SPAN 6' (all measurements in feet and/or inches)

| SPAN | | | 6' | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| HEIGHT | | | 3' | | | 4' | | | 5' | | | | 6' | | | |
| STRENGTH CLASSIFICATION | | | A | B | C | A | B | C | A | B | C | D | A | B | C | D |
| MAX FILL OVER TOP | | | 3 | 13 | 23 | 3 | 13 | 23 | 3 | 13 | 23 | 30 | 3 | 13 | 23 | 30 |
| Conc. | Top Slab | $T_1$ | 7 1/2 | 7 1/2 | 8 1/4 | 7 1/2 | 7 1/2 | 8 1/4 | 7 1/2 | 7 1/2 | 8 1/4 | 9 1/4 | 7 1/2 | 7 1/2 | 8 1/4 | 9 1/4 |
| Conc. | Bottom Slab | $T_2$ | 6 | 7 3/4 | 9 1/4 | 6 | 7 3/4 | 9 1/4 | 6 | 8 | 9 1/4 | 10 | 6 | 8 | 9 1/4 | 10 1/4 |
| Conc. | Sidewalls | $T_3$ | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 |
| Reinforcing Steel | "a" | Size Bar # | 6 | 5 | 5 | 6 | 5 | 5 | 6 | 5 | 5 | 5 | 6 | 5 | 5 | 5 |
| Reinforcing Steel | "a" | Spacing | 13 | 14 | 11 1/2 | 13 | 14 | 11 1/2 | 13 | 14 | 11 1/2 | 10 | 13 | 14 | 11 1/2 | 10 |
| Reinforcing Steel | "a" | Length | 20-10 | 20-9 | 20-9 | 20-10 | 20-9 | 20-9 | 20-10 | 20-9 | 20-9 | 20-9 | 20-10 | 20-9 | 20-9 | 20-9 |
| Reinforcing Steel | "b" or "$b_1$" | Size Bar # | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 |
| Reinforcing Steel | "b" or "$b_1$" | Spacing | 13 | 14 | 11 1/2 | 13 | 14 | 11 1/2 | 13 | 14 | 11 1/2 | 10 | 13 | 14 | 11 1/2 | 10 |
| Reinforcing Steel | "b" or "$b_1$" | Length "b" | 20-3 | 20-3 | 20-5 | 20-3 | 20-3 | 20-5 | 20-3 | 20-3 | 20-5 | 20-6 | 20-3 | 20-3 | 20-5 | 20-6 |
| Reinforcing Steel | "b" or "$b_1$" | Length "$b_1$" | 20 | 20-2 | 20-5 | 20 | 20-2 | 20-5 | 20 | 20-2 | 20-5 | 20-6 | 20 | 20 | 20-5 | 20-7 |
| Reinforcing Steel | "c" | Size Bar # | 4 | 6 | 6 | 4 | 6 | 6 | 4 | 6 | 6 | 6 | 4 | 6 | 6 | 6 |
| Reinforcing Steel | "c" | Spacing | 13 | 14 | 11 1/2 | 13 | 14 | 11 1/2 | 13 | 14 | 11 1/2 | 10 | 13 | 14 | 11 1/2 | 10 |
| Reinforcing Steel | "c" | Length | 13 | 13 | 13 | 13 | 13 | 13 | 13 | 13 | 13 | 13 | 13 | 13 | 13 | 13 |
| Reinforcing Steel | "d" Dist Bars | Top Slab-Tot. No. | 18 | 9 | 9 | 18 | 9 | 9 | 18 | 9 | 9 | 9 | 18 | 9 | 9 | 9 |
| Reinforcing Steel | "d" Dist Bars | Bottom Slab-Tot. No. | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 |
| Reinforcing Steel | "e" Bars | Size Bar # | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 4 | 4 | 6 | 6 |
| Reinforcing Steel | "e" Bars | Spacing | 18 | 18 | 18 | 18 | 18 | 11 1/2 | 18 | 11 1/2 | 12 | 10 | 18 | 8 | 12 | 10 |
| Spacers | | Number | 40 | | | 40 | | | 52 | | | | 48 | | | |
| Quan. | Concrete: C.Y. per lin. ft. | | 1.05 | 1.15 | 1.29 | 1.12 | 1.23 | 1.37 | 1.19 | 1.32 | 1.44 | 1.55 | 1.27 | 1.39 | 1.52 | 1.64 |
| Quan. | Reinf :lbs per lin. ft. | | 181 | 168 | 196 | 183 | 170 | 200 | 187 | 177 | 209 | 235 | 192 | 187 | 221 | 249 |

## NOTE

For boxes of height less than that shown in table, use next greater table height slabs, wall dimensions and reinforcing steel, and make necessary changes in bar lengths, number of spacers and quantities. Number of "d" bars in table is slab total for all cells.

| Revision | By | Approved | Date |
|---|---|---|---|
| ORIGINAL | | Kercheval | 12/75 |
| Add Metric | | T. Stanton | 03/03 |
| Reviewed | | T. Stanton | 04/06 |
| Edited | | T. Stanton | 02/09 |
| Edited | S.S. | T. Regello | 03/11 |

**SAN DIEGO REGIONAL STANDARD DRAWING**

**TRIPLE BOX CULVERT**

**DETAILS No. 1**

RECOMMENDED BY THE SAN DIEGO REGIONAL STANDARDS COMMITTEE

Chairperson R.C.E. 19246 Date 7/26/2012

DRAWING NUMBER **D-78C**