CONST. NO. _____

PROJECT NO.	YEAR	SHEET NO.
	2010	

REVISIONS

NO.	DATE	BY	BRIEF DESCRIPTION

1 @ 12 x10 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.	Bars 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	10.5	10	8	13.33	4	1	12	12.83	7	2	6	12.83	7	2	6	13.83	4	1	12	13.83	4	2	12	10.00	6	2	12	10.00	82	24	4	1.37	303
3	13	13	8	13.33	4	1	12	12.83	8	2	6	12.83	7	2	6	13.83	4	1	12	13.83	4	2	12	10.00	5	4	6	10.00	82	24	4	1.60	331
5	11	11	8	13.33	4	1	12	12.83	8	2	6	12.83	8	2	6	13.83	4	1	12	13.83	4	2	12	10.00	7	2	12	10.00	94	0	4	1.43	331
10	11	12	8	13.33	4	1	12	12.83	9	2	6	12.83	11	1	12	13.83	4	1	12	13.83	4	2	12	10.00	7	4	6	10.00	94	0	4	1.48	390
20	16	16	11	13.83	4	1	12	13.33	9	2	6	13.33	9	2	6	14.33	4	1	12	14.33	4	2	12	10.00	6	4	6	10.00	94	0	4	2.09	396
30	21	21	13	14.17	4	1	12	13.67	8	2	6	13.67	11	1	12	14.67	4	1	12	14.67	4	2	12	10.00	7	4	6	10.00	98	0	4	2.70	384
40	26	26	14	14.33	4	1	12	13.83	8	2	6	13.83	11	1	12	14.83	4	1	12	14.83	4	2	12	10.00	7	4	6	10.00	98	0	4	3.24	386
50	31	31	16	14.67	4	1	12	14.17	8	2	6	14.17	11	1	12	15.17	4	1	12	15.17	4	2	12	10.00	7	4	6	10.00	98	0	4	3.89	390
60	34	34	18	15.00	4	1	12	14.50	9	2	6	14.50	9	2	6	15.50	4	1	12	15.50	4	2	12	10.00	6	4	6	10.00	102	0	4	4.36	419

1 @ 12 x11 REINFORCED CONCRETE BOX BRIDGE

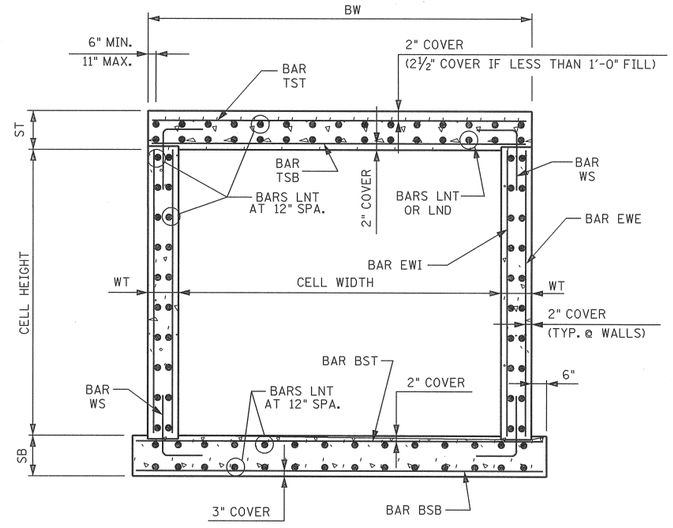
Maximum Fill Height ft.	Dimensions ST in.	SB in.	WT in.	BW ft.	Bars TST Size	No.	Spacing in.	Length ft.	Bars TSB Size	No.	Spacing in.	Length ft.	Bars BST Size	No.	Spacing in.	Length ft.	Bars BSB Size	No.	Spacing in.	Length ft.	Bars EWE Size	No.	Spacing in.	Length ft.	Bars EWI Size	No.	Spacing in.	Length ft.	Bars LNT No.	Bars LND No.	Bars WS No.	Concrete CY/LF	Reinf. Steel LB/LF
No Fill	10.5	10	8	13.33	4	1	12	12.83	7	2	6	12.83	7	2	6	13.83	4	1	12	13.83	4	2	12	11.00	6	2	12	11.00	86	24	4	1.42	310
3	13	13	8	13.33	4	1	12	12.83	8	2	6	12.83	7	2	6	13.83	4	1	12	13.83	4	2	12	11.00	5	4	6	11.00	86	24	4	1.65	339
5	11	11	8	13.33	4	1	12	12.83	8	2	6	12.83	8	2	6	13.83	4	1	12	13.83	4	2	12	11.00	7	4	6	11.00	98	0	4	1.48	384
10	11	12	9	13.50	4	1	12	13.00	9	2	6	13.00	11	1	12	14.00	4	1	12	14.00	4	2	12	11.00	7	4	6	11.00	98	0	4	1.61	404
20	16	16	11	13.83	4	1	12	13.33	9	2	6	13.33	9	2	6	14.33	4	1	12	14.33	4	2	12	11.00	8	4	6	11.00	98	0	4	2.16	458
30	21	21	14	14.33	4	1	12	13.83	8	2	6	13.83	11	1	12	14.83	4	1	12	14.83	4	2	12	11.00	7	4	6	11.00	102	0	4	2.87	398
40	26	26	16	14.67	4	1	12	14.17	8	2	6	14.17	11	1	12	15.17	4	1	12	15.17	4	2	12	11.00	7	4	6	11.00	102	0	4	3.52	402
50	31	31	18	15.00	4	1	12	14.50	8	2	6	14.50	11	1	12	15.50	4	1	12	15.50	4	2	12	11.00	7	4	6	11.00	106	0	4	4.19	409
60	34	34	19	15.17	4	1	12	14.67	9	2	6	14.67	9	2	6	15.67	4	1	12	15.67	4	2	12	11.00	7	4	6	11.00	106	0	4	4.58	455

1 @ 12 x12 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.	Bars 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	10.5	10	8	13.33	4	1	12	12.83	7	2	6	12.83	7	2	6	13.83	4	1	12	13.83	4	2	12	12.00	7	2	12	12.00	90	24	4	1.47	330
3	13	13	8	13.33	4	1	12	12.83	8	2	6	12.83	7	2	6	13.83	4	1	12	13.83	4	2	12	12.00	7	4	6	12.00	90	24	4	1.70	396
5	11	11	9	13.50	4	1	12	13.00	8	2	6	13.00	8	2	6	14.00	4	1	12	14.00	4	2	12	12.00	7	4	6	12.00	102	0	4	1.62	398
10	11	12	10	13.67	4	1	12	13.17	9	2	6	13.17	11	1	12	14.17	4	1	12	14.17	4	2	12	12.00	8	4	6	12.00	102	0	4	1.75	449
20	16	16	12	14.00	4	1	12	13.50	9	2	6	13.50	11	1	12	14.50	4	1	12	14.50	4	2	12	12.00	8	4	6	12.00	106	0	4	2.32	456
30	21	22	15	14.50	4	1	12	14.00	8	2	6	14.00	11	1	12	15.00	4	1	12	15.00	4	2	12	12.00	7	4	6	12.00	106	0	4	3.10	412
40	26	26	17	14.83	4	1	12	14.33	8	2	6	14.33	11	1	12	15.33	4	1	12	15.33	4	2	12	12.00	8	4	6	12.00	106	0	4	3.72	446
50	31	31	19	15.17	4	1	12	14.67	8	2	6	14.67	11	1	12	15.67	4	1	12	15.67	4	2	12	12.00	8	4	6	12.00	110	0	4	4.41	453
60	34	34	21	15.50	4	1	12	15.00	9	2	6	15.00	9	2	6	16.00	4	1	12	16.00	4	2	12	12.00	7	4	6	12.00	110	0	4	4.91	473

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 = 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 12'-0"
CLEAR HEIGHTS 10'-0" THRU 12'-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-17-58

DGN: d:\2010\stdbooks\tables\1-6-10\Official Culvert Files 1-6-10\12' Span\STD-17-56¢57¢58_1BARREL_BOX12'.DGN
DATE/TIME: 01/26/2010 07:26