

**Appendix I**

**Sanitary Sewer Design Sheets**

**SANITARY SEWER DESIGN SHEET**  
**FRUITLAND -WINONA SECONDARY PLAN AREA-BLOCK 1**  
**INCLUDING GREENBELT LANDS**  
 City of Hamilton

**PROJECT DETAILS**  
 Project No: 20-263  
 Date: 25-Apr-24  
 Designed by: E.L.  
 Checked by: S.H.

**DESIGN CRITERIA**  
 Min Diameter = 250 mm      Avg. Domestic Flow = 360.0 l/c/d  
 Mannings 'n' = 0.015      Infiltration = 0.600 l/s/ha  
 Min. Velocity = 0.75 m/s      Max. Peaking Factor = 5.00  
 Max. Velocity = 2.75 m/s      Min. Peaking Factor = 2.00       $M = \frac{5}{P^{0.2}}$   
 Factor of Safety = 25 %

*Denotes overcapacity sewer*  
**NOMINAL PIPE SIZE USED**

STREET	FROM MH	TO MH	RESIDENTIAL							COMMERCIAL/INDUSTRIAL/INSTITUTIONAL/MIXED USE							FLOW CALCULATIONS							PIPE DATA				
			AREA (ha)	ACC. AREA (ha)	UNITS (#)	DENISTY (P/ha)	DENSITY (P/unit)	POP	ACCUM. RES. POP.	AREA (ha)	AREA ID	ACC. AREA (ha)	EQUIV. POP. (p/ha)	FLOW RATE (l/s/ha)	EQUIV. POP.	ACCUM. EQUIV. POP.	INFILTRATION (l/s)	TOTAL ACCUM. POP.	PEAKING FACTOR	RES. FLOW (l/s)	COMM. FLOW (l/s)	ACCUM. COMM. FLOW (l/s)	TOTAL FLOW (l/s)	SLOPE (%)	PIPE DIAMETER (mm)	FULL FLOW CAPACITY (l/s)	FULL FLOW VELOCITY (m/s)	ACTUAL VELOCITY (m/s)
<b>FRUITLAND SEWERSHED</b>																												
EXTERNAL AREA 1	EXT1	SI07A014	7.70	7.70		75		578	578																			
REGALVIEW DRIVE	SI07A012	SI07A014	11.30	11.30		60		678	678																			
REGALVIEW DRIVE	SI07A014	SI07A015	1.50	20.50		60		90	1346																			
HIGHWAY 8	SI07A039	SI07A015								2.60																		
HIHWAY 8	FUTURE 2	SI07A015								1.90																		
FRUITLAND ROAD	SI07A015	SI06A001		20.50					1346	1.70																		
FRUITLAND ROAD	SI06A001	SI06A002	1.60	22.10		65		104	1450																			
FRUITLAND ROAD	SI06A002	SI06A003	0.80	22.90		65		52	1502																			
FRUITLAND ROAD	SI06A003	SI06A005	1.30	24.20		66.1538		86	1588																			
FRUITLAND ROAD	SI06A005	SI06A007	0.80	25.00		57.5		46	1634																			
FRUITLAND ROAD	SI06A007	SI06A009	0.80	25.80		63.75		51	1685																			
SHERWOOD PARK ROAD	SI06A014	SI06A013								7.90																		
SHERWOOD PARK ROAD	SI06A013	SI06A012	0.30	0.30		60		18	18																			
SHERWOOD PARK ROAD	SI06A012	SI06A009		0.30					18																			
STREET B	FUTURE 4	SI06A009	0.20	0.20																								
FRUITLAND ROAD	SI06A009	SI05A023	0.70	27.00		64.2857		45	1748																			
FRUITLAND ROAD	SI05A023	SI05A013	1.10	28.10		61.8182		68	1816																			
FRUITLAND ROAD	SI05A013	SI05A012	0.80	28.90		63.75		51	1867																			
FRUITLAND ROAD	SI05A012	SI05A010	0.60	29.50		65		39	1906																			
SANDY DRIVE	SI05A021	SI05A010	6.70	6.70		60		402	402																			
FRUITLAND ROAD	SI05A010	SI05A008	0.60	36.80		73.3333		44	2352																			
FRUITLAND ROAD	SI05A008	SI05A006		36.80					2352	1.20																		
BARTON STREET	SI05A007	SI05A006								11.50																		
BARTON STREET	SI05A015	SI05A016	1.70	1.70		198.235		337	337																			
BARTON STREET	SI05A016	MH12A	1.70	3.40		175.882		299	636																			
EXTERNAL AREA 2	EXT2	MH1A	21.60	21.60		110		2376	2376																			
<b>BLOCK 1 SEWERSHED</b>																												
GORDON DEAN AVE	MH1A	MH2A	2.70	24.30		88.8889		240	2616																			
GORDON DEAN AVE	MH2A	MH3A	5.90	30.20		178.814		1055	3671																			
GORDON DEAN AVE	MH3A	MH9A	6.80	37.00		176.471		1200	4871																			
STREET B	MH5A	MH6A	1.80	1.80		110		198	198																			
STREET B	MH6A	MH9A	10.10	11.90		65.7426		664	862																			
STREET B	MH7A	MH8A	3.60	3.60		85.5556		308	308																			
STREET B	MH8A	MH9A	2.75	6.35		186.545		513	821																			
GORDON DEAN AVE	MH9A	MH10A	10.55	65.80		88.0569		929	7483																			
GORDON DEAN AVE	MH10A	MH11A	6.70	72.50		83.8806		562	8045																			
GORDON DEAN AVE	MH11A	MH12A	1.70	74.20					8045																			
BARTON STREET	MH12A	MH13A	0.60	78.20		60		36	8717																			
BARTON STREET	MH13A	SI05A021	0.60	78.80		60		36	8753																			
BARTON STREET	SI05A021	SI05A001	0.80	79.60		60		48	8801																			
BARTON STREET	SI05A001	SI05A002	2.00	81.60		146		292	9093																			
BARTON STREET	SI05A002	SI05A003	2.90	84.50		78.4483		228	9321																			
BARTON STREET	SI05A003	SI05A004		84.50					9321	1.60																		
BARTON STREET	SI05A004	SI05A006		84.50					9321	1.60																		
<b>FRUITLAND SEWERSHED</b>																												
FRUITLAND ROAD	SI05A006	SI05A005	0.60	121.90		125		75	11748																			
FRUITLAND ROAD	SI05A005	SI04A004	3.20	125.10		125		400	12148																			
FRUITLAND ROAD	SI04A004	SI04A005	2.30	127.40		125		288	12436																			
FRUITLAND ROAD	SI04A005	SI04A008	1.60	129.00		125		200	12636																			

**SANITARY SEWER DESIGN SHEET**  
**FRUITLAND -WINONA SECONDARY PLAN AREA-BLOCK 1**  
**INCLUDING GREENBELT LANDS**  
 City of Hamilton

**PROJECT DETAILS**

Project No: 20-263  
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 Designed by: E.L.  
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**DESIGN CRITERIA**

Min Diameter = 250 mm      Avg. Domestic Flow = 360.0 l/c/d  
 Mannings 'n' = 0.015      Infiltration = 0.600 l/s/ha  
 Min. Velocity = 0.75 m/s      Max. Peaking Factor = 5.00  
 Max. Velocity = 2.75 m/s      Min. Peaking Factor = 2.00       $M = \frac{5}{P^{0.2}}$   
 Factor of Safety = 25 %

*Denotes overcapacity sewer*  
**NOMINAL PIPE SIZE USED**

STREET	FROM MH	TO MH	RESIDENTIAL							COMMERCIAL/INDUSTRIAL/INSTITUTIONAL/MIXED USE							FLOW CALCULATIONS							PIPE DATA								
			AREA (ha)	ACC. AREA (ha)	UNITS (#)	DENISTY (P/ha)	DENSITY (P/unit)	POP	ACCUM. RES. POP.	AREA (ha)	AREA ID	ACC. AREA (ha)	EQUIV. POP. (p/ha)	FLOW RATE (l/s/ha)	EQUIV. POP.	ACCUM. EQUIV. POP.	INFILTRATION (l/s)	TOTAL ACCUM. POP.	PEAKING FACTOR	RES. FLOW (l/s)	COMM. FLOW (l/s)	ACCUM. COMM. FLOW (l/s)	TOTAL FLOW (l/s)	SLOPE (%)	PIPE DIAMETER (mm)	FULL FLOW CAPACITY (l/s)	FULL FLOW VELOCITY (m/s)	ACTUAL VELOCITY (m/s)	PERCENT FULL (%)			
ARVIN AVENUE	S104A006	S104A008	27.40	27.40		125		3425	3425						16.4	3425	3.91	55.8				72.2	0.35	450	146.2	0.92	0.88	49%				
ARVIN AVENUE	S104A007	S104A008	13.80	13.80		125		1725	1725						8.3	1725	4.48	32.2				40.5	0.60	375	117.7	1.07	0.93	34%				
FRUITLAND ROAD	S104A008	S104A011	0.40	170.60		125		50	17836	28.40				1851	119.4	19687	2.76	226.0				345.4	0.75	600	460.8	1.63	1.78	75%				
FRUITLAND ROAD	S104A011	S104A014	0.50	171.10		125		63	17899	28.40				1851	119.7	19750	2.75	226.6				346.3	0.75	600	460.8	1.63	1.78	75%				
FRUITLAND ROAD	S104A014	S103A004	1.90	173.00		125		238	18137	28.40				1851	120.8	19988	2.75	228.8				349.6	0.40	675	460.8	1.29	1.40	76%				
S. SERVICE ROAD	S103A004	S103A003		173.00					18137	28.40				1851	120.8	19988	2.75	228.8				349.6	0.40	675	460.8	1.29	1.40	76%				
<b>JONES ROAD SEWERSHED</b>																																
HIGHWAY 8	EXISTING	SJ06A001	17.10	17.10		110		1881	1881	2.70	EXT3, EXT3.1	2.70	125	338	338	11.9	2219	4.26	39.4			51.3	0.50	375	107.4	0.97	0.93	48%				
JONES ROAD	EXISTING	SJ06A001								6.60	SE4, SE7	6.60	7	45	45	4.0	45	5.00	0.9			4.9	0.50	250	36.4	0.74	0.51	13%				
JONES ROAD	SJ06A001	SJ06A002		17.10				1881		2.20	J5.1, SE5.1, EX	11.50	114	250	633	17.2	2514	4.16	43.6			60.7	0.50	375	107.4	0.97	0.98	57%				
JONES ROAD	SJ06A002	SJ06A003		17.10				1881		2.70	J5.2, SE5.2, EX	14.20	111	300	933	18.8	2814	4.07	47.7			66.4	0.50	375	107.4	0.97	1.00	62%				
JONES ROAD	SJ06A003	SJ06A004	3.00	20.10		141		423	2304		J4.1, SE2.2	14.20		933	20.6	3237	3.95	53.3			73.9	0.50	375	107.4	0.97	1.02	69%					
JONES ROAD	SJ06A004	SJ06A005	1.10	21.20		159.091		175	2479		J4.2, EX	14.20		933	21.2	3412	3.91	55.6			76.9	1.90	375	209.5	1.90	1.71	37%					
JONES ROAD	SJ06A005	SJ05A005	3.40	24.60		122.059		415	2894		J3.2, NE3, EX	14.20		933	23.3	3827	3.82	61.0			84.2	1.00	375	152.0	1.38	1.39	55%					
JONES ROAD	SJ05A005	SJ05A006	1.20	25.80		187.5		225	3119		J3.1, EX	14.20		933	24.0	4052	3.78	63.8			87.8	0.70	450	206.7	1.30	1.21	42%					
JONES ROAD	SJ05A006	SJ05A007	2.80	28.60		223.214		625	3744		J1, NE2, EX	14.20		933	25.7	4677	3.67	71.6			97.3	0.50	450	174.7	1.10	1.11	56%					
JONES ROAD	SJ05A007	SJ05A008	2.70	31.30		64.8148		175	3919		J0, B3.1, EX	14.20		933	27.3	4852	3.65	73.7			101.0	0.50	450	174.7	1.10	1.11	58%					
BARTON STREET	SJ05A012	SJ05A011	0.60	0.60		60		36	36							0.4	36	5.00	0.8			1.1	0.40	300	53.0	0.75	0.26	2%				
BARTON STREET	SJ05A011	SJ05A010	1.65	2.25		184.24		304	340		B3.2, EX					1.4	340	5.00	7.1			8.4	0.40	300	53.0	0.75	0.55	16%				
BARTON STREET	SJ05A010	SJ05A008		2.25					340							1.4	340	5.00	7.1			8.4	0.40	300	53.0	0.75	0.55	16%				
BLOCK 2 EXTERNAL	EXTERNAL	BLOCK 2	24.20	24.20		120		2904	2904		EXT4					14.5	2904	4.04	48.9			63.4	0.50	375	107.4	0.97	0.98	59%				
BLOCK 2	BLOCK 2	SJ05A002	32.67	56.87		161.329		5271	8175		BLK2					34.1	8175	3.28	111.9			146.0	0.30	450	135.3	0.85	0.97	108%				
BARTON STREET	SJ05A002	SJ05A003		56.87					8175							34.1	8175	3.28	111.9			146.0	0.30	450	135.3	0.85	0.97	108%				
BARTON STREET	SJ05A003	SJ05A008		56.87					8175							34.1	8175	3.28	111.9			146.0	0.30	450	135.3	0.85	0.97	108%				
JONES ROAD	SJ05A008	SJ05A009		90.42					12434	0.80						15.00	60	48	981	63.3	13415	2.97	166.3			229.5	0.30	600	291.5	1.03	1.12	79%
JONES ROAD	SJ05A009	SJ04A001		90.42					12434	4.00						19.00	75	300	1281	65.7	13715	2.96	169.2			234.9	0.30	600	291.5	1.03	1.13	81%
JONES ROAD	SJ04A001	SJ04A002		90.42					12434	4.90						23.90	125	613	1894	68.6	14328	2.94	175.3			243.9	0.30	525	204.1	0.94	1.08	119%
JONES ROAD	SJ04A002	SJ04A003		90.42					12434							23.90		1894	68.6	14328	2.94	175.3			243.9	0.30	525	204.1	0.94	1.08	119%	
JONES ROAD	SJ04A003	SJ04A004		90.42					12434	19.20						43.10	125	2400	4294	80.1	16728	2.85	198.4			278.5	0.25	600	266.1	0.94	1.07	105%
JONES ROAD	SJ04A004	SJ04A005		90.42					12434							43.10		4294	80.1	16728	2.85	198.4			278.5	0.25	600	266.1	0.94	1.07	105%	
JONES ROAD	SJ04A005	SJ04A018	0.20	90.62					12434							43.10		4294	80.2	16728	2.85	198.4			278.6	0.25	600	266.1	0.94	1.07	105%	
PRIVATE ROAD	SJ04A017	SJ04A018								4.20						4.20	125	525	525	2.5	525	5.00	10.9			13.5	0.50	375	107.4	0.97	0.67	13%
JONES ROAD	SJ04A018	SJ03A002		90.62					12434	5.50						52.80	125	688	5507	86.1	17941	2.81	209.8			295.9	0.25	600	266.1	0.94	1.07	111%
JONES ROAD	SJ03A002	SJ03A003		90.62					12434							52.80		5507	86.1	17941	2.81	209.8			295.9	0.25	600	266.1	0.94	1.07	111%	
JONES ROAD	SJ03A003	SJ03A004		90.62					12434	6.70						59.50	125	838	6345	90.1	18779	2.78	217.6			307.7	0.25	600	266.1	0.94	1.07	116%
S. SERVICE ROAD	SJ03A004	SJ03A005		90.62					12434							59.50		6345	90.1	18779	2.78	217.6			307.7	0.25	600	266.1	0.94	1.07	116%	

**SANITARY SEWER DESIGN SHEET**  
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 Max. Velocity = 2.75 m/s      Min. Peaking Factor = 2.00       $M = \frac{5}{P^{0.2}}$   
 Factor of Safety = 25 %

*Denotes overcapacity sewer*  
**NOMINAL PIPE SIZE USED**

STREET	FROM MH	TO MH	RESIDENTIAL							COMMERCIAL/INDUSTRIAL/INSTITUTIONAL/MIXED USE							FLOW CALCULATIONS							PIPE DATA													
			AREA (ha)	ACC. AREA (ha)	UNITS (#)	DENISTY (P/ha)	DENSITY (P/unit)	POP	ACCUM. RES. POP.	AREA (ha)	AREA ID	ACC. AREA (ha)	EQUIV. POP. (p/ha)	FLOW RATE (l/s/ha)	EQUIV. POP.	ACCUM. EQUIV. POP.	INFILTRATION (l/s)	TOTAL ACCUM. POP.	PEAKING FACTOR	RES. FLOW (l/s)	COMM. FLOW (l/s)	ACCUM. COMM. FLOW (l/s)	TOTAL FLOW (l/s)	SLOPE (%)	PIPE DIAMETER (mm)	FULL FLOW CAPACITY (l/s)	FULL FLOW VELOCITY (m/s)	ACTUAL VELOCITY (m/s)	PERCENT FULL (%)								
<b>FRUITLAND SEWERSHED</b>																																					
REGALVIEW DRIVE	SI07A012	SI07A014	11.30	11.30		60		678	678																												
REGALVIEW DRIVE	SI07A014	SI07A015	1.50	12.80		60		90	768																												
HIGHWAY 8	SI07A039	SI07A015								2.60		2.60	40	105	105	1.6	105	5.00	2.2																		
HIGHWAY 8	FUTURE 2	SI07A015								1.90	SW8, EX	1.90	68	130	130	1.1	130	5.00	2.7																		
FRUITLAND ROAD	SI07A015	SI06A001		12.80					768	1.70	F4, EX	6.20	48	81	316	11.4	1084	4.92	22.2																		
FRUITLAND ROAD	SI06A001	SI06A002	1.60	14.40		65		104	872		F3.5, EX	6.20			316	12.4	1188	4.83	23.9																		
FRUITLAND ROAD	SI06A002	SI06A003	0.80	15.20		65		52	924		F3.4, EX	6.20			316	12.8	1240	4.79	24.7																		
FRUITLAND ROAD	SI06A003	SI06A005	1.30	16.50		66		86	1010		F3.3, EX	6.20			316	13.6	1326	4.73	26.1																		
FRUITLAND ROAD	SI06A005	SI06A007	0.80	17.30		58		46	1056		F3.2, EX	6.20			316	14.1	1372	4.69	26.8																		
FRUITLAND ROAD	SI06A007	SI06A009	0.80	18.10		64		51	1107		F3.1, EX	6.20			316	14.6	1423	4.66	27.6																		
SHERWOOD PARK ROAD	SI06A014	SI06A013								7.90		7.90	12	95	95	4.7	95	5.00	2.0																		
SHERWOOD PARK ROAD	SI06A013	SI06A012	0.30	0.30		60		18	18			7.90			95	4.9	113	5.00	2.4																		
SHERWOOD PARK ROAD	SI06A012	SI06A009		0.30					18			7.90			95	4.9	113	5.00	2.4																		
STREET B	FUTURE 4	SI06A009	0.20	0.20							F2.4																										
FRUITLAND ROAD	SI06A009	SI05A023	0.70	19.30		64		45	1170		F2.4, EX	14.10			411	20.0	1581	4.56	30.1																		
FRUITLAND ROAD	SI05A023	SI05A013	1.10	20.40		62		68	1238		F2.3, EX	14.10			411	20.7	1649	4.52	31.1																		
FRUITLAND ROAD	SI05A013	SI05A012	0.80	21.20		64		51	1289		F2.2, EX	14.10			411	21.2	1700	4.50	31.9																		
FRUITLAND ROAD	SI05A012	SI05A010	0.60	21.80		65		39	1328		F2.1, EX	14.10			411	21.5	1739	4.48	32.4																		
SANDY DRIVE	SI05A021	SI05A010	6.70	6.70		60		402	402							4.0	402	5.00	8.4																		
FRUITLAND ROAD	SI05A010	SI05A008	0.60	29.10		73		44	1774		F1, EX	14.10			411	25.9	2185	4.28	38.9																		
FRUITLAND ROAD	SI05A008	SI05A006		29.10					1774	1.20		15.30	94	113	524	26.6	2298	4.23	40.5																		
BARTON STREET	SI05A007	SI05A006								11.50		11.50	102	1177	1177	6.9	1177	4.84	23.7																		
BARTON STREET	SI05A015	SI05A016	1.70	1.70		198		337	337		B3.3, EX					1.0	337	5.00	7.0																		
BARTON STREET	SI05A016	MH12A	1.70	3.40		176		299	636		B3.4, EX					2.0	636	5.00	13.3																		
<b>BLOCK 1 SEWERSHED</b>																																					
GORDON DEAN AVE	MH1A	MH2A	2.70	2.70		89		240	240		SW9, SW10, & SE6					1.6	240	5.00	5.0																		
GORDON DEAN AVE	MH2A	MH3A	5.90	8.60		179		1055	1295		SW6 & SW7					5.2	1295	4.75	25.6																		
GORDON DEAN AVE	MH3A	MH9A	6.80	15.40		176		1200	2495		SW2, RD1					9.2	2495	4.16	43.3																		
STREET B	MH5A	MH6A	1.80	1.80		110		198	198		NW2 & SW1					1.1	198	5.00	4.1																		
STREET B	MH6A	MH9A	10.10	11.90		66		664	862		SW3.1, SW3-5, RD2					7.1	862	5.00	18.0																		
STREET B	MH7A	MH8A	3.60	3.60		86		308	308		SE2.1, SE3					2.2	308	5.00	6.4																		
STREET B	MH8A	MH9A	2.75	6.35		187		513	821		SE1, RD3					3.8	821	5.00	17.1																		
GORDON DEAN AVE	MH9A	MH10A	10.55	44.20		88		929	5107		NW4 & NE1					26.5	5107	3.61	76.8																		
GORDON DEAN AVE	MH10A	MH11A	6.70	50.90		84		562	5669		NW1 & NW3					30.5	5669	3.53	83.5																		
GORDON DEAN AVE	MH11A	MH12A	1.70	52.60					5669		RD4					31.6	5669	3.53	83.5																		
BARTON STREET	MH12A	MH13A	0.60	56.60		60		36	6341							34.0	6341	3.46	91.3																		
BARTON STREET	MH13A	SI05A021	0.60	57.20		60		36	6377							34.3	6377	3.45	91.7																		
BARTON STREET	SI05A021	SI05A001	0.80	58.00		60		48	6425							34.8	6425	3.45	92.3																		
BARTON STREET	SI05A001	SI05A002	2.00	60.00		146		292	6717		B2, EX					36.0	6717	3.42	95.6																		
BARTON STREET	SI05A002	SI05A003	2.90	62.90		78		228	6945		B1.2, EX					37.7	6945	3.39	98.2																		
BARTON STREET	SI05A003	SI05A004		62.90					6945	1.60	B1.1, EX	1.60	94	150	150	38.7	7095	3.38	99.9																		
BARTON STREET	SI05A004	SI05A006		62.90					6945			1.60			150	38.7	7095	3.38	99.9																		
<b>FRUITLAND (N OF BARTON)</b>																																					
FRUITLAND ROAD	SI05A006	SI05A005	0.60	92.60		125		75	8794			28.40				72.6	10645	3.12	138.2																		
FRUITLAND ROAD	SI05A005	SI04A004	3.20	95.80		125		400	9194			28.40				74.5	11045	3.09	142.3																		
FRUITLAND ROAD	SI04A004	SI04A005	2.30	98.10		125		288	9482			28.40				75.9	11333	3.08	145.3																		



**SANITARY SEWER DESIGN SHEET**  
**FRUITLAND - WINONA SECONDARY PLAN AREA-BLOCK 1**  
**EXCLUDING GREENBELT LANDS**  
 City of Hamilton

**PROJECT DETAILS**

Project No: 20-263  
 Date: 25-Apr-24  
 Designed by: E.L.  
 Checked by: S.H.

**DESIGN CRITERIA**

Min Diameter = 250 mm      Avg. Domestic Flow = 360.0 l/c/d  
 Mannings 'n' = 0.015      Infiltration = 0.600 l/s/ha  
 Min. Velocity = 0.75 m/s      Max. Peaking Factor = 5.00  
 Max. Velocity = 2.75 m/s      Min. Peaking Factor = 2.00       $M = \frac{5}{P^{0.2}}$   
 Factor of Safety = 25 %

*Denotes overcapacity sewer*  
**NOMINAL PIPE SIZE USED**

STREET	FROM MH	TO MH	RESIDENTIAL						COMMERCIAL/INDUSTRIAL/INSTITUTIONAL/MIXED USE						FLOW CALCULATIONS						PIPE DATA							
			AREA (ha)	ACC. AREA (ha)	UNITS (#)	DENISTY (P/ha)	DENSITY (P/unit)	POP	ACCUM. RES. POP.	AREA (ha)	AREA ID	ACC. AREA (ha)	EQUIV. POP. (p/ha)	FLOW RATE (l/s/ha)	EQUIV. POP.	ACCUM. EQUIV. POP.	INFILTRATION (l/s)	TOTAL ACCUM. POP.	PEAKING FACTOR	RES. FLOW (l/s)	COMM. FLOW (l/s)	ACCUM. COMM. FLOW (l/s)	TOTAL FLOW (l/s)	SLOPE (%)	PIPE DIAMETER (mm)	FULL FLOW CAPACITY (l/s)	FULL FLOW VELOCITY (m/s)	ACTUAL VELOCITY (m/s)
FRUITLAND ROAD	SJ04A008	SJ04A011	0.40	141.30		125		50	14882			28.40			1851	101.8	16733	2.85	198.4			300.3	0.75	600	460.8	1.63	1.71	65%
FRUITLAND ROAD	SJ04A011	SJ04A014	0.50	141.80		125		63	14945			28.40			1851	102.1	16796	2.84	199.0			301.2	0.75	600	460.8	1.63	1.71	65%
FRUITLAND ROAD	SJ04A014	SJ03A004	1.90	143.70		125		238	15183			28.40			1851	103.3	17034	2.84	201.3			304.5	0.40	675	460.8	1.29	1.35	66%
S. SERVICE ROAD	SJ03A004	SJ03A003		143.70					15183			28.40			1851	103.3	17034	2.84	201.3			304.5	0.40	675	460.8	1.29	1.35	66%
<b>JONES ROAD SEWERSHED</b>																												
JONES ROAD	EXISTING	SJ06A001								6.60	SE4, SE7	6.60	7	45	45	4.0	45	5.00	0.9			4.9	0.50	250	36.4	0.74	0.51	13%
JONES ROAD	SJ06A001	SJ06A002								2.20	J5.1, SE5.1, EX	8.80	114	250	295	5.3	295	5.00	6.1			11.4	0.50	375	107.4	0.97	0.64	11%
JONES ROAD	SJ06A002	SJ06A003								2.70	J5.2, SE5.2, EX	11.50	111	300	595	6.9	595	5.00	12.4			19.3	0.50	375	107.4	0.97	0.73	18%
JONES ROAD	SJ06A003	SJ06A004	3.00	3.00		141		423	423		J4.1, SE2.2	11.50		595	8.7	1018	4.98	21.1			29.8	0.50	375	107.4	0.97	0.83	28%	
JONES ROAD	SJ06A004	SJ06A005	1.10	4.10		159		175	598		J4.2, EX	11.50		595	9.4	1193	4.83	24.0			33.4	1.90	375	209.5	1.90	1.38	16%	
JONES ROAD	SJ06A005	SJ05A005	3.40	7.50		122		415	1013		J3.2, NE3, EX	11.50		595	11.4	1608	4.55	30.5			41.9	1.00	375	152.0	1.38	1.17	28%	
JONES ROAD	SJ05A005	SJ05A006	1.20	8.70		188		225	1238		J3.1, EX	11.50		595	12.1	1833	4.43	33.8			45.9	0.70	450	206.7	1.30	1.03	22%	
JONES ROAD	SJ05A006	SJ05A007	2.80	11.50		223		625	1863		J1, NE2, EX	11.50		595	13.8	2458	4.18	42.8			56.6	0.50	450	174.7	1.10	0.96	32%	
JONES ROAD	SJ05A007	SJ05A008	2.70	14.20		65		175	2038		J0, B3.1, EX	11.50		595	15.4	2633	4.12	45.2			60.6	0.50	450	174.7	1.10	0.99	35%	
BARTON STREET	SJ05A012	SJ05A011	0.60	0.60		60		36	36							0.4	36	5.00	0.8			1.1	0.40	300	53.0	0.75	0.26	2%
BARTON STREET	SJ05A011	SJ05A010	1.60	2.20		203		325	361		B3.2, EX					1.3	361	5.00	7.5			8.8	0.40	300	53.0	0.75	0.55	17%
BARTON STREET	SJ05A010	SJ05A008		2.20					361							1.3	361	5.00	7.5			8.8	0.40	300	53.0	0.75	0.55	17%
BLOCK 2	BLOCK 2	SJ05A002	32.67	32.67		161		5271	5271		BLK2					19.6	5271	3.59	78.8			98.4	0.30	450	135.3	0.85	0.91	73%
BARTON STREET	SJ05A002	SJ05A003		32.67					5271							19.6	5271	3.59	78.8			98.4	0.30	450	135.3	0.85	0.91	73%
BARTON STREET	SJ05A003	SJ05A008		32.67					5271							19.6	5271	3.59	78.8			98.4	0.30	450	135.3	0.85	0.91	73%
JONES ROAD	SJ05A008	SJ05A009		49.07					7670	0.80		12.30	60	48	643	36.8	8313	3.27	113.4			150.2	0.30	525	204.1	0.94	1.01	74%
JONES ROAD	SJ05A009	SJ04A001		49.07					7670	4.00		16.30	75	300	943	39.2	8613	3.25	116.6			155.9	0.30	525	204.1	0.94	1.03	76%
JONES ROAD	SJ04A001	SJ04A002		49.07					7670	4.90		21.20	125	613	1556	42.2	9226	3.21	123.2			165.4	0.30	525	204.1	0.94	1.04	81%
JONES ROAD	SJ04A002	SJ04A003		49.07					7670			21.20		1556	42.2	9226	3.21	123.2			165.4	0.30	525	204.1	0.94	1.04	81%	
JONES ROAD	SJ04A003	SJ04A004		49.07					7670	19.20		40.40	125	2400	3956	53.7	11626	3.06	148.3			202.0	0.25	600	266.1	0.94	1.03	76%
JONES ROAD	SJ04A004	SJ04A005		49.07					7670			40.40		3956	53.7	11626	3.06	148.3			202.0	0.25	600	266.1	0.94	1.03	76%	
JONES ROAD	SJ04A005	SJ04A018	0.20	49.27					7670			40.40		3956	53.8	11626	3.06	148.3			202.1	0.25	600	266.1	0.94	1.03	76%	
PRIVATE ROAD	SJ04A017	SJ04A018								4.20		4.20	125	525	525	2.5	525	5.00	10.9			13.5	0.50	375	107.4	0.97	0.67	13%
JONES ROAD	SJ04A018	SJ03A002		49.27					7670	5.50		50.10	125	688	5169	59.6	12839	3.00	160.5			220.2	0.25	600	266.1	0.94	1.04	83%
JONES ROAD	SJ03A002	SJ03A003		49.27					7670			50.10		5169	59.6	12839	3.00	160.5			220.2	0.25	600	266.1	0.94	1.04	83%	
JONES ROAD	SJ03A003	SJ03A004		49.27					7670	6.70		56.80	125	838	6007	63.6	13677	2.96	168.9			232.5	0.25	600	266.1	0.94	1.04	87%
S. SERVICE ROAD	SJ03A004	SJ03A005		49.27					7670			56.80		6007	63.6	13677	2.96	168.9			232.5	0.25	600	266.1	0.94	1.04	87%	