CONST. NO. _____

PROJECT NO.	YEAR	SHEET NO.

REVISIONS

NO.	DATE	BY	BRIEF DESCRIPTION

2 @ 18 x 14 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.	Bar EWI Size	No.	Spacing in.	Length ft.	Bar 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	10	9	8	38.17	7	2	6	37.66	9	1	12	37.66	7	1	12	38.66	9	1	12	38.66	4	2	12	14.00	8	2	12	14.00	6	2	12	14.00	198	36	6	3.68	878
	3	12	12	9	8	38.17	11	1	12	37.66	7	2	6	37.66	5	2	6	38.66	7	2	6	38.66	4	2	12	14.00	9	2	12	14.00	6	2	12	14.00	198	36	6	3.98	998
	5	13	13	10	8	38.33	8	2	6	37.83	6	2	6	37.83	8	1	12	38.83	11	1	12	38.83	4	2	12	14.00	9	2	12	14.00	6	2	12	14.00	236	0	6	4.32	1019
	10	14	17	11	8	38.50	9	2	6	38.00	7	2	6	38.00	9	1	12	39.00	9	2	6	39.00	4	2	12	14.00	10	2	12	14.00	6	2	12	14.00	236	0	6	5.03	1230
Moment Break	20	18	21	14	8	39.00	4	2	12	18.66	11	2	6	38.50	10	2	6	39.50	4	2	12	18.66	4	2	12	14.00	7	4	6	14.00	6	2	12	14.00	240	0	6	6.31	1214
	30	28	30	17	8	39.50	4	2	12	18.66	10	2	6	39.00	10	2	6	40.00	4	2	12	18.66	4	2	12	14.00	7	4	6	14.00	6	2	12	14.00	240	0	6	8.97	1145
	40	35	37	19	8	39.83	4	2	12	18.66	10	2	6	39.33	10	2	6	40.33	4	2	12	18.66	4	2	12	14.00	9	2	12	14.00	7	2	12	14.00	240	0	6	10.95	1146
	50	40	43	22	8	40.33	4	2	12	18.66	10	2	6	39.83	10	2	6	40.83	4	2	12	18.66	4	2	12	14.00	9	2	12	14.00	8	2	12	14.00	244	0	6	12.71	1175
	60	45	47	24	8	40.67	4	2	12	18.66	10	2	6	40.16	10	2	6	41.16	4	2	12	18.66	4	2	12	14.00	6	4	6	14.00	9	2	12	14.00	244	0	6	14.11	1190

2 @ 18 x 15 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.	Bar EWI Size	No.	Spacing in.	Length ft.	Bar 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	10	9	8	38.17	7	2	6	37.66	9	1	12	37.66	7	1	12	38.66	9	1	12	38.66	4	2	12	15.00	9	2	12	15.00	7	2	12	15.00	204	36	6	3.76	929
	3	12	12	10	8	38.33	11	1	12	37.83	7	2	6	37.83	8	1	12	38.83	10	1	12	38.83	4	2	12	15.00	9	2	12	15.00	7	2	12	15.00	204	36	6	4.17	1063
	5	13	13	10	8	38.33	8	2	6	37.83	6	2	6	37.83	8	1	12	38.83	11	1	12	38.83	4	2	12	15.00	11	2	12	15.00	7	2	12	15.00	242	0	6	4.41	1108
	10	14	17	12	8	38.67	9	2	6	38.16	7	2	6	38.16	9	1	12	39.16	9	2	6	39.16	4	2	12	15.00	11	2	12	15.00	7	2	12	15.00	242	0	6	5.23	1297
Moment Break	20	18	22	15	8	39.17	4	2	12	18.66	11	2	6	38.66	10	2	6	39.66	4	2	12	18.66	4	2	12	15.00	10	2	12	15.00	7	2	12	15.00	246	0	6	6.66	1256
	30	28	30	18	8	39.67	4	2	12	18.66	10	2	6	39.16	10	2	6	40.16	4	2	12	18.66	4	2	12	15.00	7	4	6	15.00	7	2	12	15.00	246	0	6	9.23	1180
	40	35	37	21	8	40.17	4	2	12	18.66	10	2	6	39.66	10	2	6	40.66	4	2	12	18.66	4	2	12	15.00	7	4	6	15.00	7	2	12	15.00	250	0	6	11.35	1192
	50	40	43	23	8	40.50	4	2	12	18.66	10	2	6	40.00	10	2	6	41.00	4	2	12	18.66	4	2	12	15.00	7	4	6	15.00	8	2	12	15.00	250	0	6	13.00	1216
	60	45	47	26	8	41.00	4	2	12	18.66	10	2	6	40.50	10	2	6	41.50	4	2	12	18.66	4	2	12	15.00	9	2	12	15.00	9	2	12	15.00	254	0	6	14.56	1229

2 @ 18 x 16 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.	Bar EWI Size	No.	Spacing in.	Length ft.	Bar 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	10	10	8	38.33	7	2	6	37.83	9	1	12	37.83	7	1	12	38.83	7	2	6	38.83	4	2	12	16.00	9	2	12	16.00	8	2	12	16.00	210	36	6	3.95	995
	3	12	12	10	8	38.33	11	1	12	37.83	7	2	6	37.83	8	1	12	38.83	10	1	12	38.83	4	2	12	16.00	11	2	12	16.00	8	2	12	16.00	210	36	6	4.25	1161
	5	13	13	11	8	38.50	8	2	6	38.00	6	2	6	38.00	6	2	6	39.00	11	1	12	39.00	4	2	12	16.00	11	2	12	16.00	8	2	12	16.00	248	0	6	4.61	1164
	10	14	17	13	8	38.83	9	2	6	38.33	7	2	6	38.33	9	1	12	39.33	9	2	6	39.33	4	2	12	16.00	11	2	12	16.00	8	2	12	16.00	248	0	6	5.44	1341
Moment Break	20	18	22	16	8	39.33	4	2	12	18.66	11	2	6	38.83	10	2	6	39.83	4	2	12	18.66	4	2	12	16.00	11	2	12	16.00	8	2	12	16.00	252	0	6	6.89	1330
	30	28	31	19	8	39.83	4	2	12	18.66	10	2	6	39.33	10	2	6	40.33	4	2	12	18.66	4	2	12	16.00	10	2	12	16.00	8	2	12	16.00	252	0	6	9.62	1228
	40	35	37	22	8	40.33	4	2	12	18.66	10	2	6	39.83	10	2	6	40.83	4	2	12	18.66	4	2	12	16.00	7	4	6	16.00	8	2	12	16.00	256	0	6	11.64	1232
	50	40	43	25	8	40.83	4	2	12	18.66	10	2	6	40.33	10	2	6	41.33	4	2	12	18.66	4	2	12	16.00	7	4	6	16.00	8	2	12	16.00	256	0	6	13.45	1241
	60	45	48	27	8	41.17	4	2	12	18.66	10	2	6	40.66	10	2	6	41.66	4	2	12	18.66	4	2	12	16.00	7	4	6	16.00	9	2	12	16.00	260	0	6	15.02	1273

2 @ 18 x 17 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.	Bar EWI Size	No.	Spacing in.	Length ft.	Bar 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	10	10	8	38.33	7	2	6	37.83	9	1	12	37.83	7	1	12	38.83	7	2	6	38.83	4	2	12	17.00	11	2	12	17.00	6	4	6	17.00	216	36	6	4.04	1088
	3	12	12	11	8	38.50	11	1	12	38.00	7	2	6	38.00	8	1	12	39.00	10	1	12	39.00	4	2	12	17.00	11	2	12	17.00	6	4	6	17.00	216	36	6	4.46	1196
	5	13	13	12	8	38.67	8	2	6	38.16	6	2	6	38.16	6	2	6	39.16	9	2	6	39.16	4	2	12	17.00	11	2	12	17.00	6	4	6	17.00	254	0	6	4.82	1257
	10	14	18	14	8	39.00	9	2	6	38.50	7	2	6	38.50	6	2	6	39.50	9	2	6	39.50	4	2	12	17.00	11	2	12	17.00	6	4	6	17.00	258	0	6	5.79	1364
Moment Break	20	18	22	17	8	39.50	4	2	12	18.66	11	2	6	39.00	10	2	6	40.00	4	2	12	18.66	4	2	12	17.00	11	2	12	17.00	6	4	6	17.00	258	0	6	7.14	1366
	30	28	31	21	8	40.17	4	2	12	18.66	10	2	6	39.66	10	2	6	40.66	4	2	12	18.66	4	2	12	17.00	10	2	12	17.00	6	4	6	17.00	262	0	6	10.03	1267
	40	35	38	24	8	40.67	4	2	12	18.66	10	2	6	40.16	10	2	6	41.16	4	2	12	18.66	4	2	12	17.00	10	2	12	17.00	6	4	6	17.00	262	0	6	12.21	1275
	50	40	43	27	8	41.17	4	2	12	18.66	10	2	6	40.66	10	2	6	41.66	4	2	12	18.66	4	2	12	17.00	10	2	12	17.00	6	4	6	17.00	266	0	6	13.93	1237
	60	45	48	29	8	41.50	4	2	12	18.66	10	2	6	41.00	10	2	6	42.00	4	2	12	18.66	4	2	12	17.00	11	2	12	17.00	9	2	12	17.00	266	0	6	15.52	1341

2 @ 18 x 18 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.	Bar EWI Size	No.	Spacing in.	Length ft.	Bar 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	10	11	9	38.58	7	2	6	38.08	9	1	12	38.08	7	1	12	39.08	7	2	6	39.08	4	2	12	18.00	11	2	12	18.00	6	4	6	18.00	222	36	6	4.31	1114
	3	12	12	12	9	38.75	11	1	12	38.25	7	2	6	38.25	8	1	12	39.25	11	1	12	39.25	4	2	12	18.00	11	2	12	18.00	6	4	6	18.00	222	36	6	4.74	1262
	5	13	13	12	9	38.75	8	2	6	38.25	6	2	6	38.25	6	2	6	39.25	9	2	6	39.25	4	2	12	18.00	9	4	6	18.00	6	4	6	18.00	260	0	6	4.98	1335
	10	14	18	15	9	39.25	9	2	6	38.75	7	2	6	38.75	6	2	6	39.75	9	2	6	39.75	4	2	12	18.00	11	2	12	18.00	6	4	6	18.00	264	0	6	6.09	1391
Moment Break	20	18	22	18	9	39.75	4	2	12	18.75	11	2	6	39.25	10	2	6	40.25	4	2	12	18.75	4	2	12	18.00	9	4	6	18.00	6	4	6	18.00	264	0	6	7.47	1446
	30	28	31	22	9	40.42	4	2	12	18.75	10	2	6	39.91	10	2	6	40.91	4	2	12	18.75	4	2	12	18.00	11	2	12	18.00	6	4	6	18.00	268	0	6	10.39	1328
	40	35	38	25	9	40.92	4	2	12	18.75	10	2	6	40.41	10	2	6	41.41	4	2	12	18.75	4	2	12	18.00	11	2	12	18.00	6	4	6	18.00	268	0	6	12.61	1336
	50	40	43	28	9	41.42	4	2	12	18.75	10	2	6	40.91	10	2	6	41.91	4	2	12	18.75	4	2	12	18.00	11	2	12	18.00	6	4	6	18.00	272	0	6	14.35	1348
	60	45	48	31	9	41.92	4	2	12	18.75	10	2	6	41.41	10	2	6	42.41	4	2	12	18.75	4	2	12	18.00	11	2	12	18.00	6	4	6	18.00	272	0	6	16.12	1357

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 = 5 Spacing = 12 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: 2 BARRELS AT 18'-0"
CLEAR HEIGHTS 14'-0" THRU 18'-0"
0' THRU 60' FILL
2000

CORRECT Edward P. Wasserman
ENGINEER OF STRUCTURES

STD-15-70

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

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