2:1 SLOPE										
Pipe Size	H	L	W	Longitudinal Pipe			Cross Tube			
				S	No.	Length	No.	Length	S 1	S 2
430 x 330	530	1070	610	1200	1	1550	–	–	1400	–
530 x 380	580	1170	610	1310	1	1660	–	–	1510	–
610 x 460	660	1320	920	1480	2	1830	–	–	1680	–
710 x 510	710	1420	920	1590	2	1950	–	–	1790	–
885 x 610	810	1630	1220	1820	3	2180	–	–	2020	–
1060 x 740	940	1880	1220	2100	3	2460	–	–	2310	–
1240 x 840	1040	2080	1520	2340	3	2690	–	–	2530	–
1440 x 970	1170	2340	1520	2610	3	2970	–	–	2820	–
1620 x 1100	1300	2590	1830	2900	4	3250	–	–	3100	–
1800 x 1200	1400	2790	1830	3130	4	3480	–	–	3330	–

3:1 SLOPE										
Pipe Size	H	L	W	Longitudinal Pipe			Cross Tube			
				S	No.	Length	No.	Length	S 1	S 2
430 x 330	530	1600	610	1690	1	2120	1	800	1530	460
530 x 380	580	1750	610	1850	1	2290	1	800	1540	610
610 x 460	660	1980	920	2090	2	2530	–	–	2400	–
710 x 510	710	2130	920	2250	2	2690	–	–	2550	–
885 x 610	810	2440	1220	2580	3	3000	–	–	2880	–
1060 x 740	940	2820	1220	2970	3	3400	–	–	3280	–
1240 x 840	1040	3120	1520	3300	3	3730	–	–	3600	–
1440 x 970	1170	3510	1520	3700	3	4130	1	1720	3090	920
1620 x 1100	1300	3010	1830	4100	4	4530	1	2020	3490	920
1800 x 1200	1400	4190	1830	4420	4	4850	1	2020	3810	920

4:1 SLOPE										
Pipe Size	H	L	W	Longitudinal Pipe			Cross Tube			
				S	No.	Length	No.	Length	S 1	S 2
430 x 330	530	2130	610	2210	1	2730	1	800	1770	840
530 x 380	580	2340	610	2410	1	2930	1	800	1750	1070
610 x 460	660	2640	920	2730	2	3250	1	1110	2530	610
710 x 510	710	2850	920	2930	2	3450	1	1110	2730	610
885 x 610	810	3250	1220	3350	3	3870	–	–	3760	–
1060 x 740	940	3760	1220	3870	3	4400	1	1410	3370	920
1240 x 840	1040	4170	1520	4290	3	4820	1	1720	3790	920
1440 x 970	1170	4670	1520	4820	3	5340	1	1720	3860	1370
1620 x 1100	1300	5180	1830	5340	4	5860	1	2020	3770	1980
1800 x 1200	1400	5590	1830	5760	4	6290	1	2020	3880	2290

Source Sheet: GBES 2

All dimensions are in mm unless otherwise specified.

INDIANA DEPARTMENT OF TRANSPORTATION

GRATED BOX END SECTION TYPE I DIMENSIONS

JANUARY 1999

STANDARD DRAWING NO. 715-GBTO-06

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

DESIGN STANDARDS ENGINEER

/s/ Anthony L. Uremovich 1-04-99
DESIGN STANDARDS ENGINEER DATE

/s/ Donald W. Lucas 1-04-99
CHIEF HIGHWAY ENGINEER DATE