

North Grenville Master Plan - Sanitary Design Sheet
Bridge Street SPS - Short-Term

Street Name	Residential			Commercial/Institutional			Infiltration		Peak Design Flow L/s
	Pop.	Peaking Factor	Residential Flow (L/s)	Area (ha)	Peaking Factor	ICI Peak Flow (L/s)	Area (ha)	Peak Extr. Flow L/s	
Bridge Street SPS	797	3.29	9.10	4.62	1.50	2.25	30.76	8.61	154.96

Design Parameters		
Residential Flows	300	L/Cap/Day
Infiltration Flows	0.28	L/s/ha
Correction Factor (Harmon's Formula)	0.8	-
Commercial (ICI) Peak Factor	1.5	-
Commercial (ICI)Average Flow	28000	L/ha/d
Manning Coefficient	0.013	

North Grenville Master Plan - Sanitary Design Sheet
Bridge Street SPS - Mid-Term

Street Name	Residential			Commercial/Institutional			Infiltration		Peak Design Flow L/s
	Pop.	Peaking Factor	Residential Flow (L/s)	Area (ha)	Peaking Factor	ICI Peak Flow (L/s)	Area (ha)	Peak Extr. Flow L/s	
Bridge Street SPS	1804	3.10	19.39	5.72	1.50	2.78	45.28	12.68	169.85

Design Parameters		
Residential Flows	300	L/Cap/Day
Infiltration Flows	0.28	L/s/ha
Correction Factor (Harmon's Formula)	0.8	-
Commercial (ICI) Peak Factor	1.5	-
Commercial (ICI)Average Flow	28000	L/ha/d
Manning Coefficient	0.013	

North Grenville Master Plan - Sanitary Design Sheet
Bridge Street SPS - Long-Term

Street Name	Residential			Commercial/Institutional			Infiltration		Peak Design Flow L/s
	Pop.	Peaking Factor	Residential Flow (L/s)	Area (ha)	Peaking Factor	ICI Peak Flow (L/s)	Area (ha)	Peak Extr. Flow L/s	
Bridge Street SPS	3310	2.92	33.61	7.70	1.50	3.74	61.84	17.32	189.67

Design Parameters		
Residential Flows	300	L/Cap/Day
Infiltration Flows	0.28	L/s/ha
Correction Factor (Harmon's Formula)	0.8	-
Commercial (ICI) Peak Factor	1.5	-
Commercial (ICI)Average Flow	28000	L/ha/d
Manning Coefficient	0.013	

North Grenville Master Plan - Sanitary Design Sheet
Bridge Street SPS - Build-Out

Street Name	Residential			Commercial/Institutional			Infiltration		Peak Design Flow L/s
	Pop.	Peaking Factor	Residential Flow (L/s)	Area (ha)	Peaking Factor	ICI Peak Flow (L/s)	Area (ha)	Peak Extr. Flow L/s	
Bridge Street SPS	3685	2.89	37.00	7.70	1.50	3.74	66.54	18.63	194.38

Design Parameters		
Residential Flows	300	L/Cap/Day
Infiltration Flows	0.28	L/s/ha
Correction Factor (Harmon's Formula)	0.8	-
Commercial (ICI) Peak Factor	1.5	-
Commercial (ICI)Average Flow	28000	L/ha/d
Manning Coefficient	0.013	

North Grenville Master Plan - Sanitary Design Sheet
Tempo SPS - Short-Term

Street Name	Residential			Commercial/Institutional			Infiltration		Peak Design Flow L/s
	Pop.	Peaking Factor	Residential Flow (L/s)	Area (ha)	Peaking Factor	ICI Peak Flow (L/s)	Area (ha)	Peak Extr. Flow L/s	
Tempo SPS	96	3.60	1.20	2.10	1.50	1.02	2.10	0.59	12.81

Design Parameters		
Residential Flows	300	L/Cap/Day
Infiltration Flows	0.28	L/s/ha
Correction Factor (Harmon's Formula)	0.8	-
Commercial (ICI) Peak Factor	1.5	-
Commercial (ICI)Average Flow	28000	L/ha/d
Manning Coefficient	0.013	

Street Name	Residential			Commercial/Institutional			Infiltration		Peak Design Flow L/s
	Pop.	Peaking Factor	Residential Flow (L/s)	Area (ha)	Peaking Factor	ICI Peak Flow (L/s)	Area (ha)	Peak Extr. Flow L/s	
eQuinelle SPS	632	3.34	7.32	0.00	1.50	0.00	15.41	4.31	25.63

Design Parameters		
Residential Flows	300	L/Cap/Day
Infiltration Flows	0.28	L/s/ha
Correction Factor (Harmon's Formula)	0.8	-
Commercial (ICI) Peak Factor	1.5	-
Commercial (ICI)Average Flow	28000	L/ha/d
Manning Coefficient	0.013	

Street Name	Residential			Commercial/Institutional			Infiltration		Peak Design Flow L/s
	Pop.	Peaking Factor	Residential Flow (L/s)	Area (ha)	Peaking Factor	ICI Peak Flow (L/s)	Area (ha)	Peak Extr. Flow L/s	
eQuinelle SPS	735	3.31	8.44	0.00	1.50	0.00	16.71	4.68	27.12

Design Parameters		
Residential Flows	300	L/Cap/Day
Infiltration Flows	0.28	L/s/ha
Correction Factor (Harmon's Formula)	0.8	-
Commercial (ICI) Peak Factor	1.5	-
Commercial (ICI)Average Flow	28000	L/ha/d
Manning Coefficient	0.013	

Street Name	Residential			Commercial/Institutional			Infiltration		Peak Design Flow L/s
	Pop.	Peaking Factor	Residential Flow (L/s)	Area (ha)	Peaking Factor	ICI Peak Flow (L/s)	Area (ha)	Peak Extr. Flow L/s	
eQuinelle SPS	1191	3.20	13.23	0.00	1.50	0.00	22.41	6.27	33.51

Design Parameters		
Residential Flows	300	L/Cap/Day
Infiltration Flows	0.28	L/s/ha
Correction Factor (Harmon's Formula)	0.8	-
Commercial (ICI) Peak Factor	1.5	-
Commercial (ICI)Average Flow	28000	L/ha/d
Manning Coefficient	0.013	

Street Name	Residential			Commercial/Institutional			Infiltration		Peak Design Flow L/s
	Pop.	Peaking Factor	Residential Flow (L/s)	Area (ha)	Peaking Factor	ICI Peak Flow (L/s)	Area (ha)	Peak Extr. Flow L/s	
Colonnade SPS	158	3.55	1.95	0.00	1.50	0.00	3.27	0.92	9.86

Design Parameters		
Residential Flows	300	L/Cap/Day
Infiltration Flows	0.28	L/s/ha
Correction Factor (Harmon's Formula)	0.8	-
Commercial (ICI) Peak Factor	1.5	-
Commercial (ICI)Average Flow	28000	L/ha/d
Manning Coefficient	0.013	

Street Name	Residential			Commercial/Institutional			Infiltration		Peak Design Flow L/s
	Pop.	Peaking Factor	Residential Flow (L/s)	Area (ha)	Peaking Factor	ICI Peak Flow (L/s)	Area (ha)	Peak Extr. Flow L/s	
Colonnade SPS	158	3.55	1.95	28.20	1.50	13.71	31.47	8.81	31.47

Design Parameters		
Residential Flows	300	L/Cap/Day
Infiltration Flows	0.28	L/s/ha
Correction Factor (Harmon's Formula)	0.8	-
Commercial (ICI) Peak Factor	1.5	-
Commercial (ICI)Average Flow	28000	L/ha/d
Manning Coefficient	0.013	

North Grenville Master Plan - Sanitary Design Sheet
Colonnade SPS - Long-Term

Street Name	Residential			Commercial/Institutional			Infiltration		Peak Design Flow L/s
	Pop.	Peaking Factor	Residential Flow (L/s)	Area (ha)	Peaking Factor	ICI Peak Flow (L/s)	Area (ha)	Peak Extr. Flow L/s	
Colonnade SPS	1518	3.14	16.55	39.00	1.50	18.96	59.27	16.60	59.11

Design Parameters		
Residential Flows	300	L/Cap/Day
Infiltration Flows	0.28	L/s/ha
Correction Factor (Harmon's Formula)	0.8	-
Commercial (ICI) Peak Factor	1.5	-
Commercial (ICI)Average Flow	28000	L/ha/d
Manning Coefficient	0.013	

North Grenville Master Plan - Sanitary Design Sheet
Colonnade SPS - Build-Out

Street Name	Residential			Commercial/Institutional			Infiltration		Peak Design Flow L/s
	Pop.	Peaking Factor	Residential Flow (L/s)	Area (ha)	Peaking Factor	ICI Peak Flow (L/s)	Area (ha)	Peak Extr. Flow L/s	
Colonnade SPS	7018	2.68	65.41	73.30	1.50	35.63	151.69	42.47	150.52

Design Parameters		
Residential Flows	300	L/Cap/Day
Infiltration Flows	0.28	L/s/ha
Correction Factor (Harmon's Formula)	0.8	-
Commercial (ICI) Peak Factor	1.5	-
Commercial (ICI)Average Flow	28000	L/ha/d
Manning Coefficient	0.013	

Street Name	MH No.		Residential					Commercial/Institutional				Infiltration			Peak Design Flow L/s	Pipe Data								Upstream Geometry				Downstream Geometry					
	From	To	Pop.	Cum. Pop.	Cum. Area (ha)	Peaking Factor	Residential Flow (L/s)	Area (ha)	Cum. Area (ha)	Peaking Factor	ICI Peak Flow (L/s)	Area (ha)	Cum. Area (ha)	Peak Extr. Flow L/s		Dia	Type	Actual Diameter	Slope	Q Full (L/s)	V Full	Length	Residual Capacity	% Full	TG From	Obvert	Invert	Cover	TG TO	Obvert	Invert	Cover	
Catchment Area #3 (Syphon)	SAMH-13000	SAMH-10007	557	557	0.00	3.36	6.50	13.89	13.89	1.50	6.75	53.12	53.12	14.87	28.12	150	Circular	152.40				103.32								87.730	85.512	85.360	2.218
Catchment Area #1 (Barnes St)	SAMHA-0018	SAMH-10007	1504	1504	0.00	3.14	16.41	25.80	25.80	1.50	12.54	88.29	88.29	24.72	53.68	300	Circular	304.80				37.85								87.805	85.605	85.300	2.200
Barnes St - Lydia St	SAMH-10007	SAMH-10006		2061	0.00	3.06	21.90		39.69	1.50	19.29		88.29	24.72	65.92	375	Circular	381.00	0.26%	93.27	0.82	37.85	27.35	71%	87.730	85.561	85.180	2.169	87.470	85.251	84.870	2.219	
Lydia St - James St	SAMH-10006	SAMH-10005		2061	0.00	3.06	21.90		39.69	1.50	19.29		88.29	24.72	65.92	375	Circular	381.00	0.20%	81.80	0.72	115.61	15.88	81%	87.420	85.251	84.870	2.169	88.240	85.051	84.670	3.189	
Curry (James St - midway to Parliament St)	SAMH-10005	SAMH-10004		2061	0.00	3.06	21.90		39.69	1.50	19.29		88.29	24.72	65.92	375	Circular	381.00	0.56%	136.88	1.20	74.89	70.96	48%	88.240	84.780	84.670	3.460	88.030	84.631	84.250	3.399	
Curry St (Midway of James - Parliament St)	SAMH-10004	SAMH-10003		2061	0.00	3.06	21.90		39.69	1.50	19.29		88.29	24.72	65.92	375	Circular	381.00	0.28%	96.79	0.85	62.76	30.87	68%	88.030	84.631	84.250	3.399	87.680	84.791	84.410	2.889	
Catchment Area #2 (Parliament St)	SAMHA-0052	SAMH-10003	691	691	0.00	3.32	7.96	8.24	8.24	1.50	4.00	25.93	25.93	7.26	19.22	300	Circular	304.80	0.98%	99.87	1.37	47.12	80.64	19%	88.840	85.885	85.580	2.955	87.650	85.425	85.120	2.225	
Curry St (at Parliament St)	SAMH-10003	SAMH-10002		2752	0.00	2.98	28.47		47.93	1.50	23.30		114.22	31.98	83.75	375	Circular	381.00	0.40%	115.68	1.01	5.63	31.94	72%	87.680	84.821	84.440	2.859	87.450	84.691	84.310	2.759	
Catchment Area #4 (Syphon)	SAMHA-0069	SAMH010004	764	764	0.00	3.30	8.75	12.06	12.06	1.50	5.86	101.40	101.40	28.39	43.00	300	Circular	304.80	1.05%	103.37	1.42	120.23	60.37	42%	88.937	86.252	85.947	2.685	88.030	85.145	84.840	2.885	
Catchment Area #5 (Syphon)	SAMHA-16000	SAMH-10002	489	489	0.00	3.38	5.74	11.38	11.38	1.50	5.53	63.58	63.58	17.80	29.08	250	Circular	254.00	1.31%	71.01	1.40	120.23	41.93	41%	89.670	85.904	85.650	3.766	87.500	84.404	84.150	3.096	
Curry St (Parliament St - Bridge St)	SAMH-10002	SAMH-10001		3241	0.00	2.93	32.98		59.31	1.50	28.83		332.32	93.05	154.86	600	Circular	609.60	0.96%	627.62	2.15	151.36	472.76	25%	87.500	84.970	84.360	2.530	87.390	83.180	82.570	4.210	
Curry St (Bridge St - PS)	SAMH-10001	SAMH-10000		3241	0.00	2.93	32.98		59.31	1.50	28.83		332.32	93.05	154.86	600	Circular	609.60	3.14%	1135.08	3.89	48.60	980.22	14%	87.390	83.140	82.530	4.250	88.430	81.590	80.980	6.840	

Design Parameters		
Residential Flows	300	L/Cap/Day
Infiltration Flows	0.28	L/s/ha
Correction Factor (Harmon's Formula)	0.8	-
Commercial (ICI) Peak Factor	1.5	-
Commercial (ICI) Average Flow	28000	L/ha/d
Manning Coefficient	0.013	

Pipes Directly on Curry Street or Syphon for Master Plan Assesment

Proposed Pipe Upgrades

Street Name	MH No.		Residential					Commercial/Institutional				Infiltration			Peak Design Flow L/s	Pipe Data								Upstream Geometry				Downstream Geometry				
	From	To	Pop.	Cum. Pop.	Cum. Area (ha)	Peaking Factor	Residential Flow (L/s)	Area (ha)	Cum. Area (ha)	Peaking Factor	ICI Peak Flow (L/s)	Area (ha)	Cum. Area (ha)	Peak Extr. Flow L/s		Dia	Type	Actual Diameter	Slope	Q Full (L/s)	V Full	Length	Residual Capacity	% Full	TG From	Obvert	Invert	Cover	TG TO	Obvert	Invert	Cover
Catchment Area #3 (Syphon)	SAMH-13000	SAMH-10007	1035	1035	0.00	3.23	11.62	35.27	35.27	1.50	17.15	77.23	77.23	21.62	61.18	150	Circular	152.40				103.32						87.730	85.512	85.360	2.218	
Catchment Area #1 (Barnes St)	SAMHA-0018	SAMH-10007	1504	1504	0.00	3.14	16.41	25.80	25.80	1.50	12.54	88.29	88.29	24.72	53.68	300	Circular	304.80				37.85						87.805	85.605	85.300	2.200	
Barnes St - Lydia St	SAMH-10007	SAMH-10006		2539	0.00	3.00	26.47		61.07	1.50	29.69		88.29	24.72	80.88	375	Circular	381.00	0.26%	93.27	0.82	37.85	12.39	87%	87.730	85.561	85.180	2.169	87.470	85.251	84.870	2.219
Lydia St - James St	SAMH-10006	SAMH-10005		2539	0.00	3.00	26.47		61.07	1.50	29.69		88.29	24.72	80.88	375	Circular	381.00	0.20%	81.80	0.72	115.61	0.92	99%	87.420	85.251	84.870	2.169	88.240	85.051	84.670	3.189
Curry (James St - midway to Parliament St)	SAMH-10005	SAMH-10004		2539	0.00	3.00	26.47		61.07	1.50	29.69		88.29	24.72	80.88	375	Circular	381.00	0.56%	136.88	1.20	74.89	56.00	59%	88.240	85.161	84.780	3.079	88.030	84.631	84.250	3.399
Curry St (Midway of James - Parliament St)	SAMH-10004	SAMH-10003		2539	0.00	3.00	26.47		61.07	1.50	29.69		88.29	24.72	80.88	375	Circular	381.00	0.28%	96.79	0.85	62.76	15.91	84%	88.030	84.631	84.250	3.399	87.680	84.791	84.410	2.889
Catchment Area #2 (Parliament St)	SAMHA-0052	SAMH-10003	691	691	0.00	3.32	7.96	8.24	8.24	1.50	4.00	25.93	25.93	7.26	19.22	300	Circular	304.80	0.98%	99.87	1.37	47.12	80.64	19%	88.840	85.885	85.580	2.955	87.650	85.425	85.120	2.225
Curry St (at Parliament St)	SAMH-10003	SAMH-10002		3230	0.00	2.93	32.88		69.31	1.50	33.69		114.22	31.98	98.55	375	Circular	381.00	0.40%	115.68	1.01	5.63	17.13	85%	87.680	84.821	84.440	2.859	87.450	84.691	84.310	2.759
Catchment Area #4 (Syphon)	SAMHA-0069	SAMH010004	1083	1083	0.00	3.22	12.11	15.93	15.93	1.50	7.74	108.05	108.05	30.25	50.11	300	Circular	304.80	1.05%	103.37	1.42	120.23	53.26	48%	88.937	86.252	85.947	2.685	88.030	85.145	84.840	2.885
Catchment Area #5 (Syphon)	SAMHA-16000	SAMH-10002	489	489	0.00	3.38	5.74	11.38	11.38	1.50	5.53	63.58	63.58	17.80	29.08	250	Circular	254.00	1.31%	71.01	1.40	173.70	41.93	41%	89.670	85.904	85.650	3.766	87.500	84.404	84.150	3.096
Curry St (Parliament St - Bridge St)	SAMH-10002	SAMH-10001		3719	0.00	2.89	37.31		80.69	1.50	39.22		363.08	101.66	178.19	600	Circular	609.60	0.96%	627.62	2.15	151.36	449.43	28%	87.500	84.970	84.360	2.530	87.390	83.180	82.570	4.210
Curry St (Bridge St - PS)	SAMH-10001	SAMH-10000		3719	0.00	2.89	37.31		80.69	1.50	39.22		363.08	101.66	178.19	600	Circular	609.60	3.14%	1135.08	3.89	48.60	956.88	16%	87.390	83.140	82.530	4.250	88.430	81.590	80.980	6.840

Design Parameters		
Residential Flows	300	L/Cap/Day
Infiltration Flows	0.28	L/s/ha
Correction Factor (Harmon's Formula)	0.8	-
Commercial (ICI) Peak Factor	1.5	-
Commercial (ICI) Average Flow	28000	L/ha/d
Manning Coefficient	0.013	

Pipes Directly on Curry Street or Syphon for Master Plan Assessment

Proposed Pipe Upgrades

Street Name	MH No.		Residential					Commercial/Institutional				Infiltration			Peak Design Flow L/s	Pipe Data										Upstream Geometry				Downstream Geometry			
	From	To	Pop.	Cum. Pop.	Cum. Area (ha)	Peaking Factor	Residential Flow (L/s)	Area (ha)	Cum. Area (ha)	Peaking Factor	ICI Peak Flow (L/s)	Area (ha)	Cum. Area (ha)	Peak Extr. Flow L/s		Dia	Type	Actual Diameter	Slope	Q Full (L/s)	V Full	Length	Residual Capacity	% Full	TG From	Obvert	Invert	Cover	TG TO	Obvert	Invert	Cover	
Catchment Area #3 (Syphon)	SAMH-13000	SAMH-10007	1333	1333	0.00	3.17	14.68	35.27	35.27	1.50	17.15	78.32	78.32	21.93	64.56	150	Circular	152.40				103.32						87.730	85.512	85.360	2.218		
Catchment Area #1 (Barnes St)	SAMHA-0018	SAMH-10007	1700	1700	0.00	3.11	18.37	25.80	25.80	1.50	12.54	92.52	92.52	25.91	56.81	300	Circular	304.80				37.85						87.805	85.605	85.300	2.200		
Barnes St - Lydia St	SAMH-10007	SAMH-10006	3033	3033	0.00	2.95	31.07	61.07	61.07	1.50	29.69	92.52	92.52	25.91	86.67	375	Circular	381.00	0.26%	93.27	0.82	37.85	6.60	93%	87.730	85.561	85.180	2.169	87.470	85.251	84.870	2.219	
Lydia St - James St	SAMH-10006	SAMH-10005	3033	3033	0.00	2.95	31.07	61.07	61.07	1.50	29.69	92.52	92.52	25.91	86.67	375	Circular	381.00	0.20%	81.80	0.72	115.61	-4.87	106%	87.420	85.251	84.870	2.169	88.240	85.051	84.670	3.189	
Curry (James St - midway to Parliament St)	SAMH-10005	SAMH-10004	3033	3033	0.00	2.95	31.07	61.07	61.07	1.50	29.69	92.52	92.52	25.91	86.67	375	Circular	381.00	0.56%	136.88	1.20	74.89	50.21	63%	88.240	85.161	84.780	3.079	88.030	84.631	84.250	3.399	
Curry St (Midway of James - Parliament St)	SAMH-10004	SAMH-10003	3033	3033	0.00	2.95	31.07	61.07	61.07	1.50	29.69	92.52	92.52	25.91	86.67	450	Circular	457.20	0.28%	157.39	0.96	62.76	70.72	55%	88.030	84.707	84.250	3.323	87.680	84.867	84.410	2.813	
Catchment Area #2 (Parliament St)	SAMHA-0052	SAMH-10003	691	691	0.00	3.32	7.96	8.24	8.24	1.50	4.00	25.93	25.93	7.26	19.22	300	Circular	304.80	0.98%	99.87	1.37	47.12	80.64	19%	88.840	85.885	85.580	2.955	87.650	85.425	85.120	2.225	
Curry St (at Parliament St)	SAMH-10003	SAMH-10002	3724	3724	0.00	2.89	37.35	69.31	69.31	1.50	33.69	118.45	118.45	33.17	104.21	450	Circular	457.20	0.40%	188.11	1.15	5.63	83.90	55%	87.680	84.897	84.440	2.783	87.450	84.767	84.310	2.683	
Catchment Area #4 (Syphon)	SAMHA-0069	SAMH010004	1249	1249	0.00	3.19	13.83	15.93	15.93	1.50	7.74	118.60	118.60	33.21	54.78	300	Circular	304.80	1.05%	103.37	1.42	120.23	48.60	53%	88.937	86.252	85.947	2.685	88.030	85.145	84.840	2.885	
Catchment Area #5 (Syphon)	SAMHA-16000	SAMH-10002	836	836	0.00	3.28	9.52	15.95	15.95	1.50	7.75	73.35	73.35	20.54	37.81	250	Circular	254.00	1.31%	71.01	1.40	173.70	33.20	53%	89.670	85.904	85.650	3.766	87.500	84.404	84.150	3.096	
Curry St (Parliament St - Bridge St)	SAMH-10002	SAMH-10001	4560	4560	0.00	2.83	44.73	85.26	85.26	1.50	41.44	388.72	388.72	108.84	195.02	600	Circular	609.60	0.96%	627.62	2.15	151.36	432.60	31%	87.500	84.970	84.360	2.530	87.390	83.180	82.570	4.210	
Curry St (Bridge St - PS)	SAMH-10001	SAMH-10000	4560	4560	0.00	2.83	44.73	85.26	85.26	1.50	41.44	388.72	388.72	108.84	195.02	600	Circular	609.60	3.14%	1135.08	3.89	48.60	940.06	17%	87.390	83.140	82.530	4.250	88.430	81.590	80.980	6.840	

Design Parameters		
Residential Flows	300	L/Cap/Day
Infiltration Flows	0.28	L/s/ha
Correction Factor (Harmon's Formula)	0.8	-
Commercial (ICI) Peak Factor	1.5	-
Commercial (ICI) Average Flow	28000	L/ha/d
Manning Coefficient	0.013	

Pipes Directly on Curry Street or Syphon for Master Plan Assesment

Proposed Pipe Upgrades

Street Name	MH No.		Residential					Commercial/Institutional				Infiltration			Peak Design Flow L/s	Pipe Data								Upstream Geometry				Downstream Geometry				
	From	To	Pop.	Cum. Pop.	Cum. Area (ha)	Peaking Factor	Residential Flow (L/s)	Area (ha)	Cum. Area (ha)	Peaking Factor	ICI Peak Flow (L/s)	Area (ha)	Cum. Area (ha)	Peak Extr. Flow L/s		Dia	Type	Actual Diameter	Slope	Q Full (L/s)	V Full	Length	Residual Capacity	% Full	TG From	Obvert	Invert	Cover	TG TO	Obvert	Invert	Cover
Catchment Area #3 (Syphon)	SAMH-13000	SAMH-10007	1333	1333	0.00	3.17	14.68	35.76	35.76	1.50	17.38	78.81	78.81	22.07	64.94	150	Circular	152.40				103.32						87.730	85.512	85.360	2.218	
Catchment Area #1 (Barnes St)	SAMHA-0018	SAMH-10007	1700	1700	0.00	3.11	18.37	27.29	27.29	1.50	13.27	90.40	90.40	25.31	56.95	300	Circular	304.80				37.85						87.805	85.605	85.300	2.200	
Barnes St - Lydia St	SAMH-10007	SAMH-10006	3033	3033	0.00	2.95	31.07	63.05	63.05	1.50	30.65	90.40	90.40	25.31	87.04	375	Circular	381.00	0.26%	93.27	0.82	37.85	6.23	93%	87.730	85.561	85.180	2.169	87.470	85.251	84.870	2.219
Lydia St - James St	SAMH-10006	SAMH-10005	3033	3033	0.00	2.95	31.07	63.05	63.05	1.50	30.65	90.40	90.40	25.31	87.04	375	Circular	381.00	0.20%	81.80	0.72	115.61	-5.24	106%	87.420	85.251	84.870	2.169	88.240	85.051	84.670	3.189
Curry (James St - midway to Parliament St)	SAMH-10005	SAMH-10004	3033	3033	0.00	2.95	31.07	63.05	63.05	1.50	30.65	90.40	90.40	25.31	87.04	375	Circular	381.00	0.56%	136.88	1.20	74.89	49.84	64%	88.240	85.161	84.780	3.079	88.030	84.631	84.250	3.399
Curry St (Midway of James - Parliament St)	SAMH-10004	SAMH-10003		3033	0.00	2.95	31.07		63.05	1.50	30.65		90.40	25.31	87.04	450	Circular	457.20	0.28%	157.39	0.96	62.76	70.35	55%	88.030	84.707	84.250	3.323	87.680	84.867	84.410	2.813
Catchment Area #2 (Parliament St)	SAMHA-0052	SAMH-10003	776	776	0.00	3.29	8.88	8.24	8.24	1.50	4.00	27.00	27.00	7.56	20.44	300	Circular	304.80	0.98%	99.87	1.37	47.12	79.43	20%	88.840	85.885	85.580	2.955	87.650	85.425	85.120	2.225
Curry St (at Parliament St)	SAMH-10003	SAMH-10002		3809	0.00	2.88	38.11		71.29	1.50	34.65		117.40	32.87	105.64	450	Circular	457.20	0.40%	188.11	1.15	5.63	82.48	56%	87.680	84.897	84.440	2.783	87.450	84.767	84.310	2.683
Catchment Area #4 (Syphon)	SAMHA-0069	SAMH010004	1249	1249	0.00	3.19	13.83	15.93	15.93	1.50	7.74	109.60	109.60	30.69	52.26	300	Circular	304.80	1.05%	103.37	1.42	120.23	51.12	51%	88.937	86.252	85.947	2.685	88.030	85.145	84.840	2.885
Catchment Area #5 (Syphon)	SAMHA-16000	SAMH-10002	2185	2185	0.00	3.04	23.10	11.38	11.38	1.50	5.53	86.23	86.23	24.14	52.77	250	Circular	254.00	1.31%	71.01	1.40	173.70	18.23	74%	89.670	85.904	85.650	3.766	87.500	84.404	84.150	3.096
Curry St (Parliament St - Bridge St)	SAMH-10002	SAMH-10001		5994	0.00	2.74	56.96		82.67	1.50	40.19		392.04	109.77	206.92	600	Circular	609.60	0.96%	627.62	2.15	151.36	420.70	33%	87.500	84.970	84.360	2.530	87.390	83.180	82.570	4.210
Curry St (Bridge St - PS)	SAMH-10001	SAMH-10000		5994	0.00	2.74	56.96		82.67	1.50	40.19		392.04	109.77	206.92	600	Circular	609.60	3.14%	1135.08	3.89	48.60	928.16	18%	87.390	83.140	82.530	4.250	88.430	81.590	80.980	6.840

Design Parameters		
Residential Flows	300	L/Cap/Day
Infiltration Flows	0.28	L/s/ha
Correction Factor (Harmon's Formula)	0.8	-
Commercial (ICI) Peak Factor	1.5	-
Commercial (ICI) Average Flow	28000	L/ha/d
Manning Coefficient	0.013	

Pipes Directly on Curry Street or Syphon for Master Plan Assesment

Proposed Pipe Upgrades

Street Name	MH No.		Residential					Commercial/Institutional				Infiltration			Peak Design Flow L/s	Pipe Data										Upstream Geometry				Downstream Geometry			
	From	To	Pop.	Cum. Pop.	Cum. Area (ha)	Peaking Factor	Residential Flow (L/s)	Area (ha)	Cum. Area (ha)	Peaking Factor	ICI Peak Flow (L/s)	Area (ha)	Cum. Area (ha)	Peak Extr. Flow L/s		Dia	Type	Actual Diameter	Slope	Q Full (L/s)	V Full	Length	Residual Capacity	% Full	TG From	Obvert	Invert	Cover	TG TO	Obvert	Invert	Cover	
Catchment Area #3 (Syphon)	SAMH-13000	SAMH-10007	1333	1333	0.00	3.17	14.68	35.76	35.76	1.50	17.38	78.81	78.81	22.07	64.94	150	Circular	152.40				103.32						87.730	85.512	85.360	2.218		
Catchment Area #1 (Barnes St)	SAMHA-0018	SAMH-10007	1700	1700	0.00	3.11	18.37	27.29	27.29	1.50	13.27	90.40	90.40	25.31	56.95	300	Circular	304.80				37.85						87.805	85.605	85.300	2.200		
Barnes St - Lydia St	SAMH-10007	SAMH-10006	3033	0.00	2.95	31.07	63.05	63.05	1.50	30.65	90.40	90.40	25.31	87.04	375	Circular	381.00	0.26%	93.27	0.82	37.85	6.23	93%	87.730	85.561	85.180	2.169	87.470	85.251	84.870	2.219		
Lydia St - James St	SAMH-10006	SAMH-10005	3033	0.00	2.95	31.07	63.05	63.05	1.50	30.65	90.40	90.40	25.31	87.04	375	Circular	381.00	0.20%	81.80	0.72	115.61	-5.24	106%	87.420	85.251	84.870	2.169	88.240	85.051	84.670	3.189		
Curry (James St - midway to Parliament St)	SAMH-10005	SAMH-10004	3033	0.00	2.95	31.07	63.05	63.05	1.50	30.65	90.40	90.40	25.31	87.04	375	Circular	381.00	0.56%	136.88	1.20	74.89	49.84	64%	88.240	85.161	84.780	3.079	88.030	84.631	84.250	3.399		
Curry St (Midway of James - Parliament St)	SAMH-10004	SAMH-10003	3033	0.00	2.95	31.07	63.05	63.05	1.50	30.65	90.40	90.40	25.31	87.04	450	Circular	457.20	0.28%	157.39	0.96	62.76	70.35	55%	88.030	84.707	84.250	3.323	87.680	84.867	84.410	2.813		
Catchment Area #2 (Parliament St)	SAMHA-0052	SAMH-10003	776	776	0.00	3.29	8.88	8.24	8.24	1.50	4.00	27.00	27.00	7.56	20.44	300	Circular	304.80	0.98%	99.87	1.37	47.12	79.43	20%	88.840	85.885	85.580	2.955	87.650	85.425	85.120	2.225	
Curry St (at Parliament St)	SAMH-10003	SAMH-10002	3809	0.00	2.88	38.11	71.29	71.29	1.50	34.65	117.40	117.40	32.87	105.64	450	Circular	457.20	0.40%	188.11	1.15	5.63	82.48	56%	87.680	84.897	84.440	2.783	87.450	84.767	84.310	2.683		
Catchment Area #4 (Syphon)	SAMHA-0069	SAMH010004	1394	1394	0.00	3.16	15.30	15.93	15.93	1.50	7.74	118.60	118.60	33.21	56.25	300	Circular	304.80	1.05%	103.37	1.42	120.23	47.12	54%	88.937	86.252	85.947	2.685	88.030	85.145	84.840	2.885	
Catchment Area #5 (Syphon)	SAMHA-16000	SAMH-10002	2415	2415	0.00	3.02	25.29	11.38	11.38	1.50	5.53	90.93	90.93	25.46	56.29	250	Circular	254.00	1.31%	71.01	1.40	173.70	14.72	79%	89.670	85.904	85.650	3.766	87.500	84.404	84.150	3.096	
Curry St (Parliament St - Bridge St)	SAMH-10002	SAMH-10001	6224	0.00	2.72	58.88	82.67	82.67	1.50	40.19	405.74	405.74	113.61	212.67	600	Circular	609.60	0.96%	627.62	2.15	151.36	414.95	34%	87.500	84.970	84.360	2.530	87.390	83.180	82.570	4.210		
Curry St (Bridge St - PS)	SAMH-10001	SAMH-10000	6224	0.00	2.72	58.88	82.67	82.67	1.50	40.19	405.74	405.74	113.61	212.67	600	Circular	609.60	3.14%	1135.08	3.89	48.60	922.41	19%	87.390	83.140	82.530	4.250	88.430	81.590	80.980	6.840		

Design Parameters		
Residential Flows	300	L/Cap/Day
Infiltration Flows	0.28	L/s/ha
Correction Factor (Harmon's Formula)	0.8	-
Commercial (ICI) Peak Factor	1.5	-
Commercial (ICI) Average Flow	28000	L/ha/d
Manning Coefficient	0.013	

Pipes Directly on Curry Street or Syphon for Master Plan Assesment

Proposed Pipe Upgrades