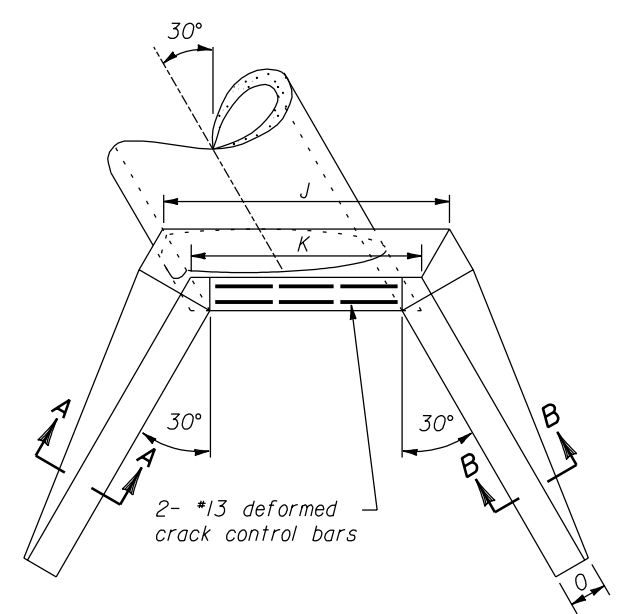


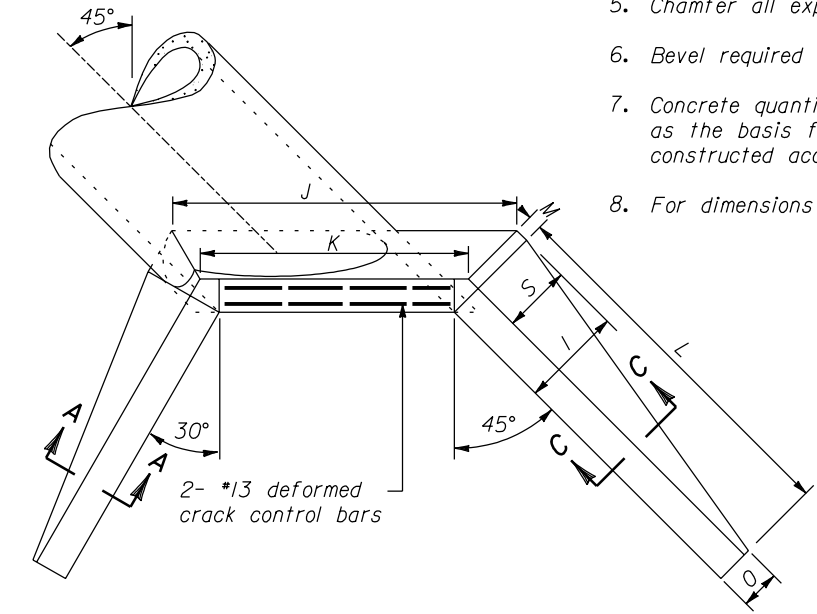
DIMENSIONS AND QUANTITIES PER WINGWALL										
D (Diameter of pipe culvert)										
For 1:1.5 fill slope 30° skew		1050	1200	1350	1500	1650	1800	1950	2100	
	D	1230	1405	1585	1760	1935	2110	2290	2465	
	J	1905	2125	2380	2625	2875	3125	3375	3620	
	K	1525	1700	1910	2110	2320	2525	2725	2935	
	O	290	290	320	345	370	395	420	445	
Conc. m ³	Conc.	2.776	3.409	4.392	5.522	6.831	8.322	9.997	11.892	
	CMP	2.982	3.681	4.762	6.010	7.461	9.120	10.989	13.098	
For 1:1.5 fill slope 45° skew	C	1755	1980	2210	2440	2665	2895	3125	3355	
	D	1510	1725	1940	2155	2370	2590	2800	3015	
	I	720	770	855	935	1015	1090	1170	1250	
	J	2280	2555	2860	3160	3460	3760	4060	4365	
	K	1760	1975	2215	2455	2700	2940	3180	3420	
	L	2480	2800	3125	3450	3770	4095	4420	4740	
	M	105	105	115	125	135	145	160	170	
	O	310	310	335	360	385	410	435	460	
	S	465	520	575	630	685	735	790	845	
	Conc. m ³	Conc.	3.235	3.969	5.132	6.458	7.983	9.721	11.679	13.877
CMP		3.473	4.285	5.561	7.026	8.716	10.648	12.832	15.289	
For 1:2 fill slope 30° skew	D	1230	1405	1585	1760	1935	2110	2290	2465	
	J	1900	2120	2370	2620	2870	3115	3370	3615	
	K	1525	1700	1910	2110	2320	2525	2725	2935	
	O	290	290	320	345	370	395	420	445	
	Conc. m ³	Conc.	3.295	4.064	5.251	6.628	8.224	10.045	12.098	14.422
CMP		3.499	4.334	5.619	7.113	8.851	10.838	13.085	15.631	
For 1:2 fill slope 45° skew	C	2285	2590	2895	3200	3505	3810	4115	4420	
	D	1510	1725	1940	2155	2370	2590	2800	3015	
	I	710	765	845	925	1005	1085	1160	1240	
	J	2270	2545	2850	3150	3450	3750	4050	4350	
	K	1760	1975	2215	2455	2700	2940	3180	3420	
	L	3230	3665	4095	4530	4955	5390	5820	6250	
	M	105	105	115	125	135	145	160	170	
	O	310	310	335	360	385	410	435	460	
	S	455	510	565	620	675	725	780	835	
	Conc. m ³	Conc.	3.856	4.782	6.171	7.871	9.662	11.796	14.209	16.929
CMP		4.091	5.095	6.597	8.435	10.390	12.718	15.357	18.335	
a	140	150	180	190	215	230	255	265		
b	90	100	115	125	140	150	165	180		

NOTE:

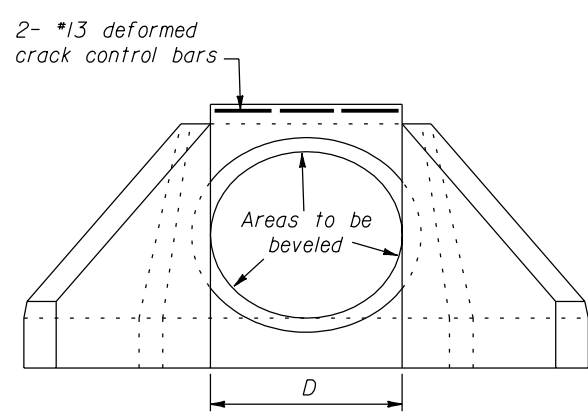
- Dimensions not labeled are in millimeters.
- Use the 30° Skew Detail for skews 15° to 37° 30', use the 45° Skew Detail for skews 37° 30' to 45°.
- On shallow fill, where headwall is 600 mm or less below shoulder line construct the headwall parallel to line and grade of the shoulder.
- Do not allow top of wingwall to project above fill slope, ditch slope, or shoulder.
- Chamfer all exposed corners 20 mm.
- Bevel required at inlet only.
- Concrete quantities as shown will be used as the basis for final payment for wingwalls constructed according to this Standard.
- For dimensions not shown See Standard M601-5.



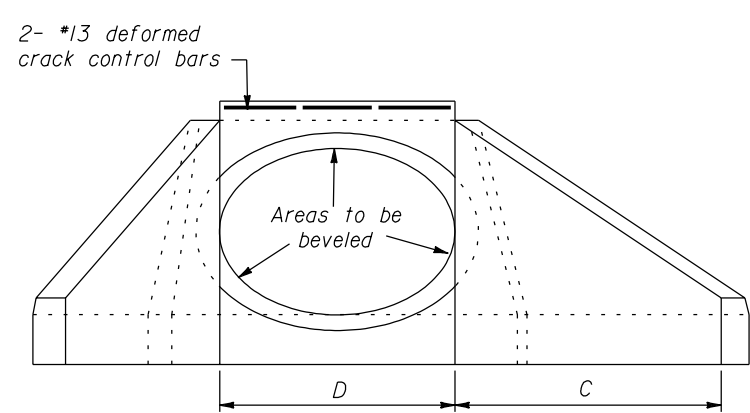
PLAN



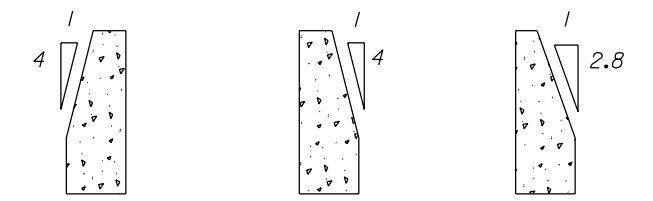
PLAN



ELEVATION



ELEVATION



SECTION A-A SECTION B-B SECTION C-C

NO SCALE

U.S. DEPARTMENT OF TRANSPORTATION
 FEDERAL HIGHWAY ADMINISTRATION
 FEDERAL LANDS HIGHWAY

METRIC STANDARD

**CONCRETE WINGWALLS
 FOR SINGLE SKEW
 1050 TO 2100 mm CULVERTS**

STANDARD APPROVED FOR USE 3/1996
 REVISED: 5/1997

STANDARD
M601-6