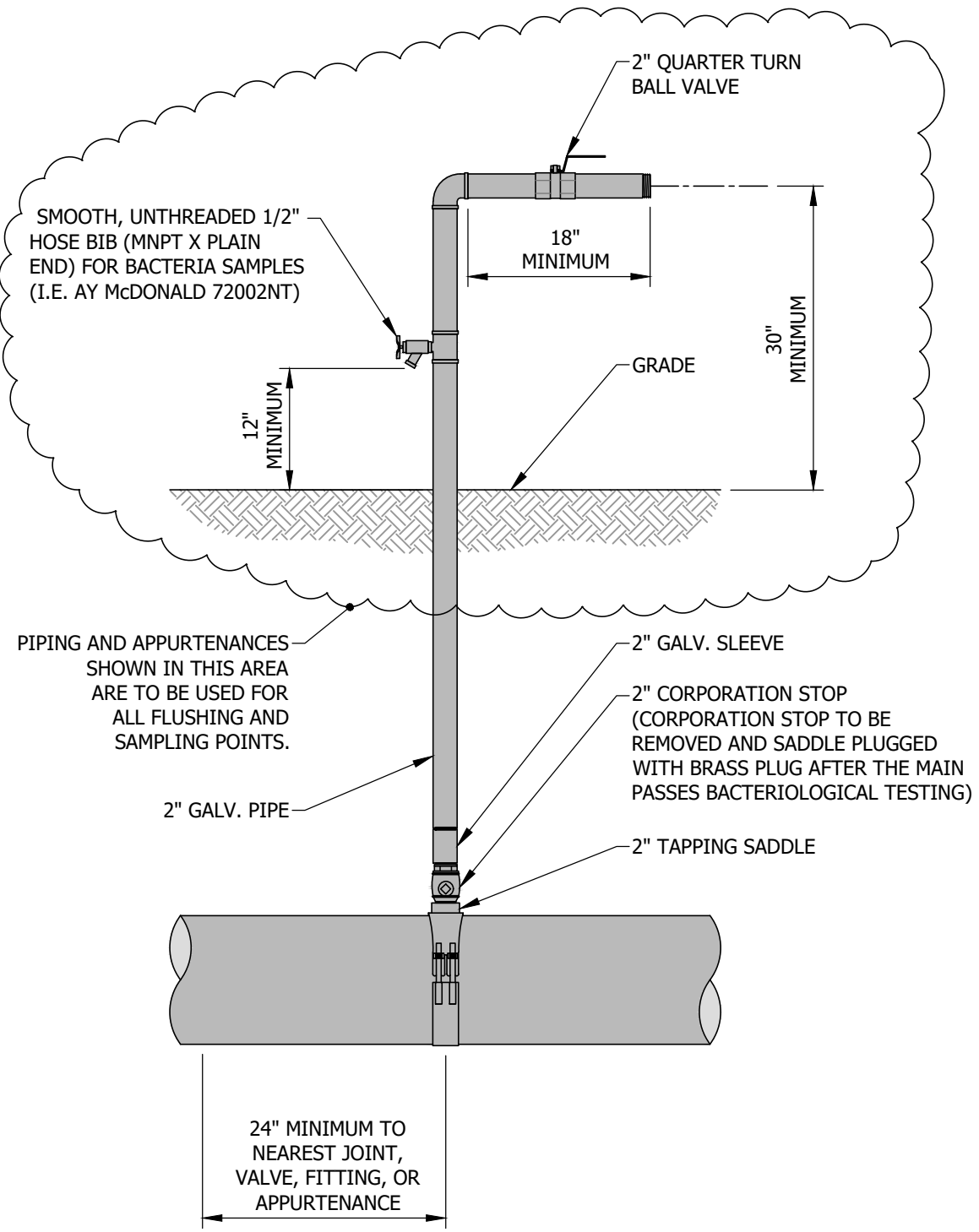
Figure

Approved By: Michael D. Labitzke, P.E.

Scale: N.T.S.

DW30

File: J:\ENGINEER\AUTOCAD\Standards\Detail Drawings\Water\DW31R--Temporary Blowoff Assembly with Saddle.dwg



Michael D. Labitzke
 REGISTERED
 No. 19900215
 STATE OF INDIANA
 PROFESSIONAL ENGINEER
J. Labitzke 28, 2017

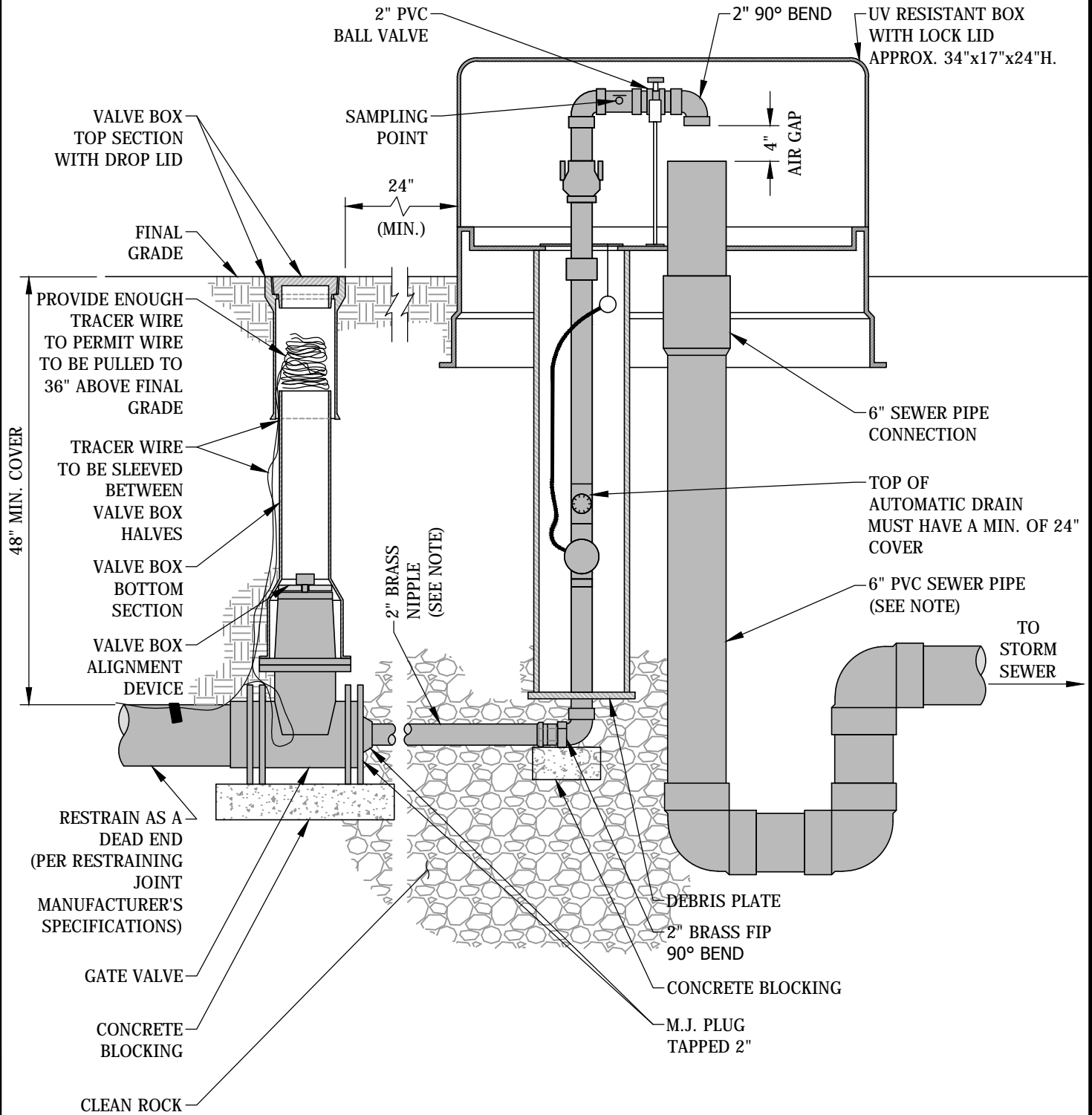


TEMPORARY BLOWOFF ASSEMBLY WITH SADDLE

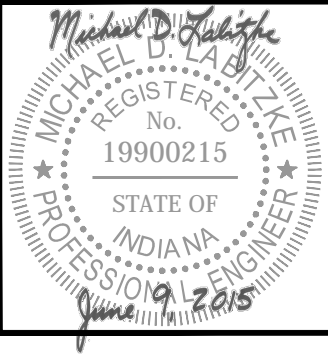
Approved: 02/28/17	Adopted: 02/28/17
Approved By: Michael D. Labitzke, P.E.	Scale: N.T.S.

Figure DW31

Fig: J:\ENGINEER\AUTOCAD\Standards\Detail Drawings\Water\DW33-Automatic Flushing Device with Gate Valve (Eclipse 9800).dwg

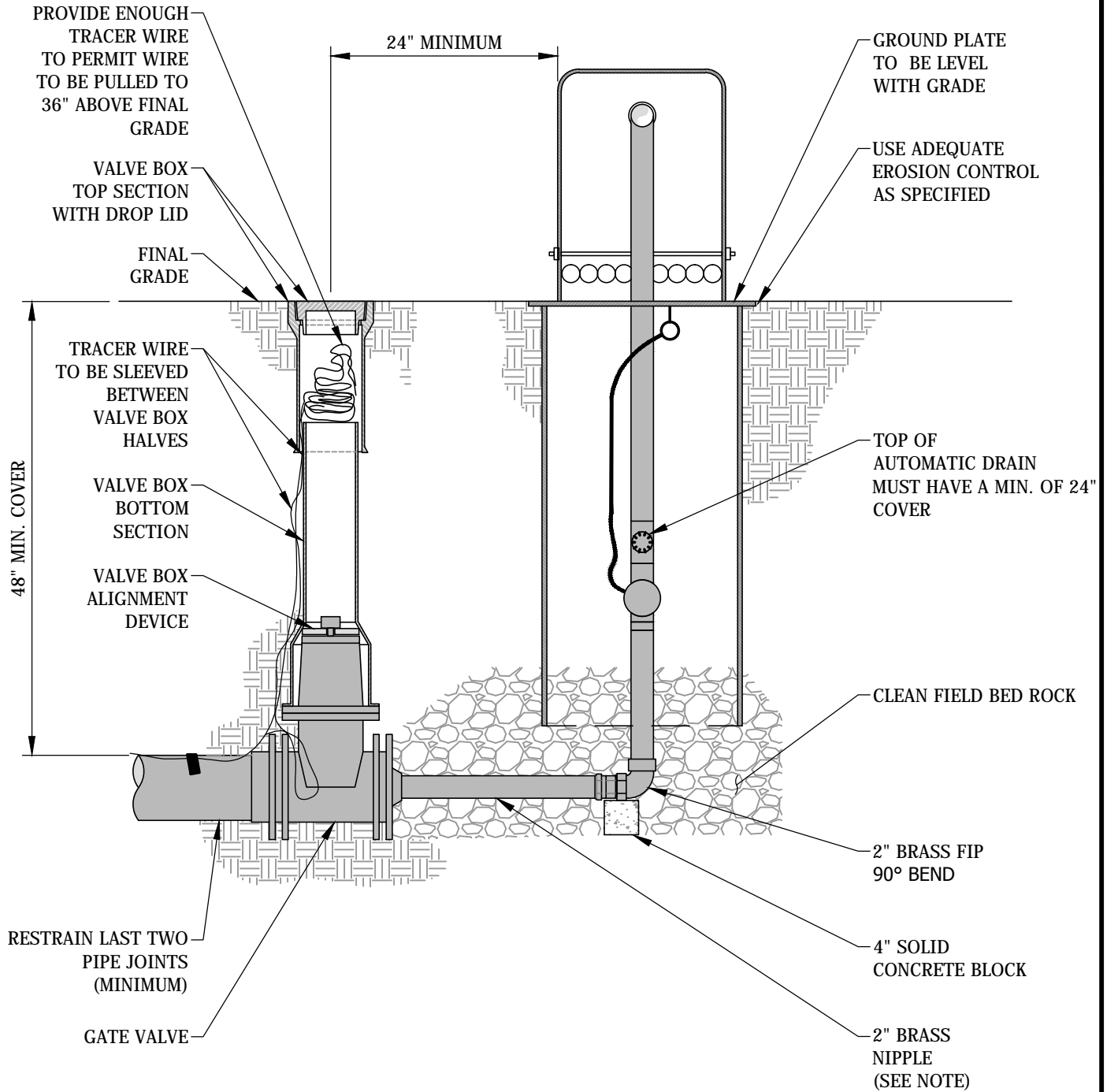


NOTE:
MAY USE SCH 80 WITH GLUE JOINT FITTINGS IF OVER 3'



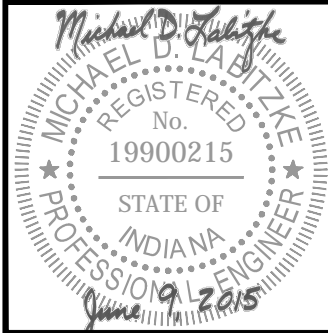
AUTOMATIC FLUSHING DEVICE WITH GATE VALVE (ECLIPSE 9800)

Approved: 06/09/15	Adopted: 06/09/15	Figure DW33
Approved By: Michael D. Labitzke, P.E.	Scale: N.T.S.	



NOTE:
MAY USE SCH 80 WITH GLUE JOINT FITTINGS IF OVER 3'

File: J:\ENGINEER\AUTOCAD\Standards\Detail Drawings\Water\DW34-Automatic Flushing Device with Gate Valve (Eclipse 9400).dwg



AUTOMATIC FLUSHING DEVICE WITH GATE VALVE (ECLIPSE 9400)

Approved: 06/09/15

Adopted: 06/09/15

Figure

Approved By: Michael D. Labitzke, P.E.

Scale: N.T.S.

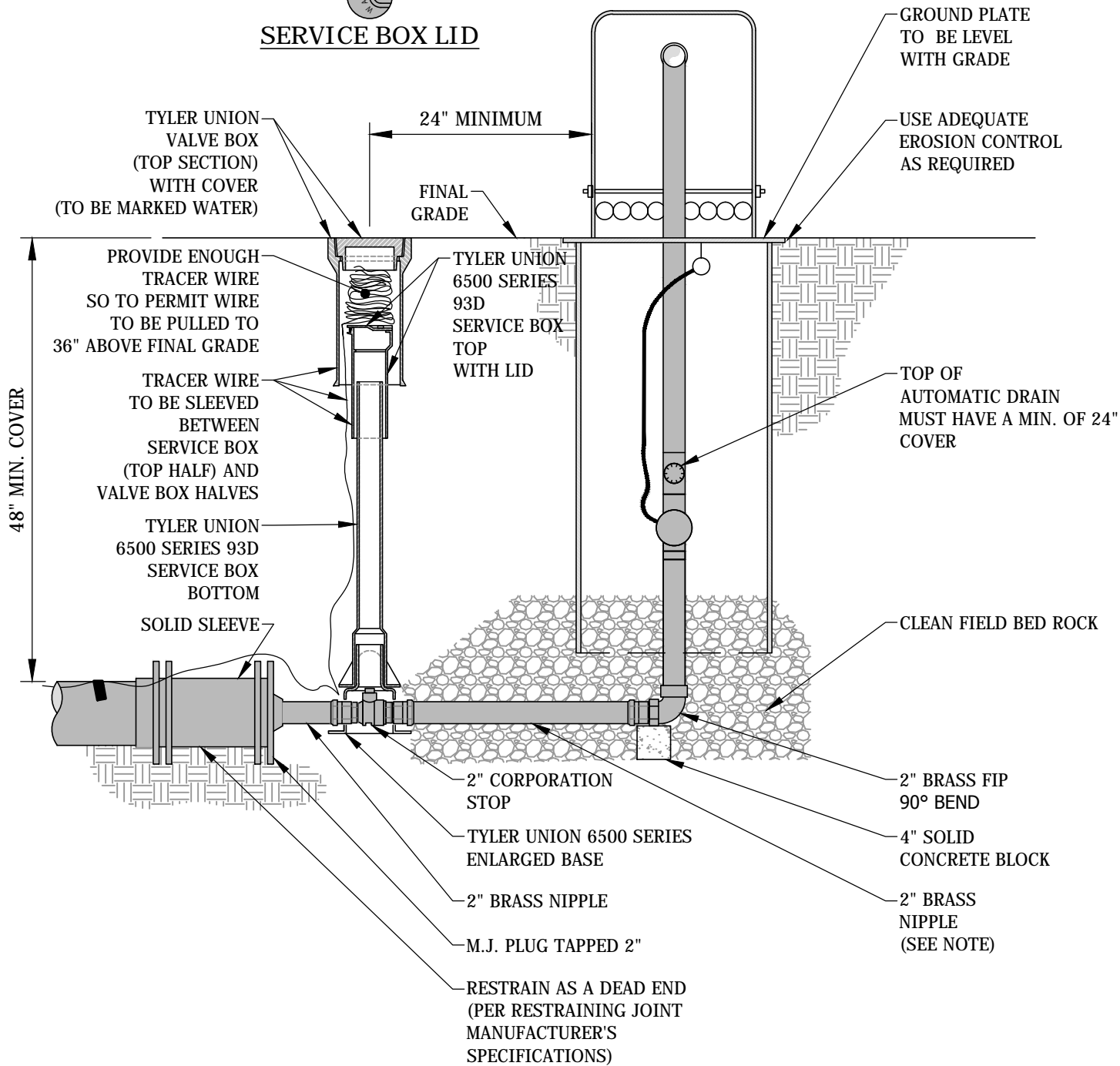
DW34



VALVE BOX COVER

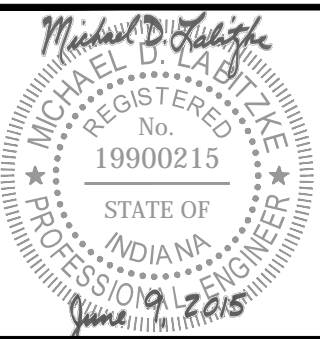


SERVICE BOX LID



NOTE:
 MAY USE SCH 80 WITH GLUE JOINT FITTINGS IF OVER 3' (ONLY BEYOND BALL COCK)

Fig. J: ENGINEER\AUTOCAD\Standards\Detail Drawings\Water\DW35-Automatic Flushing Device with 2in. Corp. Stop. (Eclipse 9400).dwg



AUTOMATIC FLUSHING DEVICE WITH 2" CORPORATION STOP (ECLIPSE 9400)

Approved: 06/09/15	Adopted: 06/09/15	Figure DW35
Approved By: Michael D. Labitzke, P.E.	Scale: N.T.S.	

THESE NOTES PERTAIN TO DETAIL FIGURES DW33, DW34 AND DW35

AUTOMATIC FLUSHING DEVICE SHALL HAVE A 2" BRASS FIP INLET, LEADING VERTICALLY INTO A 2" AUTOMATIC SOLENOID VALVE.

AUTOMATIC SOLENOID VALVE SHALL HAVE AN INTERNAL, SELF-CLEANING DEBRIS SCREEN, AND HAVE A 220 PSI RATING. EACH UNIT SHALL BE FURNISHED WITH A STAND-ALONE VALVE CONTROLLER.

VALVE CONTROLLER WILL NOT REQUIRE A SECOND HAND-HELD DEVICE FOR PROGRAMING.

CONTROLLER MUST HAVE A MINIMUM OF 9 POSSIBLE FLUSHING CYCLES PER DAY, SHALL BE SUBMERSIBLE TO 12 FEET, OPERATE WITH 9 VOLT BATTERY AND HAVE RESIN-SEALED ELECTRICAL COMPONENTS.

SOLENOID SHALL HAVE NO LOOSE PARTS WHEN REMOVED FROM VALVE.

EACH UNIT SHALL HAVE A DOUBLE-VALVE, ALL BRASS, SAMPLING POINT.

REMOVAL OF 2" SOLENOID VALVE SHALL BE POSSIBLE VIA AN O-RING CONNECTOR LOCATED UNDER THE VALVE, AFTER REMOVAL OF STAINLESS STEEL ACCESS PLATE.

VALVE ASSEMBLY SHALL BE HOUSED IN A PVC ENCLOSURE AND EACH UNIT SHALL BE SELF DRAINING, NON-FREEZING.

ALL ABOVE-GROUND COMPONENTS SHALL BE CONTAINED WITHIN A UV-RESISTANT LOCKING COVER, AS MANUFACTURED BY KUPFERLE FOUNDRY COMPANY.

ST. LOUIS, MO.

1-800-231-3990

MODEL No.9800 OR MODEL No.9400 OR APPROVED EQUAL.

PRIOR TO THE PERMANENT INSTALLATION OF THE VERTICAL PIPING FOR THE AUTOMATIC FLUSHING DEVICE, THE VERTICAL PIPING AND SURFACE COMPONENTS OF THE TEMPORARY BLOWOFF ASSEMBLY REPRESENTED IN DW31 SHALL BE INSTALLED ABOVE THE 2" BRASS FIP 90° BEND FOR A FLUSHING AND SAMPLING LOCATION DURING TESTING.

File: J:\ENGINEER\AUTOCAD\Standards\Detail Drawings\Water\DW36R--Automatic Flushing Device Notes.dwg



AUTOMATIC FLUSHING DEVICE NOTES

Approved: 02/28/17	Adopted: 02/28/17	Figure DW36
Approved By: Michael D. Labitzke, P.E.	Scale: N.T.S.	