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

REVISIONS

NO.	DATE	BY	BRIEF DESCRIPTION

2 @ 18 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	12.5	12	8	8	38.00	7	2	6	37.50	8	2	6	37.50	7	1	12	38.50	8	2	6	38.50	4	2	12	6.00	5	2	12	6.00	4	2	12	6.00	152	72	6	3.35	896
	3	15	15	8	8	38.00	11	1	12	37.50	7	2	6	37.50	8	1	12	38.50	8	2	6	38.50	4	2	12	6.00	5	2	12	6.00	4	2	12	6.00	152	72	6	4.01	919
	5	16	16	8	8	38.00	8	2	6	37.50	7	2	6	37.50	8	1	12	38.50	8	2	6	38.50	4	2	12	6.00	5	2	12	6.00	4	2	12	6.00	190	0	6	4.25	898
	10	20	20	8	8	38.00	9	2	6	37.50	7	2	6	37.50	7	2	6	38.50	9	2	6	38.50	4	2	12	6.00	5	2	12	6.00	4	2	12	6.00	190	0	6	5.20	1063
Moment Break	20	20	20	8	8	38.00	4	2	12	18.66	11	2	6	37.50	10	2	6	38.50	4	2	12	18.66	4	2	12	6.00	5	2	12	6.00	5	2	12	6.00	190	0	6	5.20	1020
	30	29	29	8	8	38.00	4	2	12	18.66	10	2	6	37.50	10	2	6	38.50	4	2	12	18.66	4	2	12	6.00	5	2	12	6.00	4	4	6	6.00	190	0	6	7.34	947
	40	36	36	9	8	38.17	4	2	12	18.66	10	2	6	37.67	10	2	6	38.67	4	2	12	18.66	4	2	12	6.00	5	2	12	6.00	5	4	6	6.00	190	0	6	9.07	959
	50	41	42	10	8	38.33	4	2	12	18.66	10	2	6	37.83	10	2	6	38.83	4	2	12	18.66	4	2	12	6.00	5	2	12	6.00	6	4	6	6.00	190	0	6	10.47	973
	60	46	46	11	9	38.58	4	2	12	18.66	10	2	6	38.08	10	2	6	39.08	4	2	12	18.66	4	2	12	6.00	5	2	12	6.00	6	4	6	6.00	190	0	6	11.67	978

2 @ 18 x 7 REINFORCED CONCRETE BOX BRIDGE

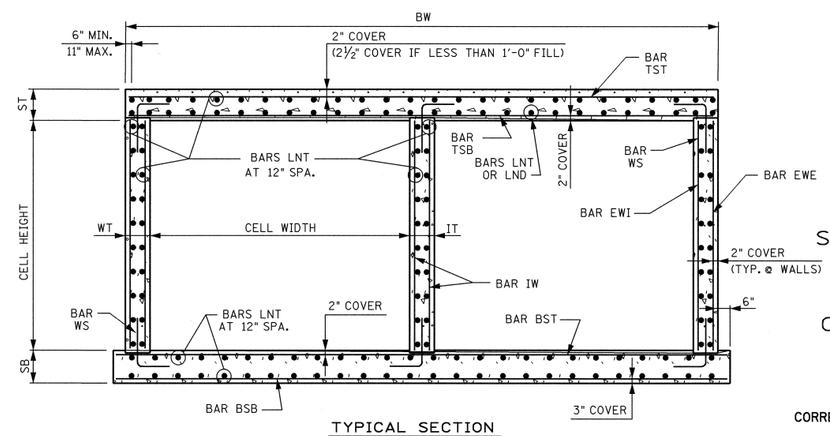
	Maximum Fill Height ft.	Dimensions ST in.	SB in.	WT in.	IT in.	BW ft.	Bars TST Size	No.	Spacing in.	Length ft.	Bars TSB Size	No.	Spacing in.	Length ft.	Bars BST Size	No.	Spacing in.	Length ft.	Bars BSB Size	No.	Spacing in.	Length ft.	Bars EWE Size	No.	Spacing in.	Length ft.	Bars EWI Size	No.	Spacing 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	12.5	12	8	8	38.00	7	2	6	37.50	8	2	6	37.50	5	2	6	38.50	8	2	6	38.50	4	2	12	7.00	5	2	12	7.00	4	2	12	7.00	158	72	6	3.43	906
	3	15	15	8	8	38.00	11	1	12	37.50	7	2	6	37.50	8	1	12	38.50	8	2	6	38.50	4	2	12	7.00	5	2	12	7.00	4	2	12	7.00	158	72	6	4.08	928
	5	16	16	8	8	38.00	8	2	6	37.50	7	2	6	37.50	8	1	12	38.50	8	2	6	38.50	4	2	12	7.00	5	2	12	7.00	4	2	12	7.00	196	0	6	4.32	906
	10	20	20	8	8	38.00	9	2	6	37.50	7	2	6	37.50	7	2	6	38.50	9	2	6	38.50	4	2	12	7.00	5	2	12	7.00	4	2	12	7.00	196	0	6	5.27	1072
Moment Break	20	20	20	8	8	38.00	4	2	12	18.66	11	2	6	37.50	10	2	6	38.50	4	2	12	18.66	4	2	12	7.00	6	2	12	7.00	5	2	12	7.00	196	0	6	5.27	1036
	30	29	29	9	8	38.17	4	2	12	18.66	10	2	6	37.67	10	2	6	38.67	4	2	12	18.66	4	2	12	7.00	5	2	12	7.00	4	4	6	7.00	196	0	6	7.48	960
	40	36	36	10	8	38.33	4	2	12	18.66	10	2	6	37.83	10	2	6	38.83	4	2	12	18.66	4	2	12	7.00	5	2	12	7.00	5	4	6	7.00	196	0	6	9.23	974
	50	41	42	11	8	38.50	4	2	12	18.66	10	2	6	38.00	10	2	6	39.00	4	2	12	18.66	4	2	12	7.00	5	2	12	7.00	6	4	6	7.00	196	0	6	10.64	990
	60	46	46	12	9	38.75	4	2	12	18.66	10	2	6	38.25	10	2	6	39.25	4	2	12	18.66	4	2	12	7.00	5	2	12	7.00	6	4	6	7.00	196	0	6	11.86	994

2 @ 18 x 8 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	12.5	12	8	8	38.00	7	2	6	37.50	8	2	6	37.50	5	2	6	38.50	8	2	6	38.50	4	2	12	8.00	5	2	12	8.00	4	2	12	8.00	164	72	6	3.50	915
	3	15	15	8	8	38.00	11	1	12	37.50	7	2	6	37.50	8	1	12	38.50	8	2	6	38.50	4	2	12	8.00	5	2	12	8.00	4	2	12	8.00	164	72	6	4.16	937
	5	16	16	8	8	38.00	8	2	6	37.50	7	2	6	37.50	8	1	12	38.50	8	2	6	38.50	4	2	12	8.00	6	2	12	8.00	4	2	12	8.00	202	0	6	4.40	922
	10	20	20	8	8	38.00	9	2	6	37.50	7	2	6	37.50	9	1	12	38.50	9	2	6	38.50	4	2	12	8.00	5	4	6	8.00	4	2	12	8.00	202	0	6	5.35	1071
Moment Break	20	20	20	8	8	38.00	4	2	12	18.66	11	2	6	37.50	10	2	6	38.50	4	2	12	18.66	4	2	12	8.00	6	4	6	8.00	5	2	12	8.00	202	0	6	5.35	1070
	30	29	29	10	8	38.33	4	2	12	18.66	10	2	6	37.83	10	2	6	38.83	4	2	12	18.66	4	2	12	8.00	5	4	6	8.00	4	4	6	8.00	202	0	6	7.64	990
	40	36	36	11	8	38.50	4	2	12	18.66	10	2	6	38.00	10	2	6	39.00	4	2	12	18.66	4	2	12	8.00	5	4	6	8.00	5	4	6	8.00	202	0	6	9.41	1005
	50	41	42	13	8	38.83	4	2	12	18.66	10	2	6	38.33	10	2	6	39.33	4	2	12	18.66	4	2	12	8.00	5	2	12	8.00	6	4	6	8.00	202	0	6	10.92	1009
	60	46	47	14	9	39.08	4	2	12	18.66	10	2	6	38.58	10	2	6	39.58	4	2	12	18.66	4	2	12	8.00	5	2	12	8.00	6	4	6	8.00	206	0	6	12.28	1016

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 18'-0"
CLEAR HEIGHTS 6'-0" THRU 8'-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

STD-17-85

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