


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 BARS	NO. BL2 BARS		
(FT.)	(FT.)	(IN.)	(IN.)	(IN.)							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	10"	4'-0"	2'-8"	8'-10"	6	10"	4'-0"	4	10"	2'-1 1/4"	3'-11"	4	12"	4'-0"	16	8
3	4	8"	8"	8"	2	2'-0"	2	2'-0"	2	2'-0"	4	10"	4'-0"	3'-2"	9'-10"	6	10"	4'-0"	4	10"	2'-1 1/4"	3'-11"	4	12"	5'-0"	16	12
4	3	10 1/4"	10 1/4"	8"	3	3'-0"	3	3'-0"	1	1'-0"	4	8"	5'-0"	2'-10 1/4"	10'-2"	6	8"	5'-0"	--	--	----	----	4	12"	4'-5"	20	8
4	4	10"	10"	8"	3	3'-0"	3	3'-0"	2	2'-0"	4	7 1/2"	5'-0"	3'-4"	11'-2"	6	7 1/2"	5'-0"	--	--	----	----	4	12"	5'-4"	20	12
4	5	10 1/4"	10 1/4"	8"	3	3'-0"	3	3'-0"	3	3'-0"	4	8"	5'-0"	3'-10 1/4"	12'-2"	6	8"	5'-0"	--	--	----	----	4	12"	6'-5"	20	16
4	6	10 1/4"	10 1/4"	8"	3	3'-0"	3	3'-0"	4	4'-0"	4	8"	5'-0"	4'-4 1/4"	13'-2"	6	8"	5'-0"	--	--	----	----	4	12"	7'-5"	20	20
5	3	13"	13"	8"	4	4'-0"	4	4'-0"	1	1'-0"	4	6 1/2"	6'-0"	3'-1"	11'-8"	6	6 1/2"	6'-0"	--	--	----	----	4	12"	4'-10"	24	8
5	4	13"	13"	8"	4	4'-0"	4	4'-0"	2	2'-0"	4	6 1/2"	6'-0"	3'-7"	12'-8"	6	6 1/2"	6'-0"	--	--	----	----	4	12"	5'-10"	24	12
5	5	13"	13"	8"	4	4'-0"	4	4'-0"	3	3'-0"	4	6 1/2"	6'-0"	4'-1"	13'-8"	6	6 1/2"	6'-0"	--	--	----	----	4	12"	6'-10"	24	16
5	6	12 1/4"	12 1/4"	8"	4	4'-0"	4	4'-0"	4	4'-0"	4	6"	6'-0"	4'-6 1/4"	14'-6"	6	6"	6'-0"	--	--	----	----	4	12"	7'-9"	24	20
5	7	12 1/4"	12 1/4"	8"	4	4'-0"	4	4'-0"	5	5'-0"	4	6 1/2"	6'-0"	5'-1 1/4"	15'-6"	6	6 1/2"	6'-0"	--	--	----	----	5	12"	8'-9"	24	24
6	4	14 1/2"	14 1/2"	8"	5	5'-0"	5	5'-0"	2	2'-0"	4	9"	7'-0"	3'-8 1/2"	13'-11"	8	9"	7'-0"	3	9"	2'-8 3/8"	5'-2"	4	12"	6'-1"	28	12
6	5	14 1/2"	14 1/2"	8"	5	5'-0"	5	5'-0"	3	3'-0"	4	5"	7'-0"	4'-2 1/2"	14'-11"	6	5"	7'-0"	--	--	----	----	4	12"	7'-1"	28	16
6	6	14 3/4"	14 3/4"	8"	5	5'-0"	5	5'-0"	4	4'-0"	4	9"	7'-0"	4'-8 3/4"	15'-11"	8	9"	7'-0"	3	9"	2'-8 3/8"	5'-2"	4	12"	8'-1"	28	20
6	7	14 3/4"	14 3/4"	8"	5	5'-0"	5	5'-0"	5	5'-0"	5	8 1/2"	7'-0"	5'-2 3/4"	16'-10"	8	8 1/2"	7'-0"	3	8 1/2"	2'-8 3/8"	5'-2"	5	12"	9'-1"	28	24
6	8	14 1/2"	14 1/2"	8"	5	5'-0"	5	5'-0"	6	6'-0"	5	8 1/2"	7'-0"	5'-8 1/2"	17'-9"	8	8 1/2"	7'-0"	3	8 1/2"	2'-8 3/8"	5'-2"	4	5 1/2"	10'-1"	28	28
7	4	17 1/2"	17 1/2"	8"	6	6'-0"	6	6'-0"	2	2'-0"	5	8"	8'-0"	3'-11 1/2"	15'-3"	8	8"	8'-0"	--	--	----	----	4	12"	6'-7"	32	12
7	6	17 3/4"	17 3/4"	8"	6	6'-0"	6	6'-0"	4	4'-0"	4	8"	8'-0"	4'-11 3/4"	17'-5"	8	8"	8'-0"	4	8"	2'-10 3/4"	5'-6"	4	12"	8'-7"	32	20
7	8	17 1/2"	17 1/2"	8"	6	6'-0"	6	6'-0"	6	6'-0"	5	8"	8'-0"	5'-11 1/2"	19'-3"	8	8"	8'-0"	3	8"	2'-10 3/4"	5'-7"	6	11 1/2"	10'-7"	32	28
7	10	17 1/2"	17 1/2"	8"	6	6'-0"	6	6'-0"	8	8'-0"	5	8"	8'-0"	6'-11 1/2"	21'-3"	8	8"	8'-0"	3	8"	2'-10 3/4"	5'-7"	7	9"	12'-7"	32	36
8	4	18 1/4"	18 1/4"	8"	7	7'-0"	7	7'-0"	2	2'-0"	4	5 1/2"	9'-0"	4'-1 1/4"	16'-6"	7	5 1/2"	9'-0"	--	--	----	----	4	12"	6'-9"	36	12
8	6	18 1/2"	18 1/2"	8"	7	7'-0"	7	7'-0"	4	4'-0"	4	5 1/2"	9'-0"	5'-1 1/2"	18'-7"	7	5 1/2"	9'-0"	--	--	----	----	4	12"	8'-9"	36	20
8	8	18 3/4"	18 3/4"	8"	7	7'-0"	7	7'-0"	6	6'-0"	5	5 1/2"	9'-0"	6'-3/4"	20'-6"	7	5 1/2"	9'-0"	--	--	----	----	4	5 1/2"	10'-9"	36	28
8	10	19"	19"	9 3/4"	7	7'-0"	7	7'-0"	8	8'-0"	5	5 1/2"	9'-3/2"	7'-1"	22'-10"	7	5 1/2"	9'-3"	--	--	----	----	4	4 1/2"	12'-10"	36	36
9	4	20"	20"	8"	8	8'-0"	8	8'-0"	2	2'-0"	5	6 1/2"	10'-0"	4'-2"	17'-8"	8	6 1/2"	10'-0"	--	--	----	----	4	12"	7'-0"	40	12
9	6	20 1/2"	20 1/2"	8"	8	8'-0"	8	8'-0"	4	4'-0"	5	6 1/2"	10'-0"	5'-2 1/2"	19'-9"	8	6 1/2"	10'-0"	--	--	----	----	4	12"	9'-1"	40	20
9	8	20 3/4"	20 3/4"	8"	8	8'-0"	8	8'-0"	6	6'-0"	5	6"	10'-0"	6'-2 3/4"	21'-10"	8	6"	10'-0"	--	--	----	----	5	8"	11'-1"	40	28
9	10	20 3/4"	20 3/4"	9 3/4"	8	8'-0"	8	8'-0"	8	8'-0"	6	6 1/2"	10'-3/2"	7'-2 3/4"	23'-11"	8	6 1/2"	10'-3"	--	--	----	----	4	4 1/2"	13'-1"	40	36
9	12	21"	21"	11 1/4"	8	8'-0"	8	8'-0"	10	10'-0"	6	5 1/2"	10'-6 1/2"	8'-3"	26'-3"	8	5 1/2"	10'-6"	--	--	----	----	6	8"	15'-2"	40	44
10	4	22 1/2"	22 1/2"	8"	9	9'-0"	9	9'-0"	2	2'-0"	4	6"	11'-0"	4'-4 1/2"	19'-3"	8	6"	11'-0"	--	--	----	----	4	12"	7'-5"	44	12
10	6	22 1/4"	22 1/4"	8"	9	9'-0"	9	9'-0"	4	4'-0"	4	6"	11'-0"	5'-4 1/4"	21'-2"	8	6"	11'-0"	--	--	----	----	4	12"	9'-4"	44	20
10	8	22 1/4"	22 1/4"	8"	9	9'-0"	9	9'-0"	6	6'-0"	5	6"	11'-0"	6'-4 1/4"	23'-1"	8	6"	11'-0"	--	--	----	----	4	5 1/2"	11'-4"	44	28
10	10	22"	22"	9 3/4"	9	9'-0"	9	9'-0"	8	8'-0"	5	5 1/2"	11'-3 1/2"	7'-4"	25'-4"	8	5 1/2"	11'-3"	--	--	----	----	4	5"	13'-4"	44	36
10	12	22"	22"	11 1/4"	9	9'-0"	9	9'-0"	10	10'-0"	7	5 1/2"	11'-6 1/2"	8'-4"	27'-3"	8	5 1/2"	11'-6"	--	--	----	----	5	6"	15'-4"	44	44
12	6	27 1/2"	27 1/2"	8 1/2"	11	11'-0"	11	11'-0"	4	4'-0"	4	5"	13'-1"	5'-9 1/2"	24'-2"	8	5"	13'-1"	--	--	----	----	4	12"	10'-3"	52	20
12	8	27 1/2"	27 1/2"	8"	11	11'-0"	11	11'-0"	6	6'-0"	5	5"	13'-0"	6'-9 1/2"	25'-11"	8	5"	13'-0"	--	--	----	----	5	7 1/2"	12'-3"	52	28
12	10	27 1/2"	27 1/2"	9 3/4"	11	11'-0"	11	11'-0"	8	8'-0"	5	4 1/2"	13'-3 1/2"	7'-9 1/2"	28'-3"	8	4 1/2"	13'-3"	--	--	----	----	6	9 1/2"	14'-3"	52	36
12	12	27 1/2"	27 1/2"	11 1/4"	11	11'-0"	11	11'-0"	10	10'-0"	6	4 1/2"	13'-6 1/2"	8'-9 1/2"	30'-4"	8	4 1/2"	13'-6"	--	--	----	----	6	8"	16'-3"	52	44

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

 ROAD AND BRIDGE STANDARDS	
SHEET 1 OF 2	REVISION DATE
1002.23	

SINGLE BOX CULVERTS

45 TO 50 FT. FILLS

VIRGINIA DEPARTMENT OF TRANSPORTATION

SPECIFICATION REFERENCE