

### 1 @ 10 x 4 REINFORCED CONCRETE BOX BRIDGE

Maximum Fill Height ft.	Dimensions				Bars TST				Bars TSB				Bars BST				Bars BSB				Bars EWE				Bars 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.	Size	No.	Spacing in.	Length ft.					
No Fill	10.5	10	8	11.33	4	1	12	10.83	7	2	6	10.83	8	1	12	11.83	5	1	12	11.83	4	2	12	4.00	4	2	12	4.00	52	20	4	0.95	208
3	12	12	8	11.33	4	1	12	10.83	7	2	6	10.83	9	1	12	11.83	5	1	12	11.83	4	2	12	4.00	4	2	12	4.00	52	20	4	0.88	216
5	10	10	8	11.33	4	1	12	10.83	7	2	6	10.83	7	2	6	11.83	5	1	12	11.83	4	2	12	4.00	4	2	12	4.00	62	0	4	0.89	218
10	10	10	8	11.33	4	1	12	10.83	8	2	6	10.83	8	2	6	11.83	5	1	12	11.83	4	2	12	4.00	4	2	12	4.00	62	0	4	0.89	246
20	12	13	8	11.33	4	1	12	10.83	8	2	6	10.83	11	1	12	11.83	5	1	12	11.83	4	2	12	4.00	4	2	12	4.00	62	0	4	1.07	246
30	18	18	8	11.33	4	1	12	10.83	7	2	6	10.83	7	2	6	11.83	5	1	12	11.83	4	2	12	4.00	4	2	12	4.00	62	0	4	1.47	218
40	22	22	8	11.33	4	1	12	10.83	7	2	6	10.83	7	2	6	11.83	5	1	12	11.83	4	2	12	4.00	4	2	12	4.00	62	0	4	1.76	218
50	25	25	8	11.33	4	1	12	10.83	8	2	6	10.83	10	1	12	11.83	5	1	12	11.83	4	2	12	4.00	4	2	12	4.00	62	0	4	1.98	234
60	29	29	8	11.33	4	1	12	10.83	8	2	6	10.83	11	1	12	11.83	5	1	12	11.83	4	2	12	4.00	4	2	12	4.00	62	0	4	2.32	246

### 1 @ 10 x 5 REINFORCED CONCRETE BOX BRIDGE

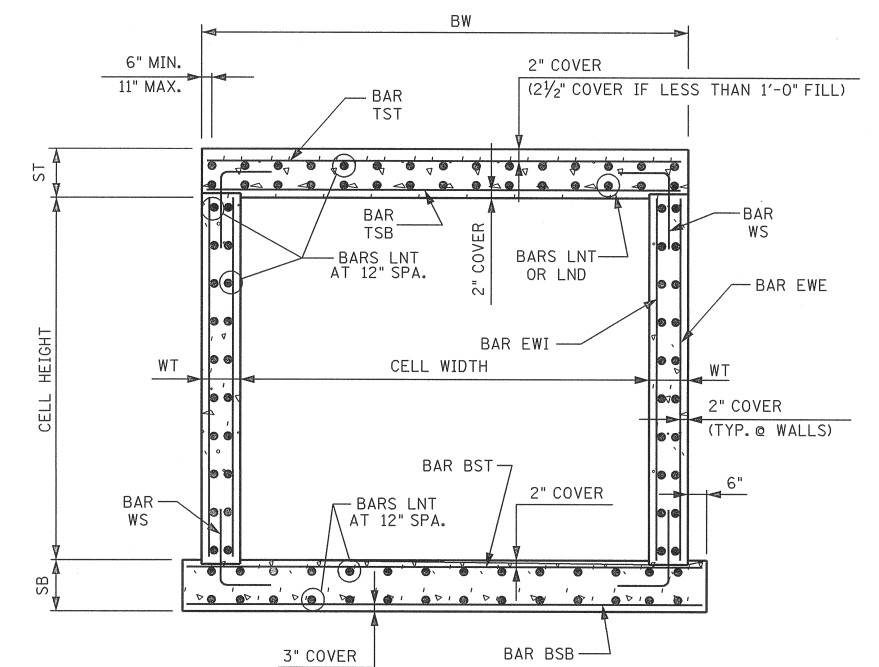
Maximum Fill Height ft.	Dimensions				Bars TST				Bars TSB				Bars BST				Bars BSB				Bars EWE				Bars EWI				Bars LNT	Bars LND	Bars WS	Concrete CY/LF	Reinf. Steel LB/LF
	ST in.	SB in.	WT in.	BW ft.	Size	No.	Spacing in.	Length ft.	Size	No.	Spacing in.	Length ft.	Size	No.	Spacing in.	Length ft.	Size	No.	Spacing in.	Length ft.	Size	No.	Spacing in.	Length ft.	Size	No.	Spacing in.	Length ft.					
No Fill	10.5	10	8	11.33	4	1	12	10.83	7	2	6	10.83	6	2	6	11.83	4	1	12	11.83	4	2	12	5.00	5	2	12	5.00	56	20	4	0.99	216
3	12	12	8	11.33	4	1	12	10.83	7	2	6	10.83	9	1	12	11.83	4	1	12	11.83	4	2	12	5.00	5	2	12	5.00	56	20	4	1.12	221
5	10	10	8	11.33	4	1	12	10.83	7	2	6	10.83	7	2	6	11.83	4	1	12	11.83	4	2	12	5.00	5	2	12	5.00	66	0	4	0.98	222
10	10	10	8	11.33	4	1	12	10.83	8	2	6	10.83	8	2	6	11.83	4	1	12	11.83	4	2	12	5.00	5	2	12	5.00	66	0	4	0.98	251
20	12	13	8	11.33	4	1	12	10.83	8	2	6	10.83	11	1	12	11.83	4	1	12	11.83	4	2	12	5.00	5	2	12	5.00	66	0	4	1.16	250
30	18	18	8	11.33	4	1	12	10.83	7	2	6	10.83	7	2	6	11.83	4	1	12	11.83	4	2	12	5.00	5	2	12	5.00	66	0	4	1.56	222
40	22	22	8	11.33	4	1	12	10.83	7	2	6	10.83	7	2	6	11.83	4	1	12	11.83	4	2	12	5.00	5	2	12	5.00	66	0	4	1.85	222
50	25	25	9	11.50	4	1	12	11.00	8	2	6	11.00	10	1	12	12.00	4	1	12	12.00	4	2	12	5.00	5	2	12	5.00	66	0	4	2.13	240
60	29	29	10	11.67	4	1	12	11.17	8	2	6	11.17	11	1	12	12.17	4	1	12	12.17	4	2	12	5.00	5	2	12	5.00	66	0	4	2.49	254

### 1 @ 10 x 6 REINFORCED CONCRETE BOX BRIDGE

Maximum Fill Height ft.	Dimensions				Bars TST				Bars TSB				Bars BST				Bars BSB				Bars EWE				Bars 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.	Size	No.	Spacing in.	Length ft.					
No Fill	10.5	10	8	11.33	4	1	12	10.83	7	2	6	10.83	8	1	12	11.83	4	1	12	11.83	4	2	12	6.00	5	2	12	6.00	60	20	4	1.04	218
3	12	12	8	11.33	4	1	12	10.83	7	2	6	10.83	9	1	12	11.83	4	1	12	11.83	4	2	12	6.00	5	2	12	6.00	60	20	4	0.98	227
5	10	10	8	11.33	4	1	12	10.83	7	2	6	10.83	7	2	6	11.83	4	1	12	11.83	4	2	12	6.00	5	2	12	6.00	70	0	4	0.99	228
10	10	10	8	11.33	4	1	12	10.83	8	2	6	10.83	8	2	6	11.83	4	1	12	11.83	4	2	12	6.00	5	2	12	6.00	70	0	4	0.99	257
20	12	13	8	11.33	4	1	12	10.83	8	2	6	10.83	11	1	12	11.83	4	1	12	11.83	4	2	12	6.00	6	2	12	6.00	70	0	4	1.17	262
30	18	18	8	11.33	4	1	12	10.83	7	2	6	10.83	7	2	6	11.83	4	1	12	11.83	4	2	12	6.00	6	2	12	6.00	70	0	4	1.57	234
40	22	22	10	11.67	4	1	12	11.17	7	2	6	11.17	7	2	6	12.17	4	1	12	12.17	4	2	12	6.00	5	2	12	6.00	70	0	4	1.98	232
50	25	25	11	11.83	4	1	12	11.33	8	2	6	11.33	11	1	12	12.33	4	1	12	12.33	4	2	12	6.00	5	2	12	6.00	70	0	4	2.27	263
60	29	29	11	11.83	4	1	12	11.33	8	2	6	11.33	11	1	12	12.33	4	1	12	12.33	4	2	12	6.00	5	2	12	6.00	70	0	4	2.62	263

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 height of fill above the top slab is less than 1 foot, the top mat of reinforcing in the top slab shall be constructed with 2-1/2 inches of concrete cover.

The following bar information applies to all fill cases in the tables 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-17-5.

STATE OF TENNESSEE  
 DEPARTMENT OF TRANSPORTATION  
 STANDARD REINFORCED CONCRETE  
 BOX BRIDGE  
 INTERIOR SECTION  
 SPANS: 1 BARREL AT 10'-0"  
 CLEAR HEIGHTS 4'-0" THRU 6'-0"  
 0' THRU 60' FILL  
 2010

CORRECT *Edward P. Wasserman*  
 ENGINEER OF STRUCTURES

DESIGNED BY RLL/ALP DATE 12-09  
 DRAWN BY KEVIN MARTINKO DATE 1-10  
 SUPERVISED BY EPW/RLC DATE 12-09  
 CHECKED BY RLL/ALP DATE 2-10