

CONST. NO.			
PROJECT NO.	YEAR	SHEET NO.	
	2010		
REVISIONS			
NO.	DATE	BY	BRIEF DESCRIPTION

### 3 @ 8 x 3 REINFORCED CONCRETE BOX BRIDGE

Maximum Fill Height ft.	Dimensions					Bars TST				Bars TSB				Bars BST				Bars BSB				Bars EWE				Bars EWI				Bars IW				Bars LNT	Bars LND	Bars WS	Concrete CY/LF	Reinf. Steel LB/LF								
	ST in.	SB in.	WT in.	IT 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	8	26.67	6	2	6	26.17	6	2	6	26.17	4	2	6	27.17	4	2	6	27.17	4	2	6	27.17	4	2	6	27.17	4	2	12	3.00	5	2	12	3.00	4	4	12	3.00	104	48	8	2.01	474
3	12	12	8	8	26.67	9	1	12	26.17	7	2	6	26.17	4	2	6	27.17	5	2	6	27.17	4	2	12	3.00	5	2	12	3.00	4	4	12	3.00	104	48	8	2.31	534								
5	11	11	8	8	26.67	7	1	12	26.17	5	2	6	26.17	4	2	6	27.17	7	1	12	27.17	4	2	12	3.00	5	2	12	3.00	4	4	12	3.00	130	0	8	2.14	412								
10	11	11	8	8	26.67	5	2	6	26.17	5	2	6	26.17	6	1	12	27.17	7	1	12	27.17	4	2	12	3.00	5	2	12	3.00	4	4	12	3.00	130	0	8	2.14	417								
20	10	11	8	8	26.67	4	3	12	8.66	7	2	6	26.17	7	2	6	27.17	4	3	12	8.66	4	2	12	3.00	5	2	12	3.00	4	4	12	3.00	130	0	8	2.06	465								
30	14	15	8	8	26.67	4	3	12	8.66	7	2	6	26.17	9	1	12	27.17	4	3	12	8.66	4	2	12	3.00	5	2	12	3.00	4	4	12	3.00	130	0	8	2.73	446								
40	18	18	8	8	26.67	4	3	12	8.66	7	2	6	26.17	9	1	12	27.17	4	3	12	8.66	4	2	12	3.00	5	2	12	3.00	5	4	12	3.00	130	0	8	3.31	450								
50	21	21	8	8	26.67	4	3	12	8.66	7	2	6	26.17	9	1	12	27.17	4	3	12	8.66	4	2	12	3.00	5	2	12	3.00	5	4	12	3.00	130	0	8	3.82	450								
60	24	24	8	8	26.67	4	3	12	8.66	7	2	6	26.17	7	2	6	27.17	4	3	12	8.66	4	2	12	3.00	5	2	12	3.00	4	8	6	3.00	130	0	8	4.32	473								

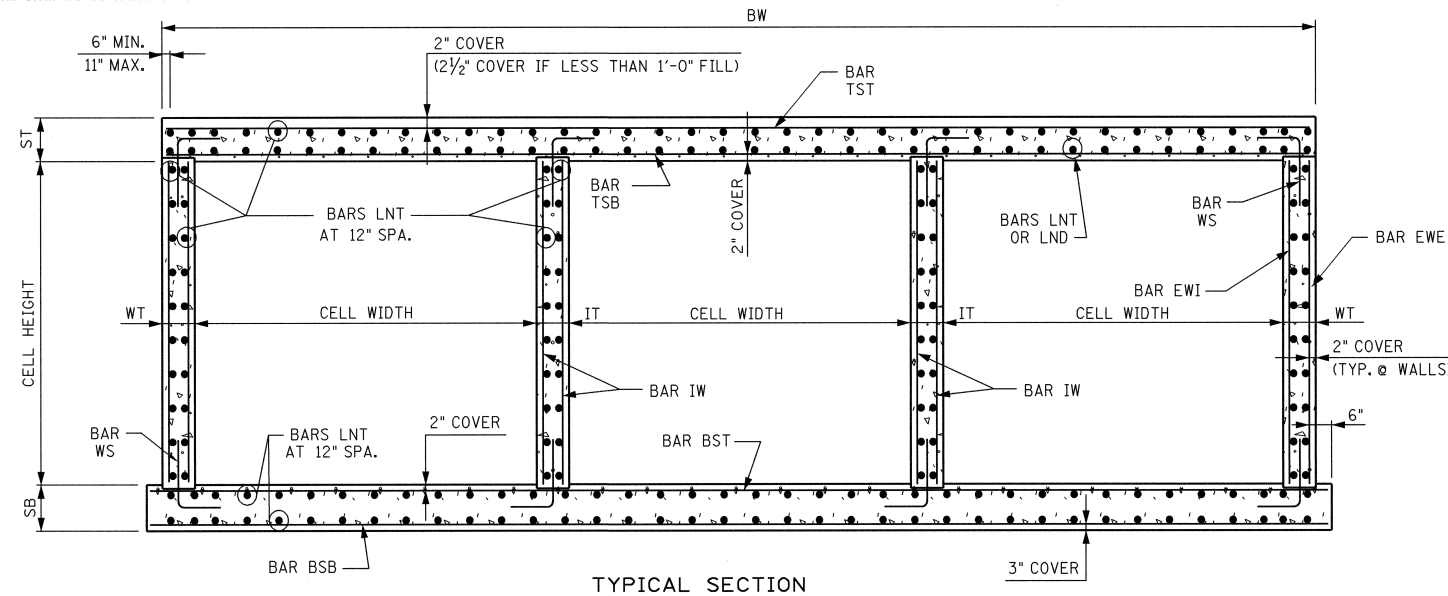
### 3 @ 8 x 4 REINFORCED CONCRETE BOX BRIDGE

Maximum Fill Height ft.	Dimensions					Bars TST				Bars TSB				Bars BST				Bars BSB				Bars EWE				Bars EWI				Bars IW				Bars LNT	Bars LND	Bars WS	Concrete CY/LF	Reinf. Steel LB/LF
	ST in.	SB in.	WT in.	IT 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.	Size	No.	Spacing in.	Length ft.					
No Fill	10.5	10	8	8	26.67	6	2	6	26.17	6	2	6	26.17	4	2	6	27.17	6	1	12	27.17	4	2	12	4.00	5	2	12	4.00	4	4	12	4.00	112	48	8	2.11	490
3	12	12	8	8	26.67	9	1	12	26.17	7	2	6	26.17	4	2	6	27.17	5	2	6	27.17	4	2	12	4.00	5	2	12	4.00	4	4	12	4.00	112	48	8	2.41	545
5	11	11	8	8	26.67	7	1	12	26.17	5	2	6	26.17	4	2	6	27.17	7	1	12	27.17	4	2	12	4.00	5	2	12	4.00	4	4	12	4.00	138	0	8	2.24	423
10	11	11	8	8	26.67	5	2	6	26.17	5	2	6	26.17	6	1	12	27.17	7	1	12	27.17	4	2	12	4.00	5	2	12	4.00	4	4	12	4.00	138	0	8	2.24	429
20	10	11	8	8	26.67	4	3	12	8.66	7	2	6	26.17	7	2	6	27.17	4	3	12	8.66	4	2	12	4.00	5	2	12	4.00	4	4	12	4.00	138	0	8	2.16	476
30	14	15	8	8	26.67	4	3	12	8.66	7	2	6	26.17	9	1	12	27.17	4	3	12	8.66	4	2	12	4.00	5	2	12	4.00	4	4	12	4.00	138	0	8	2.83	457
40	18	18	8	8	26.67	4	3	12	8.66	7	2	6	26.17	9	1	12	27.17	4	3	12	8.66	4	2	12	4.00	5	2	12	4.00	5	4	12	4.00	138	0	8	3.41	463
50	21	21	8	8	26.67	4	3	12	8.66	7	2	6	26.17	9	1	12	27.17	4	3	12	8.66	4	2	12	4.00	5	2	12	4.00	5	4	12	4.00	138	0	8	3.92	463
60	24	24	9	8	26.83	4	3	12	8.66	7	2	6	26.33	7	2	6	27.33	4	3	12	8.66	4	2	12	4.00	5	2	12	4.00	4	8	6	4.00	138	0	8	4.47	488

### 3 @ 8 x 5 REINFORCED CONCRETE BOX BRIDGE

Maximum Fill Height ft.	Dimensions					Bars TST				Bars TSB				Bars BST				Bars BSB				Bars EWE				Bars EWI				Bars IW				Bars LNT	Bars LND	Bars WS	Concrete CY/LF	Reinf. Steel LB/LF
	ST in.	SB in.	WT in.	IT 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.	Size	No.	Spacing in.	Length ft.					
No Fill	10.5	10	8	8	26.67	6	2	6	26.17	6	2	6	26.17	4	2	12	27.17	8	1	12	27.17	4	2	12	5.00	5	2	12	5.00	4	4	12	5.00	120	48	8	2.21	534
3	12	12	8	8	26.67	9	1	12	26.17	7	2	6	26.17	4	2	12	27.17	5	2	6	27.17	4	2	12	5.00	5	2	12	5.00	4	4	12	5.00	120	48	8	2.51	556
5	11	11	8	8	26.67	7	1	12	26.17	5	2	6	26.17	4	2	6	27.17	7	1	12	27.17	4	2	12	5.00	5	2	12	5.00	4	4	12	5.00	146	0	8	2.34	435
10	11	11	8	8	26.67	5	2	6	26.17	5	2	6	26.17	6	1	12	27.17	7	1	12	27.17	4	2	12	5.00	5	2	12	5.00	4	4	12	5.00	146	0	8	2.34	440
20	10	11	8	8	26.67	4	3	12	8.66	7	2	6	26.17	7	2	6	27.17	4	3	12	8.66	4	2	12	5.00	5	2	12	5.00	4	4	12	5.00	146	0	8	2.26	488
30	14	15	8	8	26.67	4	3	12	8.66	7	2	6	26.17	9	1	12	27.17	4	3	12	8.66	4	2	12	5.00	6	2	12	5.00	4	4	12	5.00	146	0	8	2.93	473
40	18	18	9	8	26.83	4	3	12	8.66	7	2	6	26.33	9	1	12	27.33	4	3	12	8.66	4	2	12	5.00	5	2	12	5.00	5	4	12	5.00	146	0	8	3.56	478
50	21	21	9	8	26.83	4	3	12	8.66	7	2	6	26.33	9	1	12	27.33	4	3	12	8.66	4	2	12	5.00	5	2	12	5.00	5	4	12	5.00	146	0	8	4.07	478
60	24	24	10	8	27.00	4	3	12	8.66	7	2	6	26.50	7	2	6	27.50	4	3	12	8.66	4	2	12	5.00	5	2	12	5.00	4	8	6	5.00	150	0	8	4.63	506

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 = 5 Spacing = 6 in.  
 Bars WS Size = 8 Length = 5.00 ft. Spacing = 12 in.



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: 3 BARRELS AT 8'-0"  
 CLEAR HEIGHTS 3'-0" THRU 5'-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