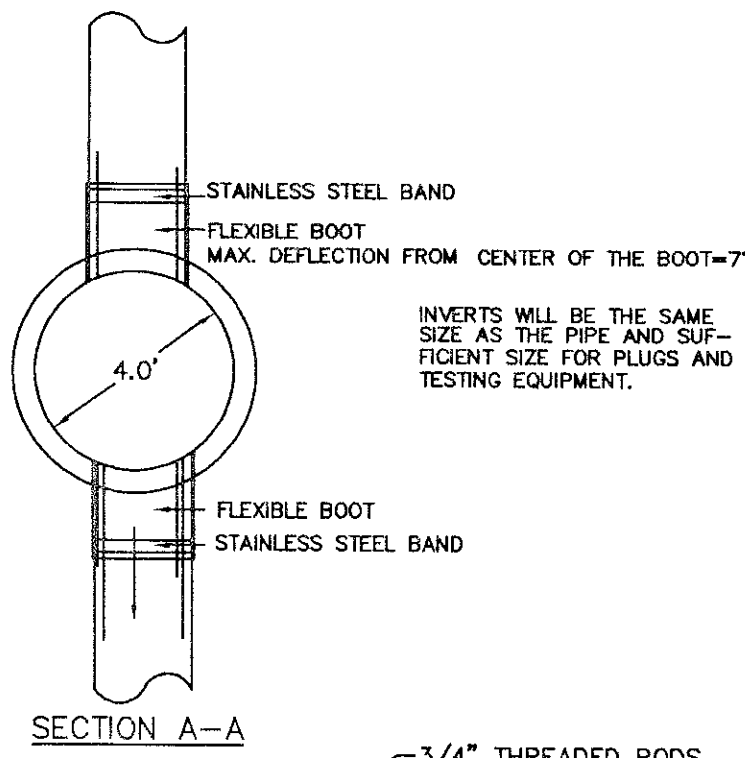
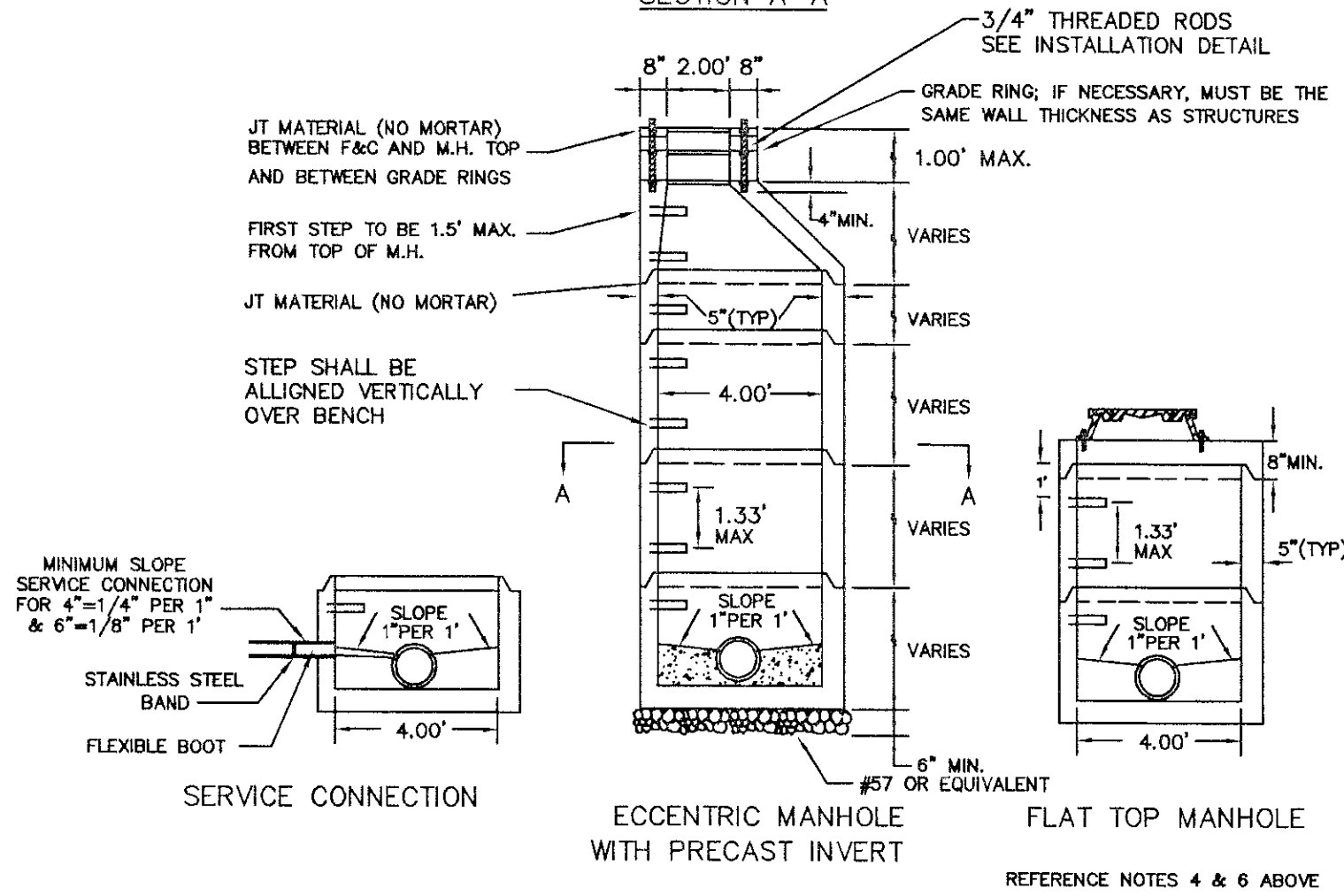


NOTES:

1. ALL MANHOLE FRAMES AND COVERS SHALL BE DEWEY BROTHERS, INC. MH-RCR-3000W IN NON-PAVED AREAS REQUIRING WATERRIGHT FRAME & COVERS AND MH-RCR-3000EC-WT IN PAVED AREAS, OR APPROVED EQUAL.
2. THE FIRST STEP SHALL BE 1 FOOT FROM THE COVER.
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. FLAT TOP TO BE VDOT APPROVED FOR TRAFFIC BEARING WHEN USED IN AREAS SUBJECT TO TRAFFIC, 8" MIN.



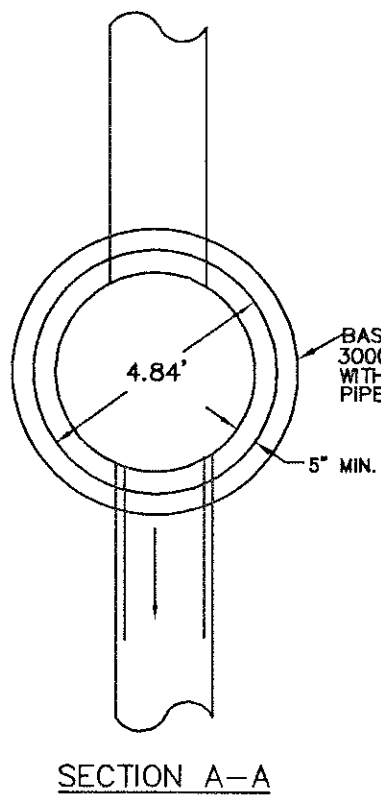
SECTION A-A



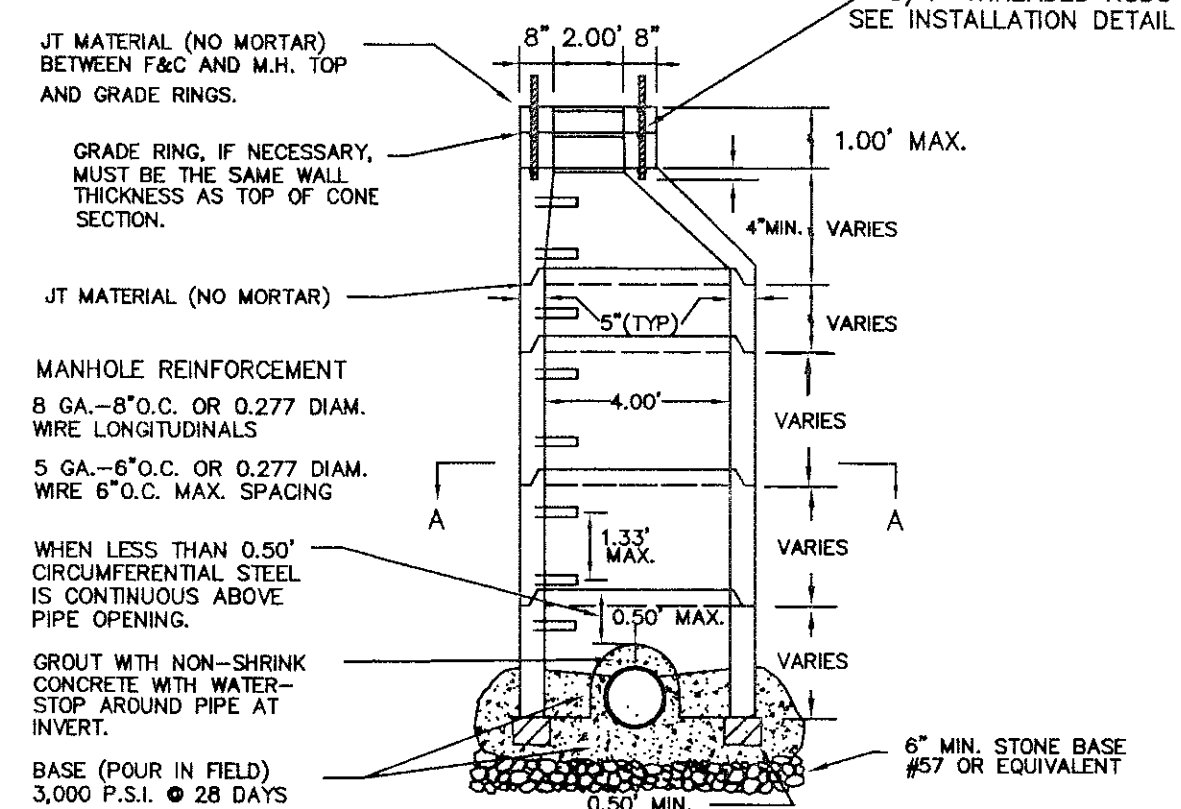
4' STANDARD MANHOLE
FOR PIPE 15" OR SMALLER

NOTES:

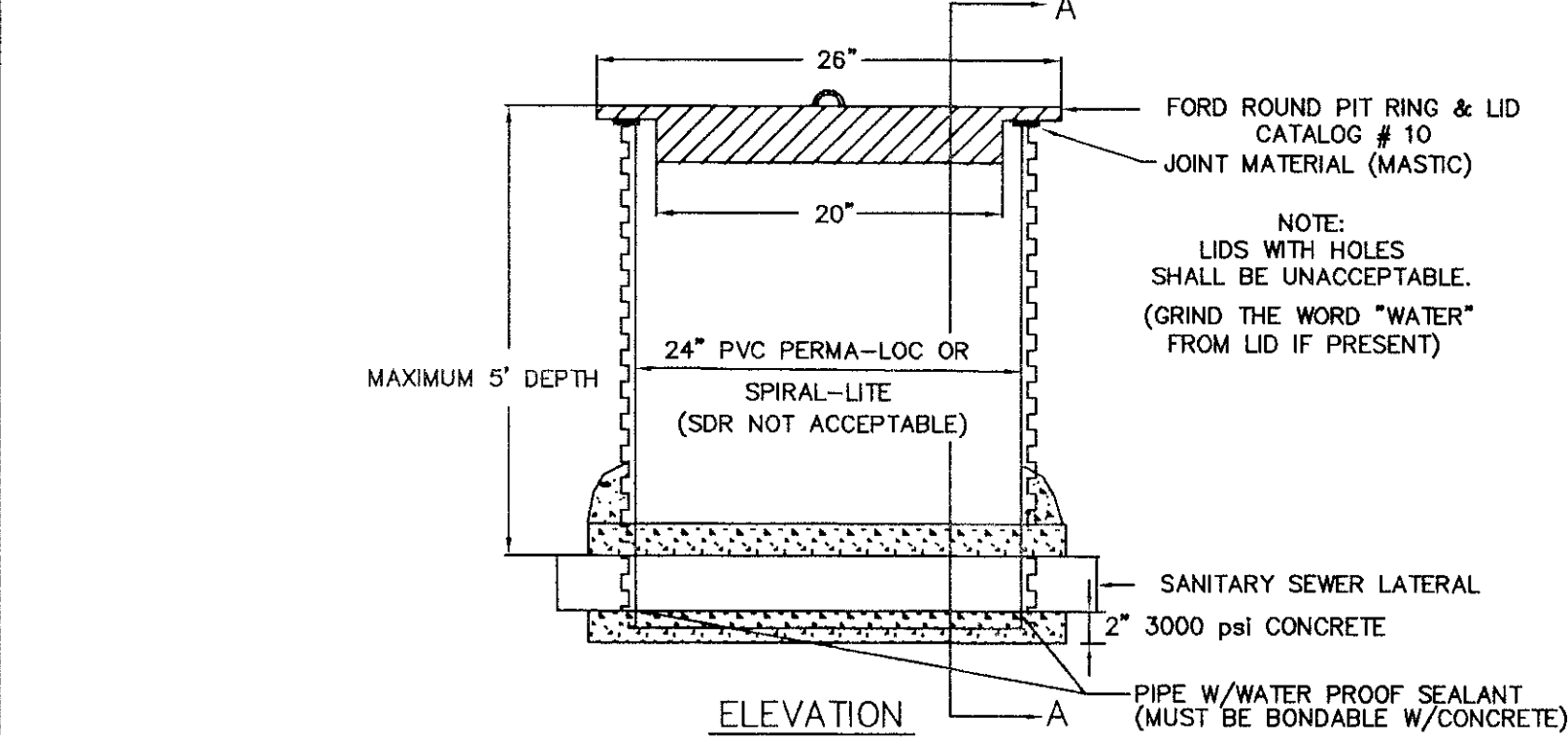
1. ALL MANHOLE FRAMES AND COVERS SHALL BE DEWEY BROTHERS, INC. MH-RCR-3000W IN NON-PAVED AREAS, MH-RCR-3000 IN PAVED AREAS, MH-RCR-3000 IN AREAS NOT SUBJECT TO FLOODING OR APPROVED EQUAL.
2. THE FIRST STEP IN THE ECCENTRIC MANHOLE SHALL BE 1 FOOT FROM THE TOP OF THE CONE SECTION AND A MAXIMUM OF 4.5 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.



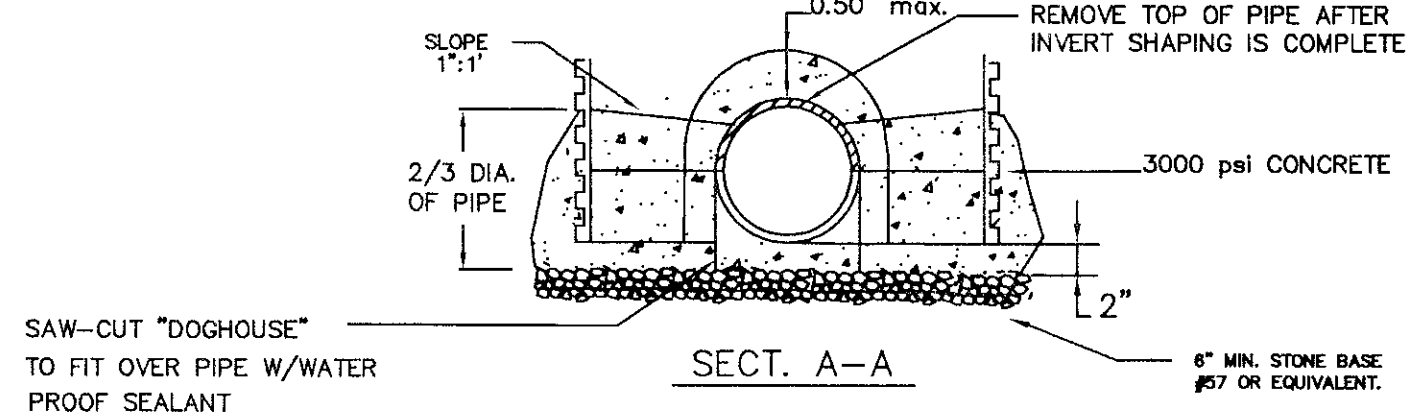
SECTION A-A



STRADDLE MANHOLE
FOR PIPE 15" OR SMALLER



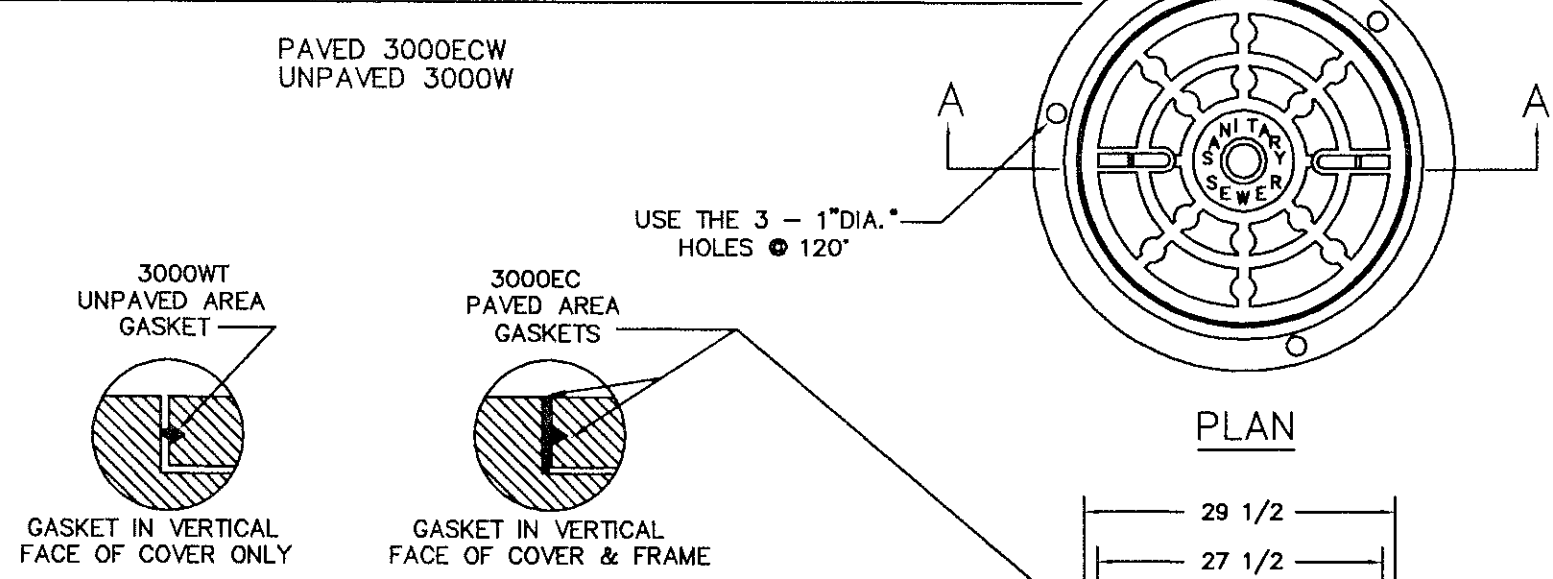
ELEVATION



SECTION A-A

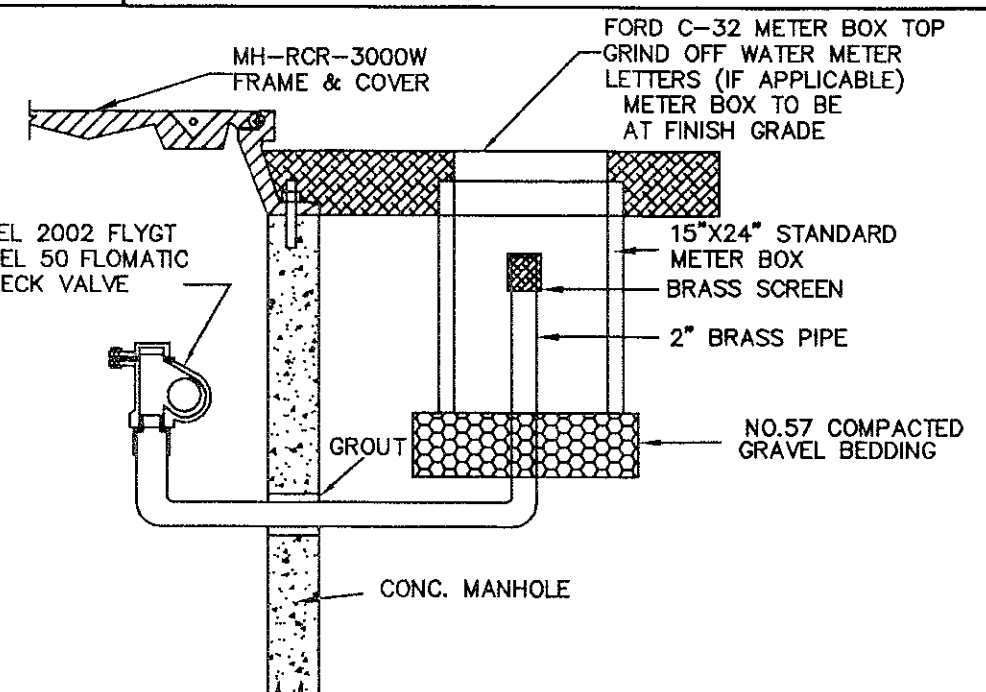
SAMPLING STRUCTURE DETAIL

WATERTIGHT MANHOLE FRAME AND COVER

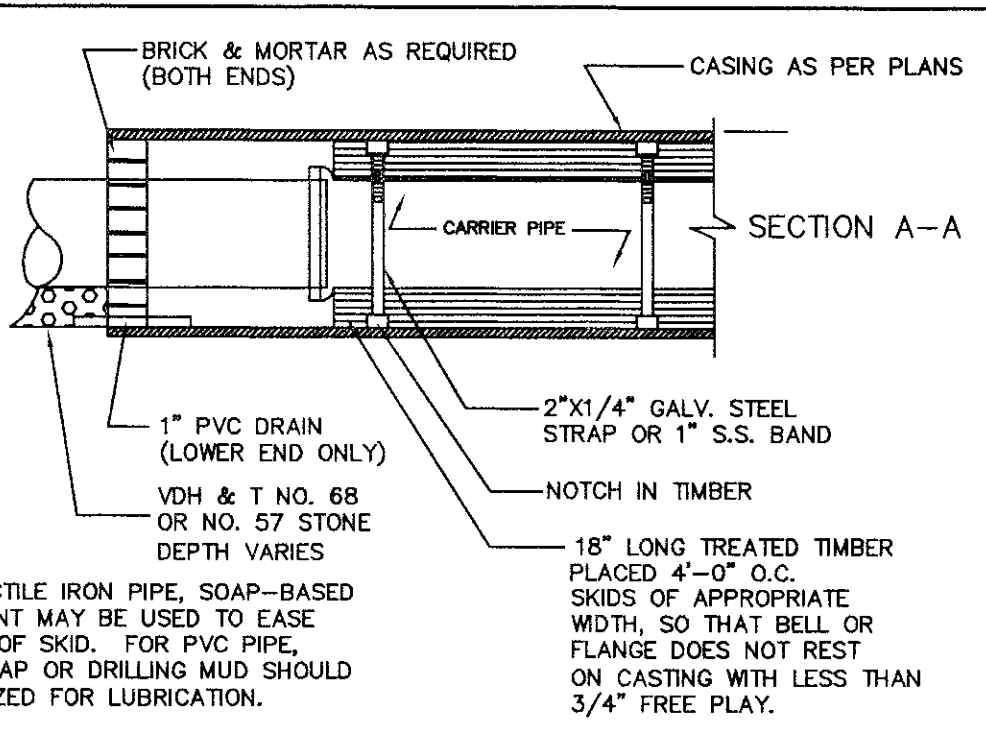


PLAN

SECTION A-A



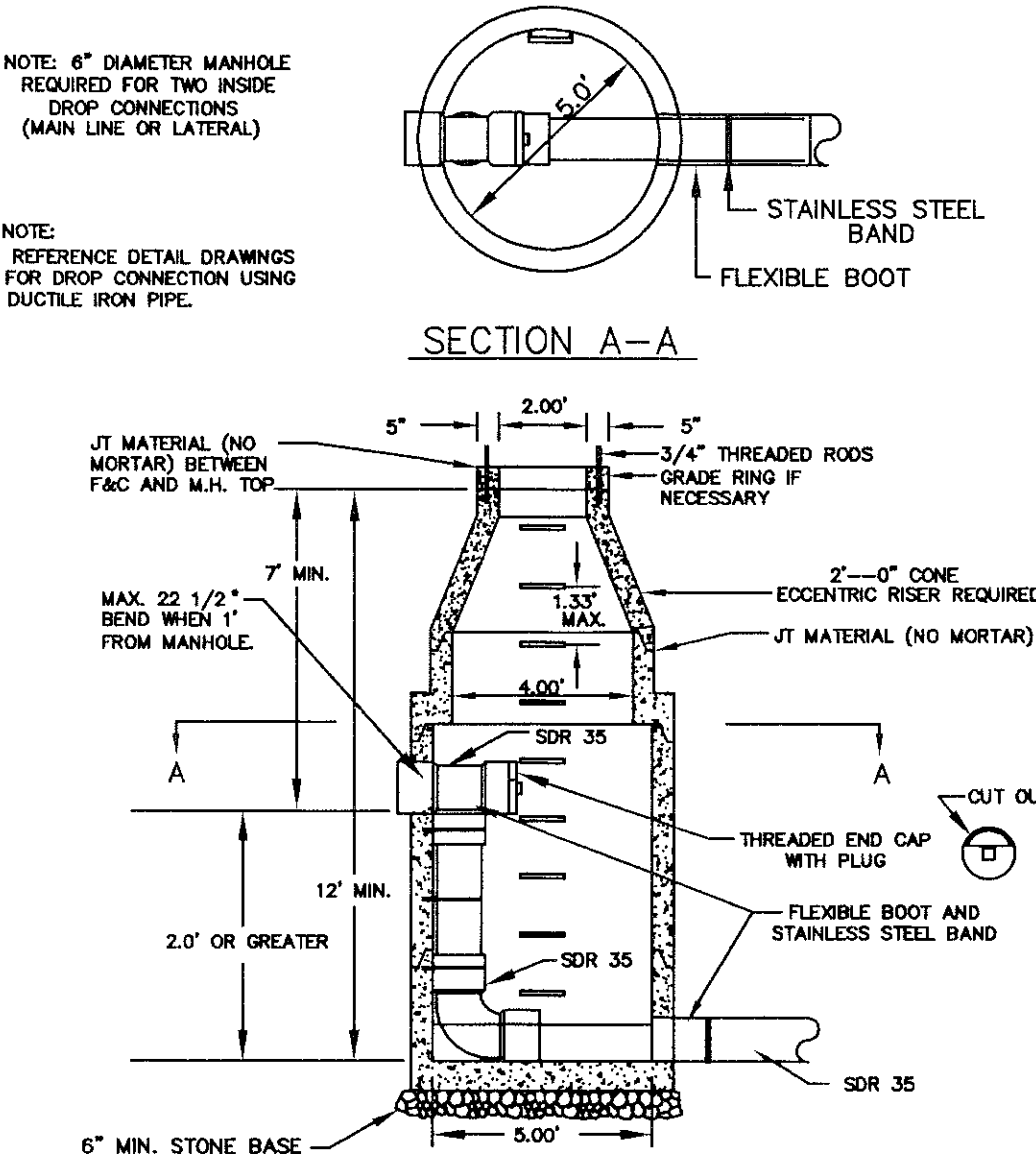
TYPE 2 MANHOLE VENT



SECTION A-A

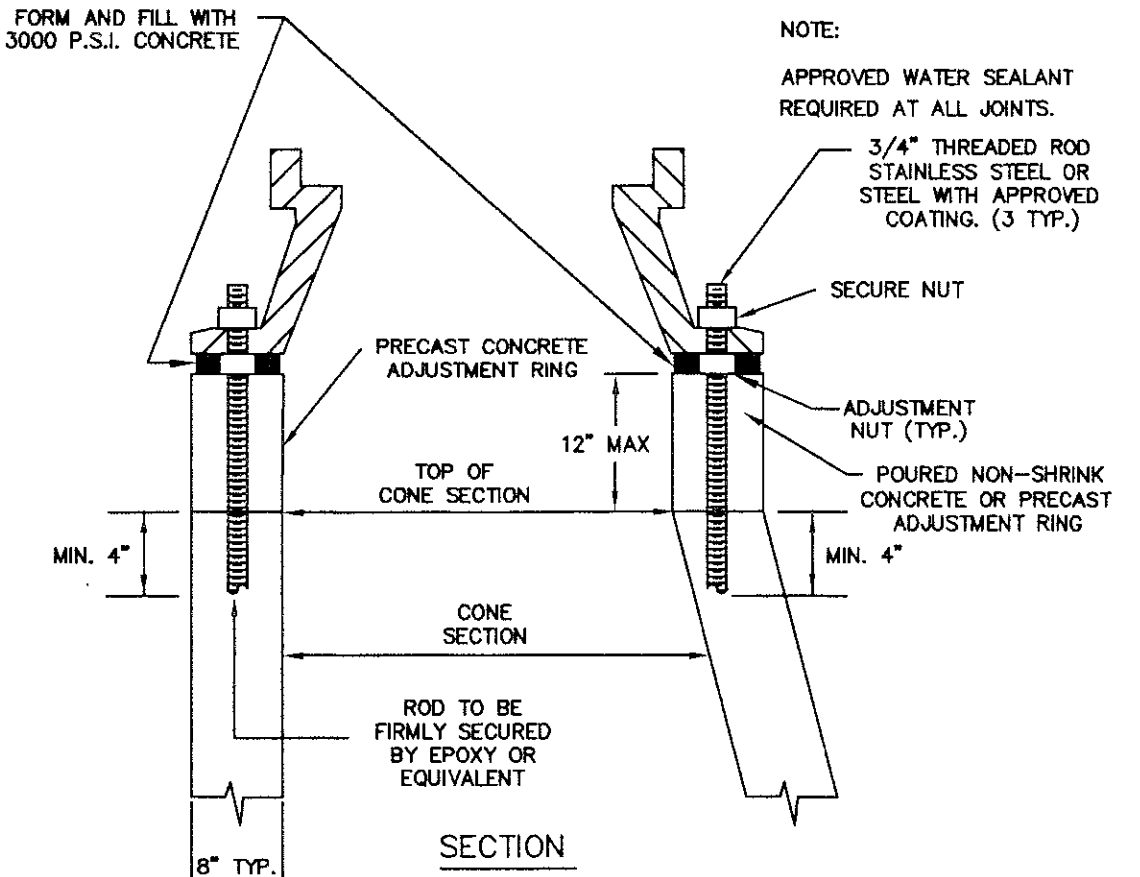
PIPE SUPPORT IN CASING PIPE

NOTE: DEWEY BROTHERS, INC. MH-RCR-3000ECW WATER TIGHT FRAME & COVER (PAVED)



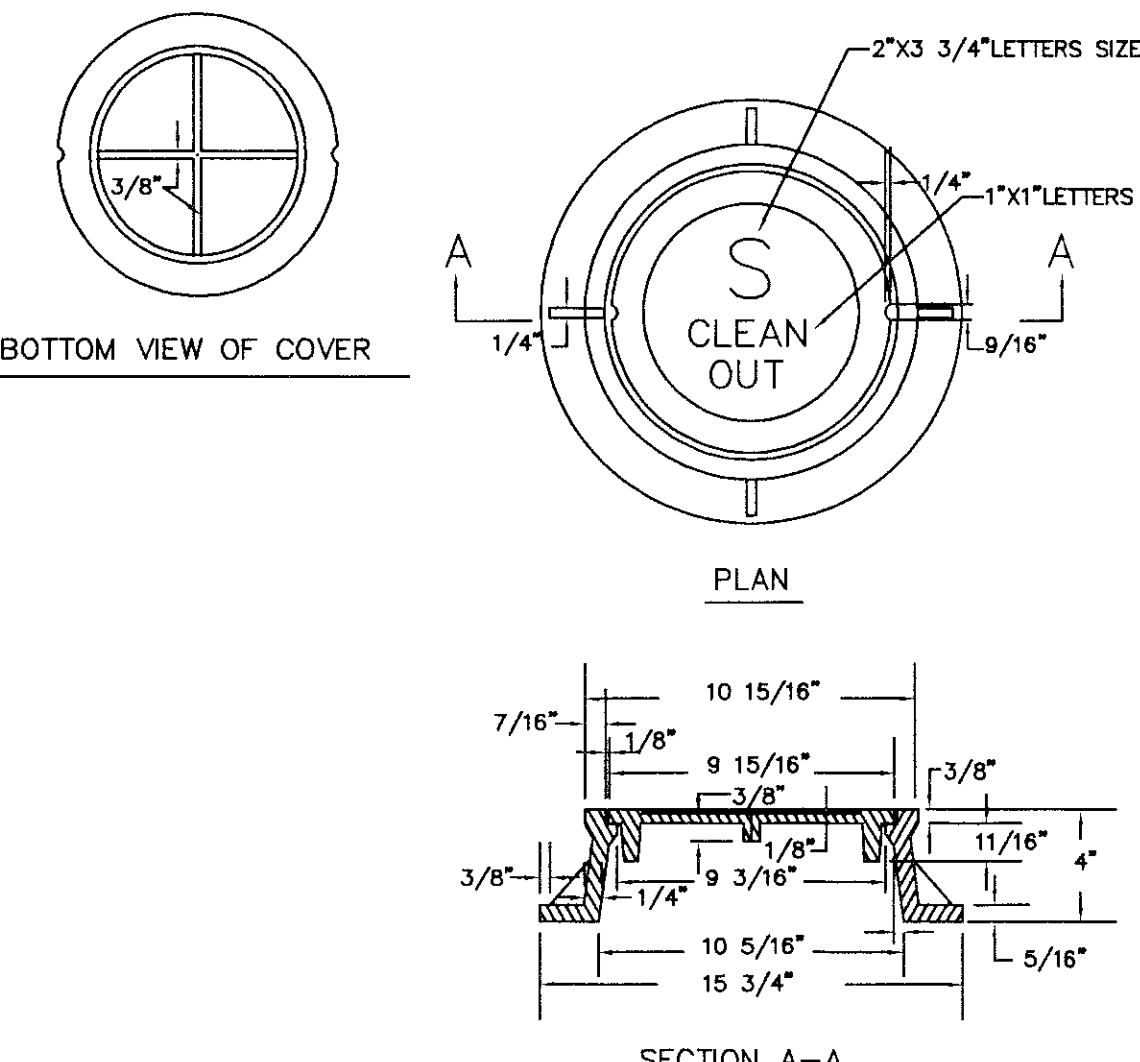
SECTION A-A

MAINLINE OR LATERAL
INSIDE DROP MANHOLE
(FOR USE WITH PVC PIPE)



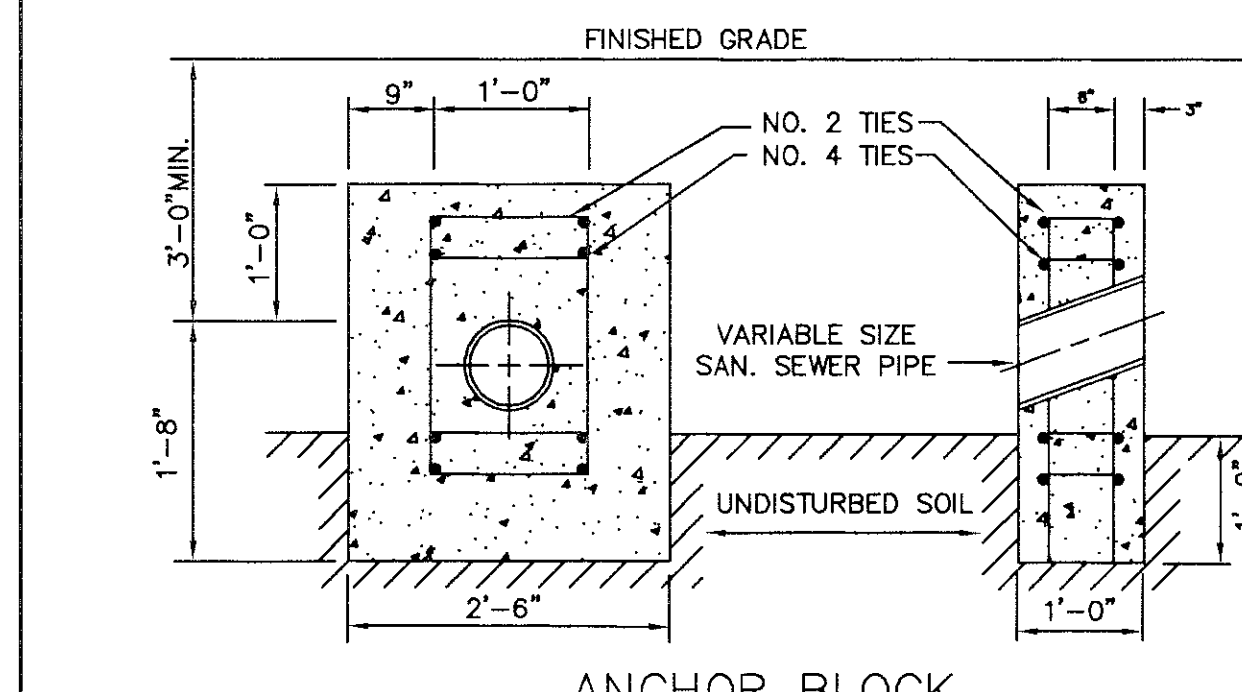
SECTION

INSTALLATION DETAIL
FOR ALL FRAMES AND COVERS



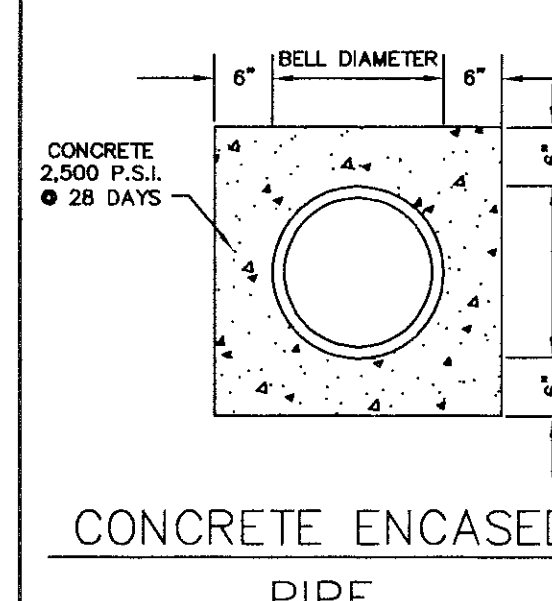
SECTION A-A

CLEANOUT ACCESS BOX



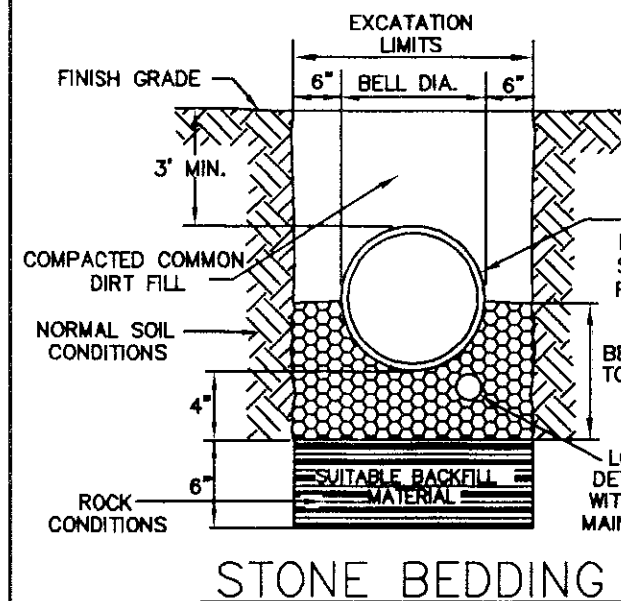
SECTION A-A

ANCHOR BLOCK



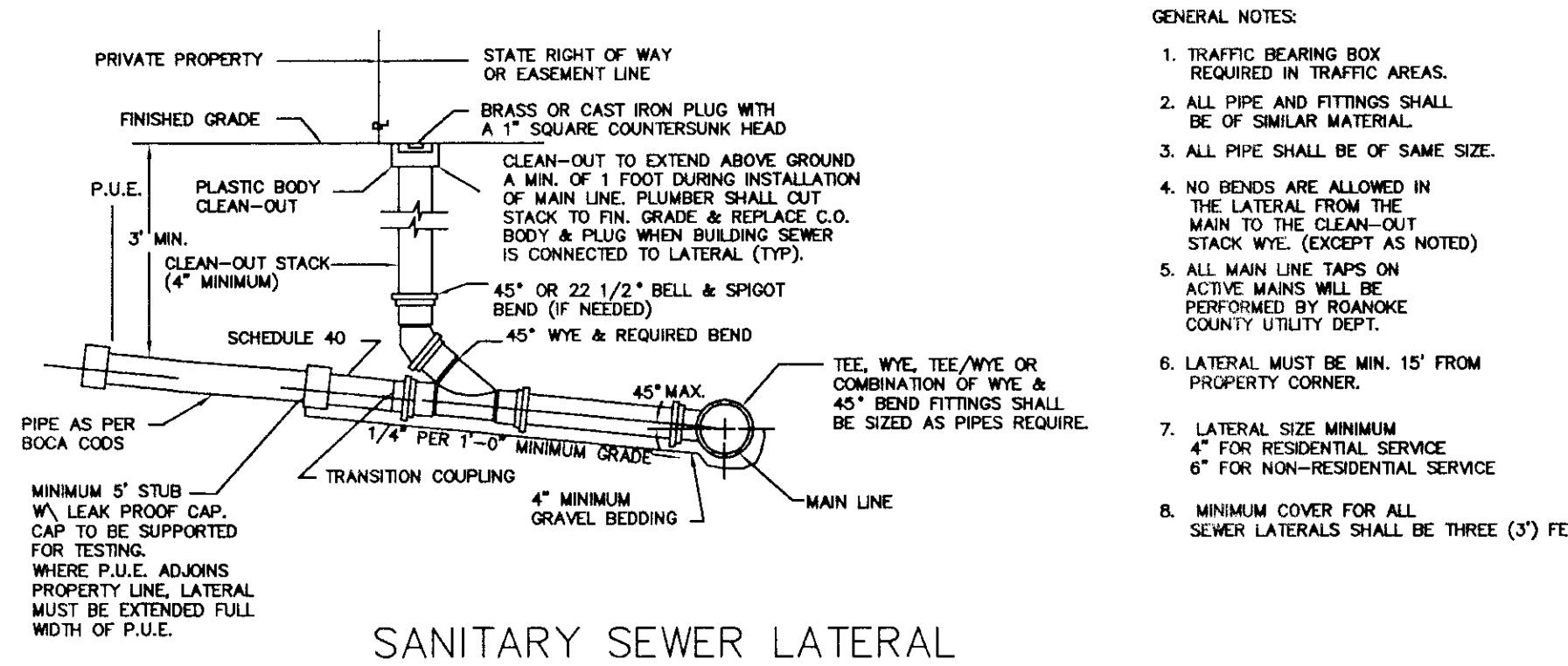
SECTION A-A

CONCRETE ENCASED
PIPE



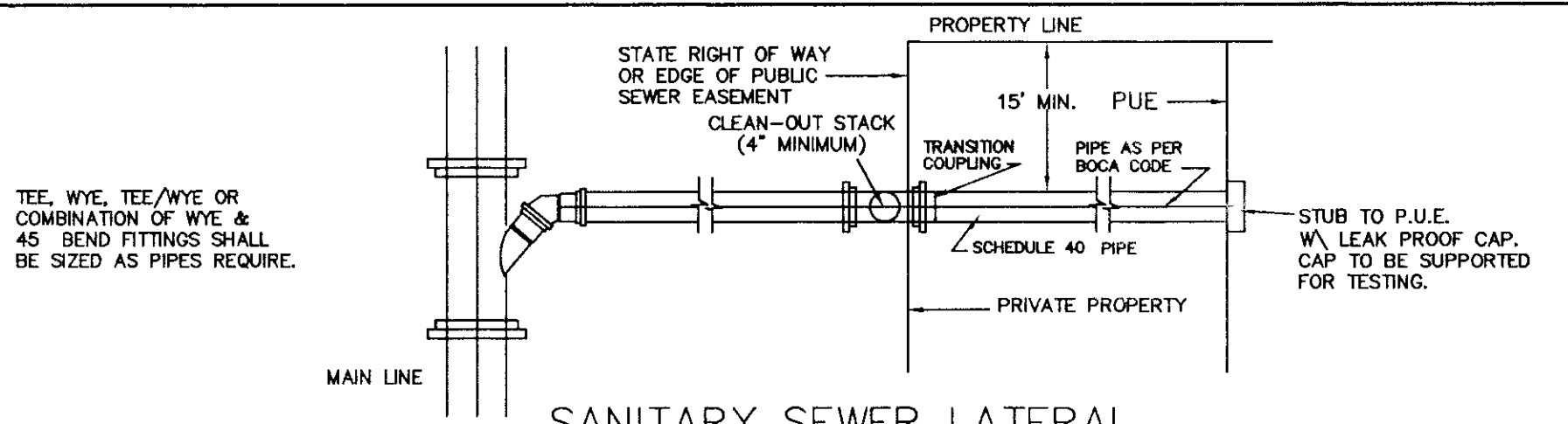
SECTION A-A

STONE BEDDING
FOR FORCE MAIN INSTALLATION



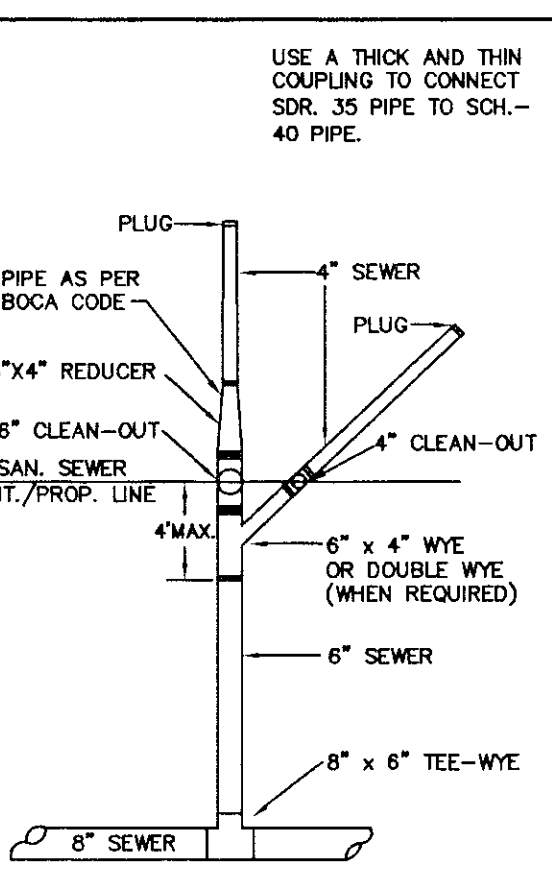
SECTION

SANITARY SEWER LATERAL



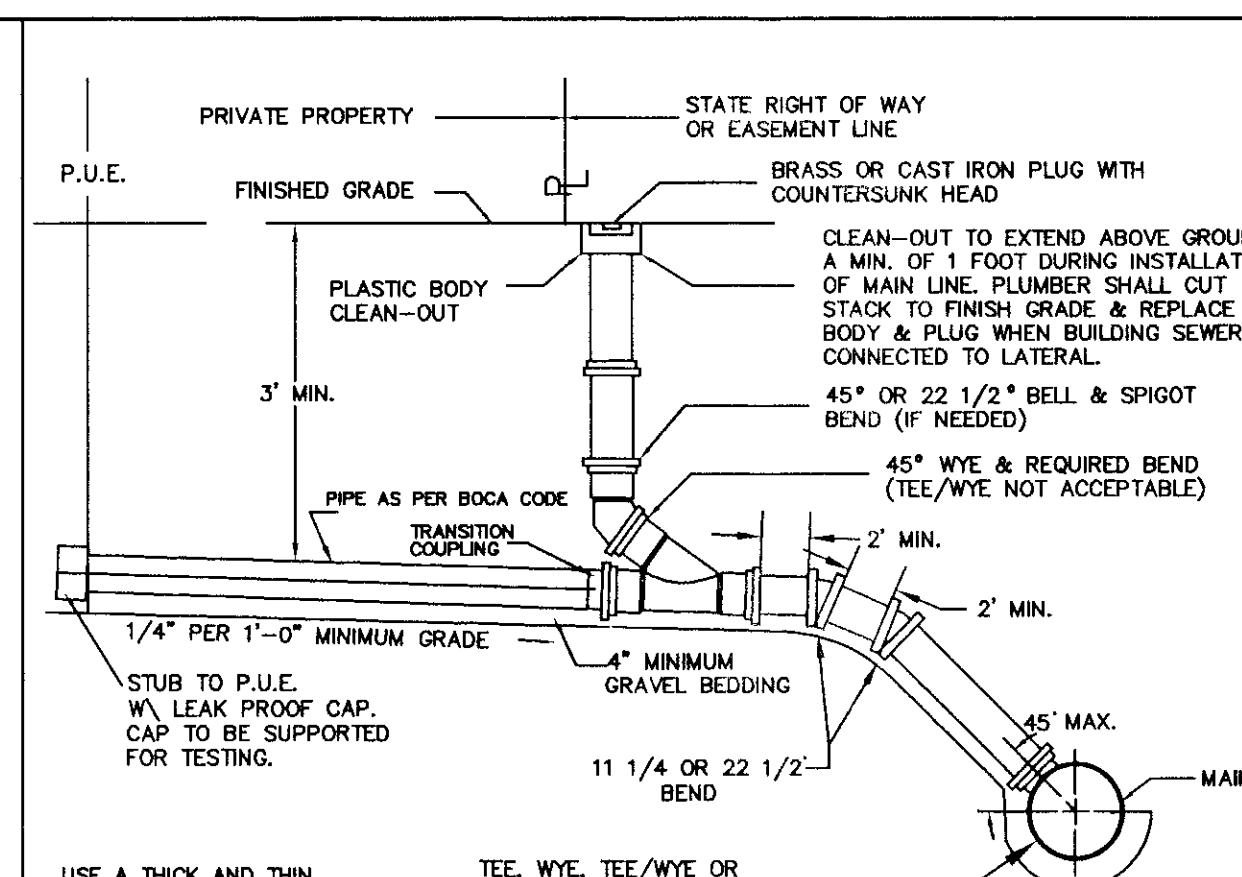
SECTION

SANITARY SEWER LATERAL IN P.U.E.



SECTION

OPTIONAL
SANITARY SEWER LATERAL



SECTION

OPTIONAL SANITARY SEWER LATERAL
8 FEET OR DEEPER

FOR ADDITIONAL REFERENCE, SEE DETAIL
DRAWINGS IN SEWER STANDARDS.

COUNTY OF ROANOKE
DEPARTMENT
OF
ENGINEERING AND INSPECTIONS

1		
2		
3		
4		
5		
6		
7		
NO.	REVISIONS	DATE

DATE: 02/26/02
SCALE: NO SCALE
DRAWING BY: CN,TB,AF (G:\CAD\DETAILS\SEWER\SEWER)
DESIGNED BY: ROANOKE COUNTY ENGINEERING DEPT.
APPROVED BY:

SEWER DETAILS

KINGSTON ESTATES
SUBDIVISION
ROANOKE COUNTY, VIRGINIA

LMW P.C.
ENGINEERING • ARCHITECTURE • SURVEYING
(540) 345-0675
FAX (540) 342-4456
102 ALBEMARLE AVE., S.E.
ROANOKE, VIRGINIA 24013

SHEET
16 of 17