

TRENCH BACKFILL COMPACTION SCHEDULE

| DESCRIPTION | INSIDE COUNTY RIGHT-OF-WAY | | | OUTSIDE COUNTY RIGHT-OF-WAY (MIN. VALUES) |
|-----------------|----------------------------|--|--------------------------|---|
| | UNDER PAVING | SHOULDER | OUTSIDE IMPROVED SECTION | |
| WATER MAIN | P.Z. | 90% (MIN) | 90% (MIN) | PIPE ZONE 90% |
| | T.Z. | PER COUNTY HAVING JURISDICTION ABOVE PIPE ZONE 85% | | |
| SERVICE LINE | P.Z. | 90% (MIN) | 90% (MIN) | PIPE ZONE 90% |
| | T.Z. | PER COUNTY HAVING JURISDICTION ABOVE PIPE ZONE 85% | | |
| HYDRANT LATERAL | P.Z. | 90% (MIN) | 90% (MIN) | PIPE ZONE 90% |
| | T.Z. | PER COUNTY HAVING JURISDICTION ABOVE PIPE ZONE 85% | | |

| | PIPE COVER, 'C' SCHEDULE | | | |
|-----------------|--------------------------|------|-----------------|------|
| | INSIDE ROADWAY | | OUTSIDE ROADWAY | |
| WATER MAIN | 36" | 48" | 36" | 48" |
| SERVICE LINE | 36" | 48" | 30" | 36" |
| HYDRANT LATERAL | 36" | 48" | 36" | 48" |
| | TYP. | MAX. | TYP. | MAX. |

NOTE: SPECIFIC DISTRICT APPROVED LOCATIONS MAY BE ALLOWED WITH A MINIMUM 30-IN COVER OR MAY REQUIRE A MAXIMUM EQUAL TO OR GREATER THAN 48-IN.

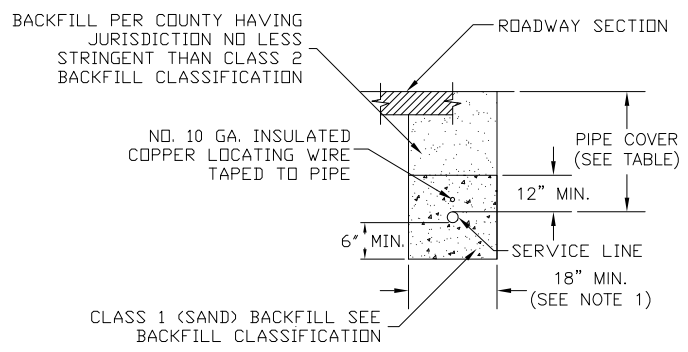
SEE NOTE #6 THIS SHEET.
 P.Z. - PIPE ZONE. BOTTOM OF TRENCH TO 12" ABOVE PIPE. (PIPE ZONE) - P.Z.
 T.Z. - ABOVE PIPE ZONE TO GROUND LEVEL. (TRENCH ZONE) - T.Z.
 NOTE: ALL PERCENTAGES BASED ON TEST METHOD ASTM 1557

BACKFILL CLASSIFICATION

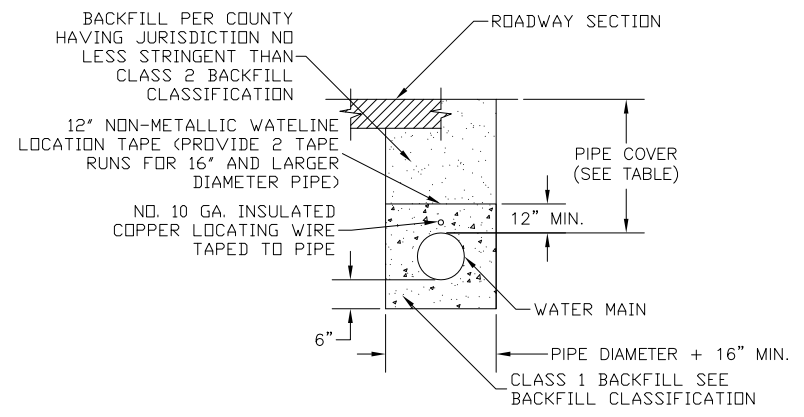
| | |
|------------------|--|
| CLASS 1 MATERIAL | SAND, FREE FROM ORGANIC OR OTHER DELETERIOUS MATERIALS, HAVING A SAND EQUIVALENT NOT LESS THAN 30 & A PERCENTAGE COMPOSITION, BY WEIGHT CONFORMING TO THE FOLLOWING GRADING: SIEVE SIZES PERCENTAGE PASSING (BY WEIGHT) 1/2" 100 NO. 4 75-100 NO. 50 0-70 NO. 100 0-30 NO. 200 0-15 WITH ALL GRAINS AS RETAINED ON NO. 4 SIEVE HAVING A ROUNDED GRAIN SHAPE AS DEFINED BY ASTM D-2488, A DURABILITY INDEX MINIMUM OF 35, A PH BETWEEN 5.0 TO 8.0, AND A RESISTIVITY R EQUAL TO OR GREATER THAN 5,000 OHMS-CM. |
| CLASS 2 MATERIAL | APPROVED SELECT EXCAVATED EARTH, FREE FROM STONES OR LUMPS EXCEEDING 2" INCHES GREATEST DIMENSION, VEGETABLE MATTER, OR OTHER DELETERIOUS MATERIAL, OR IMPORTED NON-EXPANSIVE SOIL WITH LIQUID LIMIT NO GREATER THAN 40 PERCENT AND A PLASTICITY INDEX NO GREATER THAN 12 PERCENT, FREE FROM CLODS OR ROCKS LARGER THEN 2" INCHES IN GREATEST DIMENSION, AND FREE FROM ORGANIC MATERIAL AND DEBRIS. (NOTE - COUNTY OR CITY REQUIREMENTS MAY TAKE PRECEDENCE IN THIS ZONE.) |

NOTES:

1. TRENCH WIDTHS LESS THAN 18" MAY BE APPROVED BY THE DISTRICT ON AN INDIVIDUAL BASIS, WITH PRIME CONSIDERATION GIVEN TO SOIL CONDITIONS AND PROPOSED CONSTRUCTION METHODS.
2. NON-METALLIC MAINLINE PIPES, WHEN ALLOWED, SHALL BE C-900 PVC.
3. WHEN USING BELL AND SPIGOT PIPE, BELL HOLES SHALL BE EXCAVATED IN THE TRENCH BOTTOM SO THAT THE JOINT OF PIPE SHALL BE FULLY SUPPORTED ALONG ITS ENTIRE LENGTH.
4. FINISH TRENCH TO SURFACE OF ROADWAY OR FINISHED GRADE IF OUTSIDE ROADWAY.
5. IN ROCK, HARDPAN, SHALE, OR OTHER UNSUITABLE GROUND, EXCAVATE 6" MIN. BELOW AND ON EACH SIDE OF PIPELINE AND REPLACE WITH CLASS #1 BACKFILL.
6. ROADWAY IS DEFINED AS THAT AREA BETWEEN RIGHT-OF-WAY LINES IN COUNTY OR CITY ROADS AND BETWEEN EASEMENT LINES ON PRIVATE ROADS.
7. WHEN COUNTY OR CITY CONSTRUCTION STANDARDS REQUIREMENTS ARE MORE RESTRICTIVE, THEY WILL TAKE PRECEDENCE.
8. PIPE SHALL BE LAID TO MANUFACTURER'S SPECIFICATIONS.
9. HYDROTESTING SHALL BE DONE AT SUBGRADE.
10. LOCATING TAPE SHALL BE USED IN ADDITION TO WIRE. PLACE TAPE ABOVE PIPE ZONE.
11. ALL WATER MAINS DEPTHS > OR = TO 5-FT DEEP SHALL BE CL-350 D.I.P. W/POLY WRAP.



ALL SERVICE TYPES



ALL PIPE TYPES

| NO | DATE | REVISIONS | APP | BY |
|----|------|-----------|-----|----|
| | | | | |
| | | | | |



PIPELINE TRENCH SECTIONS

SAN JUAN WATER DISTRICT

| | | |
|------------|----------------------|-------------------------|
| APPROVED | | |
| | | |
| SCALE: NTS | PRINT DATE: 07/13/07 | DETAIL NO: SHT 11 OF 27 |