

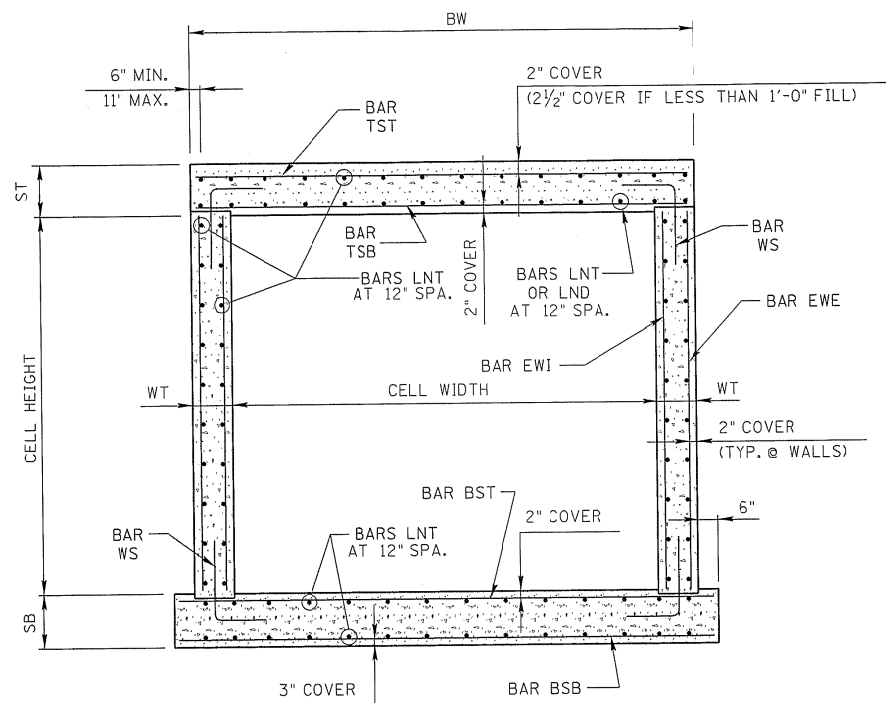
| 1 @ 16 x 6 REINFORCED CONCRETE BOX BRIDGE |            |        |        |        |          |     |             |            |          |     |             |            |          |     |             |            |          |     |             |            |          |     |             |            |         |     |          |          |         |                |                    |      |     |
|---|------------|--------|--------|--------|----------|-----|-------------|------------|----------|-----|-------------|------------|----------|-----|-------------|------------|----------|-----|-------------|------------|----------|-----|-------------|------------|---------|-----|----------|----------|---------|----------------|--------------------|------|-----|
| Maximum Fill Height ft.                   | Dimensions |        |        |        | Bars TST |     |             |            | Bars TSB |     |             |            | Bars BST |     |             |            | Bars BSB |     |             |            | Bars EWE |     |             |            | Bar EWI |     | Bars LNT | Bars LND | Bars WS | Concrete CY/LF | Reinf. Steel LB/LF |      |     |
|   | ST in.     | SB in. | WT in. | BW ft. | Size     | No. | Spacing in. | Length ft. | Size     | No. | Spacing in. | Length ft. | Size     | No. | Spacing in. | Length ft. | Size     | No. | Spacing in. | Length ft. | Size     | No. | Spacing in. | Length ft. | No.     | No. | No.      |          |         |                |                    |      |     |
| No Fill                                   | 11.5       | 10     | 8      | 17.33  | 4        | 1   | 12          | 16.83      | 11       | 1   | 12          | 16.83      | 7        | 2   | 6           | 17.83      | 4        | 1   | 12          | 17.83      | 4        | 2   | 12          | 5.00       | 4       | 2   | 12       | 6.00     | 75      | 32             | 4                  | 1.48 | 325 |
| 3   | 12         | 11     | 8      | 17.33  | 4        | 1   | 12          | 16.83      | 11       | 1   | 12          | 16.83      | 11       | 1   | 12          | 17.83      | 4        | 1   | 12          | 17.83      | 4        | 2   | 12          | 5.00       | 4       | 2   | 12       | 6.00     | 75      | 32             | 4                  | 1.56 | 347 |
| 5   | 12         | 12     | 8      | 17.33  | 4        | 1   | 12          | 16.83      | 11       | 1   | 12          | 16.83      | 11       | 1   | 12          | 17.83      | 4        | 1   | 12          | 17.83      | 4        | 2   | 12          | 5.00       | 4       | 2   | 12       | 6.00     | 92      | 0              | 4                  | 1.61 | 337 |
| 10  | 13         | 14     | 8      | 17.33  | 4        | 1   | 12          | 16.83      | 9        | 2   | 6           | 16.83      | 9        | 2   | 6           | 17.83      | 4        | 1   | 12          | 17.83      | 4        | 2   | 12          | 6.00       | 4       | 2   | 12       | 6.00     | 92      | 0              | 4                  | 1.78 | 389 |
| 20  | 16         | 18     | 8      | 17.33  | 4        | 1   | 12          | 16.83      | 10       | 2   | 6           | 16.83      | 10       | 2   | 6           | 17.83      | 4        | 1   | 12          | 17.83      | 4        | 2   | 12          | 6.00       | 4       | 2   | 12       | 6.00     | 92      | 0              | 4                  | 2.17 | 451 |
| 30  | 25         | 26     | 8      | 17.33  | 4        | 1   | 12          | 16.83      | 9        | 2   | 6           | 16.83      | 9        | 2   | 6           | 17.83      | 4        | 1   | 12          | 17.83      | 4        | 2   | 12          | 6.00       | 4       | 2   | 12       | 6.00     | 92      | 0              | 4                  | 3.10 | 389 |
| 40  | 31         | 32     | 9      | 17.50  | 4        | 1   | 12          | 17.00      | 9        | 2   | 6           | 17.00      | 9        | 2   | 6           | 18.00      | 4        | 1   | 12          | 18.00      | 4        | 2   | 12          | 6.00       | 4       | 2   | 12       | 6.00     | 92      | 0              | 4                  | 3.83 | 391 |
| 50  | 36         | 37     | 10     | 17.67  | 4        | 1   | 12          | 17.16      | 10       | 2   | 6           | 17.16      | 10       | 2   | 6           | 18.16      | 4        | 1   | 12          | 18.16      | 4        | 2   | 12          | 6.00       | 4       | 2   | 12       | 6.00     | 92      | 0              | 4                  | 4.46 | 457 |
| 60  | 40         | 42     | 11     | 17.83  | 4        | 1   | 12          | 17.33      | 10       | 2   | 6           | 17.33      | 10       | 2   | 6           | 18.33      | 4        | 1   | 12          | 18.33      | 4        | 2   | 12          | 6.00       | 4       | 2   | 12       | 6.00     | 92      | 0              | 4                  | 5.05 | 461 |

| 1 @ 16 x 7 REINFORCED CONCRETE BOX BRIDGE |            |        |        |        |          |     |             |            |          |     |             |            |          |     |             |            |          |     |             |            |          |     |             |            |         |     |          |          |         |                |                    |
|---|------------|--------|--------|--------|----------|-----|-------------|------------|----------|-----|-------------|------------|----------|-----|-------------|------------|----------|-----|-------------|------------|----------|-----|-------------|------------|---------|-----|----------|----------|---------|----------------|--------------------|
| Maximum Fill Height ft.                   | Dimensions |        |        |        | Bars TST |     |             |            | Bars TSB |     |             |            | Bars BST |     |             |            | Bars BSB |     |             |            | Bars EWE |     |             |            | Bar EWI |     | Bars LNT | Bars LND | Bars WS | Concrete CY/LF | Reinf. Steel LB/LF |
|   | ST in.     | SB in. | WT in. | BW ft. | Size     | No. | Spacing in. | Length ft. | Size     | No. | Spacing in. | Length ft. | Size     | No. | Spacing in. | Length ft. | Size     | No. | Spacing in. | Length ft. | Size     | No. | Spacing in. | Length ft. | No.     | No. | No.      |          |         |                |                    |
| No Fill                                   | 11.5       | 10     | 8      | 17.33  | 4        | 1   | 12          | 16.83      | 11       | 1   | 12          | 16.83      | 7        | 2   | 6           | 17.83      | 4        | 1   | 12          | 17.83      | 4        | 2   | 12          | 7.00       | 79      | 32  | 4        | 1.53     | 331     |                |                    |
| 3   | 12         | 11     | 8      | 17.33  | 4        | 1   | 12          | 16.83      | 11       | 1   | 12          | 16.83      | 11       | 1   | 12          | 17.83      | 4        | 1   | 12          | 17.83      | 4        | 2   | 12          | 7.00       | 79      | 32  | 4        | 1.61     | 353     |                |                    |
| 5   | 12         | 12     | 8      | 17.33  | 4        | 1   | 12          | 16.83      | 11       | 1   | 12          | 16.83      | 8        | 2   | 6           | 17.83      | 4        | 1   | 12          | 17.83      | 4        | 2   | 12          | 7.00       | 96      | 0   | 4        | 1.66     | 343     |                |                    |
| 10  | 13         | 14     | 8      | 17.33  | 4        | 1   | 12          | 16.83      | 9        | 2   | 6           | 16.83      | 9        | 2   | 6           | 17.83      | 4        | 1   | 12          | 17.83      | 4        | 2   | 12          | 7.00       | 96      | 0   | 4        | 1.83     | 394     |                |                    |
| 20  | 16         | 18     | 8      | 17.33  | 4        | 1   | 12          | 16.83      | 10       | 2   | 6           | 16.83      | 10       | 2   | 6           | 17.83      | 4        | 1   | 12          | 17.83      | 4        | 2   | 12          | 7.00       | 96      | 0   | 4        | 2.22     | 462     |                |                    |
| 30  | 25         | 26     | 9      | 17.50  | 4        | 1   | 12          | 17.00      | 9        | 2   | 6           | 17.00      | 9        | 2   | 6           | 18.00      | 4        | 1   | 12          | 18.00      | 4        | 2   | 12          | 7.00       | 96      | 0   | 4        | 3.22     | 402     |                |                    |
| 40  | 31         | 32     | 10     | 17.67  | 4        | 1   | 12          | 17.16      | 9        | 2   | 6           | 17.16      | 9        | 2   | 6           | 18.16      | 4        | 1   | 12          | 18.16      | 4        | 2   | 12          | 7.00       | 96      | 0   | 4        | 3.96     | 399     |                |                    |
| 50  | 36         | 37     | 11     | 17.83  | 4        | 1   | 12          | 17.33      | 10       | 2   | 6           | 17.33      | 10       | 2   | 6           | 18.33      | 4        | 1   | 12          | 18.33      | 4        | 2   | 12          | 7.00       | 96      | 0   | 4        | 4.60     | 466     |                |                    |
| 60  | 40         | 42     | 12     | 18.00  | 4        | 1   | 12          | 17.50      | 10       | 2   | 6           | 17.50      | 10       | 2   | 6           | 18.50      | 4        | 1   | 12          | 18.50      | 4        | 2   | 12          | 7.00       | 100     | 0   | 4        | 5.20     | 472     |                |                    |

| 1 @ 16 x 8 REINFORCED CONCRETE BOX BRIDGE |            |        |        |        |          |     |             |            |          |     |             |            |          |     |             |            |          |     |             |            |          |     |             |            |         |     |          |          |         |                |                    |
|---|------------|--------|--------|--------|----------|-----|-------------|------------|----------|-----|-------------|------------|----------|-----|-------------|------------|----------|-----|-------------|------------|----------|-----|-------------|------------|---------|-----|----------|----------|---------|----------------|--------------------|
| Maximum Fill Height ft.                   | Dimensions |        |        |        | Bars TST |     |             |            | Bars TSB |     |             |            | Bars BST |     |             |            | Bars BSB |     |             |            | Bars EWE |     |             |            | Bar EWI |     | Bars LNT | Bars LND | Bars WS | Concrete CY/LF | Reinf. Steel LB/LF |
|   | ST in.     | SB in. | WT in. | BW ft. | Size     | No. | Spacing in. | Length ft. | Size     | No. | Spacing in. | Length ft. | Size     | No. | Spacing in. | Length ft. | Size     | No. | Spacing in. | Length ft. | Size     | No. | Spacing in. | Length ft. | No.     | No. | No.      |          |         |                |                    |
| No Fill                                   | 11.5       | 10     | 8      | 17.33  | 4        | 1   | 12          | 16.83      | 11       | 1   | 12          | 16.83      | 7        | 2   | 6           | 17.83      | 4        | 1   | 12          | 17.83      | 4        | 2   | 12          | 8.00       | 83      | 32  | 4        | 1.57     | 337     |                |                    |
| 3   | 12         | 12     | 8      | 17.33  | 4        | 1   | 12          | 16.83      | 11       | 1   | 12          | 16.83      | 7        | 2   | 6           | 17.83      | 4        | 1   | 12          | 17.83      | 4        | 2   | 12          | 8.00       | 83      | 32  | 4        | 1.71     | 337     |                |                    |
| 5   | 12         | 13     | 8      | 17.33  | 4        | 1   | 12          | 16.83      | 11       | 1   | 12          | 16.83      | 11       | 1   | 12          | 17.83      | 4        | 1   | 12          | 17.83      | 4        | 2   | 12          | 8.00       | 100     | 0   | 4        | 1.77     | 349     |                |                    |
| 10  | 13         | 14     | 8      | 17.33  | 4        | 1   | 12          | 16.83      | 9        | 2   | 6           | 16.83      | 9        | 2   | 6           | 17.83      | 4        | 1   | 12          | 17.83      | 4        | 2   | 12          | 8.00       | 100     | 0   | 4        | 1.88     | 406     |                |                    |
| 20  | 16         | 18     | 9      | 17.50  | 4        | 1   | 12          | 17.00      | 10       | 2   | 6           | 17.00      | 10       | 2   | 6           | 18.00      | 4        | 1   | 12          | 18.00      | 4        | 2   | 12          | 8.00       | 100     | 0   | 4        | 2.33     | 477     |                |                    |
| 30  | 25         | 26     | 10     | 17.67  | 4        | 1   | 12          | 17.16      | 9        | 2   | 6           | 17.16      | 9        | 2   | 6           | 18.16      | 4        | 1   | 12          | 18.16      | 4        | 2   | 12          | 8.00       | 100     | 0   | 4        | 3.35     | 427     |                |                    |
| 40  | 31         | 33     | 12     | 18.00  | 4        | 1   | 12          | 17.50      | 9        | 2   | 6           | 17.50      | 9        | 2   | 6           | 18.50      | 4        | 1   | 12          | 18.50      | 4        | 2   | 12          | 8.00       | 104     | 0   | 4        | 4.24     | 423     |                |                    |
| 50  | 36         | 38     | 13     | 18.17  | 4        | 1   | 12          | 17.66      | 10       | 2   | 6           | 17.66      | 10       | 2   | 6           | 18.66      | 4        | 1   | 12          | 18.66      | 4        | 2   | 12          | 8.00       | 104     | 0   | 4        | 4.90     | 486     |                |                    |
| 60  | 40         | 42     | 14     | 18.33  | 4        | 1   | 12          | 17.83      | 10       | 2   | 6           | 17.83      | 10       | 2   | 6           | 18.83      | 4        | 1   | 12          | 18.83      | 4        | 2   | 12          | 8.00       | 104     | 0   | 4        | 5.46     | 483     |                |                    |

Note: Maximum fill height shown in the table is measured from the bottom of the top slab. To obtain the total fill height from the flow line, add the height of the box.  
 Note: When top slab is the riding surface (No Fill), the concrete cover to the top mat of reinforcing shall be 2-1/2 inches.

The following bar information applies to all fill cases in the table above:  
 Bars LNT Size = 4 Spacing = 12 in.  
 Bars LND Size = 4 Spacing = 6 in.  
 Bars WS Size = 8 Length = 5.00 ft. Spacing = 12 in.



TYPICAL SECTION

NOTE: FOR DESCRIPTIONS OF BOX DIMENSIONS AND REINFORCING BAR DESIGNATIONS SEE STANDARD DRAWING NO. STD-15-4.

STATE OF TENNESSEE  
 DEPARTMENT OF TRANSPORTATION  
 STANDARD REINFORCED CONCRETE  
 BOX BRIDGE  
 INTERIOR SECTION  
 SPANS: 1 BARREL AT 16'-0"  
 CLEAR HEIGHTS 6'-0" THRU 8'-0"  
 0' THRU 60' FILL  
 2000

CORRECT *Edward P. Wasserman*  
 ENGINEER OF STRUCTURES

|                   |      |           |
|-------------------|------|-----------|
| CONST. NO.        |      |           |
| PROJECT NO.       | YEAR | SHEET NO. |
| REVISIONS         |      |           |
| NO.               | DATE | BY        |
| BRIEF DESCRIPTION |      |           |