



- GENERAL NOTES:**
- 8-INCH OCTAVE ULTRASONIC BY MASTER METER, INC. WITH EITHER GRADE 316 STAINLESS STEEL OR LEAD-FREE EPOXY COATED DUCTILE IRON METER BODY COMPLIANT WITH ANSISF 372 (AB1953 OR NSF61G) AND A MAXIMUM WORKING PRESSURE OF 175 PSI AND STANDARD ANSI CLASS 125 STANDARD END FLANGES; OR A CITY AUTHORIZED EQUIVALENT. THE METER SHALL HAVE A 9-DIGIT LCD DISPLAY PROGRAMMED TO READ 6-DIGITS WITH 100 CUBIC FEET REGISTER AND GPM FOR RATE OF FLOW. THE METER MUST BE COMPATIBLE WITH THE AMI MODULE AND NEXGRID.
 - PIPING AND FITTINGS WITHIN THE VAULT AND AT LEAST 10-FT EXTERNAL TO THE VAULT SHALL BE CONSTRUCTED WITH 8-INCH RESTRAINED DUCTILE IRON PIPE AND FITTINGS. ALL EXTERNAL PIPE JOINTS AND/OR FITTINGS SHALL BE AT LEAST 3-FT FROM EXTERNAL VAULT WALL.
 - PIPING AND FITTINGS SHALL BE A MAXIMUM OF 3.5 FEET BELOW FINISHED GRADE.
 - PRE-CAST REINFORCED CONCRETE UNDER-GROUND VAULT WITH H-20 LOADING AND ANTI-FLOATATION. ALL VAULT OPENINGS SHALL BE WATER TIGHT AND SEALED UTILIZING MASTIC GASKETS, NON-SHRINKING GROUT AND RESILIENT PIPE CONNECTORS, AS REQUIRED.
 - TEST PORT: 2-INCH DUCTILE IRON TAPPING SADDLE MANUFACTURED BY ROMAC INDUSTRIES, INC., MODEL 202S OR EQUAL; BRASS 2-INCH STRAIGHT BALL VALVE WITH SECURA-LOK MANUFACTURED BY FORD, INC B81-777-NL OR EQUAL AND BRASS PLUG.
 - MAINTAIN AT LEAST 16-INCHES FROM METER FLANGE TO THE TEST PORT CONNECTION INSTALLATION.
 - RESILIENT WEDGE GATE VALVE NON-RISING STEM WITH HAND-WHEEL.
 - DISMANTLING JOINT MANUFACTURED BY ROMAC INDUSTRIES, INC., MODEL DJ405, OR EQUAL, INSTALLED AT LEAST 12-INCHES FROM THE VAULT WALL. THE DISMANTLING JOINT FLANGES MUST EXTEND TO AT LEAST 14-INCHES FROM PIPE FLANGE TO METER FLANGE.
 - THE ALUMINUM DOORS/HATCH WITH STAINLESS STEEL FITTINGS AND BOLTS SHALL BE FLUSH MOUNT, WATER-TIGHT, AND LOCKABLE WITH H-20 LOAD RATING AS MANUFACTURED BY BILCO OR A CITY AUTHORIZED EQUIVALENT. THE DOORS/HATCH SHALL BE SIZED TO ENSURE THE VALVES, METER AND TEST PORT ARE LOCATED WITHIN THE DOOR OPENING AND ACCESSIBLE TO CITY OF CONCORD STAFF.
 - 12-INCHES OF HORIZONTAL CLEARANCE MUST BE PROVIDED BETWEEN THE INTERIOR VAULT WALL AND ALL FITTINGS AND PIPING/FITTINGS/CONTROLS; AND 18-INCHES OF HORIZONTAL CLEARANCE BETWEEN ALL INTERNAL BY-PASS ASSEMBLY PIPING/FITTINGS AND THE METER ASSEMBLY PIPING/FITTINGS.
 - MAINTAIN 14-INCHES OF MINIMUM VERTICAL CLEARANCE FROM THE VAULT LID/HATCH TO THE TOP OF THE METER ASSEMBLY AND THE GATE VALVE HAND-WHEEL.
 - APPROPRIATE BACKFLOW ASSEMBLY, IN ACCORDANCE WITH THE CITY OF CONCORD CODE OF ORDINANCE. BACKFLOW ASSEMBLY MUST BE LOCATED OUTSIDE OF THE PUBLIC UTILITY EASEMENT/RIGHT OF WAY AND/OR GREATER THAN 10-FT FROM THE METER ASSEMBLY UNLESS OTHERWISE APPROVED BY THE CITY.
 - THE CIVIL UTILITY DESIGN DRAWINGS SHALL INCLUDE ALL PIPE MATERIAL, LENGTHS, DIAMETER, TEES, BENDS, AND VALVING WITH APPLICABLE ATTRIBUTES EXTERNAL TO THE INTERIOR METER VAULT ASSEMBLY AND THE LOCATION, DIAMETER AND TYPE OF THE PRIVATE BACKFLOW UNIT ASSEMBLY.
 - THE CONTRACTOR MUST SUBMIT A DETAIL SHOP DRAWING OF THE VAULT WITH THE AUTHORIZED MASTER METER ASSEMBLY AND PIPING TO THE CONSULTANT ENGINEER. THE CONSULTANT ENGINEER IS TO REVIEW AND CERTIFY THE CONTRACTOR'S MATERIAL SUBMITTALS ASSOCIATED WITH THE PUBLIC UTILITIES AND DETAIL SHOP DRAWINGS MEET CITY STANDARDS, TECHNICAL REQUIREMENTS AND ANTI-FLOATATION REQUIREMENTS. AFTER THE CONSULTANT ENGINEER HAS CERTIFIED THE SUBMITTALS AND SHOP DRAWINGS, THE INFORMATION IS TO BE EMAILED TO GARY STANSBURY, CITY OF CONCORD CONSTRUCTION MANAGER, AT STANSBURY@CONCORDNC.GOV FOR REVIEW PRIOR TO ANY CONSTRUCTION ACTIVITY.

8-INCH WATER METER ASSEMBLY WITH H-20 LOADED VAULT AND HATCH STANDARD DETAIL



MASTER WATER METER FOR PRIVATE WATER DISTRIBUTION SYSTEMS

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C:\Eng\ACAD Drawings\Acadrawings Library\City of Concord Standard Details\4-Future City standards Still needing approval\Water\REV 11-08-22 8-inch Meter Vaults for Private Water Systems.dwg Aug 21, 2024 - 3:31pm