

FOR TYPICAL SECTION, NOTES AND OTHER DETAILS, REFER TO STANDARD BCS-DT.

| DIMENSIONS | | | | | REINFORCING STEEL | | | | | | | | | | | | | | | | | | | | | | |
|---------------|----------------|----------------------------|-------------------------------|---------------------|-------------------|--------|----|--------|----|--------|------|----------------|--------|-----------|---------|------|----------------|--------|------|----------------|------------|--------|------|----------------|--------------------|--------------------|--------|
| SPAN (FT.) | HIGHT (FT.) | T1 TOP SLAB (IN.) | T2 BOTTOM SLAB (IN.) | T3 WALL (IN.) | A | B | C | D | E | F | BH1 | | | | BH2 | | | BH3 | | | | BV1 | | | NO. BL1 #4 BARS | NO. BL2 #3 BARS | |
| | | | | | | | | | | | SIZE | SPACING C-C | a | b | LENGTH | SIZE | SPACING C-C | LENGTH | SIZE | SPACING C-C | a | LENGTH | SIZE | SPACING C-C | | | LENGTH |
| 3 | 3 | 8" | 8" | 8" | 2 | 2'-0" | 2 | 2'-0" | 1 | 1'-0" | 4 | 12" | 4'-0" | 2'-8" | 8'-10" | 4 | 12" | 4'-0" | -- | -- | ---- | ---- | 4 | 12" | 4'-0" | 16 | 8 |
| 3 | 4 | 8" | 8" | 8" | 2 | 2'-0" | 2 | 2'-0" | 2 | 2'-0" | 4 | 12" | 4'-0" | 3'-2" | 9'-10" | 4 | 12" | 4'-0" | -- | -- | ---- | ---- | 4 | 12" | 5'-0" | 16 | 12 |
| 4 | 3 | 8" | 8" | 8" | 3 | 3'-0" | 3 | 3'-0" | 1 | 1'-0" | 4 | 11 1/2" | 5'-0" | 2'-8" | 9'-10" | 4 | 11 1/2" | 5'-0" | -- | -- | ---- | ---- | 4 | 12" | 4'-0" | 20 | 8 |
| 4 | 4 | 8" | 8" | 8" | 3 | 3'-0" | 3 | 3'-0" | 2 | 2'-0" | 4 | 11" | 5'-0" | 3'-2" | 10'-10" | 4 | 11" | 5'-0" | -- | -- | ---- | ---- | 4 | 12" | 5'-0" | 20 | 12 |
| 4 | 5 | 8" | 8" | 8" | 3 | 3'-0" | 3 | 3'-0" | 3 | 3'-0" | 4 | 12" | 5'-0" | 3'-8" | 11'-10" | 5 | 12" | 5'-0" | 3 | 12" | 2'-3 5/8" | 4'-5" | 4 | 12" | 6'-0" | 20 | 16 |
| 4 | 6 | 8" | 8" | 8" | 3 | 3'-0" | 3 | 3'-0" | 4 | 4'-0" | 4 | 12" | 5'-0" | 4'-2" | 12'-10" | 5 | 12" | 5'-0" | 3 | 12" | 2'-9" | 5'-5" | 4 | 12" | 7'-0" | 20 | 20 |
| 5 | 3 | 8" | 8" | 8" | 4 | 4'-0" | 4 | 4'-0" | 1 | 1'-0" | 4 | 12" | 6'-0" | 2'-8" | 10'-10" | 5 | 12" | 6'-0" | -- | -- | ---- | ---- | 4 | 12" | 4'-0" | 24 | 8 |
| 5 | 4 | 8" | 8" | 8" | 4 | 4'-0" | 4 | 4'-0" | 2 | 2'-0" | 4 | 11 1/2" | 6'-0" | 3'-2" | 11'-10" | 5 | 11 1/2" | 6'-0" | -- | -- | ---- | ---- | 4 | 12" | 5'-0" | 24 | 12 |
| 5 | 5 | 8" | 8" | 8" | 4 | 4'-0" | 4 | 4'-0" | 3 | 3'-0" | 4 | 11" | 6'-0" | 3'-8" | 12'-10" | 5 | 11" | 6'-0" | -- | -- | ---- | ---- | 4 | 12" | 6'-0" | 24 | 16 |
| 5 | 6 | 8" | 8" | 8" | 4 | 4'-0" | 4 | 4'-0" | 4 | 4'-0" | 4 | 10 1/2" | 6'-0" | 4'-2" | 13'-10" | 5 | 10 1/2" | 6'-0" | -- | -- | ---- | ---- | 4 | 12" | 7'-0" | 24 | 20 |
| 5 | 7 | 8" | 8" | 8" | 4 | 4'-0" | 4 | 4'-0" | 5 | 5'-0" | 4 | 10" | 6'-0" | 4'-8" | 14'-10" | 5 | 10" | 6'-0" | -- | -- | ---- | ---- | 4 | 12" | 8'-0" | 24 | 24 |
| 6 | 4 | 8" | 8" | 8" | 5 | 5'-0" | 5 | 5'-0" | 2 | 2'-0" | 4 | 9 1/2" | 7'-0" | 3'-2" | 12'-10" | 5 | 9 1/2" | 7'-0" | -- | -- | ---- | ---- | 4 | 12" | 5'-0" | 28 | 12 |
| 6 | 5 | 8" | 8" | 8" | 5 | 5'-0" | 5 | 5'-0" | 3 | 3'-0" | 4 | 11 1/2" | 7'-0" | 3'-8" | 13'-10" | 6 | 11 1/2" | 7'-0" | 4 | 11 1/2" | 2'-8 3/8" | 5'-2" | 4 | 12" | 6'-0" | 28 | 16 |
| 6 | 6 | 8" | 8" | 8" | 5 | 5'-0" | 5 | 5'-0" | 4 | 4'-0" | 4 | 11" | 7'-0" | 4'-2" | 14'-10" | 6 | 11" | 7'-0" | 3 | 11" | 2'-8 3/8" | 5'-2" | 4 | 12" | 7'-0" | 28 | 20 |
| 6 | 7 | 8" | 8" | 8" | 5 | 5'-0" | 5 | 5'-0" | 5 | 5'-0" | 4 | 10 1/2" | 7'-0" | 4'-8" | 15'-10" | 6 | 10 1/2" | 7'-0" | 3 | 10 1/2" | 2'-11" | 5'-8" | 4 | 12" | 8'-0" | 28 | 24 |
| 6 | 8 | 8" | 8" | 8" | 5 | 5'-0" | 5 | 5'-0" | 6 | 6'-0" | 4 | 10" | 7'-0" | 5'-2" | 16'-10" | 6 | 10" | 7'-0" | 4 | 10" | 3'-2" | 6'-2" | 5 | 12" | 9'-0" | 28 | 28 |
| 7 | 4 | 8" | 8" | 8" | 6 | 6'-0" | 6 | 6'-0" | 2 | 2'-0" | 5 | 10" | 8'-0" | 3'-2" | 13'-8" | 6 | 10" | 8'-0" | 3 | 10" | 2'-10 3/4" | 5'-7" | 4 | 9" | 5'-0" | 32 | 12 |
| 7 | 6 | 8" | 8" | 8" | 6 | 6'-0" | 6 | 6'-0" | 4 | 4'-0" | 4 | 9" | 8'-0" | 4'-2" | 15'-10" | 6 | 9" | 8'-0" | 3 | 9" | 2'-10 3/4" | 5'-7" | 4 | 12" | 7'-0" | 32 | 20 |
| 7 | 8 | 8" | 8" | 8" | 6 | 6'-0" | 6 | 6'-0" | 6 | 6'-0" | 4 | 8 1/2" | 8'-0" | 5'-2" | 17'-10" | 6 | 8 1/2" | 8'-0" | 3 | 8 1/2" | 3'-2" | 6'-2" | 4 | 12" | 9'-0" | 32 | 28 |
| 7 | 10 | 8" | 8" | 8" | 6 | 6'-0" | 6 | 6'-0" | 8 | 8'-0" | 4 | 7 1/2" | 8'-0" | 6'-2" | 19'-10" | 6 | 7 1/2" | 8'-0" | 3 | 7 1/2" | 3'-6" | 6'-9" | 5 | 9" | 11'-0" | 32 | 36 |
| 8 | 4 | 8" | 8" | 8" | 7 | 7'-0" | 7 | 7'-0" | 2 | 2'-0" | 5 | 8 1/2" | 9'-0" | 3'-2" | 14'-8" | 6 | 8 1/2" | 9'-0" | 3 | 8 1/2" | 3'-2" | 6'-2" | 4 | 6" | 5'-0" | 36 | 12 |
| 8 | 6 | 8" | 8" | 8" | 7 | 7'-0" | 7 | 7'-0" | 4 | 4'-0" | 4 | 7 1/2" | 9'-0" | 4'-2" | 16'-10" | 6 | 7 1/2" | 9'-0" | 3 | 7 1/2" | 3'-2" | 6'-2" | 4 | 9" | 7'-0" | 36 | 20 |
| 8 | 8 | 8" | 8" | 8" | 7 | 7'-0" | 7 | 7'-0" | 6 | 6'-0" | 4 | 7" | 9'-0" | 5'-2" | 18'-10" | 6 | 7" | 9'-0" | 3 | 7" | 3'-2" | 6'-2" | 4 | 12" | 9'-0" | 36 | 28 |
| 8 | 10 | 8" | 8" | 8" | 7 | 7'-0" | 7 | 7'-0" | 8 | 8'-0" | 4 | 6 1/2" | 9'-0" | 6'-2" | 20'-10" | 6 | 6 1/2" | 9'-0" | 3 | 6 1/2" | 3'-6" | 6'-9" | 5 | 9" | 11'-0" | 36 | 36 |
| 9 | 4 | 8" | 8" | 8" | 8 | 8'-0" | 8 | 8'-0" | 2 | 2'-0" | 5 | 7 1/2" | 10'-0" | 3'-2" | 15'-8" | 6 | 7 1/2" | 10'-0" | 3 | 7 1/2" | 3'-3 5/8" | 6'-5" | 4 | 5 1/2" | 5'-0" | 40 | 12 |
| 9 | 6 | 8 1/4" | 8 1/4" | 8" | 8 | 8'-0" | 8 | 8'-0" | 4 | 4'-0" | 5 | 6 1/2" | 10'-0" | 4'-2 1/4" | 17'-9" | 6 | 6 1/2" | 10'-0" | -- | -- | ---- | ---- | 4 | 7 1/2" | 7'-0" | 40 | 20 |
| 9 | 8 | 8 1/4" | 8 1/4" | 8" | 8 | 8'-0" | 8 | 8'-0" | 6 | 6'-0" | 4 | 6" | 10'-0" | 5'-2 1/4" | 19'-10" | 6 | 6" | 10'-0" | 3 | 6" | 3'-3 5/8" | 6'-5" | 4 | 10 1/2" | 9'-0" | 40 | 28 |
| 9 | 10 | 8 1/2" | 8 1/2" | 8" | 8 | 8'-0" | 8 | 8'-0" | 8 | 8'-0" | 5 | 7 1/2" | 10'-0" | 6'-2 1/2" | 21'-9" | 7 | 7 1/2" | 10'-0" | 3 | 7 1/2" | 3'-6" | 6'-9" | 5 | 10" | 11'-1" | 40 | 36 |
| 9 | 12 | 9" | 9" | 8" | 8 | 8'-0" | 8 | 8'-0" | 10 | 10'-0" | 6 | 8 1/2" | 10'-0" | 7'-3" | 23'-8" | 8 | 8 1/2" | 10'-0" | -- | -- | ---- | ---- | 7 | 12" | 13'-2" | 40 | 44 |
| 10 | 4 | 8 1/4" | 8 1/4" | 8" | 9 | 9'-0" | 9 | 9'-0" | 2 | 2'-0" | 5 | 6 1/2" | 11'-0" | 3'-2 1/4" | 16'-9" | 6 | 6 1/2" | 11'-0" | 3 | 6 1/2" | 3'-6" | 6'-10" | 5 | 6" | 5'-0" | 44 | 12 |
| 10 | 6 | 8 1/2" | 8 1/2" | 8" | 9 | 9'-0" | 9 | 9'-0" | 4 | 4'-0" | 6 | 7 1/2" | 11'-0" | 4'-2 1/2" | 18'-7" | 7 | 7 1/2" | 11'-0" | -- | -- | ---- | ---- | 4 | 6" | 7'-1" | 44 | 20 |
| 10 | 8 | 8 3/4" | 8 3/4" | 8" | 9 | 9'-0" | 9 | 9'-0" | 6 | 6'-0" | 4 | 5 1/2" | 11'-0" | 5'-2 3/4" | 20'-11" | 6 | 5 1/2" | 11'-0" | 3 | 5 1/2" | 3'-6" | 6'-10" | 4 | 9" | 9'-2" | 44 | 28 |
| 10 | 10 | 9 1/4" | 9 1/4" | 8" | 9 | 9'-0" | 9 | 9'-0" | 8 | 8'-0" | 4 | 5" | 11'-0" | 6'-3 1/4" | 23'-0" | 6 | 5" | 11'-0" | -- | -- | ---- | ---- | 5 | 12" | 11'-2" | 44 | 36 |
| 10 | 12 | 9 1/4" | 9 1/4" | 10" | 9 | 9'-0" | 9 | 9'-0" | 10 | 10'-0" | 4 | 8" | 11'-4" | 7'-3 1/4" | 25'-4" | 8 | 8" | 11'-0" | 4 | 8" | 4'-1" | 7'-11" | 6 | 12" | 13'-2" | 44 | 44 |
| 12 | 6 | 10 3/4" | 10 3/4" | 8" | 11 | 11'-0" | 11 | 11'-0" | 4 | 4'-0" | 6 | 7 1/2" | 13'-0" | 4'-4 3/4" | 21'-0" | 8 | 7 1/2" | 13'-0" | 3 | 7 1/2" | 3'-10 3/4" | 7'-7" | 4 | 5 1/2" | 7'-5" | 52 | 20 |
| 12 | 8 | 10 3/4" | 10 3/4" | 8" | 11 | 11'-0" | 11 | 11'-0" | 6 | 6'-0" | 5 | 6" | 13'-0" | 5'-4 3/4" | 23'-2" | 7 | 6" | 13'-0" | -- | -- | ---- | ---- | 4 | 7 1/2" | 9'-5" | 52 | 28 |
| 12 | 10 | 11" | 11" | 8" | 11 | 11'-0" | 11 | 11'-0" | 8 | 8'-0" | 5 | 7" | 13'-0" | 6'-5" | 25'-2" | 8 | 7" | 13'-0" | 3 | 7" | 3'-10 3/4" | 7'-7" | 4 | 10 1/2" | 11'-6" | 52 | 36 |
| 12 | 12 | 11 1/4" | 11 1/4" | 10" | 11 | 11'-0" | 11 | 11'-0" | 10 | 10'-0" | 5 | 6 1/2" | 13'-4" | 7'-5 1/4" | 27'-7" | 8 | 6 1/2" | 13'-0" | 3 | 6 1/2" | 4'-2" | 8'-1" | 6 | 12" | 13'-6" | 52 | 44 |

A COPY OF THE ORIGINAL SEALED AND SIGNED DRAWING IS ON FILE IN THE CENTRAL OFFICE.

VDOT
ROAD AND BRIDGE STANDARDS

SHEET 1 OF 2 REVISION DATE
1002.07 07/11

SINGLE BOX CULVERTS
5 TO 10 FT. FILLS
VIRGINIA DEPARTMENT OF TRANSPORTATION

SPECIFICATION
REFERENCE