

DIMENSIONS						REINFORCING STEEL																																
SPAN	HGHT	T1	T2	T3	T4							BH1			BH2			BH3			BH4			BV1			BV2											
(FT.)	(FT.)	TOP SLAB	BOTTOM SLAB	EXTERIOR WALL (IN.)	INTERIOR WALL (IN.)	A	B	C	D	E	F	SIZE	SPACING C-C	LENGTH	SIZE	SPACING C-C	LENGTH	SIZE	SPACING C-C	a	LENGTH	SIZE	SPACING C-C	a	b	LENGTH	SIZE	SPACING C-C	LENGTH	SIZE	SPACING C-C	LENGTH						
3	3	8"	8"	8"	8"	13	13'- 0"	13	13'- 0"	1	1'- 0"	4	12"	14'- 10"	4	12"	15'- 0"	4	12"	2'- 1/4"	3'- 11"	4	12"	2'- 1/4"	2'- 8"	4'- 6"	4	12"	4'- 0"	4	12"	4'- 0"	4	12"	4'- 0"			
3	4	8"	8"	8"	8"	13	13'- 0"	13	13'- 0"	2	2'- 0"	4	12"	14'- 10"	4	12"	15'- 0"	3	12"	2'- 1/4"	4'- 0"	4	12"	2'- 1/4"	3'- 2"	5'- 0"	4	12"	5'- 0"	4	12"	5'- 0"	4	12"	5'- 0"			
4	3	10"	10"	8"	8"	17	17'- 0"	17	17'- 0"	1	1'- 0"	4	12"	18'- 5"	4	12"	19'- 0"	--	--	--	--	--	4	12"	2'- 3/8"	2'- 10"	4'- 10"	4	12"	4'- 4"	4	12"	4'- 4"	4	12"	4'- 4"		
4	4	9 3/4"	9 3/4"	8"	8"	17	17'- 0"	17	17'- 0"	2	2'- 0"	4	12"	18'- 5"	4	12"	19'- 0"	--	--	--	--	--	4	12"	2'- 3/8"	3'- 3 3/4"	5'- 4"	4	12"	5'- 3"	4	12"	5'- 3"	4	12"	5'- 3"		
4	5	9 3/4"	9 3/4"	8"	8"	17	17'- 0"	17	17'- 0"	3	3'- 0"	4	12"	18'- 5"	4	12"	19'- 0"	--	--	--	--	--	4	12"	2'- 3/8"	3'- 9 3/4"	5'- 10"	4	12"	6'- 3"	4	12"	6'- 3"	4	12"	6'- 3"		
4	6	9 3/4"	9 3/4"	8"	8"	17	17'- 0"	17	17'- 0"	4	4'- 0"	4	12"	18'- 5"	4	12"	19'- 0"	4	12"	2'- 3/8"	4'- 4"	4	12"	2'- 3/8"	4'- 3 3/4"	6'- 4"	4	12"	7'- 3"	4	12"	7'- 3"	4	12"	7'- 3"	4	12"	7'- 3"
5	3	12"	12"	8"	8"	21	21'- 0"	21	21'- 0"	1	1'- 0"	4	11"	22'- 0"	4	11"	23'- 0"	--	--	--	--	--	4	11"	2'- 6"	3'- 0"	5'- 3"	4	12"	4'- 8"	4	12"	4'- 8"	4	12"	4'- 8"		
5	4	12"	12"	8"	8"	21	21'- 0"	21	21'- 0"	2	2'- 0"	4	11"	22'- 0"	4	11"	23'- 0"	--	--	--	--	--	4	11"	2'- 6"	3'- 6"	5'- 9"	4	12"	5'- 8"	4	12"	5'- 8"	4	12"	5'- 8"		
5	5	11 3/4"	11 3/4"	8"	8"	21	21'- 0"	21	21'- 0"	3	3'- 0"	4	11"	22'- 0"	4	11"	23'- 0"	--	--	--	--	--	4	11"	2'- 6"	3'- 11 3/4"	6'- 3"	4	12"	6'- 8"	4	12"	6'- 8"	4	12"	6'- 8"		
5	6	11 3/4"	11 3/4"	8"	8"	21	21'- 0"	21	21'- 0"	4	4'- 0"	4	11"	22'- 0"	4	11"	23'- 0"	3	11"	2'- 6"	4'- 10"	4	11"	2'- 6"	4'- 5 3/4"	6'- 9"	4	12"	7'- 8"	4	12"	7'- 8"	4	12"	7'- 8"			
5	7	11 3/4"	11 3/4"	8"	8"	21	21'- 0"	21	21'- 0"	5	5'- 0"	4	11"	22'- 0"	4	11"	23'- 0"	4	11"	2'- 6"	4'- 9"	4	11"	2'- 6"	4'- 11 3/4"	7'- 3"	4	8 1/2"	8'- 8"	4	12"	8'- 8"	4	12"	8'- 8"			
6	4	13 3/4"	13 3/4"	8"	8"	25	25'- 0"	25	25'- 0"	2	2'- 0"	4	9"	25'- 7"	4	9"	27'- 0"	--	--	--	--	--	4	9"	2'- 8 3/8"	3'- 7 3/4"	6'- 1"	4	12"	6'- 0"	4	12"	6'- 0"	4	12"	6'- 0"		
6	5	13 3/4"	13 3/4"	8"	8"	25	25'- 0"	25	25'- 0"	3	3'- 0"	4	9"	25'- 7"	4	9"	27'- 0"	--	--	--	--	--	4	9"	2'- 8 3/8"	4'- 1 3/4"	6'- 7"	4	12"	7'- 0"	4	12"	7'- 0"	4	12"	7'- 0"		
6	6	13 3/4"	13 3/4"	8"	8"	25	25'- 0"	25	25'- 0"	4	4'- 0"	4	9"	25'- 7"	4	9"	27'- 0"	--	--	--	--	--	4	9"	2'- 8 3/8"	4'- 7 3/4"	7'- 1"	4	12"	8'- 0"	4	12"	8'- 0"	4	12"	8'- 0"		
6	7	14"	14"	8"	8"	25	25'- 0"	25	25'- 0"	5	5'- 0"	4	9"	25'- 7"	4	9"	27'- 0"	3	9"	2'- 8 3/8"	5'- 2"	4	9"	2'- 8 3/8"	5'- 2"	7'- 7"	4	8 1/2"	9'- 0"	4	12"	9'- 0"	4	12"	9'- 0"			
6	8	14"	14"	8"	8"	25	25'- 0"	25	25'- 0"	6	6'- 0"	4	9"	25'- 7"	4	9"	27'- 0"	--	--	--	--	--	5	9"	2'- 8 3/8"	5'- 8"	8'- 0"	4	6"	10'- 0"	4	12"	10'- 0"	4	12"	10'- 0"		
7	4	15 3/4"	15 3/4"	8"	8"	29	29'- 0"	29	29'- 0"	2	2'- 0"	5	9"	29'- 2"	5	9"	31'- 0"	--	--	--	--	--	4	9"	2'- 10 3/4"	3'- 9 3/4"	6'- 5"	4	12"	6'- 3"	4	11 1/2"	6'- 3"	4	11 1/2"	6'- 3"		
7	6	15 3/4"	15 3/4"	8"	8"	29	29'- 0"	29	29'- 0"	4	4'- 0"	5	9"	29'- 2"	5	9"	31'- 0"	--	--	--	--	--	4	9"	2'- 10 3/4"	4'- 9 3/4"	7'- 5"	4	12"	8'- 3"	4	11 1/2"	8'- 3"	4	11 1/2"	8'- 3"		
7	8	15 3/4"	15 3/4"	8"	8"	29	29'- 0"	29	29'- 0"	6	6'- 0"	5	9"	29'- 2"	5	9"	31'- 0"	3	9"	2'- 10 3/4"	5'- 7"	4	9"	2'- 10 3/4"	5'- 9 3/4"	8'- 5"	4	6"	10'- 3"	4	11 1/2"	10'- 3"	4	11 1/2"	10'- 3"			
7	10	15 3/4"	15 3/4"	8 1/2"	8"	29	29'- 0"	29	29'- 0"	8	8'- 0"	5	9"	29'- 2"	5	9"	31'- 1"	3	9"	2'- 11 1/4"	5'- 8"	5	9"	2'- 11 1/4"	6'- 9 3/4"	9'- 5"	5	6 1/2"	12'- 3"	4	12"	12'- 3"	4	12"	12'- 3"			
8	4	17 3/4"	17 3/4"	8"	8"	33	33'- 0"	33	33'- 0"	2	2'- 0"	5	9"	32'- 10"	5	9"	35'- 0"	--	--	--	--	--	4	9"	3'- 1 1/4"	3'- 11 3/4"	6'- 10"	4	12"	6'- 7"	4	10 1/2"	6'- 7"	4	10 1/2"	6'- 7"		
8	6	17 3/4"	17 3/4"	8"	8"	33	33'- 0"	33	33'- 0"	4	4'- 0"	5	8"	32'- 10"	5	8"	35'- 0"	--	--	--	--	--	4	8"	3'- 1 1/4"	4'- 11 3/4"	7'- 10"	4	12"	8'- 7"	4	10 1/2"	8'- 7"	4	10 1/2"	8'- 7"		
8	8	17 3/4"	17 3/4"	8"	8"	33	33'- 0"	33	33'- 0"	6	6'- 0"	5	8"	32'- 10"	5	8"	35'- 0"	3	8"	3'- 1 1/4"	6'- 0"	4	8"	3'- 1 1/4"	5'- 11 3/4"	8'- 10"	4	6"	10'- 7"	4	10 1/2"	10'- 7"	4	10 1/2"	10'- 7"			
8	10	17 3/4"	17 3/4"	8 1/2"	8"	33	33'- 0"	33	33'- 0"	8	8'- 0"	5	8"	32'- 10"	5	8"	35'- 1"	3	8"	3'- 1 3/4"	6'- 1"	5	8"	3'- 1 3/4"	6'- 11 3/4"	9'- 10"	6	9"	12'- 7"	4	10 1/2"	12'- 7"	4	10 1/2"	12'- 7"			
9	4	20"	20"	8"	8"	37	37'- 0"	37	37'- 0"	2	2'- 0"	6	9"	36'- 5"	6	9"	39'- 0"	--	--	--	--	--	4	9"	3'- 3 5/8"	4'- 2"	7'- 2"	4	12"	7'- 0"	4	10"	7'- 0"	4	10"	7'- 0"		
9	6	20"	20"	8"	8"	37	37'- 0"	37	37'- 0"	4	4'- 0"	6	9"	36'- 5"	6	9"	39'- 0"	--	--	--	--	--	4	9"	3'- 3 5/8"	5'- 2"	8'- 2"	4	12"	9'- 0"	4	10"	9'- 0"	4	10"	9'- 0"		
9	8	20"	20"	8"	8"	37	37'- 0"	37	37'- 0"	6	6'- 0"	6	9"	36'- 5"	6	9"	39'- 0"	--	--	--	--	--	5	9"	3'- 3 5/8"	6'- 2"	9'- 2"	4	6"	11'- 0"	4	10"	11'- 0"	4	10"	11'- 0"		
9	10	20"	20"	8 1/2"	8"	37	37'- 0"	37	37'- 0"	8	8'- 0"	6	9"	36'- 5"	6	9"	39'- 1"	--	--	--	--	--	6	9"	3'- 4 1/8"	7'- 2"	10'- 1"	6	9"	13'- 0"	4	10"	13'- 0"	4	10"	13'- 0"		
9	12	20"	20"	10"	8"	37	37'- 0"	37	37'- 0"	10	10'- 0"	6	9"	36'- 5"	6	9"	39'- 4"	3	9"	3'- 5 5/8"	6'- 9"	6	9"	3'- 5 5/8"	8'- 2"	11'- 3"	7	10 1/2"	15'- 0"	4	10"	15'- 0"	4	10"	15'- 0"			
10	4	22 1/2"	22 1/2"	8"	8"	41	41'- 0"	41	41'- 0"	2	2'- 0"	6	9"	40'- 0"	6	9"	43'- 0"	--	--	--	--	--	4	9"	3'- 6"	4'- 4 1/2"	7'- 7"	4	12"	7'- 5"	4	10"	7'- 5"	4	10"	7'- 5"		
10	6	22 1/2"	22 1/2"	8"	8"	41	41'- 0"	41	41'- 0"	4	4'- 0"	6	9"	40'- 0"	6	9"	43'- 0"	--	--	--	--	--	4	9"	3'- 6"	5'- 4 1/2"	8'- 7"	4	12"	9'- 5"	4	10"	9'- 5"	4	10"	9'- 5"		
10	8	22 1/2"	22 1/2"	8"	8"	41	41'- 0"	41	41'- 0"	6	6'- 0"	6	9"	40'- 0"	6	9"	43'- 0"	3	9"	3'- 6"	6'- 10"	4	9"	3'- 6"	6'- 4 1/2"	9'- 7"	5	9"	11'- 5"	4	10"	11'- 5"	4	10"	11'- 5"			
10	10	22 1/2"	22 1/2"	8 1/2"	8"	41	41'- 0"	41	41'- 0"	8	8'- 0"	7	9"	40'- 0"	6	9"	43'- 1"	--	--	--	--	--	6	9"	3'- 6 1/2"	7'- 4 1/2"	10'- 6"	5	6"	13'- 5"	4	10"	13'- 5"	4	10"	13'- 5"		
10	12	22 1/2"	22 1/2"	10"	8"	41	41'- 0"	41	41'- 0"	10	10'- 0"	6	9"	40'- 0"	6	9"	43'- 4"	3	9"	3'- 8"	7'- 2"	6	9"	3'- 8"	8'- 4 1/2"	11'- 8"	6	7 1/2"	15'- 5"	4	10"	15'- 5"	4	10"	15'- 5"			
12	6	26 1/2"	26 1/2"	8"	8"	49	49'- 0"	49	49'- 0"	4	4'- 0"	6	8"	47'- 2"	6	8"	51'- 0"	--	--	--	--	--	4	8"	3'- 10 3/4"	5'- 8 1/2"	9'- 4"	4	11"	10'- 1"	4	9"	10'- 1"	4	9"	10'- 1"		
12	8	26 1/2"	26 1/2"	8"	8"	49	49'- 0"	49	49'- 0"	6	6'- 0"	6	8"	47'- 2"	6	8"	51'- 0"	--	--	--	--	--	4	8"	3'- 10 3/4"	6'- 8 1/2"	10'- 4"	4	5 1/2"	12'- 1"	4	9"	12'- 1"	4	9"	12'- 1"		
12	10	26 1/4"	26 1/4"	8 1/2"	8"	49	49'- 0"	49	49'- 0"	8	8'- 0"	6	8"	47'- 2"	6	8"	51'- 1"	3	8"	3'- 11 1/4"	7'- 8"	5	8"	3'- 11 1/4"	7'- 8 1/4"	11'- 4"	6	8"	14'- 0"	4	9"	14'- 0"	4	9"	14'- 0"			
12	12	26 1/2"	26 1/2"	10"	8"	49	49'- 0"	49	49'- 0"	10	10'- 0"	6	8"	47'- 2"	6	8"	51'- 4"	4	8"	4'- 3/4"	7'- 10"	5	8"	4'- 3/4"	8'- 8 1/2"	12'- 5"	5	5"	16'- 1"	4	9"	16'- 1"	4	9"	16'- 1"			

QUADRUPLE BOX CULVERTS

35 TO 40 FT. FILLS

VIRGINIA DEPARTMENT OF TRANSPORTATION

STRUCTURE AND BRIDGE DIVISION