



| PIPE DIA. (NOM.) | A | B | H | Reinforcing Steel No. 15 bars (No. 4) | | | | | | Concrete 2 End Secs. m ³ (cu. yds.) | Reinf. Bars 2 End Secs. kg (lbs.) |
|------------------|----------------|-----------------|----------------|---------------------------------------|----------------------------|--------------------------|---------------------------|----------------------------|--------------------------|--|-----------------------------------|
| | | | | a | b | b ₁ | c | v | v ₁ | | |
| 300 (12) | 460 (18) | 710 (28) | 460 (18) | 4 @ 610 (4 @ (24)) | 4 @ 540 (4 @ (21)) | 4 @ 790 (4 @ (31)) | 2 @ 1.75 m (2 @ (5'-9")) | 4 @ 760 (4 @ (30)) | 4 @ 530 (4 @ (21)) | .45 (.59) | 30 (40) |
| 375 (15) | 570 (24) | 780 (31) | 535 (21) | 4 @ 690 (4 @ (27)) | 4 @ 690 (4 @ (27)) | 4 @ 990 (4 @ (39)) | 2 @ 2.13 m (2 @ (7'-0")) | 4 @ 840 (4 @ (33)) | 4 @ 610 (4 @ (24)) | .59 (.77) | 30 (40) |
| 450 (18) | 685 (27) | 860 (34) | 610 (24) | 6 @ 760 (6 @ (30)) | 8 @ 760 (8 @ (30)) | 4 @ 1.07 m (4 @ (3'-6")) | 2 @ 2.44 m (2 @ (8'-0")) | 4 @ 910 (4 @ (36)) | 4 @ 690 (4 @ (27)) | .70 (.92) | 40 (60) |
| 600 (24) | 915 (36) | 1.01 m (3'-4") | 760 (30) | 6 @ 910 (6 @ (36)) | 8 @ 990 (8 @ (39)) | 6 @ 1.2 m (6 @ (4'-3")) | 2 @ 3.2 m (2 @ (10'-6")) | 8 @ 1.07 m (8 @ (3'-6")) | 4 @ 760 (4 @ (30)) | 1.01 (1.32) | 60 (90) |
| 750 (30) | 1.14 m (3'-9") | 1.16 m (3'-10") | 915 (36) | 8 @ 1.07 m (8 @ (3'-6")) | 12 @ 1.22 m (12 @ (4'-0")) | 6 @ 1.52 m (6 @ (5'-0")) | 2 @ 3.81 m (2 @ (12'-6")) | 8 @ 1.22 m (8 @ (4'-0")) | 4 @ 910 (4 @ (36)) | 1.37 (1.79) | 80 (120) |
| 900 (36) | 1.37 m (4'-6") | 1.32 m (4'-4") | 1.07 m (3'-6") | 10 @ 1.22 m (10 @ (4'-0")) | 12 @ 1.45 m (12 @ (4'-9")) | 6 @ 1.75 m (6 @ (5'-9")) | 2 @ 4.57 m (2 @ (15'-0")) | 8 @ 1.37 m (8 @ (4'-6")) | 8 @ 1.07 m (8 @ (3'-6")) | 1.85 (2.33) | 110 (150) |
| 1200 (48) | 1.83 m (6'-0") | 1.62 m (5'-4") | 1.37 m (4'-6") | 12 @ 1.52 m (12 @ (5'-0")) | 16 @ 1.9 m (16 @ (6'-3")) | 8 @ 2.21 m (8 @ (7'-3")) | 2 @ 5.87 m (2 @ (19'-3")) | 12 @ 1.52 m (12 @ (5'-0")) | 8 @ 1.07 m (8 @ (3'-6")) | 2.80 (3.6) | 170 (230) |

DESIGN DATA

GENERAL NOTES

All slope ratios are expressed as units of vertical displacement to units of horizontal displacement (V:H).

All dimensions are in millimeters (inches) unless otherwise shown.

Illinois Department of Transportation

APPROVED January 1, 1997
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ISSUED 1-1-97

| DATE | REVISIONS |
|---------|------------------------------|
| 1-1-97 | Renum. Standard 1564-1. |
| 6-15-94 | Added metric and slope note. |

REINFORCED CONCRETE END SECTIONS WITH PARALLEL WINGWALLS FOR PIPE CULVERTS 300 mm (12") THRU 1200 mm (48") DIA. AT RIGHT ANGLES WITH ROADWAY

STANDARD 542001