

DIMENSIONS					REINFORCING STEEL																						
SPAN	HGHT	T1	T2	T3	A	B	C	D	E	F	BH1				BH2			BH3				BVI			NO. BL1 BARS	NO. BL2 BARS	
(FT.)	(FT.)	TOP SLAB (IN.)	BOTTOM SLAB (IN.)	WALL (IN.)							SIZE	SPACING C-C	a	b	LENGTH	SIZE	SPACING C-C	LENGTH	SIZE	SPACING C-C	a	LENGTH	SIZE	SPACING C-C			LENGTH
3	3	8"	8"	8"	2	2'- 0"	2	2'- 0"	1	1'- 0"	4	12"	4'- 0"	2'- 8"	8'- 10"	5	12"	4'- 0"	3	12"	2'- 1 1/4"	4'- 0"	4	12"	4'- 0"	16	8
3	4	8"	8"	8"	2	2'- 0"	2	2'- 0"	2	2'- 0"	4	12"	4'- 0"	3'- 2"	9'- 10"	5	12"	4'- 0"	3	12"	2'- 1 1/4"	4'- 0"	4	12"	5'- 0"	16	12
4	3	8"	8"	8"	3	3'- 0"	3	3'- 0"	1	1'- 0"	4	9"	5'- 0"	2'- 8"	9'- 10"	5	9"	5'- 0"	--	---	----	----	4	12"	4'- 0"	20	8
4	4	8"	8"	8"	3	3'- 0"	3	3'- 0"	2	2'- 0"	4	11"	5'- 0"	3'- 2"	10'- 10"	6	11"	5'- 0"	3	11"	2'- 3 5/8"	4'- 5"	4	12"	5'- 0"	20	12
4	5	8"	8"	8"	3	3'- 0"	3	3'- 0"	3	3'- 0"	4	11"	5'- 0"	3'- 8"	11'- 10"	6	11"	5'- 0"	3	11"	2'- 3 5/8"	4'- 5"	4	12"	6'- 0"	20	16
4	6	8"	8"	8"	3	3'- 0"	3	3'- 0"	4	4'- 0"	4	10 1/2"	5'- 0"	4'- 2"	12'- 10"	6	10 1/2"	5'- 0"	3	10 1/2"	2'- 3 5/8"	4'- 5"	4	12"	7'- 0"	20	20
5	3	8 1/2"	8 1/2"	8"	4	4'- 0"	4	4'- 0"	1	1'- 0"	5	9"	6'- 0"	2'- 8 1/2"	10'- 9"	6	9"	6'- 0"	--	---	----	----	4	9"	4'- 1"	24	8
5	4	8 1/2"	8 1/2"	8"	4	4'- 0"	4	4'- 0"	2	2'- 0"	5	8 1/2"	6'- 0"	3'- 2 1/2"	11'- 9"	6	8 1/2"	6'- 0"	--	---	----	----	4	11 1/2"	5'- 1"	24	12
5	5	8 1/2"	8 1/2"	8"	4	4'- 0"	4	4'- 0"	3	3'- 0"	4	8 1/2"	6'- 0"	3'- 8 1/2"	12'- 11"	6	8 1/2"	6'- 0"	3	8 1/2"	2'- 6"	4'- 10"	4	12"	6'- 1"	24	16
5	6	8 3/4"	8 3/4"	8"	4	4'- 0"	4	4'- 0"	4	4'- 0"	4	8 1/2"	6'- 0"	4'- 2 3/4"	13'- 11"	6	8 1/2"	6'- 0"	--	---	----	----	4	12"	7'- 2"	24	20
5	7	8 3/4"	8 3/4"	8"	4	4'- 0"	4	4'- 0"	5	5'- 0"	4	8"	6'- 0"	4'- 8 3/4"	14'- 11"	6	8"	6'- 0"	--	---	----	----	4	12"	8'- 2"	24	24
6	4	10"	10"	8"	5	5'- 0"	5	5'- 0"	2	2'- 0"	4	7 1/2"	7'- 0"	3'- 4"	13'- 2"	6	7 1/2"	7'- 0"	3	7 1/2"	2'- 8 3/8"	5'- 2"	4	9"	5'- 4"	28	12
6	5	10 1/4"	10 1/4"	8"	5	5'- 0"	5	5'- 0"	3	3'- 0"	4	7 1/2"	7'- 0"	3'- 10 1/4"	14'- 2"	6	7 1/2"	7'- 0"	--	---	----	----	4	12"	6'- 5"	28	16
6	6	10 1/4"	10 1/4"	8"	5	5'- 0"	5	5'- 0"	4	4'- 0"	4	7"	7'- 0"	4'- 4 1/4"	15'- 2"	6	7"	7'- 0"	--	---	----	----	4	12"	7'- 5"	28	20
6	7	10 1/4"	10 1/4"	8"	5	5'- 0"	5	5'- 0"	5	5'- 0"	4	7"	7'- 0"	4'- 10 1/4"	16'- 2"	6	7"	7'- 0"	--	---	----	----	4	12"	8'- 5"	28	24
6	8	10 1/4"	10 1/4"	8"	5	5'- 0"	5	5'- 0"	6	6'- 0"	5	7"	7'- 0"	5'- 4 1/4"	17'- 1"	6	7"	7'- 0"	--	---	----	----	4	12"	9'- 5"	28	28
7	4	11 1/2"	11 1/2"	8"	6	6'- 0"	6	6'- 0"	2	2'- 0"	4	6 1/2"	8'- 0"	3'- 5 1/2"	14'- 5"	6	6 1/2"	8'- 0"	--	---	----	----	4	8"	5'- 7"	32	12
7	6	11 3/4"	11 3/4"	8"	6	6'- 0"	6	6'- 0"	4	4'- 0"	4	6"	8'- 0"	4'- 5 3/4"	16'- 5"	6	6"	8'- 0"	--	---	----	----	4	12"	7'- 8"	32	20
7	8	11 3/4"	11 3/4"	8"	6	6'- 0"	6	6'- 0"	6	6'- 0"	4	6"	8'- 0"	5'- 5 3/4"	18'- 5"	6	6"	8'- 0"	--	---	----	----	4	12"	9'- 8"	32	28
7	10	11 3/4"	11 3/4"	8"	6	6'- 0"	6	6'- 0"	8	8'- 0"	5	7 1/2"	8'- 0"	6'- 5 3/4"	20'- 4"	7	7 1/2"	8'- 0"	3	7 1/2"	2'- 10 3/4"	5'- 7"	4	6 1/2"	11'- 8"	32	36
8	4	12 3/4"	12 3/4"	8"	7	7'- 0"	7	7'- 0"	2	2'- 0"	5	8 1/2"	9'- 0"	3'- 6 3/4"	15'- 6"	8	8 1/2"	9'- 0"	3	8 1/2"	3'- 1 1/4"	6'- 0"	4	7 1/2"	5'- 9"	36	12
8	6	13"	13"	8"	7	7'- 0"	7	7'- 0"	4	4'- 0"	5	8 1/2"	9'- 0"	4'- 7"	17'- 6"	8	8 1/2"	9'- 0"	--	---	----	----	4	12"	7'- 10"	36	20
8	8	13"	13"	8"	7	7'- 0"	7	7'- 0"	6	6'- 0"	5	8 1/2"	9'- 0"	5'- 7"	19'- 6"	8	8 1/2"	9'- 0"	3	8 1/2"	3'- 1 1/4"	6'- 0"	4	12"	9'- 10"	36	28
8	10	13"	13"	8"	7	7'- 0"	7	7'- 0"	8	8'- 0"	5	5"	9'- 0"	6'- 7"	21'- 6"	6	5"	9'- 0"	--	---	----	----	5	10 1/2"	11'- 10"	36	36
9	4	13 1/2"	13 1/2"	8"	8	8'- 0"	8	8'- 0"	2	2'- 0"	5	6"	10'- 0"	3'- 7 1/2"	16'- 7"	7	6"	10'- 0"	--	---	----	----	4	6 1/2"	5'- 11"	40	12
9	6	13 1/2"	13 1/2"	8"	8	8'- 0"	8	8'- 0"	4	4'- 0"	4	7 1/2"	10'- 0"	4'- 7 1/2"	18'- 9"	8	7 1/2"	10'- 0"	4	7 1/2"	3'- 3 5/8"	6'- 4"	4	11 1/2"	7'- 11"	40	20
9	8	13 1/2"	13 1/2"	8"	8	8'- 0"	8	8'- 0"	6	6'- 0"	5	7 1/2"	10'- 0"	5'- 7 1/2"	20'- 7"	8	7 1/2"	10'- 0"	3	7 1/2"	3'- 3 5/8"	6'- 5"	4	12"	9'- 11"	40	28
9	10	13 1/2"	13 1/2"	8"	8	8'- 0"	8	8'- 0"	8	8'- 0"	5	6"	10'- 0"	6'- 7 1/2"	22'- 7"	7	6"	10'- 0"	--	---	----	----	4	9"	11'- 11"	40	36
9	12	13 1/4"	13 1/4"	8"	8	8'- 0"	8	8'- 0"	10	10'- 0"	6	7"	10'- 0"	7'- 7 1/4"	24'- 5"	8	7"	10'- 0"	--	---	----	----	4	4 1/2"	13'- 10"	40	44
10	4	14 3/4"	14 3/4"	8"	9	9'- 0"	9	9'- 0"	2	2'- 0"	4	6"	11'- 0"	3'- 8 3/4"	17'- 11"	7	6"	11'- 0"	4	6"	3'- 6"	6'- 9"	4	6"	6'- 1"	44	12
10	6	15"	15"	8"	9	9'- 0"	9	9'- 0"	4	4'- 0"	5	5 1/2"	11'- 0"	4'- 9"	19'- 10"	7	5 1/2"	11'- 0"	--	---	----	----	4	11"	8'- 2"	44	20
10	8	15"	15"	8"	9	9'- 0"	9	9'- 0"	6	6'- 0"	4	7"	11'- 0"	5'- 9"	22'- 0"	8	7"	11'- 0"	4	7"	3'- 6"	6'- 9"	4	12"	10'- 2"	44	28
10	10	15"	15"	8"	9	9'- 0"	9	9'- 0"	8	8'- 0"	6	6 1/2"	11'- 0"	6'- 9"	23'- 8"	8	6 1/2"	11'- 0"	--	---	----	----	4	9"	12'- 2"	44	36
10	12	15"	15"	8"	9	9'- 0"	9	9'- 0"	10	10'- 0"	6	6 1/2"	11'- 0"	7'- 9"	25'- 8"	8	6 1/2"	11'- 0"	--	---	----	----	4	4 1/2"	14'- 2"	44	44
12	6	17 1/2"	17 1/2"	8"	11	11'- 0"	11	11'- 0"	4	4'- 0"	4	6"	13'- 0"	4'- 11 1/2"	22'- 5"	8	6"	13'- 0"	3	6"	3'- 10 3/4"	7'- 7"	4	10"	8'- 7"	52	20
12	8	17 3/4"	17 3/4"	8"	11	11'- 0"	11	11'- 0"	6	6'- 0"	5	4 1/2"	13'- 0"	5'- 11 3/4"	24'- 4"	7	4 1/2"	13'- 0"	--	---	----	----	4	12"	10'- 7"	52	28
12	10	17 3/4"	17 3/4"	8"	11	11'- 0"	11	11'- 0"	8	8'- 0"	6	6"	13'- 0"	6'- 11 3/4"	26'- 2"	8	6"	13'- 0"	--	---	----	----	4	10"	12'- 7"	52	36
12	12	17 3/4"	17 3/4"	8"	11	11'- 0"	11	11'- 0"	10	10'- 0"	6	6"	13'- 0"	7'- 11 3/4"	28'- 2"	8	6"	13'- 0"	--	---	----	----	5	7 1/2"	14'- 7"	52	44

SINGLE BOX CULVERTS  
20 TO 25 FT. FILLS  
VIRGINIA DEPARTMENT OF TRANSPORTATION

STRUCTURE  
AND  
BRIDGE  
DIVISION