


2016 ROAD & BRIDGE STANDARDS

BCS-30

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

DIMENSIONS					REINFORCING STEEL																						
SPAN	HGHT	T1	T2	T3	BH1		BH2			BH3				BV1			NO. BL1 #4 BARS	NO. BL2 #5 BARS									
(FT.)	(FT.)	TOP SLAB (IN.)	BOTTOM SLAB (IN.)	WALL (IN.)	A	B	C	D	E	F	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	1 1/2"	4'-0"	2'-8"	8'-10"	5	1 1/2"	4'-0"	--	----	----	-----	4	12"	4'-0"	16	8
3	4	8"	8"	8"	2	2'-0"	2	2'-0"	2	2'-0"	4	1 1/2"	4'-0"	3'-2"	9'-10"	5	1 1/2"	4'-0"	--	----	----	-----	4	12"	5'-0"	16	12
4	3	8"	8"	8"	3	3'-0"	3	3'-0"	1	1'-0"	4	1 1/2"	5'-0"	2'-8"	9'-10"	6	1 1/2"	5'-0"	4	10 1/2"	2'-4"	4' - 5"	4	11 1/2"	4'-0"	20	8
4	4	8"	8"	8"	3	3'-0"	3	3'-0"	2	2'-0"	4	1 1/2"	5'-0"	3'-2"	10'-10"	6	1 1/2"	5'-0"	3	10"	2'-4"	4' - 5"	4	12"	5'-0"	20	12
4	5	8"	8"	8"	3	3'-0"	3	3'-0"	3	3'-0"	4	9/2"	5'-0"	3'-8"	11'-10"	6	9/2"	5'-0"	3	9/2"	2'-6"	4' - 10"	4	12"	6'-0"	20	16
4	6	8"	8"	8"	3	3'-0"	3	3'-0"	4	4'-0"	4	9/2"	5'-0"	4'-2"	12'-10"	6	9/2"	5'-0"	3	9/2"	2'-9"	5' - 3"	5	12"	7'-0"	20	20
5	3	9 1/2"	9 1/2"	8"	4	4'-0"	4	4'-0"	1	1'-0"	4	8 1/2"	6'-0"	2'-10"	11'-1"	6	8 1/2"	6'-0"	3	8 1/2"	2'-6"	4' - 10"	4	9"	4'-3"	24	8
5	4	9 3/4"	9 3/4"	8"	4	4'-0"	4	4'-0"	2	2'-0"	4	8"	6'-0"	3'-4"	12'-2"	6	8"	6'-0"	--	----	----	-----	4	12"	5'-3"	24	12
5	5	9 3/4"	9 3/4"	8"	4	4'-0"	4	4'-0"	3	3'-0"	4	8"	6'-0"	3'-10"	13'-2"	6	8"	6'-0"	--	----	----	-----	4	12"	6'-3"	24	16
5	6	9 3/4"	9 3/4"	8"	4	4'-0"	4	4'-0"	4	4'-0"	4	8"	6'-0"	4'-4"	14'-2"	6	8"	6'-0"	--	----	----	-----	5	12"	7'-3"	24	20
5	7	9 3/4"	9 3/4"	8"	4	4'-0"	4	4'-0"	5	5'-0"	4	8"	6'-0"	4'-10"	15'-2"	6	8"	6'-0"	--	----	----	-----	6	12"	8'-3"	24	24
6	4	11 1/2"	11 1/2"	8"	5	5'-0"	5	5'-0"	2	2'-0"	4	7"	7'-0"	3'-6"	13'-5"	6	7"	7'-0"	--	----	----	-----	4	12"	5'-7"	28	12
6	5	11 1/2"	11 1/2"	8"	5	5'-0"	5	5'-0"	3	3'-0"	4	6 1/2"	7'-0"	4'-0"	14'-5"	6	6 1/2"	7'-0"	--	----	----	-----	4	12"	6'-7"	28	16
6	6	11 1/2"	11 1/2"	8"	5	5'-0"	5	5'-0"	4	4'-0"	4	6 1/2"	7'-0"	4'-6"	15'-5"	6	6 1/2"	7'-0"	--	----	----	-----	4	12"	7'-7"	28	20
6	7	11 1/2"	11 1/2"	8"	5	5'-0"	5	5'-0"	5	5'-0"	4	6 1/2"	7'-0"	5'-0"	16'-5"	6	6 1/2"	7'-0"	--	----	----	-----	5	12"	8'-6"	28	24
6	8	11 1/2"	11 1/2"	8"	5	5'-0"	5	5'-0"	6	6'-0"	4	6 1/2"	7'-0"	5'-6"	17'-5"	6	6 1/2"	7'-0"	--	----	----	-----	6	10 1/2"	9'-7"	28	28
7	4	13"	13"	8"	6	6'-0"	6	6'-0"	2	2'-0"	4	6"	8'-0"	3'-7"	14'-8"	6	6"	8'-0"	--	----	----	-----	4	10 1/2"	5'-10"	32	12
7	6	13"	13"	8"	6	6'-0"	6	6'-0"	4	4'-0"	5	7 1/2"	8'-0"	4'-9"	16'-11"	8	7 1/2"	8'-0"	--	----	----	-----	4	12"	7'-10"	32	20
7	8	13"	13"	8"	6	6'-0"	6	6'-0"	6	6'-0"	5	7"	8'-0"	5'-9"	18'-11"	7	7"	8'-0"	--	----	----	-----	6	12"	9'-10"	32	28
7	10	13"	13"	9"	6	6'-0"	6	6'-0"	8	8'-0"	5	5 1/2"	8'-2"	6'-9"	21'-1"	6	5 1/2"	8'-1"	--	----	----	-----	5	5 1/2"	11'-10"	32	36
8	4	13 3/4"	13 3/4"	8"	7	7'-0"	7	7'-0"	2	2'-0"	5	8"	9'-0"	3'-10"	16'-0"	8	8"	9'-0"	3	8"	3'-2"	6' - 1"	4	8"	5'-11"	36	12
8	6	13 3/4"	13 3/4"	8"	7	7'-0"	7	7'-0"	4	4'-0"	4	8"	9'-0"	4'-8"	17'-10"	8	8"	9'-0"	3	8"	3'-3"	6' - 2"	4	12"	7'-11"	36	20
8	8	13 3/4"	13 3/4"	8"	7	7'-0"	7	7'-0"	6	6'-0"	5	6"	9'-0"	5'-10"	20'-0"	7	6"	9'-0"	--	----	----	-----	6	12"	9'-11"	36	28
8	10	13 1/2"	13 1/2"	9 1/2"	7	7'-0"	7	7'-0"	8	8'-0"	5	6"	9'-3"	6'-10"	22'-3"	7	6"	9'-3"	--	----	----	-----	5	6"	11'-11"	36	36
9	4	15 1/4"	15 1/4"	8"	8	8'-0"	8	8'-0"	2	2'-0"	4	7 1/2"	10'-0"	3'-10"	17'-1"	8	7 1/2"	10'-0"	4	7 1/2"	3'-4"	6' - 5"	4	7 1/2"	6'-2"	40	12
9	6	15 1/2"	15 1/2"	8"	8	8'-0"	8	8'-0"	4	4'-0"	4	7 1/2"	10'-0"	4'-10"	19'-1"	8	7 1/2"	10'-0"	3	7 1/2"	3'-4"	6' - 6"	4	12"	8'-3"	40	20
9	8	15 1/2"	15 1/2"	8"	8	8'-0"	8	8'-0"	6	6'-0"	4	7 1/2"	10'-0"	5'-10"	21'-1"	8	7 1/2"	10'-0"	4	7 1/2"	3'-9"	7' - 3"	6	12"	10'-2"	40	28
9	10	15 1/2"	15 1/2"	9"	8	8'-0"	8	8'-0"	8	8'-0"	5	5 1/2"	10'-0"	7'-0"	23'-6"	7	5 1/2"	10'-1"	--	----	----	-----	5	6"	12'-2"	40	36
9	12	15 1/4"	15 1/4"	11"	8	8'-0"	8	8'-0"	10	10'-0"	6	5 1/2"	10'-6"	8'-2"	25'-11"	7	5 1/2"	10'-6"	--	----	----	-----	7	9"	14'-2"	40	44
10	4	17"	17"	8"	9	9'-0"	9	9'-0"	2	2'-0"	5	5 1/2"	11'-0"	4'-2"	18'-7"	7	5 1/2"	11'-0"	--	----	----	-----	4	7 1/2"	6'-6"	44	12
10	6	17 1/4"	17 1/4"	8"	9	9'-0"	9	9'-0"	4	4'-0"	5	7"	11'-0"	5'-2"	20'-7"	8	7"	11'-0"	--	----	----	-----	4	12"	8'-6"	44	20
10	8	17 1/4"	17 1/4"	8"	9	9'-0"	9	9'-0"	6	6'-0"	5	7"	11'-0"	6'-2"	22'-7"	8	7"	11'-0"	--	----	----	-----	6	12"	10'-6"	44	28
10	10	17 1/4"	17 1/4"	9"	9	9'-0"	9	9'-0"	8	8'-0"	6	6 1/2"	11'-2"	7'-4"	24'-11"	8	6 1/2"	11'-1"	--	----	----	-----	5	6"	12'-6"	44	36
10	12	17"	17"	11"	9	9'-0"	9	9'-0"	10	10'-0"	6	6"	11'-6"	8'-3"	27'-3"	8	6"	11'-1"	--	----	----	-----	7	9 1/2"	14'-5"	44	44
12	6	19 1/2"	19 1/2"	8"	11	11'-0"	11	11'-0"	4	4'-0"	4	5 1/2"	13'-0"	5'-2"	22'-9"	8	5 1/2"	13'-0"	--	----	----	-----	4	12"	8'-11"	52	20
12	8	20"	20"	8"	11	11'-0"	11	11'-0"	6	6'-0"	5	6"	13'-0"	6'-4"	25'-1"	8	6"	13'-0"	--	----	----	-----	5	12"	11'-0"	52	28
12	10	20 1/4"	20 1/4"	8 1/2"	11	11'-0"	11	11'-0"	8	8'-0"	6	5 1/2"	13'-0"	7'-7"	27'-4"	8	5 1/2"	13'-0"	--	----	----	-----	6	9 1/2"	13'-0"	52	36
12	12	20 1/4"	20 1/4"	11"	11	11'-0"	11	11'-0"	10	10'-0"	6	5 1/2"	13'-6"	8'-7"	29'-9"	8	5 1/2"	13'-6"	--	----	----	-----	7	9 1/2"	15'-0"	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
1002.11	07/11

SINGLE BOX CULVERTS
 20 TO 30 FT. FILLS
 VIRGINIA DEPARTMENT OF TRANSPORTATION

SPECIFICATION REFERENCE