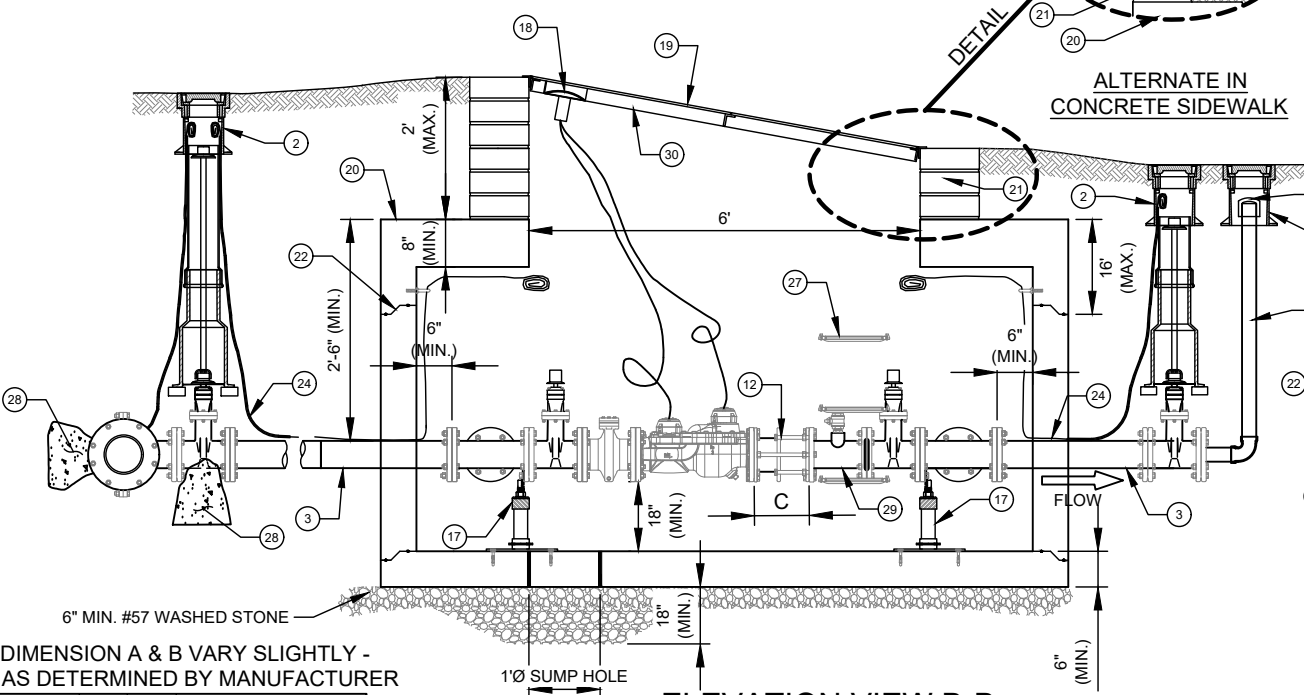
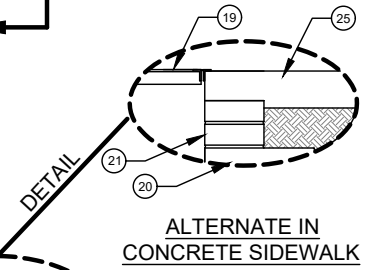


TYPICAL PLAN A



ELEVATION VIEW B-B



ALTERNATE IN CONCRETE SIDEWALK

- NOTES:**
- A. ALL FLANGE HARDWARE (BOLT/WASHER/NUT) SHALL BE STAINLESS STEEL - TYPE 304 WITH ANTI-SEIZE COMPOUND.
 - B. ALL PIPE SHALL BE RESTRAINED JOINT DUCTILE IRON FROM TAP TO PROPERTY LINE VALVE.
 - C. METER CONFIGURATION AND LENGTH MAY VARY DUE TO BRAND - VERIFY LENGTH TO DETERMINE MINIMUM VAULT LENGTH.
 - D. VAULT SHALL BE SIZED AS NEEDED FOR PIPE (8.5' X 4' MINIMUM) AND RATED FOR NCDOT HS-20 LOADING - SUBMIT SHOP DRAWINGS / P.E. SEALED FOR REVIEW.
 - E. ALL CONCRETE SHALL BE MINIMUM 4,000 PSI COMPRESSIVE STRENGTH.
 - F. DESIGN SHALL CONFORM TO ASTM C858 - SPECIFICATIONS FOR "UNDERGROUND PRECAST CONCRETE UTILITY STRUCTURE".
 - G. STEEL REINFORCING DESIGN SHALL CONFORM TO ASTM C857.
 - H. REBARS SHALL BE GRADE 60 PER ASTM A615.
 - I. WELDED WIRE FABRIC SHALL CONFORM TO ASTM A185.
 - J. DIAGONAL REINFORCING SHALL BE ADDED AT ALL OPENINGS.
 - K. PIPE PENETRATIONS SHALL BE SEALED WITH FLEXIBLE CONNECTORS (MANHOLE BOOTS) OR WITH 8" OF BRICK & MORTAR (AND 1/2-INCH THICK CONSTRUCTION EXPANSION MATERIAL).
 - L. FRAME TO BE FLUSH WITH GROUND OR CONCRETE SIDEWALK, GROUND SHALL SLOPE AWAY FROM VAULT.
 - M. ALL JOINTS SHALL BE MADE WATERTIGHT USING 2 RINGS OF BUTYL RUBBER JOINT MASTIC.
 - N. ALL VALVES SHALL BE OPEN RIGHT - CLOCKWISE, EXCEPT NO. 13.
 - O. WRAP TAPPING SLEEVE WITH 2 LAYERS HDPE PLASTIC FILM (HDCLPE PER AWWA C-105) - 4 MILS EACH LAYER - EXTEND HDPE 2' EACH WAY FROM SLEEVE - DUCT TAPE OR ZIP LOCK TIE ENDS.
 - P. CONCRETE THRUST BLOCKING REQUIRED AT TAPPING SLEEVE.
 - Q. PRECAST VAULT COMPONENTS SHALL HAVE MARKINGS PER ASTM C478 REQUIREMENTS.

- NO. DESCRIPTION:**
1. 4" TAPPING SLEEVE AND 4" FLANGE X MJ TAPPING VALVE ON EXISTING MAIN. 4" MJ TEE, 4" FOSTER ADAPTOR, AND 4" MJ GATE VALVE ON NEW MAIN.
 2. STANDARD VALVE BOX ASSEMBLY (TYP.) - ALL VALVES.
 3. FLANGE X PLAIN END DUCTILE IRON PIPE - L = 30" (MIN.) (SPECIAL CLASS 53).
 4. FLANGE DUCTILE IRON TEE WITH ADJUSTABLE FLANGE SUPPORT.
 5. FLANGE DUCTILE IRON 90° - BEND.
 6. FLANGE X PLAIN END DUCTILE IRON PIPE 2 EA. - LL = 62" (MIN. SPECIAL CLASS 53).
 7. MJ LONG PATTERN SOLID SLEEVE WITH RESTRAINED JOINTS.
 8. 3/4" BALL CORPORATION STOP WITH TAPPING SADDLE.
 9. FLANGE GATE VALVE; WITH 2" OPERATING NUT - OPEN RIGHT AND WITH ADJUSTABLE FLANGE SUPPORT ON BYPASS VALVE.
 10. FLANGE STRAINER.
 11. FLANGE COMPOUND METER ASSEMBLY W/AMR TRANSMITTERS. METER CONFIGURATION MAY VARY DUE TO BRAND SUPPLIED.
 12. 4" DISMANTLING JOINT (RESTRAINED) - ROMAC DJ400 - LL = 7" TO 9", SET TO 8", OR SMITH-BLAIR #975 - 8" TO 10", SET TO 9". - FL X FL - (L = 10" OR 9" - EXTENDED) SMITH BLAIR #975 OR ROMAC #DJ400 WITH STAINLESS STEEL TIE RODS/HARDWARE.
 13. MECHANICAL JOINT (RJ) GATE VALVE - 2" OPERATING NUT - OPEN LEFT AT PROPERTY LINE.
 14. MECHANICAL JOINT PLUG WITH 2" TAP.
 15. TEMP. 2" PIPE GALVANIZED STEEL (SCH 80) WITH STANDARD VALVE BOX/CONCRETE PAD.
 16. TEMP. 2" THREADED COUPLING.
 17. ADJUSTABLE FLANGE PIPE SUPPORTS (3 REQUIRED).
 18. AMR TRANSMITTERS.
 19. 4' X 6' DOUBLE-LEAF ACCESS DOOR. SEE STANDARD DETAIL.
 20. PRECAST REINFORCED CONCRETE VAULT.
 21. MINIMUM OF (3) STANDARD SOLID CONCRETE BRICK COURSES UNDER ACCESS DOOR FRAME, MAXIMUM 2'.
 22. JOINT REQUIRED AT FLAT TOP SECTION.
 23. 3/8" DIA. GALV. STEEL EYE BOLT (ADHESIVE ANCHOR) - TYPICAL.
 24. AWG #12 GAUGE SOLID COPPER TRACER WIRE - WITH 30 MILS BLUE HDPE INSULATION - TERMINATE WITH 24" EXCESS WIRE (COILED) AT EYE BOLT AND VALVE BOX (TYPICAL).
 25. CAST IN PLACE CONCRETE SIDEWALK - BRICKWORK SHALL NOT EXTEND TO SURFACE. ACCESS DOOR FRAME SHALL REST ON SIDEWALK.
 26. VALVE LOCK AND WARNING TAG (FURNISHED BY CLTW) - LOCK VALVE CLOSED.
 27. PLASTIC STEP - 12" VERTICAL SPACING.
 28. CONC. THRUST BLOCKING - 3,600 PSI.
 29. 4" EPOXY COATED/LINED STEEL FL X FL SPOOL WITH 2" FNPT TEST OUTLET - LL = 12" (MARS CO) AND 2" BALL CORPORATION STOP WITH T-HEAD OPERATING NUT - MNPT X FNPT.
 30. ATTACH ENGRAVED LABEL, WITH PREMISE NUMBER, TO UNDERSIDE OF DOOR, NEAR THE LIFTING HANDLE.

DIMENSION A & B VARY SLIGHTLY - AS DETERMINED BY MANUFACTURER

METER SIZE	A	B	C
4"	20"	9"	ROMAC = 8" SMITH BLAIR = 9"

SECTION VIEW A-A