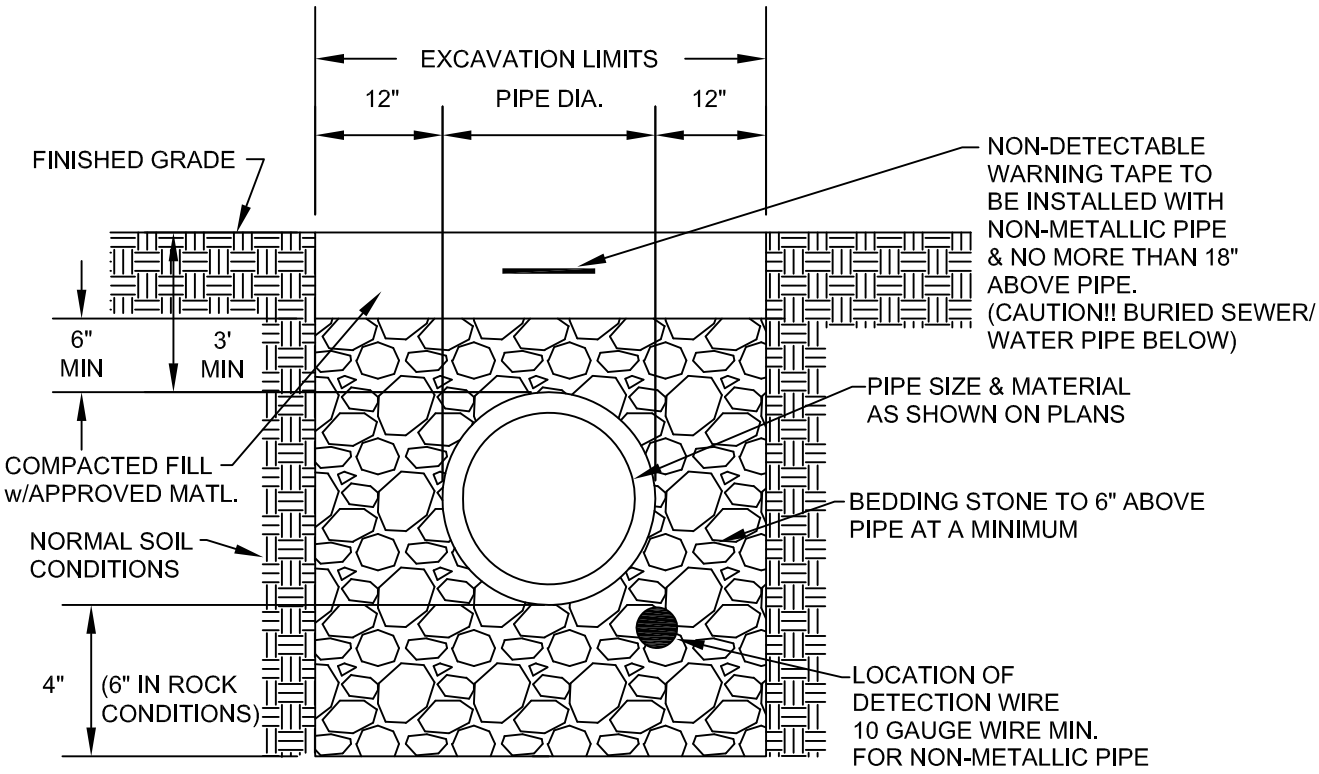
LIST OF GENERAL DETAIL DRAWINGS

BC #	TITLE
G-01	Stone Bedding for PVC Pipe
G-02	Bedding and Backfill Under Pavement
G-03	Public Sanitary Sewer and Waterline Easements
G-04	Chain Link Fence
G-05	Tracer Wire Installation for Non-Metallic Pipe

NOTES:

1. BEDDING, HAUNCHING AND INITIAL BACKFILL CONSTRUCTION SHALL BE IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATION.
2. WHEN INSTALLING NON-METALLIC PIPE, NON-DETECTABLE WARNING TAPE SHALL BE BURIED AT A MINIMUM 6" BELOW GRADE AND APPROXIMATELY 12" TO 18" ABOVE NON-METALLIC PIPE. IT SHALL BE 3 TO 5 MILS IN THICKNESS AND INSTALLED CONTINUOUS FROM VALVE BOX TO VALVE BOX OR MANHOLE TO MANHOLE.
3. ALL PVC PIPE SHALL BE BEDDED IN COMPACTED GRANULAR MATERIAL WHICH SHALL BE CRUSHED STONE MEETING VDOT STANDARDS FOR GRADUATION 57 OR 68 STONE.
4. IN AREAS NOT SUBJECTED TO VEHICULAR TRAFFIC, BEDDING STONE AND FILL SHALL BE PLACED IN 10" LIFTS AND SHALL BE COMPACTED TO AT LEAST 90% OF MAXIMUM DENSITY AS DETERMINED BY ASTM D 698.
5. ALL SEWER LINE PIPE SHALL BE BEDDED IN COMPACTED GRANULAR MATERIAL. BEDDING REQUIREMENTS FOR DUCTILE IRON PIPE ARE DEPENDENT ON MANUFACTURER'S BEDDING CRITERIA.
6. ALL EXCAVATIONS SHALL COMPLY WITH OSHA TECHNICAL MANUAL, CHAPTER 2, TITLED "EXCAVATIONS: HAZARD RECOGNITION IN TRENCHING AND SHORING."



BOTETOURT COUNTY
PUBLIC FACILITIES & PROGRAMS
30 WEST BACK STREET, NUMBER 4
FINCASTLE, VA 24090
Ph: 540-473-8316
Fx: 540-473-8360

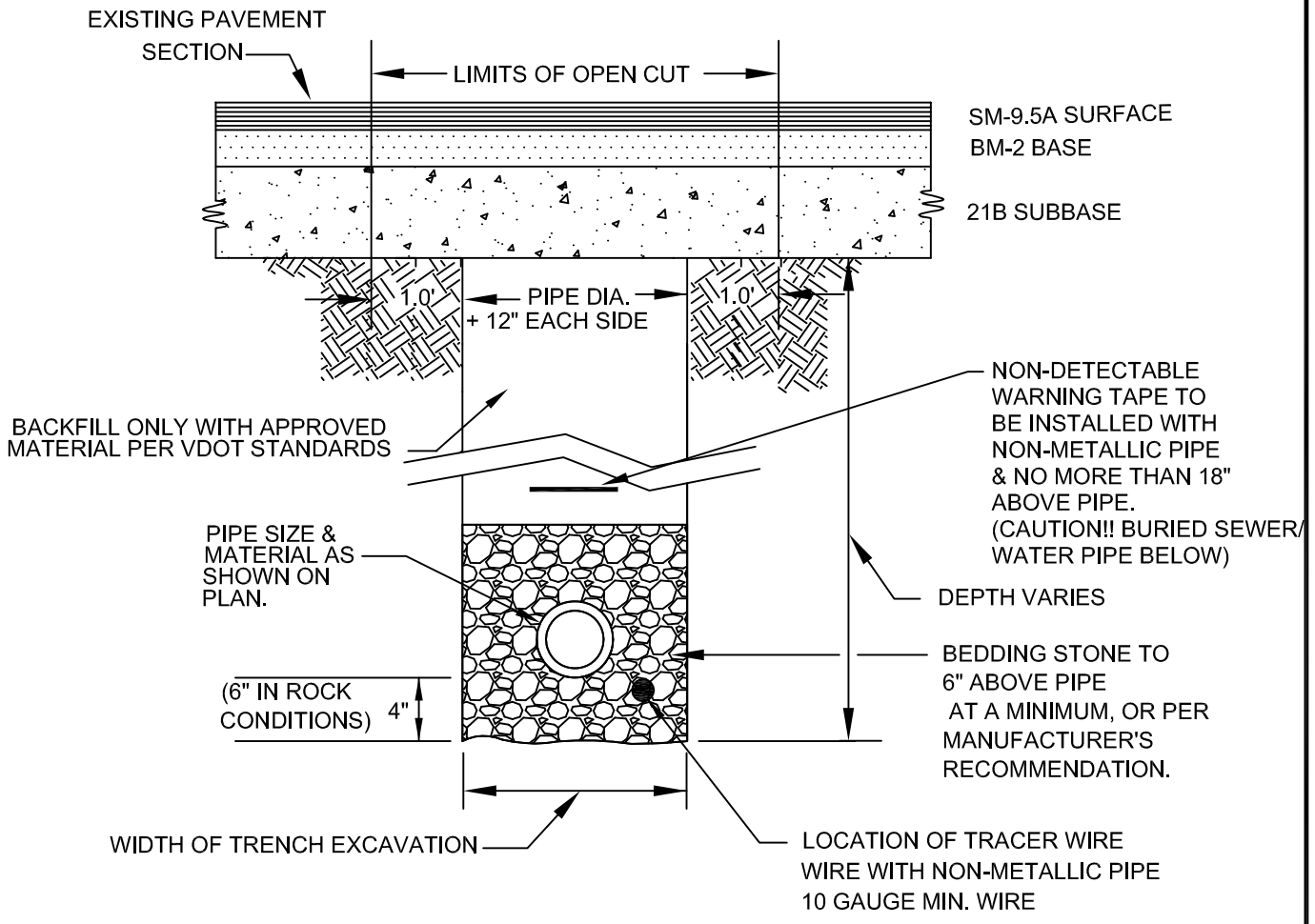
CONSTRUCTION STANDARDS

BEDDING AND BACKFILL OUTSIDE OF PAVED AREAS

DATE: MARCH 2005

REVISIONS

BC # G-01



NOTES:

1. THE CONTRACTOR SHALL REPLACE THE OPEN CUT WITH A MINIMUM TOP COURSE OF 2" VDOT SM-9.5A, BASE COURSE OF 3" VDOT BM-2, AND SUBBASE OF 8" VDOT 21B, OR AS REQUIRED BY VDOT.
2. ALL CONSTRUCTION WITHIN THE PUBLIC RIGHT-OF-WAY SHALL BE AS SPECIFIED BY VDOT.
3. PRIOR TO CONSTRUCTION, CONTRACTOR IS RESPONSIBLE FOR SECURING ALL REQUIRED PERMITS FROM VDOT.
4. ALL WATER LINES BENEATH PAVEMENT SHALL BE DUCTILE IRON UNLESS INSTALLED IN CASING PIPE OR BY DIRECTIONAL BORING.
5. IN AREAS SUBJECTED TO VEHICULAR TRAFFIC, BEDDING STONE AND FILL SHALL BE PLACED IN 6" LIFTS AND SHALL BE COMPACTED TO AT LEAST 95% OF MAXIMUM DENSITY AS DETERMINED BY ASTM D 698.
6. ALL SEWER LINE PIPE SHALL BE BEDDED IN COMPACTED GRANULAR MATERIAL. BEDDING REQUIREMENTS FOR DUCTILE IRON PIPE ARE DEPENDENT ON MANUFACTUER'S BEDDING CRITERIA.
7. ALL PVC PIPE SHALL BE BEDDED IN COMPACTED VDOT #57 OR #68 STONE.
8. ALL EXCAVATIONS SHALL COMPLY WITH OSHA TECHNICAL MANUAL, CHAPTER 2, TITLED "EXCAVATIONS: HAZARD RECOGNITION IN TRENCHING AND SHORING."

BOTETOURT COUNTY
PUBLIC FACILITIES & PROGRAMS
30 WEST BACK STREET, NUMBER 4
FINCASTLE, VA 24090
Ph: 540-473-8316
Fx: 540-473-8360

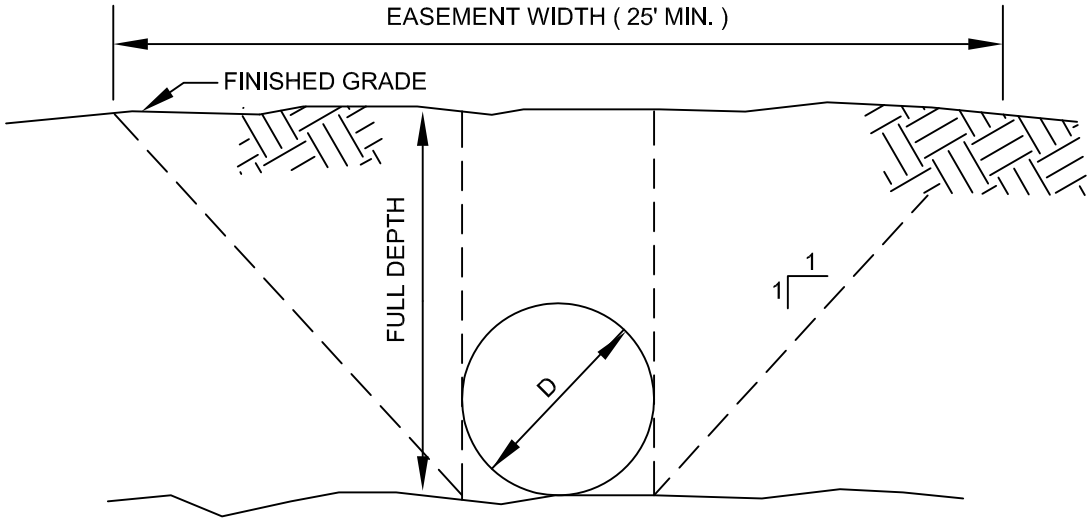
CONSTRUCTION STANDARDS

BEDDING AND BACKFILL UNDER PAVEMENT

DATE: MARCH 2005

REVISIONS

BC # G-02



D = PIPE DIAMETER.

A. PUBLIC EASEMENT WIDTH SHALL BE DETERMINED BASED ON 1:1 SIDE SLOPE EXTENDING FROM THE FINISHED GRADE TO OUTSIDE EDGE OF PIPE (NOMINAL PIPE DIAMETER) ROUNDED UP TO THE NEAREST 5' INCREMENT.

B. THIS EASEMENT SHALL EXTEND ALONG THE ENTIRE LENGTH OF THE SUBJECT PIPE AT LEAST ONE HALF THE DISTANCE OF EASEMENT PAST CENTER OF LAST MANHOLE.

C. MINIMUM 25' UNLESS APPROVED BY COUNTY ENGINEER.

BOTETOURT COUNTY
PUBLIC FACILITIES & PROGRAMS
30 WEST BACK STREET, NUMBER 4
FINCASTLE, VA 24090
Ph: 540-473-8316
Fx: 540-473-8360

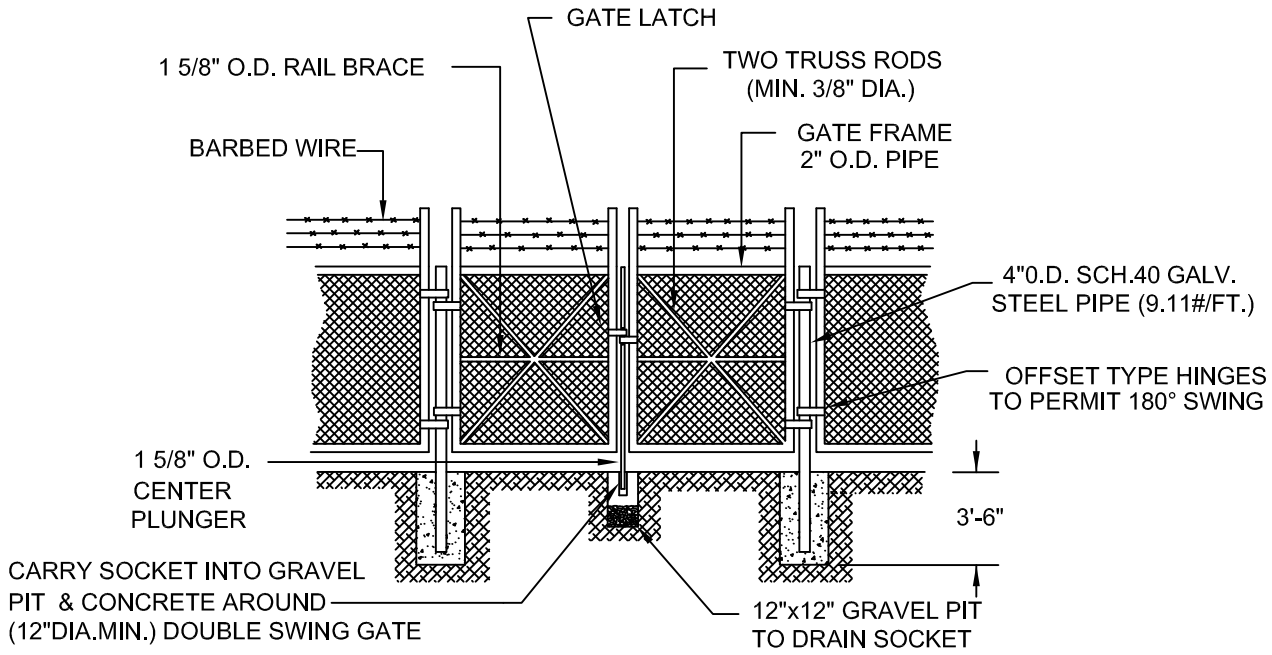
CONSTRUCTION STANDARDS

PUBLIC SANITARY SEWER AND WATERLINE EASEMENTS

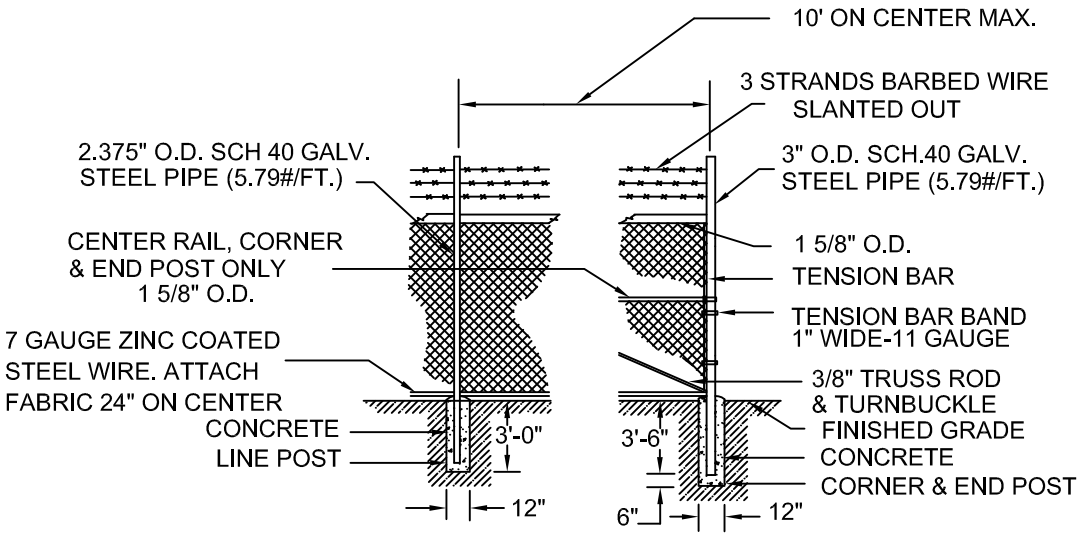
DATE: MARCH 2005

REVISIONS

BC # G-03



DOUBLE GATE DETAIL



FENCE DETAIL

AS DESIGNATED BY COUNTY ENGINEER FOR SECURITY OF UTILITY INSTALLATIONS

BOTETOURT COUNTY
PUBLIC FACILITIES & PROGRAMS
30 WEST BACK STREET, NUMBER 4
FINCASTLE, VA 24090
Ph: 540-473-8316
Fx: 540-473-8360

CONSTRUCTION STANDARDS

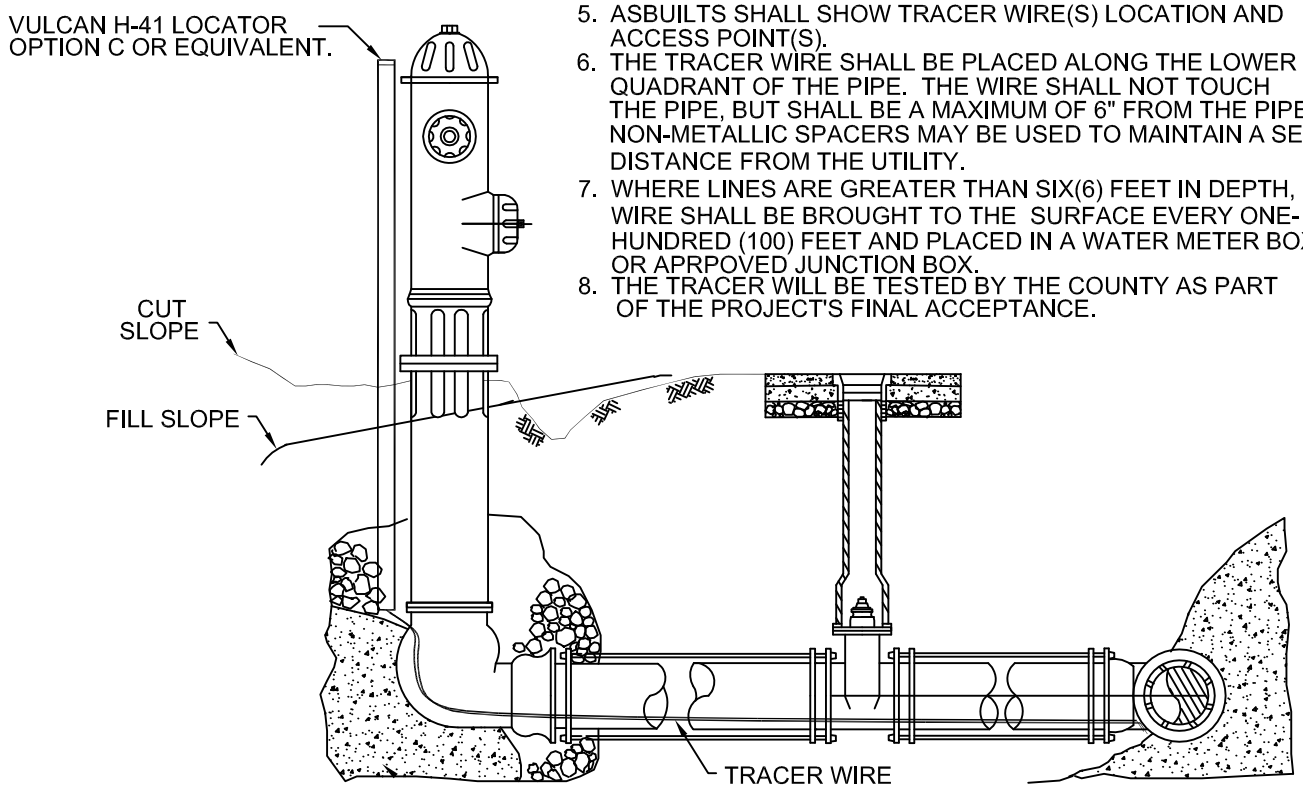
CHAIN LINK FENCE

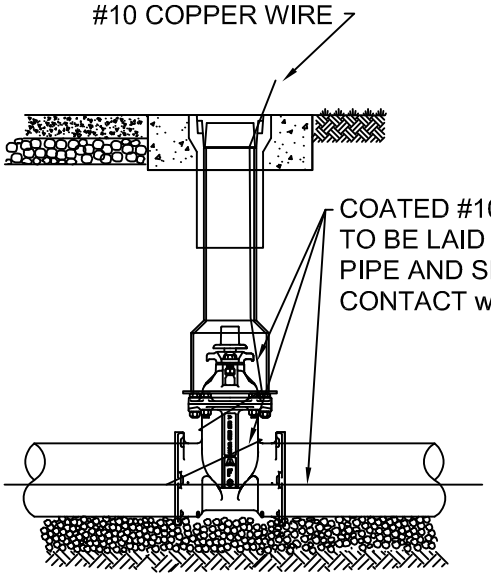
DATE: MARCH 2005

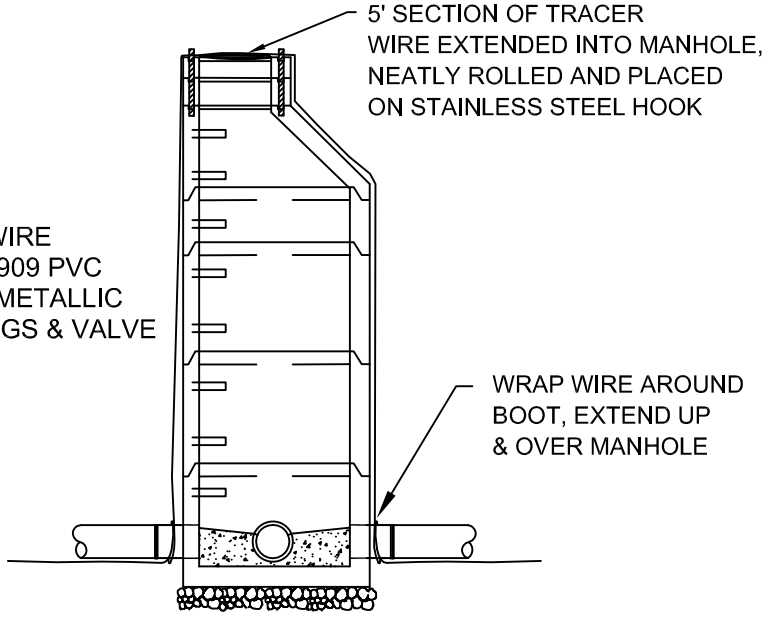
REVISIONS

BC # G-04

1. TRACER WIRES SHALL BE INSTALLED USING MANHOLES, VALVE BOXES OR VAULTS, WATER METERS AND FIRE HYDRANTS AS ACCESS POINTS.
2. TRACER WIRE SHALL BE A 10 GAUGE SOLID COPPER WIRE WITH POLYETHYLENE INSULATION OF 30 MIL THICKNESS.
3. SPLICES SHALL BE MADE USING A 3M DIRECT BURY SPLICE KIT (DBY) OR EQUIVALENT.
4. THE CONTINUOUS TRACER WIRE SHALL COVER A MAXIMUM LENGTH OF 500'.
5. ASBUILTS SHALL SHOW TRACER WIRE(S) LOCATION AND ACCESS POINT(S).
6. THE TRACER WIRE SHALL BE PLACED ALONG THE LOWER QUADRANT OF THE PIPE. THE WIRE SHALL NOT TOUCH THE PIPE, BUT SHALL BE A MAXIMUM OF 6" FROM THE PIPE. NON-METALLIC SPACERS MAY BE USED TO MAINTAIN A SET DISTANCE FROM THE UTILITY.
7. WHERE LINES ARE GREATER THAN SIX(6) FEET IN DEPTH, WIRE SHALL BE BROUGHT TO THE SURFACE EVERY ONE-HUNDRED (100) FEET AND PLACED IN A WATER METER BOX OR APRPOVED JUNCTION BOX.
8. THE TRACER WILL BE TESTED BY THE COUNTY AS PART OF THE PROJECT'S FINAL ACCEPTANCE.







BOTETOURT COUNTY
PUBLIC FACILITIES & PROGRAMS
30 WEST BACK STREET, NUMBER 4
FINCASTLE, VA 24090
Ph: 540-473-8316
Fx: 540-473-8360

CONSTRUCTION STANDARDS

TRACER WIRE INSTALLATION FOR NON-METALLIC PIPE

DATE: MARCH 2005

REVISIONS

BC # G-05