Appendix 5.5.2 Capacity Evaluation of Existing Sewer System

Sewer No.	Sewer No. of Downstream	Area		Length		Sewage Flow Rate				Design Sewer										Sewage Flow Rate/ Sewer Capacity	Remark
							Population									Invert Level		Covering			
		Each	Total	Each	Total	Population Density	Each	Total	Sewage Flow	Material	Diameter	Gradient	Velocity	Flow Capacity	Ground Level	Upstream	Downstream	Upstream	Downstream		
		ha	ha	m	m	Per./ha	Person	Person	cu.m/sec	-	mm	‰	m/sec	cu.m/sec	M	M	M	m	m		
1001	1002	7.26	7.26	580	580	561.06	4,073	4,073	0.0075	VP	200	2.00	0.607	0.0191	7.75	6.741	5.577	0.80	1.78	39	
1002	1004	1.43	8.69	280	860	561.06	802	4,876	0.0090	VP	300	1.20	0.616	0.0435	7.56	5.481	5.145	1.77	1.99	21	
1003	1004	17.64	17.64	800	800	561.06	9,897	9,897	0.0183	VP	200	2.00	0.607	0.0191	6.69	5.681	4.081	0.80	3.15	96	
1004	1005	0.00	26.33	230	1,090	561.06	0	14,773	0.0274	VP	300	1.20	0.616	0.0435	7.44	3.985	3.710	3.15	2.76	63	
1005	1021	49.79	76.12	340	1,430	561.06	27,935	42,708	0.0791	VP	300	1.20	0.616	0.0435	6.78	3.710	3.304	2.76	3.55	182	
1007	1008	7.02	7.02	550	550	561.06	3,939	3,939	0.0073	VP	200	2.00	0.607	0.0191	7.59	6.581	5.481	0.80	2.02	38	
1008	1010	4.84	11.86	415	965	561.06	2,716	6,654	0.0123	VP	300	1.20	0.616	0.0435	7.71	5.385	4.890	2.02	2.47	28	
1009	1010	8.82	8.82	630	630	561.06	4,949	4,949	0.0092	VP	200	2.00	0.607	0.0191	7.53	6.521	5.261	0.80	2.20	48	
1010	1021	0.46	21.14	95	1,060	561.06	258	11,861	0.0220	VP	300	1.20	0.616	0.0435	7.67	4.890	4.776	2.47	2.07	51	
1011	1013	2.21	2.21	100	100	561.06	1,240	1,240	0.0023	VP	200	2.00	0.607	0.0191	6.12	5.111	4.911	0.80	1.00	12	
1012	1013	0.38	0.38	25	25	561.06	213	213	0.0004	VP	300	1.20	0.616	0.0435	6.12	4.812	4.782	1.00	1.03	1	
1013	1015	3.09	5.68	230	330	561.06	1,734	3,187	0.0059	VP	300	1.20	0.616	0.0435	6.12	4.782	4.507	1.03	2.08	14	
1014	1015	6.76	6.76	420	420	561.06	3,793	3,793	0.0070	VP	200	2.00	0.607	0.0191	6.82	5.811	4.974	0.80	1.72	37	
1015	1020	2.43	14.87	230	650	561.06	1,363	8,343	0.0155	VP	300	1.20	0.616	0.0435	6.90	4.507	4.232	2.08	3.10	36	
1016	1017	2.01	2.01	215	215	561.06	1,128	1,128	0.0021	VP	200	2.00	0.607	0.0191	6.82	5.811	5.381	0.80	1.46	11	
1017	1019	1.97	3.98	260	475	561.06	1,105	2,233	0.0041	VP	300	1.20	0.616	0.0435	7.05	5.285	4.973	1.46	2.43	9	
1018	1019	3.91	3.91	440	440	561.06	2,194	2,194	0.0041	VP	200	2.00	0.607	0.0191	7.20	6.191	5.309	0.80	2.19	21	
1019	1020	0.27	8.16	75	550	561.06	151	4,578	0.0085	VP	300	1.20	0.616	0.0435	7.71	4.973	4.883	2.43	2.45	20	
1020	1021	8.94	31.97	340	990	561.06	5,016	17,937	0.0332	VP	300	1.20	0.616	0.0435	7.64	4.232	3.826	3.10	3.02	76	
1021	1024	17.42	146.65	835	2,265	561.06	9,774	82,279	0.1524	VP	450	0.70	0.617	0.0981	7.16	3.160	2.572	3.54	3.98	155	
1022	1023	48.07	48.07	1,040	1,040	561.06	26,970	26,970	0.0499	VP	200	2.00	0.607	0.0191	5.76	4.751	2.671	0.80	3.34	261	
1023	1024	47.13	95.20	600	1,640	561.06	26,443	53,413	0.0989	VP	250	1.50	0.610	0.0299	6.22	2.623	1.723	3.34	5.04	331	
1024	1025	59.65	301.50	710	2,975	561.06	33,467	169,160	0.3133	VP	450	0.70	0.617	0.0981	7.02	1.531	1.031	5.03	5.51	319	
1025	1035	60.79	362.29	870	3,845	561.06	34,107	203,266	0.3764	VP	450	0.70	0.617	0.0981	7.00	1.031	0.419	5.51	5.75	384	
1026	1028	7.93	7.93	285	285	561.06	4,449	4,449	0.0082	VP	300	1.20	0.616	0.0435	7.00	5.692	5.350	1.00	1.24	19	
1027	1028	7.12	7.12	170	170	561.06	3,995	3,995	0.0074	VP	200	2.00	0.607	0.0191	7.00	5.991	5.651	0.80	1.04	39	
1028	1030	1.14	16.19	115	400	561.06	640	9,084	0.0168	VP	300	1.20	0.616	0.0435	6.90	5.350	5.212	1.24	1.38	39	
1030	1034	8.10	24.29	620	1,020	561.06	4,545	13,628	0.0252	VP	450	0.70	0.617	0.0981	6.90	5.068	4.636	1.37	1.88	26	

Appendix 5.5.2 Capacity Evaluation of Existing Sewer System

Sewer No.	Sewer No. of Downstream	Area		Length		Sewage Flow Rate				Design Sewer									Sewage Flow Rate/ Sewer Capacity	Remark
							Population									Invert Level		Covering		
		Each	Total	Each	Total	Population Density	Each	Total	Sewage Flow	Material	Diameter	Gradient	Velocity	Flow Capacity	Ground Level	Upstream	Downstream	Upstream	Downstream	
		ha	ha	m	m	Per./ha	Person	Person	cu.m/sec	-	mm	‰	m/sec	cu.m/sec	M	M	M	m	m	
1031	1033	72.50	72.50	385	385	561.06	40,677	40,677	0.0753	VP	300	1.20	0.616	0.0435	6.88	5.572	5.108	1.00	1.61	173	
1032	1033	21.46	21.46	310	310	561.06	12,040	12,040	0.0223	VP	200	2.00	0.607	0.0191	6.84	5.831	5.209	0.80	1.61	117	
1033	1034	6.66	100.62	500	885	561.06	3,737	56,454	0.1045	VP	300	1.20	0.616	0.0435	7.03	5.108	4.508	1.61	2.16	240	
1034	1035	128.88	253.79	1,140	2,160	561.06	72,309	142,391	0.2637	VP	450	0.70	0.617	0.0981	6.98	4.364	3.565	2.15	2.60	269	
1035	1036	37.92	654.00	985	4,830	561.06	21,275	366,933	0.6795	VP	450	0.70	0.617	0.0981	6.63	0.419	-0.267	5.75	5.19	693	
1036	PUMP	0.00	654.00	1,430	6,260	561.06	0	366,933	0.6795	HP	600	0.80	0.614	0.1737	5.39	-0.425	-1.565	5.16	7.80	391	Tejgaon LS

Table 5.5.3.1 Population Density of Each Sewer for Sewage Flow Calculation

Sewer No.	Sewer No. of Downstream	Core Area			Transitional Area		Total			Length
		Area (ha)		Population	Area	Population	Area	Population	Density	
		Mesurement	Ajustment	(person)	(ha)	(person)	(ha)	(person)	(person/ha)	(m)
300	301	-	-	-	-	-	1462.00	263,147	179.99	0.1
301	302	2.70	2.17	1,218	62.18	14,241	64.35	15,459	240.23	400
302	303	1.48	1.19	668	31.87	7,299	33.06	7,967	240.98	205
303	304	0.20	0.16	90	12.44	2,849	12.60	2,939	233.25	80
304	305	6.10	4.90	2,749	63.74	14,598	68.64	17,348	252.73	410
305	306	1.78	1.43	802	34.20	7,833	35.63	8,635	242.36	220
306	307	4.13	3.32	1,863	105.71	24,211	109.03	26,073	239.14	680
307	308	1.68	1.35	757	44.31	10,148	45.66	10,906	238.85	285
308	309	1.38	1.11	623	34.98	8,011	36.09	8,634	239.24	225
309	310	1.78	1.43	802	44.31	10,148	45.74	10,951	239.41	285
310	311	1.98	1.59	892	48.19	11,037	49.78	11,929	239.64	310
311	312	0.50	0.40	224	23.32	5,341	23.72	5,565	234.63	150
312	313	0.54	0.43	241	20.21	4,629	20.64	4,870	235.95	130
313	314	0.63	0.51	286	31.09	7,121	31.60	7,407	234.39	200
314	315	1.00	0.80	449	35.76	8,190	36.56	8,639	236.30	230
315	316	0.25	0.20	112	13.99	3,204	14.19	3,316	233.71	90
316	317	0.20	0.16	90	9.33	2,137	9.49	2,227	234.63	60
317	318	0.20	0.16	90	10.88	2,492	11.04	2,582	233.84	70
318	319	1.45	1.16	651	45.08	10,325	46.24	10,975	237.36	290
319	320	1.75	1.40	785	52.86	12,107	54.26	12,892	237.60	340
320	321	0.77	0.62	348	43.53	9,970	44.15	10,318	233.69	280
321	322	1.49	1.20	673	45.08	10,325	46.28	10,998	237.64	290
322	323	0.15	0.12	67	9.33	2,137	9.45	2,204	233.25	60
323	324	2.13	1.71	959	59.08	13,531	60.79	14,490	238.37	380
324	325	1.95	1.57	881	43.53	9,970	45.10	10,851	240.59	280
325	Pump	0.00	0.00	0	0.00	0	0.00	0	0.00	30
2001	2003	6.55	5.26	2,951	0.00	0	5.26	2,951	561.06	300
2002	2003	3.68	2.95	1,655	0.00	0	2.95	1,655	561.06	195
2003	302	1.93	1.55	870	0.00	0	1.55	870	561.06	160
2004	2005	0.50	0.40	224	0.00	0	0.40	224	561.06	100
2005	303	5.65	4.54	2,547	0.00	0	4.54	2,547	561.06	450
2006	2007	2.33	1.87	1,049	0.00	0	1.87	1,049	561.06	100
2007	2009	5.50	4.41	2,474	0.00	0	4.41	2,474	561.06	400
2008	2009	0.83	0.67	376	0.00	0	0.67	376	561.06	75
2009	304	0.53	0.43	241	0.00	0	0.43	241	561.06	80

Table 5.5.3.1 Population Density of Each Sewer for Sewage Flow Calculation

Sewer No.	Sewer No. of Downstream	Core Area			Transitional Area		Total			Length
		Area (ha)		Population	Area	Population	Area	Population	Density	
		Mesurement	Ajustment	(person)	(ha)	(person)	(ha)	(person)	(person/ha)	(m)
2010	2011	0.40	0.32	180	0.00	0	0.32	180	561.06	100
2011	305	5.35	4.29	2,407	0.00	0	4.29	2,407	561.06	570
2012	2013	2.43	1.95	1,094	0.00	0	1.95	1,094	561.06	260
2013	2015	1.45	1.16	651	0.00	0	1.16	651	561.06	180
2014	2015	0.43	0.35	196	0.00	0	0.35	196	561.06	70
2015	2021	0.73	0.59	331	0.00	0	0.59	331	561.06	80
2016	2017	1.95	1.57	881	0.00	0	1.57	881	561.06	345
2017	2019	0.73	0.59	331	0.00	0	0.59	331	561.06	110
2018	2019	0.93	0.75	421	0.00	0	0.75	421	561.06	110
2019	2020	1.45	1.16	651	0.00	0	1.16	651	561.06	105
2020	2021	2.13	1.71	959	0.00	0	1.71	959	561.06	225
2021	2028	2.35	1.89	1,060	0.00	0	1.89	1,060	561.06	190
2022	2023	1.50	1.20	673	0.00	0	1.20	673	561.06	140
2023	2028	1.45	1.16	651	0.00	0	1.16	651	561.06	190
2024	2026	0.80	0.64	359	0.00	0	0.64	359	561.06	155
2025	2026	1.60	1.28	718	0.00	0	1.28	718	561.06	325
2026	2027	3.70	2.97	1,666	0.00	0	2.97	1,666	561.06	440
2027	2028	0.65	0.52	292	0.00	0	0.52	292	561.06	100
2028	306	0.98	0.79	443	0.00	0	0.79	443	561.06	145
3001	3003	0.27	0.22	123	0.00	0	0.22	123	561.06	70
3002	3003	1.41	1.13	634	0.00	0	1.13	634	561.06	190
3003	3005	0.25	0.20	112	0.00	0	0.20	112	561.06	50
3004	3005	1.12	0.90	505	0.00	0	0.90	505	561.06	170
3005	3007	0.50	0.40	224	0.00	0	0.40	224	561.06	55
3006	3007	1.15	0.92	516	0.00	0	0.92	516	561.06	160
3007	3011	0.55	0.44	247	0.00	0	0.44	247	561.06	55
3008	3010	0.69	0.55	309	0.00	0	0.55	309	561.06	100
3009	3010	0.20	0.16	90	0.00	0	0.16	90	561.06	50
3010	3011	1.54	1.24	696	0.00	0	1.24	696	561.06	265
3011	3014	0.65	0.52	292	0.00	0	0.52	292	561.06	65
3012	3013	0.20	0.16	90	0.00	0	0.16	90	561.06	50
3013	3014	1.34	1.08	606	0.00	0	1.08	606	561.06	240
3014	3017	0.65	0.52	292	0.00	0	0.52	292	561.06	75
3015	3016	0.25	0.20	112	0.00	0	0.20	112	561.06	55
3016	3017	1.34	1.08	606	0.00	0	1.08	606	561.06	205

Table 5.5.3.1 Population Density of Each Sewer for Sewage Flow Calculation

Sewer No.	Sewer No. of Downstream	Core Area			Transitional Area		Total			Length
		Area (ha)		Population	Area	Population	Area	Population	Density	
		Mesurement	Ajustment	(person)	(ha)	(person)	(ha)	(person)	(person/ha)	(m)
3017	3020	0.74	0.59	331	0.00	0	0.59	331	561.06	75
3018	3019	0.25	0.20	112	0.00	0	0.20	112	561.06	50
3019	3020	1.33	1.07	600	0.00	0	1.07	600	561.06	195
3020	3022	0.65	0.52	292	0.00	0	0.52	292	561.06	70
3021	3022	1.48	1.19	668	0.00	0	1.19	668	561.06	130
3022	3045	2.08	1.67	937	0.00	0	1.67	937	561.06	320
3023	3025	0.50	0.40	224	0.00	0	0.40	224	561.06	65
3024	3025	1.39	1.12	628	0.00	0	1.12	628	561.06	190
3025	3027	0.37	0.30	168	0.00	0	0.30	168	561.06	50
3026	3027	1.11	0.89	499	0.00	0	0.89	499	561.06	190
3027	3029	0.54	0.43	241	0.00	0	0.43	241	561.06	70
3028	3029	1.13	0.91	511	0.00	0	0.91	511	561.06	190
3029	3031	1.10	0.88	494	0.00	0	0.88	494	561.06	145
3030	3031	0.70	0.56	314	0.00	0	0.56	314	561.06	100
3031	3033	0.49	0.39	219	0.00	0	0.39	219	561.06	75
3032	3033	0.80	0.64	359	0.00	0	0.64	359	561.06	80
3033	3035	0.44	0.35	196	0.00	0	0.35	196	561.06	70
3034	3035	0.80	0.64	359	0.00	0	0.64	359	561.06	105
3035	3045	0.32	0.26	146	0.00	0	0.26	146	561.06	70
3036	3038	0.78	0.63	353	0.00	0	0.63	353	561.06	55
3037	3038	0.78	0.63	353	0.00	0	0.63	353	561.06	60
3038	3040	2.15	1.73	971	0.00	0	1.73	971	561.06	335
3039	3040	0.30	0.24	135	0.00	0	0.24	135	561.06	50
3040	3042	0.49	0.39	219	0.00	0	0.39	219	561.06	70
3041	3042	2.03	1.63	915	0.00	0	1.63	915	561.06	305
3042	3044	0.45	0.36	202	0.00	0	0.36	202	561.06	70
3043	3044	2.00	1.61	903	0.00	0	1.61	903	561.06	300
3044	3045	0.39	0.31	174	0.00	0	0.31	174	561.06	70
3045	307	0.39	0.31	174	0.00	0	0.31	174	561.06	90
3046	308	3.15	2.53	1,419	0.00	0	2.53	1,419	561.06	420
3047	3048	0.35	0.28	157	0.00	0	0.28	157	561.06	50
3048	3050	0.83	0.67	376	0.00	0	0.67	376	561.06	150
3049	3050	0.40	0.32	180	0.00	0	0.32	180	561.06	65
3050	3053	0.45	0.36	202	0.00	0	0.36	202	561.06	65
3051	3052	0.32	0.26	146	0.00	0	0.26	146	561.06	50

Table 5.5.3.1 Population Density of Each Sewer for Sewage Flow Calculation

Sewer No.	Sewer No. of Downstream	Core Area			Transitional Area		Total			Length
		Area (ha)		Population	Area	Population	Area	Population	Density	
		Mesurement	Ajustment	(person)	(ha)	(person)	(ha)	(person)	(person/ha)	(m)
3052	3053	0.78	0.63	353	0.00	0	0.63	353	561.06	150
3053	3054	0.32	0.26	146	0.00	0	0.26	146	561.06	75
3054	309	0.39	0.31	174	0.00	0	0.31	174	561.06	95
3055	3061	2.53	2.03	1,139	0.00	0	2.03	1,139	561.06	200
3056	3058	1.33	1.07	600	0.00	0	1.07	600	561.06	130
3057	3058	0.27	0.22	123	0.00	0	0.22	123	561.06	55
3058	3060	1.23	0.99	555	0.00	0	0.99	555	561.06	140
3059	3060	1.69	1.36	763	0.00	0	1.36	763	561.06	190
3060	3061	0.40	0.32	180	0.00	0	0.32	180	561.06	90
3061	3065	1.40	1.12	628	0.00	0	1.12	628	561.06	145
3062	3064	3.38	2.71	1,520	0.00	0	2.71	1,520	561.06	260
3063	3064	0.93	0.75	421	0.00	0	0.75	421	561.06	120
3064	3065	0.45	0.36	202	0.00	0	0.36	202	561.06	90
3065	3066	1.35	1.08	606	0.00	0	1.08	606	561.06	170
3066	3072	0.55	0.44	247	0.00	0	0.44	247	561.06	50
3067	3069	0.64	0.51	286	0.00	0	0.51	286	561.06	155
3068	3069	0.64	0.51	286	0.00	0	0.51	286	561.06	120
3069	3071	0.70	0.56	314	0.00	0	0.56	314	561.06	130
3070	3071	1.43	1.15	645	0.00	0	1.15	645	561.06	180
3071	3072	0.55	0.44	247	0.00	0	0.44	247	561.06	110
3072	3075	3.00	2.41	1,352	0.00	0	2.41	1,352	561.06	250
3073	3075	1.95	1.57	881	0.00	0	1.57	881	561.06	260
3074	3075	2.20	1.77	993	0.00	0	1.77	993	561.06	280
3075	310	0.40	0.32	180	0.00	0	0.32	180	561.06	95
4001	311	0.27	0.22	123	0.00	0	0.22	123	561.06	80
4002	4003	0.41	0.33	185	0.00	0	0.33	185	561.06	120
4003	4005	0.24	0.19	107	0.00	0	0.19	107	561.06	70
4004	4005	0.41	0.33	185	0.00	0	0.33	185	561.06	120
4005	4013	0.10	0.08	45	0.00	0	0.08	45	561.06	30
4006	4010	0.14	0.11	62	0.00	0	0.11	62	561.06	40
4007	4009	0.05	0.04	22	0.00	0	0.04	22	561.06	15
4008	4009	0.17	0.14	79	0.00	0	0.14	79	561.06	50
4009	4010	0.07	0.06	34	0.00	0	0.06	34	561.06	20
4010	4012	0.07	0.06	34	0.00	0	0.06	34	561.06	20
4011	4012	0.14	0.11	62	0.00	0	0.11	62	561.06	40

Table 5.5.3.1 Population Density of Each Sewer for Sewage Flow Calculation

Sewer No.	Sewer No. of Downstream	Core Area			Transitional Area		Total			Length
		Area (ha)		Population	Area	Population	Area	Population	Density	
		Mesurement	Ajustment	(person)	(ha)	(person)	(ha)	(person)	(person/ha)	(m)
4012	4013	0.15	0.12	67	0.00	0	0.12	67	561.06	45
4013	312	0.35	0.28	157	0.00	0	0.28	157	561.06	105
4014	4020	0.47	0.38	213	0.00	0	0.38	213	561.06	150
4015	4017	0.09	0.07	39	0.00	0	0.07	39	561.06	30
4016	4017	0.08	0.06	34	0.00	0	0.06	34	561.06	25
4017	4019	0.13	0.10	56	0.00	0	0.10	56	561.06	40
4018	4019	0.06	0.05	28	0.00	0	0.05	28	561.06	20
4019	4020	0.06	0.05	28	0.00	0	0.05	28	561.06	20
4020	4022	0.05	0.04	22	0.00	0	0.04	22	561.06	15
4021	4022	0.06	0.05	28	0.00	0	0.05	28	561.06	20
4022	4030	0.09	0.07	39	0.00	0	0.07	39	561.06	30
4023	4025	0.16	0.13	73	0.00	0	0.13	73	561.06	50
4024	4025	0.09	0.07	39	0.00	0	0.07	39	561.06	30
4025	4027	0.03	0.02	11	0.00	0	0.02	11	561.06	10
4026	4027	0.08	0.06	34	0.00	0	0.06	34	561.06	25
4027	4029	0.09	0.07	39	0.00	0	0.07	39	561.06	30
4028	4029	0.06	0.05	28	0.00	0	0.05	28	561.06	20
4029	4030	0.17	0.14	79	0.00	0	0.14	79	561.06	55
4030	4038	0.02	0.02	11	0.00	0	0.02	11	561.06	5
4031	4035	0.25	0.20	112	0.00	0	0.20	112	561.06	80
4032	4034	0.09	0.07	39	0.00	0	0.07	39	561.06	30
4033	4034	0.05	0.04	22	0.00	0	0.04	22	561.06	15
4034	4035	0.03	0.02	11	0.00	0	0.02	11	561.06	10
4035	4037	0.13	0.10	56	0.00	0	0.10	56	561.06	40
4036	4037	0.16	0.13	73	0.00	0	0.13	73	561.06	50
4037	4038	0.09	0.07	39	0.00	0	0.07	39	561.06	30
4038	4040	0.08	0.06	34	0.00	0	0.06	34	561.06	25
4039	4040	0.08	0.06	34	0.00	0	0.06	34	561.06	25
4040	4042	0.02	0.02	11	0.00	0	0.02	11	561.06	5
4041	4042	0.55	0.44	247	0.00	0	0.44	247	561.06	175
4042	4044	0.02	0.02	11	0.00	0	0.02	11	561.06	5
4043	4044	0.08	0.06	34	0.00	0	0.06	34	561.06	25
4044	313	0.08	0.06	34	0.00	0	0.06	34	561.06	30
4045	4054	0.59	0.47	264	0.00	0	0.47	264	561.06	120
4046	4048	0.07	0.06	34	0.00	0	0.06	34	561.06	15

Table 5.5.3.1 Population Density of Each Sewer for Sewage Flow Calculation

Sewer No.	Sewer No. of Downstream	Core Area			Transitional Area		Total			Length
		Area (ha)		Population	Area	Population	Area	Population	Density	
		Mesurement	Ajustment	(person)	(ha)	(person)	(ha)	(person)	(person/ha)	(m)
4047	4048	0.07	0.06	34	0.00	0	0.06	34	561.06	15
4048	4049	0.02	0.02	11	0.00	0	0.02	11	561.06	5
4049	4051	0.10	0.08	45	0.00	0	0.08	45	561.06	20
4050	4051	0.05	0.04	22	0.00	0	0.04	22	561.06	10
4051	4053	0.10	0.08	45	0.00	0	0.08	45	561.06	20
4052	4053	0.20	0.16	90	0.00	0	0.16	90	561.06	40
4053	4054	0.10	0.08	45	0.00	0	0.08	45	561.06	20
4054	4058	0.49	0.39	219	0.00	0	0.39	219	561.06	100
4055	4057	0.37	0.30	168	0.00	0	0.30	168	561.06	75
4056	4057	0.27	0.22	123	0.00	0	0.22	123	561.06	55
4057	4058	0.20	0.16	90	0.00	0	0.16	90	561.06	40
4058	4074	0.05	0.04	22	0.00	0	0.04	22	561.06	10
4059	4063	0.41	0.33	185	0.00	0	0.33	185	561.06	85
4060	4062	0.20	0.16	90	0.00	0	0.16	90	561.06	40
4061	4062	0.07	0.06	34	0.00	0	0.06	34	561.06	15
4062	4063	0.10	0.08	45	0.00	0	0.08	45	561.06	20
4063	4065	0.15	0.12	67	0.00	0	0.12	67	561.06	30
4064	4065	0.20	0.16	90	0.00	0	0.16	90	561.06	40
4065	4069	0.29	0.23	129	0.00	0	0.23	129	561.06	60
4066	4068	0.20	0.16	90	0.00	0	0.16	90	561.06	40
4067	4068	0.07	0.06	34	0.00	0	0.06	34	561.06	15
4068	4069	0.29	0.23	129	0.00	0	0.23	129	561.06	60
4069	4071	0.15	0.12	67	0.00	0	0.12	67	561.06	30
4070	4071	0.39	0.31	174	0.00	0	0.31	174	561.06	80
4071	4073	0.17	0.14	79	0.00	0	0.14	79	561.06	35
4072	4073	0.12	0.10	56	0.00	0	0.10	56	561.06	25
4073	4074	0.27	0.22	123	0.00	0	0.22	123	561.06	55
4074	314	0.19	0.15	84	0.00	0	0.15	84	561.06	45
4075	315	0.85	0.68	382	0.00	0	0.68	382	561.06	115
4076	4078	0.95	0.76	426	0.00	0	0.76	426	561.06	115
4077	4078	0.54	0.43	241	0.00	0	0.43	241	561.06	65
4078	4080	0.21	0.17	95	0.00	0	0.17	95	561.06	25
4079	4080	0.58	0.47	264	0.00	0	0.47	264	561.06	70
4080	4084	0.37	0.30	168	0.00	0	0.30	168	561.06	45
4081	4083	0.12	0.10	56	0.00	0	0.10	56	561.06	15

Table 5.5.3.1 Population Density of Each Sewer for Sewage Flow Calculation

Sewer No.	Sewer No. of Downstream	Core Area			Transitional Area		Total			Length
		Area (ha)		Population	Area	Population	Area	Population	Density	
		Mesurement	Ajustment	(person)	(ha)	(person)	(ha)	(person)	(person/ha)	(m)
4082	4083	0.21	0.17	95	0.00	0	0.17	95	561.06	25
4083	4084	0.75	0.60	337	0.00	0	0.60	337	561.06	90
4084	316	1.32	1.06	595	0.00	0	1.06	595	561.06	160
4085	317	0.65	0.52	292	0.00	0	0.52	292	561.06	110
4086	4088	0.56	0.45	252	0.00	0	0.45	252	561.06	90
4087	4088	0.37	0.30	168	0.00	0	0.30	168	561.06	60
4088	318	0.35	0.28	157	0.00	0	0.28	157	561.06	55
4089	4091	0.30	0.24	135	0.00	0	0.24	135	561.06	65
4090	4091	0.23	0.18	101	0.00	0	0.18	101	561.06	50
4091	4093	0.46	0.37	208	0.00	0	0.37	208	561.06	100
4092	4093	0.35	0.28	157	0.00	0	0.28	157	561.06	75
4093	4110	0.55	0.44	247	0.00	0	0.44	247	561.06	120
4094	4096	0.14	0.11	62	0.00	0	0.11	62	561.06	30
4095	4096	0.12	0.10	56	0.00	0	0.10	56	561.06	25
4096	4098	0.14	0.11	62	0.00	0	0.11	62	561.06	30
4097	4098	0.14	0.11	62	0.00	0	0.11	62	561.06	30
4098	4100	0.21	0.17	95	0.00	0	0.17	95	561.06	45
4099	4100	0.16	0.13	73	0.00	0	0.13	73	561.06	35
4100	4104	0.14	0.11	62	0.00	0	0.11	62	561.06	30
4101	4103	0.09	0.07	39	0.00	0	0.07	39	561.06	20
4102	4103	0.14	0.11	62	0.00	0	0.11	62	561.06	30
4103	4104	0.23	0.18	101	0.00	0	0.18	101	561.06	50
4104	4106	0.23	0.18	101	0.00	0	0.18	101	561.06	50
4105	4106	0.14	0.11	62	0.00	0	0.11	62	561.06	30
4106	4108	0.30	0.24	135	0.00	0	0.24	135	561.06	65
4107	4108	0.16	0.13	73	0.00	0	0.13	73	561.06	35
4108	4110	0.16	0.13	73	0.00	0	0.13	73	561.06	35
4109	4110	0.09	0.07	39	0.00	0	0.07	39	561.06	20
4110	4112	0.14	0.11	62	0.00	0	0.11	62	561.06	30
4111	4112	0.21	0.17	95	0.00	0	0.17	95	561.06	45
4112	4114	0.18	0.14	79	0.00	0	0.14	79	561.06	40
4113	4114	0.12	0.10	56	0.00	0	0.10	56	561.06	25
4114	4116	0.48	0.39	219	0.00	0	0.39	219	561.06	105
4115	4116	0.65	0.52	292	0.00	0	0.52	292	561.06	140
4116	4118	0.18	0.14	79	0.00	0	0.14	79	561.06	40

Table 5.5.3.1 Population Density of Each Sewer for Sewage Flow Calculation

Sewer No.	Sewer No. of Downstream	Core Area			Transitional Area		Total			Length
		Area (ha)		Population	Area	Population	Area	Population	Density	
		Mesurement	Ajustment	(person)	(ha)	(person)	(ha)	(person)	(person/ha)	(m)
4117	4118	0.21	0.17	95	0.00	0	0.17	95	561.06	45
4118	4157	0.09	0.07	39	0.00	0	0.07	39	561.06	20
4119	4121	0.09	0.07	39	0.00	0	0.07	39	561.06	20
4120	4121	0.28	0.22	123	0.00	0	0.22	123	561.06	60
4121	4123	0.16	0.13	73	0.00	0	0.13	73	561.06	35
4122	4123	0.23	0.18	101	0.00	0	0.18	101	561.06	50
4123	4128	0.16	0.13	73	0.00	0	0.13	73	561.06	35
4124	4128	0.21	0.17	95	0.00	0	0.17	95	561.06	45
4125	4127	0.25	0.20	112	0.00	0	0.20	112	561.06	55
4126	4127	0.18	0.14	79	0.00	0	0.14	79	561.06	40
4127	4128	0.23	0.18	101	0.00	0	0.18	101	561.06	50
4128	4132	0.55	0.44	247	0.00	0	0.44	247	561.06	120
4129	4131	0.55	0.44	247	0.00	0	0.44	247	561.06	120
4130	4131	0.14	0.11	62	0.00	0	0.11	62	561.06	30
4131	4132	0.30	0.24	135	0.00	0	0.24	135	561.06	65
4132	4138	0.05	0.04	22	0.00	0	0.04	22	561.06	10
4133	4135	0.09	0.07	39	0.00	0	0.07	39	561.06	20
4134	4135	0.23	0.18	101	0.00	0	0.18	101	561.06	50
4135	4137	0.05	0.04	22	0.00	0	0.04	22	561.06	10
4136	4137	0.07	0.06	34	0.00	0	0.06	34	561.06	15
4137	4138	0.76	0.61	342	0.00	0	0.61	342	561.06	165
4138	4140	0.23	0.18	101	0.00	0	0.18	101	561.06	50
4139	4140	0.28	0.22	123	0.00	0	0.22	123	561.06	60
4140	4146	0.18	0.14	79	0.00	0	0.14	79	561.06	40
4141	4143	0.39	0.31	174	0.00	0	0.31	174	561.06	85
4142	4143	0.16	0.13	73	0.00	0	0.13	73	561.06	35
4143	4145	0.37	0.30	168	0.00	0	0.30	168	561.06	80
4144	4145	0.42	0.34	191	0.00	0	0.34	191	561.06	90
4145	4146	0.42	0.34	191	0.00	0	0.34	191	561.06	90
4146	4148	0.37	0.30	168	0.00	0	0.30	168	561.06	80
4147	4148	0.74	0.59	331	0.00	0	0.59	331	561.06	160
4148	4156	0.53	0.43	241	0.00	0	0.43	241	561.06	115
4149	4151	0.14	0.11	62	0.00	0	0.11	62	561.06	30
4150	4151	0.16	0.13	73	0.00	0	0.13	73	561.06	35
4151	4153	0.18	0.14	79	0.00	0	0.14	79	561.06	40

Table 5.5.3.1 Population Density of Each Sewer for Sewage Flow Calculation

Sewer No.	Sewer No. of Downstream	Core Area			Transitional Area		Total			Length
		Area (ha)		Population	Area	Population	Area	Population	Density	
		Mesurement	Ajustment	(person)	(ha)	(person)	(ha)	(person)	(person/ha)	(m)
4152	4153	0.23	0.18	101	0.00	0	0.18	101	561.06	50
4153	4155	0.12	0.10	56	0.00	0	0.10	56	561.06	25
4154	4155	0.28	0.22	123	0.00	0	0.22	123	561.06	60
4155	4156	0.32	0.26	146	0.00	0	0.26	146	561.06	70
4156	4157	0.07	0.06	34	0.00	0	0.06	34	561.06	15
4157	4159	0.18	0.14	79	0.00	0	0.14	79	561.06	40
4158	4159	0.28	0.22	123	0.00	0	0.22	123	561.06	60
4159	319	0.18	0.14	79	0.00	0	0.14	79	561.06	35
4160	4162	0.07	0.06	34	0.00	0	0.06	34	561.06	15
4161	4162	0.30	0.24	135	0.00	0	0.24	135	561.06	60
4162	4164	0.05	0.04	22	0.00	0	0.04	22	561.06	10
4163	4164	0.20	0.16	90	0.00	0	0.16	90	561.06	40
4164	4166	0.05	0.04	22	0.00	0	0.04	22	561.06	10
4165	4166	0.25	0.20	112	0.00	0	0.20	112	561.06	50
4166	4168	0.20	0.16	90	0.00	0	0.16	90	561.06	40
4167	4168	0.22	0.18	101	0.00	0	0.18	101	561.06	45
4168	4170	0.05	0.04	22	0.00	0	0.04	22	561.06	10
4169	4170	0.35	0.28	157	0.00	0	0.28	157	561.06	70
4170	4173	0.35	0.28	157	0.00	0	0.28	157	561.06	70
4171	4173	0.20	0.16	90	0.00	0	0.16	90	561.06	40
4172	4173	0.17	0.14	79	0.00	0	0.14	79	561.06	35
4173	4186	0.40	0.32	180	0.00	0	0.32	180	561.06	80
4174	4186	0.79	0.63	353	0.00	0	0.63	353	561.06	160
4175	4177	0.07	0.06	34	0.00	0	0.06	34	561.06	15
4176	4177	0.20	0.16	90	0.00	0	0.16	90	561.06	40
4177	4179	0.05	0.04	22	0.00	0	0.04	22	561.06	10
4178	4179	0.10	0.08	45	0.00	0	0.08	45	561.06	20
4179	4181	0.64	0.51	286	0.00	0	0.51	286	561.06	130
4180	4181	0.20	0.16	90	0.00	0	0.16	90	561.06	40
4181	4183	0.25	0.20	112	0.00	0	0.20	112	561.06	50
4182	4183	0.15	0.12	67	0.00	0	0.12	67	561.06	30
4183	4185	0.32	0.26	146	0.00	0	0.26	146	561.06	65
4184	4185	0.20	0.16	90	0.00	0	0.16	90	561.06	40
4185	4186	0.17	0.14	79	0.00	0	0.14	79	561.06	35
4186	4188	0.20	0.16	90	0.00	0	0.16	90	561.06	40

Table 5.5.3.1 Population Density of Each Sewer for Sewage Flow Calculation

Sewer No.	Sewer No. of Downstream	Core Area			Transitional Area		Total			Length
		Area (ha)		Population	Area	Population	Area	Population	Density	
		Mesurement	Ajustment	(person)	(ha)	(person)	(ha)	(person)	(person/ha)	(m)
4187	4188	0.37	0.30	168	0.00	0	0.30	168	561.06	75
4188	4190	0.25	0.20	112	0.00	0	0.20	112	561.06	50
4189	4190	0.20	0.16	90	0.00	0	0.16	90	561.06	40
4190	4194	0.10	0.08	45	0.00	0	0.08	45	561.06	20
4191	4193	0.30	0.24	135	0.00	0	0.24	135	561.06	60
4192	4193	0.22	0.18	101	0.00	0	0.18	101	561.06	45
4193	4194	0.25	0.20	112	0.00	0	0.20	112	561.06	50
4194	4196	0.37	0.30	168	0.00	0	0.30	168	561.06	75
4195	4196	0.59	0.47	264	0.00	0	0.47	264	561.06	120
4196	4198	0.05	0.04	22	0.00	0	0.04	22	561.06	10
4197	4198	0.27	0.22	123	0.00	0	0.22	123	561.06	55
4198	4200	0.15	0.12	67	0.00	0	0.12	67	561.06	30
4199	4200	1.01	0.81	454	0.00	0	0.81	454	561.06	205
4200	4208	0.10	0.08	45	0.00	0	0.08	45	561.06	20
4201	4203	0.40	0.32	180	0.00	0	0.32	180	561.06	80
4202	4203	0.10	0.08	45	0.00	0	0.08	45	561.06	20
4203	4205	0.15	0.12	67	0.00	0	0.12	67	561.06	30
4204	4205	0.12	0.10	56	0.00	0	0.10	56	561.06	25
4205	4207	0.25	0.20	112	0.00	0	0.20	112	561.06	50
4206	4207	0.15	0.12	67	0.00	0	0.12	67	561.06	30
4207	4208	0.30	0.24	135	0.00	0	0.24	135	561.06	60
4208	4216	0.10	0.08	45	0.00	0	0.08	45	561.06	20
4209	4211	0.20	0.16	90	0.00	0	0.16	90	561.06	40
4210	4211	0.07	0.06	34	0.00	0	0.06	34	561.06	15
4211	4213	0.20	0.16	90	0.00	0	0.16	90	561.06	40
4212	4213	0.15	0.12	67	0.00	0	0.12	67	561.06	30
4213	4215	0.15	0.12	67	0.00	0	0.12	67	561.06	30
4214	4215	0.20	0.16	90	0.00	0	0.16	90	561.06	40
4215	4216	0.59	0.47	264	0.00	0	0.47	264	561.06	120
4216	4218	0.30	0.24	135	0.00	0	0.24	135	561.06	60
4217	4218	0.25	0.20	112	0.00	0	0.20	112	561.06	50
4218	320	0.19	0.15	84	0.00	0	0.15	84	561.06	50
4219	4221	0.50	0.40	224	0.00	0	0.40	224	561.06	105
4220	4221	0.43	0.35	196	0.00	0	0.35	196	561.06	90
4221	4231	0.62	0.50	281	0.00	0	0.50	281	561.06	130

Table 5.5.3.1 Population Density of Each Sewer for Sewage Flow Calculation

Sewer No.	Sewer No. of Downstream	Core Area			Transitional Area		Total			Length
		Area (ha)		Population	Area	Population	Area	Population	Density	
		Mesurement	Ajustment	(person)	(ha)	(person)	(ha)	(person)	(person/ha)	(m)
4222	4224	0.41	0.33	185	0.00	0	0.33	185	561.06	85
4223	4224	0.21	0.17	95	0.00	0	0.17	95	561.06	45
4224	4228	0.24	0.19	107	0.00	0	0.19	107	561.06	50
4225	4227	0.17	0.14	79	0.00	0	0.14	79	561.06	35
4226	4227	0.36	0.29	163	0.00	0	0.29	163	561.06	75
4227	4228	0.29	0.23	129	0.00	0	0.23	129	561.06	60
4228	4230	0.14	0.11	62	0.00	0	0.11	62	561.06	30
4229	4230	0.52	0.42	236	0.00	0	0.42	236	561.06	110
4230	4231	0.19	0.15	84	0.00	0	0.15	84	561.06	40
4231	4233	0.31	0.25	140	0.00	0	0.25	140	561.06	65
4232	4233	0.19	0.15	84	0.00	0	0.15	84	561.06	40
4233	4237	0.29	0.23	129	0.00	0	0.23	129	561.06	60
4234	4236	0.29	0.23	129	0.00	0	0.23	129	561.06	60
4235	4236	0.43	0.35	196	0.00	0	0.35	196	561.06	90
4236	4237	0.21	0.17	95	0.00	0	0.17	95	561.06	45
4237	4241	0.33	0.26	146	0.00	0	0.26	146	561.06	70
4238	4240	0.33	0.26	146	0.00	0	0.26	146	561.06	70
4239	4240	0.10	0.08	45	0.00	0	0.08	45	561.06	20
4240	4241	0.14	0.11	62	0.00	0	0.11	62	561.06	30
4241	4247	0.07	0.06	34	0.00	0	0.06	34	561.06	15
4242	4246	0.36	0.29	163	0.00	0	0.29	163	561.06	75
4243	4245	0.14	0.11	62	0.00	0	0.11	62	561.06	30
4244	4245	0.05	0.04	22	0.00	0	0.04	22	561.06	10
4245	4246	0.10	0.08	45	0.00	0	0.08	45	561.06	20
4246	4247	0.41	0.33	185	0.00	0	0.33	185	561.06	85
4247	4249	0.19	0.15	84	0.00	0	0.15	84	561.06	40
4248	4249	0.17	0.14	79	0.00	0	0.14	79	561.06	35
4249	4251	0.12	0.10	56	0.00	0	0.10	56	561.06	25
4250	4251	0.10	0.08	45	0.00	0	0.08	45	561.06	20
4251	4255	0.14	0.11	62	0.00	0	0.11	62	561.06	30
4252	4254	0.81	0.65	365	0.00	0	0.65	365	561.06	170
4253	4254	0.14	0.11	62	0.00	0	0.11	62	561.06	30
4254	4255	0.05	0.04	22	0.00	0	0.04	22	561.06	10
4255	4259	0.19	0.15	84	0.00	0	0.15	84	561.06	40
4256	4258	0.24	0.19	107	0.00	0	0.19	107	561.06	50

Table 5.5.3.1 Population Density of Each Sewer for Sewage Flow Calculation

Sewer No.	Sewer No. of Downstream	Core Area			Transitional Area		Total			Length
		Area (ha)		Population	Area	Population	Area	Population	Density	
		Mesurement	Ajustment	(person)	(ha)	(person)	(ha)	(person)	(person/ha)	(m)
4257	4258	0.14	0.11	62	0.00	0	0.11	62	561.06	30
4258	4259	0.10	0.08	45	0.00	0	0.08	45	561.06	20
4259	4261	0.12	0.10	56	0.00	0	0.10	56	561.06	25
4260	4261	0.29	0.23	129	0.00	0	0.23	129	561.06	60
4261	4265	0.10	0.08	45	0.00	0	0.08	45	561.06	20
4262	4264	0.24	0.19	107	0.00	0	0.19	107	561.06	50
4263	4264	0.12	0.10	56	0.00	0	0.10	56	561.06	25
4264	4265	0.43	0.35	196	0.00	0	0.35	196	561.06	90
4265	321	0.24	0.19	107	0.00	0	0.19	107	561.06	55
4266	4268	0.15	0.12	67	0.00	0	0.12	67	561.06	25
4267	4268	0.17	0.14	79	0.00	0	0.14	79	561.06	30
4268	4269	0.38	0.31	174	0.00	0	0.31	174	561.06	65
4269	4277	1.34	1.08	606	0.00	0	1.08	606	561.06	230
4270	4272	0.23	0.18	101	0.00	0	0.18	101	561.06	40
4271	4272	0.17	0.14	79	0.00	0	0.14	79	561.06	30
4272	4274	0.15	0.12	67	0.00	0	0.12	67	561.06	25
4273	4274	0.20	0.16	90	0.00	0	0.16	90	561.06	35
4274	4276	0.23	0.18	101	0.00	0	0.18	101	561.06	40
4275	4276	0.12	0.10	56	0.00	0	0.10	56	561.06	20
4276	4277	0.06	0.05	28	0.00	0	0.05	28	561.06	10
4277	4282	0.29	0.23	129	0.00	0	0.23	129	561.06	50
4278	4281	0.52	0.42	236	0.00	0	0.42	236	561.06	90
4279	4281	0.17	0.14	79	0.00	0	0.14	79	561.06	30
4280	4281	0.23	0.18	101	0.00	0	0.18	101	561.06	40
4281	4282	0.23	0.18	101	0.00	0	0.18	101	561.06	40
4282	4299	0.20	0.16	90	0.00	0	0.16	90	561.06	35
4283	4285	0.67	0.54	303	0.00	0	0.54	303	561.06	115
4284	4285	1.63	1.31	735	0.00	0	1.31	735	561.06	280
4285	4287	0.20	0.16	90	0.00	0	0.16	90	561.06	35
4286	4287	0.82	0.66	370	0.00	0	0.66	370	561.06	140
4287	4298	0.32	0.26	146	0.00	0	0.26	146	561.06	55
4288	4290	0.17	0.14	79	0.00	0	0.14	79	561.06	30
4289	4290	0.17	0.14	79	0.00	0	0.14	79	561.06	30
4290	4291	0.17	0.14	79	0.00	0	0.14	79	561.06	30
4291	4293	0.41	0.33	185	0.00	0	0.33	185	561.06	70

Table 5.5.3.1 Population Density of Each Sewer for Sewage Flow Calculation

Sewer No.	Sewer No. of Downstream	Core Area			Transitional Area		Total			Length
		Area (ha)		Population	Area	Population	Area	Population	Density	
		Mesurement	Ajustment	(person)	(ha)	(person)	(ha)	(person)	(person/ha)	(m)
4292	4293	0.12	0.10	56	0.00	0	0.10	56	561.06	20
4293	4295	0.23	0.18	101	0.00	0	0.18	101	561.06	40
4294	4295	0.23	0.18	101	0.00	0	0.18	101	561.06	40
4295	4297	0.12	0.10	56	0.00	0	0.10	56	561.06	20
4296	4297	0.41	0.33	185	0.00	0	0.33	185	561.06	70
4297	4298	0.17	0.14	79	0.00	0	0.14	79	561.06	30
4298	4299	0.67	0.54	303	0.00	0	0.54	303	561.06	115
4299	4301	0.23	0.18	101	0.00	0	0.18	101	561.06	40
4300	4301	0.35	0.28	157	0.00	0	0.28	157	561.06	60
4301	4303	0.09	0.07	39	0.00	0	0.07	39	561.06	15
4302	4303	0.23	0.18	101	0.00	0	0.18	101	561.06	40
4303	4305	0.15	0.12	67	0.00	0	0.12	67	561.06	25
4304	4305	0.20	0.16	90	0.00	0	0.16	90	561.06	35
4305	4312	0.12	0.10	56	0.00	0	0.10	56	561.06	20
4306	4308	0.23	0.18	101	0.00	0	0.18	101	561.06	40
4307	4308	0.29	0.23	129	0.00	0	0.23	129	561.06	50
4308	4310	0.17	0.14	79	0.00	0	0.14	79	561.06	30
4309	4310	0.23	0.18	101	0.00	0	0.18	101	561.06	40
4310	4312	0.06	0.05	28	0.00	0	0.05	28	561.06	10
4311	4312	0.55	0.44	247	0.00	0	0.44	247	561.06	95
4312	4319	0.41	0.33	185	0.00	0	0.33	185	561.06	70
4313	4315	0.41	0.33	185	0.00	0	0.33	185	561.06	70
4314	4315	0.12	0.10	56	0.00	0	0.10	56	561.06	20
4315	4317	0.29	0.23	129	0.00	0	0.23	129	561.06	50
4316	4317	0.47	0.38	213	0.00	0	0.38	213	561.06	80
4317	4319	0.23	0.18	101	0.00	0	0.18	101	561.06	40
4318	4319	0.58	0.47	264	0.00	0	0.47	264	561.06	100
4319	4324	0.87	0.70	393	0.00	0	0.70	393	561.06	150
4320	4321	0.20	0.16	90	0.00	0	0.16	90	561.06	35
4321	4323	0.23	0.18	101	0.00	0	0.18	101	561.06	40
4322	4323	0.26	0.21	118	0.00	0	0.21	118	561.06	45
4323	4324	0.26	0.21	118	0.00	0	0.21	118	561.06	45
4324	4326	0.20	0.16	90	0.00	0	0.16	90	561.06	35
4325	4326	0.70	0.56	314	0.00	0	0.56	314	561.06	120
4326	4328	0.26	0.21	118	0.00	0	0.21	118	561.06	45

Table 5.5.3.1 Population Density of Each Sewer for Sewage Flow Calculation

Sewer No.	Sewer No. of Downstream	Core Area			Transitional Area		Total			Length
		Area (ha)		Population	Area	Population	Area	Population	Density	
		Mesurement	Ajustment	(person)	(ha)	(person)	(ha)	(person)	(person/ha)	(m)
4327	4328	0.73	0.59	331	0.00	0	0.59	331	561.06	125
4328	4344	0.06	0.05	28	0.00	0	0.05	28	561.06	10
4329	4331	0.58	0.47	264	0.00	0	0.47	264	561.06	100
4330	4331	0.17	0.14	79	0.00	0	0.14	79	561.06	30
4331	4335	0.29	0.23	129	0.00	0	0.23	129	561.06	50
4332	4334	0.23	0.18	101	0.00	0	0.18	101	561.06	40
4333	4334	0.20	0.16	90	0.00	0	0.16	90	561.06	35
4334	4335	0.58	0.47	264	0.00	0	0.47	264	561.06	100
4335	4341	0.15	0.12	67	0.00	0	0.12	67	561.06	25
4336	4338	0.32	0.26	146	0.00	0	0.26	146	561.06	55
4337	4338	0.17	0.14	79	0.00	0	0.14	79	561.06	30
4338	4340	0.41	0.33	185	0.00	0	0.33	185	561.06	70
4339	4340	0.15	0.12	67	0.00	0	0.12	67	561.06	25
4340	4341	0.26	0.21	118	0.00	0	0.21	118	561.06	45
4341	4343	0.26	0.21	118	0.00	0	0.21	118	561.06	45
4342	4343	0.47	0.38	213	0.00	0	0.38	213	561.06	80
4343	4344	0.52	0.42	236	0.00	0	0.42	236	561.06	90
4344	323	1.59	1.28	718	0.00	0	1.28	718	561.06	260
4345	4349	0.43	0.35	196	0.00	0	0.35	196	561.06	50
4346	4348	0.43	0.35	196	0.00	0	0.35	196	561.06	50
4347	4348	0.26	0.21	118	0.00	0	0.21	118	561.06	30
4348	4349	0.35	0.28	157	0.00	0	0.28	157	561.06	40
4349	4351	0.35	0.28	157	0.00	0	0.28	157	561.06	40
4350	4351	0.43	0.35	196	0.00	0	0.35	196	561.06	50
4351	4353	0.22	0.18	101	0.00	0	0.18	101	561.06	25
4352	4353	0.43	0.35	196	0.00	0	0.35	196	561.06	50
4353	4356	0.26	0.21	118	0.00	0	0.21	118	561.06	30
4354	4356	0.70	0.56	314	0.00	0	0.56	314	561.06	80
4355	4356	0.65	0.52	292	0.00	0	0.52	292	561.06	75
4356	4358	0.52	0.42	236	0.00	0	0.42	236	561.06	60
4357	4358	0.52	0.42	236	0.00	0	0.42	236	561.06	60
4358	4360	0.22	0.18	101	0.00	0	0.18	101	561.06	25
4359	4360	0.70	0.56	314	0.00	0	0.56	314	561.06	80
4360	324	0.53	0.43	241	0.00	0	0.43	241	561.06	60
4361	4363	0.25	0.20	112	0.00	0	0.20	112	561.06	100

Table 5.5.3.1 Population Density of Each Sewer for Sewage Flow Calculation

Sewer No.	Sewer No. of Downstream	Core Area			Transitional Area		Total			Length
		Area (ha)		Population	Area	Population	Area	Population	Density	
		Mesurement	Ajustment	(person)	(ha)	(person)	(ha)	(person)	(person/ha)	(m)
4362	4363	0.10	0.08	45	0.00	0	0.08	45	561.06	40
4363	4367	0.04	0.03	17	0.00	0	0.03	17	561.06	15
4364	4366	0.06	0.05	28	0.00	0	0.05	28	561.06	25
4365	4366	0.20	0.16	90	0.00	0	0.16	90	561.06	80
4366	4367	0.15	0.12	67	0.00	0	0.12	67	561.06	60
4367	4369	0.10	0.08	45	0.00	0	0.08	45	561.06	40
4368	4369	0.23	0.18	101	0.00	0	0.18	101	561.06	90
4369	4371	0.05	0.04	22	0.00	0	0.04	22	561.06	20
4370	4371	0.08	0.06	34	0.00	0	0.06	34	561.06	30
4371	4373	0.08	0.06	34	0.00	0	0.06	34	561.06	30
4372	4373	0.08	0.06	34	0.00	0	0.06	34	561.06	30
4373	321	0.11	0.09	50	0.00	0	0.09	50	561.06	50
4374	322	0.91	0.73	410	0.00	0	0.73	410	561.06	80
Sub-Total	301 - 320	-	-	-	925.00	211,853	-	-	-	5,950
Total		266.61	214.00	120,067	925.00	211,853	1139.00	331919	-	40,925

Note: Population Density of Core Area = 561.06 person/ha
Population Density of Transitional Area = 229.03 person/ha

SEWAGE FLOW CALCULATION TABLE (WORK DIMENSION)

No. of Sewrs	No. of Sewrs Downstream	Drainage Area		Length		Concentration Time	Storm Run-off					Sewage Flow				Other Sewage		Total Sewage Flow	Design Sewer							Remarks
		Area	Total	Length	Total		Rainfall per ha	Rain-off Coefft.	Converted Area		Rainfall	Pop. Density	Population		Sewage Flow	per Sewer	Total		Diameter	Slope	Velocity	Flow	Elevation	Invert Level	Earth Cover	
									Area	Total			per Sewer	Total												
		ha	ha	m	m	min	m³/s·ha		ha	ha	m³/s	P/ha	Per	Person	m³/s	m³/s	m³/s	m³/s	mm	‰	m/s	m³/s	M	M	m	
2001	2003	526	526	300	300							561.0	6295	2 295	2.005			00055	⊙ 200	250	0683	00219	705 690	5841 5091	100 150	
2002		295	295	195	195							561.0	6165	6 165	6.003			00031	⊙ 200	250	0683	00219	705 690	5841 5354	100 134	
2003	302	155	976	160	460							561.0	6 869	5476	.010			00101	⊙ 200	250	0683	00219	690 682	5091 4691	150 192	
300A	301	99900	99900	0	0							179.9	9179	81 11179	81 0.3			03330	⊙ 900	110	0944	06004	705 705	4350 4350	171 171	Future Inflow
300B		46300	46300	0	0							179.9	8333	36 833	360.15			01543	⊙ 900	110	0944	06004	705 705	4350 4350	171 171	Future Inflow
301		6435	152635	400	400							240.2	3154	59 2786	050.51			05159	⊙ 900	110	0944	06004	705 682	4350 3910	171 192	
302	303	3306	156917	205	665							240.9	8796	629 2047	.540			05408	⊙ 900	110	0944	06004	682 671	3910 3685	192 204	
2004		040	040	100	100							561.0	6 225	225	.000			00004	⊙ 200	250	0683	00219	705 696	5841 5591	100 116	
2005		454	494	450	550							561.0	6254	7 277	2.005			00051	⊙ 200	250	0683	00219	696 671	5591 4466	116 204	
303	304	1260	158671	80	745							233.2	5293	929775	8.551			05514	⊙ 900	110	0944	06004	671 665	3685 3597	204 205	
2006		187	187	100	100							561.0	6105	0 105	0.001			00019	⊙ 200	250	0683	00219	696 677	5751 5501	100 196	

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Table 5.5.3.2 Sewage Flow Calculation for New Sewer System

SEWAGE FLOW CALCULATION TABLE (NORTH DHAKA EAST)

No. of Sewrs	No. of Sewrs Downstream	Dminage Area		Length		Concenfration Time	Storm Run-off					Sewage Flow				Other Sewage		Total Sewage Flow	Design Sewer							Remarks
		Area	Total	Length	Total		Rainfall per ha	Rain-off Coeffi.	Converted Area		Rainfall	Pop. Density	Population		Sewage Flow	per Sewer	Total		Diameter	Slope	Velocity	Flow	Elevation	Invert Level	Earth Cover	
									Area	Total			per Sewer	Total												
		ha	ha	m	m	min	m³/s·ha		ha	ha	m³/s	P/ha	Per	Person	m³/s	m³/s	m³/s	m³/s	mm	‰	m/s	m³/s	M	M	m	
2007	2009	441	628	400	500							561.0	62	474	3524	.006			00065	⊙ 200	250	0683	00219	677 665	5501 4501	106 194	
2008		067	067	75	75							561.0	6	376	376	.000			00007	⊙ 200	250	0683	00219	665 665	5441 5253	100 119	
2009		043	738	80	580							561.0	6	241	4141	.007			00077	⊙ 200	250	0683	00219	665 665	4501 4301	194 214	
304	305	6864	166273	410	1155							252.7	3173	473192	460.59				05912	⊙ 900	110	0944	06004	665 650	3597 3147	206 236	
2010		032	032	100	100							561.0	6	180	180	.000			00003	⊙ 200	250	0683	00219	677 665	5561 5311	100 113	
2011		429	461	570	670							561.0	6	2407	2587	.004			00048	⊙ 200	250	0683	00219	665 650	5311 3883	113 241	
305	306	3563	170297	220	1375							242.3	6863	5330468	.612				06120	⊙ 1000	100	0965	07582	650 655	3047 2828	235 262	
2016		157	157	345	345							561.0	6	881	881	.001			00016	⊙ 200	250	0683	00219	665 655	5441 4580	100 176	
2017	2019	059	216	110	455							561.0	6	331	1212	.002			00022	⊙ 200	250	0683	00219	655 655	4580 4305	176 204	
2018		075	075	110	110							561.0	6	421	421	.000			00008	⊙ 200	250	0683	00219	655 655	5341 5066	100 128	
2019		116	407	105	560							561.0	6	651	2284	.004			00042	⊙ 200	250	0683	00219	655 655	4305 4044	204 230	
2020	2021	171	578	225	785							561.0	6	959	3243	.006			00060	⊙ 200	250	0683	00219	655 655	4044 3484	230 286	

SEWAGE FLOW CALCULATION TABLE (NORTH DHAKA EAST)

No. of Sewrs	No. of Sewrs Downstream	Drainage Area		Length		Concentration Time	Storm Run-off					Sewage Flow				Other Sewage		Total Sewage Flow	Design Sewer							Remarks
		Area	Total	Length	Total		Rainfall per ha	Rain-off Coeffi	Converted Area		Rainfall	Pop. Density	Population		Sewage Flow	per Sewer	Total		Diameter	Slope	Velocity	Flow	Elevation	Invert Level	Earth Cover	
									Area	Total			per Sewer	Total												
		ha	ha	m	m	min	m³/s·ha		ha	ha	m³/s	P/ha	Per	Person	m³/s	m³/s	m³/s	m³/s	mm	‰	m/s	m³/s	M	M	m	
2012		195	195	260	260							561.0	6109	5	109	5	.002		00020	⊙	200	250	0683	00219	655 655	5441 4792	100 155	
2013	2015	116	311	180	440							561.0	6	650	174	5	.003		00032	⊙	200	250	0683	00219	655 655	4792 4344	155 200	From Cantonment PS
2014		035	035	70	70							561.0	6	197	197		.000		00004	⊙	200	250	0683	00219	655 655	5341 5167	100 117	Gulshan PS
2015		059	405	80	520							561.0	6	331	2273		.004		00042	⊙	200	250	0683	00219	655 655	4344 4144	200 220	
2021	2028	189	1172	190	975							561.0	61060		6576		.012		00122	⊙	200	250	0683	00219	655 655	3484 3008	286 333	
2025	2026	128	128	325	325							561.0	6	719	719		.001		00013	⊙	200	250	0683	00219	655 655	5341 4529	100 181	
2024		064	064	155	155							561.0	6	360	360		.000		00007	⊙	200	250	0683	00219	655 655	5341 4954	100 139	
2026		297	489	440	765							561.0	61666		2744		.005		00051	⊙	200	250	0683	00219	655 655	4529 3431	181 291	
2027	2028	052	541	100	865							561.0	6	292	3036		.005		00056	⊙	200	250	0683	00219	655 655	3431 3181	291 316	
2022		120	120	140	140							561.0	6	674	674		.001		00012	⊙	200	250	0683	00219	655 655	5341 4991	100 135	
2023		116	236	190	330							561.0	6	651	1325		.002		00025	⊙	200	250	0683	00219	655 655	4991 4515	135 183	

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SEWAGE FLOW CALCULATION TABLE (NORTH DHAKA EAST)

No. of Sewrs	No. of Sewrs Downstream	Drainage Area		Length		Concentration Time	Storm Run-off					Sewage Flow				Other Sewage		Total Sewage Flow	Design Sewer							Remarks
		Area	Total	Length	Total		Rainfall per ha	Rain-off Coeffi.	Converted Area		Rainfall	Pop. Density	Population		Sewage Flow	per Sewer	Total		Diameter	Slope	Velocity	Flow	Elevation	Invert Level	Earth Cover	
									Area	Total			per Sewer	Total												
		ha	ha	m	m	min	m³/s·ha		ha	ha	m³/s	P/ha	Per	Person	m³/s	m³/s	m³/s	m³/s	mm	‰	m/s	m³/s	M	M	m	
2028	306	079	2028	145	1120							561.06	443	11379	.021			00211	⊙ 200	250	0683	00219	655 655	5343 4981	100 136	Manhol Pump
306A		17000	17000	0	0							76.15	1294	6 12946	.024			00240	⊙ 250	220	0739	00363	655 655	5292 5292	100 100	From Cantonment
306	307	10903	200228	680	2055							239.14	2606	733808	650.70			07053	⊙ 1000	100	0965	07582	655 673	2828 2149	262 348	
3008	3010	055	055	100	100							561.06	309	309	.000			00006	⊙ 200	250	0683	00219	670 670	5491 5241	100 125	
3009		016	016	50	50							561.06	90	90	.000			00002	⊙ 200	250	0683	00219	670 670	5491 5366	100 113	
3010	3011	124	195	265	365							561.06	696	1095	.002			00020	⊙ 200	250	0683	00219	670 570	5241 4491	125 100	
3002	3003	113	113	190	190							561.06	634	634	.001			00012	⊙ 200	250	0683	00219	670 670	5491 5015	100 148	
3001		022	022	70	70							561.06	124	124	.000			00002	⊙ 200	250	0683	00219	670 670	5491 5317	100 117	
3003	3005	020	155	50	240							561.06	112	870	.001			00016	⊙ 200	250	0683	00219	670 670	5015 4890	148 160	
3004		090	090	170	170							561.06	505	505	.000			00009	⊙ 200	250	0683	00219	670 670	5491 5067	100 142	

SEWAGE FLOW CALCULATION TABLE (NORTH DHAKA EAST)

No. of Sewrs	No. of Sewrs Downstream	Drainage Area		Length		Concentration Time	Storm Run-off					Sewage Flow				Other Sewage		Total Sewage Flow	Design Sewer							Remarks
		Area	Total	Length	Total		Rainfall per ha	Rain-off Coeffi.	Converted Area		Rainfall	Pop. Density	Population		Sewage Flow	per Sewer	Total		Diameter	Slope	Velocity	Flow	Elevation	Invert Level	Earth Cover	
									Area	Total			per Sewer	Total												
		ha	ha	m	m	min	m³/s·ha		ha	ha	m³/s	P/ha	Per	Person	m³/s	m³/s	m³/s	m³/s	mm	‰	m/s	m³/s	M	M	m	
3005	3007	040	285	55	295							561.06	225	1600	.003			.00030	⊙ 200	250	0683	00219	670 670	4890 4752	160 174	
3006		092	092	160	160							561.06	517	517	.001			.00010	⊙ 200	250	0683	00219	670 670	5491 5091	100 140	
3007		044	421	55	350							561.06	247	2363	.004			.00044	⊙ 200	250	0683	00219	670 570	4752 4491	174 100	
3011	3014	052	668	65	430							561.06	291	3748	.006			.00069	⊙ 200	250	0683	00219	570 542	4432 4211	106 100	
3012		016	016	50	50							561.06	90	90	.000			.00002	⊙ 200	250	0683	00219	620 588	4796 4671	120 100	
3013		108	124	240	290							561.06	606	696	.001			.00013	⊙ 200	250	0683	00219	588 542	4671 4071	100 114	
3014	3017	052	844	75	505							561.06	292	4736	.008			.00088	⊙ 200	250	0683	00219	542 543	4071 3883	114 134	
3015		020	020	55	55							561.06	113	113	.000			.00002	⊙ 200	250	0683	00219	588 578	4671 4533	100 104	
3016		108	128	205	260							561.06	606	719	.001			.00013	⊙ 200	250	0683	00219	578 543	4533 4023	104 120	
3017	3020	059	1031	75	580							561.06	331	5785	.010			.00107	⊙ 200	250	0683	00219	543 547	3883 3695	134 157	
3018		020	020	50	50							561.06	113	113	.000			.00002	⊙ 200	250	0683	00219	578 570	4571 4446	100 105	
3019		107	127	195	245							561.06	600	713	.001			.00013	⊙ 200	250	0683	00219	570 547	4446 3959	105 130	

SEWAGE FLOW CALCULATION TABLE (NORTH DHAKA EAST)

No. of Sewrs	No. of Sewrs Downstream	Drainage Area		Length		Concentration Time	Storm Run-off					Sewage Flow				Other Sewage		Total Sewage Flow	Design Sewer							Remarks
		Area	Total	Length	Total		Rainfall per ha	Rain-off Coeffi.	Converted Area		Rainfall	Pop. Density	Population		Sewage Flow	per Sewer	Total		Diameter	Slope	Velocity	Flow	Elevation	Invert Level	Earth Cover	
									Area	Total			per Sewer	Total												
		ha	ha	m	m	min	m³/s-ha		ha	ha	m³/s	P/ha	Per	Person	m³/s	m³/s	m³/s	m³/s	mm	‰	m/s	m³/s	M	M	m	
3020	3022	052	1210	70	650							561.06	291	6789	.012			.00126	⊙ 200	250	0683	00219	547 553	3695 3521	157 180	
3021		119	119	130	130							561.06	668	668	.001			.00012	⊙ 200	250	0683	00219	584 553	4631 4307	100 101	
3022	3045	167	1496	320	970							561.06	937	8394	.015			.00155	⊙ 200	250	0683	00219	553 571	3521 2723	180 278	
3024	3025	112	112	190	190							561.06	629	629	.001			.00012	⊙ 200	250	0683	00219	670 655	5491 5015	100 133	
3023		040	040	65	65							561.06	225	225	.000			.00004	⊙ 200	250	0683	00219	655 655	5361 5179	100 116	
3025	3027	030	182	50	240							561.06	169	1022	.001			.00019	⊙ 200	250	0683	00219	655 655	5015 4890	133 145	
3026		089	089	190	190							561.06	500	500	.000			.00009	⊙ 200	250	0683	00219	670 655	5491 5015	100 133	
3027	3029	043	314	70	310							561.06	241	1762	.003			.00033	⊙ 200	250	0683	00219	655 655	4890 4716	145 163	
3028		091	091	190	190							561.06	511	511	.000			.00009	⊙ 200	250	0683	00219	670 655	5491 5015	100 133	
3029	3031	088	493	145	455							561.06	494	2767	.005			.00051	⊙ 200	250	0683	00219	655 588	4715 4353	163 132	

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SEWAGE FLOW CALCULATION TABLE (NORTH DHAKA EAST)

No. of Sewrs	No. of Sewrs Downstream	Drainage Area		Length		Concentration Time	Storm Run-off					Sewage Flow				Other Sewage		Total Sewage Flow	Design Sewer							Remarks
		Area	Total	Length	Total		Rainfall per ha	Rain-off Coeffi.	Converted Area		Rainfall	Pop. Density	Population		Sewage Flow	per Sewer	Total		Diameter	Slope	Velocity	Flow	Elevation	Invert Level	Earth Cover	
									Area	Total			per Sewer	Total												
		ha	ha	m	m	min	m³/s·ha		ha	ha	m³/s	P/ha	Per	Person	m³/s	m³/s	m³/s	m³/s	mm	‰	m/s	m³/s	M	M	m	
3030		056	056	100	100							561.06	315	315	.000			00006	⊙ 200	250	0683	00219	588 588	4571 4421	100 125	
3031	3033	039	588	75	530							561.06	219	3300	.006			00061	⊙ 200	250	0683	00219	588 578	4353 4165	132 141	
3032		064	064	80	80							561.06	360	360	.000			00007	⊙ 200	250	0683	00219	578 578	4571 4371	100 120	
3033	3035	035	687	70	600							561.06	196	3855	.007			00071	⊙ 200	250	0683	00219	578 570	4165 3991	141 150	
3034		064	064	105	105							561.06	360	360	.000			00007	⊙ 200	250	0683	00219	570 570	4491 4230	100 126	
3035	3045	026	777	70	670							561.06	146	4360	.008			00081	⊙ 200	250	0683	00219	570 571	3991 3817	150 168	
3037	3038	063	063	60	60							561.06	354	354	.000			00007	⊙ 200	250	0683	00219	584 581	4631 4481	100 112	
3036		063	063	55	55							561.06	354	354	.000			00007	⊙ 200	250	0683	00219	620 581	4765 4601	103 100	
3038	3040	173	299	335	395							561.06	971	1678	.003			00031	⊙ 200	250	0683	00219	581 610	4481 3642	112 225	
3039		024	024	50	50							561.06	135	135	.000			00003	⊙ 200	250	0683	00219	604 610	4881 4706	100 119	
3040	3042	039	362	70	465							561.06	219	2032	.003			00038	⊙ 200	250	0683	00219	610 578	3642 3468	225 210	

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SEWAGE FLOW CALCULATION TABLE (NORTH DHAKA EAST)

No. of Sewrs	No. of Sewrs Downstream	Drainage Area		Length		Concentration Time	Storm Run-off					Sewage Flow				Other Sewage		Total Sewage Flow	Design Sewer							Remarks
		Area	Total	Length	Total		Rainfall per ha	Rain-off Coeffi.	Converted Area		Rainfall	Pop. Density	Population		Sewage Flow	per Sewer	Total		Diameter	Slope	Velocity	Flow	Elevation	Invert Level	Earth Cover	
									Area	Total			per Sewer	Total												
		ha	ha	m	m	min	m³/s·ha		ha	ha	m³/s	P/ha	Per	Person	m³/s	m³/s	m³/s	m³/s	mm	‰	m/s	m³/s	M	M	m	
3041		163	163	305	305							561.06	915	915	.001			.00017	⊙ 200	250	0683	00219	584 578	4631 3869	100 170	
3042	3044	036	561	70	535							561.06	202	3148	.005			.00058	⊙ 200	250	0683	00219	578 573	3468 3294	210 223	
3043		161	161	300	300							561.06	904	904	.001			.00017	⊙ 200	250	0683	00219	577 573	4561 3811	100 171	
3044		031	753	70	605							561.06	174	4225	.007			.00078	⊙ 200	250	0683	00219	573 571	3294 3120	223 238	
3045		031	3057	90	1060							561.06	174	17152	.031			.00318	⊙ 250	220	0739	00363	571 673	4452 4254	100 222	Manhol Pump
307	308	4566	207851	285	2340							238.8	5109	064089	230.75			.07573	⊙ 1000	100	0965	07582	673 676	2149 1864	348 330	
3046		253	253	420	420							561.06	1420	1420	.002			.00026	⊙ 200	250	0683	00219	600 676	4791 3739	100 231	
308	309	3609	211713	225	2565							239.2	4863	4418976	.775			.07759	⊙ 1100	090	0976	09274	676 675	1764 1562	379 398	
3047		028	028	50	50							561.06	158	158	.000			.00003	⊙ 200	250	0683	00219	602 607	4811 4686	100 118	
3048	3050	067	095	150	200							561.06	376	534	.001			.00010	⊙ 200	250	0683	00219	607 609	4686 4311	118 157	
3049		032	032	65	65							561.06	180	180	.000			.00003	⊙ 200	250	0683	00219	604 609	4831 4669	100 121	

SEWAGE FLOW CALCULATION TABLE (NORTH DHAKA EAST)

No. of Sewrs	No. of Sewrs Downstream	Drainage Area		Length		Concentration Time	Storm Run-off					Sewage Flow				Other Sewage		Total Sewage Flow	Design Sewer							Remarks
		Area	Total	Length	Total		Rainfall per ha	Rain-off Coeffi.	Converted Area		Rainfall	Pop. Density	Population		Sewage Flow	per Sewer	Total		Diameter	Slope	Velocity	Flow	Elevation	Invert Level	Earth Cover	
									Area	Total			per Sewer	Total												
		ha	ha	m	m	min	m³/s·ha		ha	ha	m³/s	P/ha	Per	Person	m³/s	m³/s	m³/s	m³/s	mm	‰	m/s	m³/s	M	M	m	
3050	3053	036	163	65	265							561.06	202	915	.001			00017	⊙ 200	250	0683	00219	609 600	4311 4149	157 164	
3051		026	026	50	50							561.06	146	146	.000			00003	⊙ 200	250	0683	00219	607 603	4861 4736	100 109	
3052		063	089	150	200							561.06	354	500	.000			00009	⊙ 200	250	0683	00219	603 600	4736 4361	109 143	
3053		026	278	75	340							561.06	146	1560	.002			00029	⊙ 200	250	0683	00219	600 615	4149 3961	154 198	
3054		031	309	95	435							561.06	174	1734	.003			00032	⊙ 200	250	0683	00219	615 675	3961 3723	198 282	
309	310	4574	216596	285	2850							239.41	109	504316	600.79			07994	⊙ 1100	090	0976	09274	675 671	1562 1306	398 419	
3056	3058	107	107	130	130							561.06	601	601	.001			00011	⊙ 200	250	0683	00219	615 603	4941 4617	100 120	
3057		022	022	55	55							561.06	124	124	.000			00002	⊙ 200	250	0683	00219	603 603	4821 4683	100 114	
3058	3060	099	228	140	270							561.06	556	1280	.002			00024	⊙ 200	250	0683	00219	602 590	4617 4267	120 142	
3059		136	136	190	190							561.06	764	764	.001			00014	⊙ 200	250	0683	00219	603 590	4821 4345	100 135	
3060	3061	032	396	90	360							561.06	179	2222	.004			00041	⊙ 200	250	0683	00219	590 587	4267 4043	142 162	

SEWAGE FLOW CALCULATION TABLE (NORTH DHAKA EAST)

No. of Sewrs	No. of Sewrs Downstream	Drainage Area		Length		Concentration Time	Storm Run-off					Sewage Flow				Other Sewage		Total Sewage Flow	Design Sewer							Remarks
		Area	Total	Length	Total		Rainfall per ha	Rain-off Coeffi.	Converted Area		Rainfall	Pop. Density	Population		Sewage Flow	per Sewer	Total		Diameter	Slope	Velocity	Flow	Elevation	Invert Level	Earth Cover	
									Area	Total			per Sewer	Total												
		ha	ha	m	m	min	m³/s·ha		ha	ha	m³/s	P/ha	Per	Person	m³/s	m³/s	m³/s	m³/s	mm	‰	m/s	m³/s	M	M	m	
3055		203	203	200	200							561.0	61	139	1139			00021	⊙ 200	250	0683	00219	600 587	4791 4291	190 137	
3061	3065	112	711	145	505							561.0	6	629	3990			00074	⊙ 200	250	0683	00219	587 584	4043 3680	162 195	
3062	3064	271	271	260	260							561.0	6	152	1521			00028	⊙ 200	250	0683	00219	606 580	4851 4202	190 139	
3063		075	075	120	120							561.0	6	421	421			00008	⊙ 200	250	0683	00219	590 580	4691 4391	100 120	
3064		036	382	90	350							561.0	6	202	2144			00040	⊙ 200	250	0683	00219	580 584	4202 3978	139 165	
3065		108	1201	170	675							561.0	6	606	6739			00125	⊙ 200	250	0683	00219	584 616	3680 3256	195 270	
3066	3072	044	1245	50	725							561.0	6	247	6986			00129	⊙ 200	250	0683	00219	616 616	3256 3131	270 282	
3067	3069	051	051	155	155							561.0	6	287	287			00005	⊙ 200	250	0683	00219	620 602	4991 4604	100 121	
3068		051	051	120	120							561.0	6	287	287			00005	⊙ 200	250	0683	00219	620 602	4991 4691	100 112	
3069	3071	056	158	130	285							561.0	6	314	887			00016	⊙ 200	250	0683	00219	602 607	4604 4280	121 158	
3070		115	115	180	180							561.0	6	646	646			00012	⊙ 200	250	0683	00219	629 607	5081 4633	100 123	

SEWAGE FLOW CALCULATION TABLE (NORTH DHAKA EAST)

No. of Sewrs	No. of Sewrs Downstream	Drainage Area		Length		Concentration Time	Storm Run-off					Sewage Flow				Other Sewage		Total Sewage Flow	Design Sewer							Remarks
		Area	Total	Length	Total		Rainfall per ha	Run-off Coeffi.	Converted Area		Rainfall	Pop. Density	Population		Sewage Flow	per Sewer	Total		Diameter	Slope	Velocity	Flow	Elevation	Invert Level	Earth Cover	
									Area	Total			per Sewer	Total												
		ha	ha	m	m	min	m³/s·ha		ha	ha	m³/s	P/ha	Per	Person	m³/s	m³/s	m³/s	m³/s	mm	‰	m/s	m³/s	M	M	m	
3071		044	317	110	395							561.06	247	1779	.003			.00033	⊙ 200	250	0683	00219	607 616	4280 4005	158 195	
3072	3075	241	1803	250	975							561.06	1352	10116	.018			.00187	⊙ 200	250	0683	00219	616 606	3131 2506	282 335	
3074	3075	177	177	280	280							561.06	994	994	.001			.00018	⊙ 200	250	0683	00219	620 606	4991 4290	100 156	
3073		157	157	260	260							561.06	881	881	.001			.00016	⊙ 200	250	0683	00219	615 606	4941 4292	100 156	
3075		032	2169	95	1070							561.06	180	12170	.022			.00225	⊙ 250	220	0739	00363	606 671	2458 2250	334 420	
310	311	4978	223743	310	3160							239.64	1192	94557	90.84			.08440	⊙ 1100	090	0976	09274	671 649	1306 1027	419 425	
4001		022	022	80	80							561.06	124	124	.000			.00002	⊙ 200	250	0683	00219	620 649	4991 4791	100 149	
311	312	2372	226137	150	3310							234.63	556	46144	8.854			.08545	⊙ 1100	090	0976	09274	649 644	1027 0892	425 434	
4002		033	033	120	120							561.06	186	186	.000			.00003	⊙ 200	250	0683	00219	620 617	4991 4691	100 127	
4003	4005	019	052	70	190							561.06	106	292	.000			.00005	⊙ 200	250	0683	00219	617 617	4691 4517	127 144	
4004		033	033	120	120							561.06	186	186	.000			.00003	⊙ 200	250	0683	00219	620 617	4991 4691	100 127	

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SEWAGE FLOW CALCULATION TABLE (NORTH DHAKA EAST)

No. of Sewrs	No. of Sewrs Downstream	Drainage Area		Length		Concentration Time	Storm Run-off					Sewage Flow				Other Sewage		Total Sewage Flow	Design Sewer							Remarks
		Area	Total	Length	Total		Rainfall per ha	Rein-off Coeffi.	Converted Area		Rainfall	Pop. Density	Population		Sewage Flow	per Sewer	Total		Diameter	Slope	Velocity	Flow	Elevation	Invert Level	Earth Cover	
									Area	Total			per Sewer	Total												
		ha	ha	m	m	min	m³/s·ha		ha	ha	m³/s	P/ha	Per	Person	m³/s	m³/s	m³/s	m³/s	mm	‰	m/s	m³/s	M	M	m	
4005	4013	008	093	30	220							561.06	45	522	.001			00010	⊙	200	250	0683	00219	617 610	4517 4442	144 145	
4008	4009	014	014	50	50							561.06	79	79	.000			00001	⊙	200	250	0683	00219	617 620	4961 4836	100 116	
4007		004	004	15	15							561.06	23	23	.000			00001	⊙	200	250	0683	00219	620 620	4991 4954	100 104	
4009	4010	006	024	20	70							561.06	34	135	.000			00003	⊙	200	250	0683	00219	620 620	4836 4786	116 121	
4006		011	011	40	40							561.06	62	62	.000			00001	⊙	200	250	0683	00219	620 620	4991 4891	100 110	
4010	4012	006	041	20	90							561.06	34	231	.000			00004	⊙	200	250	0683	00219	620 620	4786 4736	121 126	
4011		011	011	40	40							561.06	62	62	.000			00001	⊙	200	250	0683	00219	644 620	5091 4991	114 100	
4012		012	064	45	135							561.06	68	360	.000			00007	⊙	200	250	0683	00219	620 610	4736 4624	125 127	
4013		028	185	105	325							561.06	157	1038	.001			00019	⊙	200	250	0683	00219	610 644	4442 4181	145 205	
312	313	2064	228386	130	3440							235.95	487	046735	6.865			08655	⊙	1100	090	0976	09274	644 638	0892 0775	434 440	
4014	4020	038	038	150	150							561.06	214	214	.000			00004	⊙	200	250	0683	00219	614 578	4931 4556	100 102	

SEWAGE FLOW CALCULATION TABLE (NORTH DHAKA EAST)

No. of Sewrs	No. of Sewrs Downstream	Drainage Area		Length		Concentration Time	Storm Run-off					Sewage Flow				Other Sewage		Total Sewage Flow	Design Sewer							Remarks
		Area	Total	Length	Total		Rainfall per ha	Rain-off Coeffi.	Converted Area		Rainfall	Pop. Density	Population		Sewage Flow	per Sewer	Total		Diameter	Slope	Velocity	Flow	Elevation	Invert Level	Earth Cover	
									Area	Total			per Sewer	Total												
		ha	ha	m	m	min	m³/s·ha		ha	ha	m³/s	P/ha	Per	Person	m³/s	m³/s	m³/s	m³/s	mm	‰	m/s	m³/s	M	M	m	
4015	4017	007	007	30	30							561.06	40	40	.000			00001	⊙ 200	250	0683	00219	578 578	4571 4496	100 108	
4016		006	006	25	25							561.06	34	34	.000			00001	⊙ 200	250	0683	00219	578 578	4571 4509	100 106	
4017	4019	010	023	40	70							561.06	57	130	.000			00002	⊙ 200	250	0683	00219	578 578	4496 4396	108 118	
4018		005	005	20	20							561.06	29	29	.000			00001	⊙ 200	250	0683	00219	578 578	4571 4521	100 105	
4019		005	033	20	90							561.06	28	186	.000			00003	⊙ 200	250	0683	00219	578 578	4396 4346	118 123	
4020	4022	004	075	15	165							561.06	22	421	.000			00008	⊙ 200	250	0683	00219	578 610	4346 4309	123 158	
4021		005	005	20	20							561.06	29	29	.000			00001	⊙ 200	250	0683	00219	610 610	4391 4841	100 105	
4022	4030	007	087	30	195							561.06	40	489	.000			00009	⊙ 200	250	0683	00219	610 610	4309 4234	158 166	
4023	4025	013	013	50	50							561.06	73	73	.000			00001	⊙ 200	250	0683	00219	610 610	4391 4766	100 113	
4024		007	007	30	30							561.06	40	40	.000			00001	⊙ 200	250	0683	00219	610 610	4391 4816	100 108	

SEWAGE FLOW CALCULATION TABLE (NORTH DHAKA EAST)

No. of Sewrs	No. of Sewrs Downstream	Dmainage Area		Length		Concentration Time	Storm Run-off					Sewage Flow				Other Sewage		Total Sewage Flow	Design Sewer							Remarks
		Area	Total	Length	Total		Rainfall per ha	Rain-off Coeffi.	Converted Area		Rainfall	Pop. Density	Population		Sewage Flow	per Sewer	Total		Diameter	Slope	Velocity	Flow	Elevation	Invert Level	Earth Cover	
									Area	Total			per Sewer	Total												
		ha	ha	m	m	min	m³/s·ha		ha	ha	m³/s	P/ha	Per	Person	m³/s	m³/s	m³/s	m³/s	mm	‰	m/s	m³/s	M	M	m	
4025	4027	002	022	10	60							561.06	11	124	.000			00002	⊙	200	250	0683	00219	610 610	4766 4741	113 115	
4026		006	006	25	25							561.06	34	34	.000			00001	⊙	200	250	0683	00219	610 610	4891 4829	100 106	
4027	4029	007	035	30	90							561.06	39	197	.000			00004	⊙	200	250	0683	00219	610 610	4741 4566	115 123	
4028		005	005	20	20							561.06	29	29	.000			00001	⊙	200	250	0683	00219	610 610	4891 4841	100 105	
4029		014	054	55	145							561.06	78	303	.000			00006	⊙	200	250	0683	00219	610 610	4566 4528	123 136	
4030	4038	002	143	5	200							561.06	11	803	.001			00015	⊙	200	250	0683	00219	610 610	4234 4222	166 167	
4031	4035	020	020	80	80							561.06	113	113	.000			00002	⊙	200	250	0683	00219	610 610	4891 4691	100 120	
4032	4034	007	007	30	30							561.06	40	40	.000			00001	⊙	200	250	0683	00219	610 610	4891 4816	100 108	
4033		004	004	15	15							561.06	23	23	.000			00001	⊙	200	250	0683	00219	610 610	4891 4854	100 104	
4034		002	013	10	40							561.06	11	73	.000			00001	⊙	200	250	0683	00219	610 610	4816 4791	108 110	
4035	4037	010	043	40	120							561.06	56	242	.000			00004	⊙	200	250	0683	00219	610 610	4691 4591	120 130	

SEWAGE FLOW CALCULATION TABLE (NORTH DHAKA EAST)

No. of Sewrs	No. of Sewrs Downstream	Drainage Area		Length		Concentration Time	Storm Run-off					Sewage Flow				Other Sewage		Total Sewage Flow	Design Sewer							Remarks
		Area	Total	Length	Total		Rainfall per ha	Rain-off Coeffi.	Converted Area		Rainfall	Pop. Density	Population		Sewage Flow	per Sewer	Total		Diameter	Slope	Velocity	Flow	Elevation	Invert Level	Earth Cover	
									Area	Total			per Sewer	Total												
		ha	ha	m	m	min	m³/s·ha		ha	ha	m³/s	P/ha	Per	Person	m³/s	m³/s	m³/s	m³/s	mm	‰	m/s	m³/s	M	M	m	
4036		013	013	50	50							561.06	73	73	.000			00001	200	250	0683	00219	610 610	4891 4766	100 113	
4037		007	063	30	150							561.06	39	354	.000			00007	200	250	0683	00219	610 610	4591 4516	130 138	
4038	4040	006	212	25	225							561.06	34	1190	.002			00022	200	250	0683	00219	610 610	4222 4160	157 173	
4039		006	006	25	25							561.06	34	34	.000			00001	200	250	0683	00219	610 610	4891 4829	100 106	
4040	4042	002	220	5	230							561.06	11	1235	.002			00023	200	250	0683	00219	610 610	4160 4148	173 174	
4041		044	044	175	175							561.06	247	247	.000			00005	200	250	0683	00219	610 610	4891 4455	100 144	
4042	4044	002	266	5	235							561.06	11	1493	.002			00028	200	250	0683	00219	610 610	4148 4136	174 176	
4043		006	006	25	25							561.06	34	34	.000			00001	200	250	0683	00219	610 610	4891 4829	100 106	
4044		006	278	30	265							561.06	33	1560	.002			00029	200	250	0683	00219	610 638	4136 4061	176 211	
313	314	3160	231824	200	3640							234.39	740	647632	2.882			08821	1100	090	0976	09274	638 636	0775 0595	440 456	
4059	4063	033	033	85	85							561.06	186	186	.000			00003	200	250	0683	00219	599 599	4781 4569	100 121	

SEWAGE FLOW CALCULATION TABLE (NORTH DHAKA EAST)

No. of Sewrs	No. of Sewrs Downstream	Drainage Area		Length		Concentration Time	Storm Run-off					Sewage Flow				Other Sewage		Total Sewage Flow	Design Sewer							Remarks
		Area	Total	Length	Total		Rainfall per ha	Rain-off Coeffi.	Converted Area		Rainfall	Pop. Density	Population		Sewage Flow	per Sewer	Total		Diameter	Slope	Velocity	Flow	Elevation	Invert Level	Earth Cover	
									Area	Total			per Sewer	Total												
		ha	ha	m	m	min	m³/s·ha		ha	ha	m³/s	P/ha	Per	Person	m³/s	m³/s	m³/s	m³/s	mm	‰	m/s	m³/s	M	M	m	
4060	4062	016	016	40	40							561.06	90	90	.000			00002	⊙ 200	250	0683	00219	599 599	4781 4681	100 110	
4061		006	006	15	15							561.06	34	34	.000			00001	⊙ 200	250	0683	00219	599 599	4781 4744	100 104	
4062		008	030	20	60							561.06	45	169	.000			00003	⊙ 200	250	0683	00219	599 599	4681 4631	110 115	
4063	4065	012	075	30	115							561.06	67	421	.000			00008	⊙ 200	250	0683	00219	599 599	4569 4494	121 129	
4064		016	016	40	40							561.06	90	90	.000			00002	⊙ 200	250	0683	00219	599 599	4781 4681	100 110	
4065	4068	023	114	60	175							561.06	129	640	.001			00012	⊙ 200	250	0683	00219	599 599	4494 4344	129 144	
4066	4068	016	016	40	40							561.06	90	90	.000			00002	⊙ 200	250	0683	00219	599 599	4781 4681	100 110	
4067		006	006	15	15							561.06	34	34	.000			00001	⊙ 200	250	0683	00219	599 599	4781 4744	100 104	
4068		023	045	60	100							561.06	129	253	.000			00005	⊙ 200	250	0683	00219	599 599	4681 4631	110 125	
4069	4071	012	171	30	205							561.06	67	960	.001			00018	⊙ 200	250	0683	00219	599 599	4344 4269	144 151	

SEWAGE FLOW CALCULATION TABLE (NORTH DHAKA EAST)

No. of Sewrs	No. of Sewrs Downstream	Drainage Area		Length		Concentration Time	Storm Run-off					Sewage Flow				Other Sewage		Total Sewage Flow	Design Sewer							Remarks
		Area	Total	Length	Total		Rainfall per ha	Rain-off Coeffi.	Converted Area		Rainfall	Pop. Density	Population		Sewage Flow	per Sewer	Total		Diameter	Slope	Velocity	Flow	Elevation	Invert Level	Earth Cover	
									Area	Total			per Sewer	Total												
		ha	ha	m	m	min	m³/s·ha		ha	ha	m³/s	P/ha	Per	Person	m³/s	m³/s	m³/s	m³/s	mm	‰	m/s	m³/s	M	M	m	
4070		031	031	80	80							561.06	174	174	.000			00003	⊙ 200	250	0683	00219	599 599	4781 4581	100 120	
4071	4073	014	216	35	240							561.06	78	1212	.002			00022	⊙ 200	250	0683	00219	599 630	4269 4182	151 191	
4072		010	010	25	25							561.06	57	57	.000			00001	⊙ 200	250	0683	00219	636 630	5151 5089	100 100	
4073	4074	022	248	55	295							561.06	124	1392	.002			00026	⊙ 200	250	0683	00219	630 559	4182 4044	191 134	
4045	4054	047	047	120	120							561.06	264	264	.000			00005	⊙ 200	250	0683	00219	552 552	4311 4011	100 130	
4046	4048	006	006	15	15							561.06	34	34	.000			00001	⊙ 200	250	0683	00219	552 552	4311 4274	100 104	
4047		006	006	15	15							561.06	34	34	.000			00001	⊙ 200	250	0683	00219	552 552	4311 4274	100 104	
4048		002	014	5	20							561.06	11	79	.000			00001	⊙ 200	250	0683	00219	552 552	4274 4262	104 105	
4049	4051	008	022	20	40							561.06	45	124	.000			00002	⊙ 200	250	0683	00219	552 552	4262 4212	105 110	
4050		004	004	10	10							561.06	23	23	.000			00001	⊙ 200	250	0683	00219	552 552	4311 4286	100 103	
4051	4053	008	034	20	60							561.06	45	191	.000			00004	⊙ 200	250	0683	00219	552 552	4212 4162	110 115	

SEWAGE FLOW CALCULATION TABLE (NORTH DHAKA EAST)

No. of Sewrs	No. of Sewrs Downstream	Drainage Area		Length		Concentration Time	Storm Run-off					Sewage Flow				Other Sewage		Total Sewage Flow	Design Sewer							Remarks
		Area	Total	Length	Total		Rainfall per ha	Rain-off Coefficient	Converted Area		Rainfall	Pop. Density	Population		Sewage Flow	per Sewer	Total		Diameter	Slope	Velocity	Flow	Elevation	Invert Level	Earth Cover	
									Area	Total			per Sewer	Total												
		ha	ha	m	m	min	m³/s·ha		ha	ha	m³/s	P/ha	Per	Person	m³/s	m³/s	m³/s	m³/s	mm	‰	m/s	m³/s	M	M	m	
4052		016	016	40	40							561.06	90	90	.000			00002	⊙	200	250	0683	00219	552	4311	100
																								552	4211	110
4053		008	058	20	80							561.06	45	326	.000			00006	⊙	200	250	0683	00219	552	4162	115
																								552	4112	120
4054	4058	039	144	100	220							561.06	218	808	.001			00015	⊙	200	250	0683	00219	552	4011	130
																								559	3761	162
4055	4057	030	030	75	75							561.06	169	169	.000			00003	⊙	200	250	0683	00219	559	4381	100
																								559	4193	119
4056		022	022	55	55							561.06	124	124	.000			00002	⊙	200	250	0683	00219	559	4381	100
																								559	4243	114
4057		016	068	40	115							561.06	90	382	.000			00007	⊙	200	250	0683	00219	559	4193	119
																								559	4093	129
4058		004	216	10	230							561.06	22	1212	.002			00022	⊙	200	250	0683	00219	559	3761	162
																								559	3736	165
4074		015	479	45	340							561.06	84	2688	.005			00050	⊙	200	250	0683	00219	559	3736	165
																								639	3624	253
314	315	3656	235959	230	3870							236.30	863	94876	49.903			09031	⊙	1100	090	0976	09274	636	0595	456
																								641	0389	431
4075		068	068	115	115							561.06	382	382	.000			00007	⊙	200	250	0683	00219	517	3961	100
																								641	3673	253
315	316	1419	237446	90	3960							233.71	331	64913	47.909			09099	⊙	1100	090	0976	09274	641	0389	481
																								644	0308	492

SEWAGE FLOW CALCULATION TABLE (NORTH DHAKA EAST)

No. of Sewrs	No. of Sewrs Downstream	Drainage Area		Length		Concentration Time	Storm Run-off					Sewage Flow				Other Sewage		Total Sewage Flow	Design Sewer							Remarks
		Area	Total	Length	Total		Rainfall per ha	Rain-off Coeffi.	Converted Area		Rainfall	Pop. Density	Population		Sewage Flow	per Sewer	Total		Diameter	Slope	Velocity	Flow	Elevation	Invert Level	Earth Cover	
									Area	Total			per Sewer	Total												
		ha	ha	m	m	min	m³/s·ha		ha	ha	m³/s	P/ha	Per	Person	m³/s	m³/s	m³/s	m³/s	mm	‰	m/s	m³/s	M	M	m	
4076	4078	076	076	115	115							561.06	427	427	.000			00008	⊙ 200	250	0683	00219	461 517	3401 3113	100 185	
4077		043	043	65	65							561.06	242	242	.000			00004	⊙ 200	250	0683	00219	517 517	3861 3799	100 116	
4078	4080	017	136	25	140							561.06	96	764	.001			00014	⊙ 200	250	0683	00219	517 517	3113 3051	185 191	
4079		047	047	70	70							561.06	264	264	.000			00005	⊙ 200	250	0683	00219	517 517	3861 3787	100 117	
4080	4084	030	213	45	185							561.06	169	1196	.002			00022	⊙ 200	250	0683	00219	517 517	3051 2939	191 202	
4082	4083	017	017	25	25							561.06	96	96	.000			00002	⊙ 200	250	0683	00219	517 517	3861 3899	100 106	
4081		010	010	15	15							561.06	57	57	.000			00001	⊙ 200	250	0683	00219	517 517	3861 3924	100 104	
4083		060	087	90	115							561.06	337	489	.000			00009	⊙ 200	250	0683	00219	517 517	3899 3675	106 129	
4084		106	406	160	345							561.06	594	2278	.004			00042	⊙ 200	250	0683	00219	517 644	2939 2539	202 369	
316	317	949	238801	60	4020							234.63	22264	49585	1.918			09182	⊙ 1100	090	0976	09274	644 640	0308 0254	492 494	
4085		052	052	110	110							561.06	292	292	.000			00005	⊙ 200	250	0683	00219	517 640	3861 3686	100 251	

日本上下水道設計株式会社

SEWAGE FLOW CALCULATION TABLE (NORTH DHAKA EAST)

No. of Sewrs	No. of Sewrs Downstream	Drainage Area		Length		Concentration Time	Storm Run-off					Sewage Flow				Other Sewage		Total Sewage Flow	Design Sewer							Remarks
		Area	Total	Length	Total		Rainfall per ha	Rain-off Coeffi	Converted Area		Rainfall	Pop. Density	Population		Sewage Flow	per Sewer	Total		Diameter	Slope	Velocity	Flow	Elevation	Invert Level	Earth Cover	
									Area	Total			per Sewer	Total												
		ha	ha	m	m	min	m³/s·ha		ha	ha	m³/s	P/ha	Per	Person	m³/s	m³/s	m³/s	m³/s	mm	‰	m/s	m³/s	M	M	m	
317	318	1104	239957	70	4090							233.8	4258	249872	5.923			09236	1100	090	0976	09274	640 635	0254 0191	494 495	
4086	4088	045	045	90	90							561.06	253	253	.000			00005	200	250	0683	00219	619 619	4981 4757	100 122	
4087		030	030	60	60							561.06	169	169	.000			00003	200	250	0683	00219	619 619	4981 4831	100 115	
4088		028	103	55	145							561.06	157	578	.001			00011	200	250	0683	00219	619 635	4757 4619	122 152	
318	319	4624	244684	290	4380							237.36	109	55102	780.94			09450	1200	090	1034	11696	635 641	0091 -0171	494 526	
4120	4121	022	022	60	60							561.06	124	124	.000			00002	200	250	0683	00219	561 561	4401 4251	100 115	
4119		007	007	20	20							561.06	40	40	.000			00001	200	250	0683	00219	561 561	4401 4351	100 105	
4121	4123	013	042	35	95							561.06	73	236	.000			00004	200	250	0683	00219	561 561	4251 4164	115 124	
4122		018	018	50	50							561.06	101	101	.000			00002	200	250	0683	00219	561 561	4401 4276	100 113	
4123	4128	013	073	35	130							561.06	73	410	.000			00008	200	250	0683	00219	561 561	4164 4077	124 132	

SEWAGE FLOW CALCULATION TABLE (NORTH DHAKA EAST)

No. of Sewrs	No. of Sewrs Downstream	Drainage Area		Length		Concentration Time	Storm Run-off					Sewage Flow				Other Sewage		Total Sewage Flow	Design Sewer							Remarks
		Area	Total	Length	Total		Rainfall per ha	Rain-off Coeffi.	Converted Area		Rainfall	Pop. Density	Population		Sewage Flow	per Sewer	Total		Diameter	Slope	Velocity	Flow	Elevation	Invert Level	Earth Cover	
									Area	Total			per Sewer	Total												
		ha	ha	m	m	min	m³/s·ha		ha	ha	m³/s	P/ha	Per	Person	m³/s	m³/s	m³/s	m³/s	mm	‰	m/s	m³/s	M	M	m	
4125	4127	020	020	55	55							561.06	113	113	.000			00002	⊙ 200	250	0683	00219	584 584	4631 4493	100 114	
4126		014	014	40	40							561.06	79	79	.000			00001	⊙ 200	250	0683	00219	584 584	4631 4531	100 110	
4127	4128	018	052	50	105							561.06	101	292	.000			00005	⊙ 200	250	0683	00219	584 551	4493 4368	114 103	
4124		017	017	45	45							561.06	96	96	.000			00002	⊙ 200	250	0683	00219	561 561	4401 4289	100 111	
4128	4132	044	186	120	250							561.06	247	1044	.001			00019	⊙ 200	250	0683	00219	561 545	4077 3777	132 146	
4129	4131	044	044	120	120							561.06	247	247	.000			00005	⊙ 200	250	0683	00219	561 538	4401 4101	100 137	
4130		011	011	30	30							561.06	62	62	.000			00001	⊙ 200	250	0683	00219	538 538	4171 4096	100 108	
4131		024	079	65	185							561.06	135	444	.000			00008	⊙ 200	250	0683	00219	538 545	4096 3934	108 131	
4132	4138	004	269	10	260							561.06	23	1510	.002			00028	⊙ 200	250	0683	00219	545 545	3777 3752	146 149	
4134	4135	018	018	50	50							561.06	101	101	.000			00002	⊙ 200	250	0683	00219	584 584	4631 4506	100 113	

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SEWAGE FLOW CALCULATION TABLE (NORTH DHAKA EAST)

No. of Sewrs	No. of Sewrs Downstream	Drainage Area		Length		Concentration Time	Storm Run-off					Sewage Flow				Other Sewage		Total Sewage Flow	Design Sewer							Remarks
		Area	Total	Length	Total		Rainfall per ha	Rain-off Coeffi.	Converted Area		Rainfall	Pop. Density	Population		Sewage Flow	per Sewer	Total		Diameter	Slope	Velocity	Flow	Elevation	Invert Level	Earth Cover	
									Area	Total			per Sewer	Total												
		ha	ha	m	m	min	m³/s·ha		ha	ha	m³/s	P/ha	Per	Person	m³/s	m³/s	m³/s	m³/s	mm	‰	m/s	m³/s	M	M	m	
4133		007	007	20	20							561.06	40	40	.000			00001	⊙ 200	250	0683	00219	584 584	4581 4581	100 105	
4135	4137	004	029	10	60							561.06	22	163	.000			00003	⊙ 200	250	0683	00219	584 584	4506 4481	125 115	
4136		006	006	15	15							561.06	34	34	.000			00001	⊙ 200	250	0683	00219	584 584	4581 4594	100 104	
4137		061	096	165	225							561.06	342	539	.001			00010	⊙ 200	250	0683	00219	584 545	4481 4069	115 117	
4138	4140	018	383	50	310							561.06	101	2149	.004			00040	⊙ 200	250	0683	00219	545 545	3752 3627	149 161	
4139		022	022	60	60							561.06	124	124	.000			00002	⊙ 200	250	0683	00219	538 545	4171 4021	100 122	
4140	4146	014	419	40	350							561.06	78	2351	.004			00044	⊙ 200	250	0683	00219	545 545	3627 3527	161 171	
4141	4143	031	031	85	85							561.06	174	174	.000			00003	⊙ 200	250	0683	00219	548 538	4271 4059	100 111	
4142		013	013	35	35							561.06	73	73	.000			00001	⊙ 200	250	0683	00219	548 538	4258 4171	101 100	
4143	4145	030	074	80	165							561.06	169	416	.000			00008	⊙ 200	250	0683	00219	539 538	4059 3859	111 131	
4144		034	034	90	90							561.06	191	191	.000			00004	⊙ 200	250	0683	00219	552 538	4211 4087	100 108	

SEWAGE FLOW CALCULATION TABLE (NORTH DHAKA EAST)

No. of Sewrs	No. of Sewrs Downstream	Drainage Area		Length		Concentration Time	Storm Run-off					Sewage Flow				Other Sewage		Total Sewage Flow	Design Sewer							Remarks
		Area	Total	Length	Total		Rainfall per ha	Rain-off Coeffi.	Converted Area		Rainfall	Pop. Density	Population		Sewage Flow	per Sewer	Total		Diameter	Slope	Velocity	Flow	Elevation	Invert Level	Earth Cover	
									Area	Total			per Sewer	Total												
		ha	ha	m	m	min	m³/s·ha		ha	ha	m³/s	P/ha	Per	Person	m³/s	m³/s	m³/s	m³/s	mm	‰	m/s	m³/s	M	M	m	
4145		034	142	90	255							561.06	191	797	.001			00015	⊙ 200	250	0683	00219	538 545	3859 3535	131 151	
4146	4148	030	591	80	430							561.06	168	3316	.006			00061	⊙ 200	250	0683	00219	545 545	3527 3327	171 191	
4147		059	059	160	160							561.06	332	332	.000			00006	⊙ 200	250	0683	00219	545 545	4241 3841	100 140	
4148	4156	043	693	115	545							561.06	242	3889	.007			00072	⊙ 200	250	0683	00219	545 545	3327 3039	191 220	
4150	4151	013	013	35	35							561.06	73	73	.000			00001	⊙ 200	250	0683	00219	552 552	4311 4224	100 109	
4149		011	011	30	30							561.06	62	62	.000			00001	⊙ 200	250	0683	00219	552 552	4311 4236	100 108	
4151	4153	014	038	40	75							561.06	79	214	.000			00004	⊙ 200	250	0683	00219	552 552	4224 4124	109 119	
4152		018	018	50	50							561.06	101	101	.000			00002	⊙ 200	250	0683	00219	552 552	4311 4186	100 113	
4153	4155	010	066	25	100							561.06	56	371	.000			00007	⊙ 200	250	0683	00219	552 552	4124 4062	119 125	
4154		022	022	60	60							561.06	124	124	.000			00002	⊙ 200	250	0683	00219	552 552	4311 4161	100 115	
4155		026	114	70	170							561.06	146	640	.001			00012	⊙ 200	250	0683	00219	552 545	4062 3888	125 135	

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