CONST. NO. _____

PROJECT NO.	YEAR	SHEET NO.

REVISIONS

NO.	DATE	BY	BRIEF DESCRIPTION

1 @ 16 x 9 REINFORCED CONCRETE BOX BRIDGE

Maximum Fill Height ft.	Dimensions ST in.	SB in.	WT 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.	Bar EWI Size	No.	Spacing in.	Length ft.	Bars LNT No.	Bars LND No.	Bars WS No.	Concrete CY/LF	Reinf. Steel LB/LF
No Fill	11.5	10	8	17.33	4	1	12	16.83	11	1	12	16.83	7	2	6	17.83	4	1	12	17.83	4	2	12	9.00	4	2	12	9.00	87	32	4	1.62	341
3	12	12	8	17.33	4	1	12	16.83	11	1	12	16.83	7	2	6	17.83	4	1	12	17.83	4	2	12	9.00	4	2	12	9.00	87	32	4	1.76	341
5	12	13	8	17.33	4	1	12	16.83	11	1	12	16.83	11	1	12	17.83	4	1	12	17.83	4	2	12	9.00	5	2	12	9.00	104	0	4	1.82	360
10	13	14	8	17.33	4	1	12	16.83	9	2	6	16.83	9	2	6	17.83	4	1	12	17.83	4	2	12	9.00	6	2	12	9.00	104	0	4	1.93	420
20	16	18	9	17.50	4	1	12	17.00	10	2	6	17.00	10	2	6	18.00	4	1	12	18.00	4	2	12	9.00	8	2	12	9.00	104	0	4	2.39	507
30	25	27	11	17.83	4	1	12	17.33	9	2	6	17.33	9	2	6	18.33	4	1	12	18.33	4	2	12	9.00	7	2	12	9.00	104	0	4	3.55	437
40	31	33	13	18.17	4	1	12	17.66	9	2	6	17.66	9	2	6	18.66	4	1	12	18.66	4	2	12	9.00	7	2	12	9.00	108	0	4	4.41	445
50	36	38	14	18.33	4	1	12	17.83	10	2	6	17.83	10	2	6	18.83	4	1	12	18.83	4	2	12	9.00	6	2	12	9.00	108	0	4	5.08	504
60	40	42	16	18.67	4	1	12	18.16	10	2	6	18.16	10	2	6	19.16	4	1	12	19.16	4	2	12	9.00	5	1	12	9.00	108	0	4	5.74	502

1 @ 16 x 10 REINFORCED CONCRETE BOX BRIDGE

Maximum Fill Height ft.	Dimensions ST in.	SB in.	WT 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.	Bar EWI Size	No.	Spacing in.	Length ft.	Bars LNT No.	Bars LND No.	Bars WS No.	Concrete CY/LF	Reinf. Steel LB/LF
No Fill	11.5	10	8	17.33	4	1	12	16.83	11	1	12	16.83	7	2	6	17.83	4	1	12	17.83	4	2	12	10.00	5	2	12	10.00	91	32	4	1.67	355
3	12	12	8	17.33	4	1	12	16.83	11	1	12	16.83	7	2	6	17.83	4	1	12	17.83	4	2	12	10.00	4	4	6	10.00	91	32	4	1.81	360
5	12	13	8	17.33	4	1	12	16.83	11	1	12	16.83	11	1	12	17.83	4	1	12	17.83	4	2	12	10.00	4	4	6	10.00	108	0	4	1.87	372
10	13	14	8	17.33	4	1	12	16.83	9	2	6	16.83	9	2	6	17.83	4	1	12	17.83	4	2	12	10.00	8	2	12	10.00	108	0	4	1.98	451
20	16	19	10	17.67	4	1	12	17.16	10	2	6	17.16	10	2	6	18.16	4	1	12	18.16	4	2	12	10.00	8	2	12	10.00	108	0	4	2.58	519
30	25	27	12	18.00	4	1	12	17.50	9	2	6	17.50	9	2	6	18.50	4	1	12	18.50	4	2	12	10.00	8	2	12	10.00	112	0	4	3.71	464
40	31	33	14	18.33	4	1	12	17.83	9	2	6	17.83	9	2	6	18.83	4	1	12	18.83	4	2	12	10.00	7	2	12	10.00	112	0	4	4.58	456
50	36	38	16	18.67	4	1	12	18.16	10	2	6	18.16	10	2	6	19.16	4	1	12	19.16	4	2	12	10.00	7	2	12	10.00	112	0	4	5.36	528
60	40	42	17	18.83	4	1	12	18.33	10	2	6	18.33	10	2	6	19.33	4	1	12	19.33	4	2	12	10.00	7	2	12	10.00	112	0	4	5.94	531

1 @ 16 x 11 REINFORCED CONCRETE BOX BRIDGE

Maximum Fill Height ft.	Dimensions ST in.	SB in.	WT 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.	Bar EWI Size	No.	Spacing in.	Length ft.	Bars LNT No.	Bars LND No.	Bars WS No.	Concrete CY/LF	Reinf. Steel LB/LF
No Fill	11.5	11	8	17.33	4	1	12	16.83	11	1	12	16.83	9	1	12	17.83	4	1	12	17.83	4	2	12	11.00	5	2	12	11.00	95	32	4	1.78	349
3	12	12	8	17.33	4	1	12	16.83	11	1	12	16.83	11	1	12	17.83	4	1	12	17.83	4	2	12	11.00	4	4	6	11.00	95	32	4	1.86	371
5	12	13	8	17.33	4	1	12	16.83	11	1	12	16.83	11	1	12	17.83	4	1	12	17.83	4	2	12	11.00	5	4	6	11.00	112	0	4	1.92	396
10	13	14	9	17.50	4	1	12	17.00	9	2	6	17.00	9	2	6	18.00	4	1	12	18.00	4	2	12	11.00	8	2	12	11.00	112	0	4	2.11	463
20	16	19	11	17.83	4	1	12	17.33	10	2	6	17.33	10	2	6	18.33	4	1	12	18.33	4	2	12	11.00	6	4	6	11.00	112	0	4	2.73	539
30	25	27	13	18.17	4	1	12	17.66	9	2	6	17.66	9	2	6	18.66	4	1	12	18.66	4	2	12	11.00	6	4	6	11.00	116	0	4	3.88	482
40	31	33	15	18.50	4	1	12	18.00	9	2	6	18.00	9	2	6	19.00	4	1	12	19.00	4	2	12	11.00	8	2	12	11.00	116	0	4	4.77	480
50	36	38	17	18.83	4	1	12	18.33	10	2	6	18.33	10	2	6	19.33	4	1	12	19.33	4	2	12	11.00	8	2	12	11.00	116	0	4	5.57	553
60	40	42	19	19.17	4	1	12	18.66	10	2	6	18.66	10	2	6	19.66	4	1	12	19.66	4	2	12	11.00	5	4	6	11.00	120	0	4	6.27	549

1 @ 16 x 12 REINFORCED CONCRETE BOX BRIDGE

Maximum Fill Height ft.	Dimensions ST in.	SB in.	WT 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.	Bar EWI Size	No.	Spacing in.	Length ft.	Bars LNT No.	Bars LND No.	Bars WS No.	Concrete CY/LF	Reinf. Steel LB/LF
No Fill	11.5	11	8	17.33	4	1	12	16.83	11	1	12	16.83	7	2	6	17.83	4	1	12	17.83	4	2	12	12.00	6	2	12	12.00	99	32	4	1.83	378
3	12	12	8	17.33	4	1	12	16.83	11	1	12	16.83	10	1	12	17.83	4	1	12	17.83	4	2	12	12.00	8	2	12	12.00	99	32	4	1.91	410
5	12	13	8	17.33	4	1	12	16.83	11	1	12	16.83	11	1	12	17.83	4	1	12	17.83	4	2	12	12.00	9	2	12	12.00	116	0	4	1.97	435
10	13	14	10	17.67	4	1	12	17.17	9	2	6	17.17	9	2	6	18.16	4	1	12	18.16	4	2	12	12.00	6	4	6	12.00	116	0	4	2.25	482
20	16	19	12	18.00	4	1	12	17.50	10	2	6	17.50	10	2	6	18.50	4	1	12	18.50	4	2	12	12.00	9	2	12	12.00	120	0	4	2.89	564
30	25	27	15	18.50	4	1	12	18.00	9	2	6	18.00	9	2	6	19.00	4	1	12	19.00	4	2	12	12.00	6	4	6	12.00	120	0	4	4.16	497
40	31	33	17	18.83	4	1	12	18.33	9	2	6	18.33	9	2	6	18.33	4	1	12	19.33	4	2	12	12.00	6	4	6	12.00	120	0	4	5.08	502
50	36	38	19	19.17	4	1	12	18.66	10	2	6	18.66	10	2	6	19.66	4	1	12	19.66	4	2	12	12.00	8	2	12	12.00	124	0	4	5.90	571
60	40	42	21	19.50	4	1	12	19.00	10	2	6	19.00	10	2	6	20.00	4	1	12	20.00	4	2	12	12.00	8	2	12	12.00	124	0	4	6.62	578

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 top slab is the riding surface (No Fill), the concrete cover to the top mat of reinforcing shall be 2-1/2 inches.

The following bar information applies to all fill cases in the table 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.

NOTE: FOR DESCRIPTIONS OF BOX DIMENSIONS AND REINFORCING BAR DESIGNATIONS SEE STANDARD DRAWING NO. STD-15-4.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

STANDARD REINFORCED CONCRETE BOX BRIDGE INTERIOR SECTION SPANS: 1 BARREL AT 16'-0" CLEAR HEIGHTS 9'-0" THRU 12'-0" 0' THRU 60' FILL 2000

CORRECT _____ Edward P. Wasserman
ENGINEER OF STRUCTURES

STD-15-46

DESIGNED BY JOHN PHILLIPS DATE 1-00
DRAWN BY KEVIN MARTINKO DATE 3-00
SUPERVISED BY FIELDS & HOLLORAN DATE 3-00
CHECKED BY JOHN PHILLIPS DATE 6-00

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