3 @ 12 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.
Continuous	No Fill	11.5	11	8	8	38.67	7	2	6	38.17	7	2	6	38.17	6	1	12	39.17	5	2	6	39.17
Continuous	3	14	14	8	8	38.67	9	1	12	38.17	6	2	6	38.17	7	1	12	39.17	8	1	12	39.17
Continuous	5	13	13	8	8	38.67	7	2	6	38.17	6	2	6	38.17	8	1	12	39.17	6	2	6	39.17
Continuous	10	15	15	8	8	38.67	7	2	6	38.17	6	2	6	38.17	5	2	6	39.17	6	2	6	39.17
Moment Break	20	16	16	8	8	38.67	4	3	12	12.67	9	2	6	38.17	11	1	12	39.17	4	3	12	12.67
Moment Break	30	21	21	9	8	38.83	4	3	12	12.67	8	2	6	38.33	11	1	12	39.33	4	3	12	12.67
Moment Break	40	26	26	11	8	39.17	4	3	12	12.67	8	2	6	38.67	11	1	12	39.67	4	3	12	12.67
Moment Break	50	31	31	12	8	39.33	4	3	12	12.67	8	2	6	38.83	11	1	12	39.83	4	3	12	12.67
Moment Break	60	34	34	13	8	39.50	4	3	12	12.67	9	2	6	39.00	9	2	6	40.00	4	3	12	12.67

	Maximum Fill Height 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	4	2	12	7.00	5	2	12	7.00	4	4	12	7.00	176	72	8	3.41	768
Continuous	3	4	2	12	7.00	5	2	12	7.00	4	4	12	7.00	176	72	8	4.08	744
Continuous	5	4	2	12	7.00	5	2	12	7.00	4	4	12	7.00	214	0	8	3.83	785
Continuous	10	4	2	12	7.00	6	2	12	7.00	4	4	12	7.00	214	0	8	4.32	769
Moment Break	20	4	2	12	7.00	5	4	6	7.00	4	4	12	7.00	214	0	8	4.56	825
Moment Break	30	4	2	12	7.00	5	4	6	7.00	5	4	12	7.00	214	0	8	5.83	782
Moment Break	40	4	2	12	7.00	6	2	12	7.00	5	4	12	7.00	218	0	8	7.19	780
Moment Break	50	4	2	12	7.00	6	2	12	7.00	4	8	6	7.00	218	0	8	8.49	790
Moment Break	60	4	2	12	7.00	5	2	12	7.00	7	4	12	7.00	218	0	8	9.30	922

3 @ 12 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.
Continuous	No Fill	11.5	11	8	8	38.67	7	2	6	38.17	7	2	6	38.17	6	1	12	39.17	5	2	6	39.17
Continuous	3	14	14	8	8	38.67	9	1	12	38.17	6	2	6	38.17	7	1	12	39.17	8	1	12	39.17
Continuous	5	13	13	8	8	38.67	7	2	6	38.17	6	2	6	38.17	8	1	12	39.17	9	1	12	39.17
Continuous	10	15	15	8	8	38.67	7	2	6	38.17	6	2	6	38.17	5	2	6	39.17	6	2	6	39.17
Moment Break	20	16	16	9	8	38.83	4	3	12	12.67	9	2	6	38.33	11	1	12	39.33	4	3	12	12.67
Moment Break	30	21	21	10	8	39.00	4	3	12	12.67	8	2	6	38.50	11	1	12	39.50	4	3	12	12.67
Moment Break	40	26	26	12	8	39.33	4	3	12	12.67	8	2	6	38.83	11	1	12	39.83	4	3	12	12.67
Moment Break	50	31	31	13	8	39.50	4	3	12	12.67	8	2	6	39.00	11	1	12	40.00	4	3	12	12.67
Moment Break	60	34	34	14	8	39.67	4	3	12	12.67	9	2	6	39.17	9	2	6	40.17	4	3	12	12.67

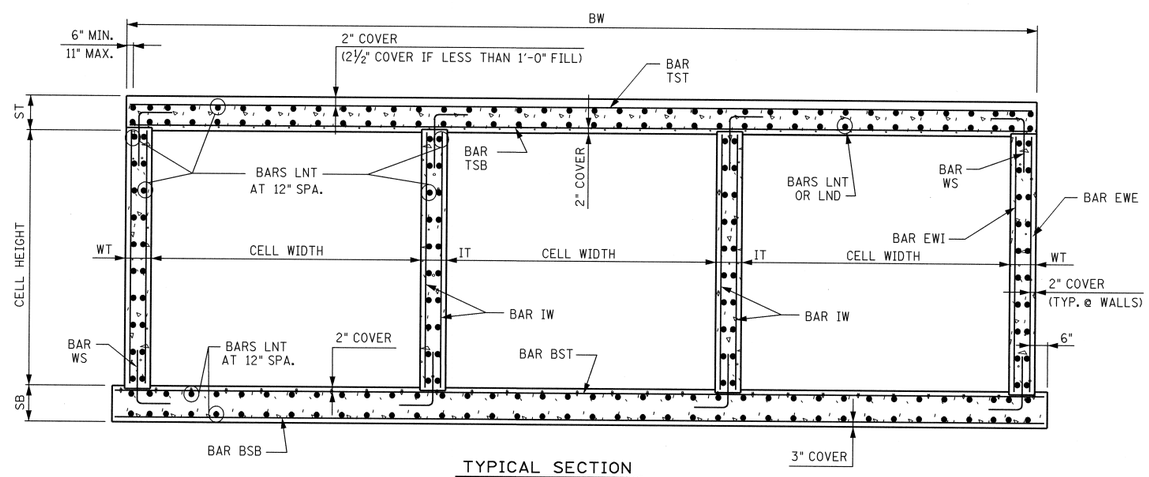
	Maximum Fill Height ft.	Bars EWE Size	No.	Spacing in.	Length ft.	Bars EWI Size	No.	Spacing in.	Length ft.	Bars IW Size	No.	Spacing in.	Length ft.	Bars LNT No.	Bars LND No.	Bars WS No.	Concrete CY/LF	Reinf. Steel LB/LF
Continuous	No Fill	4	2	12	8.00	5	2	12	8.00	4	4	12	8.00	184	72	8	3.51	779
Continuous	3	4	2	12	8.00	5	2	12	8.00	4	4	12	8.00	184	72	8	4.17	756
Continuous	5	4	2	12	8.00	6	2	12	8.00	4	4	12	8.00	222	0	8	3.93	820
Continuous	10	4	2	12	8.00	5	4	6	8.00	4	4	12	8.00	222	0	8	4.42	791
Moment Break	20	4	2	12	8.00	6	4	6	8.00	4	4	12	8.00	222	0	8	4.72	856
Moment Break	30	4	2	12	8.00	6	4	6	8.00	5	4	12	8.00	226	0	8	6.01	816
Moment Break	40	4	2	12	8.00	7	2	12	8.00	5	4	12	8.00	226	0	8	7.38	804
Moment Break	50	4	2	12	8.00	6	4	6	8.00	4	8	6	8.00	226	0	8	8.69	831
Moment Break	60	4	2	12	8.00	5	4	6	8.00	7	4	12	8.00	226	0	8	9.52	957

3 @12 x 9 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.
Continuous	No Fill	11.5	11	8	8	38.67	7	2	6	38.17	7	2	6	38.17	6	1	12	39.17	5	2	6	39.17
Continuous	3	14	14	8	8	38.67	9	1	12	38.17	6	2	6	38.17	7	1	12	39.17	8	1	12	39.17
Continuous	5	13	13	8	8	38.67	7	2	6	38.17	6	2	6	38.17	8	1	12	39.17	9	1	12	39.17
Continuous	10	15	15	8	8	38.67	7	2	6	38.17	6	2	6	38.17	8	1	12	39.17	6	2	6	39.17
Moment Break	20	16	16	10	8	39.00	4	3	12	12.66	9	2	6	38.50	8	2	6	39.50	4	3	12	12.66
Moment Break	30	21	21	11	8	39.17	4	3	12	12.66	8	2	6	38.67	11	1	12	39.67	4	3	12	12.66
Moment Break	40	26	26	13	8	39.50	4	3	12	12.66	8	2	6	39.00	11	1	12	40.00	4	3	12	12.66
Moment Break	50	31	31	15	8	39.83	4	3	12	12.66	8	2	6	39.33	8	2	6	40.33	4	3	12	12.66
Moment Break	60	34	34	16	8	40.00	4	3	12	12.66	9	2	6	39.50	9	2	6	40.50	4	3	12	12.66

	Maximum Fill Height 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	4	2	12	9.00	5	2	12	9.00	4	4	12	9.00	188	72	8	3.61	788
Continuous	3	4	2	12	9.00	6	2	12	9.00	4	4	12	9.00	188	72	8	4.27	773
Continuous	5	4	2	12	9.00	6	2	12	9.00	4	4	12	9.00	226	0	8	4.03	829
Continuous	10	4	2	12	9.00	6	4	6	9.00	4	4	12	9.00	226	0	8	4.52	841
Moment Break	20	4	2	12	9.00	6	4	6	9.00	4	4	12	9.00	230	0	8	4.90	874
Moment Break	30	4	2	12	9.00	7	4	6	9.00	5	4	12	9.00	230	0	8	6.20	852
Moment Break	40	4	2	12	9.00	6	4	6	9.00	5	4	12	9.00	230	0	8	7.59	836
Moment Break	50	4	2	12	9.00	6	4	6	9.00	4	8	6	9.00	230	0	8	9.00	851
Moment Break	60	4	2	12	9.00	6	4	6	9.00	7	4	12	9.00	234	0	8	9.83	998

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: 3 BARRELS AT 12'-0"
CLEAR HEIGHTS 7'-0" THRU 9'-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

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-17-97