3 @ 16 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	11.5	11	8	8	50.67	7	2	6	50.17	7	2	6	50.17	7	1	12	51.17	8	1	12	51.17	4	2	12	6.00	5	2	12	6.00	4	4	12	6.00	200	48	8	4.15	978
	3	15	15	8	8	50.67	7	2	6	50.17	7	2	6	50.17	5	2	6	51.17	6	2	6	51.17	4	2	12	6.00	5	2	12	6.00	4	4	12	6.00	200	48	8	5.33	998
	5	15	15	8	8	50.67	8	2	6	50.17	7	2	6	50.17	6	2	6	51.17	7	2	6	51.17	4	2	12	6.00	5	2	12	6.00	4	4	12	6.00	250	0	8	5.33	1146
	10	18	18	8	8	50.67	7	2	6	50.17	7	2	6	50.17	6	2	6	51.17	7	2	6	51.17	4	2	12	6.00	5	2	12	6.00	4	4	12	6.00	250	0	8	6.28	1083
Moment Break	20	19	19	8	8	50.67	4	3	12	16.66	10	2	6	50.17	10	2	6	51.17	4	3	12	16.66	4	2	12	6.00	5	2	12	6.00	5	4	12	6.00	250	0	8	6.59	1258
	30	26	26	8	8	50.67	4	3	12	16.66	9	2	6	50.17	9	2	6	51.17	4	3	12	16.66	4	2	12	6.00	5	2	12	6.00	4	8	6	6.00	250	0	8	8.80	1082
	40	32	32	9	8	50.83	4	3	12	16.66	9	2	6	50.33	9	2	6	51.33	4	3	12	16.66	4	2	12	6.00	5	2	12	6.00	5	8	6	6.00	250	0	8	10.77	1103
	50	37	37	10	8	51.00	4	3	12	16.66	10	2	6	50.50	10	2	6	51.50	4	3	12	16.66	4	2	12	6.00	5	2	12	6.00	6	8	6	6.00	254	0	8	12.43	1314
	60	41	42	11	8	51.17	4	3	12	16.66	10	2	6	50.67	10	2	6	51.67	4	3	12	16.66	4	2	12	6.00	5	2	12	6.00	6	8	6	6.00	254	0	8	13.94	1317

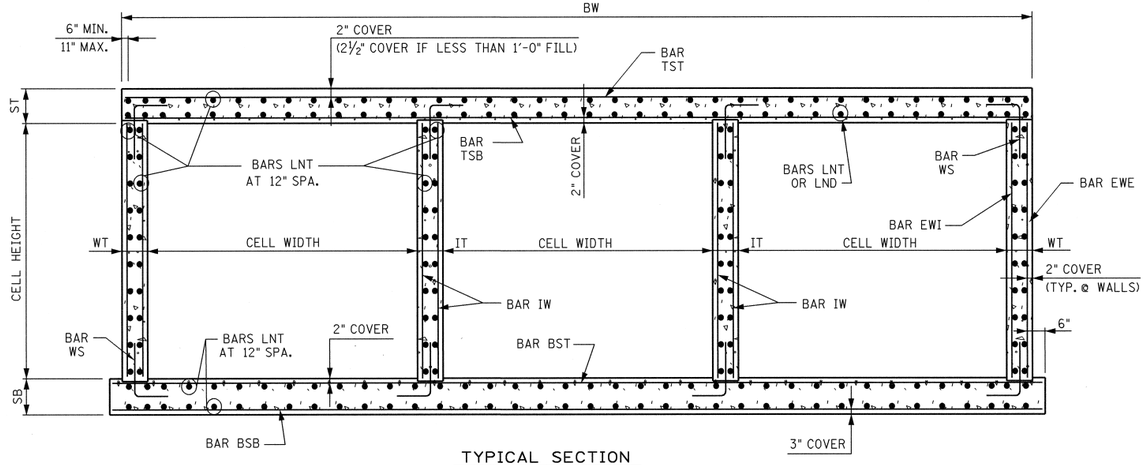
3 @ 16 x 7 REINFORCED CONCRETE BOX BRIDGE

	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	11.5	11	8	8	50.67	7	2	6	50.17	7	2	6	50.17	7	1	12	51.17	6	2	6	51.17	4	2	12	7.00	5	2	12	7.00	4	4	12	7.00	208	48	8	4.24	1007
	3	15	15	8	8	50.67	7	2	6	50.17	7	2	6	50.17	8	1	12	51.17	6	2	6	51.17	4	2	12	7.00	5	2	12	7.00	4	4	12	7.00	208	48	8	5.43	1039
	5	15	15	8	8	50.67	8	2	6	50.17	7	2	6	50.17	6	2	6	51.17	7	2	6	51.17	4	2	12	7.00	5	2	12	7.00	4	4	12	7.00	258	0	8	5.43	1158
	10	18	18	8	8	50.67	7	2	6	50.17	7	2	6	50.17	9	1	12	51.17	7	2	6	51.17	4	2	12	7.00	6	2	12	7.00	4	4	12	7.00	258	0	8	6.38	1122
Moment Break	20	19	19	8	8	50.67	4	3	12	16.66	10	2	6	50.17	10	2	6	51.17	4	3	12	16.66	4	2	12	7.00	6	2	12	7.00	5	4	12	7.00	258	0	8	6.69	1278
	30	26	26	9	8	50.83	4	3	12	16.66	9	2	6	50.33	9	2	6	51.33	4	3	12	16.66	4	2	12	7.00	6	2	12	7.00	4	8	6	7.00	258	0	8	8.97	1105
	40	32	32	10	8	51.00	4	3	12	16.66	9	2	6	50.50	9	2	6	51.50	4	3	12	16.66	4	2	12	7.00	5	2	12	7.00	7	4	12	7.00	262	0	8	10.95	1123
	50	37	37	11	8	51.17	4	3	12	16.66	10	2	6	50.67	10	2	6	51.67	4	3	12	16.66	4	2	12	7.00	5	2	12	7.00	6	8	6	7.00	262	0	8	12.62	1337
	60	41	42	12	8	51.33	4	3	12	16.66	10	2	6	50.83	10	2	6	51.83	4	3	12	16.66	4	2	12	7.00	5	2	12	7.00	6	8	6	7.00	262	0	8	14.14	1340

3 @ 16 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	11.5	11	8	8	50.67	7	2	6	50.17	7	2	6	50.17	7	1	12	51.17	6	2	6	51.17	4	2	12	8.00	5	2	12	8.00	4	4	12	8.00	216	48	8	4.34	1018
	3	15	15	8	8	50.67	7	2	6	50.17	7	2	6	50.17	8	1	12	51.17	6	2	6	51.17	4	2	12	8.00	5	2	12	8.00	4	4	12	8.00	216	48	8	5.53	1050
	5	15	15	8	8	50.67	8	2	6	50.17	7	2	6	50.17	6	2	6	51.17	7	2	6	51.17	4	2	12	8.00	6	2	12	8.00	4	4	12	8.00	266	0	8	5.53	1176
	10	18	18	8	8	50.67	7	2	6	50.17	7	2	6	50.17	9	1	12	51.17	7	2	6	51.17	4	2	12	8.00	5	4	6	8.00	4	4	12	8.00	266	0	8	6.48	1143
Moment Break	20	19	19	9	8	50.83	4	3	12	16.66	10	2	6	50.33	10	2	6	51.33	4	3	12	16.66	4	2	12	8.00	5	4	6	8.00	5	4	12	8.00	266	0	8	6.86	1304
	30	26	26	10	8	51.00	4	3	12	16.66	9	2	6	50.50	9	2	6	51.50	4	3	12	16.66	4	2	12	8.00	6	4	6	8.00	4	8	6	8.00	270	0	8	9.15	1149
	40	32	33	12	8	51.33	4	3	12	16.66	9	2	6	50.83	9	2	6	51.83	4	3	12	16.66	4	2	12	8.00	6	2	12	8.00	7	4	12	8.00	270	0	8	11.39	1152
	50	37	38	13	8	51.50	4	3	12	16.66	10	2	6	51.00	10	2	6	52.00	4	3	12	16.66	4	2	12	8.00	6	2	12	8.00	8	4	12	8.00	270	0	8	13.08	1361
	60	41	42	14	8	51.67	4	3	12	16.66	10	2	6	51.17	10	2	6	52.17	4	3	12	16.66	4	2	12	8.00	5	2	12	8.00	6	8	6	8.00	270	0	8	14.45	1367

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 = 12 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: 3 BARRELS AT 16'-0"
CLEAR HEIGHTS 6'-0" THRU 8'-0"
0' THRU 60' FILL
2010

CORRECT Edward P. Wasserman
ENGINEER OF STRUCTURES

CONST. NO.

PROJECT NO.	YEAR	SHEET NO.
	2010	

REVISIONS

NO.	DATE	BY	BRIEF DESCRIPTION

STD-17-102

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

Bold drive:\STDdoses\Tables\17-10\Offfold Culvert Files 17-10\16' Span\STD-17-102¢103¢104_3barrel_box16'.dgn
07-29-2010