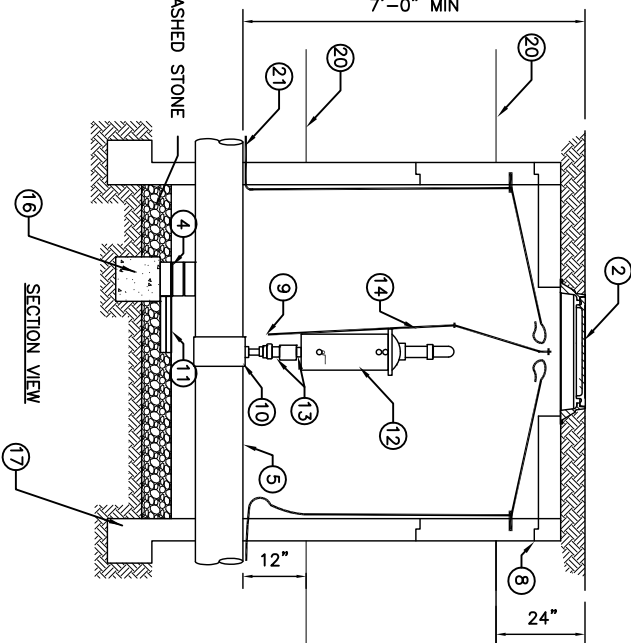
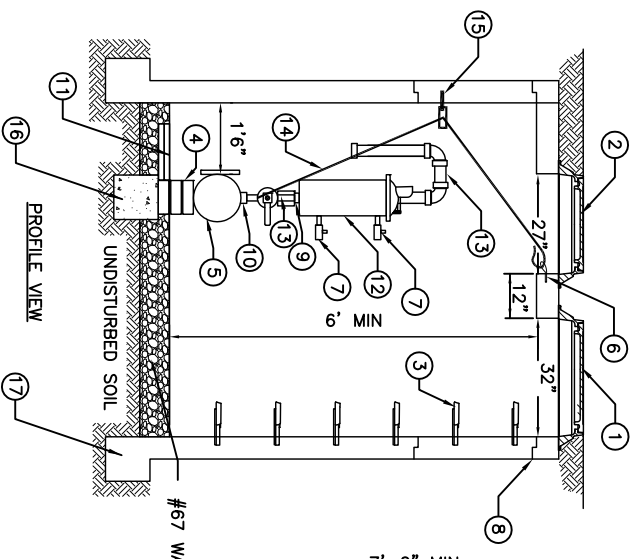
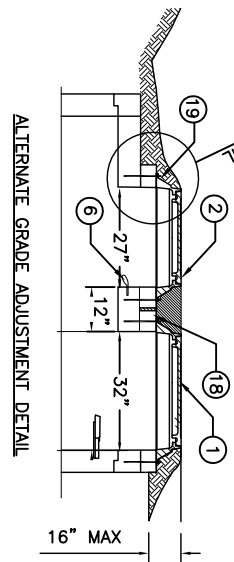


VAULT DIMENSION REQUIREMENTS			
PIPE DIA. D (IN)	LENGTH L (FT)	WIDTH W (FT)	
4-6	6.5	5.0	
8-16	7.0	5.0	
18-24	7.5	5.0	
30-36	8.0	5.0	
42-48	8.5	5.0	



- NO. DESCRIPTION**
- 30' CAST IRON MANHOLE FRAME AND COVER (MAN ACCESS)
 - CAST IRON MANHOLE FRAME AND COVER (EQUIPMENT ACCESS)
 - MANHOLE STEPS AT 12" OR 16" O.C.-CENTERED WITH FRAME
 - SOLID CONCRETE STANDARD BRICK & MORTAR PIPE SUPPORT
 - DUCTILE IRON PIPE FORCE MAIN
 - 1/2" DIA. TYPE 304 STAINLESS STEEL HOOK (ADHESIVE ANCHOR)
 - STAINLESS STEEL BALL VALVE - 1/4 TURN AND NIPPLE
 - JOINT REQUIRED AT FLAT TOP SECTION
 - STAINLESS STEEL BALL VALVE
 - BRONZE BALL CORPORATION STOP WITH ALL 304 STAINLESS STEEL TAPPING SADDLE - FORD FS 303, ROMAC STYLE 308, OR APPROVED EQUAL.
 - 16"x16"x2" CONCRETE PAVER (SPASH PAD) - 2 EACH-STACKED CENTER UNDER BRASS PIPE DISCHARGE
 - AIR AND VACUUM VALVE - SEE SPECIFICATIONS
 - SCHEDULE 40 RED BRASS PIPING
 - ROUTE 1/8" TYPE 304 STAINLESS STEEL CABLE FROM BALL VALVE HANDLE (MOUNTED ON TOP OF CORR. STOP THROUGH FLELET TO HOOK) LEAVE 6" SECURED LOOP IN CABLE END TO HANG OVER HOOK.
 - 1/2" DIA. TYPE 304 STAINLESS STEEL EYE BOLT (ADHESIVE ANCHOR) FROM VALVE
 - 12"x12"x12" CONCRETE FOOTING FOR PIPE SUPPORT OFFSET LATERALLY FROM VALVE
 - CONTINUOUS PRECAST OR CAST IN PLACE FOOTING
 - PRECAST CONCRETE GRADE ADJUSTMENT RING AS NEEDED
 - 1/2" DIA. GALV. ANCHOR BOLTS- FRAME TO VAULT (ADHESIVE ANCHOR)
 - GREEN DETECTABLE PLASTIC LOCATOR TAPE
 - ANG #12 GAUGE COPPER TRACER WIRE (THWN) WITH GREEN INSULATION - TERMINATE AT HOOK WITH 24" EXCESS WIRE (COILED).
- NOTES:**
- VAULT SHALL BE SIZED AS NEEDED FOR PIPE (6.5'X5' MINIMUM) AND RATED FOR NCDOT HS-20 LOADING - SUBMIT SHOP DRAWINGS FOR REVIEW.
 - ALL CONCRETE SHALL BE MINIMUM 4000 PSI COMPRESSIVE STRENGTH.
 - DESIGN SHALL CONFORM TO ASTM C888-SPECIFICATIONS FOR UNDERGROUND PRECAST CONCRETE UTILITY STRUCTURE.
 - STEEL REINFORCING DESIGN SHALL CONFORM TO ASTM C897.
 - REBAR SHALL BE GRADE 80 PER ASTM A615.
 - WELDED WIRE FABRIC SHALL CONFORM TO ASTM A185.
 - DIAGONAL REINFORCING SHALL BE ADDED AT ALL OPENINGS.
 - PIPE PENETRATIONS SHALL BE SEALED WITH FLEXIBLE CONNECTORS (MANHOLE BOOTS) OR WITH 8-INCHES OF BRICK & MORTAR (AND 1/2 INCH THICK CONSTRUCTION EXPANSION MATERIAL).
 - ALL VALVES SHALL OPEN COUNTERCLOCKWISE.
 - FRAME TO BE FLUSH WITH GROUND IN MAINTAINED ROAD OR YARD R/W AND 2 FEET ABOVE GROUND IN SEWER EASEMENT.
 - AIR AND VACUUM VALVE TO BE SHORT BODY TYPE, SIZED PER MANUFACTURER'S RECOMMENDATIONS.
 - VALVE TO BE INSTALLED AT MIDPOINT OF A FULL JOINT OF DUCTILE IRON PIPE.
 - VAULTS LOCATED IN AREAS SUBJECT TO FLOODING SHALL HAVE SOLID CONCRETE FLOOR AND VENT EXTENDING TO 2 FEET ABOVE 100 YEAR FLOOD ELEVATION - FRAME AND COVERS SHALL BE WATERIGHT.
 - ALL JOINTS SHALL BE MADE WATERIGHT USING 2 RINGS OF BUTYL RUBBER JOINT MASTIC.

EFFECTIVE: DECEMBER 30, 2016