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

REVISIONS

NO.	DATE	BY	BRIEF DESCRIPTION

1 @ 10 x 7 REINFORCED CONCRETE BOX BRIDGE

Maximum Fill Height ft.	Dimensions ST in.	Dimensions SB in.	Dimensions WT in.	Dimensions BW ft.	Bars TST Size	Bars TST No.	Bars TST Spacing in.	Bars TST Length ft.	Bars TSB Size	Bars TSB No.	Bars TSB Spacing in.	Bars TSB Length ft.	Bars BST Size	Bars BST No.	Bars BST Spacing in.	Bars BST Length ft.	Bars BSB Size	Bars BSB No.	Bars BSB Spacing in.	Bars BSB Length ft.	Bars EWE Size	Bars EWE No.	Bars EWE Spacing in.	Bars EWE Length ft.	Bars EWI Size	Bars EWI No.	Bars EWI Spacing in.	Bars EWI Length ft.	Bars LNT No.	Bars LND No.	Bars WS No.	Concrete CY/LF	Reinf. Steel LB/LF
No Fill	10.5	10	8	11.33	4	1	12	10.83	7	2	6	10.83	8	1	12	11.83	4	1	12	11.83	4	2	12	7.00	5	2	12	7.00	64	20	4	1.09	224
3	12	12	8	11.33	4	1	12	10.83	7	2	6	10.83	9	1	12	11.83	4	1	12	11.83	4	2	12	7.00	5	2	12	7.00	64	20	4	1.22	233
5	10	10	8	11.33	4	1	12	10.83	7	2	6	10.83	7	2	6	11.83	4	1	12	11.83	4	2	12	7.00	5	2	12	7.00	74	0	4	1.08	235
10	10	10	8	11.33	4	1	12	10.83	8	2	6	10.83	8	2	6	11.83	4	1	12	11.83	4	2	12	7.00	6	2	12	7.00	74	0	4	1.08	269
20	12	13	8	11.33	4	1	12	10.83	8	2	6	10.83	11	1	12	11.83	4	1	12	11.83	4	2	12	7.00	6	4	6	7.00	74	0	4	1.26	290
30	18	18	9	11.50	4	1	12	11.00	7	2	6	11.00	7	2	6	12.00	4	1	12	12.00	4	2	12	7.00	6	4	6	7.00	74	0	4	1.72	264
40	22	22	11	11.83	4	1	12	11.33	7	2	6	11.33	10	1	12	12.33	4	1	12	12.33	4	2	12	7.00	5	4	6	7.00	74	0	4	2.15	257
50	25	25	12	12.00	4	1	12	11.50	8	2	6	11.50	11	1	12	12.50	4	1	12	12.50	4	2	12	7.00	6	2	12	7.00	78	0	4	2.45	280
60	29	29	13	12.17	4	1	12	11.67	8	2	6	11.67	11	1	12	12.67	4	1	12	12.67	4	2	12	7.00	6	2	12	7.00	78	0	4	2.83	282

1 @ 10 x 8 REINFORCED CONCRETE BOX BRIDGE

Maximum Fill Height ft.	Dimensions ST in.	Dimensions SB in.	Dimensions WT in.	Dimensions BW ft.	Bars TST Size	Bars TST No.	Bars TST Spacing in.	Bars TST Length ft.	Bars TSB Size	Bars TSB No.	Bars TSB Spacing in.	Bars TSB Length ft.	Bars BST Size	Bars BST No.	Bars BST Spacing in.	Bars BST Length ft.	Bars BSB Size	Bars BSB No.	Bars BSB Spacing in.	Bars BSB Length ft.	Bars EWE Size	Bars EWE No.	Bars EWE Spacing in.	Bars EWE Length ft.	Bars EWI Size	Bars EWI No.	Bars EWI Spacing in.	Bars EWI Length ft.	Bars LNT No.	Bars LND No.	Bars WS No.	Concrete CY/LF	Reinf. Steel LB/LF
No Fill	10.5	10	8	11.33	4	1	12	10.83	7	2	6	10.83	8	1	12	11.83	4	1	12	11.83	4	1	12	8.00	5	2	12	8.00	68	20	4	1.14	225
3	12	12	8	11.33	4	1	12	10.83	7	2	6	10.83	9	1	12	11.83	4	1	12	11.83	4	1	12	8.00	5	2	12	8.00	68	20	4	1.27	234
5	10	10	8	11.33	4	1	12	10.83	7	2	6	10.83	7	2	6	11.83	4	1	12	11.83	4	1	12	8.00	6	2	12	8.00	78	0	4	1.13	243
10	10	11	8	11.33	4	1	12	10.83	8	2	6	10.83	7	2	6	11.83	4	1	12	11.83	4	1	12	8.00	5	4	6	8.00	78	0	4	1.16	266
20	12	13	9	11.50	4	1	12	11.00	8	2	6	11.00	11	1	12	12.00	4	1	12	12.00	4	1	12	8.00	6	4	6	8.00	78	0	4	1.37	297
30	18	18	11	11.83	4	1	12	11.33	7	2	6	11.33	7	2	6	12.33	4	1	12	12.33	4	1	12	8.00	6	4	6	8.00	78	0	4	1.91	271
40	22	22	12	12.00	4	1	12	11.50	7	2	6	11.50	10	1	12	12.50	4	1	12	12.50	4	1	12	8.00	6	4	6	8.00	82	0	4	2.29	278
50	25	25	13	12.17	4	1	12	11.67	8	2	6	11.67	11	1	12	12.67	4	1	12	12.67	4	1	12	8.00	6	4	6	8.00	82	0	4	2.60	307
60	29	29	15	12.50	4	1	12	12.00	8	2	6	12.00	11	1	12	13.00	4	1	12	13.00	4	1	12	8.00	5	4	6	8.00	82	0	4	3.07	297

1 @ 10 x 9 REINFORCED CONCRETE BOX BRIDGE

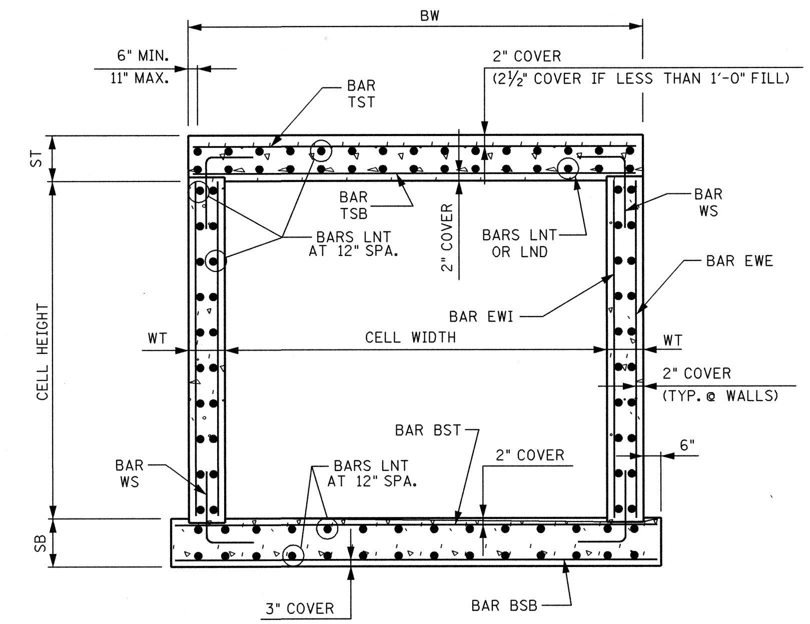
Maximum Fill Height ft.	Dimensions ST in.	Dimensions SB in.	Dimensions WT in.	Dimensions BW ft.	Bars TST Size	Bars TST No.	Bars TST Spacing in.	Bars TST Length ft.	Bars TSB Size	Bars TSB No.	Bars TSB Spacing in.	Bars TSB Length ft.	Bars BST Size	Bars BST No.	Bars BST Spacing in.	Bars BST Length ft.	Bars BSB Size	Bars BSB No.	Bars BSB Spacing in.	Bars BSB Length ft.	Bars EWE Size	Bars EWE No.	Bars EWE Spacing in.	Bars EWE Length ft.	Bars EWI Size	Bars EWI No.	Bars EWI Spacing in.	Bars EWI Length ft.	Bars LNT No.	Bars LND No.	Bars WS No.	Concrete CY/LF	Reinf. Steel LB/LF
No Fill	10.5	10	8	11.33	4	1	12	10.83	7	2	6	10.33	8	1	12	11.83	4	1	12	11.83	4	2	12	9.00	5	2	12	9.00	76	20	4	1.19	237
3	12	12	8	11.33	4	1	12	10.83	7	2	6	10.33	9	1	12	11.83	4	1	12	11.83	4	2	12	9.00	6	2	12	9.00	76	20	4	1.32	254
5	10	10	8	11.33	4	1	12	10.83	7	2	6	10.33	7	2	6	11.83	4	1	12	11.83	4	2	12	9.00	6	2	12	9.00	86	0	4	1.17	256
10	10	11	8	11.33	4	1	12	10.83	8	2	6	10.33	7	2	6	11.83	4	1	12	11.83	4	2	12	9.00	6	4	6	9.00	86	0	4	1.21	296
20	12	13	10	11.67	4	1	12	11.17	8	2	6	10.67	11	1	12	12.17	4	1	12	12.17	4	2	12	9.00	6	4	6	9.00	86	0	4	1.50	314
30	18	18	12	12.00	4	1	12	11.50	7	2	6	11.00	10	1	12	12.50	4	1	12	12.50	4	2	12	9.00	6	4	6	9.00	90	0	4	2.06	294
40	22	22	13	12.17	4	1	12	11.67	7	2	6	11.17	10	1	12	12.67	4	1	12	12.67	4	2	12	9.00	6	4	6	9.00	90	0	4	2.44	296
50	25	25	15	12.50	4	1	12	12.00	8	2	6	11.50	11	1	12	13.00	4	1	12	13.00	4	2	12	9.00	6	4	6	9.00	90	0	4	2.84	327
60	29	29	16	12.67	4	1	12	12.17	8	2	6	11.67	11	1	12	13.17	4	1	12	13.17	4	2	12	9.00	6	4	6	9.00	90	0	4	3.25	329

1 @ 10 x 10 REINFORCED CONCRETE BOX BRIDGE

Maximum Fill Height ft.	Dimensions ST in.	Dimensions SB in.	Dimensions WT in.	Dimensions BW ft.	Bars TST Size	Bars TST No.	Bars TST Spacing in.	Bars TST Length ft.	Bars TSB Size	Bars TSB No.	Bars TSB Spacing in.	Bars TSB Length ft.	Bars BST Size	Bars BST No.	Bars BST Spacing in.	Bars BST Length ft.	Bars BSB Size	Bars BSB No.	Bars BSB Spacing in.	Bars BSB Length ft.	Bars EWE Size	Bars EWE No.	Bars EWE Spacing in.	Bars EWE Length ft.	Bars EWI Size	Bars EWI No.	Bars EWI Spacing in.	Bars EWI Length ft.	Bars LNT No.	Bars LND No.	Bars WS No.	Concrete CY/LF	Reinf. Steel LB/LF
No Fill	10.5	10	8	11.33	4	1	12	10.83	7	2	6	10.83	8	1	12	11.83	4	1	12	11.83	4	2	12	10.00	6	2	12	10.00	80	20	4	1.24	255
3	12	12	8	11.33	4	1	12	10.83	7	2	6	10.83	9	1	12	11.83	4	1	12	11.83	4	2	12	10.00	5	4	6	10.00	80	20	4	1.37	275
5	10	10	8	11.33	4	1	12	10.83	7	2	6	10.83	7	2	6	11.83	4	1	12	11.83	4	2	12	10.00	6	4	6	10.00	90	0	4	1.22	295
10	10	11	8	11.33	4	1	12	10.83	8	2	6	10.83	7	2	6	11.83	4	1	12	11.83	4	2	12	10.00	8	4	6	10.00	90	0	4	1.26	355
20	12	13	11	11.83	4	1	12	11.33	8	2	6	11.33	7	2	6	12.33	4	1	12	12.33	4	2	12	10.00	7	4	6	10.00	90	0	4	1.63	335
30	18	18	13	12.17	4	1	12	11.67	7	2	6	11.67	7	2	6	12.67	4	1	12	12.67	4	2	12	10.00	7	4	6	10.00	94	0	4	2.21	327
40	22	22	15	12.50	4	1	12	12.00	7	2	6	12.00	10	1	12	13.00	4	1	12	13.00	4	2	12	10.00	7	4	6	10.00	94	0	4	2.69	333
50	25	25	16	12.67	4	1	12	12.17	8	2	6	12.17	11	1	12	13.17	4	1	12	13.17	4	2	12	10.00	7	4	6	10.00	94	0	4	3.02	363
60	29	29	18	13.00	4	1	12	12.50	8	2	6	12.50	11	1	12	13.50	4	1	12	13.50	4	2	12	10.00	6	4	6	10.00	98	0	4	3.53	348

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: 1 BARREL AT 10'-0"
CLEAR HEIGHTS 7'-0" THRU 10'-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

D:\d_drive\stdboxes\tables\1-6-10\Official Culvert Files 1-6-10\10' Span\STD-17-54 & 55_1BARREL_BOX10'.DGN
30-JUL-2010
07:08

STD-17-55