



Minimum Space Between Pipes	
1/2 Dia. of Pipe or 1/2 Span of Pipe Arch, 24" Min.	

CORRUGATED METAL PIPE											* SEE NOTE 8
Dia.	W	t _w	t _f	H	A1 *	A2 *	B	C	D1 *	D2 *	E
1'-6"	8'-0"	1'-0"	1'-0"	4'-6"	4'-0"	4'-0"	1'-6"	2'-0"	2'-0"	2'-0"	4'-0"
1'-9"	9'-0"	1'-0"	1'-0"	4'-9"	4'-6"	4'-0"	1'-6"	2'-0"	2'-6"	2'-0"	4'-3"
2'-0"	9'-6"	1'-0"	1'-0"	5'-0"	4'-6"	4'-0"	1'-6"	2'-0"	2'-6"	2'-0"	4'-6"
2'-6"	11'-6"	1'-0"	1'-0"	5'-6"	5'-0"	4'-0"	1'-6"	2'-0"	3'-0"	2'-0"	5'-0"
3'-0"	13'-0"	1'-0"	1'-0"	6'-0"	5'-6"	4'-0"	1'-6"	2'-0"	3'-6"	2'-0"	5'-6"
3'-6"	14'-6"	1'-0"	1'-0"	6'-6"	6'-0"	4'-0"	1'-6"	2'-0"	4'-0"	2'-0"	6'-0"
4'-0"	16'-0"	1'-0"	1'-0"	7'-0"	6'-6"	4'-6"	2'-0"	2'-6"	4'-0"	2'-0"	6'-6"
4'-6"	18'-0"	1'-0"	1'-0"	7'-6"	7'-0"	4'-6"	2'-0"	2'-6"	4'-6"	2'-0"	7'-0"
5'-0"	19'-6"	1'-0"	1'-0"	8'-0"	8'-0"	5'-0"	2'-6"	3'-0"	5'-0"	2'-0"	7'-6"
5'-6"	21'-0"	1'-0"	1'-0"	8'-6"	8'-6"	5'-6"	2'-6"	3'-0"	5'-6"	2'-6"	8'-0"
6'-0"	23'-0"	1'-0"	1'-0"	9'-0"	9'-6"	6'-0"	3'-0"	3'-6"	6'-0"	2'-6"	8'-6"
6'-6"	24'-6"	1'-3"	1'-3"	9'-9"	10'-0"	6'-0"	3'-0"	3'-9"	6'-6"	2'-6"	9'-3"
7'-0"	26'-0"	1'-3"	1'-3"	10'-3"	10'-0"	6'-6"	3'-0"	3'-9"	6'-6"	3'-0"	9'-9"
7'-6"	28'-0"	1'-6"	1'-6"	11'-6"	10'-6"	6'-6"	3'-0"	4'-0"	7'-0"	3'-0"	10'-6"
8'-0"	29'-6"	1'-6"	1'-6"	11'-6"	11'-0"	7'-0"	3'-0"	4'-0"	7'-6"	3'-6"	11'-0"
8'-6"	31'-0"	2'-0"	2'-0"	12'-6"	11'-6"	7'-0"	3'-0"	4'-6"	8'-0"	3'-6"	12'-0"
9'-0"	33'-0"	2'-0"	2'-0"	13'-0"	11'-6"	7'-6"	3'-0"	4'-6"	8'-0"	4'-0"	12'-6"

CORRUGATED METAL PIPE ARCH												* SEE NOTE 8
SPAN	RISE	W	t _w	t _f	H	A1 *	A2 *	B	C	D1 *	D2 *	E
1'-5"	1'-1"	6'-6"	1'-0"	1'-0"	4'-1"	4'-0"	4'-0"	1'-6"	2'-0"	2'-0"	2'-0"	3'-7"
1'-9"	1'-3"	7'-0"	1'-0"	1'-0"	4'-3"	4'-0"	4'-0"	1'-6"	2'-0"	2'-0"	2'-0"	3'-9"
2'-0"	1'-6"	8'-0"	1'-0"	1'-0"	4'-6"	4'-0"	4'-0"	1'-6"	2'-0"	2'-0"	2'-0"	4'-0"
2'-4"	1'-8"	8'-6"	1'-0"	1'-0"	4'-8"	4'-0"	4'-0"	1'-6"	2'-0"	2'-0"	2'-0"	4'-2"
2'-11"	2'-0"	9'-6"	1'-0"	1'-0"	5'-0"	4'-6"	4'-0"	1'-6"	2'-0"	2'-6"	2'-0"	4'-6"
3'-6"	2'-5"	11'-0"	1'-0"	1'-0"	5'-5"	5'-0"	4'-0"	1'-6"	2'-0"	3'-0"	2'-0"	4'-11"
4'-1"	2'-9"	12'-0"	1'-0"	1'-0"	5'-9"	5'-6"	4'-0"	1'-6"	2'-0"	3'-6"	2'-0"	5'-3"
4'-9"	3'-2"	13'-6"	1'-0"	1'-0"	6'-2"	5'-6"	4'-0"	1'-6"	2'-0"	3'-6"	2'-0"	5'-8"
5'-4"	3'-7"	15'-0"	1'-0"	1'-0"	6'-7"	6'-0"	4'-0"	1'-6"	2'-0"	4'-0"	2'-0"	6'-1"
5'-11"	3'-11"	16'-0"	1'-0"	1'-0"	6'-11"	6'-6"	4'-6"	2'-0"	2'-6"	4'-0"	2'-0"	6'-5"
6'-5"	4'-4"	17'-0"	1'-0"	1'-0"	7'-4"	7'-0"	4'-6"	2'-0"	2'-6"	4'-6"	2'-0"	6'-10"
7'-1"	4'-9"	19'-0"	1'-0"	1'-0"	7'-9"	8'-0"	4'-6"	2'-0"	2'-6"	5'-6"	2'-0"	7'-3"

GENERAL NOTES:

- For use on 2:1 or flatter backfill slopes only.
- Use Class A concrete.
- Use epoxy-coated ASTM A706, Grade 60 reinforcing steel $f_y=60,000$ psi.
- Place reinforcement 3" clear from surface of concrete unless otherwise noted.
- Chamfer all exposed concrete corners 3/4".
- If unsuitable foundation material is encountered, remove and backfill with Foundation Fill as directed by the Engineer.
- Headwalls for skewed culverts to be parallel to road centerline. See plans for dimensions of openings in headwalls for skewed culverts.
- For backfill soil with:
 $\phi=30^\circ, \gamma=130$ pcf
 Use A1 and D1
 $\phi=34^\circ, \gamma=135$ pcf
 Use A2 and D2
- See plans for railing requirements at top of wall.

State of Alaska DOT&PF
ALASKA STANDARD PLAN
**HEADWALLS
CAST-IN-PLACE
TYPE II**

Adopted as an Alaska Standard Plan by: *Kenneth J. Fisher*
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