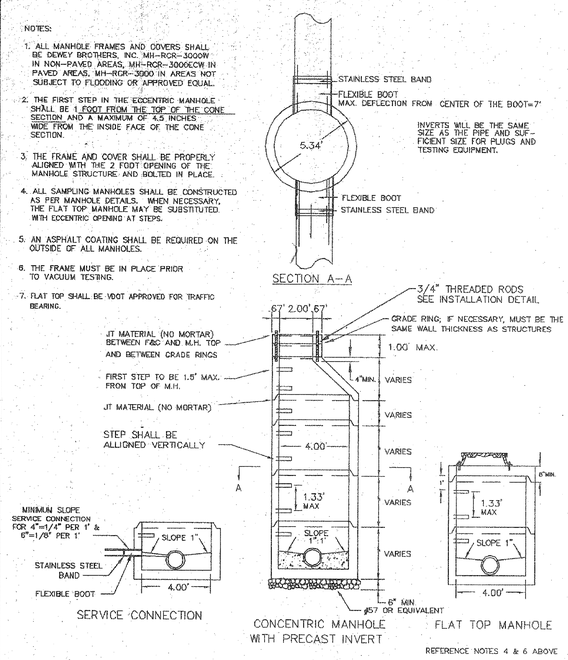
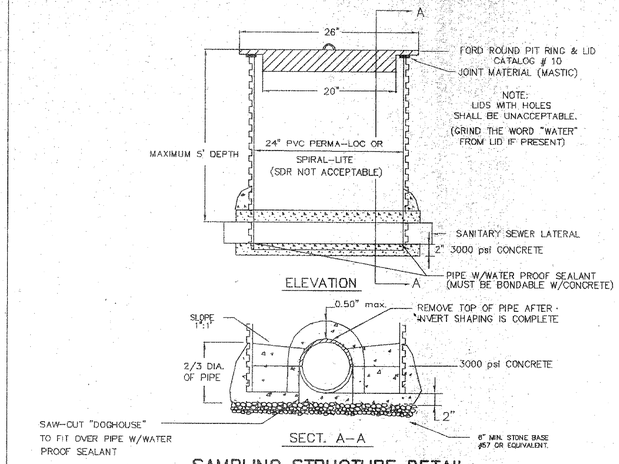
NOTES:

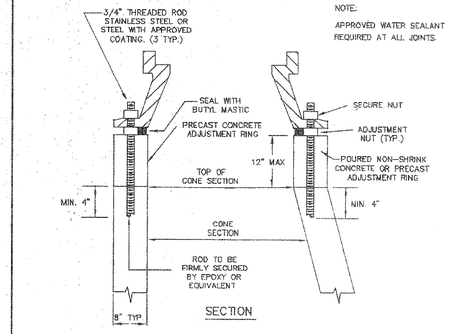
1. ALL MANHOLE FRAMES AND COVERS SHALL BE DEWEY BROTHERS, INC. MH-RCR-3000W IN NON-PAVED AREAS, MH-RCR-3000ECW IN PAVED AREAS, MH-RCR-3000 IN AREAS NOT SUBJECT TO FLOODING OR APPROVED EQUAL.
2. THE FIRST STEP IN THE ECCENTRIC MANHOLE SHALL BE 1 FOOT FROM THE TOP OF THE CONE SECTION AND A MAXIMUM OF 4.5 INCHES WIDE FROM THE INSIDE FACE OF THE CONE SECTION.
3. THE FRAME AND COVER SHALL BE PROPERLY ALIGNED WITH THE 2 FOOT OPENING OF THE MANHOLE STRUCTURE AND BOLTED IN PLACE.
4. ALL SAMPLING MANHOLES SHALL BE CONSTRUCTED AS PER MANHOLE DETAILS. WHEN NECESSARY, THE FLAT TOP MANHOLE MAY BE SUBSTITUTED WITH ECCENTRIC OPENING AT STEPS.
5. AN ASPHALT COATING SHALL BE REQUIRED ON THE OUTSIDE OF ALL MANHOLES.
6. THE FRAME MUST BE IN PLACE PRIOR TO VACUUM TESTING.
7. FLAT TOP SHALL BE VDOT APPROVED FOR TRAFFIC BEARING.



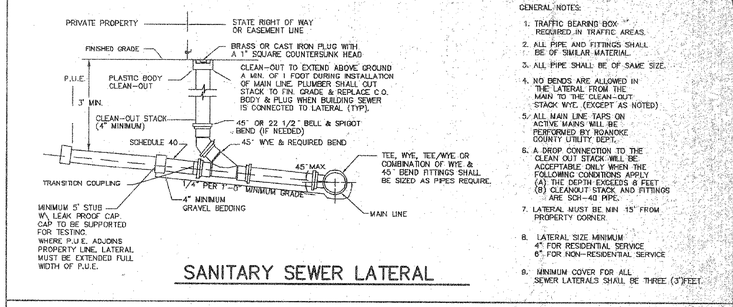
4' STANDARD MANHOLE FOR PIPE 15" OR SMALLER



SAMPLING STRUCTURE DETAIL



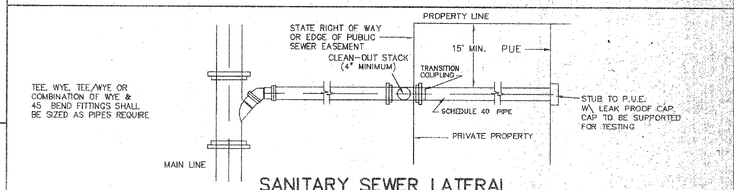
INSTALLATION DETAIL FOR ALL FRAMES AND COVERS



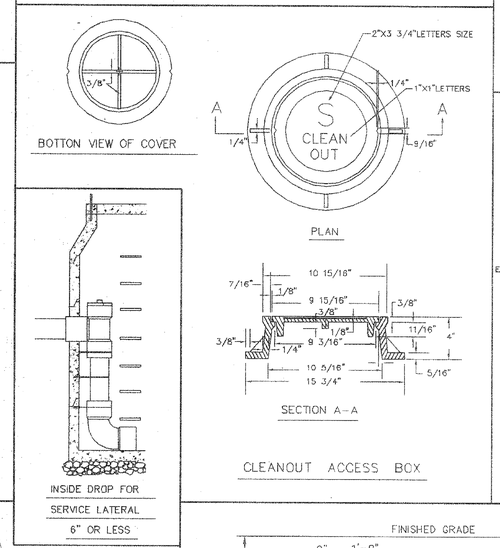
SANITARY SEWER LATERAL

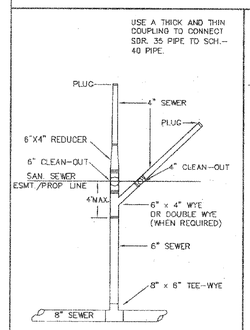
GENERAL NOTES:

1. TRAFFIC BEARING BOX REQUIRED IN TRAFFIC AREAS.
2. ALL PIPE AND FITTINGS SHALL BE OF SIMILAR MATERIAL.
3. ALL PIPE SHALL BE OF SAME SIZE.
4. NO BENDS ARE ALLOWED IN THE LATERAL FROM THE MAIN TO THE CLEAN-OUT STACK W/YE. (EXCEPT AS NOTED)
5. ALL MAIN LINE TAPS ON ACTIVE MAINS WILL BE PERFORMED BY ROANOKE COUNTY UTILITY DEPT.
6. A DROP CONNECTION TO THE CLEAN OUT STACK WILL BE ACCEPTABLE ONLY WHEN THE FOLLOWING CONDITIONS APPLY: (A) THE DEPTH EXCEEDS 6 FEET (B) CLEANOUT STACK AND FITTINGS ARE SCH-40 PIPE.
7. LATERAL MUST BE MIN 15' FROM PROPERTY CORNER.
8. LATERAL SIZE MINIMUM: 4" FOR RESIDENTIAL SERVICE 6" FOR NON-RESIDENTIAL SERVICE
9. MINIMUM COVER FOR ALL SEWER LATERALS SHALL BE THREE (3') FEET.

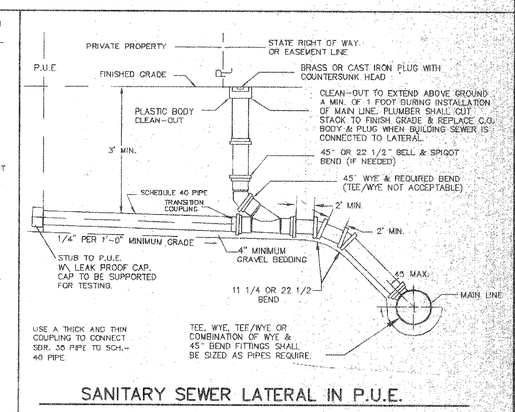


SANITARY SEWER LATERAL





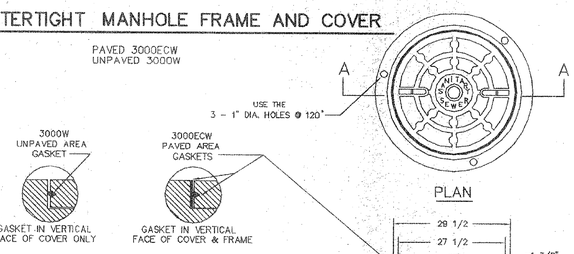
OPTIONAL LATERALS



SANITARY SEWER LATERAL IN P.U.E.

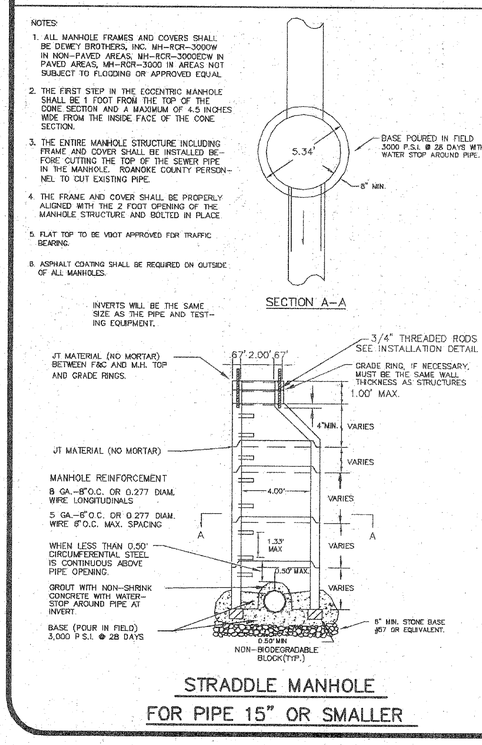
WATERTIGHT MANHOLE FRAME AND COVER

PAVED 3000ECW
UNPAVED 3000W

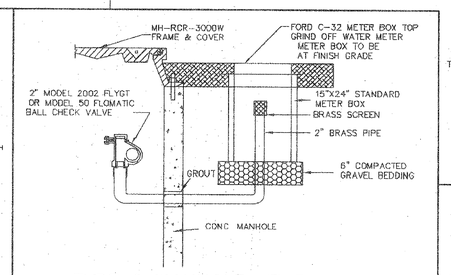


NOTES:

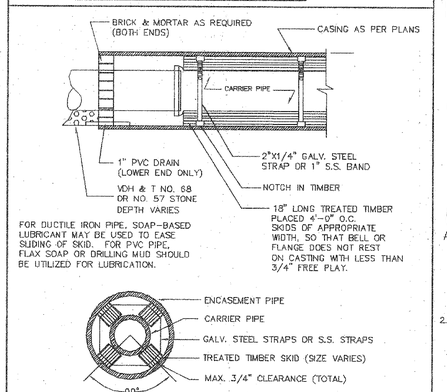
1. ALL MANHOLE FRAMES AND COVERS SHALL BE DEWEY BROTHERS, INC. MH-RCR-3000W IN NON-PAVED AREAS, MH-RCR-3000ECW IN PAVED AREAS, MH-RCR-3000 IN AREAS NOT SUBJECT TO FLOODING OR APPROVED EQUAL.
2. THE FIRST STEP IN THE ECCENTRIC MANHOLE SHALL BE 1 FOOT FROM THE TOP OF THE CONE SECTION AND A MAXIMUM OF 4.5 INCHES WIDE FROM THE INSIDE FACE OF THE CONE SECTION.
3. THE ENTIRE MANHOLE STRUCTURE INCLUDING FRAME AND COVER SHALL BE INSTALLED BEFORE CUTTING THE TOP OF THE SEWER PIPE IN THE MANHOLE. ROANOKE COUNTY PERSONNEL TO CUT EXISTING PIPE.
4. THE FRAME AND COVER SHALL BE PROPERLY ALIGNED WITH THE 2 FOOT OPENING OF THE MANHOLE STRUCTURE AND BOLTED IN PLACE.
5. FLAT TOP TO BE VDOT APPROVED FOR TRAFFIC BEARING.
6. ASPHALT COATING SHALL BE REQUIRED ON OUTSIDE OF ALL MANHOLES.



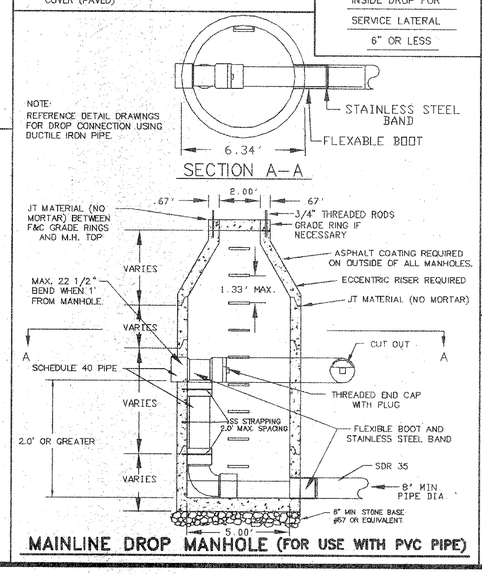
STRADDLE MANHOLE FOR PIPE 15" OR SMALLER



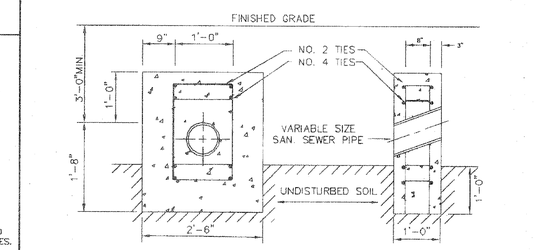
TYPE 2 MANHOLE VENT



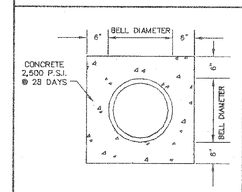
PIPE SUPPORT IN CASING PIPE



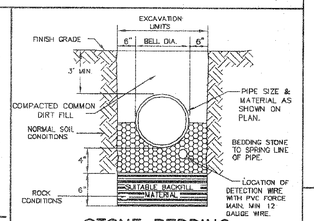
MAINLINE DROP MANHOLE (FOR USE WITH PVC PIPE)



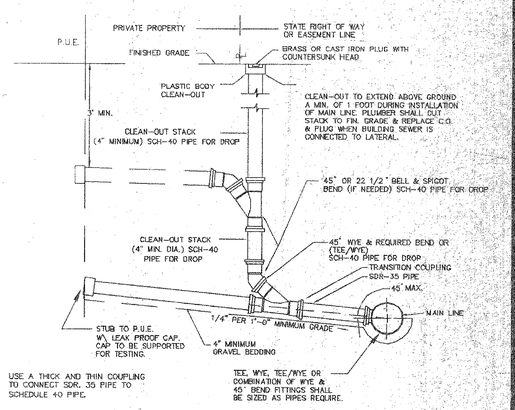
ANCHOR BLOCK



CONCRETE ENCASED PIPE



STONE BEDDING FOR FORCE MAIN INSTALLATION



OPTIONAL SANITARY SEWER LATERAL 8 FEET OR DEEPER

FOR ADDITIONAL REFERENCE, SEE DETAIL DRAWINGS IN SEWER STANDARDS.

DEPARTMENT OF ENGINEERING AND INSPECTIONS

NO.	REVISIONS	DATE
1		
2		
3		
4		
5		
6		

DR. NELSON B. GREENE

DATE: 10/19/93
SCALE: NO SCALE
DRAWING BY: CN,TB,AF
DESIGNED BY: ROANOKE COUNTY ENGINEERING DEPT.
APPROVED BY:

SEWER DETAILS

SHEET 3 OF 3

SC-030