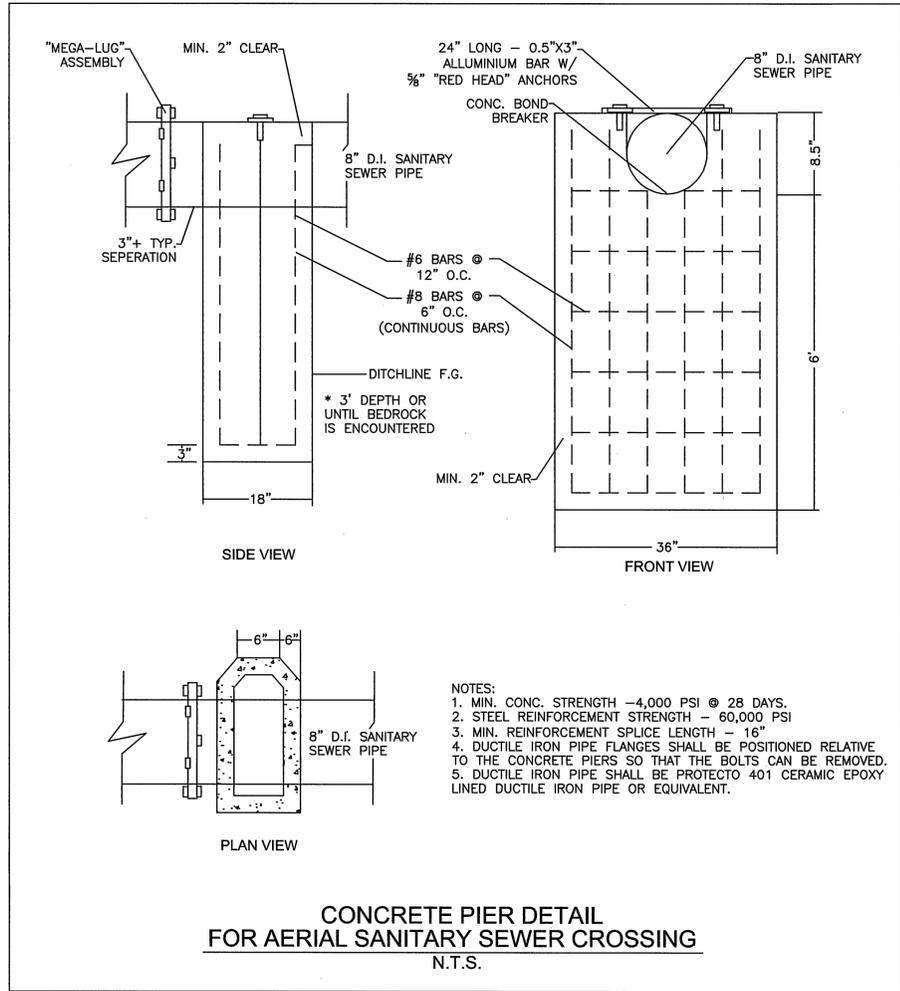


<p>EXISTING PAVEMENT SECTION</p> <p>LIMITS OF OPEN CUT</p> <p>SM-9.5A SURFACE</p> <p>2B-2 BASE</p> <p>2B-1B SUBBASE</p> <p>PIPE DIA. 12" EACH SIDE</p> <p>DEPTH VARIES</p> <p>BACKFILL ONLY WITH APPROVED MATERIAL PER APPLICABLE LOCALITY OR VDOT STANDARDS</p> <p>NON-DETECTABLE WARNING TAPE, 3 TO 5 MILS IN THICKNESS, TO BE INSTALLED APPROX. 24" ABOVE PIPE AND AT A MINIMUM OF 6" BELOW GRADE.</p> <p>FOR SEWER LINES, BEDDING SHALL BE 6" ABOVE PIPE.</p> <p>WIDTH OF TRENCH EXCAVATION</p> <p>PIPE SIZE & MATERIAL AS SHOWN ON PLAN.</p> <p>(6" IN ROCK CONDITIONS) 4"</p>	<p>NOTES:</p> <ol style="list-style-type: none"> BEDDING, HAUNCHING AND INITIAL BACKFILL CONSTRUCTION SHALL BE IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATION. ALL PVC PIPE SHALL BE BEDDED IN COMPACTED VDOT #57 OR #68 STONE. IN AREAS NOT SUBJECTED TO VEHICULAR TRAFFIC, BEDDING STONE AND FILL SHALL BE PLACED IN 6" LIFTS FROM BOTTOM OF TRENCH TO 1" ABOVE THE PIPE AND THE REMAINING SHALL BE PLACED IN 10" LIFTS AND SHALL BE COMPACTED TO AT LEAST 95% OF MAXIMUM DENSITY AS DETERMINED BY ASTM D 698. ALL SEWER LINE PIPE SHALL BE BEDDED IN COMPACTED GRANULAR MATERIAL. BEDDING REQUIREMENTS FOR DUCTILE SEWER LINE ARE DEPENDENT ON MANUFACTURER'S BEDDING CRITERIA. ALL EXCAVATIONS SHALL COMPLY WITH OSHA TECHNICAL MANUAL, CHAPTER 2, TITLED "EXCAVATIONS: HAZARD RECOGNITION IN TRENCHING AND SHORING." <p>EXCAVATION LIMITS</p> <p>FINISH GRADE</p> <p>12" PIPE DIA.</p> <p>NON-DETECTABLE WARNING TAPE, 3 TO 5 MILS IN THICKNESS, TO BE INSTALLED APPROX. 24" ABOVE PIPE AND AT A MINIMUM OF 6" BELOW GRADE.</p> <p>STONE TO BE PLACED 6" ABOVE SEWER PIPE.</p> <p>NORMAL SOIL CONDITIONS</p> <p>PIPE SIZE & MATERIAL AS SHOWN ON PLAN.</p> <p>(6" IN ROCK CONDITIONS) 4"</p>	<p>GENERAL NOTES:</p> <ol style="list-style-type: none"> TRAFFIC BEARING BOX REQUIRED IN TRAFFIC AREAS. ALL PIPE AND FITTINGS SHALL BE OF SIMILAR MATERIAL. ALL PIPE SHALL BE OF SAME SIZE. NO BENDS ARE ALLOWED IN THE LATERAL FROM THE MAIN TO THE CLEANOUT STACK WYE. (EXCEPT AS NOTED) ALL MAIN LINE TAPS ON ACTIVE MAINS WILL BE PERFORMED BY WESTERN VIRGINIA WATER AUTHORITY. PIPING BEHIND CLEANOUT TO BE INSTALLED PER BOCA CODE. MINIMUM LATERAL SIZE: 4" FOR RESIDENTIAL SERVICE 6" FOR NON-RESIDENTIAL SERVICE MINIMUM COVER FOR ALL SEWER LATERALS SHALL BE THREE(3) FEET. PROPERTY OWNER RESPONSIBLE FOR INSTALLING CLEANOUT ON PROPERTY LINE WHEN MAINTENANCE OCCURS, IN ACCORDANCE WITH THIS STANDARD. FLOWLINE AT CLEANOUT WYE SHALL BE A MINIMUM OF THREE FEET (3') BELOW LOWEST SERVED FINISHED FLOOR. <p>PRIVATE PROPERTY</p> <p>RIGHT OF WAY OR EASEMENT LINE</p> <p>HOUSE CLEANOUT FRAME & COVER</p> <p>CAPITOL FOUNDRY BRASS CAP FOR (NON-TRAFFIC) OR VDOT'S (TRAFFIC-BEARING)</p> <p>CLEAN-OUT TO EXTEND ABOVE GROUND A MIN. OF 3 FEET DURING INSTALLATION OF MAIN LINE. PLUMBER SHALL CUT STACK TO FINISH GRADE & REPLACE C.O. & PLUG WHEN BUILDING SEWER IS CONNECTED TO LATERAL.</p> <p>45° OR 22 1/2° BELL & SPIGOT BEND (IF NEEDED)</p> <p>45° WYE & REQUIRED BEND</p> <p>SANITARY TEE NOT ACCEPTABLE</p> <p>45° MAX</p> <p>TEE, WYE, TEE/WYE OR COMBINATION OF WYE & 45° BEND FITTINGS SHALL BE SIZED AS REQUIRED.</p> <p>1/4" PER 1'-0" MINIMUM GRADE</p> <p>4" MINIMUM GRAVEL BEDDING</p> <p>COUPLING</p> <p>14" PER 1'-0" MINIMUM GRADE</p> <p>4" MINIMUM GRAVEL BEDDING</p> <p>PLASTIC BODY CLEAN-OUT & CAP</p> <p>P.U.E.</p> <p>5" MIN.</p> <p>CLEAN-OUT STACK (4" MINIMUM)</p> <p>SCHEDULE 40 SDR 35</p> <p>ROUGH GRADE</p> <p>SOLID GLUE CAP</p> <p>HORIZONTAL SECTION SHALL EXTEND A MINIMUM OF 5' OR AS DIRECTED BY THE AUTHORITY.</p>	<p>NOTE: LID SHALL BE SECURELY FASTENED TO PIPE BY STAINLESS STEEL SCREWS AND CLIPS.</p> <p>26"</p> <p>20"</p> <p>24" PVC ULTRA-RIB SPIRAL-LITE OR ADS W-12 HOPE (SDR NOT ACCEPTABLE)</p> <p>MAXIMUM 5' DEPTH</p> <p>WATERSTOP</p> <p>ELEVATION</p> <p>BUTYL MASTIC JOINT SEALER</p> <p>FORD ROUND PIT RING & LID CATALOG # 10 OR A.Y. McDONALD RING AND COVER 74MPR10</p> <p>NOTE: LIDS WITH HOLES SHALL BE UNACCEPTABLE. (GRIND THE WORD "WATER" FROM LID IF PRESENT)</p> <p>SANITARY SEWER LATERAL</p> <p>2" 3000 PSI CONCRETE</p> <p>PIPE W/WATER PROOF SEALANT (MUST BE BONDABLE W/CONCRETE)</p> <p>REMOVE TOP OF PIPE AFTER INVERT SHAPING IS COMPLETE (15' MIN. OPENING)</p> <p>0.50" max.</p> <p>1" SLOPE</p> <p>2.5 DIA. OF PIPE</p> <p>3000 PSI CONCRETE</p> <p>6" MIN. STONE BASE #57 OR EQUIVALENT.</p> <p>SAW-CUT "DOGHOUSE" TO FIT OVER PIPE W/WATER PROOF SEALANT</p> <p>SECT. A-A</p> <p>NOTES:</p> <ol style="list-style-type: none"> NOT ACCEPTABLE FOR USE IN TRAFFIC AREAS OR AREAS SUBJECT TO FLOODING. VACUUM OR EXFILTRATION TESTING SHALL BE USED. VACUUM TESTING SHALL MEET THE SAME STANDARD FOR CONCRETE MANHOLES. EXFILTRATION TESTING SHALL HAVE NO LEAKAGE WITHIN 1 HOUR. "AQUIBOK" WASTEWATER ACCESS CHAMBERS MAY BE SUBSTITUTED. TRAFFIC BEARING BOXES WILL BE REQUIRED IF INSTALLED IN TRAFFIC AREAS. TESTING OF "AQUIBOK" SHALL BE BY APPLICABLE PLUMBING CODE FOR SEWER LATERALS. 2" DIA. CONCRETE WELL CASING 3000 PSI MAY BE SUBSTITUTED FOR ULTRA-RIB PIPE. ANY VERT. JOINTS IN THE CASING PIPE MUST BE BY BELL & SPIGOT CONNECTION WITH MASTIC. INVERT SHAPING CHANNEL SHALL BE 180 DEGREES THROUGH SAMPLE MANHOLE. NO ANGLES, RADII, ETC ARE ALLOWED IN SAMPLE MANHOLES. 																				
<p>WESTERN VIRGINIA WATER AUTHORITY - CONSTRUCTION STANDARDS</p> <p>REVISION DATE</p> <table border="1"> <tr><td>07/01/04</td><td></td></tr> <tr><td>03/01/08</td><td></td></tr> </table> <p>BEDDING AND BACKFILL UNDER PAVEMENT AND RIGHT-OF-WAY</p> <p>S-31</p>	07/01/04		03/01/08		<p>WESTERN VIRGINIA WATER AUTHORITY - CONSTRUCTION STANDARDS</p> <p>REVISION DATE</p> <table border="1"> <tr><td>07/01/04</td><td></td></tr> <tr><td>03/01/08</td><td></td></tr> </table> <p>BEDDING AND BACKFILL OUTSIDE OF PAVED AREAS</p> <p>S-30</p>	07/01/04		03/01/08		<p>WESTERN VIRGINIA WATER AUTHORITY - CONSTRUCTION STANDARDS</p> <p>REVISION DATE</p> <table border="1"> <tr><td>07/01/04</td><td></td></tr> <tr><td>03/01/08</td><td></td></tr> </table> <p>SANITARY SEWER LATERAL</p> <p>S-08</p>	07/01/04		03/01/08		<p>WESTERN VIRGINIA WATER AUTHORITY - CONSTRUCTION STANDARDS</p> <p>REVISION DATE</p> <table border="1"> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> </table> <p>SAMPLING STRUCTURE DETAIL</p> <p>S-07</p>								
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BOJANGLES - BRAMBLETON
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CAVE SPRING
COUNTY OF ROANOKE, VIRGINIA

DRAWN BY: BTC
DESIGNED BY: BTC
CHECKED BY: RIS
DATE: 11-26-07

REVISIONS:

1-9-08	
2-27-08	
3-11-08	

SCALE: AS SHOWN

SHEET NO. C-16

JOB NO. R0700128.00