

TABLE OF DIMENSIONS AND CONCRETE VOLUMES PER ENDWALL  
FOR 42" - 96" CIRCULAR PIPE CULVERTS

DIAMETER OF PIPE CULVERTS

DIMENSION	42"	48"	54"	60"	66"	72"	78"	84"	90"	96"	DIMENSION	
	A	1'-6"	1'-6"	1'-6"	1'-6"	1'-6"	1'-6"	1'-6"	1'-6"	1'-6"		1'-6"
B	4'-9 <sup>1</sup> / <sub>2</sub> "	5'-4"	5'-10 <sup>1</sup> / <sub>2</sub> "	6'-5"	6'-11 <sup>1</sup> / <sub>2</sub> "	7'-6"	8'-0 <sup>1</sup> / <sub>2</sub> "	8'-7"	9'-2 <sup>1</sup> / <sub>4</sub> "	9'-9 <sup>3</sup> / <sub>4</sub> "	B	
C	3'-3 <sup>3</sup> / <sub>4</sub> "	3'-9"	4'-2 <sup>1</sup> / <sub>4</sub> "	4'-7"	5'-0 <sup>5</sup> / <sub>8</sub> "	5'-5 <sup>3</sup> / <sub>4</sub> "	5'-11"	6'-4 <sup>1</sup> / <sub>4</sub> "	6'-9 <sup>3</sup> / <sub>8</sub> "	7'-2 <sup>5</sup> / <sub>8</sub> "	C	
D	3'-6"	4'-0"	4'-6"	5'-0"	5'-6"	6'-0"	6'-6"	7'-0"	7'-6"	8'-0"	D	
E	0'-6"	0'-6"	0'-6"	0'-6"	0'-6"	0'-6"	0'-6"	0'-6"	0'-6"	0'-6"	E	
F	0'-5 <sup>1</sup> / <sub>2</sub> "	0'-6"	0'-6 <sup>1</sup> / <sub>2</sub> "	0'-7"	0'-7 <sup>1</sup> / <sub>2</sub> "	0'-8"	0'-8 <sup>1</sup> / <sub>2</sub> "	0'-9"	0'-9 <sup>1</sup> / <sub>2</sub> "	0'-10"	F	
G	4'-4"	4'-10"	5'-4"	5'-10"	6'-4"	6'-10"	7'-4"	7'-10"	8'-4"	8'-10"	G	
H	0'-10"	0'-10"	0'-11"	1'-0"	1'-1"	1'-2"	1'-3"	1'-4"	1'-5"	1'-6"	H	
I	1'-11"	2'-0 <sup>1</sup> / <sub>2</sub> "	2'-3"	2'-5 <sup>1</sup> / <sub>2</sub> "	2'-8"	2'-10 <sup>1</sup> / <sub>2</sub> "	3'-1"	3'-3 <sup>1</sup> / <sub>2</sub> "	3'-6"	3'-8 <sup>1</sup> / <sub>2</sub> "	I	
J	5'-8 <sup>1</sup> / <sub>2</sub> "	6'-4 <sup>1</sup> / <sub>4</sub> "	7'-1 <sup>1</sup> / <sub>4</sub> "	7'-10"	8'-7"	9'-4"	10'-0 <sup>3</sup> / <sub>4</sub> "	10'-9 <sup>5</sup> / <sub>8</sub> "	11'-7"	12'-4 <sup>1</sup> / <sub>8</sub> "	J	
K	4'-5 <sup>1</sup> / <sub>2</sub> "	4'-11 <sup>1</sup> / <sub>2</sub> "	5'-6 <sup>3</sup> / <sub>4</sub> "	6'-1 <sup>1</sup> / <sub>8</sub> "	6'-9"	7'-4 <sup>1</sup> / <sub>8</sub> "	7'-11 <sup>1</sup> / <sub>4</sub> "	8'-6 <sup>1</sup> / <sub>2</sub> "	9'-2"	9'-9 <sup>1</sup> / <sub>8</sub> "	K	
L	6'-7 <sup>5</sup> / <sub>8</sub> "	7'-6"	8'-4 <sup>1</sup> / <sub>2</sub> "	9'-2 <sup>1</sup> / <sub>8</sub> "	10'-1 <sup>1</sup> / <sub>4</sub> "	10'-11 <sup>5</sup> / <sub>8</sub> "	11'-10"	12'-8 <sup>3</sup> / <sub>8</sub> "	13'-6 <sup>1</sup> / <sub>8</sub> "	14'-5 <sup>1</sup> / <sub>4</sub> "	L	
M	1'-1 <sup>1</sup> / <sub>4</sub> "	1'-2 <sup>1</sup> / <sub>8</sub> "	1'-3 <sup>5</sup> / <sub>8</sub> "	1'-5"	1'-6 <sup>1</sup> / <sub>2</sub> "	1'-8"	1'-9 <sup>3</sup> / <sub>8</sub> "	1'-10 <sup>3</sup> / <sub>4</sub> "	2'-0 <sup>3</sup> / <sub>8</sub> "	2'-2"	M	
N	0'-5 <sup>3</sup> / <sub>4</sub> "	0'-5 <sup>3</sup> / <sub>4</sub> "	0'-6 <sup>3</sup> / <sub>4</sub> "	0'-6 <sup>3</sup> / <sub>8</sub> "	0'-7 <sup>1</sup> / <sub>2</sub> "	0'-8 <sup>1</sup> / <sub>8</sub> "	0'-8 <sup>5</sup> / <sub>8</sub> "	0'-9 <sup>1</sup> / <sub>4</sub> "	0'-10"	0'-10 <sup>1</sup> / <sub>2</sub> "	N	
O	0'-11 <sup>1</sup> / <sub>2</sub> "	0'-11 <sup>1</sup> / <sub>2</sub> "	1'-0 <sup>1</sup> / <sub>2</sub> "	1'-1 <sup>1</sup> / <sub>2</sub> "	1'-2 <sup>1</sup> / <sub>2</sub> "	1'-3 <sup>1</sup> / <sub>2</sub> "	1'-4 <sup>1</sup> / <sub>2</sub> "	1'-5 <sup>1</sup> / <sub>2</sub> "	1'-6 <sup>1</sup> / <sub>2</sub> "	1'-7 <sup>1</sup> / <sub>2</sub> "	O	
P	5'-9"	6'-6"	7'-3"	8'-0"	8'-9"	9'-6"	10'-3"	11'-0"	11'-9"	12'-6"	P	
R	1'-1"	1'-2 <sup>1</sup> / <sub>2</sub> "	1'-4"	1'-5 <sup>1</sup> / <sub>2</sub> "	1'-7"	1'-8 <sup>1</sup> / <sub>2</sub> "	1'-10"	1'-11 <sup>1</sup> / <sub>2</sub> "	2'-1"	2'-2 <sup>1</sup> / <sub>2</sub> "	R	
CUBIC YARDS CONCRETE	CONC. PIPE	3.558	4.373	5.635	7.089	8.776	10.702	12.861	15.303	18.195	21.285	CONC. PIPE
	C.M. PIPE	3.791	4.680	6.054	7.642	9.490	11.605	13.984	16.678	19.724	23.107	C.M. PIPE
FOR 2:1 FILL SLOPE	C	4'-4"	4'-10 <sup>1</sup> / <sub>8</sub> "	5'-5 <sup>3</sup> / <sub>4</sub> "	6'-0 <sup>3</sup> / <sub>4</sub> "	6'-7 <sup>5</sup> / <sub>8</sub> "	7'-2 <sup>5</sup> / <sub>8</sub> "	7'-9 <sup>1</sup> / <sub>2</sub> "	8'-4 <sup>1</sup> / <sub>2</sub> "	8'-11 <sup>3</sup> / <sub>8</sub> "	9'-6 <sup>1</sup> / <sub>4</sub> "	C
	F	0'-6 <sup>1</sup> / <sub>2</sub> "	0'-7"	0'-7 <sup>1</sup> / <sub>2</sub> "	0'-8"	0'-8 <sup>1</sup> / <sub>2</sub> "	0'-9"	0'-9 <sup>1</sup> / <sub>2</sub> "	0'-10"	0'-10 <sup>1</sup> / <sub>2</sub> "	0'-11"	F
	G	4'-3"	4'-9"	5'-3"	5'-9"	6'-3"	6'-9"	7'-3"	7'-9"	8'-3"	8'-9"	G
	I	1'-10 <sup>3</sup> / <sub>4</sub> "	2'-0 <sup>1</sup> / <sub>4</sub> "	2'-2 <sup>3</sup> / <sub>4</sub> "	2'-5 <sup>1</sup> / <sub>4</sub> "	2'-7 <sup>3</sup> / <sub>4</sub> "	2'-10 <sup>1</sup> / <sub>4</sub> "	3'-0 <sup>3</sup> / <sub>4</sub> "	3'-3 <sup>1</sup> / <sub>4</sub> "	3'-5 <sup>3</sup> / <sub>4</sub> "	3'-8 <sup>1</sup> / <sub>4</sub> "	I
	J	5'-8 <sup>1</sup> / <sub>4</sub> "	6'-4"	7'-1"	7'-9 <sup>1</sup> / <sub>4</sub> "	8'-6 <sup>3</sup> / <sub>4</sub> "	9'-3 <sup>1</sup> / <sub>2</sub> "	10'-0 <sup>1</sup> / <sub>2</sub> "	10'-9 <sup>1</sup> / <sub>8</sub> "	11'-6 <sup>1</sup> / <sub>8</sub> "	12'-3 <sup>1</sup> / <sub>2</sub> "	J
	L	8'-8"	9'-9 <sup>3</sup> / <sub>4</sub> "	10'-11 <sup>5</sup> / <sub>8</sub> "	12'-1 <sup>1</sup> / <sub>2</sub> "	13'-3 <sup>3</sup> / <sub>8</sub> "	14'-5 <sup>1</sup> / <sub>4</sub> "	15'-7"	16'-9"	17'-10 <sup>3</sup> / <sub>4</sub> "	19'-0 <sup>5</sup> / <sub>8</sub> "	L
	M	1'-1 <sup>1</sup> / <sub>8</sub> "	1'-2"	1'-3 <sup>1</sup> / <sub>2</sub> "	1'-4 <sup>1</sup> / <sub>8</sub> "	1'-6 <sup>3</sup> / <sub>8</sub> "	1'-7 <sup>3</sup> / <sub>4</sub> "	1'-9 <sup>1</sup> / <sub>4</sub> "	1'-10 <sup>5</sup> / <sub>8</sub> "	2'-0 <sup>1</sup> / <sub>4</sub> "	2'-1 <sup>1</sup> / <sub>8</sub> "	M
	P	7'-6"	8'-6"	9'-6"	10'-6"	11'-6"	12'-6"	13'-6"	14'-6"	15'-6"	16'-6"	P
R	1'-0 <sup>3</sup> / <sub>4</sub> "	1'-2 <sup>1</sup> / <sub>4</sub> "	1'-3 <sup>3</sup> / <sub>4</sub> "	1'-5 <sup>1</sup> / <sub>4</sub> "	1'-6 <sup>3</sup> / <sub>4</sub> "	1'-8 <sup>1</sup> / <sub>4</sub> "	1'-9 <sup>3</sup> / <sub>4</sub> "	1'-11 <sup>1</sup> / <sub>4</sub> "	2'-0 <sup>3</sup> / <sub>4</sub> "	2'-2 <sup>1</sup> / <sub>4</sub> "	R	
CUBIC YARDS CONCRETE	CONC. PIPE	4.238	5.230	6.761	8.538	10.602	12.958	15.612	18.623	22.104	25.898	CONC. PIPE
	C.M. PIPE	4.469	5.536	7.177	9.088	11.312	13.856	16.730	19.993	23.618	27.704	C.M. PIPE
FOR 1/2:1 AND 2:1 FILL SLOPES	a	0'-4 <sup>1</sup> / <sub>2</sub> "	0'-5"	0'-5 <sup>3</sup> / <sub>4</sub> "	0'-6 <sup>1</sup> / <sub>4</sub> "	0'-7"	0'-7 <sup>1</sup> / <sub>2</sub> "	0'-8 <sup>1</sup> / <sub>4</sub> "	0'-8 <sup>3</sup> / <sub>4</sub> "	0'-9 <sup>1</sup> / <sub>2</sub> "	0'-10"	a
	b	0'-3 <sup>1</sup> / <sub>2</sub> "	0'-4"	0'-4 <sup>1</sup> / <sub>2</sub> "	0'-5"	0'-5 <sup>1</sup> / <sub>2</sub> "	0'-6"	0'-6 <sup>1</sup> / <sub>2</sub> "	0'-7"	0'-7 <sup>1</sup> / <sub>2</sub> "	0'-8"	b

FOR ALL DIMENSIONS NOT SHOWN SEE VALUES LISTED ABOVE FOR 1/2:1 FILL SLOPE

STANDARD ENDWALL FOR PIPE CULVERTS  
42"-96" CIRCULAR PIPES  
VIRGINIA DEPARTMENT OF TRANSPORTATION

SPECIFICATION REFERENCE

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