

**NOTE:**

1. The tabulated cover depths shall be measured from the bottom of the bituminous or concrete pavement to the top of the pipe.

**REINFORCED CONCRETE CIRCULAR PIPE  
HEIGHT OF COVER LIMITS (ft.)**

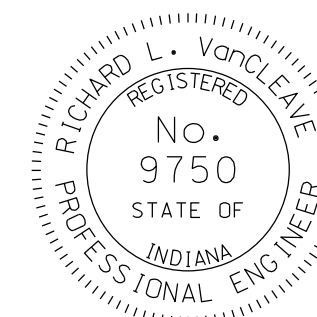
| DIAMETER<br>(in.) | Strength Class/D-load Rating       |      |                                     |      |                                     |      |                                    |      |                                    |      |                                    |       |
|-------------------|------------------------------------|------|-------------------------------------|------|-------------------------------------|------|------------------------------------|------|------------------------------------|------|------------------------------------|-------|
|                   | Class II: D <sub>0.01</sub> = 1000 |      | Class III: D <sub>0.01</sub> = 1250 |      | Class III: D <sub>0.01</sub> = 1350 |      | Class IV: D <sub>0.01</sub> = 1500 |      | Class IV: D <sub>0.01</sub> = 1750 |      | Class IV: D <sub>0.01</sub> = 2000 |       |
|                   | MIN.                               | MAX. | MIN.                                | MAX. | MIN.                                | MAX. | MIN.                               | MAX. | MIN.                               | MAX. | MIN.                               | MAX.  |
| 12                | 1.4                                | 6.0  | 1.1                                 | 10.0 | 1.1                                 | 12.0 | 1.0                                | 15.0 | 1.0                                | 24.0 | 1.0                                | 100.0 |
| 15                | 1.1                                | 8.0  | 1.0                                 | 12.0 | 1.0                                 | 14.0 | 1.0                                | 19.0 | 1.0                                | 35.0 | 1.0                                | 100.0 |
| 18                | 1.0                                | 9.0  | 1.0                                 | 14.0 | 1.0                                 | 17.0 | 1.0                                | 22.0 | 1.0                                | 52.0 | 1.0                                | 100.0 |
| 21                | 1.0                                | 10.0 | 1.0                                 | 15.0 | 1.0                                 | 18.0 | 1.0                                | 24.0 | 1.0                                | 84.0 | 1.0                                | 100.0 |
| 24                | 1.0                                | 11.0 | 1.0                                 | 17.0 | 1.0                                 | 20.0 | 1.0                                | 26.0 | 1.0                                | 85.0 | 1.0                                | 100.0 |
| 27                | 1.0                                | 10.0 | 1.0                                 | 13.0 | 1.0                                 | 15.0 | 1.0                                | 19.0 | 1.0                                | 26.0 | 1.0                                | 42.0  |
| 30                | 1.0                                | 10.0 | 1.0                                 | 14.0 | 1.0                                 | 16.0 | 1.0                                | 20.0 | 1.0                                | 28.0 | 1.0                                | 44.0  |
| 33                | 1.0                                | 10.0 | 1.0                                 | 15.0 | 1.0                                 | 17.0 | 1.0                                | 20.0 | 1.0                                | 29.0 | 1.0                                | 45.0  |
| 36                | 1.0                                | 11.0 | 1.0                                 | 15.0 | 1.0                                 | 17.0 | 1.0                                | 21.0 | 1.0                                | 29.0 | 1.0                                | 45.0  |
| 42                | 1.0                                | 11.0 | 1.0                                 | 16.0 | 1.0                                 | 18.0 | 1.0                                | 22.0 | 1.0                                | 30.0 | 1.0                                | 44.0  |
| 48                | 1.0                                | 12.0 | 1.0                                 | 17.0 | 1.0                                 | 19.0 | 1.0                                | 22.0 | 1.0                                | 30.0 | 1.0                                | 43.0  |
| 54                | 1.0                                | 12.0 | 1.0                                 | 17.0 | 1.0                                 | 19.0 | 1.0                                | 23.0 | 1.0                                | 31.0 | 1.0                                | 42.0  |
| 60                | 1.0                                | 10.0 | 1.0                                 | 13.0 | 1.0                                 | 14.0 | 1.0                                | 17.0 | 1.0                                | 21.0 | 1.0                                | 26.0  |
| 66                | 1.0                                | 10.0 | 1.0                                 | 14.0 | 1.0                                 | 15.0 | 1.0                                | 17.0 | 1.0                                | 21.0 | 1.0                                | 26.0  |
| 72                | 1.0                                | 11.0 | 1.0                                 | 14.0 | 1.0                                 | 15.0 | 1.0                                | 18.0 | 1.0                                | 22.0 | 1.0                                | 27.0  |
| 78                | 1.0                                | 11.0 | 1.0                                 | 14.0 | 1.0                                 | 16.0 | 1.0                                | 18.0 | 1.0                                | 22.0 | 1.0                                | 27.0  |
| 84                | 1.0                                | 11.0 | 1.0                                 | 15.0 | 1.0                                 | 16.0 | 1.0                                | 19.0 | 1.0                                | 23.0 | 1.0                                | 28.0  |
| 90                | 1.0                                | 11.0 | 1.0                                 | 15.0 | 1.0                                 | 16.0 | 1.0                                | 19.0 | 1.0                                | 23.0 | 1.0                                | 28.0  |
| 96                | 1.0                                | 11.0 | 1.0                                 | 15.0 | 1.0                                 | 17.0 | 1.0                                | 19.0 | 1.0                                | 23.0 | 1.0                                | 28.0  |
| 102               | 1.1                                | 12.0 | 1.1                                 | 15.0 | 1.1                                 | 17.0 | 1.1                                | 19.0 | 1.1                                | 24.0 | 1.1                                | 29.0  |
| 108               | 1.2                                | 12.0 | 1.2                                 | 15.0 | 1.2                                 | 17.0 | 1.2                                | 20.0 | 1.2                                | 24.0 | 1.2                                | 29.0  |
| 114               | 1.2                                | 12.0 | 1.2                                 | 16.0 | 1.2                                 | 17.0 | 1.2                                | 20.0 | 1.2                                | 24.0 | 1.2                                | 29.0  |
| 120               | 1.3                                | 12.0 | 1.3                                 | 16.0 | 1.3                                 | 17.0 | 1.3                                | 20.0 | 1.3                                | 24.0 | 1.3                                | 29.0  |
| 126               | 1.4                                | 12.0 | 1.4                                 | 16.0 | 1.4                                 | 18.0 | 1.4                                | 20.0 | 1.4                                | 24.0 | 1.4                                | 29.0  |
| 132               | 1.4                                | 12.0 | 1.4                                 | 16.0 | 1.4                                 | 18.0 | 1.4                                | 20.0 | 1.4                                | 25.0 | 1.4                                | 29.0  |
| 138               | 1.5                                | 12.0 | 1.5                                 | 16.0 | 1.5                                 | 18.0 | 1.5                                | 20.0 | 1.5                                | 25.0 | 1.5                                | 29.0  |
| 144               | 1.5                                | 12.0 | 1.5                                 | 16.0 | 1.5                                 | 18.0 | 1.5                                | 20.0 | 1.5                                | 25.0 | 1.5                                | 29.0  |

INDIANA DEPARTMENT OF TRANSPORTATION

PIPE HEIGHT OF  
COVER LIMITS

SEPTEMBER 2009

STANDARD DRAWING NO. E 715-PHCL-21



*/s/ Richard L. VanCleave*      09/01/09  
DESIGN STANDARDS ENGINEER      DATE

*/s/ Mark A. Miller*      09/01/09  
CHIEF HIGHWAY ENGINEER      DATE

DESIGN STANDARDS ENGINEER