

BCD-50

FOR TYPICAL SECTION, NOTES AND OTHER DETAILS, REFER TO STANDARD BCD-DT.

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	9/4"	9/4"	8"	8"	6	6'- 0"	6	6'- 0"	1	1'- 0"	4	12"	6'- 7"	4	12"	7'- 8"	--	---	----	----	4	12"	2'- 4"	2'- 10"	4'- 10"	4	12"	4'- 2"	4	12"	4'- 2"
3	4	9/4"	9/4"	8"	8"	6	6'- 0"	6	6'- 0"	2	2'- 0"	4	12"	6'- 7"	4	12"	7'- 8"	--	---	----	----	4	12"	2'- 4"	3'- 4"	5'- 4"	4	12"	5'- 2"	4	12"	5'- 2"
4	3	1 1/2"	1 1/2"	8"	8"	8	8'- 0"	8	8'- 0"	1	1'- 0"	4	12"	8'- 7"	4	12"	9'- 8"	--	---	----	----	4	12"	2'- 4"	3'- 0"	5'- 0"	4	12"	4'- 6"	4	12"	4'- 6"
4	4	1 1/2"	1 1/2"	8"	8"	8	8'- 0"	8	8'- 0"	2	2'- 0"	4	12"	8'- 7"	4	12"	9'- 8"	--	---	----	----	4	12"	2'- 4"	3'- 6"	5'- 6"	4	12"	5'- 6"	4	12"	5'- 6"
4	5	1 1/4"	1 1/4"	8"	8"	8	8'- 0"	8	8'- 0"	3	3'- 0"	4	12"	8'- 7"	4	12"	9'- 8"	--	---	----	----	4	12"	2'- 4"	4'- 0"	6'- 0"	5	12"	6'- 6"	4	12"	6'- 6"
4	6	1 1/4"	1 1/4"	8"	8"	8	8'- 0"	8	8'- 0"	4	4'- 0"	4	12"	8'- 7"	4	12"	9'- 8"	4	12"	3'- 0"	5'- 9"	4	12"	2'- 4"	4'- 6"	6'- 6"	5	9"	7'- 6"	4	12"	7'- 6"
5	3	1 4/2"	1 4/2"	8"	8"	10	10'- 0"	10	10'- 0"	1	1'- 0"	4	10"	10'- 7"	4	10"	11'- 8"	--	---	----	----	4	10"	2'- 4"	3'- 3"	5'- 3"	4	12"	5'- 0"	4	12"	5'- 0"
5	4	14"	14"	8"	8"	10	10'- 0"	10	10'- 0"	2	2'- 0"	4	10"	10'- 7"	4	10"	11'- 8"	--	---	----	----	4	10"	2'- 4"	3'- 9"	5'- 9"	4	12"	6'- 0"	4	12"	6'- 0"
5	5	14"	14"	8"	8"	10	10'- 0"	10	10'- 0"	3	3'- 0"	4	10"	10'- 7"	4	10"	11'- 8"	--	---	----	----	4	10"	2'- 4"	4'- 3"	6'- 3"	5	12"	7'- 0"	4	12"	7'- 0"
5	6	13 3/4"	13 3/4"	8"	8"	10	10'- 0"	10	10'- 0"	4	4'- 0"	4	10"	10'- 7"	4	10"	11'- 8"	--	---	----	----	4	10"	2'- 4"	4'- 8"	6'- 9"	5	9"	7'- 11"	4	12"	7'- 11"
5	7	14"	14"	8 1/2"	8"	10	10'- 0"	10	10'- 0"	5	5'- 0"	4	10"	10'- 5"	4	10"	11'- 9"	--	---	----	----	5	10"	2'- 6"	5'- 4"	7'- 6"	6	10 1/2"	9'- 0"	4	12"	9'- 0"
6	4	16 1/2"	16 1/2"	8"	8"	12	12'- 0"	12	12'- 0"	2	2'- 0"	5	9"	12'- 7"	4	9"	13'- 8"	--	---	----	----	4	9"	2'- 9"	3'- 11"	6'- 4"	4	12"	6'- 5"	4	10"	6'- 5"
6	5	16 1/2"	16 1/2"	8"	8"	12	12'- 0"	12	12'- 0"	3	3'- 0"	5	9"	12'- 7"	4	9"	13'- 8"	--	---	----	----	4	9"	2'- 9"	4'- 5"	6'- 10"	5	12"	7'- 5"	4	10"	7'- 5"
6	6	16 1/2"	16 1/2"	8"	8"	12	12'- 0"	12	12'- 0"	4	4'- 0"	5	9"	12'- 7"	4	9"	13'- 8"	--	---	----	----	4	9"	2'- 9"	4'- 11"	7'- 4"	5	9"	8'- 5"	4	10 1/2"	8'- 5"
6	7	16 1/2"	16 1/2"	8"	8"	12	12'- 0"	12	12'- 0"	5	5'- 0"	5	9"	12'- 7"	4	9"	13'- 8"	3	9"	3'- 8"	7'- 1"	4	9"	2'- 9"	5'- 5"	7'- 10"	5	6 1/2"	9'- 5"	4	10"	9'- 5"
6	8	16 1/2"	16 1/2"	9 1/2"	8"	12	12'- 0"	12	12'- 0"	6	6'- 0"	5	9"	12'- 7"	4	9"	13'- 11"	--	---	----	----	5	9"	2'- 11"	6'- 1"	8'- 7"	7	11 1/2"	10'- 5"	4	10 1/2"	10'- 5"
7	4	19"	19"	8"	8"	14	14'- 0"	14	14'- 0"	2	2'- 0"	6	9"	14'- 7"	5	9"	15'- 8"	--	---	----	----	4	9"	3'- 2"	4'- 1"	7'- 0"	4	12"	6'- 9"	4	10"	6'- 9"
7	6	18 3/4"	18 3/4"	8"	8"	14	14'- 0"	14	14'- 0"	4	4'- 0"	5	8"	14'- 7"	5	8"	15'- 8"	--	---	----	----	4	8"	2'- 9"	5'- 1"	7'- 7"	5	9"	8'- 9"	4	10"	8'- 9"
7	8	18 3/4"	18 3/4"	9"	8"	14	14'- 0"	14	14'- 0"	6	6'- 0"	5	8"	14'- 9"	5	8"	15'- 9"	3	8"	4'- 0"	7'- 10"	4	8"	2'- 9"	6'- 1"	8'- 7"	6	7 1/2"	10'- 9"	4	10"	10'- 9"
7	10	19"	19"	12"	8"	14	14'- 0"	14	14'- 0"	8	8'- 0"	5	8"	15'- 0"	5	8"	16'- 3"	3	8"	4'- 6"	8'- 8"	5	8"	2'- 11"	7'- 3"	9'- 10"	7	9"	12'- 9"	4	10"	12'- 9"
8	4	21 1/2"	21 1/2"	8"	8"	16	16'- 0"	16	16'- 0"	2	2'- 0"	6	9"	16'- 7"	5	9"	17'- 8"	--	---	----	----	4	9"	3'- 2"	4'- 4"	7'- 2"	4	12"	7'- 3"	4	10"	7'- 3"
8	6	21"	21"	8"	8"	16	16'- 0"	16	16'- 0"	4	4'- 0"	6	9"	16'- 7"	5	9"	17'- 8"	--	---	----	----	4	9"	3'- 2"	5'- 3"	8'- 2"	5	8 1/2"	9'- 2"	4	10"	9'- 2"
8	8	21 1/2"	21 1/2"	9"	8"	16	16'- 0"	16	16'- 0"	6	6'- 0"	6	9"	16'- 6"	5	9"	17'- 9"	--	---	----	----	5	9"	3'- 4"	6'- 6"	9'- 5"	6	7 1/2"	11'- 3"	4	10"	11'- 3"
8	10	21 1/2"	21 1/2"	12"	8"	16	16'- 0"	16	16'- 0"	8	8'- 0"	6	9"	16'- 9"	5	9"	18'- 3"	--	---	----	----	6	9"	3'- 5"	7'- 8"	10'- 8"	4	4"	13'- 3"	4	10"	13'- 3"
9	4	24"	24"	8"	8"	18	18'- 0"	18	18'- 0"	2	2'- 0"	7	9"	18'- 7"	6	9"	19'- 8"	--	---	----	----	4	9"	3'- 10"	4'- 6"	8'- 1"	4	12"	7'- 8"	4	9"	7'- 8"
9	6	24"	24"	8"	8"	18	18'- 0"	18	18'- 0"	4	4'- 0"	6	9"	18'- 7"	6	9"	19'- 8"	--	---	----	----	4	9"	3'- 2"	5'- 6"	8'- 5"	5	8"	9'- 8"	4	9"	9'- 8"
9	8	24"	24"	8"	8"	18	18'- 0"	18	18'- 0"	6	6'- 0"	6	9"	18'- 7"	6	9"	19'- 8"	4	9"	4'- 6"	8'- 8"	4	9"	3'- 2"	6'- 6"	9'- 5"	5	4 1/2"	11'- 8"	4	9"	11'- 8"
9	10	24"	24"	11 1/2"	8"	18	18'- 0"	18	18'- 0"	8	8'- 0"	6	9"	18'- 11"	6	9"	20'- 3"	3	9"	4'- 10"	9'- 6"	5	9"	3'- 4"	7'- 9"	10'- 8"	6	6"	13'- 8"	4	9"	13'- 8"
9	12	24"	24"	14"	8"	18	18'- 0"	18	18'- 0"	10	10'- 0"	6	9"	18'- 10"	6	9"	20'- 8"	3	9"	5'- 3"	10'- 4"	7	9"	3'- 7"	9'- 1"	12'- 2"	7	9 1/2"	15'- 8"	4	9"	15'- 8"
10	4	26 1/2"	26 1/2"	8"	8"	20	20'- 0"	20	20'- 0"	2	2'- 0"	7	8"	20'- 7"	6	8"	21'- 8"	--	---	----	----	4	8"	3'- 10"	4'- 9"	8'- 3"	4	12"	8'- 0"	4	8"	8'- 0"
10	6	26 1/2"	26 1/2"	8"	8"	20	20'- 0"	20	20'- 0"	4	4'- 0"	6	8"	20'- 7"	6	8"	21'- 8"	--	---	----	----	4	8"	3'- 2"	5'- 9"	8'- 7"	6	12"	10'- 0"	4	8"	10'- 0"
10	8	26 1/2"	26 1/2"	8"	8"	20	20'- 0"	20	20'- 0"	6	6'- 0"	6	8"	20'- 7"	6	8"	21'- 8"	3	8"	4'- 8"	9'- 2"	4	8"	3'- 2"	6'- 9"	9'- 7"	5	4 1/2"	12'- 0"	4	8"	12'- 0"
10	10	26 1/2"	26 1/2"	11"	8"	20	20'- 0"	20	20'- 0"	8	8'- 0"	6	8"	20'- 10"	6	8"	22'- 2"	3	8"	5'- 1"	9'- 11"	5	8"	3'- 4"	7'- 11"	10'- 10"	8	11 1/2"	14'- 0"	4	8"	14'- 0"
10	12	26"	26"	14"	8"	20	20'- 0"	20	20'- 0"	10	10'- 0"	7	9"	20'- 10"	7	9"	22'- 8"	--	---	----	----	7	9"	4'- 3"	9'- 3"	13'- 0"	8	12"	16'- 0"	4	8"	16'- 0"
12	6	31 1/2"	31 1/2"	8"	8"	24	24'- 0"	24	24'- 0"	4	4'- 0"	8	9"	24'- 7"	6	9"	25'- 8"	--	---	----	----	4	9"	4'- 10"	6'- 2"	10'- 8"	6	10 1/2"	10'- 11"	5	10 1/2"	10'- 11"
12	8	31 1/2"	31 1/2"	8"	8"	24	24'- 0"	24	24'- 0"	6	6'- 0"	7	9"	24'- 7"	6	9"	25'- 8"	3	9"	5'- 1"	10'- 0"	4	9"	3'- 10"	7'- 2"	10'- 8"	8	9"	12'- 11"	5	10 1/2"	12'- 11"
12	10	31 1/2"	31 1/2"	9 3/4"	8"	24	24'- 0"	24	24'- 0"	8	8'- 0"	7	9"	24'- 8"	6	9"	25'- 11"	3	9"	5'- 6"	10'- 9"	5	9"	4'- 0"	8'- 4"	11'- 11"	6	5 1/2"	14'- 11"	5	10 1/2"	14'- 11"
12	12	31"	31"	13 1/2"	8"	24	24'- 0"	24	24'- 0"	10	10'- 0"	8	9"	25'- 0"	7	9"	26'- 6"	3	9"	5'- 10"	11'- 6"	6	9"	5'- 1"	9'- 6"	14'- 1"	8	12"	16'- 9"	5	10 1/2"	16'- 9"

A COPY OF THE ORIGINAL SEALED AND SIGNED DRAWING IS ON FILE IN THE CENTRAL OFFICE.

VDOT
ROAD AND BRIDGE STANDARDS

SHEET 1 OF 2 REVISION DATE
1003.17 07/11

DOUBLE BOX CULVERTS
40 TO 50 FT. FILLS

VIRGINIA DEPARTMENT OF TRANSPORTATION

SPECIFICATION REFERENCE