

2016 ROAD & BRIDGE STANDARDS

FOR TYPICAL SECTION, NOTES AND OTHER DETAILS, REFER TO STANDARD BCT-DT.

BCT-50

SPAN		HIGHT		REINFORCING STEEL											QUAN./LF		HEADWALLS											
(FT.)	(FT.)	SIZE	SPACING C-C	BT1								NO. B1 #4 BARS	NO. B12 #3 BARS	REINFORCING STEEL (LBS/LONG. JT)	CONCRETE CLASS A4 (CY/LF)	REINFORCING STEEL (LBS/LF)	G			HW1		NO. HW2 BARS	NO. HW3 BARS	INLET CONCRETE CL. A4 (CY)	INLET REINFORCING STEEL (LBS)	OUTLET CONCRETE CL. A4 (CY)	OUTLET REINFORCING STEEL (LBS)	WINGWALL
				a	b	c	d	e	f	g	LENGTH						HEADWALL LENGTH	SIZE	LENGTH									
3	3	4	12"	2'-6"	0'- 5"	1'-10"	0'- 6 5/8"	0'- 4 1/4"	11'-3"	1'-1"	11'-10"	44	16	42.388	1.061	109.676	13'- 2"	6	12'-10"	2	8	1.811	102.932	1.791	77.103	A		
3	4	4	12"	2'-6"	0'- 5"	1'-10"	0'- 6 5/8"	0'- 4 1/4"	11'-3"	1'-1"	11'-10"	44	24	45.212	1.159	118.028	13'- 2"	6	12'-10"	2	10	1.916	109.835	1.884	77.103	C		
4	3	4	12"	3'-2"	0'- 7"	2'-3"	0'- 9 3/8"	0'- 6 1/4"	14'-3"	1'-4"	15'-2"	56	16	52.408	1.407	131.864	16'- 2"	6	15'-10"	2	8	2.072	120.956	2.063	95.127	B		
4	4	4	12"	3'-1"	0'- 7 1/4"	2'-3"	0'- 9 3/4"	0'- 6 1/2"	14'-3"	1'-3"	15'-2"	56	24	55.232	1.528	140.485	16'- 2"	6	15'-10"	2	10	2.171	127.859	2.149	95.127	D		
4	5	4	12"	3'-2"	0'- 7"	2'-3"	0'- 9 3/8"	0'- 6 1/4"	14'-3"	1'-4"	15'-2"	56	32	58.056	1.603	153.443	16'- 2"	6	15'-10"	2	12	2.282	134.761	2.248	95.127	F		
4	6	4	12"	3'-1"	0'- 7 1/4"	2'-3"	0'- 9 3/4"	0'- 6 1/2"	14'-3"	1'-3"	15'-2"	56	40	60.880	1.722	183.256	16'- 2"	6	15'-10"	2	14	2.381	141.664	2.334	95.127	H		
5	3	4	9"	3'-9"	0'- 9 1/2"	2'-8"	1'- 1"	0'- 8 3/4"	17'-4"	1'-6"	18'-6"	68	16	62.428	1.879	182.405	19'- 2"	6	18'-10"	2	8	2.269	138.980	2.270	113.151	B		
5	4	4	9"	3'-9"	0'- 9 1/2"	2'-8"	1'- 1"	0'- 8 3/4"	17'-4"	1'-6"	18'-6"	68	24	65.252	1.978	191.202	19'- 2"	6	18'-10"	2	10	2.374	145.883	2.362	113.151	D		
5	5	4	9"	3'-9"	0'- 9 1/2"	2'-8"	1'- 1"	0'- 8 3/4"	17'-4"	1'-6"	18'-6"	68	32	68.076	2.075	205.187	19'- 2"	6	18'-10"	2	12	2.471	152.785	2.446	113.151	F		
5	6	4	9"	3'-9"	0'- 9 1/2"	2'-8"	1'- 1"	0'- 8 3/4"	17'-4"	1'-6"	18'-6"	68	40	70.900	2.173	219.080	19'- 2"	6	18'-10"	2	14	2.576	159.688	2.539	113.151	H		
5	7	4	10"	3'-9"	0'- 9 1/2"	2'-8"	1'- 1"	0'- 8 3/4"	17'-5"	1'-6"	18'-7"	68	48	73.724	2.299	238.475	19'- 2"	6	18'-10"	2	16	2.681	166.591	2.632	113.151	J		
6	4	4	9"	4'-4"	1'- 1/2"	3'-0"	1'- 5 1/8"	0'-11 3/4"	20'-4"	1'-8"	21'-11"	80	24	75.272	2.606	240.773	22'- 2"	6	21'-10"	2	10	2.526	163.907	2.524	131.175	E		
6	5	4	9"	4'-4"	1'- 0"	3'-0"	1'- 4 1/2"	0'-11 1/4"	20'-4"	1'-9"	21'-10"	80	32	78.096	2.640	254.688	22'- 2"	6	21'-10"	2	12	2.631	170.809	2.617	131.175	G		
6	6	4	9"	4'-4"	1'- 0"	3'-0"	1'- 4 1/2"	0'-11 1/4"	20'-4"	1'-9"	21'-10"	80	40	80.920	2.738	266.899	22'- 2"	6	21'-10"	2	14	2.758	177.712	2.732	131.175	I		
6	7	4	9"	4'-4"	1'- 0"	3'-0"	1'- 4 1/2"	0'-11 1/4"	20'-4"	1'-9"	21'-10"	80	48	83.744	2.834	299.565	22'- 2"	6	21'-10"	2	16	2.864	184.615	2.825	131.175	K		
6	8	4	9"	4'-6"	1'- 0"	3'-0"	1'- 4 1/2"	0'-11 1/4"	20'-7"	1'-9"	22'-1"	80	56	86.568	3.030	331.062	22'- 2"	6	21'-10"	2	18	2.969	191.517	2.917	131.175	M		
7	4	5	9"	4'-11"	1'- 2 1/2"	3'-5"	1'- 7 1/8"	1'- 1 5/8"	23'-4"	1'-11"	25'-2"	92	24	85.292	3.198	321.237	25'- 2"	6	24'-10"	2	10	2.649	181.931	2.657	149.199	E		
7	6	5	9"	4'-11"	1'- 2 1/2"	3'-5"	1'- 7 1/8"	1'- 1 5/8"	23'-4"	1'-11"	25'-2"	92	40	90.940	3.393	351.266	25'- 2"	6	24'-10"	2	14	2.859	195.736	2.842	149.199	I		
7	8	5	9"	5'-1"	1'- 2"	3'-5"	1'- 7 1/8"	1'- 1 1/8"	23'-7"	2'-0"	25'-4"	92	56	96.588	3.616	398.726	25'- 2"	6	24'-10"	2	18	3.069	209.541	3.028	149.199	M		
7	10	5	9"	5'-3"	1'- 2"	3'-5"	1'- 7 1/8"	1'- 1 1/8"	23'-11"	2'-0"	25'-8"	92	72	102.236	3.986	482.871	25'- 2"	6	24'-10"	2	22	3.140	223.347	3.073	149.199	Q		
8	4	6	9"	5'-7"	1'- 5"	3'-10"	1'-11 1/4"	1'- 4"	26'-4"	2'-2"	28'-6"	104	24	95.312	3.942	457.422	28'- 2"	6	27'-10"	2	10	2.703	199.955	2.721	167.223	E		
8	6	5	8"	5'-6"	1'- 5"	3'-10"	1'-11 3/8"	1'- 4 1/8"	26'-4"	2'-1"	28'-6"	104	40	100.960	4.142	421.090	28'- 2"	6	27'-10"	2	14	2.913	213.760	2.906	167.223	I		
8	8	5	8"	5'-7"	1'- 4 1/2"	3'-10"	1'-10 3/4"	1'- 3 5/8"	26'-5"	2'-2"	28'-6"	104	56	106.608	4.288	483.673	28'- 2"	6	27'-10"	2	18	3.123	227.565	3.092	167.223	M		
8	10	5	8"	5'-10"	1'- 4 1/2"	3'-10"	1'-10 3/4"	1'- 3 5/8"	26'-11"	2'-2"	29'-0"	104	72	112.256	4.735	546.994	28'- 2"	6	27'-10"	2	22	3.190	241.371	3.132	167.223	Q		
9	4	6	9"	6'-2"	1'- 7"	4'-3"	2'- 2 1/8"	1'- 6"	29'-4"	2'-5"	31'-9"	116	24	105.332	4.693	504.698	31'- 2"	6	30'-10"	2	10	2.765	217.979	2.793	185.247	F		
9	6	6	9"	6'-2"	1'- 7"	4'-3"	2'- 2 1/8"	1'- 6"	29'-4"	2'-5"	31'-9"	116	40	110.980	4.888	538.646	31'- 2"	6	30'-10"	2	14	2.975	231.784	2.978	185.247	J		
9	8	6	9"	6'-3"	1'- 7"	4'-3"	2'- 2 1/8"	1'- 6"	29'-5"	2'-5"	31'-10"	116	56	116.628	5.117	610.412	31'- 2"	6	30'-10"	2	18	3.185	245.589	3.164	185.247	N		
9	10	6	9"	6'-6"	1'- 7"	4'-3"	2'- 2 1/8"	1'- 6"	29'-11"	2'-5"	32'-4"	116	72	122.276	5.571	681.462	31'- 2"	6	30'-10"	2	22	3.249	259.395	3.201	185.247	R		
9	12	6	9"	6'-8"	1'- 7"	4'-3"	2'- 2 1/8"	1'- 6"	30'-4"	2'-5"	32'-9"	116	88	127.924	6.050	761.471	31'- 2"	6	30'-10"	2	26	3.317	273.200	3.243	185.247	V		
10	4	6	9"	6'-9"	1'-10"	4'-8"	2'- 6 3/8"	1'- 9"	32'-3"	2'-6"	35'-2"	128	24	115.352	5.720	556.431	34'- 2"	6	33'-10"	2	10	2.731	236.003	2.769	203.271	F		
10	6	6	9"	6'-9"	1'- 9 1/2"	4'-8"	2'- 5 5/8"	1'- 8 1/2"	32'-3"	2'-7"	35'-1"	128	40	121.000	5.814	592.755	34'- 2"	6	33'-10"	2	14	2.941	249.808	2.954	203.271	J		
10	8	6	9"	6'-9"	1'- 9 1/2"	4'-8"	2'- 5 5/8"	1'- 8 1/2"	32'-3"	2'-7"	35'-1"	128	56	126.648	6.006	662.601	34'- 2"	6	33'-10"	2	18	3.152	263.613	3.140	203.271	N		
10	10	6	9"	7'-0"	1'- 9 1/2"	4'-8"	2'- 5 5/8"	1'- 8 1/2"	32'-9"	2'-7"	35'-7"	128	72	132.296	6.463	725.436	34'- 2"	6	33'-10"	2	22	3.210	277.419	3.172	203.271	R		
10	12	6	9"	7'-3"	1'- 9 1/2"	4'-8"	2'- 5 5/8"	1'- 8 1/2"	33'-3"	2'-7"	36'-1"	128	88	137.944	6.992	804.999	34'- 2"	6	33'-10"	2	26	3.275	291.224	3.211	203.271	V		
12	6	7	9"	8'-0"	2'- 2 1/2"	5'-5"	3'- 5/8"	2'- 1 1/4"	38'-3"	3'-0"	41'-9"	152	40	141.040	7.932	855.425	40'- 2"	6	39'-10"	2	14	2.828	285.856	2.861	239.319	K		
12	8	7	9"	8'-0"	2'- 2 1/2"	5'-5"	3'- 5/8"	2'- 1 1/4"	38'-3"	3'-0"	41'-9"	152	56	146.688	8.124	919.861	40'- 2"	6	39'-10"	2	18	3.063	299.661	3.071	239.319	O		
12	10	7	8"	8'-1"	2'- 2 1/2"	5'-5"	3'- 5/8"	2'- 1 1/4"	38'-7"	3'-0"	42'-0"	152	72	152.336	8.471	1103.668	40'- 2"	6	39'-10"	2	22	3.089	313.467	3.071	239.319	S		
12	12	7	8"	8'-5"	2'- 2 1/2"	5'-5"	3'- 5/8"	2'- 1 1/4"	39'-1"	3'-0"	42'-7"	152	88	157.984	9.025	1194.524	40'- 2"	6	39'-10"	2	26	3.123	327.272	3.079	239.319	W		

A COPY OF THE ORIGINAL SEALED AND SIGNED DRAWING IS ON FILE IN THE CENTRAL OFFICE.

SPECIFICATION REFERENCE	<p>TRIPLE BOX CULVERTS 40 TO 50 FT. FILLS</p> <p>VIRGINIA DEPARTMENT OF TRANSPORTATION</p>		 ROAD AND BRIDGE STANDARDS	
			REVISION DATE	SHEET 2 OF 2
			07/11	1004.18

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