SAFETY METAL END SECTIONS FOR CIRCULAR PIPES							
Pipe Dia.	Min. Thick.	Dimensions				L Dimensions	
		A	H	W	Overall Width	4:1 Slope	6:1 Slope
375	1.63	200	150	525	925	500	750
450	1.63	200	150	600	1000	800	1200
525	1.63	200	150	675	1075	1100	1650
600	1.63	200	150	750	1150	1400	2100
675	2.77	300	225	825	1425	1700	2550
750	2.77	300	225	900	1500	2000	3000
825	2.77	300	225	975	1575	2300	3450
900	2.77	300	225	1050	1650	2600	3900
1050	2.77	400	300	1200	2000	3200	4800
1200	2.77	400	300	1350	2150	3800	5700
1350	2.77	400	300	1500	2300	4400	6600
1500	2.77	400	300	1650	2450	5000	7500

SAFETY METAL END SECTIONS FOR HORIZONTAL ELLIPTICAL PIPE									
Equiv. Dia.	Span	Rise	Min. Thick.	Dimensions				L Dimension	
				A	H	W	Overall Width	4:1 Slope	6:1 Slope
450	575	365	1.63	200	150	725	1125	400	600
600	770	490	1.63	200	150	900	1300	900	1350
675	865	550	2.01	300	225	1000	1600	1200	1800
750	960	610	2.01	300	225	1100	1700	1400	2100
825	1055	670	2.77	300	225	1200	1800	1700	2550
900	1150	730	2.77	400	300	1275	2075	1900	2850
975	1250	795	2.77	400	300	1400	2200	2180	3270
1050	1345	855	2.77	400	300	1475	2275	2400	3600
1200	1535	975	2.77	400	300	1650	2450	2800	4200
1350	1730	1095	2.77	400	300	1875	2675	3300	4950
1500	1920	1220	2.77	400	300	2025	2825	3800	5700

All dimensions are in mm unless otherwise specified.

INDIANA DEPARTMENT OF TRANSPORTATION

SAFETY METAL CULVERT END SECTIONS FOR SMOOTH PIPE

JANUARY 1998

STANDARD DRAWING NO. **715-SMES-12**

ANTHONY L. UREMOVICH REGISTERED No. 18095 STATE OF INDIANA PROFESSIONAL ENGINEER

DESIGN STANDARDS ENGINEER

/s/ Anthony L. Uremovich 1-02-98
DESIGN STANDARDS ENGINEER DATE

/s/ Donald W. Lucas 1-02-98
CHIEF HIGHWAY ENGINEER DATE

Source Sheet: SMES4