

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	α	LENGTH	SIZE	SPACING C-C	α	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 1/4"	2'- 8"	4'- 6"	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"	--	---	----	----	4	12"	2'- 1 1/4"	3'- 2"	5'- 0"	4	12"	5'- 0"	4	12"	5'- 0"
4	3	8 1/2"	8 1/2"	8"	8"	17	17'- 0"	17	17'- 0"	1	1'- 0"	4	12"	18'- 5"	4	12"	19'- 0"	--	---	----	----	4	12"	2'- 3 5/8"	2'- 8 1/2"	4'- 9"	4	12"	4'- 1"	4	12"	4'- 1"
4	4	8 1/2"	8 1/2"	8"	8"	17	17'- 0"	17	17'- 0"	2	2'- 0"	4	12"	18'- 5"	4	12"	19'- 0"	--	---	----	----	4	12"	2'- 3 5/8"	3'- 2 1/2"	5'- 3"	4	12"	5'- 1"	4	12"	5'- 1"
4	5	8 1/2"	8 1/2"	8"	8"	17	17'- 0"	17	17'- 0"	3	3'- 0"	4	12"	18'- 5"	4	12"	19'- 0"	--	---	----	----	4	12"	2'- 3 5/8"	3'- 8 1/2"	5'- 9"	4	12"	6'- 1"	4	12"	6'- 1"
4	6	8 1/2"	8 1/2"	8"	8"	17	17'- 0"	17	17'- 0"	4	4'- 0"	4	12"	18'- 5"	4	12"	19'- 0"	--	---	----	----	4	12"	2'- 3 5/8"	4'- 2 1/2"	6'- 3"	4	12"	7'- 1"	4	12"	7'- 1"
5	3	10 1/4"	10 1/4"	8"	8"	21	21'- 0"	21	21'- 0"	1	1'- 0"	4	12"	22'- 0"	4	12"	23'- 0"	3	12"	2'- 6"	4'-10"	4	12"	2'- 6"	2'-10 1/4"	5'- 1"	4	12"	4'- 5"	4	12"	4'- 5"
5	4	10"	10"	8"	8"	21	21'- 0"	21	21'- 0"	2	2'- 0"	4	12"	22'- 0"	4	12"	23'- 0"	3	12"	2'- 6"	4'-10"	4	12"	2'- 6"	3'- 4"	5'- 7"	4	12"	5'- 4"	4	12"	5'- 4"
5	5	10 1/4"	10 1/4"	8"	8"	21	21'- 0"	21	21'- 0"	3	3'- 0"	4	12"	22'- 0"	4	12"	23'- 0"	3	12"	2'- 6"	4'-10"	4	12"	2'- 6"	3'-10 1/4"	6'- 1"	4	12"	6'- 5"	4	12"	6'- 5"
5	6	10"	10"	8"	8"	21	21'- 0"	21	21'- 0"	4	4'- 0"	4	12"	22'- 0"	4	12"	23'- 0"	4	12"	2'- 6"	4'- 9"	4	12"	2'- 6"	4'- 4"	6'- 7"	4	12"	7'- 4"	4	12"	7'- 4"
5	7	10"	10"	8"	8"	21	21'- 0"	21	21'- 0"	5	5'- 0"	4	12"	22'- 0"	4	12"	23'- 0"	4	12"	2'- 6"	4'- 9"	4	12"	2'- 6"	4'-10"	7'- 1"	4	12"	8'- 4"	4	12"	8'- 4"
6	4	12"	12"	8"	8"	25	25'- 0"	25	25'- 0"	2	2'- 0"	4	10"	25'- 7"	4	10"	27'- 0"	--	---	----	----	4	10"	2'- 8 3/8"	3'- 6"	5'-11"	4	12"	5'- 8"	4	12"	5'- 8"
6	5	12 1/4"	12 1/4"	8"	8"	25	25'- 0"	25	25'- 0"	3	3'- 0"	4	10"	25'- 7"	4	10"	27'- 0"	--	---	----	----	4	10"	2'- 8 3/8"	4'- 1/4"	6'- 5"	4	12"	6'- 9"	4	12"	6'- 9"
6	6	11 1/2"	11 1/2"	8"	8"	25	25'- 0"	25	25'- 0"	4	4'- 0"	4	10"	25'- 7"	4	10"	27'- 0"	--	---	----	----	4	10"	2'- 8 3/8"	4'- 5 1/2"	6'-11"	4	12"	7'- 7"	4	12"	7'- 7"
6	7	11 1/2"	11 1/2"	8"	8"	25	25'- 0"	25	25'- 0"	5	5'- 0"	4	10"	25'- 7"	4	10"	27'- 0"	3	10"	2'- 8 3/8"	5'- 2"	4	10"	2'- 8 3/8"	4'-11 1/2"	7'- 5"	4	12"	8'- 7"	4	12"	8'- 7"
6	8	11 3/4"	11 3/4"	8"	8"	25	25'- 0"	25	25'- 0"	6	6'- 0"	4	10"	25'- 7"	4	10"	27'- 0"	--	---	----	----	5	10"	2'- 8 3/8"	5'- 5 3/4"	7'-10"	4	8 1/2"	9'- 8"	4	12"	9'- 8"
7	4	13 1/4"	13 1/4"	8"	8"	29	29'- 0"	29	29'- 0"	2	2'- 0"	4	9"	29'- 2"	4	9"	31'- 0"	--	---	----	----	4	9"	2'-10 3/4"	3'- 7 1/4"	6'- 3"	4	12"	5'-10"	4	12"	5'-10"
7	6	13 1/4"	13 1/4"	8"	8"	29	29'- 0"	29	29'- 0"	4	4'- 0"	4	9"	29'- 2"	5	9"	31'- 0"	--	---	----	----	4	9"	2'-10 3/4"	4'- 7 1/4"	7'- 3"	4	12"	7'-10"	4	12"	7'-10"
7	8	13 1/4"	13 1/4"	8"	8"	29	29'- 0"	29	29'- 0"	6	6'- 0"	4	9"	29'- 2"	5	9"	31'- 0"	3	9"	2'-10 3/4"	5'- 7"	4	9"	2'-10 3/4"	5'- 7 1/4"	8'- 3"	4	9"	9'-10"	4	12"	9'-10"
7	10	13 1/4"	13 1/4"	8"	8"	29	29'- 0"	29	29'- 0"	8	8'- 0"	4	9"	29'- 2"	5	9"	31'- 0"	3	9"	2'-10 3/4"	5'- 7"	5	9"	2'-10 3/4"	6'- 7 1/4"	9'- 2"	5	8"	11'-10"	4	12"	11'-10"
8	4	15"	15"	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'- 9"	6'- 7"	4	12"	6'- 2"	4	12"	6'- 2"
8	6	15"	15"	8"	8"	33	33'- 0"	33	33'- 0"	4	4'- 0"	5	9"	32'-10"	5	9"	35'- 0"	--	---	----	----	4	9"	3'- 1 1/4"	4'- 9"	7'- 7"	4	12"	8'- 2"	4	12"	8'- 2"
8	8	15 1/4"	15 1/4"	8"	8"	33	33'- 0"	33	33'- 0"	6	6'- 0"	5	9"	32'-10"	5	9"	35'- 0"	3	9"	3'- 1 1/4"	6'- 0"	4	9"	3'- 1 1/4"	5'- 9 1/4"	8'- 7"	4	9"	10'- 3"	4	12"	10'- 3"
8	10	15"	15"	8"	8"	33	33'- 0"	33	33'- 0"	8	8'- 0"	5	9"	32'-10"	5	9"	35'- 0"	3	9"	3'- 1 1/4"	6'- 0"	5	9"	3'- 1 1/4"	6'- 9"	9'- 6"	6	11 1/2"	12'- 2"	4	12"	12'- 2"
9	4	17"	17"	8"	8"	37	37'- 0"	37	37'- 0"	2	2'- 0"	6	9"	36'- 5"	5	9"	39'- 0"	--	---	----	----	4	9"	3'- 3 5/8"	3'-11"	6'-11"	4	12"	6'- 6"	4	12"	6'- 6"
9	6	17"	17"	8"	8"	37	37'- 0"	37	37'- 0"	4	4'- 0"	6	9"	36'- 5"	5	9"	39'- 0"	--	---	----	----	4	9"	3'- 3 5/8"	4'-11"	7'-11"	4	12"	8'- 6"	4	12"	8'- 6"
9	8	17"	17"	8"	8"	37	37'- 0"	37	37'- 0"	6	6'- 0"	6	9"	36'- 5"	5	9"	39'- 0"	--	---	----	----	5	9"	3'- 3 5/8"	5'-11"	8'-11"	4	9"	10'- 6"	4	12"	10'- 6"
9	10	17"	17"	8"	8"	37	37'- 0"	37	37'- 0"	8	8'- 0"	5	9"	36'- 5"	5	9"	39'- 0"	--	---	----	----	6	9"	3'- 3 5/8"	6'-11"	9'-10"	5	8"	12'- 6"	4	12"	12'- 6"
9	12	17"	17"	8 1/2"	8"	37	37'- 0"	37	37'- 0"	10	10'- 0"	5	9"	36'- 5"	5	9"	39'- 1"	--	---	----	----	7	9"	3'- 4 1/8"	7'-11"	10'-10"	5	5 1/2"	14'- 6"	4	12"	14'- 6"
10	4	18 1/2"	18 1/2"	8"	8"	41	41'- 0"	41	41'- 0"	2	2'- 0"	6	9"	40'- 0"	5	9"	43'- 0"	--	---	----	----	4	9"	3'- 6"	4'- 1/2"	7'- 3"	4	12"	6'- 9"	4	10 1/2"	6'- 9"
10	6	18 1/2"	18 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'- 1/2"	8'- 3"	4	12"	8'- 9"	4	10 1/2"	8'- 9"
10	8	18 3/4"	18 3/4"	8"	8"	41	41'- 0"	41	41'- 0"	6	6'- 0"	6	9"	40'- 0"	5	9"	43'- 0"	3	9"	3'- 6"	6'-10"	4	9"	3'- 6"	6'- 3/4"	9'- 4"	4	9"	10'- 9"	4	11"	10'- 9"
10	10	18 3/4"	18 3/4"	8"	8"	41	41'- 0"	41	41'- 0"	8	8'- 0"	6	9"	40'- 0"	5	9"	43'- 0"	3	9"	3'- 6"	6'-10"	5	9"	3'- 6"	7'- 3/4"	10'- 3"	4	5"	12'- 9"	4	11"	12'- 9"
10	12	18 3/4"	18 3/4"	8 1/2"	8"	41	41'- 0"	41	41'- 0"	10	10'- 0"	6	9"	40'- 0"	6	9"	43'- 1"	4	9"	3'- 6 1/2"	6'-10"	6	9"	3'- 6 1/2"	8'- 3/4"	11'- 2"	5	5 1/2"	14'- 9"	4	11"	14'- 9"
12	6	21 3/4"	21 3/4"	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'- 3 3/4"	8'-11"	4	12"	9'- 3"	4	10"	9'- 3"
12	8	21 3/4"	21 3/4"	8"	8"	49	49'- 0"	49	49'- 0"	6	6'- 0"	6	8"	47'- 2"	6	8"	51'- 0"	3	8"	3'-10 3/4"	7'- 7"	4	8"	3'-10 3/4"	6'- 3 3/4"	9'-11"	4	8 1/2"	11'- 3"	4	10"	11'- 3"
12	10	21 3/4"	21 3/4"	8"	8"	49	49'- 0"	49	49'- 0"	8	8'- 0"	6	8"	47'- 2"	6	8"	51'- 0"	3	8"	3'-10 3/4"	7'- 7"	5	8"	3'-10 3/4"	7'- 3 3/4"	10'-11"	4	5"	13'- 3"	4	10"	13'- 3"
12	12	21 3/4"	21 3/4"	8 1/2"	8"	49	49'- 0"	49	49'- 0"	10	10'- 0"	6	8"	47'- 2"	6	8"	51'- 1"	4	8"	3'-11 1/4"	7'- 7"	5	8"	3'-11 1/4"	8'- 3 3/4"	11'-11"	5	5 1/2"	15'- 3"	4	10"	15'- 3"

QUADRUPLE BOX CULVERTS

25 TO 30 FT. FILLS

VIRGINIA DEPARTMENT OF TRANSPORTATION

STRUCTURE
AND
BRIDGE
DIVISION