


2016 ROAD & BRIDGE STANDARDS

BCS-05

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

DIMENSIONS					REINFORCING STEEL																						
SPAN (FT.)	HGHT (FT.)	T1 TOP SLAB (IN.)	T2 BOTTOM SLAB (IN.)	T3 WALL (IN.)	A	B	C	D	E	F	BH1				BH2			BH3				BV1			NO. BL1 #4 BARS	NO. BL2 #3 BARS	
											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"	4	12"	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"	4	12"	4'-0"	--	--	----	----	4	12"	5'-0"	16	12
4	3	8"	8"	8"	3	3'-0"	3	3'-0"	1	1'-0"	4	12"	5'-0"	2'-8"	9'-10"	5	12"	5'-0"	--	--	----	----	4	12"	4'-0"	20	8
4	4	8"	8"	8"	3	3'-0"	3	3'-0"	2	2'-0"	4	12"	5'-0"	3'-2"	10'-10"	5	12"	5'-0"	--	--	----	----	4	12"	5'-0"	20	12
4	5	8"	8"	8"	3	3'-0"	3	3'-0"	3	3'-0"	4	12"	5'-0"	3'-8"	11'-10"	5	12"	5'-0"	--	--	----	----	4	12"	6'-0"	20	16
4	6	8"	8"	8"	3	3'-0"	3	3'-0"	4	4'-0"	4	12"	5'-0"	4'-2"	12'-10"	5	12"	5'-0"	--	--	----	----	4	12"	7'-0"	20	20
5	3	8"	8"	8"	4	4'-0"	4	4'-0"	1	1'-0"	4	12"	6'-0"	2'-8"	10'-10"	5	12"	6'-0"	4	12"	2'-6"	4'-9"	4	12"	4'-0"	24	8
5	4	8"	8"	8"	4	4'-0"	4	4'-0"	2	2'-0"	4	12"	6'-0"	3'-2"	11'-10"	5	12"	6'-0"	--	--	----	----	4	12"	5'-0"	24	12
5	5	8"	8"	8"	4	4'-0"	4	4'-0"	3	3'-0"	4	12"	6'-0"	3'-8"	12'-10"	5	12"	6'-0"	--	--	----	----	4	12"	6'-0"	24	16
5	6	8"	8"	8"	4	4'-0"	4	4'-0"	4	4'-0"	4	12"	6'-0"	4'-2"	13'-10"	6	12"	6'-0"	--	--	----	----	4	12"	7'-0"	24	20
5	7	8"	8"	8"	4	4'-0"	4	4'-0"	5	5'-0"	4	12"	6'-0"	4'-8"	14'-10"	6	12"	6'-0"	--	--	----	----	4	12"	8'-0"	24	24
6	4	8"	8"	8"	5	5'-0"	5	5'-0"	2	2'-0"	5	12"	7'-0"	3'-2"	12'-8"	6	12"	7'-0"	--	--	----	----	4	12"	5'-0"	28	12
6	5	8"	8"	8"	5	5'-0"	5	5'-0"	3	3'-0"	4	12"	7'-0"	3'-8"	13'-10"	6	12"	7'-0"	4	12"	2'-8 ³ / ₈ "	5'-2"	4	12"	6'-0"	28	16
6	6	8"	8"	8"	5	5'-0"	5	5'-0"	4	4'-0"	4	12"	7'-0"	4'-2"	14'-10"	6	12"	7'-0"	4	12"	2'-8 ³ / ₈ "	5'-2"	4	12"	7'-0"	28	20
6	7	8"	8"	8"	5	5'-0"	5	5'-0"	5	5'-0"	4	10"	7'-0"	4'-8"	15'-10"	6	10"	7'-0"	4	10"	2'-11"	5'-8"	4	12"	8'-0"	28	24
6	8	8"	8"	8"	5	5'-0"	5	5'-0"	6	6'-0"	4	9"	7'-0"	5'-2"	16'-10"	6	9"	7'-0"	4	9"	3'-2"	6'-2"	4	12"	9'-0"	28	28
7	4	8"	8"	8"	6	6'-0"	6	6'-0"	2	2'-0"	5	11"	8'-0"	3'-2"	13'-8"	6	11"	8'-0"	--	--	----	----	4	12"	5'-0"	32	12
7	6	8"	8"	8"	6	6'-0"	6	6'-0"	4	4'-0"	4	9"	8'-0"	4'-2"	15'-10"	6	9"	8'-0"	4	9"	2'-10 ³ / ₄ "	5'-6"	4	12"	7'-0"	32	20
7	8	8"	8"	8"	6	6'-0"	6	6'-0"	6	6'-0"	4	8"	8'-0"	5'-2"	17'-10"	6	8"	8'-0"	3	8"	3'-2"	6'-2"	4	12"	9'-0"	32	28
7	10	8"	8"	8"	6	6'-0"	6	6'-0"	8	8'-0"	5	6"	8'-0"	6'-2"	19'-8"	6	6"	8'-0"	--	--	----	----	5	12"	11'-0"	32	36
8	4	8"	8"	8"	7	7'-0"	7	7'-0"	2	2'-0"	5	9"	9'-0"	3'-2"	14'-8"	6	9"	9'-0"	3	9"	3'-2"	6'-2"	4	11 ¹ / ₂ "	5'-0"	36	12
8	6	8"	8"	8"	7	7'-0"	7	7'-0"	4	4'-0"	4	8"	9'-0"	4'-2"	16'-10"	6	8"	9'-0"	4	8"	3'-2"	6'-2"	4	12"	7'-0"	36	20
8	8	8"	8"	8"	7	7'-0"	7	7'-0"	6	6'-0"	5	7"	9'-0"	5'-2"	18'-8"	6	7"	9'-0"	--	--	----	----	4	12"	9'-0"	36	28
8	10	8"	8"	8"	7	7'-0"	7	7'-0"	8	8'-0"	5	11"	9'-0"	6'-2"	20'-8"	8	11"	9'-0"	4	11"	3'-6"	6'-9"	5	12"	11'-0"	36	36
9	4	8"	8"	8"	8	8'-0"	8	8'-0"	2	2'-0"	5	8"	10'-0"	3'-2"	15'-8"	6	8"	10'-0"	3	8"	3'-3 ³ / ₈ "	6'-5"	4	8"	5'-0"	40	12
9	6	8"	8"	8"	8	8'-0"	8	8'-0"	4	4'-0"	4	7"	10'-0"	4'-2"	17'-10"	6	7"	10'-0"	4	7"	3'-3 ³ / ₈ "	6'-4"	4	11"	7'-0"	40	20
9	8	8 ¹ / ₄ "	8 ¹ / ₄ "	8"	8	8'-0"	8	8'-0"	6	6'-0"	5	10 ¹ / ₂ "	10'-0"	5'-2 ¹ / ₄ "	19'-9"	8	10 ¹ / ₂ "	10'-0"	3	10 ¹ / ₂ "	3'-3 ³ / ₈ "	6'-5"	4	12"	9'-0"	40	28
9	10	8"	8"	8"	8	8'-0"	8	8'-0"	8	8'-0"	5	10"	10'-0"	6'-2"	21'-8"	8	10"	10'-0"	4	10"	3'-6"	6'-9"	5	12"	11'-0"	40	36
9	12	8 ¹ / ₄ "	8 ¹ / ₄ "	8"	8	8'-0"	8	8'-0"	10	10'-0"	5	9 ¹ / ₂ "	10'-0"	7'-2 ¹ / ₄ "	23'-9"	8	9 ¹ / ₂ "	10'-0"	3	9 ¹ / ₂ "	3'-11"	7'-9"	6	11 ¹ / ₂ "	13'-0"	40	44
10	4	8 ³ / ₄ "	8 ³ / ₄ "	8"	9	9'-0"	9	9'-0"	2	2'-0"	6	7"	11'-0"	3'-2 ³ / ₄ "	16'-8"	6	7"	11'-0"	--	--	----	----	5	9 ¹ / ₂ "	5'-2"	44	12
10	6	8 ³ / ₄ "	8 ³ / ₄ "	8"	9	9'-0"	9	9'-0"	4	4'-0"	6	10"	11'-0"	4'-2 ³ / ₄ "	18'-8"	8	10"	11'-0"	--	--	----	----	4	9"	7'-2"	44	20
10	8	8 ³ / ₄ "	8 ³ / ₄ "	8"	9	9'-0"	9	9'-0"	6	6'-0"	6	6"	11'-0"	5'-2 ³ / ₄ "	20'-8"	6	6"	11'-0"	--	--	----	----	4	10"	9'-2"	44	28
10	10	8 ³ / ₄ "	8 ³ / ₄ "	8"	9	9'-0"	9	9'-0"	8	8'-0"	6	9 ¹ / ₂ "	11'-0"	6'-2 ³ / ₄ "	22'-8"	8	9 ¹ / ₂ "	11'-0"	3	9 ¹ / ₂ "	3'-6"	6'-10"	4	9"	11'-2"	44	36
10	12	9 ¹ / ₄ "	9 ¹ / ₄ "	8"	9	9'-0"	9	9'-0"	10	10'-0"	5	8 ¹ / ₂ "	11'-0"	7'-3 ¹ / ₄ "	24'-11"	8	8 ¹ / ₂ "	11'-0"	4	8 ¹ / ₂ "	4'-1"	7'-11"	6	12"	13'-2"	44	44
12	6	9 ¹ / ₂ "	9 ¹ / ₂ "	8"	11	11'-0"	11	11'-0"	4	4'-0"	6	8"	13'-0"	4'-3 ¹ / ₂ "	20'-9"	7	8"	13'-0"	4	8"	3'-10 ³ / ₄ "	7'-6"	4	6 ¹ / ₂ "	7'-3"	52	20
12	8	9 ³ / ₄ "	9 ³ / ₄ "	8"	11	11'-0"	11	11'-0"	6	6'-0"	6	8"	13'-0"	5'-7 ¹ / ₄ "	23'-4"	8	8"	13'-0"	3	8"	3'-10 ³ / ₄ "	7'-7"	4	8 ¹ / ₂ "	9'-3"	52	28
12	10	9 ³ / ₄ "	9 ³ / ₄ "	8"	11	11'-0"	11	11'-0"	8	8'-0"	5	8"	13'-0"	6'-3 ³ / ₄ "	25'-0"	8	8"	13'-0"	4	8"	3'-10 ³ / ₄ "	7'-6"	4	12"	11'-3"	52	36
12	12	10 ¹ / ₂ "	10 ¹ / ₂ "	8"	11	11'-0"	11	11'-0"	10	10'-0"	6	7"	13'-0"	7'-8"	27'-7"	8	7"	13'-0"	--	--	----	----	6	12"	13'-5"	52	44

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

 ROAD AND BRIDGE STANDARDS	
SHEET 1 OF 2	REVISION DATE
1002.05	07/11

SINGLE BOX CULVERTS
2 TO 5 FT. FILLS

VIRGINIA DEPARTMENT OF TRANSPORTATION

SPECIFICATION
REFERENCE