

SPAN		HGHT		REINFORCING STEEL											QUAN./LF		HEADWALLS						WINGWALL			
(FT.)	(FT.)	SIZE	SPACING C-C	a	b	c	d	e	f	g	LENGTH	NO. BL1 BARS	NO. BL2 BARS	REINFORCING STEEL (LBS/LONG. JT)	CONCRETE CLASS A4 (CY/LF)	REINFORCING STEEL (LBS/LF)	HEADWALL LENGTH	HW1 SIZE	HW1 LENGTH	NO. HW2 BARS	NO. HW3 BARS	INLET CONCRETE CL. A4 (CY)		INLET REINFORCING STEEL (LBS)	OUTLET CONCRETE CL. A4 (CY)	OUTLET REINFORCING STEEL (LBS)
3	3	4	12"	2'- 8 3/4"	0'- 4 3/4"	1'- 6 3/8"	0'- 6 1/4"	0'- 4"	11'- 3 3/8"	1'- 5 5/8"	11'- 11"	44	16	42.388	1.006	119.910	13'- 2"	6	12'- 10"	2	8	1.823	102.932	1.804	77.103	A
3	4	4	12"	2'- 8 3/4"	0'- 4 3/4"	1'- 6 3/8"	0'- 6 1/4"	0'- 4"	11'- 3 3/8"	1'- 5 5/8"	11'- 11"	44	24	45.212	1.105	128.262	13'- 2"	6	12'- 10"	2	10	1.928	109.835	1.896	77.103	C
4	3	4	12"	3'- 5 1/4"	0'- 7"	1'- 9"	0'- 9 3/8"	0'- 6 1/4"	14'- 4"	1'- 10 1/2"	15'- 2"	56	16	52.408	1.362	132.045	16'- 2"	6	15'- 10"	2	8	2.085	120.956	2.076	95.127	B
4	4	4	12"	3'- 5 1/4"	0'- 7"	1'- 9"	0'- 9 3/8"	0'- 6 1/4"	14'- 4"	1'- 10 1/2"	15'- 2"	56	24	55.232	1.460	140.397	16'- 2"	6	15'- 10"	2	10	2.190	127.859	2.168	95.127	D
4	5	4	12"	3'- 5 1/8"	0'- 7 1/4"	1'- 8 3/4"	0'- 9 3/4"	0'- 6 1/2"	14'- 4"	1'- 10 1/4"	15'- 3"	56	32	58.056	1.581	148.861	16'- 2"	6	15'- 10"	2	12	2.289	134.761	2.255	95.127	F
4	6	4	12"	3'- 5 1/8"	0'- 7 1/4"	1'- 8 3/4"	0'- 9 3/4"	0'- 6 1/2"	14'- 4"	1'- 10 1/4"	15'- 3"	56	40	60.880	1.678	169.692	16'- 2"	6	15'- 10"	2	14	2.394	141.664	2.347	95.127	H
5	3	4	10"	4'- 1 7/8"	0'- 9"	1'- 11 3/4"	1'- 1/4"	0'- 8 1/4"	17'- 4"	2'- 3 3/4"	18'- 6"	68	16	62.428	1.772	170.945	19'- 2"	6	18'- 10"	2	8	2.295	138.980	2.296	113.151	B
5	4	4	10"	4'- 1 7/8"	0'- 9"	1'- 11 3/4"	1'- 1/4"	0'- 8 1/4"	17'- 4"	2'- 3 3/4"	18'- 6"	68	24	65.252	1.870	179.564	19'- 2"	6	18'- 10"	2	10	2.401	145.883	2.398	113.151	D
5	5	4	10"	4'- 1 7/8"	0'- 9"	1'- 11 3/4"	1'- 1/4"	0'- 8 1/4"	17'- 4"	2'- 3 3/4"	18'- 6"	68	32	68.076	1.968	188.184	19'- 2"	6	18'- 10"	2	12	2.506	152.785	2.481	113.151	F
5	6	4	10"	4'- 1 7/8"	0'- 9"	1'- 11 3/4"	1'- 1/4"	0'- 8 1/4"	17'- 4"	2'- 3 3/4"	18'- 6"	68	40	70.900	2.066	196.803	19'- 2"	6	18'- 10"	2	14	2.611	159.688	2.574	113.151	H
5	7	4	10"	4'- 1 7/8"	0'- 9"	1'- 11 3/4"	1'- 1/4"	0'- 8 1/4"	17'- 4"	2'- 3 3/4"	18'- 6"	68	48	73.724	2.162	225.486	19'- 2"	6	18'- 10"	2	16	2.716	166.591	2.667	113.151	J
6	4	4	9"	4'- 10 3/8"	0'- 11 1/4"	2'- 2 1/4"	1'- 3 3/8"	0'- 10 1/2"	20'- 4"	2'- 8 3/4"	21'- 9"	80	24	75.272	2.384	237.810	22'- 2"	6	21'- 10"	2	10	2.563	163.907	2.561	131.175	D
6	5	4	9"	4'- 10 3/8"	0'- 11 1/4"	2'- 2 1/4"	1'- 3 3/8"	0'- 10 1/2"	20'- 4"	2'- 8 3/4"	21'- 9"	80	32	78.096	2.482	246.608	22'- 2"	6	21'- 10"	2	12	2.668	170.809	2.654	131.175	F
6	6	4	9"	4'- 10 3/8"	0'- 11 1/4"	2'- 2 1/4"	1'- 3 3/8"	0'- 10 1/2"	20'- 4"	2'- 8 3/4"	21'- 9"	80	40	80.920	2.580	255.405	22'- 2"	6	21'- 10"	2	14	2.773	177.712	2.746	131.175	H
6	7	4	9"	4'- 10 3/8"	0'- 11 1/4"	2'- 2 1/4"	1'- 3 3/8"	0'- 10 1/2"	20'- 4"	2'- 8 3/4"	21'- 9"	80	48	83.744	2.677	281.845	22'- 2"	6	21'- 10"	2	16	2.878	184.615	2.839	131.175	J
6	8	4	9"	4'- 10 3/8"	0'- 11 1/4"	2'- 2 1/4"	1'- 3 3/8"	0'- 10 1/2"	20'- 4"	2'- 8 3/4"	21'- 9"	80	56	86.568	2.774	304.790	22'- 2"	6	21'- 10"	2	18	2.983	191.517	2.932	131.175	L
7	4	5	9"	5'- 6 3/4"	1'- 1 7/8"	2'- 4 5/8"	1'- 7"	1'- 1"	23'- 4 1/8"	3'- 1 3/8"	25'- 1"	92	24	85.292	3.018	295.429	25'- 2"	6	24'- 10"	2	10	2.689	181.931	2.697	149.199	E
7	6	4	9"	5'- 6 3/4"	1'- 1 3/4"	2'- 4 5/8"	1'- 6 3/8"	1'- 1"	23'- 4 1/8"	3'- 1 3/8"	25'- 1"	92	40	90.940	3.214	309.518	25'- 2"	6	24'- 10"	2	14	2.899	195.736	2.882	149.199	I
7	8	4	9"	5'- 6 3/4"	1'- 1 3/4"	2'- 4 5/8"	1'- 6 3/8"	1'- 1"	23'- 4 1/8"	3'- 1 3/8"	25'- 1"	92	56	96.588	3.408	363.278	25'- 2"	6	24'- 10"	2	18	3.109	209.541	3.068	149.199	M
7	10	4	9"	5'- 7 3/4"	1'- 1 3/4"	2'- 4 5/8"	1'- 6 3/8"	1'- 1"	23'- 4 1/8"	3'- 1 3/8"	25'- 3"	92	72	102.236	3.681	410.043	25'- 2"	6	24'- 10"	2	22	3.241	223.347	3.174	149.199	Q
8	4	5	8"	6'- 3 1/4"	1'- 3 3/8"	2'- 7 3/8"	1'- 9 3/8"	1'- 3"	26'- 3 3/8"	3'- 6 5/8"	28'- 5"	104	24	95.312	3.660	384.188	28'- 2"	6	27'- 10"	2	10	2.781	199.955	2.799	167.223	E
8	6	5	8"	6'- 3 1/4"	1'- 3 3/8"	2'- 7 3/8"	1'- 9 3/8"	1'- 3"	26'- 3 3/8"	3'- 6 5/8"	28'- 5"	104	40	100.960	3.858	377.182	28'- 2"	6	27'- 10"	2	14	2.991	213.760	2.985	167.223	I
8	8	5	8"	6'- 3 3/8"	1'- 3 5/8"	2'- 7 5/8"	1'- 9 1/2"	1'- 2 3/4"	26'- 3 3/8"	3'- 6 7/8"	28'- 4"	104	56	106.608	4.011	425.598	28'- 2"	6	27'- 10"	2	18	3.217	227.565	3.186	167.223	M
8	10	5	8"	6'- 4 1/4"	1'- 3 7/8"	2'- 7 3/8"	1'- 9 3/8"	1'- 3"	26'- 5 3/8"	3'- 6 5/8"	28'- 7"	104	72	112.256	4.324	513.594	28'- 2"	6	27'- 10"	2	22	3.331	241.371	3.274	167.223	Q
9	4	5	9"	6'- 11 7/8"	1'- 5 3/8"	2'- 10 1/4"	2'- 5 3/8"	1'- 5"	29'- 4"	3'- 11 3/4"	31'- 8"	116	24	105.332	4.377	458.279	31'- 2"	6	30'- 10"	2	10	2.855	217.979	2.883	185.247	F
9	6	5	9"	6'- 11 7/8"	1'- 5 3/8"	2'- 10 1/4"	2'- 5 3/8"	1'- 5"	29'- 4"	3'- 11 3/4"	31'- 8"	116	40	110.980	4.573	478.066	31'- 2"	6	30'- 10"	2	14	3.065	231.784	3.068	185.247	J
9	8	5	9"	6'- 11 7/8"	1'- 5 3/8"	2'- 10 1/4"	2'- 5 3/8"	1'- 5"	29'- 4"	3'- 11 3/4"	31'- 8"	116	56	116.628	4.766	534.043	31'- 2"	6	30'- 10"	2	18	3.275	245.589	3.254	185.247	N
9	10	5	9"	7'- 7/8"	1'- 5 3/8"	2'- 10 1/4"	2'- 5 3/8"	1'- 5"	29'- 6"	3'- 11 3/4"	31'- 10"	116	72	122.276	5.042	598.272	31'- 2"	6	30'- 10"	2	22	3.403	259.395	3.356	185.247	R
9	12	5	9"	7'- 2 1/4"	1'- 6 1/8"	2'- 10"	2'- 1"	1'- 5 1/4"	29'- 9"	3'- 11 1/2"	32'- 1"	116	88	127.924	5.437	673.368	31'- 2"	6	30'- 10"	2	26	3.439	273.200	3.366	185.247	V
10	4	6	9"	7'- 8 1/2"	1'- 8"	3'- 1"	2'- 3 5/8"	1'- 7"	32'- 4"	4'- 5"	34'- 11"	128	24	115.352	5.167	542.758	34'- 2"	6	33'- 10"	2	10	2.873	236.003	2.911	203.271	F
10	8	6	9"	7'- 8 1/2"	1'- 8"	3'- 1"	2'- 3 5/8"	1'- 7"	32'- 4"	4'- 5"	34'- 11"	128	40	121.000	5.363	563.235	34'- 2"	6	33'- 10"	2	14	3.083	249.808	3.097	203.271	J
10	8	6	9"	7'- 8 1/2"	1'- 8"	3'- 1"	2'- 3 5/8"	1'- 7"	32'- 4"	4'- 5"	34'- 11"	128	56	126.648	5.557	614.472	34'- 2"	6	33'- 10"	2	18	3.294	263.613	3.282	203.271	N
10	10	6	9"	7'- 9 1/2"	1'- 8"	3'- 1"	2'- 3 5/8"	1'- 7"	32'- 6"	4'- 5"	35'- 1"	128	72	132.296	5.836	673.740	34'- 2"	6	33'- 10"	2	22	3.419	277.419	3.382	203.271	R
10	12	6	9"	7'- 10 7/8"	1'- 8 1/4"	3'- 3/4"	2'- 4"	1'- 7 1/4"	32'- 9"	4'- 4 3/4"	35'- 5"	128	88	137.944	6.238	745.759	34'- 2"	6	33'- 10"	2	26	3.450	291.224	3.387	203.271	V
12	6	6	8"	9'- 1 5/8"	2'- 1/4"	3'- 6 3/8"	2'- 9 5/8"	1'- 11 1/4"	38'- 4 1/8"	5'- 3 3/8"	41'- 6"	152	40	141.040	7.222	782.525	40'- 2"	6	39'- 10"	2	14	3.003	285.856	3.036	239.319	K
12	8	6	8"	9'- 1 5/8"	2'- 1/4"	3'- 6 3/8"	2'- 9 5/8"	1'- 11 1/4"	38'- 4 1/8"	5'- 3 3/8"	41'- 6"	152	56	146.688	7.415	839.828	40'- 2"	6	39'- 10"	2	18	3.213	299.661	3.221	239.319	O
12	10	6	8"	9'- 2 1/8"	2'- 1/4"	3'- 6 3/8"	2'- 9 5/8"	1'- 11 1/4"	38'- 6 3/8"	5'- 3 3/8"	41'- 9"	152	72	152.336	7.725	848.516	40'- 2"	6	39'- 10"	2	22	3.312	313.467	3.294	239.319	S
12	12	6	8"	9'- 4 1/8"	2'- 1/4"	3'- 6 3/8"	2'- 9 5/8"	1'- 11 1/4"	38'- 9 3/8"	5'- 3 3/8"	41'- 11"	152	88	157.984	8.059	933.076	40'- 2"	6	39'- 10"	2	26	3.379	327.272	3.336	239.319	W

SPECIFICATION REFERENCE

**TRIPLE BOX CULVERTS**  
 40 TO 50 FT. FILLS  
 VIRGINIA DEPARTMENT OF TRANSPORTATION

**VDOT**  
 ROAD AND BRIDGE STANDARDS

REVISION DATE	SHEET 2 OF 2
1004.23	