

FULL CIRCLE STEEL PIPE CULVERT (INCLUDING ALL COATED TYPES)												
PIPE DIAM. IN INCHES	PIPE CHARACTERISTICS				MIN. COVER (INCHES)	MAXIMUM FILL HEIGHT ABOVE TOP OF PIPE (FEET)						
	CORRUGATED STEEL					EQUIV. STANDARD GAGE						
	2 2/3" x 1/2"	3" x 1"	5" x 1"	6"x2" STR. PLATE	TOP OF PIPE TO TOP OF SUBGRADE	16	14	12	10	8	7	5
12"	●				12"	218'	272'					
15"	●				12"	174'	218'					
18"	●				12"	145'	181'	254'				
21"	●				12"	124'	155'	218'				
24"	●				12"	108'	136'	190'				
30"	●				12"	87'	108'	152'				
36"	●				12"	72'	90'	127'	163'			
42"	●	●			12"	83'	104'	146'	188'	231'		
48"	●	●			12"	62'	77'	108'	140'	171'		
		●			12"	71'	89'	125'	161'	198'		
54"	●	●			12"	54'	67'	95'	122'	150'		
		●			12"	62'	78'	109'	141'	173'		
		●	●		12"	55'	69'	97'	125'	153'		
60"	●	●	●		12"	55'	69'	97'	125'	153'		
		●	●		12"	49'	61'	86'	111'	136'		
		●	●		12"	49'	62'	87'	112'	138'		
		●	●	●	12"	44'	55'	78'	100'	123'		
66"	●	●	●	●	12"			46'	68'	90'	96'	106'
		●	●	●	12"			89'	109'			
		●	●	●	12"	45'	56'	79'	102'	125'		
		●	●	●	12"	40'	50'	70'	91'	111'		
72"	●	●	●	●	12"			42'	62'	78'	82'	90'
		●	●	●	12"			81'	99'			
		●	●	●	12"	41'	51'	72'	94'	115'		
		●	●	●	12"	36'	46'	64'	83'	102'	73'	78'
78"	●	●	●	●	12"			38'	57'	69'		
		●	●	●	12"			88'				
		●	●	●	12"	38'	47'	67'	86'	106'		
		●	●	●	12"	33'	42'	59'	77'	94'		
84"	●	●	●	●	12"			35'	53'	63'	66'	70'
		●	●	●	12"			76'				
		●	●	●	12"	35'	44'	62'	80'	98'		
		●	●	●	12"	31'	39'	55'	71'	87'		
90"		●	●	●	12"			33'	49'	59'	61'	64'
		●	●	●	12"			58'	75'	92'		
		●	●	●	12"	29'	36'	51'	66'	81'		
96"		●	●	●	12"			31'	45'	55'	57'	60'
		●	●	●	12"			38'	54'	70'	86'	
		●	●	●	12"			34'	48'	62'	76'	
102"		●	●	●	12"			29'	43'	53'	54'	57'
		●	●	●	24"			36'	51'	66'	81'	
		●	●	●	24"			32'	45'	58'	72'	
108"		●	●	●	24"							
		●	●	●	24"			48'	62'	76'		
		●	●	●	24"			43'	55'	68'		
114"		●	●	●	24"			25'	38'	49'	50'	52'
		●	●	●	24"							
		●	●	●	24"			45'	59'	72'		
		●	●	●	24"			40'	52'	64'		
120"		●	●	●	24"			43'	56'	68'		
		●	●	●	24"			38'	50'	61'		
		●	●	●	24"			23'	34'	45'	48'	49'

FULL CIRCLE ALUMINUM ALLOY PIPE CULVERT												
PIPE DIAM. IN INCHES	PIPE CHARACTERISTICS			MIN. COVER (INCHES)	MAXIMUM FILL HEIGHT ABOVE TOP OF PIPE (FEET)							
	CORR. ALUMINUM ALLOY				EQUIV. STANDARD GAGE							
	2 2/3" x 1/2"	3" x 1"	6" x 1"	TOP OF PIPE TO TOP OF SUBGRADE	16	14	12	10	8			
12"	●			12"	141'	176'	247'	318'				
15"	●			12"	112'	141'	197'	254'				
18"	●			12"	93'	117'	164'	212'				
21"				12"	80'	100'	140'	181'				
24"	●			12"	69'	87'	123'	158'				
30"	●			12"		77'	109'	140'				
		●		12"			98'	126'				
36"	●			12"		69'	88'	114'				
		●		12"			81'	105'				
42"	●			12"			69'	89'				
		●		12"			63'	60'	78'			
48"	●			12"			53'	69'				
		●		12"			57'		61'	51'		
54"	●			12"							82'	
		●		12"							45'	
		●		12"							73'	
60"	●			12"							66'	
		●		12"							41'	
		●		12"							66'	
66"	●			12"							58'	
		●		12"							37'	
		●		12"							51'	
		●		12"							52'	
72"	●			12"							54'	
		●		15"							43'	
78"	●			15"							50'	
		●		15"							40'	
84"	●			18"							47'	
		●		18"							37'	
90"	●			18"							43'	
		●		18"							34'	
96"	●			18"							40'	
		●		18"							32'	
102"	●			21"							37'	
		●		21"							29'	
108"	●			21"							35'	
		●		21"							28'	
114"	●			24"							34'	
		●		24"							26'	
120"	●			24"							32'	
		●		24"							25'	

ALL NOTES, PAY ITEMS AND DRAWINGS RELEVANT TO METAL CULVERTS AND THEIR INSTALLATIONS ARE SHOWN ON ROADWAY STANDARD MCI-1.

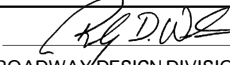
TABLE OF STANDARD BEDDING MATERIAL QUANTITIES SHOWN ON ROADWAY STANDARD MCI-3.


STEEL & ALUMINUM ALLOY PIPE ARCH - FILLS TO 10 FT. MAX.					
2 2/3" x 1/2" CORRUGATION PATTERN					
APPROX. EQUIV. ROUND PIPE	SIZE SPAN x RISE	CORRUGATED STEEL		ALUMINUM ALLOY	
		MIN. GAGE	MIN. COVER (INCHES)	MIN. GAGE	MIN. COVER (INCHES)
15"	17" x 13"	16	12"	16	12"
18"	21" x 15"	16	12"	16	12"
21"	24" x 18"	16	12"	16	12"
24"	28" x 20"	16	12"	14	12"
30"	35" x 24"	14	12"	14	12"
36"	42" x 29"	14	12"	12	15"
42"	49" x 33"	14	12"	12	15"
48"	57" x 38"	12	12"	10	15"
54"	64" x 43"	12	12"	10	18"
60"	71" x 47"	10	12"	8	18"
66"	77" x 52"	8	12"	8	18"
72"	83" x 57"	8	12"	8	18"

WHEN INSTALLED UNDER PAVEMENT INCLUDING ALL P.C. OR A.C. SURFACING UNDER MAINLINE TRAFFIC AND MAJOR STREET RETURNS. A MINIMUM PIPE GAGE OF 16 MAY BE USED FOR INSTALLATIONS REQUIRING 30 INCH EQUIVALENT ROUND CONDUITS (MAX.) AND LIMITED TO LOW VOLUME COUNTY OR OFF-SYSTEM ROADS, MINOR STREET RETURNS, DRIVEWAYS OR TEMPORARY DETOURS, AS APPROVED BY THE ENGINEER.

EQUIVALENT METAL THICKNESS AND GAGE		
GAGE NUMBER	METAL THICKNESS (INCHES)	
	■ STEEL	◆ ALUMINUM ALLOY
16	0.064	0.060
14	0.079	0.075
12	0.109	0.105
10	0.138	0.135
8	0.168	0.164
7	0.188	----
5	0.218	----

■ THE THICKNESS OF THE SHEET INCLUDES BOTH THE BASE STEEL AND THE ZINC COATING (GALVANIZE).
 ◆ THE THICKNESS SHOWN REFERS TO THE BASE ALUMINUM CLAD SHEET.

APPROVED BY ROADWAY ENGINEER:  DATE: 12/20/2024
 ROADWAY DESIGN DIVISION STANDARD
METAL CULVERT INSTALLATION
 (2 OF 3 SHEETS)

 **OKLAHOMA Transportation**

2019 SPECIFICATIONS
 MCI-2 0
 R-60