

IRON PIPE SIZE (IPS)	BORING DISTANCE (IN FEET)
1-1/4	400
1-1/2	400
2	350
2-1/2	350
3	300
4	250

INSTALLATION

A. INSTALLING HDPE PIPE.

1. PROVIDE A SWIVEL TO REAMING ASSEMBLY AND PULL SECTION OF PIPE TO MINIMIZE TORSIONAL STRESS ON PULL SECTION AFTER DRILLING PILOT HOLE.
2. HOLD REAMING DIAMETER TO 1.5 TIMES THE OUTSIDE DIAMETER OF HDPE PIPE BEING INSTALLED.
3. PROTECT PULL SECTION AS IT PROCEEDS DURING PULL BACK SO THAT IT MOVES FREELY AND IS NOT DAMAGED.
4. PULL DETECTION WIRE ALONG WITH HDPE PIPE. EXTEND WIRE INTO LOCATOR STATION AT EACH END OF HDPE PIPE.
5. WHEN CONNECTING TO ADJACENT PULLED OR NON-PULLED SECTION OF HDPE PIPE, ALLOW PULL SECTION OF PIPE TO EXTEND PAST TERMINATION POINT. MAKE TIE-INS THE NEXT DAY AFTER PULLBACK OF HDPE PIPE.
6. TEST PIT PIPE INSTALLATION TO VERIFY HORIZONTAL AND VERTICAL ALIGNMENT AT ENGINEER'S DIRECTION.
 - a. ONE TEST PIT FOR EVERY 500 FEET ALING LENGTH OF PIPELINE.
 - b. ENGINEER MAY ORDER ADDITIONAL TEST PIT FOR EACH TEST PIT THAT REVEALS PIPELINE INSTALLATION IS NOT IN COMPLIANCE WITH THE CONTRACT DOCUMENTS AT NO ADDITIONAL COST TO THE CITY OF ROCKY MOUNT.
7. REPLACE PORTIONS OF THE PIPELINE NOT IN COMPLIANCE WITH THE CONTRACT DOCUMENTS AT ENGINEER'S DIRECTION AND AT NO ADDITIONAL COST TO THE CITY OF ROCKY MOUNT.

B. INSTALLING LOCATOR STATION.

1. LOCATOR STATIONS.
 - a. PROVIDE LOCATOR STATIONS, FOLLOWING STANDARD DETAILS OR DRAWINGS, AT EACH END OF HDPE PIPE.
 - b. FLUSH MOUNT UNDERGROUND LOCATOR: SEE STANDARD DETAILS.
 - c. WHEN HDPE PIPE IS CONNECTED TO ANOTHER TYPE OF PIPE MATERIAL, CONTINUE DETECTOR WIRE OVER THE CONNECTING PIPE, SO LOCATOR STATION IS INSTALLED OUT OF PAVED AREA.
 - d. IN AREAS SCHEDULED TO BE IMPROVED IDENTIFY AND PROTECT STATION LOCATIONS IMMEDIATELY AFTER INSTALLATION.
 - 1) SPACE 3 STAKES EQUALLY AROUND THE STATION.
 - 2) EXTEND AT LEAST 4 FEET ABOVE EXISTING GRADE.
 - 3) FLAG WITH ORANGE FLUORESCENT WRAP WITHIN 6 INCHES FROM TOP OF STAKES.
 - e. MANHOLE MOUNTED LOCATOR STATION: SEE STANDARD DETAILS.
2. DETECTION WIRE.
 - a. INSTALL DETECTION WIRE WITHOUT SPLICES AS SHOWN ON STANDARD DETAILS.
 - b. TERMINATE DETECTION WIRE INSIDE LOCATOR BOX USING PROPER SIZED CRIMP TYPE CONNECTORS ON WIRE ENDS.
 - c. CONNECT EACH WIRE TO A TERMINAL MAINTAINING AT LEAST 18 INCHES SLACK IN EACH WIRE FOR UNDERGROUND FLUSH MOUNTED LOCATOR STATIONS.
 - d. NEATLY COIL SLACK WIRE IN TEST STATION BELOW TERMINAL BOARD.
 - e. LOCATE WIRES ON TOP AND ALONG HDPE PIPE.
 - f. ALLOW ADEQUATE SLACK AND SUPPORT TO PROTECT WIRES FROM DAMAGE DURING BACKFILLING OPERATIONS.
 - g. TEST EACH DETECTION WIRE FOR CONTINUITY AFTER BACKFILL IS COMPLETED.
 - 1) IF TEST FOR CONTINUITY IS NEGATIVE, REPAIR OR REPLACE AT ENGINEER'S DIRECTION.
 - 2) AFTER CONTINUITY IS VERIFIED, CONNECT EACH DETECTION WIRE TO TERMINAL BLOCK IN LOCATOR STATION.

HORIZONTAL DIRECTIONAL BORE NOTES (SHEET 2 OF 2)

REVISIONS		
NO	DATE	DESCRIPTION

CITY OF ROCKY MOUNT
DEPT. OF ENGINEERING

APPROVED -	STD. NO. 1.8c
DATE 12-19-08	REVISION -