

ROUND PIPE - 2-2/3" X 1/2" CORRUGATION							MIN. HEIGHT OF COVER (FT.)
D (IN)	AREA (SQ. FT.)	MAXIMUM HEIGHT OF COVER (FT.)					
		SHEET THICKNESS IN INCHES (GAGE)					
		0.064 (16)	0.079 (14)	0.109 (12)	0.138 (10)	0.168 (8)	
12	.79	100+	100+	NA	NA	NA	SEE DWG 703
15	1.23	100+	100+	NA	NA	NA	
18	1.77	100+	100+	100+	NA	NA	
21	2.40	100+	100+	100+	NA	NA	
24	3.14	100+	100+	100+	NA	NA	
30	4.91	85	100+	100+	NA	NA	
36	7.1	71+	88	100+	100+	NA	
42	9.6	NS	76	100+	100+	NA	
48	12.6	NS	66	93	100+	100+*	
54	16.0	NS	NS	82	100+	100+*	
60	19.6	NS	NS	74	95	100+*	
66	23.8	NS	NS	NS	87	100+*	
72	28.3	NS	NS	NS	79	97*	
78	33.2	NS	NS	NS	NS	90*	
84	38.5	NS	NS	NS	NS	83*	

ROUND PIPE - 3" X 1" CORRUGATION							MIN. HEIGHT OF COVER (FT.)
D (IN)	AREA (SQ. FT.)	MAXIMUM HEIGHT OF COVER (FT.)					
		SHEET THICKNESS IN INCHES (GAGE)					
		0.064 (16)	0.079 (14)	0.109 (12)	0.138 (10)	0.168 (8)	
36	7.1	81	100+	100+	NA	NA	SEE DWG 703
42	9.6	70	87	100+	NA	NA	
48	12.6	61	76	100+	100+	NA	
54	16.0	54	68	95	100+	NA	
60	19.6	48	61	85	100+	NA	
66	23.8	44	55	78	100+	100+*	
72	28.3	NS	51	71	91	100+*	
78	33.2	NS	47	66	84	100+*	
84	38.5	NS	43	61	78	100+*	
90	44.2	NS	40	57	73	90*	
96	50.3	NS	NS	53	68	84*	
102	56.7	NS	NS	50	64	79*	
108	63.6	NS	NS	47	61	75*	
114	70.9	NS	NS	NS	58	71*	
120	78.5	NS	NS	NS	55	67*	
132	95.0	NS	NS	NS	50	61*	

ROUND PIPE - 5" X 1" CORRUGATION							MIN. HEIGHT OF COVER (FT.)
D (IN)	AREA (SQ. FT.)	MAXIMUM HEIGHT OF COVER (FT.)					
		SHEET THICKNESS IN INCHES (GAGE)					
		0.064 (16)	0.079 (14)	0.109 (12)	0.138 (10)	0.168 (8)	
36	7.1	72	90	100+	NA	NA	SEE DWG 703
42	9.6	62	77	100+	NA	NA	
48	12.6	54	68	95	100+	NA	
54	16.0	48	60	84	100+	NA	
60	19.6	43	54	76	98	NA	
66	23.8	39	49	69	89	100+*	
72	28.3	NS	45	63	81	100+*	
78	33.2	NS	41	58	75	92*	
84	38.5	NS	38	54	70	85*	
90	44.2	NS	36	50	65	80*	
96	50.3	NS	NS	47	61	75*	
102	56.7	NS	NS	44	57	70*	
108	63.6	NS	NS	42	54	66*	
114	70.9	NS	NS	NS	51	63*	
120	78.5	NS	NS	NS	49	60*	
132	95.0	NS	NS	NS	44	54*	

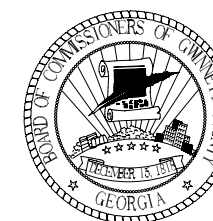
PIPE ARCH - 2-2/3" X 1/2" CORRUGATION							MIN. HEIGHT OF COVER (FT.)
SPAN (IN)	RISE (IN)	EQUIV. ROUND PIPE (IN)	AREA (SQ. FT.)	MINIMUM SHEET THICKNESS REQUIRED (IN) (GA)	MAXIMUM HEIGHT OF COVER (FT)		
					MAXIMUM CORNER PRESSURE-LBS/SQ.FT		
					4000	6000	
17	13	15	1.1	.064 (16)	12	14	SEE DWG 703
21	15	18	1.6	.064 (16)	10	14	
24	18	21	2.2	.064 (16)	7	13	
28	20	24	2.9	.064 (16)	5	11	
35	24	30	4.5	.064 (16)	NS	7	
42	29	36	6.5	.079 (14)	NS	7	
49	33	42	8.9	.079 (14)	NS	6	
57	38	48	11.6	.109 (12)	NS	8	
64	43	54	14.7	.109 (12)	NS	9	
71	47	60	18.1	.138 (10)	NS	10	
77	52	66	21.9	.168 (8)*	5	10	
83	57	72	26.0	.168 (8)*	5	10	

PIPE ARCH - 3" X 1" AND 5" X 1" CORRUGATION							MIN. HEIGHT OF COVER (FT.)
SPAN (IN)	RISE (IN)	EQUIV. ROUND PIPE (IN)	AREA (SQ. FT.)	MINIMUM SHEET THICKNESS REQUIRED (IN) (GA)	MAXIMUM HEIGHT OF COVER (FT)		
					MAXIMUM CORNER PRESSURE-LBS/SQ.FT		
					4000	6000	
40	31	36	7.0	.079 (14)	8	12	SEE DWG 703
46	36	42	9.4	.079 (14)	8	13	
53	41	48	12.3	.079 (14)	8	13	
60	46	54	15.6	.079 (14)	8	13	
66	51	60	19.3	.079 (14)	9	13	
73	55	66	23.2	.079 (14)	11	16	
81	59	72	27.4	.079 (14)	11	17	
87	63	78	32.1	.109 (12)	10	16	
95	67	84	37.0	.109 (12)	11	17	
103	71	90	42.4	.109 (12)	10	15	
112	75	96	48.0	.109 (12)	10	16	
117	79	102	54.2	.109 (12)	10	15	
128	83	108	60.5	.138 (10)	9	14	
137	87	114	67.4	.138 (10)	8	13	
142	91	120	74.5	.168 (8)*	7	12	

\* AVAILABILITY SHOULD BE QUALIFIED BEFORE SPECIFYING

NA - NOT AVAILABLE

NS - NOT APPROVED (FOR HIGHWAY H-20 LOADINGS)



GWINNETT COUNTY  
DEPARTMENT OF PLANNING & DEVELOPMENT  
STANDARD DRAWING

Standard Pipe Culverts - Detail No. 1

DATE: JANUARY 1988

SHEET: 701