

Table 14.5.1.33 Population of Hazaribag Trunk Main (Year 1991)

Zone	Hazaribag LS			New Market LS			Trunk Main No.1			Moghbar LS			Total
	Established Urban		Sub-Total	Established Urban		Sub-Total	Established Urban		Sub-Total	Established Urban		Sub-Total	
	Urban Fringe	Security Zone		Urban Fringe	Security Zone		Urban Fringe	Security Zone		Urban Fringe	Security Zone		
1	SPZ Area (ha)	858	0	858	0	858	0	858	0	858	0	858	3,432
	Service Area (ha)	0	0	0	5	5	0	88	0	88	0	84	177
	Density (person/ha)	287	0	287	0	287	0	287	0	287	0	287	287
	Population (person)	0	0	0	1,435	1,435	0	25,256	24,108	0	24,108	0	24,108
2	SPZ Area (ha)	1,288	0	1,288	0	1,288	0	1,288	0	1,288	0	1,288	5,152
	Service Area (ha)	0	0	0	475	475	0	297	0	297	0	20	495
	Density (person/ha)	297	0	297	0	297	0	1,121	0	1,121	0	5,940	147,015
	Population (person)	0	0	0	141,075	141,075	0	1,121	1,121	0	1,121	0	1,121
3	SPZ Area (ha)	1,121	0	1,121	0	1,121	0	22	0	22	0	0	22
	Service Area (ha)	0	0	0	791	791	0	791	0	791	0	0	791
	Density (person/ha)	791	0	791	0	791	0	17,402	0	17,402	0	0	17,402
	Population (person)	0	0	0	1,059	1,059	0	1,059	1,059	0	1,059	0	1,059
4	SPZ Area (ha)	1,059	0	1,059	0	1,059	0	103	0	103	0	0	245
	Service Area (ha)	142	0	142	0	142	0	532	0	532	0	0	532
	Density (person/ha)	532	0	532	0	532	0	54,796	0	54,796	0	0	130,340
	Population (person)	75,544	0	75,544	54,796	1,536	0	1,536	1,536	0	1,536	0	1,536
7	SPZ Area (ha)	1,536	0	1,536	0	1,536	0	0	0	0	0	43	43
	Service Area (ha)	0	0	0	536	536	0	536	0	536	0	536	536
	Density (person/ha)	536	0	536	0	536	0	23,048	0	23,048	0	23,048	23,048
	Population (person)	0	0	0	5,862	5,862	0	5,862	5,862	0	5,862	0	5,862
Sub-total	SPZ Area (ha)	5,862	0	5,862	0	5,862	0	605	88	693	0	147	982
	Service Area (ha)	142	0	142	605	747	0	355	287	642	0	361	375
	Density (person/ha)	532	0	532	355	887	0	214,708	25,256	240,964	0	53,096	368,604
	Population (person)	75,544	0	75,544	214,708	290,252	68	732	800	1,536	68	800	3,200
6	SPZ Area (ha)	732	68	800	732	800	0	0	0	0	0	0	0
	Service Area (ha)	0	0	0	0	0	0	235	53	288	0	235	0
	Density (person/ha)	235	53	288	0	235	53	0	0	0	0	0	0
	Population (person)	0	0	0	0	0	0	1,328	855	1,328	473	855	5,312
13-1	SPZ Area (ha)	473	855	1,328	473	855	0	0	0	0	0	0	0
	Service Area (ha)	0	0	0	0	0	0	131	53	184	0	131	0
	Density (person/ha)	131	53	184	0	131	53	0	0	0	0	0	0
	Population (person)	0	0	0	0	0	0	2,128	1,205	3,333	923	2,128	8,512
Sub-total	SPZ Area (ha)	1,205	923	2,128	1,205	923	0	0	0	0	0	0	0
	Service Area (ha)	0	0	0	0	0	0	7,067	7,067	0	0	0	0
	Density (person/ha)	0	0	0	0	0	0	7,990	923	8,913	0	7,990	31,960
	Population (person)	7,067	923	7,990	7,067	8,913	0	605	88	693	0	147	982
Total	SPZ Area (ha)	142	0	142	605	747	0	355	287	642	0	361	375
	Service Area (ha)	532	0	532	532	1,064	0	532	287	819	0	361	375
	Density (person/ha)	75,544	0	75,544	214,708	290,252	68	732	800	1,536	68	800	3,200
	Population (person)	75,544	0	75,544	214,708	290,252	68	732	800	1,536	68	800	3,200

Table 14.S.1.33 Population of Hazaribag Trunk Main (Year 1991) (Continued)

Zone	Moghbar Main			Trunk Main No.2			P&T LS			P&T Main			Trunk Main No.3			Grand Total						
	Established Urban Fringe	Urban Security Zone	Sub-Total	Established Urban Fringe	Urban Security Zone	Sub-Total	Established Urban Fringe	Urban Security Zone	Sub-Total	Established Urban Fringe	Urban Security Zone	Sub-Total	Urban Fringe	Urban Security Zone	Sub-Total							
																	SPZ Area (ha)	Service Area (ha)	Density (person/ha)	Population (person)	SPZ Area (ha)	Service Area (ha)
1	858	0	858	858	0	858	858	0	858	858	0	858	858	0	858	858	0	858	858	0	858	7,722
	70	0	70	122	0	122	172	0	172	66	0	66	144	0	144	144	0	144	144	0	144	751
	287	0	287	287	0	287	287	0	287	287	0	287	287	0	287	287	0	287	287	0	287	287
	20,090	0	20,090	35,014	0	35,014	49,364	0	49,364	18,942	0	18,942	41,328	0	41,328	41,328	0	41,328	41,328	0	41,328	215,537
2	1,288	0	1,288	1,288	0	1,288	1,288	0	1,288	1,288	0	1,288	1,288	0	1,288	1,288	0	1,288	1,288	0	1,288	11,592
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	495
	297	0	297	297	0	297	297	0	297	297	0	297	297	0	297	297	0	297	297	0	297	297
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	147,015
3	1,121	0	1,121	1,121	0	1,121	1,121	0	1,121	1,121	0	1,121	1,121	0	1,121	1,121	0	1,121	1,121	0	1,121	10,089
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	89
	791	0	791	791	0	791	791	0	791	791	0	791	791	0	791	791	0	791	791	0	791	791
	1,059	0	1,059	1,059	0	1,059	1,059	0	1,059	1,059	0	1,059	1,059	0	1,059	1,059	0	1,059	1,059	0	1,059	70,531
4	532	0	532	532	0	532	532	0	532	532	0	532	532	0	532	532	0	532	532	0	532	245
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	532
	1,536	0	1,536	1,536	0	1,536	1,536	0	1,536	1,536	0	1,536	1,536	0	1,536	1,536	0	1,536	1,536	0	1,536	130,340
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	228
7	536	0	536	536	0	536	536	0	536	536	0	536	536	0	536	536	0	536	536	0	536	536
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	536
	95,944	0	95,944	95,944	0	95,944	95,944	0	95,944	95,944	0	95,944	95,944	0	95,944	95,944	0	95,944	95,944	0	95,944	122,208
	5,862	0	5,862	5,862	0	5,862	5,862	0	5,862	5,862	0	5,862	5,862	0	5,862	5,862	0	5,862	5,862	0	5,862	52,758
Sub-total	70	0	70	122	0	122	351	0	351	72	0	72	211	0	211	211	0	211	211	0	211	1,808
	287	0	287	287	0	287	414	0	414	308	0	308	447	0	447	447	0	447	447	0	447	379
	20,090	0	20,090	35,014	0	35,014	145,308	0	145,308	22,158	0	22,158	94,325	0	94,325	94,325	0	94,325	94,325	0	94,325	685,499
	732	68	800	732	68	800	800	68	868	732	68	800	800	68	868	800	68	868	800	68	868	7,200
6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	235	53	288	235	53	288	235	53	288	235	53	288	235	53	288	235	53	288	235	53	288	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	473	855	1,328	473	855	1,328	1,328	855	1,328	473	855	1,328	473	855	1,328	473	855	1,328	473	855	1,328	11,952
13-1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	131	53	184	131	53	184	131	53	184	131	53	184	131	53	184	131	53	184	131	53	184	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1,205	923	2,128	1,205	923	2,128	2,128	923	2,128	1,205	923	2,128	1,205	923	2,128	1,205	923	2,128	1,205	923	2,128	19,152
Sub-total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7,067	923	7,990	7,067	923	7,990	7,990	923	7,990	7,067	923	7,990	7,067	923	7,990	7,067	923	7,990	7,067	923	7,990	71,910
	70	0	70	122	0	122	351	0	351	72	0	72	211	0	211	211	0	211	211	0	211	1,808
	287	0	287	287	0	287	414	0	414	308	0	308	447	0	447	447	0	447	447	0	447	379
Total	20,090	0	20,090	35,014	0	35,014	145,308	0	145,308	22,158	0	22,158	94,325	0	94,325	94,325	0	94,325	94,325	0	94,325	685,499

Table 14.5.1.34 Population of Hazaribag Trunk Main (Year 1997)

Zone	Hazaribag LS			New Market LS			Trunk Main No.1			Moghbar LS			Total
	Established Urban Fringe	Security Zone	Sub-Total	Established Urban Fringe	Security Zone	Sub-Total	Established Urban Fringe	Security Zone	Sub-Total	Established Urban Fringe	Security Zone	Sub-Total	
1	SPZ Area (ha)	0	858	858	0	858	858	0	858	858	0	858	3,432
	Service Area (ha)	0	0	5	0	5	88	0	88	84	0	84	177
	Density (person/ha)	360	0	360	0	360	360	0	360	360	0	360	360
	Population (person)	0	0	1,800	0	1,800	31,680	0	31,680	30,240	0	30,240	63,720
2	SPZ Area (ha)	1,288	0	1,288	0	1,288	1,288	0	1,288	1,288	0	1,288	5,152
	Service Area (ha)	0	0	475	0	475	377	0	377	20	0	20	495
	Density (person/ha)	377	0	377	0	377	377	0	377	377	0	377	377
	Population (person)	0	0	179,075	0	179,075	0	0	7,540	7,540	0	7,540	186,615
3	SPZ Area (ha)	1,121	0	1,121	0	1,121	1,121	0	1,121	1,121	0	1,121	4,484
	Service Area (ha)	0	0	22	0	22	866	0	866	0	0	0	22
	Density (person/ha)	866	0	866	0	866	866	0	866	866	0	866	866
	Population (person)	0	0	19,052	0	19,052	0	0	0	0	0	0	19,052
4	SPZ Area (ha)	1,059	0	1,059	0	1,059	1,059	0	1,059	1,059	0	1,059	4,236
	Service Area (ha)	142	0	142	0	142	103	0	103	0	0	0	245
	Density (person/ha)	680	0	680	0	680	680	0	680	680	0	680	680
	Population (person)	96,560	0	96,560	0	70,040	70,040	0	70,040	0	0	0	166,600
7	SPZ Area (ha)	1,536	0	1,536	0	1,536	1,536	0	1,536	1,536	0	1,536	6,144
	Service Area (ha)	0	0	0	0	0	691	0	691	43	0	43	45
	Density (person/ha)	691	0	691	0	691	691	0	691	691	0	691	691
	Population (person)	0	0	0	0	0	0	0	29,713	29,713	0	29,713	29,713
Sub-total	SPZ Area (ha)	5,862	0	5,862	0	5,862	5,862	0	5,862	5,862	0	5,862	23,448
	Service Area (ha)	142	0	142	0	142	605	0	605	88	0	88	982
	Density (person/ha)	680	0	680	0	446	360	0	360	459	0	459	474
	Population (person)	96,560	0	269,967	0	269,967	31,680	0	31,680	67,493	0	67,493	465,700
6	SPZ Area (ha)	732	68	800	68	800	732	68	800	732	68	800	3,200
	Service Area (ha)	0	0	0	0	0	0	0	0	0	0	0	0
	Density (person/ha)	348	57	348	57	348	348	57	348	348	57	348	348
	Population (person)	0	0	0	0	0	0	0	0	0	0	0	0
13-1	SPZ Area (ha)	473	855	1,328	473	855	1,328	473	855	1,328	473	855	5,312
	Service Area (ha)	0	0	0	0	0	0	0	0	0	0	0	0
	Density (person/ha)	140	57	140	57	140	140	57	140	140	57	140	140
	Population (person)	0	0	0	0	0	0	0	0	0	0	0	0
Sub-total	SPZ Area (ha)	1,205	923	2,128	923	2,128	1,205	923	2,128	1,205	923	2,128	8,512
	Service Area (ha)	0	0	0	0	0	0	0	0	0	0	0	0
	Density (person/ha)	0	0	0	0	0	0	0	0	0	0	0	0
	Population (person)	7,067	923	7,990	7,067	923	7,990	7,067	923	7,990	7,067	923	31,960
Total	SPZ Area (ha)	142	0	142	0	142	605	0	605	88	0	88	982
	Service Area (ha)	680	0	680	446	446	360	0	360	459	0	459	474
	Density (person/ha)	96,560	0	96,560	269,967	269,967	31,680	0	31,680	67,493	0	67,493	465,700
	Population (person)	0	0	0	0	0	0	0	0	0	0	0	0

Table 14.5.1.35 Population of Hazaribag Trunk Main (Year 2005)

Zone	Hazaribag LS						New Market LS						Trunk Main No.1						Moghbar LS					
	Established Urban		Sub-Total	Established Urban		Sub-Total	Established Urban		Sub-Total	Established Urban		Sub-Total	Established Urban		Sub-Total	Established Urban		Sub-Total	Established Urban		Sub-Total			
	Urban Fringe	Security Zone		Urban Fringe	Security Zone		Urban Fringe	Security Zone		Urban Fringe	Security Zone		Urban Fringe	Security Zone		Urban Fringe	Security Zone		Urban Fringe	Security Zone		Urban Fringe	Security Zone	Urban Fringe
1	SPZ Area (ha)	858	0	858	0	858	0	858	0	858	0	858	0	858	0	858	0	858	0	858	0			
	Service Area (ha)	0	0	0	0	5	0	5	0	88	0	88	0	88	0	84	0	84	0	84	0			
	Density (person/ha)	458	0	0	0	458	0	458	0	458	0	458	0	458	0	458	0	458	0	458	0			
	Population (person)	0	0	0	0	2,290	0	2,290	0	40,304	0	40,304	0	38,472	0	38,472	0	38,472	0	38,472	0			
2	SPZ Area (ha)	1,288	0	1,288	0	1,288	0	1,288	0	1,288	0	1,288	0	1,288	0	1,288	0	1,288	0	1,288	0			
	Service Area (ha)	0	0	0	0	475	0	475	0	484	0	484	0	484	0	20	0	20	0	20	0			
	Density (person/ha)	484	0	0	0	484	0	484	0	229,900	0	229,900	0	9,680	0	9,680	0	9,680	0	9,680	0			
	Population (person)	0	0	0	0	229,900	0	229,900	0	1,121	0	1,121	0	1,121	0	1,121	0	1,121	0	1,121	0			
3	SPZ Area (ha)	1,121	0	1,121	0	1,121	0	1,121	0	1,121	0	1,121	0	1,121	0	1,121	0	1,121	0	1,121	0			
	Service Area (ha)	0	0	0	0	22	0	22	0	965	0	965	0	965	0	0	0	0	0	0	0			
	Density (person/ha)	965	0	0	0	965	0	965	0	21,230	0	21,230	0	1,059	0	1,059	0	1,059	0	1,059	0			
	Population (person)	0	0	0	0	21,230	0	21,230	0	1,059	0	1,059	0	1,059	0	1,059	0	1,059	0	1,059	0			
4'	SPZ Area (ha)	1,059	0	1,059	0	1,059	0	1,059	0	1,059	0	1,059	0	1,059	0	1,059	0	1,059	0	1,059	0			
	Service Area (ha)	142	0	142	0	103	0	103	0	876	0	876	0	876	0	43	0	43	0	43	0			
	Density (person/ha)	876	0	876	0	876	0	876	0	90,228	0	90,228	0	1,536	0	1,536	0	1,536	0	1,536	0			
	Population (person)	124,392	0	124,392	0	1,536	0	1,536	0	897	0	897	0	897	0	897	0	897	0	897	0			
7	SPZ Area (ha)	1,536	0	1,536	0	1,536	0	1,536	0	1,536	0	1,536	0	1,536	0	1,536	0	1,536	0	1,536	0			
	Service Area (ha)	0	0	0	0	0	0	0	0	5,862	0	5,862	0	5,862	0	5,862	0	5,862	0	5,862	0			
	Density (person/ha)	897	0	897	0	897	0	897	0	38,571	0	38,571	0	38,571	0	38,571	0	38,571	0	38,571	0			
	Population (person)	0	0	0	0	0	0	0	0	5,862	0	5,862	0	5,862	0	5,862	0	5,862	0	5,862	0			
Sub-total	SPZ Area (ha)	5,862	0	5,862	0	5,862	0	5,862	0	5,862	0	5,862	0	5,862	0	5,862	0	5,862	0	5,862	0			
	Service Area (ha)	142	0	142	0	605	0	605	0	88	0	88	0	147	0	147	0	147	0	147	0			
	Density (person/ha)	876	0	876	0	568	0	568	0	458	0	458	0	590	0	590	0	590	0	590	0			
	Population (person)	124,392	0	124,392	0	343,648	0	343,648	0	40,304	0	40,304	0	86,723	0	86,723	0	86,723	0	86,723	0			
6	SPZ Area (ha)	732	68	800	68	732	68	800	68	732	68	800	68	732	68	800	68	800	68	800	68			
	Service Area (ha)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
	Density (person/ha)	500	64	500	64	500	64	500	64	500	64	500	64	500	64	500	64	500	64	500	64			
	Population (person)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
13-1	SPZ Area (ha)	473	855	1,328	855	473	855	1,328	855	473	855	1,328	855	473	855	1,328	855	473	855	1,328	855			
	Service Area (ha)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
	Density (person/ha)	150	64	150	64	150	64	150	64	150	64	150	64	150	64	150	64	150	64	150	64			
	Population (person)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Sub-total	SPZ Area (ha)	1,205	923	2,128	923	1,205	923	2,128	923	1,205	923	2,128	923	1,205	923	2,128	923	1,205	923	2,128	923			
	Service Area (ha)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
	Density (person/ha)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
	Population (person)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Total	SPZ Area (ha)	7,067	923	7,990	923	7,067	923	7,990	923	7,067	923	7,990	923	7,067	923	7,990	923	7,067	923	7,990	923			
	Service Area (ha)	142	0	142	0	605	0	605	0	88	0	88	0	147	0	147	0	147	0	147	0			
	Density (person/ha)	876	0	876	0	568	0	568	0	458	0	458	0	590	0	590	0	590	0	590	0			
	Population (person)	124,392	0	124,392	0	343,648	0	343,648	0	40,304	0	40,304	0	86,723	0	86,723	0	86,723	0	86,723	0			

Table 14.5.1.36 Population of Hazaribag Trunk Main (Year 2010)

Zone	Hazaribag LS				New Market LS				Trunk Main No.1				Moghbar LS			
	Established Urban		Sub-Total	Security Zone	Established Urban		Sub-Total	Security Zone	Established Urban		Sub-Total	Security Zone	Established Urban		Sub-Total	Security Zone
	Urban Fringe	Security Zone			Urban Fringe	Security Zone			Urban Fringe	Security Zone			Urban Fringe	Security Zone		
1	SPZ Area (ha)	858	0	858	858	0	858	858	0	858	858	0	858	858	0	858
	Service Area (ha)	0	0	0	5	0	5	88	0	88	84	0	84	84	0	177
	Density (person/ha)	474	0	474	474	0	474	474	0	474	474	0	474	474	0	474
	Population (person)	0	0	0	2,370	0	2,370	41,712	0	41,712	39,816	0	39,816	39,816	0	85,898
2	SPZ Area (ha)	1,288	0	1,288	1,288	0	1,288	1,288	0	1,288	1,288	0	1,288	1,288	0	1,288
	Service Area (ha)	0	0	0	475	0	475	0	0	20	0	0	20	20	0	495
	Density (person/ha)	504	0	504	504	0	504	504	0	504	504	0	504	504	0	504
	Population (person)	0	0	0	239,400	0	239,400	10,080	0	10,080	10,080	0	10,080	10,080	0	249,480
3	SPZ Area (ha)	1,121	0	1,121	1,121	0	1,121	1,121	0	1,121	1,121	0	1,121	1,121	0	1,121
	Service Area (ha)	0	0	0	22	0	22	0	0	0	0	0	0	0	0	22
	Density (person/ha)	981	0	981	981	0	981	981	0	981	981	0	981	981	0	981
	Population (person)	0	0	0	21,582	0	21,582	0	0	0	0	0	0	0	0	21,582
4	SPZ Area (ha)	1,059	0	1,059	1,059	0	1,059	1,059	0	1,059	1,059	0	1,059	1,059	0	1,059
	Service Area (ha)	142	0	142	103	0	103	0	0	0	0	0	0	0	0	245
	Density (person/ha)	929	0	929	929	0	929	929	0	929	929	0	929	929	0	929
	Population (person)	131,918	0	131,918	95,687	0	95,687	0	0	0	0	0	0	0	0	227,605
7	SPZ Area (ha)	1,536	0	1,536	1,536	0	1,536	1,536	0	1,536	1,536	0	1,536	1,536	0	1,536
	Service Area (ha)	0	0	0	0	0	0	0	0	43	0	0	43	43	0	43
	Density (person/ha)	949	0	949	949	0	949	949	0	949	949	0	949	949	0	949
	Population (person)	0	0	0	0	0	0	0	0	0	40,807	0	40,807	40,807	0	40,807
Sub-total	SPZ Area (ha)	5,862	0	5,862	5,862	0	5,862	5,862	0	5,862	5,862	0	5,862	5,862	0	5,862
	Service Area (ha)	142	0	142	605	0	605	88	0	88	147	0	147	147	0	982
	Density (person/ha)	929	0	929	593	0	593	474	0	474	617	0	617	617	0	635
	Population (person)	131,918	0	131,918	359,039	0	359,039	41,712	0	41,712	90,703	0	90,703	90,703	0	623,372
6	SPZ Area (ha)	732	68	800	732	68	800	732	68	800	732	68	800	800	68	3,200
	Service Area (ha)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Density (person/ha)	545	68	545	545	68	545	545	68	545	545	68	545	545	68	545
	Population (person)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13-1	SPZ Area (ha)	473	855	1,328	473	855	1,328	473	855	1,328	473	855	1,328	1,328	855	5,312
	Service Area (ha)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Density (person/ha)	148	68	148	148	68	148	148	68	148	148	68	148	148	68	148
	Population (person)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sub-total	SPZ Area (ha)	1,205	923	2,128	1,205	923	2,128	1,205	923	2,128	1,205	923	2,128	2,128	923	8,512
	Service Area (ha)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Density (person/ha)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Population (person)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	SPZ Area (ha)	7,067	923	7,990	7,067	923	7,990	7,067	923	7,990	7,067	923	7,990	7,990	923	31,960
	Service Area (ha)	142	0	142	605	0	605	88	0	88	147	0	147	147	0	982
	Density (person/ha)	929	0	929	593	0	593	474	0	474	617	0	617	617	0	635
	Population (person)	131,918	0	131,918	359,039	0	359,039	41,712	0	41,712	90,703	0	90,703	90,703	0	623,372

Table 14.5.1.37 Population of Hazaribag Trunk Main (Year 2015)

Zone	Hazaribag LS			New Market LS			Trunk Main No.1			Moghbar LS		
	Established Urban Fringe	Urban Security Zone	Sub-Total	Established Urban Fringe	Urban Security Zone	Sub-Total	Established Urban Fringe	Urban Security Zone	Sub-Total	Established Urban Fringe	Urban Security Zone	Sub-Total
1	SPZ Area (ha)	0	858	858	0	858	858	0	858	858	0	858
	Service Area (ha)	0	0	5	0	5	88	0	88	84	0	84
	Density (person/ha)	0	0	491	0	491	491	0	491	491	0	491
	Population (person)	0	0	2,455	0	2,455	43,208	0	43,208	41,244	0	41,244
2	SPZ Area (ha)	0	1,288	1,288	0	1,288	1,288	0	1,288	1,288	0	1,288
	Service Area (ha)	0	0	475	0	475	525	0	525	525	0	525
	Density (person/ha)	0	0	525	0	525	525	0	525	525	0	525
	Population (person)	0	0	249,375	0	249,375	0	0	0	10,500	0	10,500
3	SPZ Area (ha)	0	1,121	1,121	0	1,121	1,121	0	1,121	1,121	0	1,121
	Service Area (ha)	0	0	22	0	22	998	0	998	998	0	998
	Density (person/ha)	0	0	21,956	0	21,956	0	0	0	0	0	0
	Population (person)	0	0	1,059	0	1,059	1,059	0	1,059	1,059	0	1,059
4	SPZ Area (ha)	0	142	103	0	103	984	0	984	984	0	984
	Service Area (ha)	0	984	984	0	984	984	0	984	984	0	984
	Density (person/ha)	0	139,728	101,352	0	101,352	0	0	0	0	0	0
	Population (person)	0	1,536	1,536	0	1,536	1,536	0	1,536	1,536	0	1,536
7	SPZ Area (ha)	0	0	0	0	0	1,002	0	1,002	1,002	0	1,002
	Service Area (ha)	0	0	1,002	0	1,002	0	0	0	43,086	0	43,086
	Density (person/ha)	0	0	5,862	0	5,862	5,862	0	5,862	5,862	0	5,862
	Population (person)	0	0	605	0	605	88	0	88	147	0	147
Sub-total	SPZ Area (ha)	0	142	620	0	620	491	0	491	645	0	645
	Service Area (ha)	0	984	620	0	620	491	0	491	645	0	645
	Density (person/ha)	0	139,728	375,138	0	375,138	43,208	0	43,208	94,830	0	94,830
	Population (person)	0	800	800	68	868	732	68	800	732	68	800
6	SPZ Area (ha)	0	0	0	0	0	593	0	593	593	0	593
	Service Area (ha)	0	0	593	0	593	0	0	0	0	0	0
	Density (person/ha)	0	0	0	0	0	0	0	0	0	0	0
	Population (person)	0	0	1,328	855	1,328	473	855	1,328	473	855	1,328
13-1	SPZ Area (ha)	0	0	0	0	0	0	0	0	0	0	0
	Service Area (ha)	0	0	142	0	142	73	0	73	142	0	142
	Density (person/ha)	0	0	0	0	0	0	0	0	0	0	0
	Population (person)	0	0	0	0	0	0	0	0	0	0	0
Sub-total	SPZ Area (ha)	0	1,205	923	0	923	1,205	923	2,128	1,205	923	2,128
	Service Area (ha)	0	0	0	0	0	0	0	0	0	0	0
	Density (person/ha)	0	0	0	0	0	0	0	0	0	0	0
	Population (person)	0	0	0	0	0	0	0	0	0	0	0
Total	SPZ Area (ha)	0	7,990	7,067	923	7,990	7,067	923	7,990	7,067	923	7,990
	Service Area (ha)	0	142	605	0	605	88	0	88	147	0	147
	Density (person/ha)	0	984	620	0	620	491	0	491	645	0	645
	Population (person)	0	139,728	375,138	0	375,138	43,208	0	43,208	94,830	0	94,830

Table 14.5.1.37 Population of Hazaribag Trunk Main (Year 2015) (Continued)

Zone	Moghbar Main			Trunk Main No.2			P&T L S			P&T Main			Trunk Main No.3		
	Established Urban Fringe	Urban Security Zone	Sub-Total	Established Urban Fringe	Urban Security Zone	Sub-Total	Established Urban Fringe	Urban Security Zone	Sub-Total	Established Urban Fringe	Urban Security Zone	Sub-Total	Established Urban Fringe	Urban Security Zone	Sub-Total
1	SPZ Area (ha)	858	0	858	858	0	858	858	0	858	858	0	858	0	858
	Service Area (ha)	70	0	70	122	0	122	172	0	172	66	0	144	0	144
	Density (person/ha)	491	0	491	491	0	491	491	0	491	491	0	491	0	491
	Population (person)	34,370	0	34,370	59,902	0	59,902	84,452	0	84,452	32,406	0	70,704	0	70,704
2	SPZ Area (ha)	1,288	0	1,288	1,288	0	1,288	1,288	0	1,288	1,288	0	1,288	0	1,288
	Service Area (ha)	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Density (person/ha)	525	0	525	525	0	525	525	0	525	525	0	525	0	525
	Population (person)	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	SPZ Area (ha)	1,121	0	1,121	1,121	0	1,121	1,121	0	1,121	1,121	0	1,121	0	1,121
	Service Area (ha)	998	0	998	998	0	998	998	0	998	998	0	998	0	998
	Density (person/ha)	1,059	0	1,059	1,059	0	1,059	1,059	0	1,059	1,059	0	1,059	0	1,059
	Population (person)	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	SPZ Area (ha)	1,536	0	1,536	1,536	0	1,536	1,536	0	1,536	1,536	0	1,536	0	1,536
	Service Area (ha)	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Density (person/ha)	984	0	984	984	0	984	984	0	984	984	0	984	0	984
	Population (person)	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7	SPZ Area (ha)	1,002	0	1,002	1,002	0	1,002	1,002	0	1,002	1,002	0	1,002	0	1,002
	Service Area (ha)	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Density (person/ha)	5,862	0	5,862	5,862	0	5,862	5,862	0	5,862	5,862	0	5,862	0	5,862
	Population (person)	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sub-total	SPZ Area (ha)	70	0	70	122	0	122	351	0	351	72	0	211	0	211
	Service Area (ha)	491	0	491	491	0	491	752	0	752	534	0	652	0	652
	Density (person/ha)	34,370	0	34,370	59,902	0	59,902	263,810	0	263,810	38,418	0	137,570	0	137,570
	Population (person)	732	68	800	732	68	800	800	68	868	732	68	800	68	868
6	SPZ Area (ha)	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Service Area (ha)	593	73	666	593	73	666	593	73	666	593	73	666	73	739
	Density (person/ha)	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Population (person)	473	855	1,328	473	855	1,328	473	855	1,328	473	855	473	855	1,328
13-1	SPZ Area (ha)	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Service Area (ha)	142	73	215	142	73	215	142	73	215	142	73	215	73	288
	Density (person/ha)	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Population (person)	1,205	923	2,128	1,205	923	2,128	1,205	923	2,128	1,205	923	1,205	923	2,128
Sub-total	SPZ Area (ha)	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Service Area (ha)	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Density (person/ha)	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Population (person)	7,067	923	7,990	7,067	923	7,990	7,067	923	7,990	7,067	923	7,067	923	7,990
Total	SPZ Area (ha)	70	0	70	122	0	122	351	0	351	72	0	211	0	211
	Service Area (ha)	491	0	491	491	0	491	752	0	752	534	0	652	0	652
	Density (person/ha)	34,370	0	34,370	59,902	0	59,902	263,810	0	263,810	38,418	0	137,570	0	137,570
	Population (person)	858	858	1,716	1,716	858	1,716	1,716	858	3,432	1,716	858	1,716	858	3,432

Table 14.5.1.38 Population of Hazaribag Trunk Main (Year 2020)

Zone	Hazaribag LS				New Market LS				Trunk Main No.1				Moghbar LS				Total
	Established Urban		Sub-Total	Security Zone	Established Urban		Sub-Total	Security Zone	Established Urban		Sub-Total	Security Zone	Established Urban		Sub-Total	Security Zone	
	Urban Fringe	Urban Fringe			Urban Fringe	Urban Fringe			Urban Fringe	Urban Fringe			Urban Fringe	Urban Fringe			
1	SPZ Area (ha)	858	0	858	858	0	858	858	0	858	858	0	858	858	0	858	5,452
	Service Area (ha)	0	0	0	5	0	5	88	0	88	84	0	84	84	0	84	177
	Density (person/ha)	507	0	0	507	0	507	507	0	507	507	0	507	507	0	507	507
	Population (person)	0	0	0	2,535	0	2,535	44,616	0	44,616	42,588	0	42,588	42,588	0	42,588	89,739
2	SPZ Area (ha)	1,288	0	1,288	1,288	0	1,288	1,288	0	1,288	1,288	0	1,288	1,288	0	1,288	5,152
	Service Area (ha)	0	0	0	475	0	475	0	0	0	20	0	20	20	0	20	495
	Density (person/ha)	544	0	0	544	0	544	544	0	544	544	0	544	544	0	544	544
	Population (person)	0	0	0	258,400	0	258,400	0	0	0	10,880	0	10,880	10,880	0	10,880	269,280
3	SPZ Area (ha)	1,121	0	1,121	1,121	0	1,121	1,121	0	1,121	1,121	0	1,121	1,121	0	1,121	4,484
	Service Area (ha)	0	0	0	22	0	22	0	0	0	0	0	0	0	0	0	22
	Density (person/ha)	1,014	0	0	1,014	0	1,014	1,014	0	1,014	1,014	0	1,014	1,014	0	1,014	1,014
	Population (person)	0	0	0	22,308	0	22,308	0	0	0	0	0	0	0	0	0	22,308
4	SPZ Area (ha)	1,059	0	1,059	1,059	0	1,059	1,059	0	1,059	1,059	0	1,059	1,059	0	1,059	4,236
	Service Area (ha)	142	0	142	103	0	103	0	0	0	0	0	0	0	0	0	245
	Density (person/ha)	1,037	0	1,037	1,037	0	1,037	1,037	0	1,037	1,037	0	1,037	1,037	0	1,037	1,037
	Population (person)	147,254	0	147,254	106,811	0	106,811	0	0	0	0	0	0	0	0	0	254,065
7	SPZ Area (ha)	1,536	0	1,536	1,536	0	1,536	1,536	0	1,536	1,536	0	1,536	1,536	0	1,536	6,144
	Service Area (ha)	0	0	0	0	0	0	0	0	0	43	0	43	43	0	43	43
	Density (person/ha)	1,054	0	1,054	1,054	0	1,054	1,054	0	1,054	1,054	0	1,054	1,054	0	1,054	1,054
	Population (person)	0	0	0	0	0	0	0	0	0	45,322	0	45,322	45,322	0	45,322	45,322
Sub-total	SPZ Area (ha)	5,862	0	5,862	5,862	0	5,862	5,862	0	5,862	5,862	0	5,862	5,862	0	5,862	23,448
	Service Area (ha)	142	0	142	605	0	605	88	0	88	147	0	147	147	0	147	982
	Density (person/ha)	1,037	0	1,037	645	0	645	507	0	507	672	0	672	672	0	672	693
	Population (person)	147,254	0	147,254	390,054	0	390,054	44,616	0	44,616	98,790	0	98,790	98,790	0	98,790	680,714
6	SPZ Area (ha)	732	68	800	732	68	800	732	68	800	732	68	800	800	68	800	3,200
	Service Area (ha)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Density (person/ha)	639	76	639	639	76	639	639	76	639	639	76	639	639	76	639	639
	Population (person)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13-1	SPZ Area (ha)	473	855	1,328	473	855	1,328	473	855	1,328	473	855	1,328	855	1,328	1,328	5,312
	Service Area (ha)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Density (person/ha)	140	76	140	140	76	140	140	76	140	140	76	140	140	76	140	140
	Population (person)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sub-total	SPZ Area (ha)	1,205	923	2,128	1,205	923	2,128	1,205	923	2,128	1,205	923	2,128	923	2,128	2,128	8,512
	Service Area (ha)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Density (person/ha)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Population (person)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	SPZ Area (ha)	7,067	923	7,990	7,067	923	7,990	7,067	923	7,990	7,067	923	7,990	923	7,990	7,990	31,960
	Service Area (ha)	142	0	142	605	0	605	88	0	88	147	0	147	147	0	147	982
	Density (person/ha)	1,037	0	1,037	645	0	645	507	0	507	672	0	672	672	0	672	693
	Population (person)	147,254	0	147,254	390,054	0	390,054	44,616	0	44,616	98,790	0	98,790	98,790	0	98,790	680,714

Appendix 14.5.2 Design Sewage Flow of Existing Sewerage Service Area

Table 14.5.2.1 Design Sewage Flow of Existing Sewerage Service Area (Year 1991)

Trunk Main	Lift Station	Area (ha)		Population (person)		Sewage Flow (cu.m/day)								
		Each	Total	Each	Total	Each			Total					
						Q1	Q2	Q3	Q1	Q2	Q3			
Gulshan	Tejgonj LS	719		155,159		11,637	13,964	17,843						
	Sub-total	719	719	155,159	155,159	11,637	13,964	17,843	11,637	13,964	17,843			
Faridabad	Faridabad LS	44		34,804		2,610	3,132	4,002						
	Trunk Main No.1	309	353	242,889	277,693	18,217	21,860	27,932	20,827	24,992	31,934	20,827	24,992	31,934
Asadgate	Sub-total	353	353	277,693	277,693	20,827	24,992	31,934	20,827	24,992	31,934	20,827	24,992	31,934
	Asadgate LS	153		76,226		5,717	6,860	8,766						
Trunk Main	Tejgonj LS	498	1,004	153,164	384,549	11,487	13,785	17,614	28,841					
	Bashaboo LS	368	1,372	197,248	581,797	14,794	17,752	22,684	43,635					
Nawabgonj	Sayedabad LS	255	1,627	136,680	718,477	10,251	12,301	15,718	53,886					
	Sub-total	1,274	1,627	563,318	718,477	42,249	50,698	64,782	53,886					
Trunk Main	Nawabgonj LS	115		74,648		5,599	6,718	8,585						
	Trunk Main No.1	22	137	17,402	92,050	1,305	1,566	2,001	6,904					
Trunk Main	Azimpur LS	75		56,301		4,223	5,067	6,475						
	Azimpur Main	11	86	8,701	65,002	653	783	1,001	4,875					
Trunk Main	Trunk Main No.2	60	283	47,460	204,512	3,560	4,271	5,458	15,338					
	Medical College LS	97		34,895		2,617	3,141	4,013						
Trunk Main	MC Main	38	135	20,986	55,881	1,574	1,889	2,413	4,191					
	Trunk Main No.3	239	657	189,049	449,442	14,179	17,014	21,741	33,708					
Trunk Main	Sub-total	657	657	449,442	449,442	33,710	40,449	51,687	33,708					
	Hazaribag LS	142		75,544		5,666	6,799	8,688						
Trunk Main	New Market LS	605	747	214,708	290,252	16,103	19,324	24,691	21,769					
	Trunk Main No.1	88	835	25,256	315,508	1,894	2,273	2,904	23,663					
Trunk Main	Moghbarar LS	147		53,096		3,982	4,779	6,106						
	Moghbarar Main	70	217	20,090	73,186	1,507	1,808	2,310	5,489					
Trunk Main	Trunk Main No.2	122	1,174	35,014	423,708	2,626	3,151	4,027	31,778					
	P&T LS	351		145,308		10,898	13,078	16,710						
Trunk Main	P&T Main	72	423	22,158	167,466	1,662	1,994	2,548	12,560					
	Trunk Main No.3	211	1,808	94,325	685,499	7,074	8,489	10,847	51,412					
Trunk Main	Sub-total	1,808	1,808	685,499	685,499	51,412	61,695	78,831	105,948					
	Narinda PS	0	2,818		1,412,634				159,833					
Pagla STP		0	4,445		2,131,111				191,800					

Note: 1) Q1: Design Average Daily Flow, Per Capita Sewage Flow= 75 lpcd
 2) Q2: Design Maximum Daily Flow, Per Capita Sewage Flow= 90 lpcd
 3) Q3: Design Maximum Hourly Flow, Per Capita Sewage Flow= 115 lpcd

Table 14.5.2.2 Design Sewerage Flow of Existing Sewerage Service Area (Year 1997)

Trunk Main	Lift Station	Area (ha)		Population (person)		Sewerage Flow (cu.m/day)								
		Each	Total	Each	Total	Each			Total					
						Q1	Q2	Q3	Q1	Q2	Q3			
Gulshan Trunk Main	Tejgaon LS	719		227,345		17,051	20,461	26,145	17,051	20,461	26,145	26,145	20,461	26,145
	Sub-total	719	719	227,345	227,345	17,051	20,461	26,145	17,051	20,461	26,145	26,145	20,461	26,145
Faridabad Trunk Main	Faridabad LS	44		38,104		2,858	3,429	4,382	2,858	3,429	4,382	4,382	3,429	4,382
	Sub-total	309	353	266,544	304,648	19,991	23,989	30,653	22,849	27,418	35,035	27,418	27,418	35,035
Asadgate Trunk Main	Asadgate LS	153		97,374		7,303	8,764	11,198	7,303	8,764	11,198	11,198	8,764	11,198
	Sub-total	498	1,004	194,654	519,373	14,599	17,519	22,385	14,599	17,519	22,385	22,385	17,519	22,385
Nawabgonj Trunk Main	Bashaboo LS	368		254,288		19,072	22,886	29,243	19,072	22,886	29,243	29,243	22,886	29,243
	Sub-total	255	1,627	176,205	949,866	13,215	15,858	20,264	13,215	15,858	20,264	20,264	15,858	20,264
Nawabgonj Trunk Main	Sub-total	1,274	1,627	722,521	949,866	54,189	65,027	83,090	54,189	65,027	83,090	83,090	65,027	83,090
	Sub-total	115		87,872		6,590	7,908	10,105	6,590	7,908	10,105	10,105	7,908	10,105
Nawabgonj Trunk Main	Trunk Main No.1	22	137	19,052	106,924	1,429	1,715	2,191	1,429	1,715	2,191	2,191	1,715	2,191
	Sub-total	75		61,914		4,644	5,572	7,120	4,644	5,572	7,120	7,120	5,572	7,120
Nawabgonj Trunk Main	Trunk Main No.2	11	86	9,526	71,440	714	857	1,095	714	857	1,095	1,095	857	1,095
	Sub-total	60	283	51,960	230,324	3,897	4,676	5,975	3,897	4,676	5,975	5,975	4,676	5,975
Nawabgonj Trunk Main	Trunk Main No.3	97		42,004		3,150	3,780	4,830	3,150	3,780	4,830	4,830	3,780	4,830
	Sub-total	38	135	23,800	65,804	1,785	2,142	2,737	1,785	2,142	2,737	2,737	2,142	2,737
Nawabgonj Trunk Main	Trunk Main No.3	239	657	206,974	503,102	15,523	18,628	23,802	15,523	18,628	23,802	23,802	18,628	23,802
	Sub-total	657	657	503,102	503,102	37,732	45,278	57,855	37,732	45,278	57,855	57,855	45,278	57,855
Nawabgonj Trunk Main	Hazaribag LS	142		96,560		7,242	8,690	11,104	7,242	8,690	11,104	11,104	8,690	11,104
	Sub-total	605	747	269,967	366,527	20,248	24,297	31,046	20,248	24,297	31,046	31,046	24,297	31,046
Nawabgonj Trunk Main	Trunk Main No.1	88	835	31,680	398,207	2,376	2,851	3,643	2,376	2,851	3,643	3,643	2,851	3,643
	Sub-total	147		67,493		5,062	6,074	7,762	5,062	6,074	7,762	7,762	6,074	7,762
Nawabgonj Trunk Main	Trunk Main No.2	70	217	25,200	92,693	1,890	2,268	2,898	1,890	2,268	2,898	2,898	2,268	2,898
	Sub-total	122	1,174	43,920	534,820	3,294	3,953	5,051	3,294	3,953	5,051	5,051	3,953	5,051
Nawabgonj Trunk Main	Trunk Main No.2	351		185,609		13,921	16,705	21,345	13,921	16,705	21,345	21,345	16,705	21,345
	Sub-total	72	423	27,906	213,515	2,093	2,512	3,209	2,093	2,512	3,209	3,209	2,512	3,209
Nawabgonj Trunk Main	Trunk Main No.3	211	1,808	109,862	858,197	8,240	9,888	12,634	8,240	9,888	12,634	12,634	9,888	12,634
	Sub-total	1,808	1,808	858,197	858,197	64,366	77,238	98,692	64,366	77,238	98,692	98,692	77,238	98,692
Narinda PS Pagla SIP		0	2,818		1,665,947									
		0	4,445		2,615,813									

Note: 1) Q1: Design Average Daily Flow, Per Capita Sewerage Flow= 75 lpcd
 2) Q2: Design Maximum Daily Flow, Per Capita Sewerage Flow= 90 lpcd
 3) Q3: Design Maximum Hourly Flow, Per Capita Sewerage Flow= 115 lpcd

Table 14.5.2.3 Design Sewage Flow of Existing Sewerage Service Area (Year 2005)

Trunk Main	Lift Station	Area (ha)		Population (person)		Sewage Flow (cu.m/day)							
		Each	Total	Each	Total	Each			Total				
						Q1	Q2	Q3	Q1	Q2	Q3		
Gulshan Trunk Main	Tejgaon LS	719		324,510		30,828	37,319	47,054	30,828	37,319	47,054		
	Sub-total	719	719	324,510	324,510	30,828	37,319	47,054	30,828	37,319	47,054		47,054
Faridabad Trunk Main	Faridabad LS	44		42,460		4,034	4,883	6,157					
	Trunk Main No.1	309	353	297,777	340,237	28,289	34,244	43,178	32,323	39,127	49,335	32,323	39,127
	Sub-total	353	353	340,237	340,237	32,323	39,127	49,335	32,323	39,127	49,335		49,334
Asadgate Trunk Main	Asadgate LS	153		125,404		11,913	14,421	18,184					
	Tejgaon LS	498	1,004	250,118	700,032	23,761	28,764	36,267	66,503	80,504	101,505		101,505
	Bashaboo LS	368	1,372	330,096	1,030,128	31,359	37,961	47,864	97,862	118,465	149,369		149,369
	Sayedabad LS	255	1,627	228,735	1,258,863	21,730	26,305	33,167	119,592	144,769	182,535		182,535
	Sub-total	1,274	1,627	934,353	1,258,863	88,763	107,451	135,482	119,592	144,769	182,535		182,535
Nawabgonj Trunk Main	Nawabgonj LS	115		105,368		10,010	12,117	15,278					
	Trunk Main No.1	22	137	21,230	126,598	2,017	2,441	3,078	12,027	14,559	18,357		18,357
	Azimpur LS	75		69,333		6,587	7,973	10,053					
	Azimpur Main	11	86	10,615	79,948	1,008	1,221	1,539	7,595	9,194	11,592		11,592
	Trunk Main No.2	60	283	57,900	264,446	5,501	6,659	8,396	25,122	30,411	38,345		38,345
	Medical College LS	97		51,524		4,895	5,925	7,471					
	MC Main	38	135	27,544	79,068	2,617	3,168	3,994	7,511	9,093	11,465		11,465
	Trunk Main No.3	239	657	230,635	574,149	21,910	26,523	33,442	54,544	66,027	83,252		83,252
	Sub-total	657	657	574,149	574,149	54,545	66,027	83,251	54,544	66,027	83,252		83,252
Hazariabag Trunk Main	Hazariabag LS	142		124,392		11,817	14,305	18,037					
	New Market LS	605	747	343,648	468,040	32,647	39,520	49,829	44,464	53,825	67,866		67,866
	Trunk Main No.1	88	835	40,304	508,344	3,829	4,635	5,844	48,293	58,460	73,710		73,710
	Moghbarar LS	147		86,723		8,239	9,973	12,575					
	Moghbarar Main	70	217	32,060	118,783	3,046	3,687	4,649	11,284	13,660	17,224		17,224
	Trunk Main No.2	122	1,174	55,876	683,003	5,308	6,426	8,102	64,885	78,545	99,035		99,035
	P&T LS	351		239,339		22,737	27,524	34,704					
	P&T Main	72	423	35,610	274,949	3,383	4,095	5,163	26,120	31,619	39,868		39,868
	Trunk Main No.3	211	1,808	130,607	1,088,559	12,408	15,020	18,938	103,413	125,194	157,841		157,841
	Sub-total	1,808	1,808	1,088,559	1,088,559	103,414	125,185	157,841	103,413	125,184	157,841		157,841
Narinda PS		0	2,818		2,002,945				190,280	230,339	290,427		290,427
Pagla STP		0	4,445		3,261,808				309,872	375,108	472,962		472,962

Note: 1) Q1: Design Average Daily Flow, Per Capita Sewage Flow= 95 lpcd
 2) Q2: Design Maximum Daily Flow, Per Capita Sewage Flow= 115 lpcd
 3) Q3: Design Maximum Hourly Flow, Per Capita Sewage Flow= 145 lpcd

Table 14.5.2.4 Design Sewage Flow of Existing Sewerage Service Area (Year 2010)

Trunk Main	Lift Station	Area (ha)		Population (person)		Sewage Flow (cu.m/day)								
		Each	Total	Each	Total	Each			Total					
						Q1	Q2	Q3	Q1	Q2	Q3			
Gulshan Trunk Main	Tejgaon LS	719		353,307		35,331	44,163	56,529						
	Sub-total	719	719	353,307	353,307	35,331	44,163	56,529	35,331	44,163	56,529			
Faridabad Trunk Main	Faridabad LS	44		43,164		4,316	5,396	6,906						
	Trunk Main No.1	309	353	302,937	346,101	30,294	37,867	48,470	34,610	43,263	55,376			
	Sub-total	353	353	346,101	346,101	34,610	43,263	55,376	34,610	43,263	55,376			
Asadgate Trunk Main	Asadgate LS	153		132,787		13,279	16,598	21,246						
	Tejgaon LS	498	1,004	260,782	746,876	26,078	32,598	41,725	74,688	93,360	119,500			
	Bashaboo LS	368	1,372	349,232	1,096,108	34,923	43,654	55,877	109,611	137,014	175,377			
	Sayedabad LS	255	1,627	241,995	1,338,103	24,200	30,249	38,719	133,810	167,263	214,096			
	Sub-total	1,274	1,627	984,796	1,338,103	98,480	123,099	157,567	133,810	167,263	214,096			
Nawabgonj Trunk Main	Nawabgonj LS	115		109,539		10,954	13,692	17,526						
	Trunk Main No.1	22	137	21,582	131,121	2,158	2,698	3,453	13,112	16,390	20,979			
	Azimpur LS	75		70,533		7,053	8,817	11,285						
	Azimpur Main	11	86	10,791	81,324	1,079	1,349	1,727	8,132	10,166	13,012			
	Trunk Main No.2	60	283	58,860	271,305	5,886	7,358	9,418	27,131	33,913	43,409			
	Medical College LS	97		53,076		5,308	6,635	8,492						
	MC Main	38	135	28,152	81,228	2,815	3,519	4,504	8,123	10,154	12,996			
	Trunk Main No.3	239	657	234,459	586,992	23,446	29,307	37,513	58,699	73,374	93,919			
	Sub-total	657	657	586,992	586,992	58,699	73,375	93,918	58,699	73,374	93,919			
Hazaribag Trunk Main	Hazaribag LS	142		131,918		13,192	16,490	21,107						
	New Market LS	605	747	359,039	490,957	35,904	44,880	57,446	49,096	61,370	78,553			
	Trunk Main No.1	88	835	41,712	532,669	4,171	5,214	6,674	53,267	66,584	85,227			
	Moghbarar LS	147		90,703		9,070	11,338	14,512						
	Moghbarar Main	70	217	33,180	123,883	3,318	4,148	5,309	12,388	15,485	19,821			
	Trunk Main No.2	122	1,174	57,828	714,380	5,783	7,229	9,252	71,438	89,298	114,301			
	P&T LS	351		251,399		25,140	31,425	40,224						
	P&T Main	72	423	36,978	288,377	3,698	4,622	5,916	28,838	36,047	46,140			
	Trunk Main No.3	211	1,808	133,983	1,136,740	13,398	16,748	21,437	113,674	142,093	181,878			
	Sub-total	1,808	1,808	1,136,740	1,136,740	113,674	142,094	181,877	113,674	142,093	181,878			
Narinda PS		0	2,818		2,069,833				206,983	258,729	331,173			
Pagla STP		0	4,445		3,407,936				340,794	425,992	545,270			

Note: 1) Q1: Design Average Daily Flow, Per Capita Sewage Flow= 100 lpcd

2) Q2: Design Maximum Daily Flow, Per Capita Sewage Flow= 125 lpcd

3) Q3: Design Maximum Hourly Flow, Per Capita Sewage Flow= 160 lpcd

Table 14.5.2.5 Design Sewage Flow of Existing Sewerage Service Area (Year 2015)

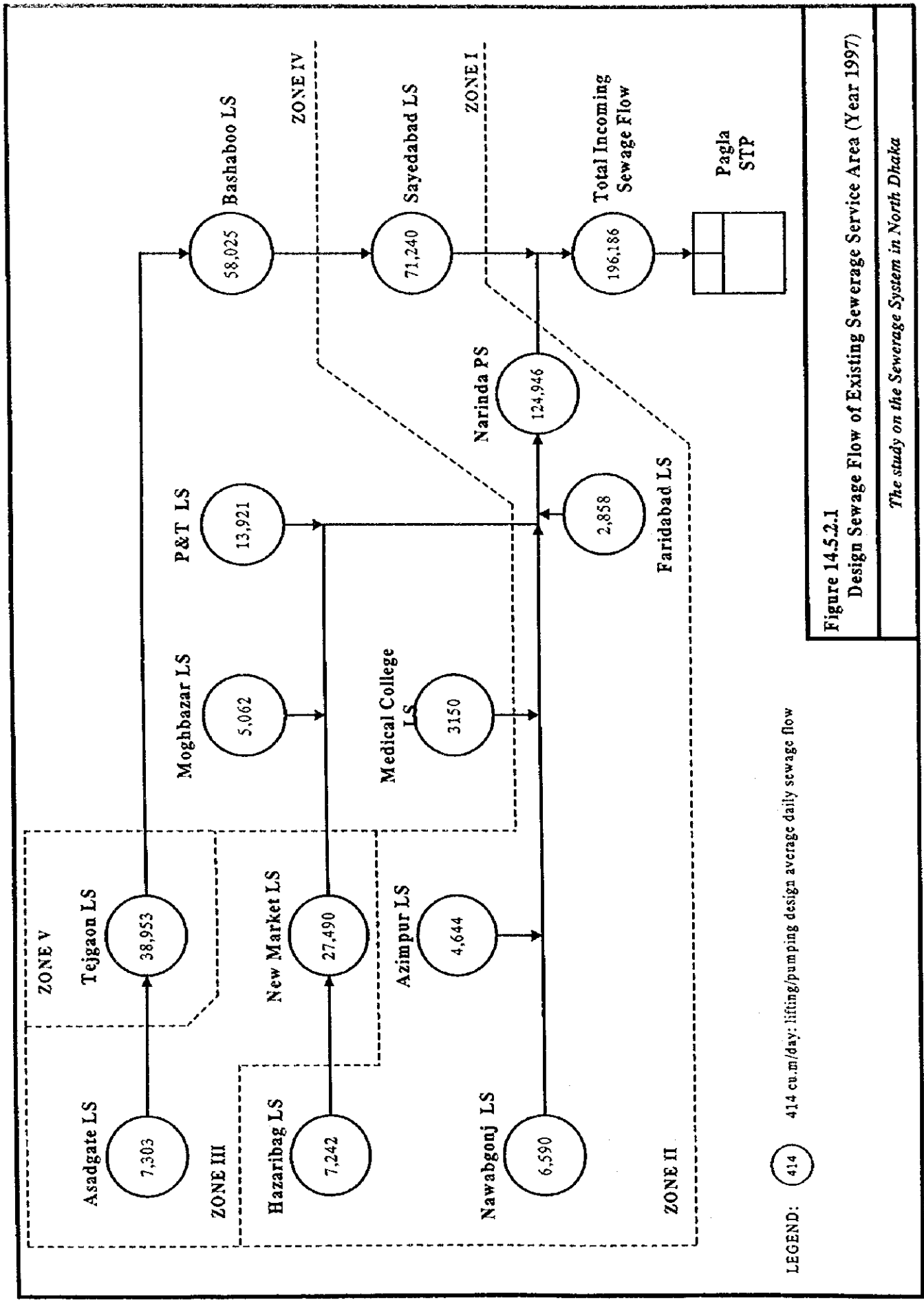
Trunk Main	Lift Station	Area (ha)		Population (person)		Sewage Flow (cu.m/day)								
		Each	Total	Each	Total	Each			Total					
						Q1	Q2	Q3	Q1	Q2	Q3			
Gulshan	Tejgaon LS	719		383,998		38,400	48,000	61,440	38,400	48,000	61,440			
	Sub-total	719	719	383,998	383,998	38,400	48,000	61,440	38,400	48,000	61,440			
Faridabad	Faridabad LS	44		43,912		4,391	5,489	7,026						
	Trunk Main No.1	309	353	308,406	352,318	30,841	38,551	49,345	35,232	44,040	56,371	44,040	56,371	
Asadgate	Sub-total	353	353	352,318	352,318	35,232	44,040	56,371	35,232	44,040	56,371			
	Asadgate LS	153		140,454		14,045	17,557	22,473						
Nawabgonj	Tejgaon LS	498	1,004	271,944	796,396	27,194	33,993	43,511	79,640	99,550	127,423			
	Bashaboo LS	368	1,372	368,736	1,165,132	36,874	46,092	58,998	116,513	145,642	186,421			
Trunk Main	Sayedabad LS	255	1,627	255,510	1,420,642	25,551	31,939	40,882	142,064	177,580	227,303			
	Sub-total	1,274	1,627	1,036,644	1,420,642	103,664	129,581	165,864	142,064	177,580	227,303			
Nawabgonj	Nawabgonj LS	115		113,888		11,389	14,236	18,222						
	Trunk Main No.1	22	137	21,956	135,844	2,196	2,745	3,513	13,584	16,981	21,735			
Trunk Main	Azimpur LS	75		71,808		7,181	8,976	11,489						
	Trunk Main No.2	11	86	10,978	82,786	1,098	1,372	1,756	8,279	10,348	13,246			
MC Main	Medical College LS	60	283	59,880	278,510	5,988	7,485	9,581	27,851	34,814	44,562			
	MC Main	38	135	28,798	83,523	2,880	3,600	4,608	8,352	10,440	13,364			
Hazaribag	Trunk Main No.3	239	657	238,522	600,555	23,852	29,815	38,164	60,056	75,069	96,089			
	Sub-total	657	657	600,555	600,555	60,057	75,070	96,089	60,056	75,069	96,089			
New Market LS	Hazaribag LS	142		139,728		13,973	17,466	22,356						
	New Market LS	605	747	375,138	514,866	37,514	46,892	60,022	51,487	64,358	82,379			
Moghbazars LS	Trunk Main No.1	88	835	43,208	558,074	4,321	5,401	6,913	55,807	69,759	89,292			
	Moghbazars LS	147		94,830		9,483	11,854	15,173						
P&T Main	Moghbazars Main	70	217	34,370	129,200	3,437	4,296	5,499	12,920	16,150	20,672			
	Trunk Main No.2	122	1,174	59,902	747,176	5,990	7,488	9,584	74,718	93,397	119,548			
Trunk Main	P&T LS	351		263,810		26,381	32,976	42,210						
	P&T Main	72	423	38,418	302,228	3,842	4,802	6,147	30,223	37,779	48,356			
Narindia PS	Trunk Main No.3	211	1,808	137,570	1,186,974	13,757	17,196	22,011	118,697	148,372	189,916			
	Sub-total	1,808	1,808	1,186,974	1,186,974	118,698	148,371	189,915	118,697	148,372	189,916			
Pagla STP		0	2,818		2,139,847				213,985	267,481	342,376			
		0	4,445		3,560,489				356,049	445,061	569,678			

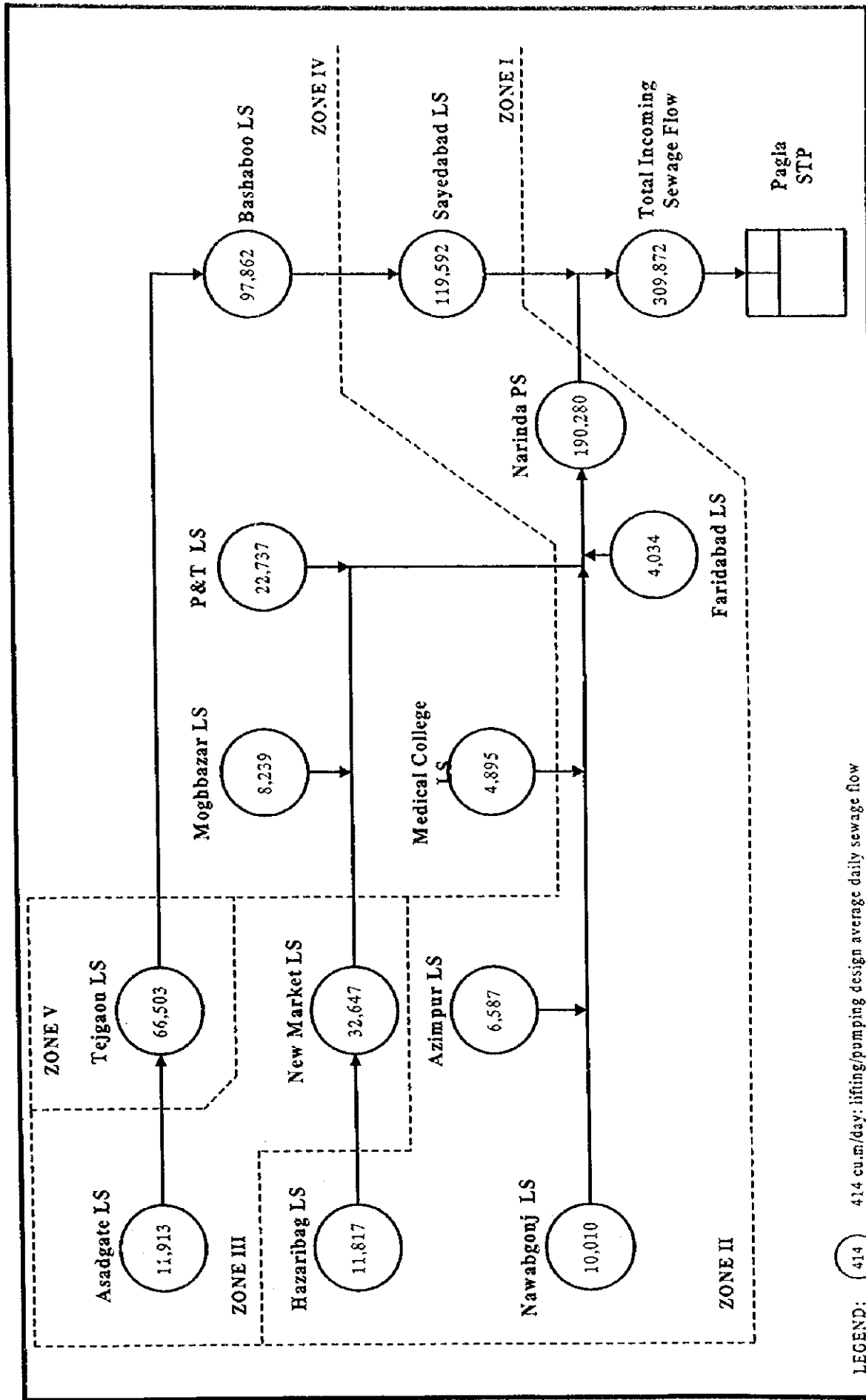
Note: 1) Q1: Design Average Daily Flow, Per Capita Sewage Flow= 100 lpcd
 2) Q2: Design Maximum Daily Flow, Per Capita Sewage Flow= 125 lpcd
 3) Q3: Design Maximum Hourly Flow, Per Capita Sewage Flow= 160 lpcd

Table 14.5.2.6 Design Sewage Flow of Existing Sewerage Service Area (Year 2020)

Trunk Main	Lift Station	Area (ha)		Population (person)		Sewage Flow (cu.m/day)								
		Each	Total	Each	Total	Each			Total					
						Q1	Q2	Q3	Q1	Q2	Q3			
Gulshan	Tejgaon LS	719		413,365		41,337	51,671	66,138						
	Sub-total	719	719	413,365	413,365	41,337	51,671	66,138	41,337	51,671	66,138			
Faridabad	Faridabad LS	44		44,616		4,462	5,577	7,139						
	Trunk Main No.1	309	353	313,566	358,182	31,357	39,196	50,171	35,818	44,773	57,309			
Asadgate	Sub-total	353	353	358,182	358,182	35,819	44,773	57,310	35,818	44,773	57,309			
	Asadgate LS	153		147,815		14,782	18,477	23,650						
Nawabgonj	Tejgaon LS	498	1,004	282,132	843,312	28,213	35,267	45,141	84,331	105,414	134,930			
	Bashaboo LS	368	1,372	387,872	1,231,184	38,787	48,484	62,060	123,118	153,898	196,989			
Pagla STP	Sayedabad LS	255	1,627	268,770	1,499,954	26,877	33,596	43,003	149,995	187,494	239,993			
	Sub-total	1,274	1,627	1,086,589	1,499,954	108,659	135,824	173,854	149,995	187,494	239,993			
Nawabgonj	Nawabgonj LS	115		118,059		11,806	14,757	18,889						
	Trunk Main No.1	22	137	22,308	140,367	2,231	2,789	3,569	14,037	17,546	22,459			
Pagla STP	Azimpur LS	75		73,008		7,301	9,126	11,681						
	Trunk Main No.2	60	283	60,840	285,369	6,084	7,605	9,734	28,537	35,671	45,659			
Pagla STP	Medical College LS	97		56,277		5,628	7,035	9,004						
	MC Main	38	135	29,406	85,683	2,941	3,676	4,705	8,568	10,710	13,709			
Pagla STP	Trunk Main No.3	239	657	242,346	613,398	24,235	30,293	38,775	61,340	76,675	98,144			
	Sub-total	657	657	613,398	613,398	61,341	76,675	98,142	61,340	76,675	98,144			
Pagla STP	Hazaribag LS	142		147,254		14,725	18,407	23,561						
	New Market LS	605	747	390,054	537,308	39,005	48,757	62,409	53,731	67,164	85,969			
Pagla STP	Trunk Main No.1	88	835	44,616	581,924	4,462	5,577	7,139	58,192	72,741	93,108			
	Moghbarar LS	147		98,790		9,879	12,349	15,806						
Pagla STP	Moghbarar Main	70	217	35,490	134,280	3,549	4,436	5,678	13,428	16,785	21,485			
	Trunk Main No.2	122	1,174	61,854	778,058	6,185	7,732	9,897	77,806	97,257	124,489			
Pagla STP	P&T LS	351		275,870		27,587	34,484	44,139						
	P&T Main	72	423	39,786	315,656	3,979	4,973	6,366	31,566	39,457	50,505			
Pagla STP	Trunk Main No.3	211	1,808	140,946	1,234,660	14,095	17,618	22,551	123,466	154,333	197,546			
	Sub-total	1,808	1,808	1,234,660	1,234,660	123,466	154,333	197,546	123,466	154,333	197,546			
Pagla STP	Narinda PS	0	2,818		2,206,240				220,624	275,780	352,998			
	Pagla STP	0	4,445		3,706,194				370,619	463,274	592,991			

Note: 1) Q1: Design Average Daily Flow, Per Capita Sewage Flow= 100 lpcd
 2) Q2: Design Maximum Daily Flow, Per Capita Sewage Flow= 125 lpcd
 3) Q3: Design Maximum Hourly Flow, Per Capita Sewage Flow= 160 lpcd

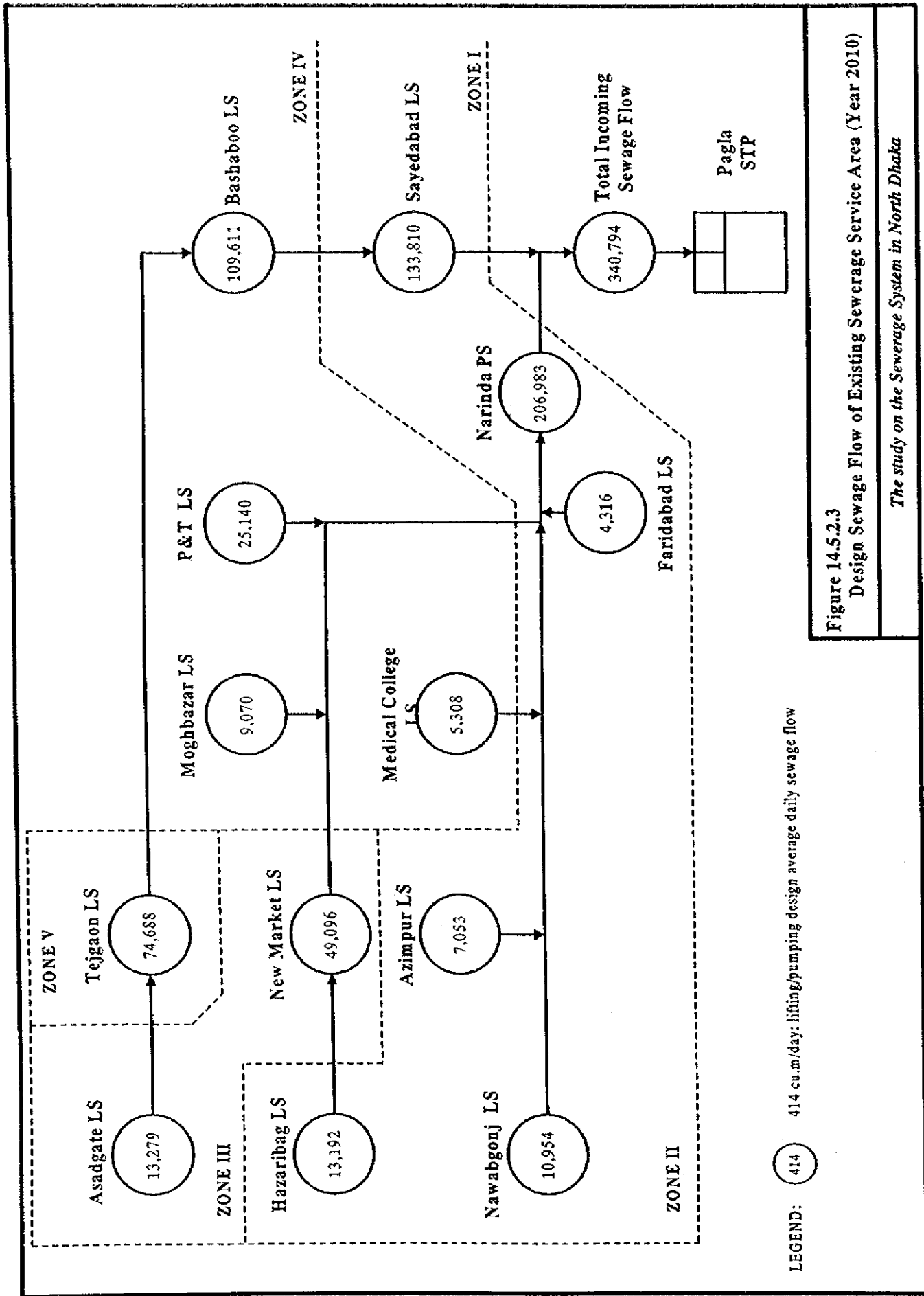


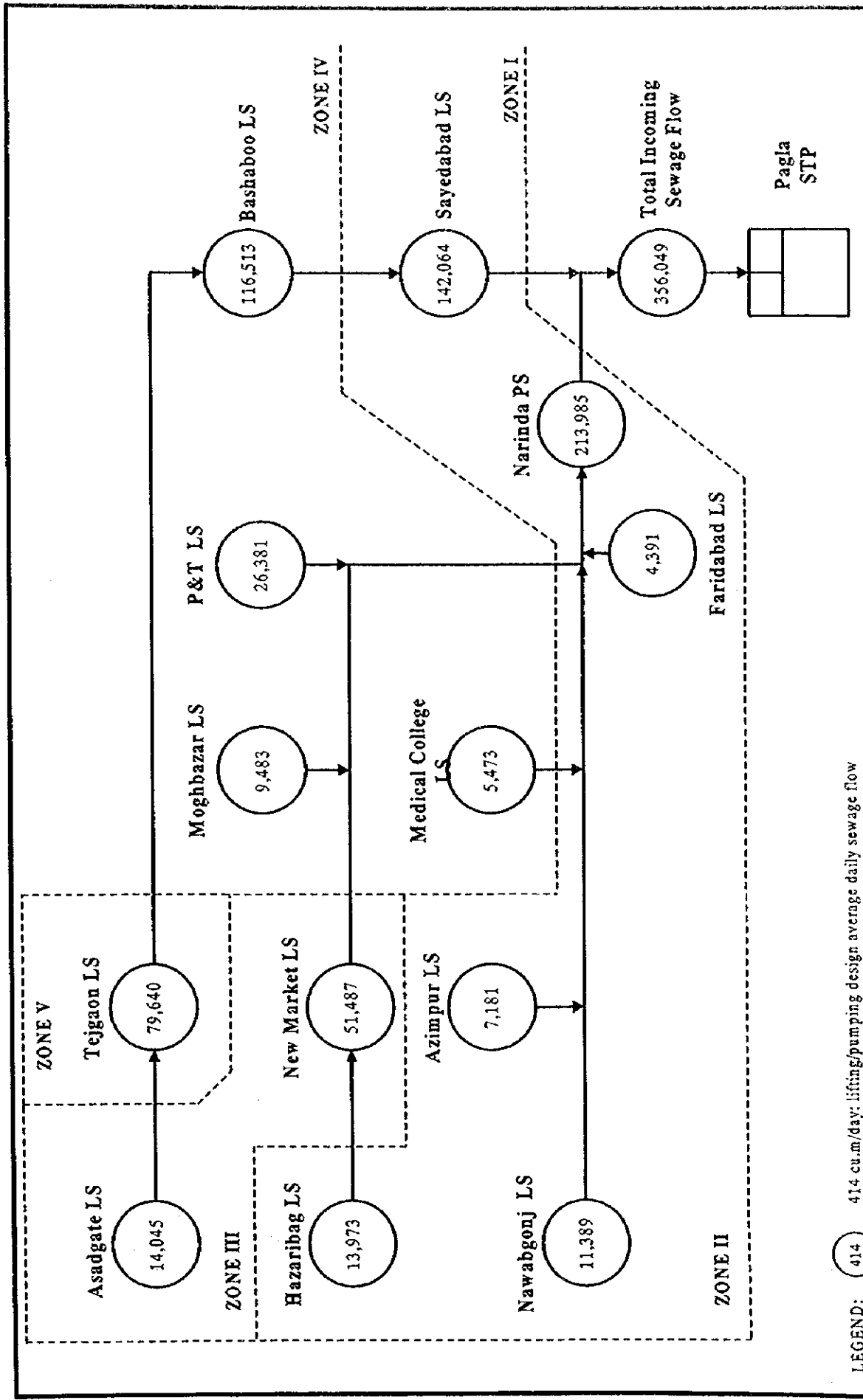


LEGEND: (414) 414 cu.m/day: lifting/pumping design average daily sewage flow

Figure 14.5.2.2
Design Sewage Flow of Existing Sewerage Service Area (Year 2005)

The study on the Sewerage System in North Dhaka





LEGEND: (414) 414 cu.m./day: lifting/pumping design average daily sewage flow

Figure 14.5.2.4 Design Sewage Flow of Existing Sewerage Service Area (Year 2015)

The study on the Sewerage System in North Dhaka

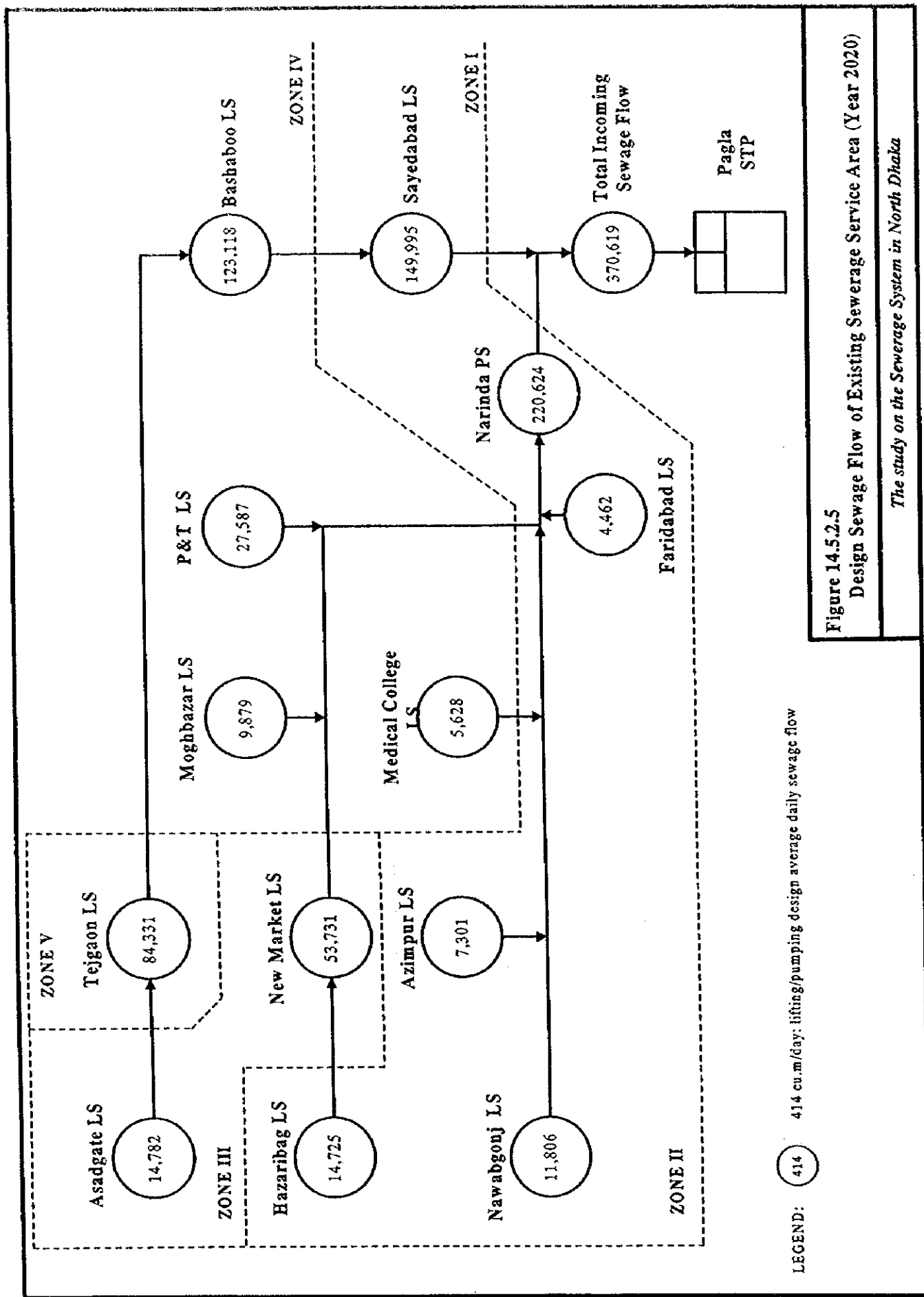


Figure 14.5.2.5
Design Sewage Flow of Existing Sewerage Service Area (Year 2020)

The study on the Sewerage System in North Dhaka

LEGEND: (414) 414 cu.m/day: lifting/pumping design average daily sewage flow

Appendix 14.5.3 Design Incoming Sewage Flow of Existing Lift Station (Year 2005)

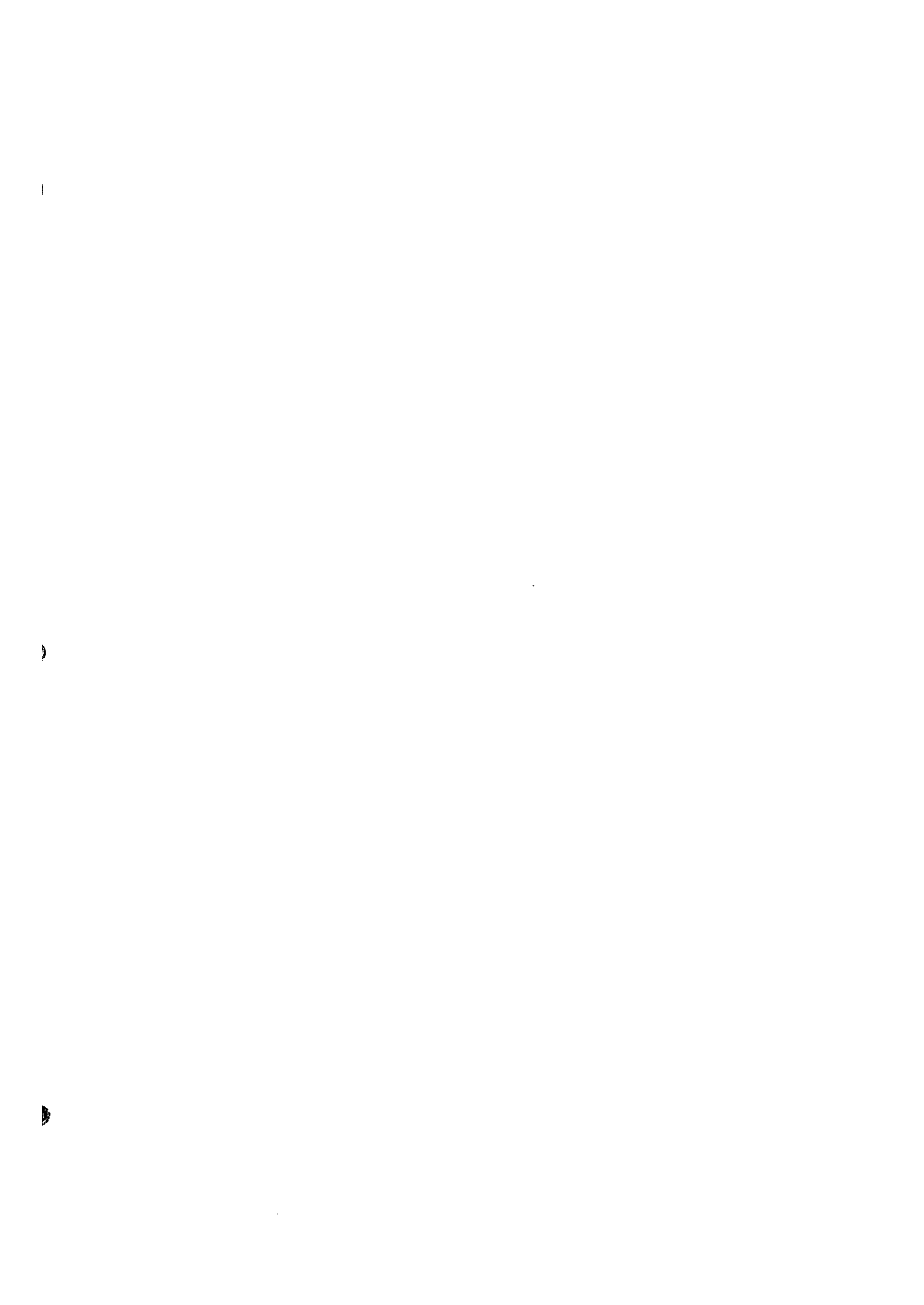
Table 14.5.3.1 Design Sewage Flow of Existing Sewerage Service Area (Year 2005)

Trunk Main	Lift Station	Area (ha)		Population (person)		Sewage Flow (cu.m/day)								
		Each	Total	Each	Total	Each			Total					
						Q1	Q2	Q3	Q1	Q2	Q3			
Gulshan Trunk Main	Tejgaon LS	719		316,573		30,074	36,406	45,903	30,074	36,406	45,903			
	Sub-total	719	719	316,573	316,573	30,074	36,406	45,903	30,074	36,406	45,903			
Faridabad Trunk Main	Faridabad LS	44		42,460		4,034	4,883	6,157						
	Trunk Main No.1	309	353	297,777	340,237	28,289	34,244	43,178	32,323	39,127	49,334			
	Sub-total	353	353	340,237	340,237	32,323	39,127	49,335	32,323	39,127	49,334			
Asadgate Trunk Main	Asadgate LS	153		125,404		11,913	14,421	18,184						
	Tejgaon LS	498	1,004	250,118	692,095	23,761	28,764	36,267	65,749	79,591	100,354			
	Bashaboo LS	368	1,372	330,096	1,022,191	31,359	37,961	47,864	97,108	117,552	148,218			
	Sayedabad LS	255	1,627	228,735	1,250,926	21,730	26,305	33,167	118,838	143,856	181,384			
	Sub-total	1,274	1,627	934,353	1,250,926	88,763	107,451	135,482	118,838	143,856	181,384			
Nawabgonj Trunk Main	Nawabgonj LS	115		105,368		10,010	12,117	15,278						
	Trunk Main No.1	22	137	21,230	126,598	2,017	2,441	3,078	12,027	14,559	18,357			
	Azimpur LS	75		69,333		6,587	7,973	10,053						
	Azimpur Main	11	86	10,615	79,948	1,008	1,221	1,539	7,595	9,194	11,592			
	Trunk Main No.2	60	283	57,900	264,446	5,501	6,659	8,396	25,122	30,411	38,345			
	Medical College LS	97		51,524		4,895	5,925	7,471						
Hazaribag Trunk Main	MC Main	38	135	27,544	79,068	2,617	3,168	3,994	7,511	9,093	11,465			
	Trunk Main No.3	239	657	230,635	574,149	21,910	26,523	33,442	54,544	66,027	83,252			
	Sub-total	657	657	574,149	574,149	54,545	66,027	83,251	54,544	66,027	83,252			
	Hazaribag LS	142		124,392		11,817	14,305	18,037						
	New Market LS	605	747	343,648	468,040	32,647	39,520	49,829	44,464	53,825	67,866			
Hazaribag Trunk Main	Trunk Main No.1	88	835	40,304	508,344	3,829	4,635	5,844	48,293	58,460	73,710			
	Moghbarar LS	147		86,723		8,239	9,973	12,575						
	Moghbarar Main	70	217	32,060	118,783	3,046	3,687	4,649	11,284	13,660	17,224			
	Trunk Main No.2	122	1,174	55,876	683,003	5,308	6,426	8,102	64,885	78,545	99,035			
	P&T LS	351		239,339		22,737	27,524	34,704						
Narinda PS Pagla STP	P&T Main	72	423	35,610	274,949	3,383	4,095	5,163	26,120	31,619	39,868			
	Trunk Main No.3	211	1,808	130,607	1,088,559	12,408	15,020	18,938	103,413	125,184	157,841			
	Sub-total	1,808	1,808	1,088,559	1,088,559	103,414	125,185	157,841	103,413	125,184	157,841			
		0	2,818		2,002,945				190,280	230,339	290,427			
		0	4,445		3,253,871				309,118	374,195	471,811			

Note: 1) Q1: Design Average Daily Flow, Per Capita Sewage Flow= 95 lpcd
 2) Q2: Design Maximum Daily Flow, Per Capita Sewage Flow= 115 lpcd
 3) Q3: Design Maximum Hourly Flow, Per Capita Sewage Flow= 145 lpcd

Table 14.5.3.2 Sewage Flow of Each Lift Station (Year 2005)

Lift Station	Area	Design Sewage Flow		Sewerage Service Ratio	Sewerage Leakage Ratio	Sewage Flow	
		Q1	Q3			Q1	Q3
		cu.m/day	cu.m/day			cu.m/day	cu.m/day
Asad Gate		11,913	18,184	64	69	2364	3,608
Tejgaon	North Dhaka	30,074	45,903	44	69	4102	6,261
	South Dhaka	23,761	36,267	64	69	4714	7,195
	Total	65,748	100,354			11,180	17,064
Bashaboo	Each	31,359	47,864	64	69	6222	9,496
	Total	97,107	148,218			17,402	26,560
Sayedabad	Each	21,730	33,166	64	69	4311	6,580
	Total	118,837	181,384			21,713	33,140
Hazaribag		11,817	18,037	64	27	5521	8,427
New Market		44,464	67,866	64	27	20774	31,707
Moghbazar		8,239	12,575	64	27	3849	5,875
P&T		22,737	34,704	64	27	10623	16,214
Nawabgonj		10,010	15,278	64	27	4677	7,138
Azimpur		6,587	10,053	64	27	3077	4,697
Medical College		4,895	7,471	64	27	2287	3,490
Faridabad		4,034	6,157	64	27	1885	2,877
Narinda		190,280	290,427	64	27	88899	135,687
Pagla STP		309,117	471,811			110612	168,827



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