

PROJECT TYPICAL DETAILS

PROJECT REFERENCE NO.
DF18314.2044195

SHEET NO.
UC-3A

DESIGNED BY: TMR

DRAWN BY: TMR

CHECKED BY: JDN

APPROVED BY: JDN

REVISED:

NORTH CAROLINA
DEPARTMENT OF
TRANSPORTATION

SEAL
047349

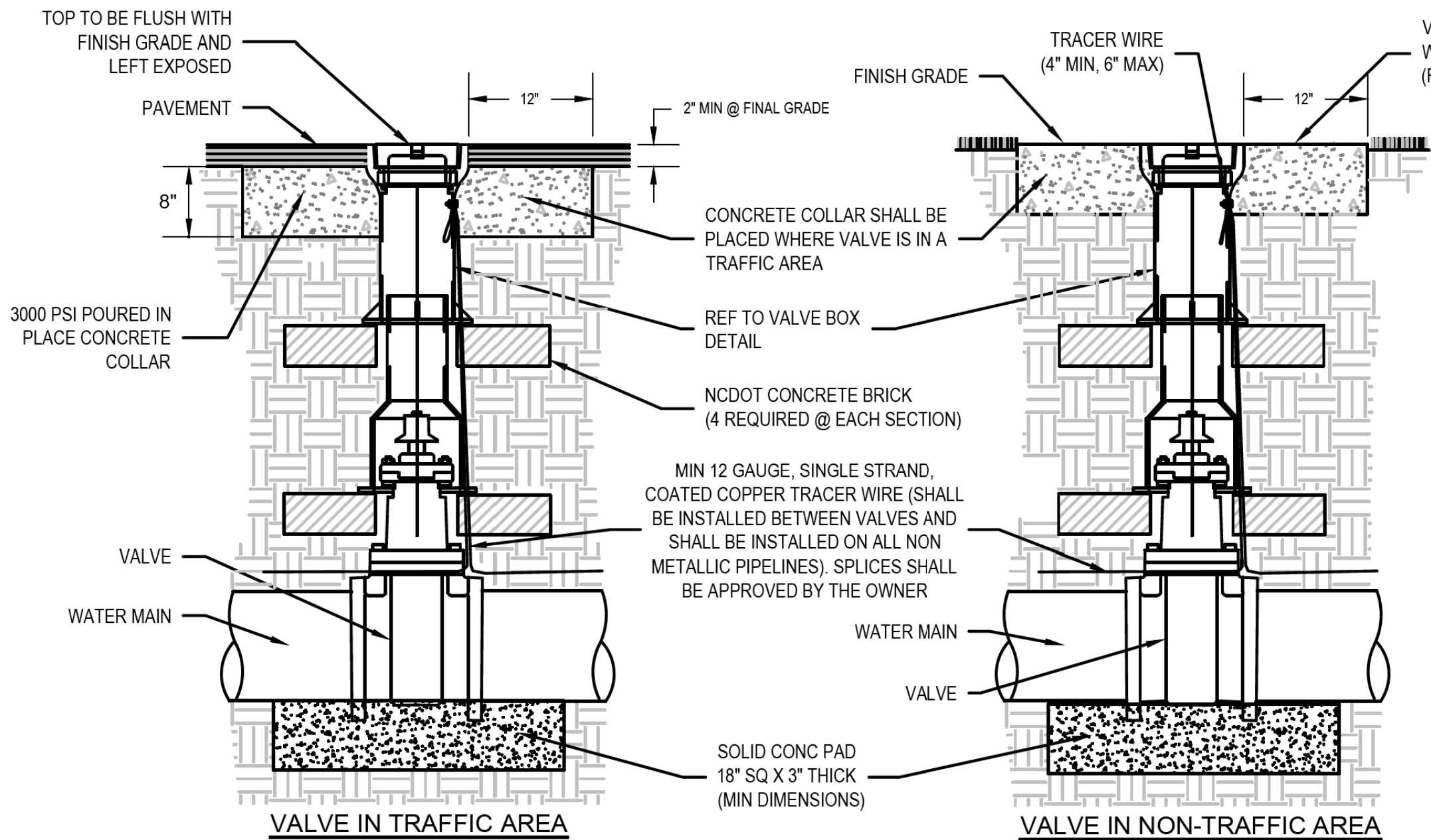
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UTILITIES ENGINEERING SEC.
PHONE: (919) 707-6690
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UTILITY CONSTRUCTION
PLANS ONLY

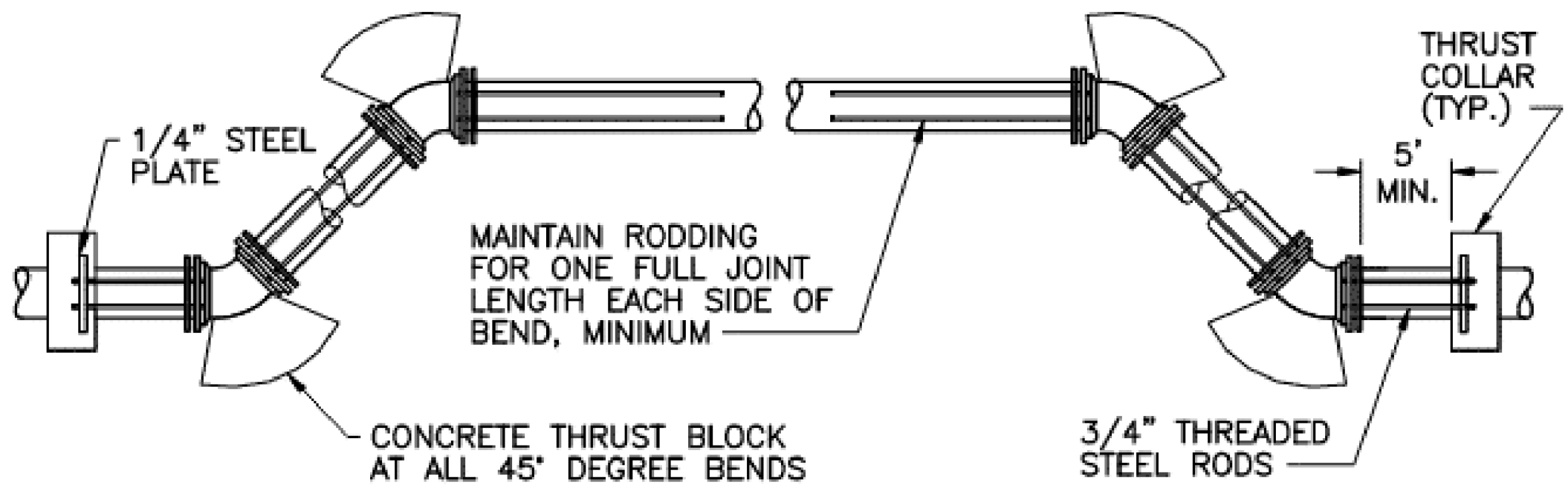
UTILITY CONSTRUCTION

DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED



1 GATE VALVE DETAIL (TYP)
NTS

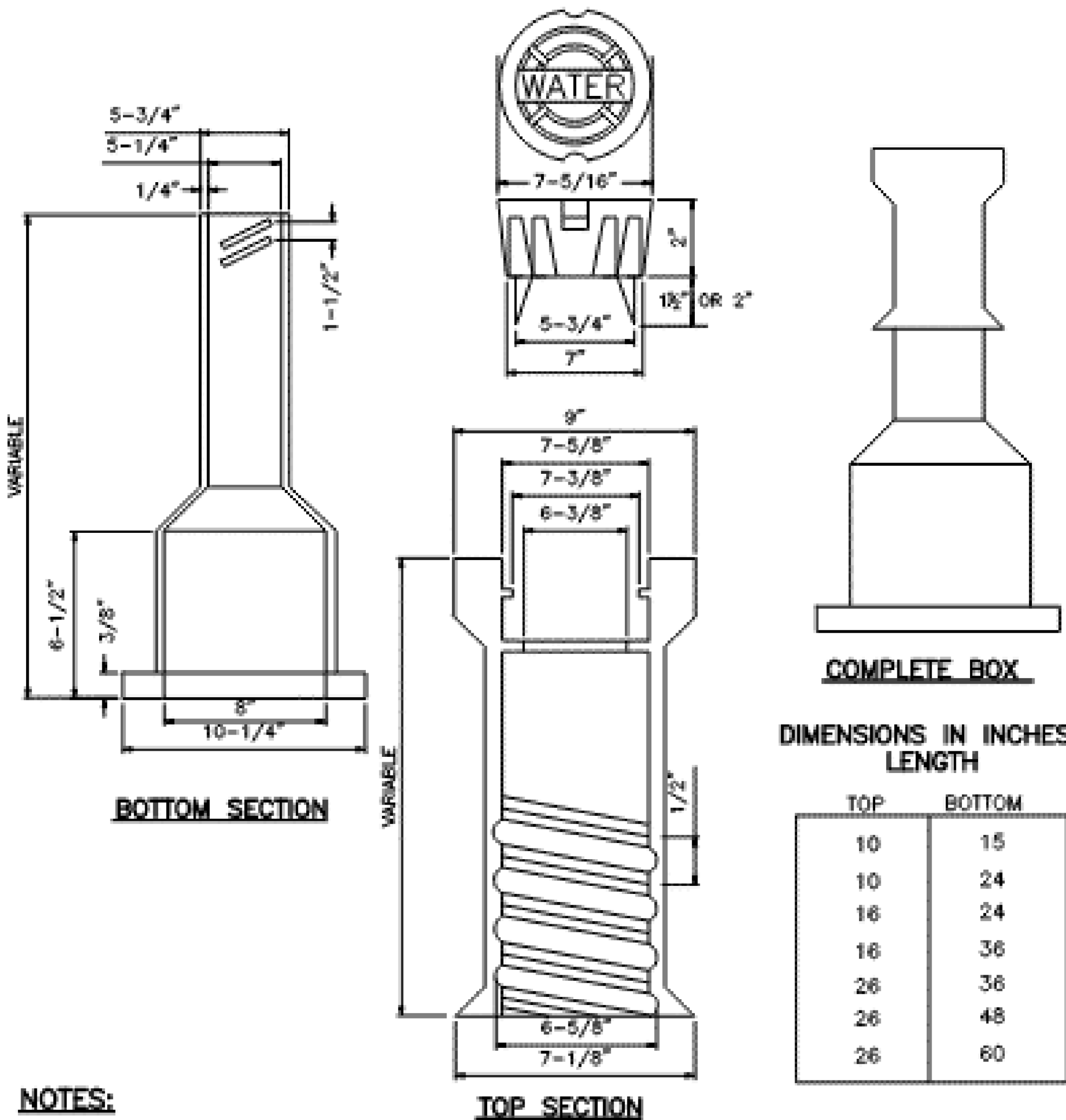
- NOTES:
1. ALL MATERIALS SHALL BE IN ACCORDANCE WITH OWNER STANDARDS.
 2. RESILIENT WEDGE GATE VALVE SHALL BE AS MANUFACTURED BY MUELLER CORP, AMERICAN DARLING OR CLOW CORP.
 3. ALL VALVES SHALL HAVE 2" SQUARE OPERATING NUT AND SHALL OPEN COUNTERCLOCKWISE.
 4. VALVE BODY, BONNET AND GATE SHALL BE IN ACCORDANCE WITH AWWA C-509/C-515 AND NSF61.
 5. VALVE BODY AND BONNET SHALL BE COATED ON ALL INTERIOR AND EXTERIOR SURFACES WITH A FUSION BONDED EPOXY IN ACCORDANCE WITH AWWA C-550-90.
 6. ALL VALVES 24" AND SMALLER SHALL HAVE A SAFE WORKING PRESSURE OF 250 PSI.
 7. REF TO VALVE BOX DETAIL FOR ADDITIONAL INFORMATION.
 8. REF TO VALVE BOX PROTECTOR RING DETAIL FOR ADDITIONAL INFORMATION.
 9. VALVE BOX SECTIONS ARE REQUIRED. THE USE OF PIPE IN LIEU OF VALVE BOX SECTIONS SHALL NOT BE PERMITTED.
 10. THE SOLID CONCRETE PAD UNDER VALVE MAY BE PROVIDED BY A PRECAST MANUFACTURER OR CAST-IN-PLACE IN THE FIELD. THE PADS MAY NOT BE CAST-IN-PLACE IN THE PIPE TRENCH. CONNECTION TO PIPE SHALL BE SUCH THAT THERE SHALL BE NO STRESS AT THE JOINT CAUSED BY MISALIGNMENT OR INADEQUATE SUPPORT OF PIPE OR VALVE.



STATIC THRUST SIZE OF 45° BEND	NUMBER OF IN POUNDS	NUMBER OF RODS REQUIRED
6"	4,328	2
8"	7,694	2
12"	17,312	4
16"	30,779	4
20"	48,091	6
24"	69,252	8

- NOTES:
1. ONCE INSTALLED AND TIGHT, THE STEEL RODS AND BOLTS SHALL RECIEVE 2 COATS OF BITUMINOUS MATERIAL OR SHALL BE GALVANIZED.
 2. CONCRETE SHALL NOT CONTACT BOLTS OR ENDS OF MECHANICAL JOINT BENDS.

VERTICAL BENDS
N.T.S.



- NOTES:
1. VALVE BOX SHALL HAVE RAISED LETTERS "WATER" CAST INTO COVER.
 2. VALVE BOX ACCOMMODATES 4" THRU 12" VALVES.
 3. VALVE BOX SHALL HAVE 3/8" HOLE DRILLED IN TOP SECTION THRU WHICH A 1/2" X 1 1/2" GALVANIZED BOLT SHALL BE USED TO SECURE A 12GA. THHN TRACER WIRE FOR NON-FERROUS PIPE. A 1/2" WASHER SHALL BE USED BETWEEN NUT AND INSIDE OF BOX. TIGHTEN HAND TIGHT.
 4. SCREW TYPE VALVE BOXES ARE REQUIRED.
 5. DIMENSIONS SHOWN MAY VARY DEPENDING UPON THE MANUFACTURER.

VALVE BOX DETAIL
NTS

