CONST. NO.		
PROJECT NO.	YEAR	SHEET NO.
	2010	

REVISIONS

NO.	DATE	BY	BRIEF DESCRIPTION

2 @ 10 x 4 REINFORCED CONCRETE BOX BRIDGE

Maximum Fill Height ft.	Dimensions ST in.	SB in.	WT in.	IT in.	BW ft.	Bars TST Size	No.	Spacing in.	Length ft.	Bars TSB Size	No.	Spacing in.	Length ft.	Bars BST Size	No.	Spacing in.	Length ft.	Bars BSB Size	No.	Spacing in.	Length ft.	Bars EWE Size	No.	Spacing in.	Length ft.	Bars EWI Size	No.	Spacing in.	Length ft.	Bars IW Size	No.	Spacing in.	Length ft.	Bars LNT No.	Bars LND No.	Bars WS No.	Concrete CY/LF	Reinf. Steel LB/LF
No Fill	10.5	10	8	8	22.00	6	2	6	21.50	8	1	12	21.50	6	1	12	22.50	5	2	6	22.50	4	2	12	4.00	5	2	12	4.00	4	2	12	4.00	92	20	6	1.72	384
3	13	13	8	8	22.00	7	2	6	21.50	6	2	6	21.50	6	1	12	22.50	8	1	12	22.50	4	2	12	4.00	5	2	12	4.00	4	2	12	4.00	92	20	6	2.10	428
5	13	13	8	8	22.00	6	2	6	21.50	5	2	6	21.50	6	1	12	22.50	6	2	6	22.50	4	2	12	4.00	5	2	12	4.00	4	2	12	4.00	114	0	6	2.10	386
10	13	13	8	8	22.00	8	2	6	21.50	5	2	6	21.50	7	1	12	22.50	9	1	12	22.50	4	2	12	4.00	5	2	12	4.00	4	2	12	4.00	114	0	6	2.10	457
20	12	13	8	8	22.00	4	2	12	10.66	8	2	6	21.50	11	1	12	22.50	4	2	12	10.66	4	2	12	4.00	5	2	12	4.00	4	2	12	4.00	114	0	6	2.03	438
30	18	18	8	8	22.00	4	2	12	10.66	7	2	6	21.50	7	2	6	22.50	4	2	12	10.66	4	2	12	4.00	5	2	12	4.00	5	2	12	4.00	114	0	6	2.80	387
40	22	22	8	8	22.00	4	2	12	10.66	7	2	6	21.50	7	2	6	22.50	4	2	12	10.66	4	2	12	4.00	5	2	12	4.00	5	2	12	4.00	114	0	6	3.35	387
50	25	25	8	8	22.00	4	2	12	10.66	8	2	6	21.50	10	1	12	22.50	4	2	12	10.66	4	2	12	4.00	5	2	12	4.00	4	4	6	4.00	114	0	6	3.77	421
60	29	29	8	8	22.00	4	2	12	10.66	9	2	6	21.50	11	1	12	22.50	4	2	12	10.66	4	2	12	4.00	5	2	12	4.00	7	2	12	4.00	114	0	6	4.32	481

2 @ 10 x 5 REINFORCED CONCRETE BOX BRIDGE

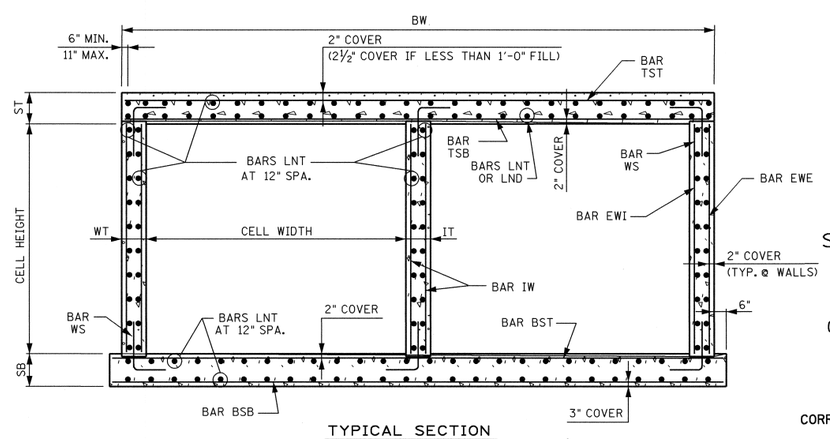
	Maximum Fill Height ft.	Dimensions ST in.	SB in.	WT in.	IT in.	BW ft.	Bars TST Size	No.	Spacing in.	Length ft.	Bars TSB Size	No.	Spacing in.	Length ft.	Bars BST Size	No.	Spacing in.	Length ft.	Bars BSB Size	No.	Spacing in.	Length ft.	Bars EWE Size	No.	Spacing in.	Length ft.	Bars EWI Size	No.	Spacing in.	Length ft.	Bars IW Size	No.	Spacing in.	Length ft.	Bars LNT No.	Bars LND No.	Bars WS No.	Concrete CY/LF	Reinf. Steel LB/LF
Continuous	No Fill	10.5	10	8	8	22.00	6	2	6	21.50	8	1	12	21.50	6	1	12	22.50	6	2	6	22.50	4	2	12	5.00	5	2	12	5.00	4	2	12	5.00	98	20	6	1.79	414
	3	13	13	8	8	22.00	7	2	6	21.50	6	2	6	21.50	6	1	12	22.50	6	2	6	22.50	4	2	12	5.00	5	2	12	5.00	4	2	12	5.00	98	20	6	2.18	444
	5	13	13	8	8	22.00	6	2	6	21.50	5	2	6	21.50	6	1	12	22.50	6	2	6	22.50	4	2	12	5.00	5	2	12	5.00	4	2	12	5.00	120	0	6	2.18	395
	10	13	13	8	8	22.00	8	2	6	21.50	5	2	6	21.50	7	1	12	22.50	9	1	12	22.50	4	2	12	5.00	5	2	12	5.00	4	2	12	5.00	120	0	6	2.18	466
Moment Break	20	12	13	8	8	22.00	4	2	12	10.66	8	2	6	21.50	11	1	12	22.50	4	2	12	10.66	4	2	12	5.00	5	2	12	5.00	4	2	12	5.00	120	0	6	2.11	447
	30	18	18	8	8	22.00	4	2	12	10.66	7	2	6	21.50	7	2	6	22.50	4	2	12	10.66	4	2	12	5.00	5	2	12	5.00	5	2	12	5.00	120	0	6	2.87	396
	40	22	22	8	8	22.00	4	2	12	10.66	7	2	6	21.50	7	2	6	22.50	4	2	12	10.66	4	2	12	5.00	5	2	12	5.00	5	2	12	5.00	120	0	6	3.43	396
	50	25	25	9	8	22.17	4	2	12	10.66	8	2	6	21.67	10	1	12	22.67	4	2	12	10.66	4	2	12	5.00	5	2	12	5.00	4	4	6	5.00	120	0	6	3.90	432
	60	29	29	10	8	22.33	4	2	12	10.66	9	2	6	21.83	11	1	12	22.83	4	2	12	10.66	4	2	12	5.00	5	2	12	5.00	7	1	12	5.00	120	0	6	4.52	486

2 @ 10 x 6 REINFORCED CONCRETE BOX BRIDGE

	Maximum Fill Height ft.	Dimensions ST in.	SB in.	WT in.	IT in.	BW ft.	Bars TST Size	No.	Spacing in.	Length ft.	Bars TSB Size	No.	Spacing in.	Length ft.	Bars BST Size	No.	Spacing in.	Length ft.	Bars BSB Size	No.	Spacing in.	Length ft.	Bars EWE Size	No.	Spacing in.	Length ft.	Bars EWI Size	No.	Spacing in.	Length ft.	Bars IW Size	No.	Spacing in.	Length ft.	Bars LNT No.	Bars LND No.	Bars WS No.	Concrete CY/LF	Reinf. Steel LB/LF
Continuous	No Fill	10.5	10	8	8	22.00	6	2	6	21.50	8	1	12	21.50	5	2	6	22.50	6	2	6	22.50	4	2	12	6.00	5	2	12	6.00	4	2	12	6.00	104	20	6	1.87	435
	3	13	13	8	8	22.00	7	2	6	21.50	6	2	6	21.50	5	2	6	22.50	5	2	6	22.50	4	2	12	6.00	5	2	12	6.00	4	2	12	6.00	104	20	6	2.25	445
	5	13	13	8	8	22.00	6	2	6	21.50	5	2	6	21.50	5	2	6	22.50	6	2	6	22.50	4	2	12	6.00	5	2	12	6.00	4	2	12	6.00	126	0	6	2.25	417
	10	13	13	8	8	22.00	8	2	6	21.50	5	2	6	21.50	7	1	12	22.50	9	1	12	22.50	4	2	12	6.00	5	2	12	6.00	4	2	12	6.00	126	0	6	2.25	475
Moment Break	20	12	13	8	8	22.00	4	2	12	10.66	8	2	6	21.50	11	1	12	22.50	4	2	12	10.66	4	2	12	6.00	6	2	12	6.00	4	2	12	6.00	126	0	6	2.18	461
	30	18	18	8	8	22.00	4	2	12	10.66	7	2	6	21.50	7	2	6	22.50	4	2	12	10.66	4	2	12	6.00	6	2	12	6.00	5	2	12	6.00	126	0	6	2.94	411
	40	22	22	10	8	22.33	4	2	12	10.66	7	2	6	21.83	7	2	6	22.83	4	2	12	10.66	4	2	12	6.00	5	2	12	6.00	5	2	12	6.00	126	0	6	3.62	408
	50	25	25	11	8	22.50	4	2	12	10.66	8	2	6	22.00	11	1	12	23.00	4	2	12	10.66	4	2	12	6.00	5	2	12	6.00	4	4	6	6.00	126	0	6	4.10	469
	60	29	29	11	8	22.50	4	2	12	10.66	9	2	6	22.00	11	1	12	23.00	4	2	12	10.66	4	2	12	6.00	5	2	12	6.00	7	2	12	6.00	126	0	6	4.67	510

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 = 12 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: 2 BARRELS 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