CONST. NO. _____

PROJECT NO.	YEAR	SHEET NO.
	2010	

REVISIONS

NO.	DATE	BY	BRIEF DESCRIPTION

2 @ 14 x 12 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	11.5	11	8	8	30.00	7	2	6	29.50	7	2	6	29.50	5	2	6	30.50	7	2	6	30.50	4	2	12	12.00	7	2	12	12.00	5	2	12	12.00	164	56	6	3.01	747
	3	14	14	8	8	30.00	7	2	6	29.50	7	2	6	29.50	7	1	12	30.50	7	2	6	30.50	4	2	12	12.00	7	4	6	12.00	5	2	12	12.00	164	56	6	3.52	794
	5	14	14	9	8	30.17	8	2	6	29.67	6	2	6	29.67	5	2	6	30.67	10	1	12	30.67	4	2	12	12.00	7	4	6	12.00	5	2	12	12.00	194	0	6	3.61	792
	10	17	17	10	8	30.33	8	2	6	29.83	6	2	6	29.83	8	1	12	30.83	11	1	12	30.83	4	2	12	12.00	8	4	6	12.00	5	2	12	12.00	194	0	6	4.27	874
Moment Break	20	17	17	12	8	30.67	4	2	12	14.66	9	2	6	30.17	9	2	6	31.17	4	2	12	14.66	4	2	12	12.00	8	4	6	12.00	5	2	12	12.00	194	0	6	4.46	835
	30	23	24	15	8	31.17	4	2	12	14.66	9	2	6	30.67	9	2	6	31.67	4	2	12	14.66	4	2	12	12.00	7	4	6	12.00	5	2	12	12.00	198	0	6	6.00	815
	40	29	30	17	8	31.50	4	2	12	14.66	9	2	6	31.00	9	2	6	32.00	4	2	12	14.66	4	2	12	12.00	7	4	6	12.00	6	2	12	12.00	198	0	6	7.38	830
	50	33	34	19	8	31.83	4	2	12	14.66	9	2	6	31.33	9	2	6	32.33	4	2	12	14.66	4	2	12	12.00	7	4	6	12.00	7	2	12	12.00	198	0	6	8.39	848
	60	37	38	21	9	32.25	4	2	12	14.66	9	2	6	31.75	9	2	6	32.75	4	2	12	14.66	4	2	12	12.00	7	4	6	12.00	6	2	12	12.00	202	0	6	9.47	843

2 @ 14 x 13 REINFORCED CONCRETE BOX BRIDGE

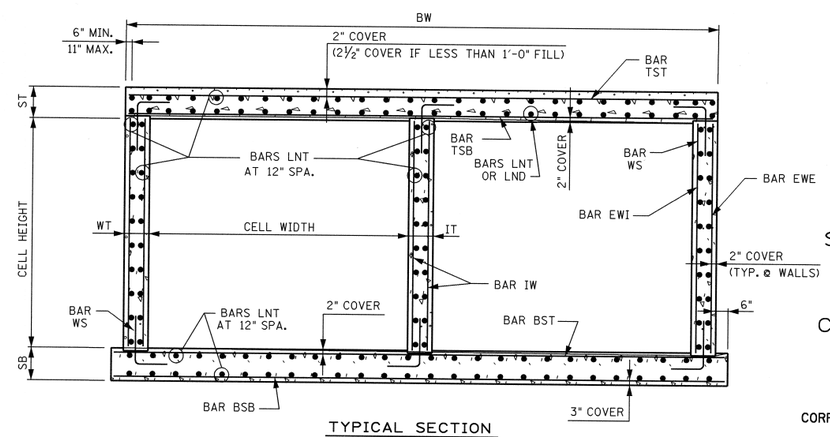
	Maximum Fill Height ft.	Dimensions ST in.	SB in.	WT in.	IT in.	BW ft.	Bars TST Size	No.	Spacing in.	Length ft.	Bars TSB Size	No.	Spacing in.	Length ft.	Bars BST Size	No.	Spacing in.	Length ft.	Bars BSB Size	No.	Spacing in.	Length ft.	Bars EWE Size	No.	Spacing in.	Length ft.	Bars EWI Size	No.	Spacing 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	11.5	11	8	8	30.00	7	2	6	29.50	7	2	6	29.50	5	2	6	30.50	7	2	6	30.50	4	2	12	13.00	7	4	6	13.00	4	4	6	13.00	170	56	6	3.08	819
	3	14	14	9	8	30.17	7	2	6	29.67	7	2	6	29.67	7	1	12	30.67	7	2	6	30.67	4	2	12	13.00	7	4	6	13.00	4	4	6	13.00	170	56	6	3.69	820
	5	14	14	9	8	30.17	8	2	6	29.67	6	2	6	29.67	8	1	12	30.67	10	1	12	30.67	4	2	12	13.00	8	4	6	13.00	4	4	6	13.00	200	0	6	3.69	866
	10	17	17	10	8	30.33	8	2	6	29.83	6	2	6	29.83	8	1	12	30.83	11	1	12	30.83	4	2	12	13.00	9	4	6	13.00	4	4	6	13.00	200	0	6	4.36	938
Moment Break	20	17	18	13	8	30.83	4	2	12	14.66	9	2	6	30.33	9	2	6	31.33	4	2	12	14.66	4	2	12	13.00	8	4	6	13.00	4	4	6	13.00	200	0	6	4.75	863
	30	23	25	16	8	31.33	4	2	12	14.66	9	2	6	30.83	9	2	6	31.83	4	2	12	14.66	4	2	12	13.00	8	4	6	13.00	4	4	6	13.00	204	0	6	6.32	873
	40	29	30	18	8	31.67	4	2	12	14.66	9	2	6	31.17	9	2	6	32.17	4	2	12	14.66	4	2	12	13.00	8	4	6	13.00	6	2	12	13.00	204	0	6	7.62	881
	50	33	34	21	9	32.25	4	2	12	14.66	9	2	6	31.75	9	2	6	32.75	4	2	12	14.66	4	2	12	13.00	7	4	6	13.00	6	2	12	13.00	208	0	6	8.82	860
	60	37	38	23	9	32.58	4	2	12	14.66	9	2	6	32.08	9	2	6	33.08	4	2	12	14.66	4	2	12	13.00	7	4	6	13.00	6	2	12	13.00	208	0	6	9.87	864

2 @ 14 x 14 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	11.5	11	8	8	30.00	7	2	6	29.50	7	2	6	29.50	5	2	6	30.50	7	2	6	30.50	4	2	12	14.00	8	4	6	14.00	6	2	12	14.00	176	56	6	3.15	875
	3	14	14	9	8	30.17	7	2	6	29.67	7	2	6	29.67	7	1	12	30.67	7	2	6	30.67	4	2	12	14.00	8	4	6	14.00	6	2	12	14.00	176	56	6	3.77	876
	5	14	14	10	8	30.33	8	2	6	29.83	6	2	6	29.83	8	1	12	30.83	10	1	12	30.83	4	2	12	14.00	8	4	6	14.00	6	2	12	14.00	206	0	6	3.87	892
	10	17	17	11	8	30.50	8	2	6	30.00	6	2	6	30.00	8	1	12	31.00	10	1	12	31.00	4	2	12	14.00	9	4	6	14.00	6	2	12	14.00	206	0	6	4.55	935
Moment Break	20	17	18	14	8	31.00	4	2	12	14.66	9	2	6	30.50	9	2	6	31.50	4	2	12	14.66	4	2	12	14.00	9	4	6	14.00	6	2	12	14.00	210	0	6	4.96	932
	30	23	25	17	8	31.50	4	2	12	14.66	9	2	6	31.00	9	2	6	32.00	4	2	12	14.66	4	2	12	14.00	8	4	6	14.00	6	2	12	14.00	210	0	6	6.56	898
	40	29	30	20	8	32.00	4	2	12	14.66	9	2	6	31.50	9	2	6	32.50	4	2	12	14.66	4	2	12	14.00	8	4	6	14.00	6	2	12	14.00	214	0	6	7.99	908
	50	33	34	22	9	32.42	4	2	12	14.66	9	2	6	31.92	9	2	6	32.92	4	2	12	14.66	4	2	12	14.00	8	4	6	14.00	6	2	12	14.00	214	0	6	9.10	913
	60	37	38	24	10	32.83	4	2	12	14.66	9	2	6	32.33	9	2	6	33.33	4	2	12	14.66	4	2	12	14.00	8	4	6	14.00	6	2	12	14.00	214	0	6	10.22	919

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: 2 BARRELS AT 14'-0"
CLEAR HEIGHTS 12'-0" THRU 14'-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