DATA FOR CULVERTS SECTION A-A 3

Height of Fill in Feet H.F.	Size of Culvert Span(S) Height(H)	Dimension "t" Walls w/	Type II Bar (Bent) Size & Spacing	Dimension "a"	Dimension "b"	Type III Bar (Trans) Size & Spacing	Type IV Bar (Trans) Size & Spacing	Type V Bar (Long) Size & Spacing	Type VI Bar (Long) Size & Spacing	Type VII Bar (Vert) Size & Spacing	Type VIII Bar (Vert) Size & Spacing
0'-3"	17' x 14'	13"	#6@5"	3'-2"	3'-11"	#7@5"	#5@15"	#5@18"	#5@6"	#5@15"	#6@5"
4'-6"		14"	#6@5"	3'-3"	3'-10"	#7@5"	#5@15"	#5@9"	#5@18"	#5@15"	#6@5"
7'-9"		14"	#7@6"	3'-6"	4'-3"	#8@6"	#5@18"	#5@6"	#5@18"	#5@18"	#7@6"
10'-12"		16"	#8@6"	3'-11"	4'-9"	#8@6"	#5@18"	#5@6"	#5@18"	#5@18"	#8@6"
13'-15"		17"	#7@5"	3'-9"	4'-5"	#8@5"	#5@15"	#5@6"	#5@18"	#5@15"	#7@5"
16'-18"		18"	#7@5"	3'-10"	4'-6"	#8@5"	#5@15"	#5@6"	#5@18"	#5@15"	#7@5"
19'-21"		19"	#8@5"	4'-2"	4'-8"	#8@5"	#5@15"	#5@6"	#5@18"	#5@15"	#8@5"
0'-3"	17' x 15'	13"	#6@5"	3'-2"	4'-0"	#7@5"	#5@15"	#5@18"	#5@6"	#5@15"	#6@5"
4'-6"		14"	#6@5"	3'-3"	3'-11"	#7@5"	#5@15"	#5@9"	#5@18"	#5@15"	#6@5"
7'-9"		14"	#7@6"	3'-6"	4'-4"	#8@6"	#5@18"	#5@6"	#5@18"	#5@18"	#7@6"
10'-12"		16"	#8@6"	3'-11"	4'-7"	#8@6"	#5@18"	#5@6"	#5@18"	#5@18"	#8@6"
13'-15"		17"	#7@5"	3'-9"	4'-6"	#8@5"	#5@15"	#5@6"	#5@18"	#5@15"	#7@5"
16'-18"		18"	#7@5"	3'-10"	4'-7"	#8@5"	#5@15"	#5@6"	#5@18"	#5@15"	#7@5"
19'-21"		19"	#8@5"	4'-2"	4'-9"	#8@5"	#5@15"	#5@6"	#5@18"	#5@15"	#8@5"
0'-3"	17' x 16'	13"	#6@5"	3'-2"	4'-1"	#7@5"	#5@15"	#5@18"	#5@6"	#5@15"	#6@5"
4'-6"		13"	#6@5"	3'-2"	4'-2"	#7@5"	#5@15"	#5@6"	#5@18"	#5@15"	#6@5"
7'-9"		14"	#6@5"	3'-3"	4'-3"	#7@5"	#5@15"	#5@6"	#5@18"	#5@15"	#6@5"
10'-12"		16"	#8@6"	3'-11"	4'-8"	#8@6"	#5@18"	#5@6"	#5@18"	#5@18"	#8@6"
13'-15"		17"	#7@5"	3'-9"	4'-6"	#8@5"	#5@15"	#5@6"	#5@18"	#5@15"	#7@5"
16'-18"		18"	#7@5"	3'-10"	4'-7"	#8@5"	#5@15"	#5@6"	#5@18"	#5@15"	#7@5"
19'-21"		19"	#8@5"	4'-2"	4'-9"	#8@5"	#5@15"	#5@6"	#5@18"	#5@15"	#8@5"
0'-3"	17' x 17'	13"	#6@5"	3'-2"	4'-2"	#7@5"	#5@15"	#5@18"	#5@6"	#5@15"	#6@5"
4'-6"		13"	#6@5"	3'-2"	4'-4"	#7@5"	#5@15"	#5@9"	#5@18"	#5@15"	#6@5"
7-9"		14"	#7@5"	3'-6"	4'-7"	#7@5"	#5@15"	#5@6"	#5@18"	#5@15"	#7@5"
10'-12"		16"	#8@5"	3'-5"	4'-6"	#7@5"	#5@15"	#5@6"	#5@18"	#5@15"	#8@5"
13'-15"		17"	#7@5"	3'-9"	4'-8"	#8@5"	#5@15"	#5@6"	#5@18"	#5@15"	#7@5"
16'-18"		18"	#7@5"	3'-10"	4'-9"	#8@5"	#5@15"	#5@6"	#5@18"	#5@15"	#7@5"
19'-21"		19"	#8@5"	4'-2"	4'-11"	#8@5"	#5@15"	#5@6"	#5@18"	#5@15"	#8@5"
0'-3"	18' x 9'	13"	#6@5"	3'-3"	3'-10"	#7@5"	#5@15"	#5@18"	#5@6"	#5@15"	#6@5"
4'-6"		14"	#6@5"	3'-3"	4'-1"	#7@5"	#5@15"	#5@6"	#5@18"	#5@15"	#6@5"
7'-9"		15"	#7@6"	3'-7"	4'-5"	#8@6"	#5@18"	#5@6"	#5@18"	#5@18"	#7@6"
10'-12"		16"	#7@5"	3'-8"	4'-5"	#8@5"	#5@15"	#5@6"	#5@18"	#5@15"	#7@5"
13'-15"		17"	#7@5"	3'-9"	4'-6"	#8@5"	#5@15"	#5@6"	#5@18"	#5@15"	#7@5"
16'-18"		18"	#8@5"	4'-1"	4'-9"	#8@5"	#5@15"	#5@6"	#5@18"	#5@15"	#8@5"
19'-21"		20"	#9@6"	4'-6"	5'-1"	#9@6"	#5@18"	#5@6"	#5@18"	#5@18"	#9@6"
0'-3"	18' x 10'	14"	#6@5"	3'-3"	3'-10"	#7@5"	#5@15"	#5@18"	#5@6"	#5@15"	#6@5"
4'-6"		14"	#6@5"	3'-3"	4'-2"	#7@5"	#5@15"	#5@6"	#5@18"	#5@15"	#6@5"
7'-9"		15"	#7@6"	3'-7"	4'-4"	#8@6"	#5@18"	#5@6"	#5@18"	#5@18"	#7@6"
10'-12"		16"	#7@5"	3'-8"	4'-5"	#8@5"	#5@15"	#5@6"	#5@18"	#5@15"	#7@5"
13'-15"		17"	#7@5"	3'-9"	4'-6"	#8@5"	#5@15"	#5@6"	#5@18"	#5@15"	#7@5"
16'-18"		18"	#8@5"	4'-1"	4'-9"	#8@5"	#5@15"	#5@6"	#5@18"	#5@15"	#8@5"
19'-21"		20"	#9@6"	4'-6"	5'-1"	#9@6"	#5@18"	#5@6"	#5@18"	#5@18"	#9@6"
0'-3"	18' x 11'	14"	#6@5"	3'-3"	3'-9"	#7@5"	#5@15"	#5@18"	#5@6"	#5@15"	#6@5"
4'-6"		14"	#6@5"	3'-3"	4'-1"	#7@5"	#5@15"	#5@6"	#5@18"	#5@15"	#6@5"
7'-9"		15"	#7@6"	3'-7"	4'-4"	#8@6"	#5@18"	#5@6"	#5@18"	#5@18"	#7@6"
10'-12"		16"	#7@5"	3'-8"	4'-5"	#8@5"	#5@15"	#5@6"	#5@18"	#5@15"	#7@5"
13'-15"		17"	#7@5"	3'-9"	4'-6"	#8@5"	#5@15"	#5@6"	#5@18"	#5@15"	#7@5"
16'-18"		18"	#8@5"	4'-1"	4'-8"	#8@5"	#5@15"	#5@6"	#5@18"	#5@15"	#8@5"
19'-21"		20"	#9@6"	4'-6"	5'-0"	#9@6"	#5@18"	#5@6"	#5@18"	#5@18"	#9@6"
0'-3"	18' x 12'	14"	#6@5"	3'-3"	3'-9"	#7@5"	#5@15"	#5@18"	#5@6"	#5@15"	#6@5"
4'-6"		14"	#6@5"	3'-3"	4'-1"	#7@5"	#5@15"	#5@6"	#5@18"	#5@15"	#6@5"
7'-9"		15"	#7@6"	3'-7"	4'-4"	#8@6"	#5@18"	#5@6"	#5@18"	#5@18"	#7@6"
10'-12"		16"	#7@5"	3'-8"	4'-5"	#8@5"	#5@15"	#5@6"	#5@18"	#5@15"	#7@5"
13'-15"		17"	#7@5"	3'-9"	4'-6"	#8@5"	#5@15"	#5@6"	#5@18"	#5@15"	#7@5"
16'-18"		19"	#7@5"	3'-11"	4'-7"	#8@5"	#5@15"	#5@6"	#5@18"	#5@15"	#7@5"
19'-21"		20"	#9@6"	4'-6"	5'-0"	#9@6"	#5@18"	#5@6"	#5@18"	#5@18"	#9@6"
0'-3"	18' x 13'	14"	#6@5"	3'-3"	3'-10"	#7@5"	#5@15"	#5@18"	#5@6"	#5@15"	#6@5"
4'-6"		14"	#6@5"	3'-3"	4'-2"	#7@5"	#5@15"	#5@6"	#5@18"	#5@15"	#6@5"
7'-9"		15"	#7@6"	3'-7"	4'-4"	#8@6"	#5@18"	#5@6"	#5@18"	#5@18"	#7@6"
10'-12"		16"	#7@5"	3'-8"	4'-5"	#8@5"	#5@15"	#5@6"	#5@18"	#5@15"	#7@5"
13'-15"		17"	#7@5"	3'-9"	4'-6"	#8@5"	#5@15"	#5@6"	#5@18"	#5@15"	#7@5"
16'-18"		19"	#7@5"	3'-11"	4'-8"	#8@5"	#5@15"	#5@6"	#5@18"	#5@15"	#7@5"
19'-21"		20"	#9@6"	4'-6"	5'-0"	#9@6"	#5@18"	#5@6"	#5@18"	#5@18"	#9@6"
0'-3"	18' x 14'	14"	#6@5"	3'-3"	3'-10"	#7@5"	#5@15"	#5@18"	#5@6"	#5@15"	#6@5"
4'-6"		14"	#6@5"	3'-3"	4'-2"	#7@5"	#5@15"	#5@6"	#5@18"	#5@15"	#6@5"
7'-9"		16"	#7@6"	3'-8"	4'-3"	#8@6"	#5@18"	#5@6"	#5@18"	#5@18"	#7@6"
10'-12"		16"	#7@5"	3'-8"	4'-5"	#8@5"	#5@15"	#5@6"	#5@18"	#5@15"	#7@5"
13'-15"		18"	#7@5"	3'-10"	4'-5"	#8@5"	#5@15"	#5@6"	#5@18"	#5@15"	#7@5"
16'-18"		19"	#7@5"	3'-11"	4'-8"	#8@5"	#5@15"	#5@6"	#5@18"	#5@15"	#7@5"
19'-21"		20"	#9@6"	4'-6"	5'-0"	#9@6"	#5@18"	#5@6"	#5@18"	#5@18"	#9@6"
0'-3"	18' x 15'	13"	#6@5"	3'-3"	3'-11"	#7@5"	#5@15"	#5@18"	#5@6"	#5@15"	#6@5"
4'-6"		14"	#6@5"	3'-3"	4'-3"	#7@5"	#5@15"	#5@6"	#5@18"	#5@15"	#6@5"
7'-9"		15"	#7@6"	3'-7"	4'-5"	#8@6"	#5@18"	#5@6"	#5@18"	#5@18"	#7@6"
10'-12"		16"	#7@5"	3'-8"	4'-5"	#8@5"	#5@15"	#5@6"	#5@18"	#5@15"	#7@5"
13'-15"		17"	#7@5"	3'-9"	4'-6"	#8@5"	#5@15"	#5@6"	#5@18"	#5@15"	#7@5"
16'-18"		19"	#8@5"	4'-1"	4'-9"	#8@5"	#5@15"	#5@6"	#5@18"	#5@15"	#8@5"
19'-21"		20"	#9@6"	4'-6"	5'-0"	#9@6"	#5@18"	#5@6"	#5@18"	#5@18"	#9@6"
0'-3"	18' x 16'	13"	#6@5"	3'-3"	3'-11"	#7@5"	#5@15"	#5@18"	#5@6"	#5@15"	#6@5"
4'-6"		14"	#6@5"	3'-3"	4'-3"	#7@5"	#5@15"	#5@6"	#5@18"	#5@15"	#6@5"
7'-9"		15"	#7@6"	3'-7"	4'-5"	#8@6"	#5@18"	#5@6"	#5@18"	#5@18"	#7@6"
10'-12"		16"	#7@5"	3'-8"	4'-5"	#8@5"	#5@15"	#5@6"	#5@18"	#5@15"	#7@5"
13'-15"		17"	#7@5"	3'-9"	4'-6"	#8@5"	#5@15"	#5@6"	#5@18"	#5@15"	#7@5"
16'-18"		19"	#8@5"	4'-1"	4'-9"	#8@5"	#5@15"	#5@6"	#5@18"	#5@15"	#8@5"
19'-21"		20"	#9@6"	4'-6"	5'-0"	#9@6"	#5@18"	#5@6"	#5@18"	#5@18"	#9@6"
0'-3"	18' x 17'	13"	#6@5"	3'-3"	3'-11"	#7@5"	#5@15"	#5@18"	#5@6"	#5@15"	#6@5"
4'-6"		14"	#6@5"	3'-3"	4'-3"	#7@5"	#5@15"	#5@6"	#5@18"	#5@15"	#6@5"
7'-9"		15"	#7@6"	3'-7"	4'-5"	#8@6"	#5@18"	#5@6"	#5@18"	#5@18"	#7@6"
10'-12"		16"	#7@5"	3'-8"	4'-5"	#8@5"	#5@15"	#5@6"	#5@18"	#5@15"	#7@5"
13'-15"		17"	#7@5"	3'-9"	4'-6"	#8@5"	#5@15"	#5@6"	#5@18"	#5@15"	#7@5"
16'-18"		19"	#8@5"	4'-1"	4'-10"	#8@5"	#5@15"	#5@6"	#5@18"	#5@15"	#8@5"
19'-21"		20"	#9@6"	4'-6"	5'-0"	#9@6"	#5@18"	#5@6"	#5@18"	#5@18"	#9@6"
0'-3"	18' x 18'	13"	#6@5"	3'-3"	3'-10"	#7@5"	#5@15"	#5@18"	#5@6"	#5@15"	#6@5"
4'-6"		14"	#6@5"	3'-3"	4'-3"	#7@5"	#5@15"	#5@6"	#5@18"	#5@15"	#6@5"
7-9"		15"	#7@6"	3'-7"	4'-5"	#8@6"	#5@18"	#5@6"	#5@18"	#5@18"	#7@6"
10'-12"		16"	#7@5"	3'-8"	4'-5"	#8@5"	#5@15"	#5@6"	#5@18"	#5@15"	#7@5"
13'-15"		17"	#7@5"	3'-9"	4'-6"	#8@5"	#5@15"	#5@6"	#5@18"	#5@15"	#7@5"
16'-18"		19"	#8@5"	4'-1"	4'-10"	#8@5"	#5@15"	#5@6"	#5@18"	#5@15"	#8@5"
19'-21"		20"	#9@6"	4'-6"	5'-0"	#9@6"	#5@18"	#5@6"	#5@18"	#5@18"	#9@6"
0'-3"	19' x 9'	13"	#6@5"	3'-3"	3'-10"	#7@5"	#5@15"	#5@18"	#5@6"	#5@15"	#6@5"
4'-6"		14"	#6@5"	3'-3"	4'-1"	#7@5"	#5@15"	#5@6"	#5@18"	#5@15"	#6@5"
7'-9"		15"	#7@6"	3'-7"	4'-4"	#8@6"	#5@18"	#5@6"	#5@18"	#5@18"	#7@6"
10'-12"		16"	#7@5"	3'-8"	4'-5"	#8@5"	#5@15"	#5@6"	#5@18"	#5@15"	#7@5"
13'-15"		17"	#7@5"	3'-9"	4'-6"	#8@5"	#5@15"	#5@6"	#5@18"	#5@15"	#7@5"
16'-18"		19"	#8@5"	4'-1"	4'-9"	#8@5"	#5@15"	#5@6"	#5@18"	#5@15"	#8@5"
19'-21"		20"	#9@6"	4'-6"	5'-1"	#9@6"	#5@18"	#5@6"	#5@18"	#5@18"	#9@6"
0'-3"	19' x 10'	14"	#6@5"	3'-3"	3'-10"	#7@5"	#5@15"	#5@18"	#5@6"	#5@15"	#6@5"
4'-6"		14"	#6@5"	3'-3"	4'-2"	#7@5"	#5@15"	#5@6"	#5@18"	#5@15"	#6@5"
7'-9"		15"	#7@6"	3'-7"	4'-4"	#8@6"	#5@18"	#5@6"	#5@18"	#5@18"	#7@6"
10'-12"		16"	#7@5"	3'-8"	4'-5"	#8@5"	#5@15"	#5@6"	#5@18"	#5@15"	#7@5"
13'-15"		17"	#7@5"	3'-9"	4'-6"	#8@5"	#5@15"	#5@6"	#5@18"	#5@15"	#7@5"
16'-18"		19"	#8@5"	4'-1"	4'-9"	#8@5"	#5@15"	#5@6"	#5@18"	#5@15"	#8@5"
19'-21"		20"	#9@6"	4'-6"	5'-1"	#9@6"	#5@18"	#5@6"	#5@18"	#5@18"	#9@6"
0'-3"	19' x 11'	14"	#6@5"	3'-3"	3'-9"	#7@5"	#5@15"	#5@18"	#5@6"	#5@15"	#6@5"
4'-6"		14"	#6@5"	3'-3"	4'-1"	#7@5"	#5@15"	#5@6"	#5@18"	#5@15"	#6@5"
7'-9"		15"	#7@6"	3'-7"	4'-4"	#8@6"	#5@18"	#5@6"	#5@18"	#5@18"	#7@6"
10'-12"		16"	#7@5"	3'-8"	4'-5"	#8@5"	#5@15"	#5@6"	#5@18"	#5@15"	#7@5"
13'-15"		17"	#7@5"	3'-9"	4'-6"	#8@5"	#5@15"	#5@6"	#5@18"	#5@15"	#7@5"
16'-18"		19"	#8@5"	4'-1"	4'-8"	#8@5"	#5@15"	#5@6"	#5@18"	#5@15"	#8@5"
19'-21"		20"	#9@6"	4'-6"	5'-0"	#9@6"	#5@18"	#5@6"	#5@18"	#5@18"	#9@6"
0'-3"	19' x 12'	14"	#6@5"	3'-3"	3'-9"	#7@5"	#5@15"	#5@18"	#5@6"	#5@15"	#6@5"
4'-6"		14"	#6@5"	3'-3"	4'-1"	#7@5"	#5@15"	#5@6"	#5@18"	#5@15"	#6@5"
7'-9"		15"	#7@6"	3'-7"	4'-4"	#8@6"	#5@18"	#5@6"	#5@18"	#5@18"	#7@6"
10'-12"		16"	#7@5"	3'-8"	4'-5"	#8@5"	#5@15"	#5@6"	#5@18"	#5@15"	#7@5"
13'-15"		17"	#7@5"	3'-9"	4'-6"	#8@5"	#5@15"	#5@6"	#5@18"	#5@15"	#7@5"
16'-18"		19"	#8@5"	4'-1"	4'-8"	#8@5"	#5@15"	#5@6"	#5@18"	#5@15"	#8@5"
19'-21"		20"	#9@6"	4'-6"	5'-0"	#9@6"	#5@18"	#5@6"	#5@18"	#5@18"	#9@6"
0'-3"	19' x 13'	14"	#6@5"	3'-3"	3'-9"	#7@5"	#5@15"	#5@18"	#5@6"	#5@15"	#6@5"
4'-6"		14"	#6@5"	3'-3"	4'-1"	#7@5"	#5@15"	#5@6"	#5@18"	#5@15"	#6@5"
7'-9"		15"	#7@6"	3'-7"	4'-4"	#8@6"	#5@18"	#5@6"	#5@18"	#5@18"	#7@6"
10'-12"		16"	#7@5"	3'-8"	4'-5"	#8@5"	#5@15"	#5@6"	#5@18"	#5@15"	#7@5"
13'-15"		17"	#7@5"	3'-9"	4'-6"	#8@5"	#5@15"	#5@6"	#5@18"	#5@15"	#7@5"
16'-18"		19"	#8@5"	4'-1"	4'-8"	#8@5"	#5@15"	#5@6"	#5@18"	#5@15"	#8@5"
19'-21"		20"	#9@6"	4'-6"	5'-0"	#9@6"	#5@18"	#5@6"	#5@18"	#5@18"	#9@6"
0'-3"	19' x 14'	14"	#6@5"	3'-3"	3'-9"	#7@5"	#5@15"	#5@18"	#5@6"	#5@15"	#6@5"
4'-6"		14"	#6@5"	3'-3"	4'-1"	#7@5"	#5@15"	#5@6"	#5@18"	#5@15"	#6@5"
7'-9"		15"	#7@6"	3'-7"	4'-4"	#8@6"	#5@18"	#5@6"	#5@18"	#5@18"	#7@6"
10'-12"		16"	#7@5"	3'-8"	4'-5"	#8@5"	#5@15"	#5@6"	#5@18"	#5@15"	#7@5"
13'-15"		17"	#7@5"	3'-9"	4'-6"	#8@5"	#5@15"	#5@6"	#5@18"	#5@15"	#7@5"
16'-18"		19"	#8@5"	4'-1"	4'-8"	#8@5"	#5@15"	#5@6"	#5@18"	#5@15"	#8@5"
19'-21"		20"	#9@6"	4'-6"	5'-0"	#9@6"	#5@18"	#5@6"	#5@18"	#5@18"	#9@6"
0'-3"	20' x 11'	14"	#6@5"	3'-3"	3'-8"	#7@5"	#5@15"	#5@18"	#5@6"	#5@15"	#6@5"
4'-6"		14"	#6@5"	3'-3"	4'-1"	#7@5"	#5@15"	#5@6"	#5@18"	#5@15"	#6@5"
7'-9"		15"	#7@6"	3'-7"	4'-4"	#8@6"	#5@18"	#5@6"	#5@18"	#5@18"	#7@6"
10'-12"		16"	#7@5"	3'-8"	4'-5"	#8@5"	#5@15"	#5@6"	#5@18"	#5@15"	#7@5"
13'-15"		17"	#7@5"	3'-9"	4'-6"	#8@5"	#5@15"	#5@6"	#5@18"	#5@15"	#7@5"
16'-18"		19"	#8@5"	4'-1"	4'-8"	#8@5"	#5@15"	#5@6"	#5@18"	#5@15"	#8@5"
19'-21"		20"	#9@6"	4'-6"	5'-0"	#9@6"	#5@18"	#5@6"	#5@18"	#5@18"	#9@6"
0'-3"	20' x 12'	14"	#6@5"	3'-3"	3'-8"	#7@5"	#5@15"	#5@18"	#5@6"	#5@15"	#6@5"
4'-6"		14"	#6@5"	3'-3"	4'-1"	#7@5"	#5@15"	#5@6"	#5@18"	#5@15"	#6@5"
7'-9"		15"	#7@6"	3'-7"	4'-4"	#8@6"	#5@18"	#5@6"	#5@18"	#5@18"	#7@6"
10'-12"		16"	#7@5"	3'-8"	4'-5"	#8@5"	#5@15"	#5@6"	#5@18"	#5@15"	#7@5"
13'-15"		17"	#7@5"	3'-9"	4'-6"	#8@5"	#5@15"	#5@6"	#5@18"	#5@15"	#7@5"
16'-18"		19"	#8@5"	4'-1"	4'-8"	#8@5"	#5@15"	#5@6"	#5@18"	#5@15"	#8@5"
19'-21"		20"	#9@6"	4'-6"	5'-0"	#9@6"	#5@18"	#5@6"	#5@18"	#5@18"	#9@6"
0'-3"	20' x 13'	14"	#6@5"	3'-3"	3'-8"	#7@5"	#5@15"	#5@18"	#5@6"	#5@15"	#6@5"
4'-6"		14"	#6@5"	3'-3"	4'-1"	#7@5"	#5@15"	#5@6"	#5@18"	#5@15"	#6@5"
7'-9"		15"	#7@6"	3'-7"	4'-4"	#8@6"	#5@18"	#5@6"	#5@18"	#5@18"	#7@6"
10'-12"		16"	#7@5"	3'-8"	4'-5"	#8@5"	#5@15"	#5@6"	#5@18"	#5@15"	#7@5"
13'-15"		17"	#7@5"	3'-9"	4'-6"	#8@5"	#5@15"	#5@6"	#5@18"	#5@15"	#7@5"
16'-18"		19"	#8@5"	4'-1"	4'-8"	#8@5"	#5@15"	#5@6"	#5@18"	#5@15"	#8@5"
19'-21"		20"	#9@6"	4'-6"	5'-0"	#9@6"	#5@18"	#5@6"	#5@18"	#5@18"	#9@6"
0'-3"	20' x 14'	14"	#6@5"	3'-3"	3'-8"	#7@5"	#5@15"	#5@18"	#5@6"	#5@15"	#6@5"
4'-6"		14"	#6@5"	3'-3"	4'-1"	#7@5"	#5@15"	#5@6"	#5@18"	#5@15"	#6@5"
7'-9"		15"	#7@6"	3'-7"	4'-4"	#8@6"	#5@18"	#5@6"	#5@18"	#5@18"	#7@6"
10'-12"		16"	#7@5"	3'-8"	4'-5"	#8@5"	#5@15"	#5@6"	#5@18"	#5@15"	#7@5"
13'-15"		17"	#7@5"	3'-9"	4'-6"	#8@5"	#5@15"	#5@6"	#5@18"	#5@15"	#7@5"
16'-18"		19"	#8@5"	4'-1"	4'-8"	#8@5"	#5@15"	#5@6"	#5@18"	#5@15"	#8@5"
19'-21"		20"	#9@6"	4'-6"	5'-0"	#9@6"	#5@18"	#5@6"	#5@18"	#5@18"	#9@6"
0'-3"	20' x 15'	16"	#6@5"	3'-3"	4'-0"	#8@5"	#5@15"	#5@18"	#6@6"	#5@15"	#6@5"
4'-6"		16"	#6@5"	3'-3"	4'-5"	#8@5"	#5@15"	#5@6"	#5@18"	#5@15"	#6@5"
7'-9"		17"	#7@5"	3'-9"	4'-8"	#8@5"	#5@15"	#5@6"	#5@18"	#5@15"	#7@5"
10'-12"		18"	#7@5"	3'-10"	4'-11"	#8@5"	#5@15"	#5@6"	#5@18"	#5@15"	#7@5"
13'-15"		19"	#7@5"	3'-11"	5'-0"	#9@5"	#5@15"	#5@6"	#5@18"	#5@15"	#7@5"
16'-18"		21"	#7@5"	4'-1"	5'-1"	#9@5"	#5@15"	#5@6"	#5@18"	#5@15"	#7@5"
19'-21"		22"	#8@5"	4'-5"	5'-3"	#9@5"	#5@15"	#6@6"	#5@18"	#5@15"	#8@5"
0'-3"	20' x 16'	16"	#6@5"	3'-3"	4'-0"	#8@5"	#5@15"	#5@18"	#6@6"	#5@15"	#6@5"
4'-6"		16"	#6@5"	3'-3"	4'-5"	#8@5"	#5@15"	#5@6"	#5@18"	#5@15"	#6@5"
7'-9"		17"	#7@5"	3'-9"	4'-8"	#8@5"	#5@15"	#5@6"	#5@18"	#5@15"	#7@5"
10'-12"		18"	#7@5"	3'-10"	4'-11"	#8@5"	#5@15"	#5@6"	#5@18"	#5@15"	#7@5"
13'-15"		19"	#7@5"	3'-11"	5'-0"	#9@5"	#5@15"	#5@6"	#5@18"	#5@15"	#7@5"
16'-18"		21"	#7@5"	4'-1"	5'-1"	#9@5"	#5@15"	#5@6"	#5@18"	#5@15"	#7@5"
19'-21"		22"	#8@5"	4'-5"	5'-4"	#9@5"	#5@15"	#6@6"	#5@18"	#5@15"	#8@5"
0'-3"	20' x 17'	16"	#7@6"	3'-8"	4'-3"	#8@6"	#5@18"	#5@18"	#6@6"	#5@18"	#7@6"
4'-6"		16"	#7@6"	3'-8"	4'-9"	#8@6"	#5@18"	#5@6"	#5@18"	#5@18"	#7@6"
7'-9"		17"	#7@5"	3'-9"	5'-0"	#8@5"	#5@15"	#5@6"	#5@18"	#5@15"	#7@5"
10'-12"		18"	#7@5"	3'-10"	5'-1"	#8@5"	#5@15"	#5@6"	#5@18"	#5@15"	#7@5"
13'-15"		19"	#7@5"	3'-11"	5'-2"	#9@5"	#5@15"	#5@6"	#5@18"	#5@15"	#7@5"
16'-18"		21"	#7@5"	4'-1"	5'-3"	#9@5"	#5@15"	#5@6"	#5@18"	#5@15"	#7@5"
19'-21"		22"	#8@5"	4'-5"	5'-5"	#9@5"	#5@15"	#6@6"	#5@18"	#5@15"	#8@5"
0'-3"	20' x 18'	16"	#7@6"	3'-8"	4'-2"	#8@6"	#5@18"	#5@18"	#6@6"	#5@18"	#7@6"
4'-6"		16"	#7@6"	3'-8"	4'-9"	#8@6"	#5@18"	#5@6"	#5@18"	#5@18"	#7@6"
7'-9"		17"	#7@5"	3'-9"	5'-0"	#8@5"	#5@15"	#5@6"	#5@18"	#5@15"	#7@5"
10'-12"		18"	#7@5"	3'-10"	5'-1"	#8@5"	#5@15"	#5@6"	#5@18"	#5@15"	#7@5"
13'-15"		19"	#7@5"	3'-11"	5'-2"	#9@5"	#5@15"	#5@6"	#5@18"	#5@15"	#7@5"
16'-18"		21"	#7@5"	4'-1"	5'-3"	#9@5"	#5@15"	#5@6"	#5@18"	#5@15"	#7@5"
19'-21"		22"	#8@5"	4'-5"	5'-5"	#9@5"	#5@15"	#6@6"	#5@18"	#5@15"	#8@5"
0'-3"	20' x 19'	16"	#7@6"	3'-8"	4'-1"	#8@6"	#5@18"	#5@18"	#6@6"	#5@18"	#7@6"
4'-6"		16"	#7@6"	3'-8"	4'-9"	#8@6"	#5@18"	#5@6"	#5@18"	#5@18"	#7@6"
7'-9"		17"	#7@5"	3'-9"	5'-0"	#8@5"	#5@15"	#5@6"	#5@18"	#5@15"	#7@5"
10'-12"		18"	#7@5"	3'-10"	5'-1"	#8@5"	#5@15"	#5@6"	#5@18"	#5@15"	#7@5"
13'-15"		19"	#7@5"	3'-11"	5'-2"	#9@5"	#5@15"	#5@6"	#5@18"	#5@15"	#7@5"
16'-18"		21"	#7@5"	4'-1"	5'-3"	#9@5"	#5@15"	#5@6"	#5@18"	#5@15"	#7@5"
19'-21"		22"	#8@5"	4'-5"	5'-5"	#9@5"	#5@15"	#6@6"	#5@18"	#5@15"	#8@5"
0'-3"	20' x 20	16"	#7@6"	3'-8"	4'-0"	#8@6"	#5@18"	#5@18"	#6@6"	#5@18"	#7@6"
4'-6"		16"	#7@6"	3'-8"	4'-8"	#8@6"	#5@18"	#5@6"	#5@18"	#5@18"	#7@6"
7'-9"		17"	#7@5"	3'-9"	5'-0"	#8@5"	#5@15"	#5@6"	#5@18"	#5@15"	#7@5"
10'-12"		18"	#7@5"	3'-10"	5'-1"	#8@5"	#5@15"	#5@6"	#5@18"	#5@15"	#7@5"
13'-15"		19"	#7@5"	3'-11"	5'-2"	#9@5"	#5@15"	#5@6"	#5@18"	#5@15"	#7@5"
16'-18"		21"	#7@5"	4'-1"	5'-3"	#9@5"	#5@15"	#5@6"	#5@18"	#5@15"	#7@5"
19'-21"		22"	#8@5"	4'-5"	5'-5"	#9@5"	#5@15"	#6@6"	#5@18"	#5@15"	#8@5"

PROJECT ENGINEER J. de Mars
IN CHARGE OF J. de Mars
DESIGNED BY
DESIGN CHECKED BY
DETAILED BY W. J. Jerome
DETAIL CHECKED BY H. E. Rathe

APPROVED Nov. 22, 1976
Malcolm D. Graham
MALCOLM D. GRAHAM DEPUTY CHIEF ENGINEER (Facilities Design)

APPROVED Nov 18, 1976
E. V. Hourigan
E.V. HOURIGAN DEPUTY CHIEF ENGINEER

STANDARD CLOSED BOX CULVERTS

GRAPHIC CONTROLS CORPORATION Brooklyn, New York Printed in U.S.A. ASTROFILM 273-4K

FIGURE 19C