

519C – Pipe Culverts.dwg March 17, 2026 – 3:12pm

TABLE 519C - 1 TABLE SHOWING CLASSES OF CONCRETE PIPE, GAUGES OF CORRUGATED STEEL PIPE AND THICKNESS IN INCHES OF CORRUGATED ALUMINUM PIPE FOR VARIOUS HEIGHTS OF FILL ABOVE TOP OF PIPE												
DIAM. (IN.)	TYPE OF PIPE	+ Height of Fill in Feet Above Top of Pipe**										
		1-10	10-15	15-20	20-25	25-30	30-35	35-40	40-50	50-60	60-70	70-80
15	CONCRETE	III	III	IV	V	V	V	V	V	V	V	V
	CORR. STEEL	16	16	16	16	16	16	16	16	14	14	10
	CORR. ALUM.	0.06	0.06	0.06	0.06	0.06	0.075	0.105	NP	NP	NP	NP
18	CONCRETE	III	III	IV	V	V	V	V	V	V	V	V
	CORR. STEEL	16	16	16	16	16	16	16	14	14	12	10
	CORR. ALUM.	0.06	0.06	0.06	0.06	0.075	0.105	NP	NP	NP	NP	NP
24	CONCRETE	III	III	IV	V	V	V	V	V	V	V	V
	CORR. STEEL	16	16	16	16	16	12	12	10	8	0	0
	CORR. ALUM.	0.075	0.075	0.075	0.075	0.105	0.135	NP	NP	NP	NP	NP
30	CONCRETE	III	III	IV	V	V	V	V	V	V	V	V
	CORR. STEEL	16	16	16	14	12	14	12	8	0	0	0
	CORR. ALUM.	0.075	0.075	0.075	0.105	0.135	0.164	NP	NP	NP	NP	NP
36	CONCRETE	III	III	IV	V	V	V	V	V	V	V	V
	CORR. STEEL	16	16	16	10	14	12	10	10	8	10	0
	CORR.ALUM.	0.105	0.105	0.105	0.105	0.135	0.164	NP	NP	NP	NP	NP
42	CONCRETE	III	III	IV	V	V	V	V	V	V	V	NP
	CORR. STEEL	16	16	14	16	14	14	12	8	0	0	0
	CORR. ALUM.	0.105	0.105	0.105	0.135	0.135	NP	NP	NP	NP	NP	NP
48	CONCRETE	III	III	IV	V	V	V	V	V	V	V	V
	CORR.STEEL	16	16	12	16	14	14	12	12	0	0	0
	CORR,ALUM.	0.105	0.105	0.105	0.135	0.164	NP	NP	NP	NP	NP	NP
54	CONCRETE	III	III	IV	V	V	V	V	V	V	V	V
	CORR. STEEL	14	14	14	14	14	8	8	0	0	0	0
	CORR. ALUM.	0.105	0.105	0.105	0.135	0.164	NP	NP	NP	NP	NP	NP
60	CONCRETE	III	III	IV	V	V	V	V	V	V	V	V
	CORR. STEEL	12	12	12	12	12	10	8		V	V	V
	CORR. ALUM.	0.135	0.135	0.164	0.164	NP	NP	NP	NP	NP	NP	NP
66	CONCRETE	III	III	IV	V	V	V	V	V	V	V	V
	CORR. STEEL	12	12	12	12	10	10		V	V	V	V
	CORR. ALUM.	0.135	0.135	0.164	NP	NP	NP	NP	NP	NP	NP	NP
72	CONCRETE	III	III	IV	V	V	V	V	V	V	V	V
	CORR. STEEL	10	10	10	10	8		V	V	V	V	V
	CORR. ALUM.	0.135	0.135	0.164	NP	NP	NP	NP	NP	NP	NP	NP

TABLE 519C - 2 TABLE SHOWING CLASSES OF CONCRETE PIPE, GAUGES OF CORRUGATED STEEL PIPE AND THICKNESS IN INCHES OF CORRUGATED ALUMINUM PIPE FOR VARIOUS HEIGHTS OF FILL ABOVE TOP OF PIPE												
DIAMETER (IN.)	TYPE OF PIPE	+ Height of Fill in Feet Above Top of Pipe**										
		1-10	10-15	15-20	20-25	25-30	30-35	35-40	40-50	50-60	60-70	70-80
78	CONCRETE	III	III	IV	V	V	V	V	V	V	V	V
	CORR. STEEL	8	8	8	8	USE	STRU	CTUR	AL	PLA	TE	PIPE
	CORR. ALUM.	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP
84	CONCRETE	III	III	IV	V	V	V	V	V	V	NP	NP
	CORR. STEEL	8	8	8	USE	STRU	CTUR	AL	PLA	TE	PIPE	
	CORR. ALUM.	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	
90	CONCRETE	III	III	IV	V	V	NP	NP	NP	NP	NP	NP
	CORR. STEEL			USE	STRU	CTUR	AL	PLA	TE	PIPE		
	CORR. ALUM.	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	
96	CONCRETE	III	III	IV	V	V	NP	NP	NP	NP	NP	NP
	CORR. STEEL			USE	STRU	CTUR	AL	PLA	TE	PIPE		
	CORR. ALUM.	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	
102	CONCRETE	III	III	IV	V	V	NP	NP	NP	NP	NP	NP
	CORR. STEEL			USE	STRU	CTUR	AL	PLA	TE	PIPE		
	CORR.ALUM.	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	
108	CONCRETE	III	III	IV	V	V	NP	NP	NP	NP	NP	NP
	CORR. STEEL			USE	STRU	CTUR	AL	PLA	TE	PIPE		
	CORR. ALUM.	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	
NP= NOT PERMITTED = PIPE SHALL BE SHAPE II CIRCULAR CROSS SECTION FACTORY ELONGATED												

NOTES:

1. ALL STEEL AND ALUMINUM PIPE SHALL BE LOCK-SEAM OR WELDED-SEAM (HELICAL) CONSTRUCTION.
2. MINIMUM COVER VALUES APPLY TO HS-20 LIVE LOAD. MINIMUM COVER NEEDED FOR CONSTRUCTION VEHICLES MAY BE GREATER AND IS THE RESPONSIBILITY OF THE CONTRACTOR.
3. TABLE VALUES FOR ALUMINUM CORRUGATED PIPE (OR ALUMINUM SPIRAL RIB PIPE) ARE COMPUTED BASED UPON ALCLAD ALLOY 3004-H34 HAVING MINIMUM YIELD STRENGTH, fy=24,000 PSI. IF ALUMINUM PIPE IS OTHERWISE FURNISHED AS 3004-H32 (fy=20,000 PSI). THE TABLE NO.1 ALLOWABLE FILL HEIGHTS SHALL BE ADJUSTED AS FOLLOWS:

A. ALL MINIMUM COVER VALUES SHALL BE INCREASED BY 15 PERCENT. (EXAMPLE: 12 INCHES BECOMES 13.8 INCHES).

B. ALL HEIGHT OF FILL VALUES SHALL BE DECREASED BY 15 PERCENT. (EXAMPLE: 35-40 FEET BECOMES 29.7-34.0 FEET).

TABLE 519C - 3		
COR. METAL THICKNESS		EQUIVALENT GUAGE
STEEL	0.064	16
	0.079	14
	0.109	12
	0.138	10
	0.168	8
ALUMINUM	0.060	16
	0.075	14
	0.105	12
	0.135	10
	0.164	8

FULTON COUNTY STANDARD DETAIL 519C

PIPE CULVERTS
SHEET 3 OF 3

	DATE	REVISIONS	DATE	REVISIONS

DGS/DRN/CHKD: MB/EB/ML

APPROVED: TM

DATE: 02-18-2026



FULTON COUNTY PUBLIC WORKS

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DRAWING NO.

519C