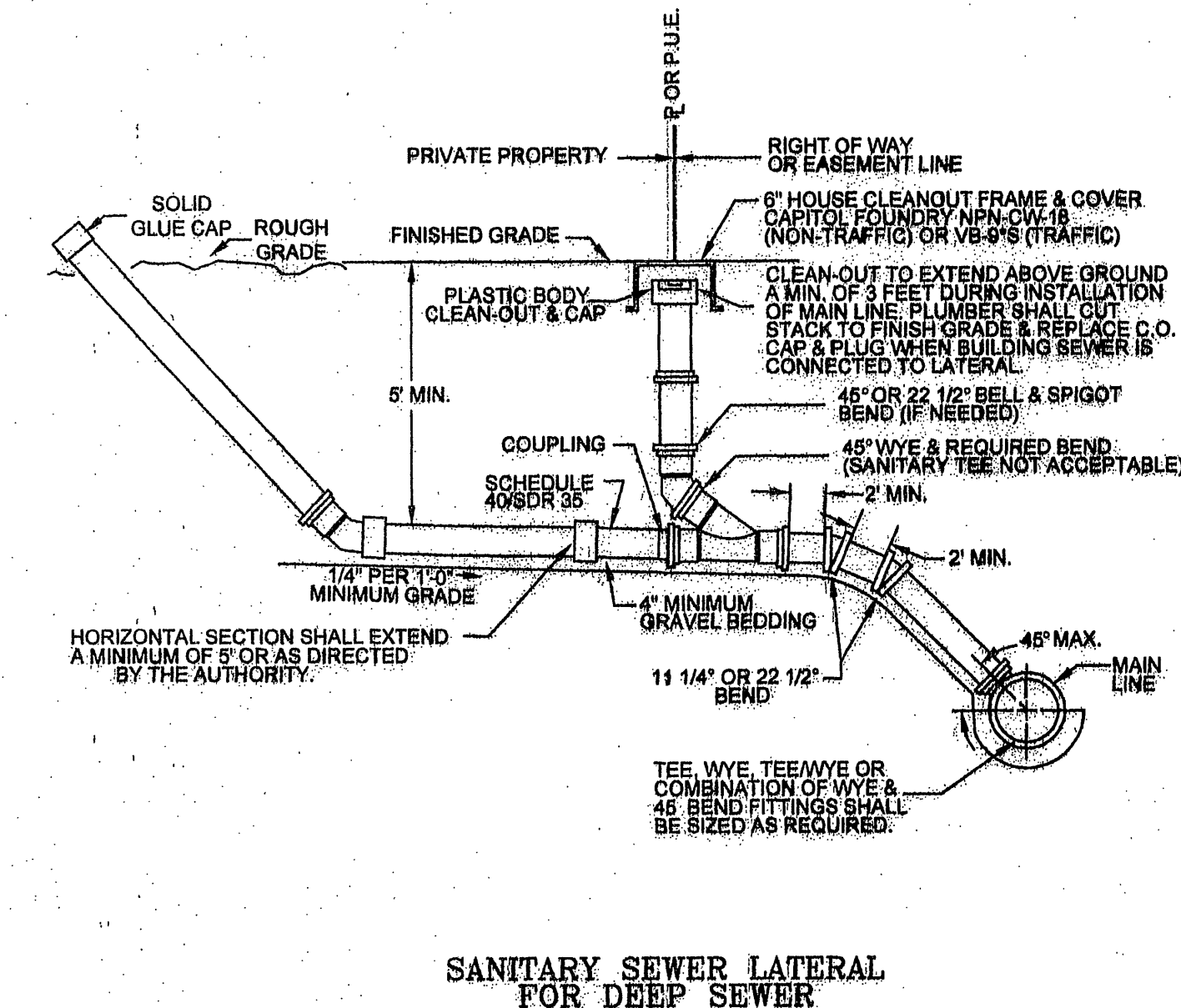


GENERAL NOTES:

1. TRAFFIC BEARING BOX REQUIRED IN TRAFFIC AREA.
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 WYE (EXCEPT AS NOTED).
5. ALL MAIN LINE TAPS ON ACTIVE MAINS WILL BE PERFORMED BY THE WESTERN VIRGINIA WATER AUTHORITY.
6. PIPING BEHIND CLEAN-OUT TO BE INSTALLED PER BOCA CODE.
7. MINIMUM LATERAL SIZE:
  - 4" FOR RESIDENTIAL SERVICE
  - 6" FOR NON-RESIDENTIAL SERVICE
8. PROPERTY OWNER RESPONSIBLE FOR INSTALLING CLEANOUT ON PROPERTY LINE WHEN MAINTENANCE OCCURS.



ANCHOR SPACING:

GRADES FROM 20% TO 35% -- 36 FEET ON CENTER

GRADES FROM 35% TO 50% -- 24 FEET ON CENTER

GRADES FROM 50% TO 80% -- 16 FEET ON CENTER

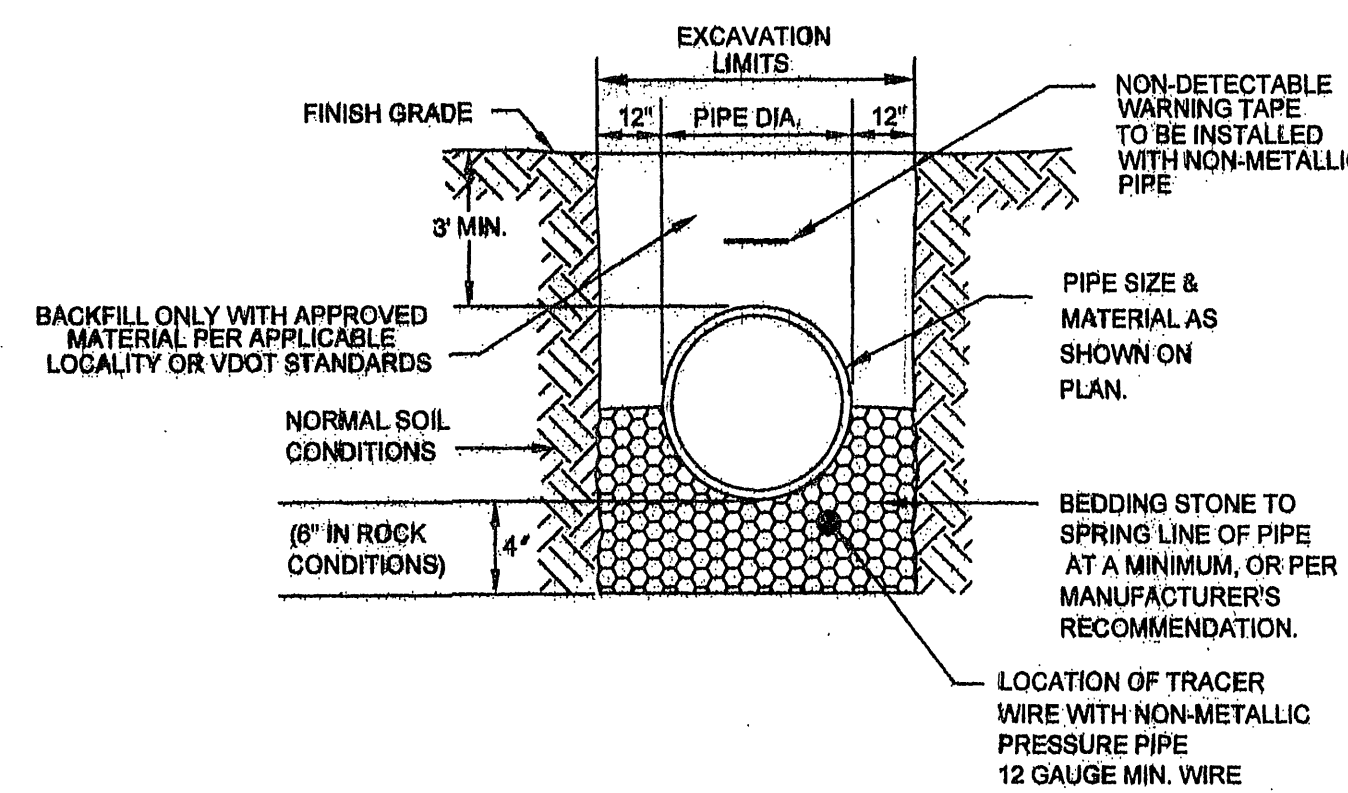
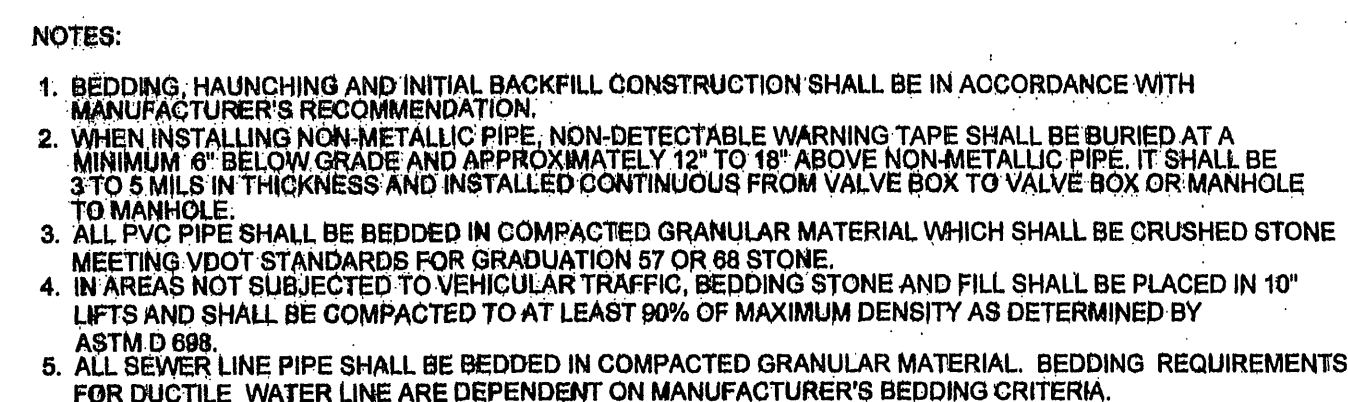
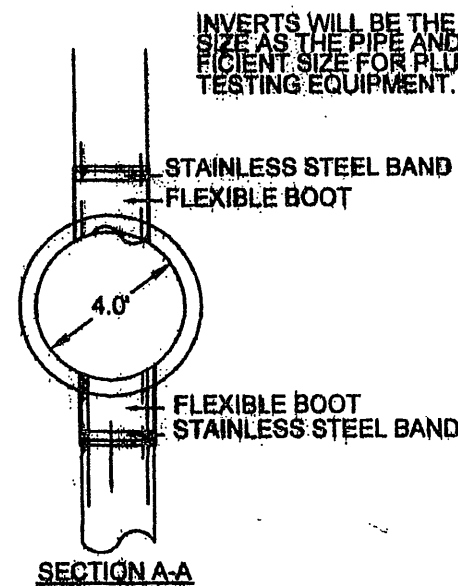
SANITARY SEWER LATERAL  
FOR DEEP SEWER

NOTES:

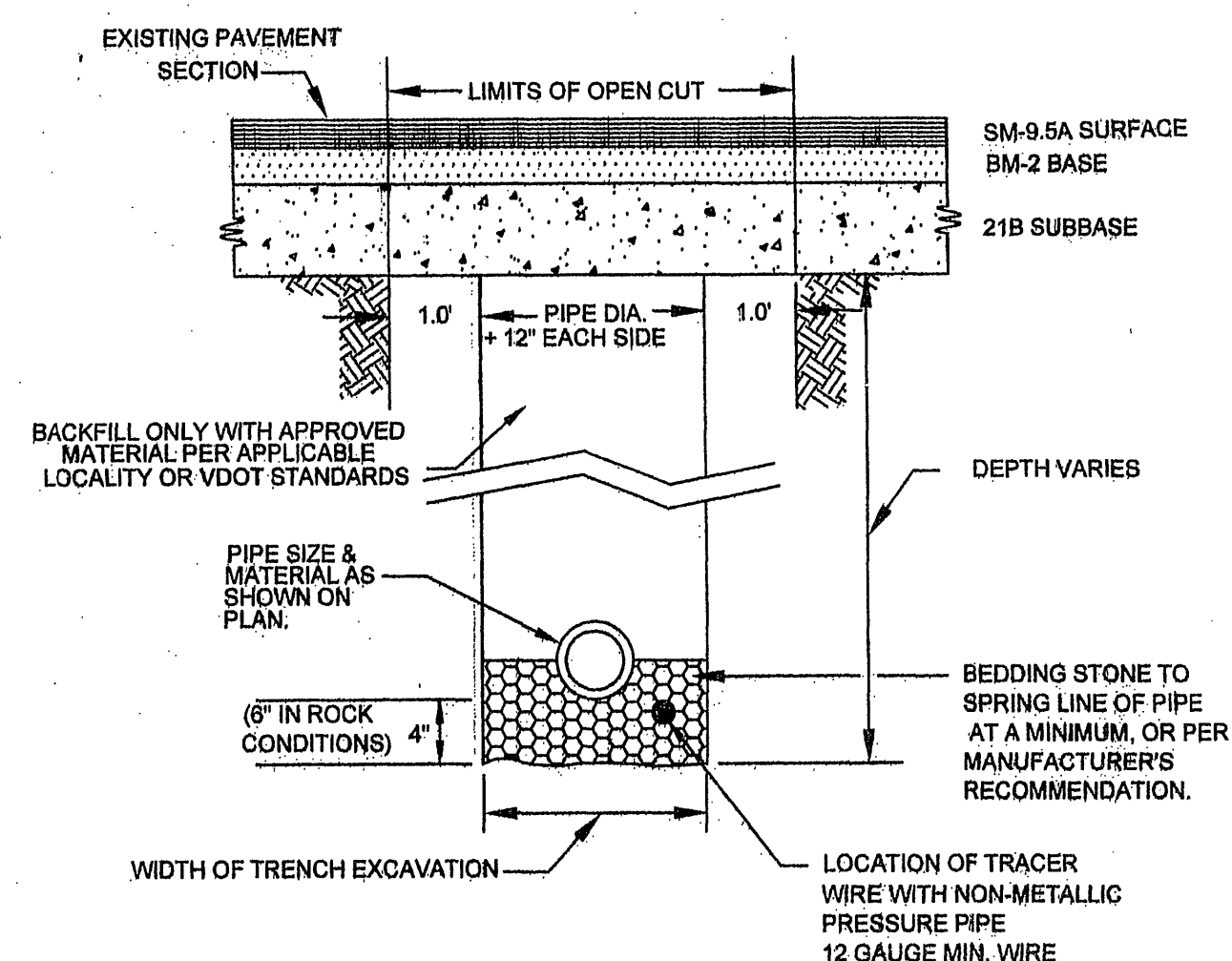
1. ALL MANHOLE FRAMES AND COVERS SHALL BE EAST JORDAN IRON WORKS, INC. WATERTIGHT MANHOLE FRAME MODEL #10452, WATER TIGHT COVER MODEL #10460 AND 20" DIA. MANHOLE COVER MODEL #10460S OR APPROVED EQUAL BELOW GROUND SURFACE. ALL JOINTS SHALL BE TO FLOODING OR AS DIRECTED BY THE AUTHORITY.
2. STEPS TO BE VERTICALLY ALIGNED.
3. THE FRAME AND COVER SHALL BE PROPERLY ALIGNED WITH THE FOOT OPENING OF THE MANHOLE STRUCTURE AND BOLTED IN PLACE.
4. FLAT TOP MANHOLES MAY ONLY BE SUBSTITUTED WITH THE PERMISSION OF THE UTILITY DIRECTOR. WHEN USED, THE ECCENTRIC OPENING MUST LINE UP WITH THE STEPS.
5. SAMPLING MANHOLES IN TRAFFIC AREAS SHALL BE CONSTRUCTED AS PER MANHOLE DETAILS.
6. FLEXIBLE JOINT MANHOLE CONNECTION SHALL BE AS MANUFACTURED BY PRE-CAST, GASKET CORPORATION OR EQUAL.
7. GROUT ANNUAL SPACE BETWEEN PIPE AND PRECAST MANHOLE ON INSIDE OF MANHOLE.

INVERTS WILL BE THE SAME  
SIZES AS THE PIPE AND SO  
THEY WILL BE THE SAME  
TESTING EQUIPMENT

STAINLESS STEEL BAND  
FLEXIBLE BOOT  
4.0'  
FLEXIBLE BOOT  
STAINLESS STEEL BAND



## BEDDING AND BACKFILL OUTSIDE OF PAVED AREAS



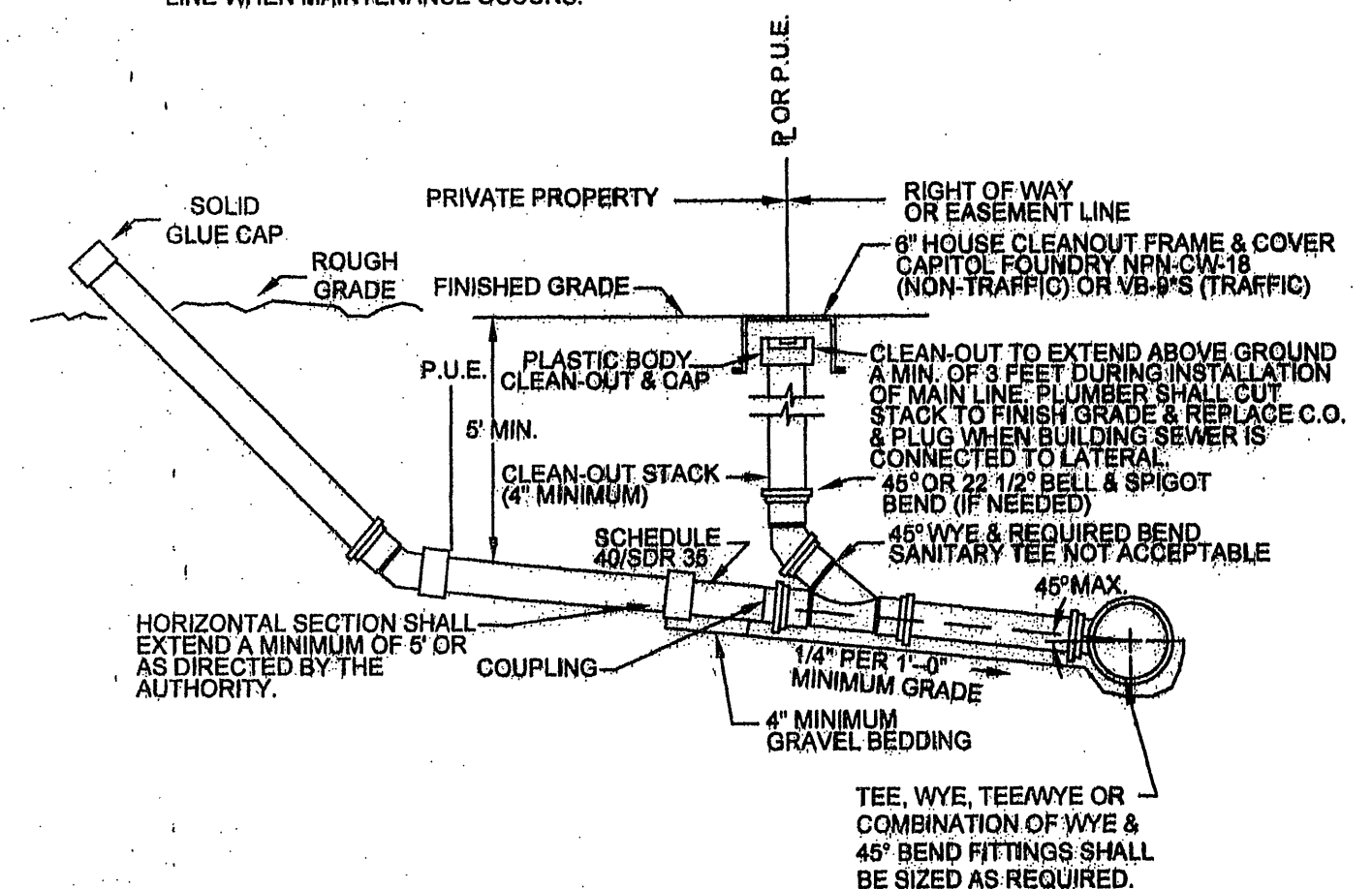
NOTES:

- A. IN ROCKAWE COUNTY, THE CONTRACTOR SHALL REPLACE THE OPEN CUT WITH A MINIMUM TOP COURSE OF 2" VDOT 9M-5.5, BASE COURSE OF 3" VDOT BM-2, AND SUBBASE OF 8" VDOT 21B, OR AS REQUIRED BY VDOT. IN ROCKAWE CITY, CONTRACTOR SHALL MATCH EXISTING PAVEMENT LAYERS OR AS REQUIRED BY CITY STANDARDS.
- B. ALL CONSTRUCTION WITHIN THE PUBLIC RIGHT-OF-WAY SHALL BE AS SPECIFIED BY VDOT OR APPLICABLE LOCALITY.
- C. PRIOR TO CONSTRUCTION, CONTRACTOR IS RESPONSIBLE FOR SECURING ALL REQUIRED PERMITS FROM VDOT AND/OR APPLICABLE LOCALITY.
- D. ALL WATER LINES BENEATH PAVEMENT SHALL BE DUCTILE IRON UNLESS INSTALLED IN CASING PIPE OR BY DIRECTIONAL BORING.
- E. IN AREAS SUBJECTED TO VEHICULAR TRAFFIC, BEDDING STONE AND FILL SHALL BE PLACED IN 6" LIFTS AND SHALL BE COMPACTED TO AT LEAST 98% OF MAXIMUM DENSITY AS DETERMINED BY ASTM D 1556.
- F. ALL SEWER LINE PIPE SHALL BE BEDDED IN COMPACTED GRANULAR MATERIAL. BEDDING REQUIREMENTS FOR DUCTILE WATER LINE ARE DEPENDENT ON MANUFACTURER'S BEDDING CRITERIA.

### BEDDING AND BACKFILL UNDER PAVEMENT

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 CLEANOUT STACK WYE. (EXCEPT AS NOTED)
5. ALL MAIN LINE TAPS ON ACTIVE MAINS WILL BE PERFORMED BY WESTERN VIRGINIA WATER AUTHORITY.
6. PIPING BETWEEN CLEANOUT TO BE INSTALLED PER BOCA CODE.
7. MINIMUM LATERAL SIZE:
  - a. 4" FOR INDUSTRIAL SERVICE
  - b. 6" FOR RESIDENTIAL SERVICE
  - c. 8" FOR NON-RESIDENTIAL SERVICE
8. MINIMUM COVER FOR ALL SEWER LATERALS SHALL BE THREE(3) FEET.
9. PROPERTY OWNER RESPONSIBLE FOR INSTALLING CLEANOUT ON PROPERTY LINE WHEN MAINTENANCE OCCURS.



SANITARY SEWER LATERAL