

DIMENSIONS								REINFORCING STEEL																								
SPAN	HGHT	T1	T2	T3	T4	A	B	C	D	E	F	BH1			BH2			BH3			BH4			BV1			BV2					
(FT.)	(FT.)	TOP SLAB	BOTTOM SLAB	EXTERIOR WALL (IN.)	INTERIOR WALL (IN.)							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	9"	9"	8"	8"	13	13'- 0"	13	13'- 0"	1	1'- 0"	4	12"	14'- 10"	4	12"	15'- 0"	--	--	----	----	4	12"	2'- 1/4"	2'- 9"	4'- 7"	4	12"	4'- 2"	4	12"	4'- 2"
3	4	9"	9"	8"	8"	13	13'- 0"	13	13'- 0"	2	2'- 0"	4	12"	14'- 10"	4	12"	15'- 0"	--	--	----	----	4	12"	2'- 1/4"	3'- 3"	5'- 1"	4	12"	5'- 2"	4	12"	5'- 2"
4	3	11"	11"	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'- 11"	4'- 11"	4	12"	4'- 6"	4	12"	4'- 6"
4	4	11 1/4"	11 1/4"	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'- 5/4"	5'- 6"	4	12"	5'- 6"	4	12"	5'- 6"
4	5	11"	11"	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'- 11"	5'- 11"	4	12"	6'- 6"	4	12"	6'- 6"
4	6	11 1/4"	11 1/4"	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'- 5/4"	6'- 6"	4	9"	7'- 6"	4	12"	7'- 6"
5	3	13 1/4"	13 1/4"	8"	8"	21	21'- 0"	21	21'- 0"	1	1'- 0"	4	10"	22'- 0"	4	10"	23'- 0"	--	--	----	----	4	10"	2'- 6"	3'- 1 1/4"	5'- 4"	4	12"	4'- 10"	4	12"	4'- 10"
5	4	13 1/4"	13 1/4"	8"	8"	21	21'- 0"	21	21'- 0"	2	2'- 0"	4	9"	22'- 0"	4	9"	23'- 0"	--	--	----	----	4	9"	2'- 6"	3'- 7/4"	5'- 10"	4	12"	5'- 10"	4	12"	5'- 10"
5	5	13 1/4"	13 1/4"	8"	8"	21	21'- 0"	21	21'- 0"	3	3'- 0"	4	9"	22'- 0"	4	9"	23'- 0"	--	--	----	----	4	9"	2'- 6"	4'- 1 1/4"	6'- 4"	4	12"	6'- 10"	4	12"	6'- 10"
5	6	13 1/4"	13 1/4"	8"	8"	21	21'- 0"	21	21'- 0"	4	4'- 0"	4	10"	22'- 0"	4	10"	23'- 0"	3	10"	2'- 6"	4'- 10"	4	10"	2'- 6"	4'- 7/4"	6'- 10"	4	10"	7'- 10"	4	12"	7'- 10"
5	7	13 1/4"	13 1/4"	8"	8"	21	21'- 0"	21	21'- 0"	5	5'- 0"	4	10"	22'- 0"	4	10"	23'- 0"	--	--	----	----	5	10"	2'- 6"	5'- 1 1/4"	7'- 3"	5	10 1/2"	8'- 10"	4	12"	8'- 10"
6	4	15 3/4"	15 3/4"	8"	8"	25	25'- 0"	25	25'- 0"	2	2'- 0"	4	9"	25'- 7"	5	9"	27'- 0"	--	--	----	----	4	9"	2'- 8 3/8"	3'- 9 3/4"	6'- 3"	4	12"	6'- 3"	4	11"	6'- 3"
6	5	15 3/4"	15 3/4"	8"	8"	25	25'- 0"	25	25'- 0"	3	3'- 0"	4	9"	25'- 7"	5	9"	27'- 0"	--	--	----	----	4	9"	2'- 8 3/8"	4'- 3 3/4"	6'- 9"	4	12"	7'- 3"	4	11"	7'- 3"
6	6	15 3/4"	15 3/4"	8"	8"	25	25'- 0"	25	25'- 0"	4	4'- 0"	4	9"	25'- 7"	5	9"	27'- 0"	--	--	----	----	4	9"	2'- 8 3/8"	4'- 9 3/4"	7'- 3"	4	9 1/2"	8'- 3"	4	11"	8'- 3"
6	7	16"	16"	8"	8"	25	25'- 0"	25	25'- 0"	5	5'- 0"	4	9"	25'- 7"	5	9"	27'- 0"	3	9"	2'- 8 3/8"	5'- 2"	4	9"	2'- 8 3/8"	5'- 4"	7'- 9"	4	6 1/2"	9'- 4"	4	11"	9'- 4"
6	8	15 1/2"	15 1/2"	8"	8"	25	25'- 0"	25	25'- 0"	6	6'- 0"	4	9"	25'- 7"	5	9"	27'- 0"	--	--	----	----	5	9"	2'- 8 3/8"	5'- 9 1/2"	8'- 2"	4	5"	10'- 3"	4	11"	10'- 3"
7	4	18"	18"	8"	8"	29	29'- 0"	29	29'- 0"	2	2'- 0"	5	8"	29'- 2"	5	8"	31'- 0"	--	--	----	----	4	8"	2'- 10 3/4"	4'- 0"	6'- 8"	4	12"	6'- 8"	4	10"	6'- 8"
7	6	17 3/4"	17 3/4"	8"	8"	29	29'- 0"	29	29'- 0"	4	4'- 0"	5	8"	29'- 2"	5	8"	31'- 0"	--	--	----	----	4	8"	2'- 10 3/4"	4'- 11 3/4"	7'- 7"	4	9 1/2"	8'- 7"	4	10"	8'- 7"
7	8	17 3/4"	17 3/4"	8"	8"	29	29'- 0"	29	29'- 0"	6	6'- 0"	5	9"	29'- 2"	5	9"	31'- 0"	--	--	----	----	5	9"	2'- 10 3/4"	5'- 11 3/4"	8'- 7"	5	7 1/2"	10'- 7"	4	10"	10'- 7"
7	10	18"	18"	9 3/4"	8"	29	29'- 0"	29	29'- 0"	8	8'- 0"	5	9"	29'- 2"	5	9"	31'- 3"	4	9"	3'- 1/2"	5'- 10"	5	9"	3'- 1/2"	7'- 0"	9'- 9"	6	9"	12'- 8"	4	10"	12'- 8"
8	4	20 1/2"	20 1/2"	8"	8"	33	33'- 0"	33	33'- 0"	2	2'- 0"	6	9"	32'- 10"	5	9"	35'- 0"	--	--	----	----	4	9"	3'- 1 1/4"	4'- 2 1/2"	7'- 1"	4	12"	7'- 1"	4	10"	7'- 1"
8	6	20 1/2"	20 1/2"	8"	8"	33	33'- 0"	33	33'- 0"	4	4'- 0"	6	9"	32'- 10"	5	9"	35'- 0"	--	--	----	----	4	9"	3'- 1 1/4"	5'- 2 1/2"	8'- 1"	4	9"	9'- 1"	4	10"	9'- 1"
8	8	20 1/4"	20 1/4"	8"	8"	33	33'- 0"	33	33'- 0"	6	6'- 0"	6	9"	32'- 10"	5	9"	35'- 0"	--	--	----	----	5	9"	3'- 1 1/4"	6'- 2 1/4"	9'- 0"	4	4 1/2"	11'- 0"	4	10"	11'- 0"
8	10	20 1/4"	20 1/4"	9 3/4"	8"	33	33'- 0"	33	33'- 0"	8	8'- 0"	6	9"	32'- 10"	5	9"	35'- 3"	--	--	----	----	6	9"	3'- 3"	7'- 2 1/4"	10'- 0"	6	9"	13'- 0"	4	10"	13'- 0"
9	4	23"	23"	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'- 5"	7'- 5"	4	12"	7'- 6"	4	10"	7'- 6"
9	6	23"	23"	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'- 5"	8'- 5"	4	8"	9'- 6"	4	10"	9'- 6"
9	8	22 3/4"	22 3/4"	8"	8"	37	37'- 0"	37	37'- 0"	6	6'- 0"	6	9"	36'- 5"	6	9"	39'- 0"	--	--	----	----	5	9"	3'- 5 3/8"	6'- 4 3/4"	9'- 4"	5	7 1/2"	11'- 6"	4	10"	11'- 6"
9	10	22 3/4"	22 3/4"	9 3/4"	8"	37	37'- 0"	37	37'- 0"	8	8'- 0"	6	9"	36'- 5"	6	9"	39'- 3"	--	--	----	----	6	9"	3'- 5 3/8"	7'- 4 3/4"	10'- 5"	5	6"	13'- 6"	4	10"	13'- 6"
9	12	22 1/2"	22 1/2"	11"	8"	37	37'- 0"	37	37'- 0"	10	10'- 0"	6	9"	36'- 5"	6	9"	39'- 6"	3	9"	3'- 6 5/8"	6'- 11"	7	9"	3'- 6 5/8"	8'- 4 1/2"	11'- 6"	6	7"	15'- 5"	4	10"	15'- 5"
10	4	25"	25"	8"	8"	41	41'- 0"	41	41'- 0"	2	2'- 0"	7	9"	40'- 0"	6	9"	43'- 0"	--	--	----	----	4	9"	3'- 6"	4'- 7"	7'- 10"	4	12"	7'- 10"	4	9"	7'- 10"
10	6	24 3/4"	24 3/4"	8"	8"	41	41'- 0"	41	41'- 0"	4	4'- 0"	6	9"	40'- 0"	6	9"	43'- 0"	--	--	----	----	4	9"	3'- 6"	5'- 6 3/4"	8'- 10"	4	8"	9'- 9"	4	9"	9'- 9"
10	8	24 3/4"	24 3/4"	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'- 6 3/4"	9'- 10"	4	4 1/2"	11'- 9"	4	9"	11'- 9"
10	10	24 3/4"	24 3/4"	9 3/4"	8"	41	41'- 0"	41	41'- 0"	8	8'- 0"	6	9"	40'- 0"	6	9"	43'- 3"	3	9"	3'- 7 3/4"	7'- 1"	5	9"	3'- 7 3/4"	7'- 6 3/4"	10'- 11"	5	6"	13'- 9"	4	9"	13'- 9"
10	12	24 3/4"	24 3/4"	11"	8"	41	41'- 0"	41	41'- 0"	10	10'- 0"	6	9"	40'- 0"	6	9"	43'- 6"	3	9"	3'- 9"	7'- 4"	6	9"	3'- 9"	8'- 6 3/4"	11'- 11"	7	9 1/2"	15'- 9"	4	9"	15'- 9"
12	6	29 1/2"	29 1/2"	8"	8"	49	49'- 0"	49	49'- 0"	4	4'- 0"	7	9"	47'- 2"	7	9"	51'- 0"	--	--	----	----	4	9"	3'- 10 3/4"	5'- 11 1/2"	9'- 7"	4	7"	10'- 7"	4	7 1/2"	10'- 7"
12	8	29 1/2"	29 1/2"	8"	8"	49	49'- 0"	49	49'- 0"	6	6'- 0"	7	9"	47'- 2"	7	9"	51'- 0"	3	9"	3'- 10 3/4"	7'- 7"	4	9"	3'- 10 3/4"	6'- 11 1/2"	10'- 7"	5	6 1/2"	12'- 7"	4	7 1/2"	12'- 7"
12	10	29 1/2"	29 1/2"	9 3/4"	8"	49	49'- 0"	49	49'- 0"	8	8'- 0"	7	9"	47'- 2"	7	9"	51'- 3"	--	--	----	----	6	9"	4'- 1/2"	7'- 11 1/2"	11'- 7"	6	8"	14'- 7"	4	7 1/2"	14'- 7"
12	12	29 3/4"	29 3/4"	11 1/4"	8"	49	49'- 0"	49	49'- 0"	10	10'- 0"	7	8"	47'- 2"	7	8"	51'- 6"	3	8"	4'- 2"	8'- 2"	6	8"	4'- 2"	8'- 11 3/4"	12'- 9"	8	12"	16'- 8"	4	7 1/2"	16'- 8"

# QUADRUPLE BOX CULVERTS

## 45 TO 50 FT. FILLS

VIRGINIA DEPARTMENT OF TRANSPORTATION

STRUCTURE  
AND  
BRIDGE  
DIVISION