4:1 SLOPE							
PIPE SIZE	H	L	W	S	GRATE C		GRATE B
					No.	LENGTH	LENGTH
430 x 330	460	1830	610	1850	1	1120	310
530 x 380	510	2030	610	2060	1	1220	410
610 x 460	580	2340	920	2370	2	810	310
710 x 510	640	2540	920	2570	2	920	310
885 x 610	740	2940	1220	2970	3	710	410
1060 x 740	860	3450	1220	3480	5	610	–
1240 x 840	970	3860	1520	3890	5	610	410
1440 x 970	1100	4370	1520	4400	6	610	310
1620 x 1100	1220	4880	1830	5010	9	510	–
1800 x 1200	1320	5280	1830	5410	9	510	410

10:1 SLOPE							
PIPE SIZE	H	L	W	S	GRATE C		GRATE B
					No.	LENGTH	LENGTH
430 x 330	460	4570	610	4500	2	1220	1020
530 x 380	510	5080	610	5010	3	1220	310
610 x 460	580	5840	920	5820	5	810	710
710 x 510	640	6350	920	6330	5	920	710
885 x 610	740	7370	1220	7340	8	710	610
1060 x 740	860	8640	1220	8560	10	710	410
1240 x 840	970	9650	1520	9680	17	510	–
1440 x 970	1100	10920	1520	10900	23	410	510
1620 x 1100	1220	12190	1830	12220	22	510	–
1800 x 1200	1320	13210	1830	13240	24	510	–

6:1 SLOPE							
PIPE SIZE	H	L	W	S	GRATE C		GRATE B
					No.	LENGTH	LENGTH
430 x 330	460	2740	610	2670	1	1220	810
530 x 380	510	3050	610	2970	1	1220	1120
610 x 460	580	3500	920	3480	3	810	410
710 x 510	640	3810	920	3790	3	920	410
885 x 610	740	4420	1220	4400	5	610	710
1060 x 740	860	5180	1220	5210	7	610	310
1240 x 840	970	5790	1520	5820	8	610	310
1440 x 970	1100	6550	1520	6530	9	610	410
1620 x 1100	1220	7320	1830	7340	12	510	610
1800 x 1200	1320	7930	1830	7950	18	410	–

APPROXIMATE QUANTITIES									
PIPE Size	4:1 SLOPE			6:1 SLOPE			10:1 SLOPE		
	Str. Steel, kg	Conc., m^3	Reinf. Steel, kg	Str. Steel, kg	Conc., m^3	Reinf. Steel, kg	Str. Steel, kg	Conc., m^3	Reinf. Steel, kg
430 x 330	160	.91	140	225	1.2	188	370	1.9	290
530 x 380	180	1.0	150	240	1.4	210	410	2.1	320
610 x 460	270	1.4	200	400	1.9	280	660	3.0	420
710 x 510	290	1.5	210	430	2.1	290	700	3.2	460
885 x 610	440	2.1	280	650	2.8	390	1080	4.4	600
1060 x 740	520	2.4	320	780	3.4	450	1250	5.3	710
1240 x 840	690	3.1	400	1030	4.3	560	1740	6.8	890
1440 x 970	780	3.4	450	1150	4.9	640	2000	7.8	1020
1620 x 1100	1040	4.4	550	1520	6.2	600	2520	9.9	1250
1800 x 1200	1120	4.7	590	1690	6.8	780	2720	10.9	1370

All dimensions are in mm unless otherwise specified.

INDIANA DEPARTMENT OF TRANSPORTATION

GRATED BOX END SECTION TYPE II
DIMENSIONS AND QUANTITIES

JANUARY 1999

STANDARD DRAWING NO. **715-GBTT-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

Source Sheet: GBES 4