

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 3/8"	0'- 4 1/2"	1'- 6 5/8"	0'- 5 7/8"	0'- 3 3/4"	11'- 3 7/8"	1'- 5 7/8"	11'- 10"	44	16	42.388	0.989	115.349	13'- 2"	6	12'- 10"	2	8	1.827	102.932	1.808	77.103	A
3	4	4	12"	2'- 8 3/8"	0'- 4 1/2"	1'- 6 5/8"	0'- 5 7/8"	0'- 3 3/4"	11'- 3 7/8"	1'- 5 7/8"	11'- 10"	44	24	45.212	1.087	117.685	13'- 2"	6	12'- 10"	2	10	1.932	109.835	1.901	77.103	C
4	3	4	12"	3'- 5 3/8"	0'- 5 3/4"	1'- 10 1/4"	0'- 7 7/8"	0'- 5"	14'- 4"	1'- 11 3/4"	15'- 0"	56	16	52.408	1.249	130.598	16'- 2"	6	15'- 10"	2	8	2.117	120.956	2.108	95.127	B
4	4	4	12"	3'- 5 3/8"	0'- 5 3/4"	1'- 10 1/4"	0'- 7 7/8"	0'- 5"	14'- 4"	1'- 11 3/4"	15'- 0"	56	24	55.232	1.347	138.950	16'- 2"	6	15'- 10"	2	10	2.222	127.859	2.200	95.127	D
4	5	4	12"	3'- 5 3/8"	0'- 5 3/4"	1'- 10 1/4"	0'- 7 7/8"	0'- 5"	14'- 4"	1'- 11 3/4"	15'- 0"	56	32	58.056	1.445	147.302	16'- 2"	6	15'- 10"	2	12	2.327	134.761	2.293	95.127	F
4	6	4	12"	3'- 5 3/8"	0'- 5 3/4"	1'- 10 1/4"	0'- 7 7/8"	0'- 5"	14'- 4"	1'- 11 3/4"	15'- 0"	56	40	60.880	1.543	162.297	16'- 2"	6	15'- 10"	2	14	2.432	141.664	2.386	95.127	H
5	3	4	11"	4'- 2 3/4"	0'- 7 1/4"	2'- 1 1/2"	0'- 9 3/4"	0'- 6 1/2"	17'- 4"	2'- 5 1/2"	18'- 3"	68	16	62.428	1.582	159.869	19'- 2"	6	18'- 10"	2	8	2.357	138.980	2.357	113.151	B
5	4	4	11"	4'- 2 3/4"	0'- 7 1/4"	2'- 1 1/2"	0'- 9 3/4"	0'- 6 1/2"	17'- 4"	2'- 5 1/2"	18'- 3"	68	24	65.252	1.680	168.342	19'- 2"	6	18'- 10"	2	10	2.462	145.883	2.450	113.151	D
5	5	4	11"	4'- 2 3/8"	0'- 7 1/2"	2'- 1 1/4"	0'- 10 1/8"	0'- 6 3/4"	17'- 4"	2'- 5 1/4"	18'- 3"	68	32	68.076	1.805	177.149	19'- 2"	6	18'- 10"	2	12	2.558	152.785	2.534	113.151	F
5	6	4	11"	4'- 2 3/8"	0'- 7 1/2"	2'- 1 1/4"	0'- 10 1/8"	0'- 6 3/4"	17'- 4"	2'- 5 1/4"	18'- 3"	68	40	70.900	1.903	193.553	19'- 2"	6	18'- 10"	2	14	2.663	159.688	2.627	113.151	H
5	7	4	11"	4'- 2 5/8"	0'- 7 1/2"	2'- 1 1/4"	0'- 10 1/8"	0'- 6 3/4"	17'- 4"	2'- 5 1/4"	18'- 3"	68	48	73.724	2.000	209.564	19'- 2"	6	18'- 10"	2	16	2.768	166.591	2.719	113.151	J
6	4	4	9"	4'- 11 1/4"	0'- 9 1/2"	2'- 4"	1'- 7/8"	0'- 8 3/4"	20'- 4"	2'- 10 1/2"	21'- 6"	80	24	75.272	2.162	215.436	22'- 2"	6	21'- 10"	2	10	2.640	163.907	2.638	131.175	D
6	5	4	9"	4'- 11 1/4"	0'- 9 1/2"	2'- 4"	1'- 7/8"	0'- 8 3/4"	20'- 4"	2'- 10 1/2"	21'- 6"	80	32	78.096	2.260	224.233	22'- 2"	6	21'- 10"	2	12	2.745	170.809	2.731	131.175	F
6	6	4	9"	4'- 11 1/4"	0'- 9 1/2"	2'- 4"	1'- 7/8"	0'- 8 3/4"	20'- 4"	2'- 10 1/2"	21'- 6"	80	40	80.920	2.358	233.031	22'- 2"	6	21'- 10"	2	14	2.850	177.712	2.824	131.175	H
6	7	4	9"	4'- 11 1/4"	0'- 9 1/2"	2'- 4"	1'- 7/8"	0'- 8 3/4"	20'- 4"	2'- 10 1/2"	21'- 6"	80	48	83.744	2.456	253.262	22'- 2"	6	21'- 10"	2	16	2.956	184.615	2.917	131.175	J
6	8	4	9"	4'- 11 1/4"	0'- 9 1/2"	2'- 4"	1'- 7/8"	0'- 8 3/4"	20'- 4"	2'- 10 1/2"	21'- 6"	80	56	86.568	2.553	276.467	22'- 2"	6	21'- 10"	2	18	3.061	191.517	3.009	131.175	L
7	4	4	9"	5'- 8 1/8"	0'- 11"	2'- 7 3/8"	1'- 3"	0'- 10 1/4"	23'- 4 1/8"	3'- 4 1/8"	24'- 9"	92	24	85.292	2.618	264.710	25'- 2"	6	24'- 10"	2	10	2.817	181.931	2.825	149.199	D
7	6	4	9"	5'- 8 1/8"	0'- 11"	2'- 7 3/8"	1'- 3"	0'- 10 1/4"	23'- 4 1/8"	3'- 4 1/8"	24'- 9"	92	40	90.940	2.815	282.305	25'- 2"	6	24'- 10"	2	14	3.027	195.736	3.011	149.199	H
7	8	4	9"	5'- 8 1/8"	0'- 11"	2'- 7 3/8"	1'- 3"	0'- 10 1/4"	23'- 4 1/8"	3'- 4 1/8"	24'- 9"	92	56	96.588	3.009	320.718	25'- 2"	6	24'- 10"	2	18	3.238	209.541	3.196	149.199	L
7	10	4	9"	5'- 8 1/8"	0'- 11"	2'- 7 3/8"	1'- 3"	0'- 10 1/4"	23'- 4 1/8"	3'- 4 1/8"	24'- 9"	92	72	102.236	3.202	387.381	25'- 2"	6	24'- 10"	2	22	3.448	223.347	3.382	149.199	P
8	4	5	9"	6'- 4 3/4"	1'- 7/8"	2'- 10 3/8"	1'- 5 5/8"	1'- 0"	26'- 3 3/8"	3'- 9 5/8"	28'- 0"	104	24	95.312	3.169	345.966	28'- 2"	6	27'- 10"	2	10	2.969	199.955	2.987	167.223	E
8	6	4	8"	6'- 4 3/4"	1'- 7/4"	2'- 10 3/8"	1'- 5 1/2"	1'- 0"	26'- 3 3/8"	3'- 9 5/8"	28'- 0"	104	40	100.960	3.365	362.767	28'- 2"	6	27'- 10"	2	14	3.180	213.760	3.173	167.223	I
8	8	4	8"	6'- 4 3/4"	1'- 7/4"	2'- 10 3/8"	1'- 5 1/2"	1'- 0"	26'- 3 3/8"	3'- 9 5/8"	28'- 0"	104	56	106.608	3.560	402.626	28'- 2"	6	27'- 10"	2	18	3.390	227.565	3.358	167.223	M
8	10	4	8"	6'- 4 3/4"	1'- 7/4"	2'- 10 3/8"	1'- 5 1/2"	1'- 0"	26'- 3 3/8"	3'- 9 5/8"	28'- 0"	104	72	112.256	3.752	464.454	28'- 2"	6	27'- 10"	2	22	3.600	241.371	3.544	167.223	Q
9	4	5	9"	7'- 1 3/8"	1'- 2 7/8"	3'- 1 1/4"	1'- 8 3/8"	1'- 2"	29'- 4"	4'- 2 3/4"	31'- 3"	116	24	105.332	3.831	417.023	31'- 2"	6	30'- 10"	2	10	3.052	217.979	3.080	185.247	E
9	6	5	9"	7'- 1 3/8"	1'- 2 7/8"	3'- 1 1/4"	1'- 8 3/8"	1'- 2"	29'- 4"	4'- 2 3/4"	31'- 3"	116	40	110.980	4.027	435.381	31'- 2"	6	30'- 10"	2	14	3.263	231.784	3.266	185.247	I
9	8	5	9"	7'- 1 3/8"	1'- 2 7/8"	3'- 1 1/4"	1'- 8 3/8"	1'- 2"	29'- 4"	4'- 2 3/4"	31'- 3"	116	56	116.628	4.221	482.709	31'- 2"	6	30'- 10"	2	18	3.473	245.589	3.451	185.247	M
9	10	5	9"	7'- 1 3/8"	1'- 2 7/8"	3'- 1 1/4"	1'- 8 3/8"	1'- 2"	29'- 4"	4'- 2 3/4"	31'- 3"	116	72	122.274	4.414	545.190	31'- 2"	6	30'- 10"	2	22	3.683	259.395	3.637	185.247	Q
9	12	5	9"	7'- 2 1/2"	1'- 3 1/8"	3'- 1"	1'- 8 3/4"	1'- 2 1/4"	29'- 6 1/2"	4'- 2 1/2"	31'- 6"	116	88	127.924	4.768	619.468	31'- 2"	6	30'- 10"	2	26	3.760	273.200	3.688	185.247	U
10	4	6	9"	7'- 10 1/8"	1'- 4 3/4"	3'- 4 1/4"	1'- 11"	1'- 3 3/4"	32'- 4"	4'- 8 1/4"	34'- 6"	128	24	115.352	4.512	537.927	34'- 2"	6	33'- 10"	2	10	3.119	236.003	3.157	203.271	E
10	6	6	9"	7'- 10 1/8"	1'- 4 3/4"	3'- 4 1/4"	1'- 11"	1'- 3 3/4"	32'- 4"	4'- 8 1/4"	34'- 6"	128	40	121.000	4.708	556.591	34'- 2"	6	33'- 10"	2	14	3.329	249.808	3.342	203.271	I
10	8	6	9"	7'- 10 1/8"	1'- 4 3/4"	3'- 4 1/4"	1'- 11"	1'- 3 3/4"	32'- 4"	4'- 8 1/4"	34'- 6"	128	56	126.648	4.903	600.486	34'- 2"	6	33'- 10"	2	18	3.539	263.613	3.528	203.271	M
10	10	6	9"	7'- 10 1/8"	1'- 4 3/4"	3'- 4 1/4"	1'- 11"	1'- 3 3/4"	32'- 4"	4'- 8 1/4"	34'- 6"	128	72	132.296	5.096	659.952	34'- 2"	6	33'- 10"	2	22	3.750	277.419	3.713	203.271	Q
10	12	5	9"	7'- 11 1/4"	1'- 4 7/8"	3'- 4"	1'- 11 1/4"	1'- 4"	32'- 6 1/2"	4'- 8"	34'- 9"	128	88	137.944	5.460	684.764	34'- 2"	6	33'- 10"	2	26	3.822	291.224	3.760	203.271	U
12	6	6	8"	9'- 3 3/8"	1'- 8 3/4"	3'- 9 3/8"	2'- 4 5/8"	1'- 7 3/4"	38'- 4 1/8"	5'- 6 5/8"	41'- 0"	152	40	141.040	6.392	710.159	40'- 2"	6	39'- 10"	2	14	3.333	285.856	3.366	239.319	J
12	8	6	8"	9'- 3 3/8"	1'- 8 3/4"	3'- 9 3/8"	2'- 4 5/8"	1'- 7 3/4"	38'- 4 1/8"	5'- 6 5/8"	41'- 0"	152	56	146.688	6.586	761.530	40'- 2"	6	39'- 10"	2	18	3.543	299.661	3.552	239.319	N
12	10	6	8"	9'- 3 3/8"	1'- 8 3/4"	3'- 9 3/8"	2'- 4 5/8"	1'- 7 3/4"	38'- 4 1/8"	5'- 6 5/8"	41'- 0"	152	72	152.336	6.779	826.605	40'- 2"	6	39'- 10"	2	22	3.754	313.467	3.737	239.319	R
12	12	6	8"	9'- 4 5/8"	1'- 8 3/4"	3'- 9 7/8"	2'- 4 5/8"	1'- 7 3/4"	38'- 6 5/8"	5'- 6 5/8"	41'- 3"	152	88	157.984	7.095	882.169	40'- 2"	6	39'- 10"	2	26	3.842	327.272	3.799	239.319	V

SPECIFICATION REFERENCE

TRIPLE BOX CULVERTS
 30 TO 35 FT. FILLS
 VIRGINIA DEPARTMENT OF TRANSPORTATION

VDOT
 ROAD AND BRIDGE STANDARDS

REVISION DATE	SHEET 2 OF 2
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