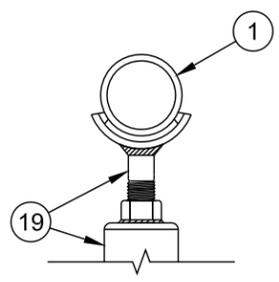
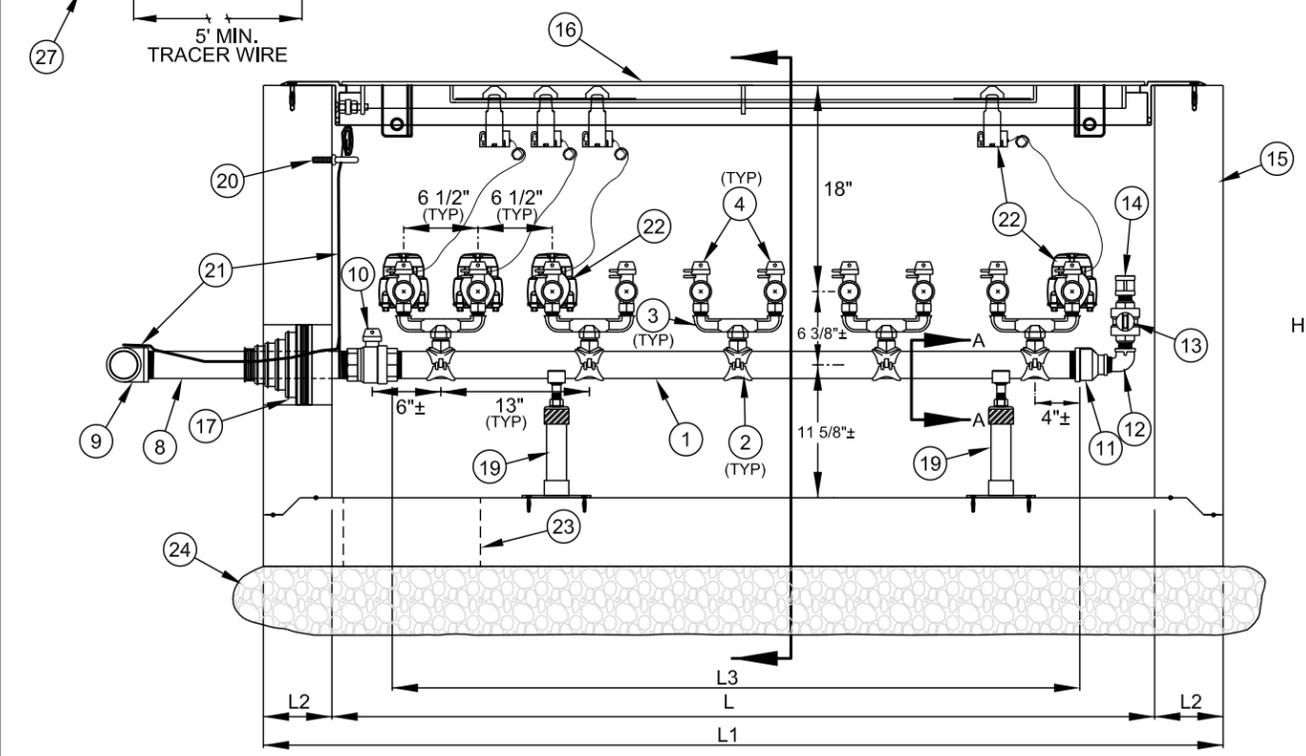


PLAN VIEW

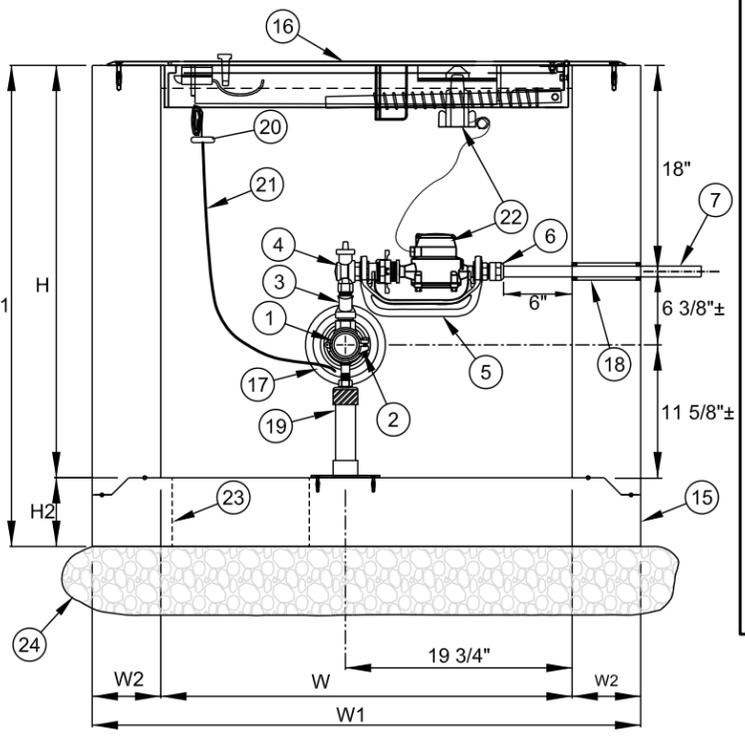
- NOTES:
- A. ACCESS DOOR SHALL BE ANCHORED TO VAULT OR SIDEWALK PER ACCESS DOOR STANDARD DETAIL.
 - B. ACCESS DOOR SHALL BE FLUSH WITH GROUND OR SIDEWALK, AND GROUND SHALL SLOPE AWAY FROM VAULT.
 - C. SEE MULTIPLE WATER SERVICES - SCHEMATIC STANDARD DETAIL FOR ADDITIONAL LAYOUT REQUIREMENTS AND OPTIONS.



SECTION AA



ELEVATION VIEW



SIDE ELEVATION VIEW

NO. DESCRIPTION

- 1 2" SCH. 40 RED BRASS PIPE MNPT (LENGTH=L3)
- 2 2" x 1" BRASS SERVICE SADDLE - FNPT OUTLET
- 3 1" x 3/4" x 3/4" BRASS U-BRANCH - MNPT
- 4 5/8" X 3/4" ANGLE BALL VALVE WITH LOCK WINGS - FNPT x YOKE STAR NUT
- 5 5/8" DUCTILE IRON METER YOKE BAR
- 6 5/8" STRAIGHT CONNECTOR (YOKE STAR NUT x CTS COMPRESSION)
- 7 3/4" TYPE K COPPER (L = 18")
- 8 2" SCH. 40 RED BRASS PIPE MNPT (L=24")
- 9 2" - 90° BRASS BEND - FNPT x CTS COMPRESSION
- 10 2" BALL VALVE CURB STOP - FNPT x FNPT
- 11 2" x 1" BRASS REDUCER - FNPT x FNPT
- 12 1" BRASS 90° STREET ELBOW - MNPT x FNPT
- 13 1" BALL VALVE CURB STOP - MNPT x MNPT WITH LOCK WINGS (LOCK CLOSED WITH LOCK FURNISHED BY CMUD)
- 14 1" RED BRASS THREADED COUPLING - FNPT x FNPT
- 15 PRECAST CONCRETE METER VAULT - SEE CHART FOR SIZE
- 16 MANIFOLD ALUMINUM ACCESS DOOR - SEE DETAIL
- 17 2" FLEXIBLE PIPE CONNECTOR BOOT
- 18 1 1/2"Ø - SCH 40 PVC SLEEVE (WITH RUBBER ISOLATION BUSHING AT EACH FACE OF VAULT WALL)
- 19 GALV. STEEL OR S.S. ADJUSTABLE SADDLE PIPE SUPPORT (NUMBER REQ'D = N1) WITH 1/4"± THICK NEOPRENE LINER (WITH STAINLESS STEEL ADHESIVE ANCHORS)
- 20 3/8" DIA. STAINLESS STEEL EYE BOLT (ADHESIVE ANCHOR)
- 21 AWG #12 GAUGE COPPER TRACER WIRE (THWN) - WITH BLUE INSULATION - TERMINATE WITH 24" EXCESS WIRE (COILED) @ EYE BOLT AND VALVE BOX (TYPICAL).
- 22 5/8" WATER METER WITH AMR ERT TRANSMITTER (FURNISHED BY CMUD)
- 23 12" DIAMETER SUMP HOLE
- 24 6" #57 OR #67 WASHED STONE
- 25 2" TYPE K COPPER OR SDR9 HDPE (POLY) TUBING (WITH INSERT STIFFENERS)
- 26 FOR EXISTING MAINS - TAPPING SADDLE AND 2" BALL CORPORATION STOP - CC (TAPER TREAD) x CTS COMPRESSION (WITH STANDARD VALVE BOX ASSEMBLY), OR; FOR NEW MAINS - MJ TEE, MJ PLUG - TAP - 2", 2" x 6" SCH 40 RED BRASS NIPPLE, 2" GATE VALVE (FNPT) (WITH STANDARD VALVE BOX ASSEMBLY), BRASS STRAIGHT CONNECTOR (MNPT x CTS COMPRESSION) MUELLER #H-15428, FORD #C84-77GJ, McDONALD #24753T
- 27 6" OR LARGER WATER MAIN

DESIGN REQUIREMENTS

- A. VAULT SHALL BE RATED FOR NCDOT HS-20 LOADING - SUBMIT SHOP DRAWING / CALCULATIONS / P.E. SEALED FOR REVIEW.
- B. ALL CONCRETE SHALL BE MINIMUM 4000 PSI COMPRESSIVE STRENGTH.
- C. DESIGN SHALL CONFORM TO ASTM C858 - SPECIFICATIONS FOR "UNDERGROUND PRECAST CONCRETE UTILITY STRUCTURE"
- D. STEEL REINFORCING DESIGN SHALL CONFORM TO ASTM C857
- E. REBARS SHALL BE GRADE 60 PER ASTM A615
- F. WELDED WIRE FABRIC SHALL CONFORM TO ASTM A185
- G. PIPE PENETRATIONS SHALL BE ISOLATED FROM PIPE WITH FLEXIBLE CONNECTERS (MANHOLE BOOTS) OR WITH RUBBER ISOLATION BUSHINGS

DIMENSIONS (INCHES)

VAULT (INSIDE)			VAULT (OVERALL-MIN.)			WALL THICKNESS (MIN.)	FLOOR THICKNESS (MIN.)	NUMBER OF METERS (MAX.)	L3 2" RED BRASS PIPE LENGTH (1)	N1 REQ'D NO. OF PIPE SUPPORTS (19)		
L	W	H	L1	W1	H1	W2 / L2	H2				L4	L5
72	36	36	84	48	42	6	6	10	60	2	6.5	7
60	36	36	72	48	42	6	6	8	48	2	7	7.5
48	36	36	60	48	42	6	6	6	36	2	7.5	8
36	36	36	44	44	40	4	4	4	24	1	8	8.5

NO SCALE

STANDARD NO.	S
VERSION DATE	09.30.2010
VERSION NO.	1.0

3/4-INCH MANIFOLD WATER METER ASSEMBLY AND PRECAST CONCRETE VAULT

CHARLOTTE-MECKLENBURG UTILITIES STANDARD DETAILS WATER

