STD-142&143&144_2BARREL_SLAB16'.DGN

2 @ 16 x 13 REINFORCED CONCRETE SLAB BRIDGE

	Fill Height ft.	Dimensions				Bars TST				Bars TSB				Bars EWE				Bars EWI				Bars IW				Bars LNT	Bars LND	Bars WS	Bars WF	Bars EWF	Bars IWF	Concrete CY/LF	Reinf. Steel LB/LF
		ST in.	WT in.	IT in.	BW ft.	Size	No.	Spacing in.	Length ft.	Size	No.	Spacing in.	Length ft.	Size	No.	Spacing in.	Length ft.	Size	No.	Spacing in.	Length ft.	Size	No.	Spacing in.	Length ft.	No.	No.	No.	No.	Length ft.	Length ft.		
Continuous	No Fill	11.5	8	8	34.00	10	1	12	33.50	8	2	6	33.50	4	2	12	11.50	5	4	6	11.50	5	2	12	11.50	109	64	3	3	1.67	1.67	2.42	617
	3	14	8	8	34.00	7	2	6	33.50	7	2	6	33.50	4	2	12	11.50	6	4	6	11.50	5	2	12	11.50	109	64	3	3	1.67	1.67	2.68	589
	5	15	8	8	34.00	11	1	12	33.50	6	2	6	33.50	4	2	12	11.50	7	4	6	11.50	5	2	12	11.50	143	0	3	3	1.67	1.67	2.79	599
	10	18	9	8	34.17	9	2	6	33.67	6	2	6	33.67	4	2	12	11.50	8	4	6	11.50	5	2	12	11.50	143	0	3	3	1.75	1.67	3.19	679
Moment Break	20	19	12	8	34.67	4	2	12	16.66	10	2	6	34.17	4	2	12	11.50	7	4	6	11.50	5	2	12	11.50	143	0	3	3	2.00	1.67	3.57	637
	30	26	14	8	35.00	4	2	12	16.66	9	2	6	34.50	4	2	12	11.50	7	4	6	11.50	4	4	6	11.50	145	0	3	3	2.17	1.67	4.50	586
	40	32	16	8	35.33	4	2	12	16.66	9	2	6	34.83	4	2	12	11.50	7	4	6	11.50	7	2	12	11.50	145	0	3	3	2.33	1.67	5.34	605
	50	37	18	8	35.67	4	2	12	16.66	10	2	6	35.17	4	2	12	11.50	7	4	6	11.50	6	4	6	11.50	145	0	3	3	2.50	1.67	6.09	693
	60	41	20	9	36.08	4	2	12	16.66	10	2	6	35.58	4	2	12	11.50	7	4	6	11.50	5	4	6	11.50	147	0	3	3	2.67	1.75	6.78	677

2 @ 16 x 14 REINFORCED CONCRETE SLAB BRIDGE

	Fill Height ft.	Dimensions				Bars TST				Bars TSB				Bars EWE				Bars EWI				Bars IW				Bars LNT	Bars LND	Bars WS	Bars WF	Bars EWF	Bars IWF	Concrete CY/LF	Reinf. Steel LB/LF
		ST in.	WT in.	IT in.	BW ft.	Size	No.	Spacing in.	Length ft.	Size	No.	Spacing in.	Length ft.	Size	No.	Spacing in.	Length ft.	Size	No.	Spacing in.	Length ft.	Size	No.	Spacing in.	Length ft.	No.	No.	No.	No.	Length ft.	Length ft.		
Continuous	No Fill	11.5	8	8	34.00	10	1	12	33.50	8	2	6	33.50	4	2	12	12.50	6	4	6	12.50	5	2	12	12.50	115	64	3	3	1.67	1.67	2.49	652
	3	14	8	8	34.00	7	2	6	33.50	7	2	6	33.50	4	2	12	12.50	7	4	6	12.50	5	2	12	12.50	115	64	3	3	1.67	1.67	2.76	630
	5	15	9	8	34.17	11	1	12	33.67	6	2	6	33.67	4	2	12	12.50	7	4	6	12.50	5	2	12	12.50	149	0	3	3	1.75	1.67	2.96	616
	10	18	10	8	34.33	9	2	6	33.83	6	2	6	33.83	4	2	12	12.50	8	4	6	12.50	5	2	12	12.50	149	0	3	3	1.83	1.67	3.37	699
Moment Break	20	19	13	8	34.83	4	2	12	16.66	10	2	6	34.33	4	2	12	12.50	7	4	6	12.50	5	2	12	12.50	149	0	3	3	2.08	1.67	3.76	654
	30	26	15	8	35.17	4	2	12	16.66	9	2	6	34.67	4	2	12	12.50	7	4	6	12.50	4	4	6	12.50	151	0	3	3	2.25	1.67	4.71	603
	40	32	18	8	35.67	4	2	12	16.66	9	2	6	35.17	4	2	12	12.50	7	4	6	12.50	7	2	12	12.50	151	0	3	3	2.50	1.67	5.67	625
	50	37	20	9	36.08	4	2	12	16.66	10	2	6	35.58	4	2	12	12.50	7	4	6	12.50	5	4	6	12.50	153	0	3	3	2.67	1.75	6.49	695
	60	41	21	9	36.25	4	2	12	16.66	10	2	6	35.75	4	2	12	12.50	7	4	6	12.50	5	4	6	12.50	153	0	3	3	2.75	1.75	7.04	696

2 @ 16 x 15 REINFORCED CONCRETE SLAB BRIDGE

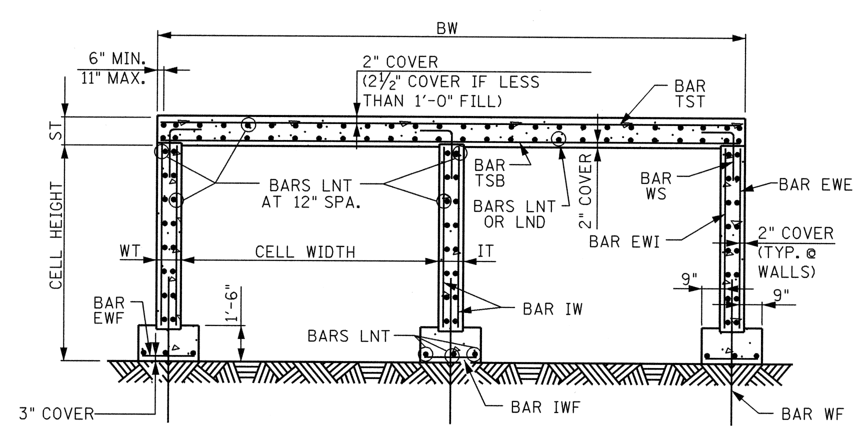
	Fill Height ft.	Dimensions				Bars TST				Bars TSB				Bars EWE				Bars EWI				Bars IW				Bars LNT	Bars LND	Bars WS	Bars WF	Bars EWF	Bars IWF	Concrete CY/LF	Reinf. Steel LB/LF
		ST in.	WT in.	IT in.	BW ft.	Size	No.	Spacing in.	Length ft.	Size	No.	Spacing in.	Length ft.	Size	No.	Spacing in.	Length ft.	Size	No.	Spacing in.	Length ft.	Size	No.	Spacing in.	Length ft.	No.	No.	No.	No.	Length ft.	Length ft.		
Continuous	No Fill	11.5	8	8	34.00	10	1	12	33.50	8	2	6	33.50	4	2	12	13.50	7	4	6	13.50	4	4	6	13.50	121	64	3	3	1.67	1.67	2.57	703
	3	14	9	8	34.17	7	2	6	33.67	7	2	6	33.67	4	2	12	13.50	7	4	6	13.50	4	4	6	13.50	121	64	3	3	1.75	1.67	2.93	655
	5	15	9	8	34.17	11	1	12	33.67	6	2	6	33.67	4	2	12	13.50	8	4	6	13.50	4	4	6	13.50	155	0	3	3	1.75	1.67	3.04	673
	10	18	11	8	34.50	9	2	6	34.00	6	2	6	34.00	4	2	12	13.50	8	4	6	13.50	4	4	6	13.50	155	0	3	3	1.92	1.67	3.56	727
Moment Break	20	19	14	8	35.00	4	2	12	16.66	10	2	6	34.50	4	2	12	13.50	8	4	6	13.50	4	4	6	13.50	157	0	3	3	2.17	1.67	3.97	714
	30	26	16	8	35.33	4	2	12	16.66	9	2	6	34.83	4	2	12	13.50	8	4	6	13.50	4	4	6	13.50	157	0	3	3	2.33	1.67	4.94	655
	40	32	19	9	35.92	4	2	12	16.66	9	2	6	35.42	4	2	12	13.50	8	4	6	13.50	6	2	12	13.50	157	0	3	3	2.58	1.75	5.97	663
	50	37	21	9	36.25	4	2	12	16.66	10	2	6	35.75	4	2	12	13.50	8	4	6	13.50	5	4	6	13.50	159	0	3	3	2.75	1.75	6.75	748
	60	41	23	10	36.67	4	2	12	16.66	10	2	6	36.17	4	2	12	13.50	7	4	6	13.50	5	4	6	13.50	159	0	3	3	2.92	1.83	7.48	718

2 @ 16 x 16 REINFORCED CONCRETE SLAB BRIDGE

	Fill Height ft.	Dimensions				Bars TST				Bars TSB				Bars EWE				Bars EWI				Bars IW				Bars LNT	Bars LND	Bars WS	Bars WF	Bars EWF	Bars IWF	Concrete CY/LF	Reinf. Steel LB/LF
		ST in.	WT in.	IT in.	BW ft.	Size	No.	Spacing in.	Length ft.	Size	No.	Spacing in.	Length ft.	Size	No.	Spacing in.	Length ft.	Size	No.	Spacing in.	Length ft.	Size	No.	Spacing in.	Length ft.	No.	No.	No.	No.	Length ft.	Length ft.		
Continuous	No Fill	11.5	9	8	34.17	10	1	12	33.67	8	2	6	33.67	4	2	12	14.50	7	4	6	14.50	7	2	12	14.50	127	64	3	3	1.75	1.67	2.75	741
	3	14	9	8	34.17	7	2	6	33.67	7	2	6	33.67	4	2	12	14.50	8	4	6	14.50	7	2	12	14.50	127	64	3	3	1.75	1.67	3.01	728
	5	15	10	8	34.33	11	1	12	33.83	6	2	6	33.83	4	2	12	14.50	8	4	6	14.50	7	2	12	14.50	161	0	3	3	1.83	1.67	3.22	714
	10	18	12	8	34.67	9	2	6	34.17	6	2	6	34.17	4	2	12	14.50	8	4	6	14.50	7	2	12	14.50	161	0	3	3	2.00	1.67	3.76	768
Moment Break	20	19	15	8	35.17	4	2	12	16.66	10	2	6	34.67	4	2	12	14.50	8	4	6	14.50	7	2	12	14.50	163	0	3	3	2.25	1.67	4.19	755
	30	26	18	8	35.67	4	2	12	16.66	9	2	6	35.17	4	2	12	14.50	8	4	6	14.50	7	2	12	14.50	163	0	3	3	2.50	1.67	5.28	696
	40	32	20	9	36.08	4	2	12	16.66	9	2	6	35.58	4	2	12	14.50	8	4	6	14.50	6	2	12	14.50	165	0	3	3	2.67	1.75	6.23	685
	50	37	23	10	36.67	4	2	12	16.66	10	2	6	36.17	4	2	12	14.50	8	4	6	14.50	5	4	6	14.50	165	0	3	3	2.92	1.83	7.20	772
	60	41	25	10	37.00	4	2	12	16.66	10	2	6	36.50	4	2	12	14.50	8	4	6	14.50	5	4	6	14.50	165	0	3	3	3.08	1.83	7.90	775

Note: Maximum fill height 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.
Bars WF Size = 8 Length = 6.00 ft. Spacing = 12 in.
Bars IWF Size = 4 No. = 1 Spacing = 12 in.
Bars EWF Size = 4 No. = 2 Spacing = 12 in.



TYPICAL SECTION

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

REVISIONS

NO.	DATE	BY	BRIEF DESCRIPTION

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 SLAB BRIDGE
INTERIOR SECTION
SPANS: 2 BARRELS AT 16'-0"
CLEAR HEIGHTS 13'-0" THRU 16'-0"
0' THRU 60' FILL
2010

CORRECT Edward P. Wasserman
ENGINEER OF STRUCTURES

STD-17-144

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

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