| POLYETHYLENE CORRUGATED PIPE (PE) (SEE NOTE 6) |         |                            |  |  |
|--|---------|----------------------------|--|--|
| DIAMETER                                       | AREA    | MAXIMUM<br>HEIGHT OF COVER |  |  |
| INCHES   | SQ. FT. | FEET                       |  |  |
| 12   | 0.8     | 21                         |  |  |
| 15   | 1.2     | 21                         |  |  |
| 18   | 1.8     | 20                         |  |  |
| 24   | 3.1     | 20                         |  |  |
| 30   | 4.9     | 19                         |  |  |
| 36   | 7.1     | 18                         |  |  |
| 42   | 7.1     | 18                         |  |  |
| 48   | 7.1     | 17                         |  |  |

| POLYVINYLCHLORIDE RIBBED PIPE (PVC) |         |                            |  |
|-------------------------------------|---------|----------------------------|--|
| DIAMETER                            | AREA    | MAXIMUM<br>HEIGHT OF COVER |  |
| INCHES                              | SQ. FT. | FEET                       |  |
| 18                                  | 1.7     | 20                         |  |
| 21                                  | 2.3     | 19                         |  |
| 24                                  | 3.0     | 19                         |  |
| 30                                  | 4.7     | 18                         |  |
| 36                                  | 6.9     | 18                         |  |
| 48                                  | 12.3    | 18                         |  |

## NOTES:

- 1. COVER HEIGHTS INDICATED IN TABLES ARE FOR FINISHED CONSTRUCTION.
- 2. TO PROTECT PIPE DURING CONSTRUCTION, MINIMUM HEIGHT OF COVER TO BE IN ACCORDANCE WITH TABLE A PRIOR TO ALLOWING CONSTRUCTION TRAFFIC TO CROSS INSTALLATION. THE COVER SHALL EXTEND THE FULL LENGTH OF THE PIPE. THE APPROACH FILL IS TO EXTEND A MINIMUM OF 10(DIAMETER +  $/\!\!/_2$  DIAMETER) ON EACH SIDE OF THE PIPE OR TO THE INTERSECTION WITH A CUT.
- 3. STANDARD MINIMUM FINISHED HEIGHT OF COVER FOR ALL PIPES, EXCEPT THOSE UNDER ENTRANCES, SHALL BE 2.0' OR ½ DIAMETER WHICHEVER IS GREATER. IN CASES IN WHICH THESE COVER HEIGHTS CANNOT BE ACHIEVED, AN ABSOLUTE MINIMUM FINISHED COVER HEIGHT OF 1.0' OR ½ DIAMETER WHICHEVER IS GREATER WILL BE ALLOWED ONLY IF ALL POSSIBLE MEANS TO OBTAIN THE STANDARD VALUE HAVE BEEN EXHAUSTED. THE MINIMUM FINISHED HEIGHT OF COVER FOR PIPES UNDER ENTRANCES IS 9" FOR PIPE DIAMETERS LESS THAN OR EQUAL TO 24" AND 12" OR ½ DIAMETER, WHICHEVER IS GREATER, FOR PIPE DIAMETERS GREATER THAN 24". WHICHE THE SURFACE OVER THE TOP OF THE PIPE WILL BE ASPHALT, A MINIMUM OF 6" OF CLASS I BACKFILL MATERIAL IS TO BE PLACED BETWEEN THE TOP OF THE PIPE AND THE BOTTOM OF THE ASPHALT.
- 4. SEE STANDARD PB-1 FOR PIPE BEDDING AND BACKFILL REQUIREMENTS.
- 5. THE MAXIMUM HEIGHT OF COVER SHOWN IN THE TABLES IS BASED ON A SOIL MODULUS OF 700 PSI. ALL OTHER DESIGN CRITERIA ARE IN ACCORDANCE WITH THE AASHTO SPECIFICATIONS AND VDOT MODIFICATIONS FOR SOIL THERMOPLASTIC PIPE INTERACTION SYSTEMS.
- 6. HEIGHT OF COVER VALUES FOR 12" TO 36" DIAMETER APPLY TO TYPE C, D, OR S. HEIGHT OF COVER VALUES FOR 42" AND 48" APPLY TO TYPE D ONLY.

| TABLE A       |   |  |
|---------------|---|--|
| PIPE DIAMETER | MINIMUM COVER HEIGHT<br>DURING CONSTRUCTION<br>(SEE NOTE 4) |  |
| 12" TO 30"    | 18"   |  |
| 36" AND ABOVE | √2 DAMETER  |  |

## PLASTIC PIPE

| EXTRA STRENGTH CLAY PIPE |         |                            |  |  |
|--------------------------|---------|----------------------------|--|--|
| DIAMETER                 | AREA    | MAXIMUM<br>HEIGHT OF COVER |  |  |
| INCHES                   | SQ. FT. | FEET                       |  |  |
| 12                       | 0.8     | 19                         |  |  |
| 15                       | 1.2     | 15                         |  |  |
| 18                       | 1.8     | 15                         |  |  |
| 21                       | 2.4     | 15                         |  |  |
| 24                       | 3.1     | 15                         |  |  |
| 30                       | 4.9     | 13                         |  |  |
| 36                       | 7.1     | 13                         |  |  |

## NOTES:

- 1. ALL VITRIFIED CLAY PIPE IS TO BE EXTRA STRENGTH.
- 2. MAXIMUM HEIGHTS OF COVER SHOWN IN TABLE ARE FOR FINISHED CONSTRUCTION.
- 3. TO PROTECT PIPE <u>DURING CONSTRUCTION</u>, MINIMUM HEIGHT OF COVER PRIOR TO ALLOWING CONSTRUCTION TRAFFIC TO CROSS INSTALLATION IS TO BE 36". THIS COVER IS TO EXTEND THE FULL LENGTH OF THE PIPE. THE APPROACH FILL RAMP IS TO EXTEND A MINIMUM OF L10(DIAMETER + 36")] ON EACH SIDE OF THE PIPE, OR TO THE INTERSECTION WITH A CUT.
- 4. MINIMUM <u>FINISHED</u> HEIGHT OF COVER TO BE 24", EXCEPT PIPE UNDER ENTRANCES WHERE A 9" MINIMUM WILL BE PERMITTED.
- 5. METHOD A BEDDING IS TO BE USED FOR ALL INSTALLATIONS UNLESS OTHERWISE DESIGNATED ON THE PLANS.

VITRIFIED CLAY

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## VITRIFIED CLAY AND PLASTIC PIPE HEIGHT OF COVER TABLES FOR H-20 LIVE LOAD

232 302

**SPECIFICATION** 

REV. 7/05 107.20

VIRGINIA DEPARTMENT OF TRANSPORTATION