Humber Catchment
Option 1 - New Gravity Sanitary

Pump Required	Pump Upper	Street and Address	Floor Elevation (Polaris Survey)	Distance from Entrance to PL	Distance From PL to Main	House file assumed Main Entrance Distance to Lower	Slab to inv (assumed) m	Calculated Service Elevation at House (SP)	Calculated Service Elevation at Property Line @ 1% (IC)	Calculated Service Elevation at Main @ 2% (MC)	Calculated Service Elevation at Main @ 2% (MC) *(No Lower Floor)*	Distance from Upstream Manhole	Grade from Upstream Manhole	Upstream Manhole	Invert of Upstream Manhole	Diameter of Main	Obvert of Main	Difference (+) Gravity (-) Pump	(No Lower Floor) Difference (+) Gravity (-) Pump	Comments
			Elev. (m)	Dist. (m)	Dist. (m)	Depth (m)	Depth (m)	Elev. (m)	Elev. (m)	Elev. (m)	Elev. (m)	Dist. (m)	Grade (%)	MH #	Elev. (m)	Dia. (m)	Elev. (m)	(m)	(m)	
		BEACH DR																		
		3190 BEACH DR	7.870	20.000	12.000	1.10	0.60	6.17	5.97	5.73	6.83	25.00	1.37%	5328	4.39	0.20	4.248	1.48	2.58	
		3200 BEACH DR	8.010	25.000	5.000	1.80	0.60	5.61	5.36	5.26	7.06	45.00	1.37%	5328	4.39	0.20	3.974	1.29	3.09	
		3210 BEACH DR	7.690	25.000	10.000	2.40	0.60	4.69	4.44	4.24	6.64	45.00	0.50%	5313	3.34	0.20	3.316	0.92	3.32	
		3220 BEACH DR	9.270	30.000	10.000	2.50	0.60	6.17	5.87	5.67	8.17	88.00	0.50%	5313	3.34	0.20	3.102	2.57	5.07	
E		3225 BEACH DR	6.020	40.000	13.000	2.90	0.60	2.52	2.12	1.86	4.76	10.00	0.50%	5313	3.34	0.20	3.490	-1.63	1.27	
		3230 BEACH DR	7.020	25.000	12.000	2.40	0.60	4.02	3.77	3.53	5.93	25.00	0.50%	5286	2.82	0.20	2.894	0.64	3.04	
		3235 BEACH DR	7.530	35.000	10.000	2.70	0.60	4.23	3.88	3.68	6.38	51.00	0.50%	5313	3.34	0.20	3.286	0.39	3.09	
		3240 BEACH DR	6.070	20.000	10.000	1.40	0.60	4.07	3.87	3.67	5.07	69.00	0.50%	5286	2.82	0.20	2.673	1.00	2.40	
		3245 BEACH DR	6.720	40.000	10.000	2.30	0.60	3.82	3.42	3.22	5.52	2.00	0.50%	5286	2.82	0.20	3.010	0.21	2.51	
		3250 BEACH DR	5.300	25.000	11.000	1.00	0.60	3.70	3.45	3.23	4.23	33.00	0.50%	5266	2.37	0.20	2.405	0.82	1.82	
		3260 BEACH DR	6.360	25.000	10.000	2.40	0.60	3.36	3.11	2.91	5.31	75.00	0.50%	5266	2.37	0.20	2.195	0.71	3.11	
P		3265 BEACH DR	6.500	50.000	10.000	2.70	0.60	3.20	2.70	2.50	5.20	45.00	0.50%	5286	2.82	0.20	2.793	-0.29	2.41	
P		3270 BEACH DR	5.070	25.000	10.000	2.40	0.60	2.07	1.82	1.62	4.02	65.00	0.40%	5223	2.20	0.30	2.241	-0.62	1.78	
		3275 BEACH DR	5.690	45.000	10.000	1.70	0.60	3.39	2.94	2.74	4.44	9.00	0.50%	5266	2.37	0.20	2.525	0.21	1.91	
		3280 BEACH DR	4.710	20.000	11.000	0.00	0.60	4.11	3.91	3.69	3.69	5.00	0.40%	5223	2.20	0.30	2.480	1.21	1.21	
E		3285 BEACH DR	6.040	60.000	10.000	3.00	0.60	2.44	1.84	1.64	4.64	2.00	0.40%	5243	1.59	0.38	1.957	-0.32	2.68	
P		3290 BEACH DR	4.820	15.000	10.000	2.70	0.60	1.52	1.37	1.17	3.87	38.50	0.40%	5210	2.56	0.30	2.708	-1.54	1.16	
		3295 BEACH DR	4.450	15.000	8.000	1.40	0.60	2.45	2.30	2.14	3.54	7.00	0.40%	5243	1.59	0.38	1.937	0.20	1.60	
		3340 BEACH DR	6.270	25.000	12.000	1.00	0.60	4.67	4.42	4.18	5.18	32.00	1.91%	5197	4.12	0.25	3.759	0.42	1.42	
E		3355 BEACH DR	6.750	40.000	8.000	3.40	0.60	2.75	2.35	2.19	5.59	98.00	2.20%	5181	6.80	0.25	4.898	-2.71	0.69	
		3360 BEACH DR	10.970	45.000	12.000	2.60	0.60	7.77	7.32	7.08	9.68	105.00	2.20%	5181	6.80	0.25	4.744	2.34	4.94	
		3380 BEACH DR	11.250	20.000	12.000	1.20	0.60	9.45	9.25	9.01	10.21	62.00	2.20%	5181	6.80	0.25	5.688	3.32	4.52	
		*3385 BEACH DR	9.200	35.000	8.000	0.00	0.60	8.60	8.25	8.09	8.09	42.00	2.20%	5181	6.80	0.25	6.128	1.96	1.96	*Parking Lot, assumed MFE & no Bsmt
		3390 BEACH DR	13.090	25.000	8.000	2.40	0.60	10.09	9.84	9.68	12.08	32.00	6.84%	5190	10.97	0.20	8.977	0.70	3.10	
		3420 BEACH DR	17.350	30.000	10.000	2.60	0.60	14.15	13.85	13.65	16.25	103.00	0.40%	5215	11.44	0.20	11.228	2.42	5.02	
E		3425 BEACH DR	13.070	35.000	10.000	3.00	0.60	9.47	9.12	8.92	11.92	74.00	4.65%	5167	12.13	0.20	8.887	0.03	3.03	Exist. Pump not required
		3445 BEACH DR	15.410	39.000	9.000	3.20	0.60	11.61	11.22	11.04	14.24	30.00	4.65%	5167	12.13	0.20	10.934	0.11	3.31	
		3448 BEACH DR	20.010	40.000	12.000	2.70	0.60	16.71	16.31	16.07	18.77	16.00	4.65%	5167	12.13	0.20	11.586	4.48	7.18	
		3460 BEACH DR	22.200	20.000	12.000	2.60	0.60	19.00	18.80	18.56	21.16	81.00	5.94%	5145	18.60	0.20	13.991	4.57	7.17	
		3465 BEACH DR	17.590	43.000	7.000	2.60	0.60	14.39	13.96	13.82	16.42	90.00	5.94%	5145	18.60	0.20	13.457	0.36	2.96	
		3475 BEACH DR	18.980	35.000	7.000	2.40	0.60	15.98	15.63	15.49	17.89	56.00	5.94%	5145	18.60	0.20	15.475	0.01	2.41	
		3490 BEACH DR	25.400	20.000	12.000	1.00	0.60	23.80	23.60	23.36	24.36	17.00	5.94%	5145	18.60	0.20	17.791	5.57	6.57	
		3498 BEACH DR	28.790	25.000	15.000	2.60	0.60	25.59	25.34	25.04	27.64	64.00	2.09%	5139	22.55	0.20	21.416	3.62	6.22	
P	UP	3515 BEACH DR	18.590	56.000	14.000	0.61	0.60	17.38	16.82	16.54	17.15	7.00	5.94%	5145	18.60	0.20	18.384	-1.84	-1.23	
P		3525 BEACH DR	22.530	38.000	12.000	2.40	0.60	19.53	19.15	18.91	21.31	70.00	3.77%	5126	23.25	0.20	20.808	-1.90	0.50	
E		3535 BEACH DR	26.280	29.000	14.000	2.70	0.60	22.98	22.69	22.41	25.11	29.00	3.77%	5126	23.25	0.20	22.355	0.05	2.75	
		3550 BEACH DR	41.730	30.000	15.000	4.50	0.60	36.63	36.33	36.03	40.53	57.00	1.50%	5118	24.85	0.20	24.197	11.83	16.33	
E		3555 BEACH DR	28.050	17.000	14.000	2.70	0.60	24.75	24.58	24.30	27.00	81.00	1.50%	5118	24.85	0.20	23.838	0.46	3.16	Exist. Pump not required
		3565 BEACH DR	28.219	21.000	10.000	2.70	0.60	24.92	24.71	24.51	27.21	46.00	1.50%	5118	24.85	0.20	24.361	0.15	2.85	
		3570 BEACH DR	37.860	25.000	15.000	1.50	0.60	35.76	35.51	35.21	36.71	14.00	1.50%	5118	24.85	0.20	24.840	10.37	11.87	
		3572 BEACH DR	37.270	35.000	15.000	1.20	0.60	35.47	35.12	34.82	36.02	91.00	1.37%	5107	26.30	0.20	25.250	9.57	10.77	
		3575 BEACH DR	28.870	19.000	9.000	2.40	0.60	25.87	25.68	25.50	27.90	84.00	1.37%	5107	26.30	0.20	25.346	0.15	2.55	
P		3585 BEACH DR	29.000	22.000	9.000	3.00	0.60	25.40	25.18	25.00	28.00	36.00	1.37%	5107	26.30	0.20	26.005	-1.01	1.99	Assumed MFE
P		3595 BEACH DR	29.500	37.000	9.000	2.40	0.60	26.50	26.13	25.95	28.35	100.00	1.99%	5081	28.63	0.20	26.843	-0.89	1.51	Assumed MFE, BFE
P		3655 BEACH DR	30.000	28.000	9.000	2.70	0.60	26.70	26.42	26.24	28.94	45.00	1.99%	5081	28.63	0.20	27.936	-1.70	1.00	Assumed MFE
P		3695 BEACH DR	31.000	20.000	9.000	3.80	0.60	26.60	26.40	26.22	30.02	1.00	1.99%	5081	28.63	0.20	28.810	-2.59	1.21	Assumed MFE
P	UP	2710 HIBBONS CL	23.000	25.000	110.000	2.40	0.60	20.00	19.75	17.55	19.95	1.00	1.99%	5081	28.63	0.20	28.810	-11.26	-8.86	Assumed MFE, BFE

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			Elev. (m)	Dist. (m)	Dist. (m)	Depth (m)	Depth (m)	Elev. (m)	Elev. (m)	Elev. (m)	Elev. (m)	Dist. (m)	Grade (%)	MH #	Elev. (m)	Dia. (m)	Elev. (m)	(m)	(m)	
		CADBORO BAY RD																		
		3611 CADBORO BAY RD	41.560	30.000	17.000	2.70	0.60	38.26	37.96	37.62	40.32	61.00	1.37%	5107	26.30	0.20	25.662	11.96	14.66	service on Beach Dr
		3615 CADBORO BAY RD	41.330	30.000	17.000	2.70	0.60	38.03	37.73	37.39	40.09	22.00	1.37%	5107	26.30	0.20	26.198	11.19	13.89	service on Beach Dr
		EXETER RD																		
		3110 EXETER RD	15.050	40.000	10.000	1.50	0.60	12.95	12.55	12.35	13.85	113.00	1.00%	6584	6.55	0.20	5.619	6.73	8.23	
		3130 EXETER RD	15.000	30.000	10.000	2.40	0.60	12.00	11.70	11.50	13.90	84.00	1.00%	6584	6.55	0.20	5.909	5.59	7.99	Assumed MFE, BFE
		3145 EXETER RD	8.760	20.000	5.000	1.20	0.60	6.96	6.76	6.66	7.86	55.00	1.00%	6584	6.55	0.20	6.199	0.46	1.66	
		3160 EXETER RD	12.110	20.000	14.000	3.00	0.60	8.51	8.31	8.03	11.03	40.00	1.00%	6584	6.55	0.20	6.350	1.68	4.68	
		3170 EXETER RD	11.570	15.000	12.000	2.40	0.60	8.57	8.42	8.18	10.58	16.00	1.00%	6584	6.55	0.20	6.590	1.59	3.99	Assumed BFE
		3175 EXETER RD	9.800	25.000	5.000	1.70	0.60	7.50	7.25	7.15	8.85	13.00	1.00%	6584	6.55	0.20	6.620	0.53	2.23	
		3190 EXETER RD	13.040	35.000	15.000	1.20	0.60	11.24	10.89	10.59	11.79	2.00	1.00%	6584	6.55	0.20	6.730	3.86	5.06	
		3195 EXETER RD	10.230	25.000	10.000	2.40	0.60	7.23	6.98	6.78	9.18	2.00	1.00%	6584	6.55	0.20	6.730	0.05	2.45	
		3200 EXETER RD	11.250	25.000	5.000	1.80	0.60	8.85	8.60	8.50	10.30	0.00	1.78%	7021	5.90	0.20	6.100	2.40	4.20	
		3205 EXETER RD	10.030	15.000	15.000	2.40	0.60	7.03	6.88	6.58	8.98	5.00	1.78%	7021	5.90	0.20	6.011	0.57	2.97	
		3220 EXETER RD	12.340	20.000	5.000	2.40	0.60	9.34	9.14	9.04	11.44	18.00	1.78%	7021	5.90	0.20	5.780	3.26	5.66	
		3225 EXETER RD	9.320	20.000	10.000	2.60	0.60	6.12	5.92	5.72	8.32	24.00	1.78%	7021	5.90	0.20	5.673	0.05	2.65	
		3235 EXETER RD	8.520	15.000	8.000	2.40	0.60	5.52	5.37	5.21	7.61	56.00	1.78%	7021	5.90	0.20	5.105	0.11	2.51	
		3240 EXETER RD	12.000	20.000	7.000	2.40	0.60	9.00	8.80	8.66	11.06	48.00	1.78%	7021	5.90	0.20	5.247	3.41	5.81	No House, Assumed MFE, BFE
P		3245 EXETER RD	6.950	15.000	5.000	2.30	0.60	4.05	3.90	3.80	6.10	94.00	1.78%	7021	5.90	0.20	4.430	-0.63	1.67	
		3250 EXETER RD	11.520	15.000	12.000	1.40	0.60	9.52	9.37	9.13	10.53	78.00	1.78%	7021	5.90	0.20	4.714	4.42	5.82	
		3260 EXETER RD	9.350	15.000	12.000	1.30	0.60	7.45	7.30	7.06	8.36	107.00	1.78%	7021	5.90	0.20	4.198	2.86	4.16	
		3275 EXETER RD	6.210	15.000	5.000	1.10	0.60	4.51	4.36	4.26	5.36	126.00	1.78%	7021	5.90	0.20	3.861	0.40	1.50	
		3280 EXETER RD	8.310	15.000	12.000	2.40	0.60	5.31	5.16	4.92	7.32	1.00	0.40%	5246	3.32	0.20	3.511	1.41	3.81	
P		3285 EXETER RD	5.200	20.000	5.000	1.10	0.60	3.50	3.30	3.20	4.30	26.00	0.40%	5246	3.32	0.20	3.411	-0.21	0.89	
P		3290 EXETER RD	6.840	20.000	12.000	2.50	0.60	3.74	3.54	3.30	5.80	23.00	0.40%	5246	3.32	0.20	3.423	-0.12	2.38	
		3295 EXETER RD	6.980	15.000	5.000	2.70	0.60	3.68	3.53	3.43	6.13	62.00	0.40%	5246	3.32	0.20	3.267	0.16	2.86	
		3300 EXETER RD	6.780	20.000	13.000	2.20	0.60	3.98	3.78	3.52	5.72	61.00	0.40%	5246	3.32	0.20	3.271	0.25	2.45	
P		3320 EXETER RD	5.500	20.000	10.000	2.50	0.60	2.40	2.20	2.00	4.50	108.00	0.40%	5246	3.32	0.20	3.083	-1.08	1.42	
		HUMBER RD																		
P		3120 HUMBER RD	4.880	55.000	15.000	3.00	0.60	1.28	0.73	0.43	3.43	41.00	0.40%	5243	1.59	0.38	1.801	-1.37	1.63	
		3140 HUMBER RD	5.540	30.000	15.000	2.40	0.60	2.54	2.24	1.94	4.34	8.00	0.39%	5239	1.22	0.38	1.559	0.38	2.78	
P		3145 HUMBER RD	5.050	35.000	7.000	2.70	0.60	1.75	1.40	1.26	3.96	61.00	0.40%	5243	1.59	0.38	1.721	-0.46	2.24	
E		3160 HUMBER RD	3.900	150.000	15.000	0.00	0.60	3.30	1.80	1.50	1.50	30.00	0.39%	5239	1.22	0.38	1.474	0.03	0.03	SOG, No bsmt, ex. pump not req'd
E		3180 HUMBER RD	3.510	80.000	15.000	1.50	0.60	1.41	0.61	0.31	1.81	30.00	0.39%	5239	1.22	0.38	1.474	-1.16	0.34	
P		3190 HUMBER RD	4.030	25.000	20.000	1.80	0.60	1.63	1.38	0.98	2.78	30.00	0.39%	5239	1.22	0.38	1.474	-0.49	1.31	Last MH @ outfall
		3195 HUMBER RD	5.560	40.000	10.000	2.70	0.60	2.26	1.86	1.66	4.36	26.00	0.39%	5239	1.22	0.38	1.490	0.17	2.87	
		LANSDOWNE RD																		
		2980 LANSDOWNE RD	10.810	20.000	20.000	2.40	0.60	7.81	7.61	7.21	9.61	1.00	3.52%	5263	5.60	0.20	5.765	1.45	3.85	
		3000 LANSDOWNE RD	9.950	20.000	15.000	2.40	0.60	6.95	6.75	6.45	8.85	26.00	3.52%	5263	5.60	0.20	4.885	1.57	3.97	
		3005 LANSDOWNE RD	9.160	29.000	8.000	2.70	0.60	5.86	5.57	5.41	8.11	42.00	3.52%	5263	5.60	0.20	4.322	1.09	3.79	
		3020 LANSDOWNE RD	8.660	20.000	12.000	2.70	0.60	5.36	5.16	4.92	7.62	22.00	5.00%	5344	4.82	0.20	3.920	1.00	3.70	
		3035 LANSDOWNE RD	7.350	20.000	7.000	1.00	0.60	5.75	5.55	5.41	6.41	11.00	5.00%	5344	4.82	0.20	4.470	0.94	1.94	
		3050 LANSDOWNE RD	8.240	25.000	10.000	2.40	0.60	5.24	4.99	4.79	7.19	9.00	1.37%	5328	4.39	0.20	4.467	0.32	2.72	

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			Elev. (m)	Dist. (m)	Dist. (m)	Depth (m)	Depth (m)	Elev. (m)	Elev. (m)	Elev. (m)	Elev. (m)	Dist. (m)	Grade (%)	MH #	Elev. (m)	Dia. (m)	Elev. (m)	(m)	(m)	
		MIDLAND RD																		
		3215 MIDLAND RD	32.070	30.000	12.000	2.50	0.60	28.97	28.67	28.43	30.93	1.00	1.00%	5264	26.40	0.20	26.590	1.84	4.34	
		3235 MIDLAND RD	31.910	35.000	12.000	2.60	0.60	28.71	28.36	28.12	30.72	14.00	1.00%	5264	26.40	0.20	26.460	1.66	4.26	
		3265 MIDLAND RD	29.860	30.000	14.000	2.70	0.60	26.56	26.26	25.98	28.68	64.00	1.00%	5264	26.40	0.20	25.959	0.02	2.72	
E		3295 MIDLAND RD	30.320	30.000	10.000	1.50	0.60	28.22	27.92	27.72	29.22	105.00	1.00%	5264	26.40	0.20	25.548	2.17	3.67	Exist. Pump not required
		3315 MIDLAND RD	29.700	25.000	10.000	2.60	0.60	26.50	26.25	26.05	28.65	40.00	0.61%	5241	25.28	0.20	25.235	0.82	3.42	
E		3335 MIDLAND RD	26.150	35.000	10.000	3.00	0.60	22.55	22.20	22.00	25.00	91.00	0.61%	5241	25.28	0.20	24.922	-2.92	0.08	
P		3355 MIDLAND RD	26.000	30.000	10.000	2.60	0.60	22.80	22.50	22.30	24.90	18.00	1.08%	5211	24.50	0.20	24.505	-2.21	0.39	Assumed MFE
		3375 MIDLAND RD	28.040	35.000	10.000	2.60	0.60	24.84	24.49	24.29	26.89	54.00	1.08%	5211	24.50	0.20	24.115	0.17	2.77	
		3405 MIDLAND RD	27.700	35.000	10.000	3.00	0.60	24.10	23.75	23.55	26.55	15.00	0.40%	6861	23.40	0.20	23.540	0.01	3.01	
		3435 MIDLAND RD	28.680	30.000	10.000	2.60	0.60	25.48	25.18	24.98	27.58	49.00	0.40%	6861	23.40	0.20	23.404	1.58	4.18	
		3465 MIDLAND RD	30.860	25.000	10.000	2.40	0.60	27.86	27.61	27.41	29.81	94.00	0.40%	6861	23.40	0.20	23.223	4.19	6.59	
		3530 MIDLAND RD	38.840	40.000	27.000	3.00	0.60	35.24	34.84	34.30	37.30	2.00	2.09%	5139	22.55	0.20	22.708	11.59	14.59	
		NORFOLK RD																		
		3175 NORFOLK RD	21.890	20.000	15.000	2.60	0.60	18.69	18.49	18.19	20.79	2.00	3.75%	5306	18.00	0.20	18.125	0.07	2.67	
		3180 NORFOLK RD	22.100	20.000	15.000	2.40	0.60	19.10	18.90	18.60	21.00	2.00	3.75%	5306	18.00	0.20	18.125	0.48	2.88	
		3185 NORFOLK RD	20.400	20.000	5.000	1.10	0.60	18.70	18.50	18.40	19.50	15.00	3.75%	5306	18.00	0.20	17.637	0.76	1.86	
		3190 NORFOLK RD	21.690	20.000	12.000	1.10	0.60	19.99	19.79	19.55	20.65	19.00	3.75%	5306	18.00	0.20	17.487	2.06	3.16	
		3195 NORFOLK RD	20.000	25.000	5.000	2.70	0.60	16.70	16.45	16.35	19.05	51.00	3.75%	5306	18.00	0.20	16.286	0.06	2.76	
		3200 NORFOLK RD	23.900	25.000	10.000	2.40	0.60	20.90	20.65	20.45	22.85	3.00	2.64%	nor1	15.80	0.20	15.921	4.53	6.93	
		3215 NORFOLK RD	18.330	30.000	5.000	1.10	0.60	16.63	16.33	16.23	17.33	23.00	2.64%	nor1	15.80	0.20	15.392	0.84	1.94	
		3220 NORFOLK RD	24.940	25.000	10.000	2.60	0.60	21.74	21.49	21.29	23.89	32.00	2.64%	nor1	15.80	0.20	15.155	6.14	8.74	
		3225 NORFOLK RD	18.240	25.000	8.000	2.50	0.60	15.14	14.89	14.73	17.23	18.00	0.69%	7025	14.60	0.20	14.676	0.05	2.55	
		3240 NORFOLK RD	23.890	30.000	10.000	1.90	0.60	21.39	21.09	20.89	22.79	30.00	0.69%	7025	14.60	0.20	14.593	6.30	8.20	
		3245 NORFOLK RD	18.320	15.000	10.000	2.80	0.60	14.92	14.77	14.57	17.37	51.00	0.69%	7025	14.60	0.20	14.448	0.12	2.92	
		3250 NORFOLK RD	24.050	30.000	10.000	2.40	0.60	21.05	20.75	20.55	22.95	75.00	0.69%	7025	14.60	0.20	14.283	6.27	8.67	
		3255 NORFOLK RD	20.010	20.000	10.000	2.70	0.60	16.71	16.51	16.31	19.01	81.00	0.69%	7025	14.60	0.20	14.241	2.07	4.77	
		3270 NORFOLK RD	20.850	20.000	10.000	1.00	0.60	19.25	19.05	18.85	19.85	105.00	0.69%	7025	14.60	0.20	14.076	4.77	5.77	
		3275 NORFOLK RD	17.320	25.000	5.000	2.30	0.60	14.42	14.17	14.07	16.37	120.00	0.69%	7025	14.60	0.20	13.973	0.10	2.40	
		3285 NORFOLK RD	18.980	15.000	8.000	2.70	0.60	15.68	15.53	15.37	18.07	14.00	1.97%	5251	13.65	0.20	13.575	1.80	4.50	
		3290 NORFOLK RD	19.430	20.000	10.000	1.50	0.60	17.33	17.13	16.93	18.43	15.00	1.97%	5251	13.65	0.20	13.555	3.38	4.88	
		3295 NORFOLK RD	16.770	20.000	10.000	2.70	0.60	13.47	13.27	13.07	15.77	45.00	1.97%	5251	13.65	0.20	12.965	0.11	2.81	
		3300 NORFOLK RD	19.330	20.000	5.000	0.90	0.60	17.83	17.63	17.53	18.43	58.00	1.97%	5251	13.65	0.20	12.709	4.82	5.72	
		3315 NORFOLK RD	16.170	25.000	7.000	2.70	0.60	12.87	12.62	12.48	15.18	72.00	1.97%	5251	13.65	0.20	12.434	0.05	2.75	
		3335 NORFOLK RD	15.890	20.000	5.000	2.50	0.60	12.79	12.59	12.49	14.99	20.00	0.50%	5229	12.05	0.20	12.150	0.34	2.84	
		3355 NORFOLK RD	15.400	20.000	10.000	1.30	0.60	13.50	13.30	13.10	14.40	57.00	0.50%	5229	12.05	0.20	11.966	1.13	2.43	

Pump Required	Pump Upper	Street and Address	Floor Elevation (Polaris Survey)	Distance from Entrance to PL	Distance From PL to Main	House file assumed Main Entrance Distance to Lower	Slab to inv (assumed) m	Calculated Service Elevation at House (SP)	Calculated Service Elevation at Property Line @ 1% (IC)	Calculated Service Elevation at Main @ 2% (MC)	Calculated Service Elevation at Main @ 2% (MC) *(No Lower Floor)*	Distance from Upstream Manhole	Grade from Upstream Manhole	Upstream Manhole	Invert of Upstream Manhole	Diameter of Main	Obvert of Main	Difference (+) Gravity (-) Pump	(No Lower Floor) Difference (+) Gravity (-) Pump	Comments
			Elev. (m)	Dist. (m)	Dist. (m)	Depth (m)	Depth (m)	Elev. (m)	Elev. (m)	Elev. (m)	Elev. (m)	Dist. (m)	Grade (%)	MH #	Elev. (m)	Dia. (m)	Elev. (m)	(m)	(m)	
		RIPON RD																		
		3210 RIPON RD	32.410	30.000	11.000	2.40	0.60	29.41	29.11	28.89	31.29	2.00	2.49%	RIP1	25.71	0.20	25.864	3.03	5.43	
		3225 RIPON RD	29.540	27.000	11.000	2.40	0.60	26.54	26.27	26.05	28.45	17.00	2.49%	RIP1	25.71	0.20	25.491	0.56	2.96	
		3230 RIPON RD	31.650	22.000	10.000	2.70	0.60	28.35	28.13	27.93	30.63	13.00	2.49%	RIP1	25.71	0.20	25.590	2.34	5.04	
		3245 RIPON RD	28.250	25.000	10.000	2.40	0.60	25.25	25.00	24.80	27.20	7.00	6.53%	5265	24.30	0.20	24.043	0.76	3.16	
		3250 RIPON RD	30.610	30.000	15.000	2.60	0.60	27.41	27.11	26.81	29.41	5.00	6.53%	5265	24.30	0.20	24.174	2.64	5.24	
		3275 RIPON RD	24.910	25.000	12.000	2.70	0.60	21.61	21.36	21.12	23.82	52.00	6.53%	5265	24.30	0.20	21.107	0.01	2.71	
		3280 RIPON RD	25.950	35.000	10.000	1.50	0.60	23.85	23.50	23.30	24.80	46.00	6.53%	5265	24.30	0.20	21.498	1.80	3.30	
		3295 RIPON RD	23.500	20.000	10.000	2.70	0.60	20.20	20.00	19.80	22.50	80.00	6.53%	5265	24.30	0.20	19.280	0.52	3.22	
		3300 RIPON RD	25.930	30.000	10.000	2.70	0.60	22.63	22.33	22.13	24.83	8.00	3.84%	5248	18.90	0.20	18.792	3.34	6.04	
		3315 RIPON RD	21.200	20.000	15.000	2.40	0.60	18.20	18.00	17.70	20.10	38.00	3.84%	5248	18.90	0.20	17.639	0.06	2.46	
		3320 RIPON RD	23.270	35.000	10.000	2.60	0.60	20.07	19.72	19.52	22.12	60.00	3.84%	5248	18.90	0.20	16.793	2.73	5.33	
		3335 RIPON RD	19.330	20.000	12.000	2.60	0.60	16.13	15.93	15.69	18.29	44.00	0.49%	6520	11.68	0.20	11.662	4.03	6.63	
		3340 RIPON RD	21.190	30.000	12.000	2.60	0.60	17.99	17.69	17.45	20.05	114.00	3.84%	5248	18.90	0.20	14.718	2.73	5.33	
		3360 RIPON RD	19.790	30.000	15.000	2.50	0.60	16.69	16.39	16.09	18.59	12.00	0.40%	5215	11.44	0.20	11.592	4.50	7.00	
		3375 RIPON RD	15.930	20.000	3.000	3.00	0.60	12.33	12.13	12.07	15.07	46.00	0.40%	5215	11.44	0.20	11.456	0.61	3.61	
		3380 RIPON RD	18.200	20.000	20.000	2.40	0.60	15.20	15.00	14.60	17.00	53.00	0.40%	5215	11.44	0.20	11.428	3.17	5.57	
P	UP	3475 RIPON RD	7.670	21.000	75.000	2.70	0.60	4.37	4.16	2.66	5.36	2.00	2.20%	5181	6.80	0.25	7.006	-4.35	-1.65	Yaught Club, Eas through parking lot
P	UP	3480 RIPON RD	8.970	20.000	75.000	2.00	0.60	6.37	6.17	4.67	6.67	2.00	2.20%	5181	6.80	0.25	7.006	-2.34	-0.34	
		UPPER TERR																		
		3275 UPPER TERR	37.080	80.000	8.000	2.70	0.60	33.78	32.98	32.82	35.52	29.00	1.00%	5264	26.40	0.20	26.309	6.51	9.21	Serviced from Midland
		3295 UPPER TERR	39.130	80.000	6.000	3.00	0.60	35.53	34.73	34.61	37.61	70.00	1.00%	5264	26.40	0.20	25.899	8.71	11.71	Serviced from Midland
		3325 UPPER TERR	41.460	80.000	10.000	2.48	0.60	38.38	37.58	37.38	39.86	5.00	0.61%	5241	25.28	0.20	25.449	11.93	14.41	Serviced from Midland
		3375 UPPER TERR	43.550	75.000	12.000	2.70	0.60	40.25	39.50	39.26	41.96	50.00	0.61%	5241	25.28	0.20	25.173	14.09	16.79	Serviced from Midland
		3385 UPPER TERR	42.390	60.000	12.000	2.60	0.60	39.19	38.59	38.35	40.95	95.00	0.61%	5241	25.28	0.20	24.898	13.45	16.05	Serviced from Midland
		3393 UPPER TERR	42.210	50.000	12.000	2.80	0.60	38.81	38.31	38.07	40.87	18.00	1.08%	5211	24.50	0.20	24.505	13.56	16.36	Serviced from Midland
		3435 UPPER TERR	44.500	80.000	12.000	3.00	0.60	40.90	40.10	39.86	42.86	66.00	1.08%	5211	24.50	0.20	23.985	15.87	18.87	Serviced from Midland
		3455 UPPER TERR	44.030	50.000	18.000	2.40	0.60	41.03	40.53	40.17	42.57	31.00	0.40%	6861	23.40	0.20	23.476	16.69	19.09	Serviced from Midland
		3475 UPPER TERR	42.850	50.000	10.000	2.40	0.60	39.85	39.35	39.15	41.55	76.00	0.40%	6861	23.40	0.20	23.295	15.85	18.25	Serviced from Midland
		3485 UPPER TERR	42.810	50.000	30.000	2.40	0.60	39.81	39.31	38.71	41.11	2.00	0.40%	5166	22.93	0.20	23.122	15.59	17.99	Serviced from Midland
		3495 UPPER TERR	43.460	50.000	22.000	2.40	0.60	40.46	39.96	39.52	41.92	45.00	0.40%	5166	22.93	0.20	22.949	16.57	18.97	Serviced from Midland
		3505 UPPER TERR	42.510	50.000	16.000	2.50	0.60	39.41	38.91	38.59	41.09	63.00	0.40%	5166	22.93	0.20	22.877	15.71	18.21	Serviced from Midland
		3515 UPPER TERR	42.320	50.000	14.000	2.10	0.60	39.62	39.12	38.84	40.94	2.00	2.09%	5139	22.55	0.20	22.708	16.13	18.23	Serviced from Midland
		3565 UPPER TERR	42.340	46.000	21.000	1.90	0.60	39.84	39.38	38.96	40.86	93.00	1.50%	5118	24.85	0.20	23.658	15.30	17.20	Serviced from Beach

Pump Required	Pump Upper	Street and Address	Floor Elevation (Polaris Survey)	Distance from Entrance to PL	Distance From PL to Main	House file assumed Main Entrance Distance to Lower	Slab to inv (assumed) m	Calculated Service Elevation at House (SP)	Calculated Service Elevation at Property Line @ 1% (IC)	Calculated Service Elevation at Main @ 2% (MC)	Calculated Service Elevation at Main @ 2% (MC) *(No Lower Floor)*	Distance from Upstream Manhole	Grade from Upstream Manhole	Upstream Manhole	Invert of Upstream Manhole	Diameter of Main	Obvert of Main	Difference (+) Gravity (-) Pump	(No Lower Floor) Difference (+) Gravity (-) Pump	Comments
			Elev. (m)	Dist. (m)	Dist. (m)	Depth (m)	Depth (m)	Elev. (m)	Elev. (m)	Elev. (m)	Elev. (m)	Dist. (m)	Grade (%)	MH #	Elev. (m)	Dia. (m)	Elev. (m)	(m)	(m)	
		BEACH DR																		
		2970 BEACH DR	12.222	28.354	6.513	1.00	0.60	10.62	10.34	10.21	11.21	22.00	0.50%	6581	8.76	0.20	8.845	1.36	2.36	
E	UP	2975 BEACH DR	7.727	59.641	21.522	1.70	0.60	5.43	4.83	4.40	6.10	0.00	0.50%	6581	8.76	0.20	8.955	-4.55	-2.85	
		2980 BEACH DR	13.392	16.535	6.301	2.60	0.60	10.19	10.03	9.90	12.50	19.00	1.32%	6582	8.53	0.20	8.480	1.42	4.02	
E	UP	2985 BEACH DR	7.822	70.770	14.037	3.00	0.60	4.22	3.51	3.23	6.23	10.00	0.50%	6581	8.76	0.20	8.905	-5.67	-2.67	
		2990 BEACH DR	19.264	45.540	4.299	3.00	0.60	15.66	15.21	15.12	18.12	51.00	1.32%	6582	8.53	0.20	8.059	7.06	10.06	
		2997 BEACH DR	10.952	22.380	13.719	0.00	0.60	10.35	10.13	9.85	9.85	13.00	1.32%	6582	8.53	0.20	8.559	1.29	1.29	
P		2999 BEACH DR	11.124	25.000	20.000	2.30	0.60	8.22	7.97	7.57	9.87	65.00	1.32%	6582	8.53	0.20	7.875	-0.30	2.00	
		3000 BEACH DR	12.796	19.411	4.315	2.40	0.60	9.80	9.60	9.52	11.92	25.00	1.46%	6446	7.40	0.20	7.234	2.28	4.68	
P		3005 BEACH DR	8.230	17.689	17.901	2.70	0.60	4.93	4.75	4.40	7.10	56.00	1.46%	6446	7.40	0.20	6.780	-2.39	0.31	
P		3023 BEACH DR	8.951	16.486	17.265	3.10	0.60	5.25	5.09	4.74	7.84	17.00	1.67%	6445	6.40	0.20	6.316	-1.58	1.52	
		3030 BEACH DR	12.942	22.552	2.259	2.70	0.60	9.64	9.42	9.37	12.07	3.00	1.67%	6445	6.40	0.20	6.550	2.82	5.52	
		3040 BEACH DR	8.976	26.619	5.096	1.20	0.60	7.18	6.91	6.81	8.01	46.00	1.67%	6445	6.40	0.20	5.833	0.98	2.18	
P		3045 BEACH DR	8.141	28.856	12.750	1.50	0.60	6.04	5.75	5.50	7.00	56.00	1.67%	6445	6.40	0.20	5.666	-0.17	1.33	
		3050 BEACH DR	7.647	17.034	15.964	2.30	0.60	4.75	4.58	4.26	6.56	1.00	0.40%	5448	3.11	0.20	3.301	0.96	3.26	
P		3055 BEACH DR	5.705	15.610	4.618	2.40	0.60	2.71	2.55	2.46	4.86	14.00	0.40%	5448	3.11	0.20	3.249	-0.79	1.61	
P		3065 BEACH DR	6.072	16.473	4.131	2.60	0.60	2.87	2.71	2.62	5.22	42.00	0.40%	5448	3.11	0.20	3.137	-0.51	2.09	
		3100 BEACH DR	6.626	21.357	4.589	2.80	0.60	3.23	3.01	2.92	5.72	47.00	1.50%	5416	3.10	0.30	2.697	0.22	3.02	
P		3115 BEACH DR	5.200	25.000	12.000	2.40	0.60	2.20	1.95	1.71	4.11	44.00	0.37%	5424	1.70	0.38	1.910	-0.20	2.20	No house, assume MFE, BFE
		3120 BEACH DR	6.543	41.957	8.200	0.00	0.60	5.94	5.52	5.36	5.36	41.00	0.60%	6531	4.05	0.20	4.003	1.36	1.36	
E		3125 BEACH DR	7.308	57.155	13.000	2.60	0.60	4.11	3.54	3.28	5.88	49.00	0.60%	6531	4.05	0.20	3.955	-0.68	1.92	
P		3140 BEACH DR	7.000	30.000	9.500	2.40	0.60	4.00	3.70	3.51	5.91	65.00	1.01%	7030	4.73	0.20	4.276	-0.77	1.63	No house, assume MFE, BFE
P		3152 BEACH DR	7.472	26.665	8.913	2.90	0.60	3.97	3.71	3.53	6.43	29.00	1.01%	7030	4.73	0.20	4.638	-1.11	1.79	
P	UP	3155 BEACH DR	5.200	51.000	9.526	3.15	0.60	1.45	0.94	0.75	3.90	60.00	1.01%	7030	4.73	0.20	4.326	-3.58	-0.43	From Design drawings
		3170 BEACH DR	8.908	30.000	11.040	2.30	0.60	6.01	5.71	5.49	7.79	3.00	1.01%	7030	4.73	0.20	4.900	0.59	2.89	
P		3175 BEACH DR	7.214	55.400	10.632	2.60	0.60	4.01	3.46	3.25	5.85	5.00	1.01%	7030	4.73	0.20	4.880	-1.63	0.97	
		CADBORO BAY RD																		
		3185 CADBORO BAY RD	56.427	27.030	2.568	2.70	0.60	53.13	52.86	52.81	55.51	44.00	0.50%	6476	50.12	0.20	50.098	2.71	5.41	
		3195 CADBORO BAY RD	55.801	20.213	6.417	2.70	0.60	52.50	52.30	52.17	54.87	4.00	3.75%	COT1	51.31	0.20	51.356	0.81	3.51	
		3225 CADBORO BAY RD	56.868	50.500	5.000	2.40	0.60	53.87	53.36	53.26	55.66	42.00	0.55%	CAD6	53.11	0.20	53.084	0.18	2.58	
		3245 CADBORO BAY RD	56.595	56.000	5.000	1.00	0.60	55.00	54.44	54.34	55.34	11.00	0.55%	CAD6	53.11	0.20	53.254	1.08	2.08	
		3265 CADBORO BAY RD	57.404	46.000	5.000	2.40	0.60	54.40	53.94	53.84	56.24	61.00	0.98%	CAD7	53.90	0.20	53.502	0.34	2.74	
		3285 CADBORO BAY RD	58.599	56.000	5.000	2.40	0.60	55.60	55.04	54.94	57.34	31.00	0.98%	CAD7	53.90	0.20	53.796	1.14	3.54	
		3315 CADBORO BAY RD	58.965	54.000	5.000	2.40	0.60	55.97	55.43	55.33	57.73	0.00	0.98%	CAD7	53.90	0.20	54.100	1.23	3.63	
		3325 CADBORO BAY RD	59.080	54.000	16.000	2.70	0.60	55.78	55.24	54.92	57.62	10.00	1.00%	CAD1	54.61	0.20	54.709	0.21	2.91	
		3355 CADBORO BAY RD	58.690	23.831	13.126	1.70	0.60	56.39	56.15	55.89	57.59	45.00	1.00%	CAD1	54.61	0.20	54.359	1.53	3.23	
		3375 CADBORO BAY RD	59.071	16.092	13.138	2.40	0.60	56.07	55.91	55.65	58.05	71.00	1.00%	CAD1	54.61	0.20	54.099	1.55	3.95	
		3395 CADBORO BAY RD	59.233	26.744	11.800	2.40	0.60	56.23	55.97	55.73	58.13	102.00	1.00%	CAD1	54.61	0.20	53.788	1.94	4.34	
		3405 CADBORO BAY RD	57.945	31.828	11.800	2.70	0.60	54.65	54.33	54.09	56.79	39.00	1.86%	5184	53.14	0.20	52.612	1.48	4.18	
		3415 CADBORO BAY RD	57.119	24.500	11.800	2.40	0.60	54.12	53.87	53.64	56.04	78.00	1.86%	5184	53.14	0.20	51.885	1.75	4.15	Was off back
		3425 CADBORO BAY RD	55.173	17.800	11.800	2.40	0.60	52.17	52.00	51.76	54.16	105.00	1.86%	5184	53.14	0.20	51.382	0.38	2.78	Was off back
		3435 CADBORO BAY RD	56.079	19.700	11.800	1.00	0.60	54.48	54.28	54.05	55.05	22.00	0.40%	CAD2	50.70	0.20	50.811	3.23	4.23	Was off back
		3445 CADBORO BAY RD	55.782	20.100	11.800	1.00	0.60	54.18	53.98	53.75	54.75	43.00	0.40%	CAD2	50.70	0.20	50.727	3.02	4.02	Was off back
		3455 CADBORO BAY RD	55.644	20.400	11.800	2.40	0.60	52.64	52.44	52.20	54.60	71.00	0.40%	CAD2	50.70	0.20	50.614	1.59	3.99	Was off back
		3465 CADBORO BAY RD	55.341	16.500	11.800	2.70	0.60	52.04	51.88	51.64	54.34	105.00	0.40%	CAD2	50.70	0.20	50.477	1.16	3.86	Was off back
P		3475 CADBORO BAY RD	53.547	23.200	11.800	2.70	0.60	50.25	50.02	49.78	52.48	19.00	2.55%	CAD3	50.18	0.20	49.895	-0.12	2.58	Was off back
P		3495 CADBORO BAY RD	51.471	26.000	11.800	2.70	0.60	48.17	47.91	47.68	50.38	59.00	2.55%	CAD3	50.18	0.20	48.873	-1.20	1.50	Private Easement 3490 Upper Tce
P		3507 CADBORO BAY RD	49.652	23.000	11.800	2.40	0.60	46.65	46.42	46.19	48.59	23.00	1.01%	CAD4	47.95	0.20	47.919	-1.73	0.67	Private Easement 3490 Upper Tce
P		3605 CADBORO BAY RD	47.560	18.700	51.000	2.40	0.60	44.56	44.37	43.35	45.75	0.00	0.50%	Upp1	43.93	0.20	44.130	-0.78	1.62	no bsmt data (assume 2.4)
		CARDIGAN RD																		
		2440 CARDIGAN RD	55.776	16.272	7.615	2.40	0.60	52.78	52.61	52.46	54.86	19.00	7.09%	5195	52.55	0.20	51.404	1.06	3.46	
		2455 CARDIGAN RD	55.450	15.971	12.432	2.70	0.60	52.15	51.99	51.74	54.44	19.00	7.09%	5195	52.55	0.20	51.404	0.34	3.04	
P		2460 CARDIGAN RD	52.939	21.528	6.310	3.50	0.60	48.84	48.62	48.50	52.00	20.00	2.85%	5200	49.19	0.20	48.821	-0.32	3.18	
		2475 CARDIGAN RD	53.022	11.800	14.087	0.00	0.60	52.42	52.30	52.02	52.02	15.00	2.85%	5200	49.19	0.20	48.963	3.06	3.06	
		2480 CARDIGAN RD	51.766	13.341	5.923	2.40	0.60	48.77	48.63	48.51	50.91	10.00	5.08%	5205	47.23	0.20	46.922	1.59	3.99	

Pump Required	Pump Upper	Street and Address	Floor Elevation (Polaris Survey)	Distance from Entrance to PL	Distance From PL to Main	House file assumed Main Entrance Distance to Lower	Slab to inv (assumed) m	Calculated Service Elevation at House (SP)	Calculated Service Elevation at Property Line @ 1% (IC)	Calculated Service Elevation at Main @ 2% (MC)	Calculated Service Elevation at Main @ 2% (MC) *(No Lower Floor)*	Distance from Upstream Manhole	Grade from Upstream Manhole	Upstream Manhole	Invert of Upstream Manhole	Diameter of Main	Obvert of Main	Difference (+) Gravity (-) Pump	(No Lower Floor) Difference (+) Gravity (-) Pump	Comments
			Elev. (m)	Dist. (m)	Dist. (m)	Depth (m)	Depth (m)	Elev. (m)	Elev. (m)	Elev. (m)	Elev. (m)	Dist. (m)	Grade (%)	MH #	Elev. (m)	Dia. (m)	Elev. (m)	(m)	(m)	
		CHILTERN PL																		
P		2440 CHILTERN PL	54.544	25.524	5.255	2.40	0.60	51.54	51.29	51.18	53.58	28.00	0.40%	CHI1	51.15	0.20	51.238	-0.05	2.35	
P	UP	2450 CHILTERN PL	52.084	28.000	8.000	3.50	0.60	47.98	47.70	47.54	51.04	3.00	0.40%	CHI1	51.15	0.20	51.338	-3.79	-0.29	
P		2455 CHILTERN PL	54.782	21.600	7.100	2.80	0.60	51.38	51.17	51.02	53.82	20.00	0.40%	CHI1	51.15	0.20	51.270	-0.25	2.55	
P		2465 CHILTERN PL	52.369	18.600	6.200	2.50	0.60	49.27	49.08	48.96	51.46	3.00	0.40%	CHI1	51.15	0.20	51.338	-2.38	0.12	
		COTSWOLD RD																		
		2440 COTSWOLD RD	56.990	19.336	11.850	2.50	0.60	53.89	53.70	53.46	55.96	4.00	3.75%	COT1	51.31	0.20	51.356	2.10	4.60	
		2450 COTSWOLD RD	54.654	28.388	10.811	2.60	0.60	51.45	51.17	50.95	53.55	29.00	3.75%	COT1	51.31	0.20	50.419	0.54	3.14	
		2455 COTSWOLD RD	53.711	13.410	10.429	0.00	0.60	53.11	52.98	52.77	52.77	40.00	3.75%	COT1	51.31	0.20	50.006	2.76	2.76	
		2460 COTSWOLD RD	52.898	15.377	8.040	1.20	0.60	51.10	50.94	50.78	51.98	12.00	4.69%	5272	49.35	0.20	48.988	1.80	3.00	
		2475 COTSWOLD RD	52.087	13.237	12.531	2.60	0.60	48.89	48.75	48.50	51.10	24.00	4.69%	5272	49.35	0.20	48.425	0.08	2.68	
		2500 COTSWOLD RD	48.048	17.042	21.908	2.60	0.60	44.85	44.68	44.24	46.84	1.00	5.24%	5293	41.50	0.20	41.649	2.59	5.19	
		2505 COTSWOLD RD	45.942	22.351	20.725	2.50	0.60	42.84	42.62	42.20	44.70	3.00	5.24%	5293	41.50	0.20	41.544	0.66	3.16	
		2515 COTSWOLD RD	44.196	18.274	12.493	2.40	0.60	41.20	41.01	40.76	43.16	23.00	5.24%	5293	41.50	0.20	40.495	0.27	2.67	
		2520 COTSWOLD RD	46.737	20.233	12.901	2.10	0.60	44.04	43.83	43.58	45.68	9.00	5.24%	5293	41.50	0.20	41.229	2.35	4.45	
P		2535 COTSWOLD RD	41.369	23.700	13.200	3.00	0.60	37.77	37.53	37.27	40.27	31.00	3.56%	5295	39.15	0.20	38.247	-0.98	2.02	
		2540 COTSWOLD RD	45.990	24.106	9.259	2.90	0.60	42.49	42.25	42.06	44.96	42.00	5.24%	5293	41.50	0.20	39.500	2.56	5.46	
		2555 COTSWOLD RD	39.944	34.468	18.193	2.40	0.60	36.94	36.60	36.24	38.64	10.00	4.00%	6505	31.80	0.20	31.604	4.63	7.03	
		2560 COTSWOLD RD	44.368	25.307	5.859	1.40	0.60	42.37	42.11	42.00	43.40	44.00	3.56%	5295	39.15	0.20	37.785	4.21	5.61	
		2580 COTSWOLD RD	41.685	19.191	10.427	2.40	0.60	38.69	38.49	38.28	40.68	78.00	3.56%	5295	39.15	0.20	36.575	1.71	4.11	
P		2605 COTSWOLD RD	37.251	17.217	15.108	2.60	0.60	34.05	33.88	33.58	36.18	6.00	3.56%	5288	35.15	0.20	35.136	-1.56	1.04	
		LANSDOWNE RD																		
		2420 LANSDOWNE RD	53.699	41.162	10.600	0.61	0.60	52.49	52.08	51.87	52.48	3.00	3.52%	5331	49.02	0.20	49.114	2.75	3.36	
P		2445 LANSDOWNE RD	51.234	18.101	10.787	3.00	0.60	47.63	47.45	47.24	50.24	4.00	3.52%	5331	49.02	0.20	49.079	-1.84	1.16	
		2450 LANSDOWNE RD	51.836	22.415	9.384	2.40	0.60	48.84	48.61	48.42	50.82	31.00	3.52%	5331	49.02	0.20	48.129	0.30	2.70	
		2470 LANSDOWNE RD	50.694	29.660	10.167	2.40	0.60	47.69	47.40	47.19	49.59	24.00	5.00%	6478	45.29	0.20	44.290	2.90	5.30	
		2475 LANSDOWNE RD	48.933	16.627	10.378	2.40	0.60	45.93	45.77	45.56	47.96	6.00	5.00%	6478	45.29	0.20	45.190	0.37	2.77	
		2525 LANSDOWNE RD	42.093	20.169	8.583	2.30	0.60	39.19	38.99	38.82	41.12	42.00	1.43%	5377	19.15	0.25	18.801	20.02	22.32	
		2530 LANSDOWNE RD	42.779	16.052	38.690	2.60	0.60	39.58	39.42	38.64	41.24	12.00	6.03%	6860	37.10	0.20	36.576	2.07	4.67	
		2545 LANSDOWNE RD	39.923	18.949	8.899	2.40	0.60	36.92	36.73	36.56	38.96	22.00	6.03%	6860	37.10	0.20	35.973	0.58	2.98	
		2550 LANSDOWNE RD	40.163	15.429	9.944	2.40	0.60	37.16	37.01	36.81	39.21	48.00	6.03%	6860	37.10	0.20	34.404	2.41	4.81	
		2555 LANSDOWNE RD	38.045	34.709	10.359	2.70	0.60	34.75	34.40	34.19	36.89	52.00	6.03%	6860	37.10	0.20	34.163	0.03	2.73	
		2570 LANSDOWNE RD	37.885	11.948	9.347	2.40	0.60	34.89	34.77	34.58	36.98	19.00	4.66%	5351	33.45	0.20	32.764	1.81	4.21	
		2575 LANSDOWNE RD	38.800	10.772	10.754	2.40	0.60	35.80	35.69	35.48	37.88	21.00	4.66%	5351	33.45	0.20	32.670	2.81	5.21	
		2580 LANSDOWNE RD	36.906	18.898	9.349	2.10	0.60	34.21	34.02	33.83	35.93	45.00	4.66%	5351	33.45	0.20	31.551	2.28	4.38	
		2595 LANSDOWNE RD	33.516	20.756	10.775	2.60	0.60	30.32	30.11	29.89	32.49	82.00	4.66%	5351	33.45	0.20	29.825	0.07	2.67	
		2625 LANSDOWNE RD	29.633	13.811	10.695	2.40	0.60	26.63	26.49	26.28	28.68	40.00	5.23%	5359	27.50	0.20	25.608	0.67	3.07	
		2655 LANSDOWNE RD	26.851	16.726	10.782	1.50	0.60	24.75	24.58	24.37	25.87	19.00	5.29%	5365	24.30	0.20	23.495	0.87	2.37	
		2660 LANSDOWNE RD	29.801	18.321	9.308	2.40	0.60	26.80	26.62	26.43	28.83	13.00	5.29%	5365	24.30	0.20	23.812	2.62	5.02	
		2695 LANSDOWNE RD	25.720	12.338	10.716	2.70	0.60	22.42	22.30	22.08	24.78	46.00	5.29%	5365	24.30	0.20	22.067	0.02	2.72	
		2700 LANSDOWNE RD	24.274	24.335	9.450	2.60	0.60	21.07	20.83	20.64	23.24	21.00	1.43%	5377	19.15	0.25	19.100	1.54	4.14	
		2720 LANSDOWNE RD	23.518	20.729	9.448	2.40	0.60	20.52	20.31	20.12	22.52	50.00	1.43%	5377	19.15	0.25	18.687	1.44	3.84	
		2725 LANSDOWNE RD	22.771	16.224	10.641	2.70	0.60	19.47	19.31	19.10	21.80	23.00	1.43%	5377	19.15	0.25	19.072	0.02	2.72	
		2755 LANSDOWNE RD	21.068	23.267	10.680	1.20	0.60	19.27	19.04	18.82	20.02	54.00	1.43%	5377	19.15	0.25	18.630	0.19	1.39	
		2760 LANSDOWNE RD	21.836	21.948	9.257	2.50	0.60	18.74	18.52	18.33	20.83	31.00	1.51%	5381	18.12	0.25	17.902	0.43	2.93	
		2765 LANSDOWNE RD	20.803	15.003	10.844	1.50	0.60	18.70	18.55	18.34	19.84	33.00	1.51%	5381	18.12	0.25	17.872	0.46	1.96	
		2810 LANSDOWNE RD	21.837	16.691	17.821	2.80	0.60	18.44	18.27	17.91	20.71	17.00	2.31%	5390	16.62	0.25	16.477	1.44	4.24	
		2815 LANSDOWNE RD	19.633	16.793	12.302	0.00	0.60	19.03	18.87	18.62	18.62	18.00	2.31%	5390	16.62	0.25	16.454	2.16	2.16	
		2830 LANSDOWNE RD	18.786	22.341	16.226	0.40	0.60	17.79	17.56	17.24	17.64	54.00	2.31%	5390	16.62	0.25	15.622	1.62	2.02	
		2835 LANSDOWNE RD	19.778	11.055	13.744	2.40	0.60	16.78	16.67	16.39	18.79	58.00	2.31%	5390	16.62	0.25	15.530	0.86	3.26	
		2850 LANSDOWNE RD	19.503	19.054	7.456	2.40	0.60	16.50	16.31	16.16	18.56	24.00	2.34%	5396	14.53	0.25	14.219	1.94	4.34	
		2855 LANSDOWNE RD	18.504	12.221	10.890	0.50	0.60	17.40	17.28	17.06	17.56	2.00	2.34%	5396	14.53	0.25	14.733	2.33	2.83	
		2870 LANSDOWNE RD	18.928	26.290	8.043	2.60	0.60	15.73	15.47	15.30	17.90	59.00	2.34%	5396	14.53	0.25	13.401	1.90	4.50	
		2875 LANSDOWNE RD	18.107	24.692	18.020	2.90	0.60	14.61	14.36	14.00	16.90	34.00	2.34%	5396	14.53	0.25	13.985	0.01	2.91	
		2880 LANSDOWNE RD	17.596	19.673	12.622	2.60	0.60	14.40	14.20	13.95	16.55	5.00	3.79%	5391	12.16	0.25	12.220	1.73	4.33	
		2890 LANSDOWNE RD	15.575	22.679	14.906	1.10	0.60	13.88	13.65	13.35	14.45	147.00	4.20%	5325	17.12	0.20	11.143	2.21	3.31	
		2895 LANSDOWNE RD	17.667	18.136	12.777	2.60	0.60	14.47	14.29	14.03	16.63	25.00	3.79%	5391	12.16	0.25	11.462	2.57	5.17	
		2925 LANSDOWNE RD	14.007	14.591	12.497	2.40	0.60	11.01	10.86	10.61	13.01	9.00	5.17%	5379	8.80	0.30	8.635	1.98	4.38	
		2950 LANSDOWNE RD	12.966	23.356	24.378	3.00	0.60	9.37	9.13	8.64	11.64	23.00	5.17%	5379	8.80	0.30	7.911	0.73	3.73	

Pump Required	Pump Upper	Street and Address	Floor Elevation (Polaris Survey)	Distance from Entrance to PL	Distance From PL to Main	House file assumed Main Entrance Distance to Lower	Slab to inv (assumed) m	Calculated Service Elevation at House (SP)	Calculated Service Elevation at Property Line @ 1% (IC)	Calculated Service Elevation at Main @ 2% (MC)	Calculated Service Elevation at Main @ 2% (MC) *(No Lower Floor)*	Distance from Upstream Manhole	Grade from Upstream Manhole	Upstream Manhole	Invert of Upstream Manhole	Diameter of Main	Obvert of Main	Difference (+) Gravity (-) Pump	(No Lower Floor) Difference (+) Gravity (-) Pump	Comments
			Elev. (m)	Dist. (m)	Dist. (m)	Depth (m)	Depth (m)	Elev. (m)	Elev. (m)	Elev. (m)	Elev. (m)	Dist. (m)	Grade (%)	MH #	Elev. (m)	Dia. (m)	Elev. (m)	(m)	(m)	
		MIDLAND RD																		
		3110 MIDLAND RD	28.616	12.117	9.411	2.70	0.60	25.32	25.19	25.01	27.71	63.00	1.00%	6509	21.64	0.20	21.211	3.80	6.50	
		3125 MIDLAND RD	24.970	46.100	1.500	2.60	0.60	21.77	21.31	21.28	23.88	67.00	1.00%	6509	21.64	0.20	21.171	0.11	2.71	
		3130 MIDLAND RD	29.578	13.901	9.500	0.00	0.60	28.98	28.84	28.65	28.65	32.00	1.00%	6509	21.64	0.20	21.521	7.13	7.13	
		3135 MIDLAND RD	25.366	45.000	1.500	2.70	0.60	22.07	21.62	21.59	24.29	27.00	1.00%	6509	21.64	0.20	21.571	0.01	2.71	
		3140 MIDLAND RD	30.315	17.381	9.585	2.40	0.60	27.32	27.14	26.95	29.35	3.00	1.00%	6509	21.64	0.20	21.811	5.14	7.54	
		3145 MIDLAND RD	27.508	46.500	1.500	2.70	0.60	24.21	23.74	23.71	26.41	3.00	1.00%	6509	21.64	0.20	21.811	1.90	4.60	
		3150 MIDLAND RD	31.997	19.982	9.424	1.00	0.60	30.40	30.20	30.01	31.01	97.00	2.99%	5290	27.65	0.20	24.950	5.06	6.06	
		3155 MIDLAND RD	28.524	42.900	1.500	2.70	0.60	25.22	24.80	24.77	27.47	4.00	1.00%	6509	21.64	0.20	21.801	2.96	5.66	
		3160 MIDLAND RD	32.639	17.534	9.241	2.40	0.60	29.64	29.46	29.28	31.68	65.00	2.99%	5290	27.65	0.20	25.907	3.37	5.77	
		3165 MIDLAND RD	30.154	13.183	36.441	1.20	0.60	28.35	28.22	27.49	28.69	65.00	2.99%	5290	27.65	0.20	25.907	1.59	2.79	
		3175 MIDLAND RD	30.705	11.967	36.402	1.10	0.60	29.01	28.89	28.16	29.26	38.00	2.99%	5290	27.65	0.20	26.714	1.44	2.54	
		3180 MIDLAND RD	33.749	24.077	9.524	2.00	0.60	31.15	30.91	30.72	32.72	10.00	2.99%	5290	27.65	0.20	27.551	3.17	5.17	
		3185 MIDLAND RD	31.358	33.268	37.023	2.00	0.60	28.76	28.43	27.68	29.68	15.00	2.99%	5290	27.65	0.20	27.402	0.28	2.28	
		3200 MIDLAND RD	33.940	26.800	9.700	2.70	0.60	30.64	30.37	30.18	32.88	15.00	2.99%	5290	27.65	0.20	27.402	2.78	5.48	
		NORFOLK RD																		
		3105 NORFOLK RD	15.023	9.300	0.228	2.90	0.60	11.52	11.43	11.43	14.33	145.00	4.20%	5325	17.12	0.20	11.227	0.20	3.10	
		3110 NORFOLK RD	17.660	15.822	15.544	1.20	0.60	15.86	15.70	15.39	16.59	81.00	4.20%	5325	17.12	0.20	13.916	1.48	2.68	
		3115 NORFOLK RD	16.840	22.300	2.000	2.40	0.60	13.84	13.62	13.58	15.98	95.00	4.20%	5325	17.12	0.20	13.327	0.25	2.65	
		3125 NORFOLK RD	18.742	16.382	2.000	2.40	0.60	15.74	15.58	15.54	17.94	51.00	4.20%	5325	17.12	0.20	15.176	0.36	2.76	
		3130 NORFOLK RD	20.075	26.616	15.961	2.80	0.60	16.68	16.41	16.09	18.89	41.00	4.20%	5325	17.12	0.20	15.596	0.49	3.29	
		3145 NORFOLK RD	20.443	17.541	2.000	1.40	0.60	18.44	18.27	18.23	19.63	10.00	4.20%	5325	17.12	0.20	16.898	1.33	2.73	
		3150 NORFOLK RD	22.160	22.184	15.784	2.60	0.60	18.96	18.74	18.42	21.02	10.00	4.20%	5325	17.12	0.20	16.898	1.52	4.12	
		3165 NORFOLK RD	21.153	30.712	2.000	2.70	0.60	17.85	17.55	17.51	20.21	1.00	4.20%	5325	17.12	0.20	17.276	0.23	2.93	
		3170 NORFOLK RD	22.070	22.191	18.092	1.20	0.60	20.27	20.05	19.69	20.89	3.00	4.20%	5325	17.12	0.20	17.192	2.49	3.69	
		NOTTINGHAM RD																		
P		2580 NOTTINGHAM RD	34.904	67.308	3.847	2.30	0.60	32.00	31.33	31.25	33.55	45.00	4.66%	5351	33.45	0.20	31.551	-0.30	2.00	
		RIPON RD																		
		3120 RIPON RD	22.022	24.868	10.237	1.20	0.60	20.22	19.97	19.77	20.97	54	1.95%	6856	19.86	0.20	19.009	0.76	1.96	
		3135 RIPON RD	23.567	28.860	9.900	2.60	0.60	20.37	20.08	19.88	22.48	27	1.95%	6856	19.86	0.20	19.534	0.35	2.95	
		3140 RIPON RD	24.251	23.694	10.229	2.80	0.60	20.85	20.61	20.41	23.21	27	1.95%	6856	19.86	0.20	19.534	0.88	3.68	
		3145 RIPON RD	24.632	20.379	9.522	2.70	0.60	21.33	21.13	20.94	23.64	60	3.03%	5362	21.96	0.20	20.339	0.60	3.30	
		3150 RIPON RD	24.958	20.748	11.434	2.60	0.60	21.76	21.55	21.32	23.92	63	3.03%	5362	21.96	0.20	20.248	1.07	3.67	
		3155 RIPON RD	25.696	21.319	10.921	2.60	0.60	22.50	22.28	22.06	24.66	20	3.03%	5362	21.96	0.20	21.550	0.51	3.11	
		3160 RIPON RD	26.248	21.788	9.558	2.70	0.60	22.95	22.73	22.54	25.24	17	3.03%	5362	21.96	0.20	21.640	0.90	3.60	
		3165 RIPON RD	26.852	16.866	11.998	2.70	0.60	23.55	23.38	23.14	25.84	57	3.41%	5303	24.31	0.20	22.569	0.57	3.27	
		3170 RIPON RD	27.619	15.834	7.526	2.70	0.60	24.32	24.16	24.01	26.71	31	3.41%	5303	24.31	0.20	23.456	0.55	3.25	
		3175 RIPON RD	27.960	20.170	11.374	2.70	0.60	24.66	24.46	24.23	26.93	18	3.41%	5303	24.31	0.20	23.899	0.33	3.03	
		3185 RIPON RD	30.184	37.546	8.693	3.00	0.60	26.58	26.21	26.03	29.03	3	3.41%	5303	24.31	0.20	24.411	1.62	4.62	
		3190 RIPON RD	30.354	25.803	19.147	1.90	0.60	27.85	27.60	27.21	29.11	3	3.41%	5303	24.31	0.20	24.411	2.80	4.70	
		3215 RIPON RD	31.079	45.325	41.485	2.70	0.60	27.78	27.33	26.50	29.20	0	3.41%	5303	24.31	0.20	24.513	1.98	4.68	
		RUTLAND RD																		
		2955 RUTLAND RD	11.908	17.516	14.429	2.60	0.60	8.71	8.53	8.24	10.84	56.00	5.17%	5379	8.80	0.30	6.204	2.04	4.64	
		2970 RUTLAND RD	9.286	45.150	19.396	2.50	0.60	6.19	5.73	5.35	7.85	2.00	1.49%	6863	5.05	0.30	5.320	0.03	2.53	
		2985 RUTLAND RD	10.759	25.075	16.900	2.70	0.60	7.46	7.21	6.87	9.57	53.00	1.23%	5388	4.85	0.30	4.496	2.37	5.07	
		2990 RUTLAND RD	8.452	23.360	4.441	2.70	0.60	5.15	4.92	4.83	7.53	35.00	1.23%	5388	4.85	0.30	4.718	0.11	2.81	
		3000 RUTLAND RD	7.720	13.090	8.340	2.30	0.60	4.82	4.69	4.52	6.82	13.00	1.38%	5413	3.60	0.30	3.721	0.80	3.10	no floor / basement elev (assumed)
		3005 RUTLAND RD	8.567	21.501	15.490	2.70	0.60	5.27	5.05	4.74	7.44	72.00	1.23%	5388	4.85	0.30	4.261	0.48	3.18	
		3025 RUTLAND RD	8.891	12.202	12.723	2.60	0.60	5.69	5.57	5.31	7.91	13.00	1.38%	5413	3.60	0.30	3.721	1.59	4.19	
		3055 RUTLAND RD	6.909	16.323	17.656	2.70	0.60	3.61	3.45	3.09	5.79	21.00	1.50%	5416	3.10	0.30	3.086	0.01	2.71	
		3075 RUTLAND RD	6.735	23.644	15.783	2.60	0.60	3.54	3.30	2.98	5.58	53.00	1.50%	5416	3.10	0.30	2.607	0.38	2.98	
P		3150 RUTLAND RD	5.277	34.289	9.071	2.70	0.60	1.98	1.63	1.45	4.15	17.00	0.46%	5431	1.48	0.38	1.772	-0.32	2.38	adjust PS inlet
		3155 RUTLAND RD	7.059	19.992	5.150	3.00	0.60	3.46	3.26	3.16	6.16	40.00	0.46%	5431	1.48	0.38	1.667	1.49	4.49	
		SHERRINGHAM PL																		
		3145 SHERRINGHAM PL	55.082	27.000	8.000	2.40	0.60	52.08	51.81	51.65	54.05	31.00	0.50%	6476	50.12	0.20	50.163	1.49	3.89	
P		3155 SHERRINGHAM PL	53.322	22.000	6.000	2.50	0.60	50.22	50.00	49.88	52.38	3.00	0.50%	6476	50.12	0.20	50.303	-0.42	2.08	
E	UP	3165 SHERRINGHAM PL	51.550	14.000	34.000	3.40	0.60	47.55	47.41	46.73	50.13	0.00	0.50%	6476	50.12	0.20	50.318	-3.59	-0.19	
		3175 SHERRINGHAM PL	54.349	23.000	3.000	2.70	0.60	51.05	50.82	50.76	53.46	3.00	0.50%	6476	50.12	0.20	50.303	0.46	3.16	
		SOUTHDOWNE RD																		
		3075 SOUTHDOWNE RD	19.566	34.137	8.628	1.80	0.60	17.17	16.82	16.65	18.45	65.00	2.34%	5396	14.53	0.25	13.260	3.39	5.19	
		3085 SOUTHDOWNE RD	19.029	31.345	74.465	2.10	0.60	16.33	16.02	14.53	16.63	89.00	2.34%	5396	14.53	0.25	12.699	1.83	3.93	
		SURREY RD																		
		2960 SURREY RD	16.776	50.575	20.901	0.50	0.60	15.68	15.17	14.75	15.25	2.00	1.46%	6446	7.40	0.20	7.571	7.18	7.68	
E	UP	3065 SURREY RD	7.194	28.761	88.000	2.00	0.60	4.59	4.31	2.55	4.55	82.00	1.32%	6582	8.53	0.20	7.651	-5.10	-3.10	
		TARN PL																		
		3140 TARN PL	6.487	24.945	9.632	0.90	0.60	4.99	4.74	4.54	5.44	11.00	0.40%	6850	3.43	0.20	3.586	0.96	1.86	
E		3150 TARN PL	6.543	14.162	9.203	2.40	0.60	3.54	3.40	3.22	5.62	20.00	0.40%	5467	3.55	0.20	3.672	-0.45	1.95	
E		3165 TARN PL	7.092	24.967	8.272	4.10	0.60	2.39	2.14	1.98	6.08	0.00	0.40%	5467	3.55	0.20	3.752	-1.78	2.32	
		3175 TARN PL	6.483	45.934	9.335	1.40	0.60	4.48	4.02	3.84	5.24	0.00	0.40%	5467	3.55	0.20	3.752	0.08	1.48	

Pump Required	Pump Upper	Street and Address	Floor Elevation (Polaris Survey)	Distance from Entrance to PL	Distance From PL to Main	House file assumed Main Entrance Distance to Lower	Slab to inv (assumed) m	Calculated Service Elevation at House (SP)	Calculated Service Elevation at Property Line @ 1% (IC)	Calculated Service Elevation at Main @ 2% (MC)	Calculated Service Elevation at Main @ 2% (MC) *(No Lower Floor)*	Distance from Upstream Manhole	Grade from Upstream Manhole	Upstream Manhole	Invert of Upstream Manhole	Diameter of Main	Obvert of Main	Difference (+) Gravity (-) Pump	(No Lower Floor) Difference (+) Gravity (-) Pump	Comments
			Elev. (m)	Dist. (m)	Dist. (m)	Depth (m)	Depth (m)	Elev. (m)	Elev. (m)	Elev. (m)	Elev. (m)	Dist. (m)	Grade (%)	MH #	Elev. (m)	Dia. (m)	Elev. (m)	(m)	(m)	
		UPLANDS RD																		
		3085 UPLANDS RD	44.829	23.076	10.255	2.70	0.60	41.53	41.30	41.09	43.79	18.00	6.01%	5337	40.50	0.20	39.619	1.47	4.17	
		3090 UPLANDS RD	46.290	29.864	9.401	1.50	0.60	44.19	43.89	43.70	45.20	59.00	5.00%	6478	45.29	0.20	42.540	1.16	2.66	
		3100 UPLANDS RD	47.540	21.602	10.287	2.40	0.60	44.54	44.32	44.12	46.52	64.00	0.90%	5312	41.88	0.20	41.502	2.62	5.02	
		3125 UPLANDS RD	44.140	37.179	11.440	2.40	0.60	41.14	40.77	40.54	42.94	44.00	6.01%	5337	40.50	0.20	38.057	2.48	4.88	Assumed BFE
		3130 UPLANDS RD	48.320	23.673	11.771	2.20	0.60	45.52	45.28	45.05	47.25	13.00	0.90%	5312	41.88	0.20	41.963	3.09	5.29	
		3155 UPLANDS RD	45.830	16.432	20.146	2.40	0.60	42.83	42.67	42.26	44.66	6.00	0.63%	5300A	42.07	0.20	42.232	0.03	2.43	
		3160 UPLANDS RD	48.772	23.937	10.225	2.70	0.60	45.47	45.23	45.03	47.73	33.00	1.77%	6864	44.78	0.20	44.395	0.63	3.33	
		3200 UPLANDS RD	50.421	23.338	7.206	2.70	0.60	47.12	46.89	46.74	49.44	67.00	4.69%	5272	49.35	0.20	46.410	0.33	3.03	
		3220 UPLANDS RD	52.139	28.261	11.025	2.70	0.60	48.84	48.56	48.34	51.04	3.00	2.51%	5260	46.20	0.20	46.325	2.01	4.71	
		3225 UPLANDS RD	50.436	27.341	11.216	2.70	0.60	47.14	46.86	46.64	49.34	3.00	2.51%	5260	46.20	0.20	46.325	0.31	3.01	
		3240 UPLANDS PL	53.160	17.470	17.195	3.20	0.60	49.36	49.19	48.84	52.04	0.00	2.91%	5253	48.60	0.20	48.800	0.04	3.24	
		3255 UPLANDS RD	49.109	20.200	10.200	3.00	0.60	45.51	45.31	45.10	48.10	0.00	0.41%	5257	44.89	0.20	45.090	0.01	3.01	
		3260 UPLANDS PL	53.883	24.117	16.323	2.70	0.60	50.58	50.34	50.02	52.72	0.00	2.91%	5253	48.60	0.20	48.800	1.22	3.92	
		3275 UPLANDS RD	48.669	20.153	9.322	2.40	0.60	45.67	45.47	45.28	47.68	28.00	0.41%	5257	44.89	0.20	44.974	0.31	2.71	
		3280 UPLANDS RD	50.909	16.546	10.743	2.90	0.60	47.41	47.24	47.03	49.93	21.00	0.41%	5257	44.89	0.20	45.003	2.03	4.93	
		3295 UPLANDS RD	48.634	20.356	9.089	2.40	0.60	45.63	45.43	45.25	47.65	24.00	0.42%	5250	44.67	0.20	44.769	0.48	2.88	
		3300 UPLANDS RD	51.934	35.439	11.008	2.70	0.60	48.63	48.28	48.06	50.76	26.00	0.42%	5250	44.67	0.20	44.760	3.30	6.00	
		3335 UPLANDS RD	49.014	18.240	9.526	3.00	0.60	45.41	45.23	45.04	48.04	63.00	0.42%	5250	44.67	0.20	44.604	0.44	3.44	
		3350 UPLANDS RD	50.628	35.813	10.526	3.00	0.60	47.03	46.67	46.46	49.46	1.00	0.41%	5231	44.30	0.20	44.496	1.96	4.96	
		3355 UPLANDS RD	49.034	13.281	9.368	3.00	0.60	45.43	45.30	45.11	48.11	21.00	0.41%	5231	44.30	0.20	44.414	0.70	3.70	
		3370 UPLANDS RD	50.420	20.258	11.046	2.80	0.60	47.02	46.82	46.60	49.40	52.00	0.41%	5231	44.30	0.20	44.288	2.31	5.11	
		3375 UPLANDS RD	48.849	14.554	9.373	2.70	0.60	45.55	45.40	45.22	47.92	55.00	0.41%	5231	44.30	0.20	44.276	0.94	3.64	
		3410 UPLANDS RD	49.378	12.920	4.441	2.40	0.60	46.38	46.25	46.16	48.56	49.00	5.08%	5205	47.23	0.20	44.942	1.22	3.62	
		3420 UPLANDS RD	49.706	14.858	0.474	2.40	0.60	46.71	46.56	46.55	48.95	9.00	4.70%	5201	43.61	0.20	43.387	3.16	5.56	
		3430 UPLANDS RD	47.620	16.936		1.40	0.60	45.62	45.45	45.45	46.85	30.70	0.96%	5187	41.60	0.20	41.504	3.95	5.35	
		UPPER TERR																		
		3205 UPPER TERR	37.063	15.500	9.850	2.40	0.60	34.06	33.91	33.71	36.11	11.00	2.78%	5282	33.80	0.20	33.695	0.02	2.42	
		3210 UPPER TERR	40.270	12.200	10.450	2.70	0.60	36.97	36.85	36.64	39.34	34.00	3.56%	5288	35.15	0.20	34.139	2.50	5.20	
		3215 UPPER TERR	35.514	27.700	15.600	2.70	0.60	32.21	31.94	31.63	34.33	32.00	2.80%	7016	31.95	0.20	31.254	0.37	3.07	
		3230 UPPER TERR	40.967	22.965	15.705	2.70	0.60	37.67	37.44	37.12	39.82	27.00	2.78%	5282	33.80	0.20	33.251	3.87	6.57	
		3250 UPPER TERR	40.346	26.431	23.868	1.00	0.60	38.75	38.48	38.00	39.00	70.00	4.05%	5254	35.88	0.20	33.246	4.76	5.76	
		3270 UPPER TERR	41.862	20.458	12.058	2.20	0.60	39.06	38.86	38.62	40.82	26.00	4.05%	5254	35.88	0.20	35.027	3.59	5.79	
		3290 UPPER TERR	42.861	19.193	9.799	2.40	0.60	39.86	39.67	39.47	41.87	59.00	3.60%	5236	38.34	0.20	36.416	3.06	5.46	
		3320 UPPER TERR	43.607	16.066	9.898	1.20	0.60	41.81	41.65	41.45	42.65	10.00	3.60%	5236	38.34	0.20	38.180	3.27	4.47	Assumed BFE
		3350 UPPER TERR	44.907	10.893	11.761	2.40	0.60	41.91	41.80	41.56	43.96	89.00	1.88%	5208	40.50	0.20	39.031	2.53	4.93	
		3380 UPPER TERR	47.260	12.883	13.195	2.60	0.60	44.06	43.93	43.67	46.27	47.00	1.88%	5208	40.50	0.20	39.819	3.85	6.45	
		3400 UPPER TERR	47.527	15.171	6.071	2.40	0.60	44.53	44.38	44.25	46.65	40.00	4.70%	5201	43.61	0.20	41.932	2.32	4.72	
		3440 UPPER TERR	46.753	17.159	13.154	3.00	0.60	43.15	42.98	42.72	45.72	69.00	0.89%	5173	42.25	0.20	41.838	0.88	3.88	
		3450 UPPER TERR	48.472	26.162	14.056	2.40	0.60	45.47	45.21	44.93	47.33	46.00	0.89%	5173	42.25	0.20	42.042	2.89	5.29	
		3460 UPPER TERR	47.855	16.648	14.728	2.40	0.60	44.86	44.69	44.39	46.79	5.00	0.89%	5173	42.25	0.20	42.406	1.99	4.39	
		3470 UPPER TERR	47.142	26.470	11.909	2.70	0.60	43.84	43.58	43.34	46.04	13.00	0.89%	5162	42.70	0.20	42.785	0.55	3.25	
P		3480 UPPER TERR	46.658	30.237	7.357	2.70	0.60	43.36	43.06	42.91	45.61	55.00	0.69%	5138	43.30	0.20	43.121	-0.21	2.49	
		3490 UPPER TERR	47.442	13.483	10.051	2.30	0.60	44.54	44.41	44.21	46.51	5.00	0.69%	5138	43.30	0.20	43.466	0.74	3.04	
		3500 UPPER TERR	47.766	20.395	3.667	0.90	0.60	46.27	46.06	45.99	46.89	0.00	0.69%	5138	43.30	0.20	43.500	2.49	3.39	
		3520 UPPER TERR	48.735	22.857	4.117	1.60	0.60	46.54	46.31	46.22	47.82	0.00	0.69%	5138	43.30	0.20	43.500	2.72	4.32	
P	UP	3525 UPPER TERR	44.660	30.000	8.000	2.40	0.60	41.66	41.36	41.20	43.60	57.00	0.50%	UPP1	43.93	0.20	43.844	-2.64	-0.24	Assumed BFE
P		3535 UPPER TERR	46.800	25.000	11.000	2.40	0.60	43.80	43.55	43.33	45.73	19.00	0.50%	UPP1	43.93	0.20	44.035	-0.70	1.70	Assumed BFE
		VALDEZ PL																		
		3000 VALDEZ PL	13.667	30.118	28.000	2.00	0.60	11.07	10.77	10.21	12.21	2.00	1.61%	VAL1	5.21	0.20	5.378	4.83	6.83	
		3015 VALDEZ PL	12.357	28.920	28.000	0.50	0.60	11.26	10.97	10.41	10.91	2.00	1.61%	VAL1	5.21	0.20	5.378	5.03	5.53	
		3020 VALDEZ PL	9.624	45.000	7.000	2.40	0.60	6.62	6.17	6.03	8.43	0.00	1.61%	VAL1	5.21	0.20	5.410	0.62	3.02	Assumed BFE
		3046 VALDEZ PL	9.102	12.000	7.000	2.40	0.60	6.10	5.98	5.84	8.24	9.00	1.61%	VAL1	5.21	0.20	5.265	0.58	2.98	
		3055 VALDEZ PL	12.433	20.000	6.000	0.90	0.60	10.93	10.73	10.61	11.51	18.00	1.61%	VAL1	5.21	0.20	5.121	5.49	6.39	
		WEALD RD																		
		3110 WEALD RD	35.206	19.761	10.783	2.40	0.60	32.21	32.01	31.79	34.19	52.00	1.70%	5327	29.15	0.20	28.467	3.33	5.73	
		3125 WEALD RD	32.940	31.540	9.493	2.40	0.60	29.94	29.62	29.43	31.83	21.00	5.23%	5359	27.50	0.20	26.602	2.83	5.23	
		3130 WEALD RD	35.894	15.077	11.346	2.50	0.60	32.79	32.64	32.42	34.92	13.00	1.70%	5327	29.15	0.20	29.131	3.29	5.79	
		3135 WEALD RD	32.477	36.954	9.896	1.20	0.60	30.68	30.31	30.11	31.31	16.00	1.70%	5327	29.15	0.20	29.080	1.03	2.23	
		3145 WEALD RD	35.054	15.845	5.616	2.50	0.60	31.95	31.80	31.68	34.18	43.00	4.00%	6505	31.80	0.20	30.283	1.40	3.90	
		3160 WEALD RD	36.854	14.831	14.493	0.00	0.60	36.25	36.11	35.82	35.82	43.00	4.00%	6505	31.80	0.20	30.283	5.53	5.53	
		3165 WEALD RD	36.232	14.538	3.237	2.40	0.60	33.23	33.09	33.02	35.42	21.00	4.00%	6505	31.80	0.20	31.163	1.86	4.26	
		3185 WEALD RD	36.635	31.684	3.139	2.40	0.60	33.64	33.32	33.26	35.66	3.00	4.00%	6505	31.80	0.20	31.884	1.37	3.77	
		3220 WEALD RD	46.134	29.384	9.246	3.00	0.60	42.53	42.24	42.06	45.06	45.00	1.83%	5259	39.82	0.20	39.192	2.86	5.86	
		3235 WEALD RD	44.641	30.584	5.345	3.00	0.60	41.04	40.74	40.63	43.63	32.00	1.83%	5259	39.82	0.20	39.430	1.20	4.20	
		3250 WEALD RD	46.243	24.509	8.439	2.40	0.60	43.24	43.00	42.83	45.23	13.00	1.83%	5259	39.82	0.20	39.777	3.05	5.45	
		3280 WEALD RD	46.376	19.147	8.358	2.70	0.60	43.08	42.88	42.72	45.42	72.00	0.50%	5244	40.32	0.20	40.160	2.56	5.26	
		3285 WEALD RD	44.639	22.601	6.678	2.40	0.60	41.64	41.41	41.28	43.68	68.00	0.50%	5244	40.32	0.20	40.180	1.10	3.50	
		3305 WEALD RD	44.799	48.380	8.450	3.00	0.60	41.20	40.72	40.55	43.55	30.00	0.50%	5244	40.32	0.20	40.370	0.18	3.18	
		3320 WEALD RD	46.894	18.431	6.909	2.40	0.60	43.89	43.71	43.57	45.97	32.00	0.50%	5244	40.32	0.20	40.360	3.21	5.61	
		3335 WEALD RD	45.635	9.300	6.500	2.40	0.60	42.64	42.54	42.41	44.81	45.00	1.00%	5227	40.96	0.20	40.713	1.70	4.10	
		3350 WEALD RD	47.007	18.524	8.901	2.50	0.60	43.91	43.72	43.54	46.04	4.00	0.50%	5244	40.32	0.20	40.500	3.04	5.54	
		3355 WEALD RD	46.073	15.977	8.960	3.00	0.60	42.47	42.31	42.13	45.13	29.00	1.00%	5227	40.96	0.20	40.873	1.26	4.26	
		3375 WEALD RD	47.616	26.224	6.632	2.50	0.60	44.52	44.25	44.12	46.62	1.00	1.00%	5227	40.96	0.20	41.153	2.97	5.47	
		3395 WEALD RD	48.809	12.037	8.153	3.00	0.60	45.21	45.09	44.93	47.93	50.00	0.41%	5220	43.94	0.20	43.933	0.99	3.99	

Humber Catchment
Option 2 - New Gravity Storm

Pump Required	Street and Address	Floor Elevation (Polaris Survey)	Distance from Entrance to PL	Distance From PL to Main	House file assumed Main Entrance Distance to Lower	Slab to inv (assumed) m	Calculated Service Elevation at House (SP)	Calculated Service Elevation at Property Line @ 1% (IC)	Calculated Service Elevation at Main @ 2% (MC)	Distance from Upstream Manhole	Grade from Upstream Manhole	Upstream Manhole	Invert of Upstream Manhole	Diameter of Main	Obvert of Main	Difference (+) Gravity (-) Pump	Comments
		Elev. (m)	Dist. (m)	Dist. (m)	Depth (m)	Depth (m)	Elev. (m)	Elev. (m)	Elev. (m)	Dist. (m)	Grade (%)	MH #	Elev. (m)	Dia. (m)	Elev. (m)	(m)	
	BEACH DR																
	3190 BEACH DR	7.870	20.000	12.000	1.10	0.30	6.47	6.27	6.03	25.00	1.01%	5328	4.39	0.25	4.389	1.64	
	3200 BEACH DR	8.010	25.000	5.000	1.80	0.30	5.91	5.66	5.56	45.00	1.01%	5328	4.39	0.25	4.187	1.37	
	3210 BEACH DR	7.690	25.000	10.000	2.40	0.30	4.99	4.74	4.54	45.00	0.50%	5313	3.53	0.38	3.679	0.86	
	3220 BEACH DR	9.270	30.000	10.000	2.50	0.30	6.47	6.17	5.97	88.00	0.50%	5313	3.53	0.38	3.463	2.51	
P	3225 BEACH DR	6.020	40.000	13.000	2.90	0.30	2.82	2.42	2.16	10.00	0.50%	5313	3.53	0.38	3.855	-1.69	
	3230 BEACH DR	7.020	25.000	12.000	2.40	0.30	4.32	4.07	3.83	25.00	0.50%	5286	3.03	0.38	3.279	0.55	
	3235 BEACH DR	7.530	35.000	10.000	2.70	0.30	4.53	4.18	3.98	51.00	0.50%	5313	3.53	0.38	3.649	0.33	
	3240 BEACH DR	6.070	20.000	10.000	1.40	0.30	4.37	4.17	3.97	69.00	0.50%	5286	3.03	0.38	3.058	0.91	
	3245 BEACH DR	6.720	40.000	10.000	2.30	0.30	4.12	3.72	3.52	2.00	0.50%	5286	3.03	0.38	3.395	0.13	
	3250 BEACH DR	5.300	25.000	11.000	1.00	0.30	4.00	3.75	3.53	33.00	0.50%	5266	2.61	0.38	2.815	0.71	
	3260 BEACH DR	6.360	25.000	10.000	2.40	0.30	3.66	3.41	3.21	75.00	0.50%	5266	2.61	0.38	2.605	0.60	
P	3265 BEACH DR	6.500	50.000	10.000	2.70	0.30	3.50	3.00	2.80	45.00	0.50%	5286	3.03	0.38	3.178	-0.38	
P	3270 BEACH DR	5.070	25.000	10.000	2.40	0.30	2.37	2.12	1.92	65.00	0.49%	5223	2.25	0.53	2.454	-0.53	
	3275 BEACH DR	5.690	45.000	10.000	1.70	0.30	3.69	3.24	3.04	9.00	0.50%	5266	2.61	0.38	2.935	0.10	
	3280 BEACH DR	4.710	20.000	11.000	0.00	0.30	4.41	4.21	3.99	5.00	0.49%	5223	2.25	0.53	2.750	1.24	
P	3285 BEACH DR	6.040	60.000	10.000	3.00	0.30	2.74	2.14	1.94	2.00	0.40%	5243	1.59	0.53	2.107	-0.17	Must lower end of line to get lower
P	3290 BEACH DR	4.820	15.000	10.000	2.70	0.30	1.82	1.67	1.47	38.00	0.50%	5210	2.69	0.53	3.026	-1.56	
	3295 BEACH DR	4.450	15.000	8.000	1.40	0.30	2.75	2.60	2.44	7.00	0.40%	5243	1.59	0.53	2.087	0.35	
	3340 BEACH DR	6.270	25.000	12.000	1.00	0.30	4.97	4.72	4.48	32.00	1.75%	5197	4.12	0.45	4.012	0.47	
P	3355 BEACH DR	6.750	40.000	8.000	3.40	0.30	3.05	2.65	2.49	98.00	2.65%	5181	7.43	0.38	5.206	-2.72	
	3360 BEACH DR	10.970	45.000	12.000	2.60	0.30	8.07	7.62	7.38	105.00	2.65%	5181	7.43	0.38	5.021	2.36	
	3380 BEACH DR	11.250	20.000	12.000	1.20	0.30	9.75	9.55	9.31	62.00	2.65%	5181	7.43	0.38	6.159	3.15	
	*3385 BEACH DR	9.200	35.000	8.000	0.00	0.30	8.90	8.55	8.39	62.00	2.65%	5181	7.43	0.38	6.159	2.23	*Parking Lot, assumed MFE, no bsmt
	3390 BEACH DR	13.090	25.000	8.000	2.40	0.30	10.39	10.14	9.98	32.00	4.57%	5190	10.75	0.30	9.588	0.39	
	3420 BEACH DR	17.350	30.000	10.000	2.60	0.30	14.45	14.15	13.95	103.00	0.60%	5215	11.44	0.30	11.120	2.83	
	3425 BEACH DR	13.070	35.000	10.000	3.00	0.30	9.77	9.42	9.22	74.00	3.57%	5167	11.65	0.20	9.209	0.01	
	3445 BEACH DR	15.410	39.000	9.000	3.20	0.30	11.91	11.52	11.34	17.00	3.57%	5167	11.65	0.20	11.243	0.10	
	3448 BEACH DR	20.010	40.000	12.000	2.70	0.30	17.01	16.61	16.37	16.00	3.57%	5167	11.65	0.20	11.279	5.09	
	3460 BEACH DR	22.200	20.000	12.000	2.60	0.30	19.30	19.10	18.86	81.00	5.36%	5145	17.50	0.20	13.356	5.50	
	3465 BEACH DR	17.590	43.000	7.000	2.60	0.30	14.69	14.26	14.12	81.00	5.36%	5145	17.50	0.20	13.356	0.76	
	3475 BEACH DR	18.980	35.000	7.000	2.40	0.30	16.28	15.93	15.79	37.00	5.36%	5145	17.50	0.20	15.715	0.07	
	3490 BEACH DR	25.400	20.000	12.000	1.00	0.30	24.10	23.90	23.66	17.00	5.36%	5145	17.50	0.20	16.788	6.87	
	3498 BEACH DR	28.790	25.000	15.000	2.60	0.30	25.89	25.64	25.34	64.00	2.46%	5139	22.85	0.20	21.473	3.87	
P	3515 BEACH DR	18.590	56.000	14.000	0.61	0.30	17.68	17.12	16.84	86.00	4.68%	5126	23.25	0.20	19.428	-2.59	
P	3525 BEACH DR	22.530	38.000	12.000	2.40	0.30	19.83	19.45	19.21	37.00	4.68%	5126	23.25	0.20	21.720	-2.51	
E	3535 BEACH DR	26.280	29.000	14.000	2.70	0.30	23.28	22.99	22.71	2.00	4.68%	5126	23.25	0.20	23.356	-0.65	
	3550 BEACH DR	41.730	30.000	15.000	4.50	0.30	36.93	36.63	36.33	57.00	1.50%	5118	24.85	0.20	24.197	12.13	
	3555 BEACH DR	28.050	17.000	14.000	2.70	0.30	25.05	24.88	24.60	60.00	1.50%	5118	24.85	0.20	24.152	0.45	
	3565 BEACH DR	28.219	21.000	10.000	2.70	0.30	25.22	25.01	24.81	18.00	1.50%	5118	24.85	0.20	24.781	0.03	
	3570 BEACH DR	37.860	25.000	15.000	1.50	0.30	36.06	35.81	35.51	14.00	1.50%	5118	24.85	0.20	24.840	10.67	
	3572 BEACH DR	37.270	35.000	15.000	1.20	0.30	35.77	35.42	35.12	91.00	1.57%	5107	26.50	0.20	25.271	9.85	
	3575 BEACH DR	28.870	19.000	9.000	2.40	0.30	26.17	25.98	25.80	84.00	1.57%	5107	26.50	0.20	25.381	0.42	
P	3585 BEACH DR	29.000	22.000	9.000	3.00	0.30	25.70	25.48	25.30	36.00	1.57%	5107	26.50	0.20	26.135	-0.83	
P	3595 BEACH DR	29.500	37.000	9.000	2.40	0.30	26.80	26.43	26.25	100.00	1.81%	5081	28.63	0.20	27.017	-0.77	
P	3655 BEACH DR	30.000	28.000	9.000	2.70	0.30	27.00	26.72	26.54	45.00	1.81%	5081	28.63	0.20	28.014	-1.47	
P	3695 BEACH DR	31.000	20.000	9.000	3.80	0.30	26.90	26.70	26.52	1.00	1.81%	5081	28.63	0.20	28.812	-2.29	
P	2710 HIBBONS CL	23.000	25.000	110.000	2.40	0.30	20.30	20.05	17.85	1.00	1.81%	5081	28.63	0.20	28.812	-10.96	

Humber Catchment
Option 2 - New Gravity Storm

Pump Required	Street and Address	Floor Elevation (Polaris Survey)	Distance from Entrance to PL	Distance From PL to Main	House file assumed Main Entrance Distance to Lower	Slab to inv (assumed) m	Calculated Service Elevation at House (SP)	Calculated Service Elevation at Property Line @ 1% (IC)	Calculated Service Elevation at Main @ 2% (MC)	Distance from Upstream Manhole	Grade from Upstream Manhole	Upstream Manhole	Invert of Upstream Manhole	Diameter of Main	Obvert of Main	Difference (+) Gravity (-) Pump	Comments
		Elev. (m)	Dist. (m)	Dist. (m)	Depth (m)	Depth (m)	Elev. (m)	Elev. (m)	Elev. (m)	Dist. (m)	Grade (%)	MH #	Elev. (m)	Dia. (m)	Elev. (m)	(m)	
	CADBORO BAY RD																
	3611 CADBORO BAY RD	41.560	30.000	17.000	2.70	0.30	38.56	38.26	37.92	61.00	1.57%	5107	26.50	0.20	25.742	12.18	
	3615 CADBORO BAY RD	41.330	30.000	17.000	2.70	0.30	38.33	38.03	37.69	22.00	1.57%	5107	26.50	0.20	26.355	11.34	
	EXETER RD																
	3110 EXETER RD	15.050	40.000	10.000	1.50	0.30	13.25	12.85	12.65	113.00	1.00%	6584	6.85	0.20	5.919	6.73	
	3130 EXETER RD	15.000	30.000	10.000	2.40	0.30	12.30	12.00	11.80	84.00	1.00%	6584	6.85	0.20	6.209	5.59	
	3145 EXETER RD	8.760	20.000	5.000	1.20	0.30	7.26	7.06	6.96	55.00	1.00%	6584	6.85	0.20	6.499	0.46	
	3160 EXETER RD	12.110	20.000	14.000	3.00	0.30	8.81	8.61	8.33	40.00	1.00%	6584	6.85	0.20	6.650	1.68	
	3170 EXETER RD	11.570	15.000	12.000	2.40	0.30	8.87	8.72	8.48	16.00	1.00%	6584	6.85	0.20	6.890	1.59	
	3175 EXETER RD	9.800	25.000	5.000	1.70	0.30	7.80	7.55	7.45	13.00	1.00%	6584	6.85	0.20	6.920	0.53	
	3190 EXETER RD	13.040	35.000	15.000	1.20	0.30	11.54	11.19	10.89	2.00	1.00%	6584	6.85	0.20	7.030	3.86	
	3195 EXETER RD	10.230	25.000	10.000	2.40	0.30	7.53	7.28	7.08	2.00	1.00%	6584	6.85	0.20	7.030	0.05	
	3200 EXETER RD	11.250	25.000	5.000	1.80	0.30	9.15	8.90	8.80	0.00	1.75%	7021	6.10	0.20	6.300	2.50	
	3205 EXETER RD	10.030	15.000	15.000	2.40	0.30	7.33	7.18	6.88	5.00	1.75%	7021	6.10	0.20	6.212	0.67	
	3220 EXETER RD	12.340	20.000	5.000	2.40	0.30	9.64	9.44	9.34	18.00	1.75%	7021	6.10	0.20	5.985	3.36	
	3225 EXETER RD	9.320	20.000	10.000	2.60	0.30	6.42	6.22	6.02	24.00	1.75%	7021	6.10	0.20	5.879	0.14	
	3235 EXETER RD	8.520	15.000	8.000	2.40	0.30	5.82	5.67	5.51	56.00	1.75%	7021	6.10	0.20	5.319	0.19	
	3240 EXETER RD	12.000	20.000	7.000	2.40	0.30	9.30	9.10	8.96	50.00	1.75%	7021	6.10	0.20	5.424	3.54	
P	3245 EXETER RD	6.950	15.000	5.000	2.30	0.30	4.35	4.20	4.10	94.00	1.75%	7021	6.10	0.20	4.653	-0.55	
	3250 EXETER RD	11.520	15.000	12.000	1.40	0.30	9.82	9.67	9.43	78.00	1.75%	7021	6.10	0.20	4.933	4.50	
	3260 EXETER RD	9.350	15.000	12.000	1.30	0.30	7.75	7.60	7.36	107.00	1.75%	7021	6.10	0.20	4.425	2.94	
E	3275 EXETER RD	6.210	15.000	5.000	1.10	0.30	4.81	4.66	4.56	126.00	1.75%	7021	6.10	0.20	4.092	0.47	Ex. Pump, not req'd
	3280 EXETER RD	8.310	15.000	12.000	2.40	0.30	5.61	5.46	5.22	1.00	0.40%	5246	3.50	0.30	3.796	1.42	
E	3285 EXETER RD	5.200	20.000	5.000	1.10	0.30	3.80	3.60	3.50	26.00	0.40%	5246	3.50	0.30	3.696	-0.20	
P	3290 EXETER RD	6.840	20.000	12.000	2.50	0.30	4.04	3.84	3.60	23.00	0.40%	5246	3.50	0.30	3.708	-0.11	
	3295 EXETER RD	6.980	15.000	5.000	2.70	0.30	3.98	3.83	3.73	62.00	0.40%	5246	3.50	0.30	3.552	0.18	
	3300 EXETER RD	6.780	20.000	13.000	2.20	0.30	4.28	4.08	3.82	61.00	0.40%	5246	3.50	0.30	3.556	0.26	
E	3320 EXETER RD	5.500	20.000	10.000	2.50	0.30	2.70	2.50	2.30	108.00	0.40%	5246	3.50	0.30	3.368	-1.07	
	HUMBER RD																
P	3120 HUMBER RD	4.880	55.000	15.000	3.00	0.30	1.58	1.03	0.73	41.00	0.40%	5243	1.59	0.53	1.951	-1.22	
	3140 HUMBER RD	5.540	30.000	15.000	2.40	0.30	2.84	2.54	2.24	8.00	0.40%	5239	1.24	0.53	1.733	0.51	
P	3145 HUMBER RD	5.050	35.000	7.000	2.70	0.30	2.05	1.70	1.56	61.00	0.40%	5243	1.59	0.53	1.871	-0.31	Must lower end of line to get lower
	3160 HUMBER RD	3.900	150.000	15.000	0.00	0.30	3.60	2.10	1.80	30.00	0.40%	5239	1.24	0.53	1.645	0.16	no bsmt
P	3180 HUMBER RD	3.510	80.000	15.000	1.50	0.30	1.71	0.91	0.61	30.00	0.40%	5239	1.24	0.53	1.645	-1.03	
P	3190 HUMBER RD	4.030	25.000	20.000	1.80	0.30	1.93	1.68	1.28	30.00	0.40%	5239	1.24	0.53	1.645	-0.36	Last MH @ outfall
	3195 HUMBER RD	5.560	40.000	10.000	2.70	0.30	2.56	2.16	1.96	26.00	0.40%	5239	1.24	0.53	1.661	0.30	
	LANSDOWNE RD																
	2980 LANSDOWNE RD	10.810	20.000	20.000	2.40	0.30	8.11	7.91	7.51	1.00	3.52%	5363	5.80	0.20	5.965	1.55	
	3000 LANSDOWNE RD	9.950	20.000	15.000	2.40	0.30	7.25	7.05	6.75	26.00	3.52%	5363	5.80	0.20	5.085	1.67	
	3005 LANSDOWNE RD	9.160	29.000	8.000	2.70	0.30	6.16	5.87	5.71	42.00	3.52%	5363	5.80	0.20	4.522	1.19	
	3020 LANSDOWNE RD	8.660	20.000	12.000	2.70	0.30	5.66	5.46	5.22	22.00	5.00%	5344	5.02	0.25	4.165	1.06	
E	3035 LANSDOWNE RD	7.350	20.000	7.000	1.00	0.30	6.05	5.85	5.71	11.00	5.00%	5344	5.02	0.25	4.715	1.00	Ex. Pump, not req'd
	3050 LANSDOWNE RD	8.240	25.000	10.000	2.40	0.30	5.54	5.29	5.09	9.00	1.01%	5328	4.39	0.25	4.549	0.54	

Humber Catchment
Option 2 - New Gravity Storm

Pump Required	Street and Address	Floor Elevation (Polaris Survey)	Distance from Entrance to PL	Distance From PL to Main	House file assumed Main Entrance Distance to Lower	Slab to inv (assumed) m	Calculated Service Elevation at House (SP)	Calculated Service Elevation at Property Line @ 1% (IC)	Calculated Service Elevation at Main @ 2% (MC)	Distance from Upstream Manhole	Grade from Upstream Manhole	Upstream Manhole	Invert of Upstream Manhole	Diameter of Main	Obvert of Main	Difference (+) Gravity (-) Pump	Comments
		Elev. (m)	Dist. (m)	Dist. (m)	Depth (m)	Depth (m)	Elev. (m)	Elev. (m)	Elev. (m)	Dist. (m)	Grade (%)	MH #	Elev. (m)	Dia. (m)	Elev. (m)	(m)	
	MIDLAND RD																
	3215 MIDLAND RD	32.070	30.000	12.000	2.50	0.30	29.27	28.97	28.73	1.00	1.00%	5264	26.70	0.20	26.890	1.84	
	3235 MIDLAND RD	31.910	35.000	12.000	2.60	0.30	29.01	28.66	28.42	14.00	1.00%	5264	26.70	0.20	26.760	1.66	
	3265 MIDLAND RD	29.860	30.000	14.000	2.70	0.30	26.86	26.56	26.28	64.00	1.00%	5264	26.70	0.20	26.259	0.02	
	3295 MIDLAND RD	30.320	30.000	10.000	1.50	0.30	28.52	28.22	28.02	105.00	1.00%	5264	26.70	0.20	25.848	2.17	
	3315 MIDLAND RD	29.700	25.000	10.000	2.60	0.30	26.80	26.55	26.35	40.00	0.82%	5241	25.58	0.20	25.451	0.90	
P	3335 MIDLAND RD	26.150	35.000	10.000	3.00	0.30	22.85	22.50	22.30	91.00	0.82%	5241	25.58	0.20	25.031	-2.73	
E	3355 MIDLAND RD	26.000	30.000	10.000	2.60	0.30	23.10	22.80	22.60	18.00	0.83%	5211	24.55	0.20	24.601	-2.00	no house elev surveyed
	3375 MIDLAND RD	28.040	35.000	10.000	2.60	0.30	25.14	24.79	24.59	54.00	0.83%	5211	24.55	0.20	24.304	0.29	
	3405 MIDLAND RD	27.700	35.000	10.000	3.00	0.30	24.40	24.05	23.85	15.00	0.40%	6861	23.70	0.20	23.840	0.01	
	3435 MIDLAND RD	28.680	30.000	10.000	2.60	0.30	25.78	25.48	25.28	49.00	0.40%	6861	23.70	0.20	23.704	1.58	
	3465 MIDLAND RD	30.860	25.000	10.000	2.40	0.30	28.16	27.91	27.71	94.00	0.40%	6861	23.70	0.20	23.523	4.19	
	3530 MIDLAND RD	38.840	40.000	27.000	3.00	0.30	35.54	35.14	34.60	2.00	2.46%	5139	22.85	0.20	23.001	11.60	
	NORFOLK RD																
	3175 NORFOLK RD	21.890	20.000	15.000	2.60	0.30	18.99	18.79	18.49	2.00	3.49%	5306	18.10	0.20	18.230	0.26	
	3180 NORFOLK RD	22.100	20.000	15.000	2.40	0.30	19.40	19.20	18.90	2.00	3.49%	5306	18.10	0.20	18.230	0.67	
	3185 NORFOLK RD	20.400	20.000	5.000	1.10	0.30	19.00	18.80	18.70	15.00	3.49%	5306	18.10	0.20	17.776	0.92	
	3190 NORFOLK RD	21.690	20.000	12.000	1.10	0.30	20.29	20.09	19.85	19.00	3.49%	5306	18.10	0.20	17.637	2.21	
	3195 NORFOLK RD	20.000	25.000	5.000	2.70	0.30	17.00	16.75	16.65	51.00	3.49%	5306	18.10	0.20	16.519	0.13	
	3200 NORFOLK RD	23.900	25.000	10.000	2.40	0.30	21.20	20.95	20.75	3.00	2.41%	nor1	16.05	0.20	16.178	4.57	
	3215 NORFOLK RD	18.330	30.000	5.000	1.10	0.30	16.93	16.63	16.53	23.00	2.41%	nor1	16.05	0.20	15.695	0.83	
	3220 NORFOLK RD	24.940	25.000	10.000	2.60	0.30	22.04	21.79	21.59	32.00	2.41%	nor1	16.05	0.20	15.478	6.11	
	3225 NORFOLK RD	18.240	25.000	8.000	2.50	0.30	15.44	15.19	15.03	18.00	0.69%	7025	14.95	0.20	15.026	0.00	
	3240 NORFOLK RD	23.890	30.000	10.000	1.90	0.30	21.69	21.39	21.19	30.00	0.69%	7025	14.95	0.20	14.943	6.25	
	3245 NORFOLK RD	18.320	15.000	10.000	2.80	0.30	15.22	15.07	14.87	51.00	0.69%	7025	14.95	0.20	14.798	0.07	
	3250 NORFOLK RD	24.050	30.000	10.000	2.40	0.30	21.35	21.05	20.85	75.00	0.69%	7025	14.95	0.20	14.633	6.22	
	3255 NORFOLK RD	20.010	20.000	10.000	2.70	0.30	17.01	16.81	16.61	81.00	0.69%	7025	14.95	0.20	14.591	2.02	
	3270 NORFOLK RD	20.850	20.000	10.000	1.00	0.30	19.55	19.35	19.15	105.00	0.69%	7025	14.95	0.20	14.426	4.72	
E	3275 NORFOLK RD	17.320	25.000	5.000	2.30	0.30	14.72	14.47	14.37	120.00	0.69%	7025	14.95	0.20	14.323	0.05	Ex. Pump, not req'd
	3285 NORFOLK RD	18.980	15.000	8.000	2.70	0.30	15.98	15.83	15.67	14.00	2.28%	5251	14.00	0.20	13.880	1.79	
	3290 NORFOLK RD	19.430	20.000	10.000	1.50	0.30	17.63	17.43	17.23	15.00	2.28%	5251	14.00	0.20	13.857	3.37	
	3295 NORFOLK RD	16.770	20.000	10.000	2.70	0.30	13.77	13.57	13.37	45.00	2.28%	5251	14.00	0.20	13.172	0.20	
	3300 NORFOLK RD	19.330	20.000	5.000	0.90	0.30	18.13	17.93	17.83	58.00	2.28%	5251	14.00	0.20	12.875	4.95	
	3315 NORFOLK RD	16.170	25.000	7.000	2.70	0.30	13.17	12.92	12.78	72.00	2.28%	5251	14.00	0.20	12.556	0.22	
	3335 NORFOLK RD	15.890	20.000	5.000	2.50	0.30	13.09	12.89	12.79	20.00	0.50%	5229	12.15	0.20	12.250	0.54	
	3355 NORFOLK RD	15.400	20.000	10.000	1.30	0.30	13.80	13.60	13.40	57.00	0.50%	5229	12.15	0.20	12.066	1.33	

Humber Catchment
Option 2 - New Gravity Storm

Pump Required	Street and Address	Floor Elevation (Polaris Survey)	Distance from Entrance to PL	Distance From PL to Main	House file assumed Main Entrance Distance to Lower	Slab to inv (assumed) m	Calculated Service Elevation at House (SP)	Calculated Service Elevation at Property Line @ 1% (IC)	Calculated Service Elevation at Main @ 2% (MC)	Distance from Upstream Manhole	Grade from Upstream Manhole	Upstream Manhole	Invert of Upstream Manhole	Diameter of Main	Obvert of Main	Difference (+) Gravity (-) Pump	Comments
		Elev. (m)	Dist. (m)	Dist. (m)	Depth (m)	Depth (m)	Elev. (m)	Elev. (m)	Elev. (m)	Dist. (m)	Grade (%)	MH #	Elev. (m)	Dia. (m)	Elev. (m)	(m)	
	RIPON RD																
	3210 RIPON RD	32.410	30.000	11.000	2.40	0.30	29.71	29.41	29.19	2.00	2.01%	rip1	26.00	0.20	26.160	3.03	
	3225 RIPON RD	29.540	27.000	11.000	2.40	0.30	26.84	26.57	26.35	17.00	2.01%	rip1	26.00	0.20	25.859	0.49	
	3230 RIPON RD	31.650	22.000	10.000	2.70	0.30	28.65	28.43	28.23	13.00	2.01%	rip1	26.00	0.20	25.939	2.29	
	3245 RIPON RD	28.250	25.000	10.000	2.40	0.30	25.55	25.30	25.10	7.00	7.07%	5265	24.85	0.20	24.555	0.55	
	3250 RIPON RD	30.610	30.000	15.000	2.60	0.30	27.71	27.41	27.11	5.00	7.07%	5265	24.85	0.20	24.696	2.41	
	3275 RIPON RD	24.910	25.000	12.000	2.70	0.30	21.91	21.66	21.42	52.00	7.07%	5265	24.85	0.20	21.371	0.05	
	3280 RIPON RD	25.950	35.000	10.000	1.50	0.30	24.15	23.80	23.60	46.00	7.07%	5265	24.85	0.20	21.796	1.80	
	3295 RIPON RD	23.500	20.000	10.000	2.70	0.30	20.50	20.30	20.10	80.00	7.07%	5265	24.85	0.20	19.391	0.71	
	3300 RIPON RD	25.930	30.000	10.000	2.70	0.30	22.93	22.63	22.43	8.00	3.92%	5248	19.00	0.20	18.886	3.54	
	3315 RIPON RD	21.200	20.000	15.000	2.40	0.30	18.50	18.30	18.00	38.00	3.92%	5248	19.00	0.20	17.710	0.29	
	3320 RIPON RD	23.270	35.000	10.000	2.60	0.30	20.37	20.02	19.82	60.00	3.92%	5248	19.00	0.20	16.848	2.97	
	3335 RIPON RD	19.330	20.000	12.000	2.60	0.30	16.43	16.23	15.99	44.00	0.49%	6520	11.78	0.20	11.762	4.23	
	3340 RIPON RD	21.190	30.000	12.000	2.60	0.30	18.29	17.99	17.75	114.00	3.92%	5248	19.00	0.20	14.731	3.02	
	3360 RIPON RD	19.790	30.000	15.000	2.50	0.30	16.99	16.69	16.39	12.00	0.60%	5215	11.44	0.30	11.668	4.72	
	3375 RIPON RD	15.930	20.000	3.000	3.00	0.30	12.63	12.43	12.37	46.00	0.60%	5215	11.44	0.30	11.463	0.91	
	3380 RIPON RD	18.200	20.000	20.000	2.40	0.30	15.50	15.30	14.90	53.00	0.60%	5215	11.44	0.30	11.421	3.48	
P	3475 RIPON RD	7.670	21.000	75.000	2.70	0.30	4.67	4.46	2.96	0.00	2.65%	5181	7.43	0.38	7.800	-4.84	Yaught Club, Potential outlet to ocean
P	3480 RIPON RD	8.970	20.000	75.000	2.00	0.30	6.67	6.47	4.97	0.00	2.65%	5181	7.43	0.38	7.800	-2.83	Potential outlet to ocean
	UPPER TERR																
	3275 UPPER TERR	37.080	80.000	8.000	2.70	0.30	34.08	33.28	33.12	29.00	1.00%	5264	26.70	0.20	26.609	6.51	Serviced from Midland
	3295 UPPER TERR	39.130	80.000	6.000	3.00	0.30	35.83	35.03	34.91	70.00	1.00%	5264	26.70	0.20	26.199	8.71	Serviced from Midland
	3325 UPPER TERR	41.460	80.000	10.000	2.48	0.30	38.68	37.88	37.68	5.00	0.82%	5241	25.58	0.20	25.739	11.94	Serviced from Midland
	3375 UPPER TERR	43.550	75.000	12.000	2.70	0.30	40.55	39.80	39.56	50.00	0.82%	5241	25.58	0.20	25.369	14.19	Serviced from Midland
	3385 UPPER TERR	42.390	60.000	12.000	2.60	0.30	39.49	38.89	38.65	95.00	0.82%	5241	25.58	0.20	24.998	13.65	Serviced from Midland
	3393 UPPER TERR	42.210	50.000	12.000	2.80	0.30	39.11	38.61	38.37	18.00	0.83%	5211	24.55	0.20	24.601	13.77	Serviced from Midland
	3435 UPPER TERR	44.500	80.000	12.000	3.00	0.30	41.20	40.40	40.16	66.00	0.83%	5211	24.55	0.20	24.205	15.95	Serviced from Midland
	3455 UPPER TERR	44.030	50.000	18.000	2.40	0.30	41.33	40.83	40.47	31.00	0.40%	6861	23.70	0.20	23.776	16.69	Serviced from Midland
	3475 UPPER TERR	42.850	50.000	10.000	2.40	0.30	40.15	39.65	39.45	76.00	0.40%	6861	23.70	0.20	23.595	15.85	Serviced from Midland
	3485 UPPER TERR	42.810	50.000	30.000	2.40	0.30	40.11	39.61	39.01	2.00	0.40%	5166	23.23	0.20	23.422	15.59	Serviced from Midland
	3495 UPPER TERR	43.460	50.000	22.000	2.40	0.30	40.76	40.26	39.82	45.00	0.40%	5166	23.23	0.20	23.249	16.57	Serviced from Midland
	3505 UPPER TERR	42.510	50.000	16.000	2.50	0.30	39.71	39.21	38.89	63.00	0.40%	5166	23.23	0.20	23.177	15.71	Serviced from Midland
	3515 UPPER TERR	42.320	50.000	14.000	2.10	0.30	39.92	39.42	39.14	2.00	2.46%	5139	22.85	0.20	23.001	16.14	Serviced from Midland
	3565 UPPER TERR	42.340	46.000	21.000	1.90	0.30	40.14	39.68	39.26	93.00	1.50%	5118	24.85	0.20	23.658	15.60	Serviced from Beach

Rutland Catchment
Option 2 - New Gravity Storm

Pump Required	Street and Address	Floor Elevation (Polaris Survey)	Distance from Entrance to PL	Distance From PL to Main	House file assumed Main Entrance Distance to Lower	Slab to inv (assumed) m	Calculated Service Elevation at House (SP)	Calculated Service Elevation at Property Line @ 1% (IC)	Calculated Service Elevation at Main @ 2% (MC)	Distance from Upstream Manhole	Grade from Upstream Manhole	Upstream Manhole	Invert of Upstream Manhole	Diameter of Main	Obvert of Main	Difference (+) Gravity (-) Pump	Comments
		Elev. (m)	Dist. (m)	Dist. (m)	Depth (m)	Depth (m)	Elev. (m)	Elev. (m)	Elev. (m)	Dist. (m)	Grade (%)	MH #	Elev. (m)	Dia. (m)	Elev. (m)	(m)	
	BEACH DR																
	2970 BEACH DR	12.222	28.354	6.513	1.00	0.30	10.92	10.64	10.51	22.00	0.50%	6581	8.76	0.20	8.845	1.66	
P	2975 BEACH DR	7.727	59.641	21.522	1.70	0.30	5.73	5.13	4.70	0.00	0.50%	6581	8.76	0.20	8.955	-4.25	
	2980 BEACH DR	13.392	16.535	6.301	2.60	0.30	10.49	10.33	10.20	19.00	1.26%	6582	8.48	0.20	8.441	1.76	
E	2985 BEACH DR	7.822	70.770	14.037	3.00	0.30	4.52	3.81	3.53	10.00	0.50%	6581	8.76	0.20	8.905	-5.37	
	2990 BEACH DR	19.264	45.540	4.299	3.00	0.30	15.96	15.51	15.42	51.00	1.26%	6582	8.48	0.20	8.039	7.38	
	2997 BEACH DR	10.952	22.380	13.719	0.00	0.30	10.65	10.43	10.15	13.00	1.26%	6582	8.48	0.20	8.517	1.64	
	2999 BEACH DR	11.124	25.000	20.000	2.30	0.30	8.52	8.27	7.87	65.00	1.26%	6582	8.48	0.20	7.863	0.011	
	3000 BEACH DR	12.796	19.411	4.315	2.40	0.30	10.10	9.90	9.82	25.00	1.39%	6446	7.35	0.20	7.203	2.61	
P	3005 BEACH DR	8.230	17.689	17.901	2.70	0.30	5.23	5.05	4.70	56.00	1.39%	6446	7.35	0.20	6.773	-2.08	
E	3023 BEACH DR	8.951	16.486	17.265	3.10	0.30	5.55	5.39	5.04	17.00	1.67%	6445	6.40	0.25	6.366	-1.33	
	3030 BEACH DR	12.942	22.552	2.259	2.70	0.30	9.94	9.72	9.67	3.00	1.67%	6445	6.40	0.25	6.600	3.07	
	3040 BEACH DR	8.976	26.619	5.096	1.20	0.30	7.48	7.21	7.11	46.00	1.67%	6445	6.40	0.25	5.883	1.23	
	3045 BEACH DR	8.141	28.856	12.750	1.50	0.30	6.34	6.05	5.80	56.00	1.67%	6445	6.40	0.25	5.716	0.08	
	3050 BEACH DR	7.647	17.034	15.964	2.30	0.30	5.05	4.88	4.56	1.00	0.40%	5448	3.11	0.25	3.351	1.21	
P	3055 BEACH DR	5.705	15.610	4.618	2.40	0.30	3.01	2.85	2.76	14.00	0.40%	5448	3.11	0.25	3.299	-0.54	
P	3065 BEACH DR	6.072	16.473	4.131	2.60	0.30	3.17	3.01	2.92	42.00	0.40%	5448	3.11	0.25	3.187	-0.26	
	3100 BEACH DR	6.626	21.357	4.589	2.80	0.30	3.53	3.31	3.22	47.00	1.50%	5416	3.10	0.60	2.997	0.22	
P	3115 BEACH DR	5.200	25.000	12.000	2.40	0.30	2.50	2.25	2.01	44.00	0.40%	5424	1.70	0.60	2.125	-0.11	No house, assume MFE, BFE
	3120 BEACH DR	6.543	41.957	8.200	0.00	0.30	6.24	5.82	5.66	41.00	0.60%	6531	4.05	0.20	4.003	1.66	
P	3125 BEACH DR	7.308	57.155	13.000	2.60	0.30	4.41	3.84	3.58	49.00	0.60%	6531	4.05	0.20	3.955	-0.38	
P	3140 BEACH DR	7.000	30.000	9.500	2.40	0.30	4.30	4.00	3.81	65.00	1.01%	7030	4.73	0.20	4.276	-0.47	No house, assume MFE, BFE
P	3152 BEACH DR	7.472	26.665	8.913	2.90	0.30	4.27	4.01	3.83	29.00	1.01%	7030	4.73	0.20	4.638	-0.81	
P	3155 BEACH DR	5.200	51.000	9.526	3.15	0.30	1.75	1.24	1.05	60.00	1.01%	7030	4.73	0.20	4.326	-3.28	From Design drawings
	3170 BEACH DR	8.908	30.000	11.040	2.30	0.30	6.31	6.01	5.79	3.00	1.01%	7030	4.73	0.20	4.900	0.89	
P	3175 BEACH DR	7.214	55.400	10.632	2.60	0.30	4.31	3.76	3.55	5.00	1.01%	7030	4.73	0.20	4.880	-1.33	
	CADBORO BAY RD																
	3185 CADBORO BAY RD	56.427	27.030	2.568	2.70	0.30	53.43	53.16	53.11	44.00	0.40%	6476	49.96	0.20	49.984	3.12	
	3195 CADBORO BAY RD	55.801	20.213	6.417	2.70	0.30	52.80	52.60	52.47	4.00	4.03%	COT1	51.95	0.20	51.989	0.48	
	3225 CADBORO BAY RD	56.868	50.500	5.000	2.40	0.30	54.17	53.66	53.56	42.00	1.00%	CAD6	53.35	0.20	53.130	0.43	
	3245 CADBORO BAY RD	56.595	56.000	5.000	1.00	0.30	55.30	54.74	54.64	11.00	1.00%	CAD6	53.35	0.20	53.440	1.19	
	3265 CADBORO BAY RD	57.404	46.000	5.000	2.40	0.30	54.70	54.24	54.14	61.00	2.50%	CAD7	55.40	0.20	54.075	0.07	
	3285 CADBORO BAY RD	58.599	56.000	5.000	2.40	0.30	55.90	55.34	55.24	31.00	2.50%	CAD7	55.40	0.20	54.825	0.41	
	3315 CADBORO BAY RD	58.965	54.000	5.000	2.40	0.30	56.27	55.73	55.63	0.00	2.50%	CAD7	55.40	0.20	55.600	0.03	
	3325 CADBORO BAY RD	59.080	54.000	16.000	2.70	0.30	56.08	55.54	55.22	10.00	0.50%	CAD1	55.05	0.20	55.200	0.02	
	3355 CADBORO BAY RD	58.690	23.831	13.126	1.70	0.30	56.69	56.45	56.19	45.00	0.50%	CAD1	55.05	0.20	55.025	1.16	
	3375 CADBORO BAY RD	59.071	16.092	13.138	2.40	0.30	56.37	56.21	55.95	71.00	0.50%	CAD1	55.05	0.20	54.895	1.05	
	3395 CADBORO BAY RD	59.233	26.744	11.800	2.40	0.30	56.53	56.27	56.03	102.00	0.50%	CAD1	55.05	0.20	54.740	1.29	
	3405 CADBORO BAY RD	57.945	31.828	11.800	2.70	0.30	54.95	54.63	54.39	39.00	2.76%	5184	54.29	0.20	53.413	0.98	
	3415 CADBORO BAY RD	57.119	24.500	11.800	2.40	0.30	54.42	54.17	53.94	78.00	2.76%	5184	54.29	0.20	52.336	1.60	Was off back
	3425 CADBORO BAY RD	55.173	17.800	11.800	2.40	0.30	52.47	52.30	52.06	105.00	2.76%	5184	54.29	0.20	51.590	0.47	Was off back
	3435 CADBORO BAY RD	56.079	19.700	11.800	1.00	0.30	54.78	54.58	54.35	22.00	0.40%	CAD2	50.70	0.20	50.811	3.53	Was off back
	3445 CADBORO BAY RD	55.782	20.100	11.800	1.00	0.30	54.48	54.28	54.05	43.00	0.40%	CAD2	50.70	0.20	50.727	3.32	Was off back
	3455 CADBORO BAY RD	55.644	20.400	11.800	2.40	0.30	52.94	52.74	52.50	71.00	0.40%	CAD2	50.70	0.20	50.614	1.89	Was off back
	3465 CADBORO BAY RD	55.341	16.500	11.800	2.70	0.30	52.34	52.18	51.94	105.00	0.40%	CAD2	50.70	0.20	50.477	1.46	Was off back
	3475 CADBORO BAY RD	53.547	23.200	11.800	2.70	0.30	50.55	50.32	50.08	19.00	2.55%	CAD3	50.18	0.20	49.895	0.18	Was off back
P	3495 CADBORO BAY RD	51.471	26.000	11.800	2.70	0.30	48.47	48.21	47.98	59.00	2.55%	CAD3	50.18	0.20	48.873	-0.90	Private Easement 3490 Upper Tce
P	3507 CADBORO BAY RD	49.652	23.000	11.800	2.40	0.30	46.95	46.72	46.49	23.00	1.01%	CAD4	47.95	0.20	47.919	-1.43	Private Easement 3490 Upper Tce
P	3605 CADBORO BAY RD	47.560	18.700	51.000	2.40	0.30	44.86	44.67	43.65	0.00	0.50%	Upp1	43.93	0.20	44.130	-0.48	
	CADBORO BAY RD																
	2440 CARDIGAN RD	55.776	16.272	7.615	2.40	0.30	53.08	52.91	52.76	19.00	7.30%	5195	52.55	0.20	51.363	1.40	
	2455 CARDIGAN RD	55.450	15.971	12.432	2.70	0.30	52.45	52.29	52.04	19.00	7.30%	5195	52.55	0.20	51.363	0.68	
	2460 CARDIGAN RD	52.939	21.528	6.310	3.50	0.30	49.14	48.92	48.80	20.00	2.70%	5200	49.09	0.20	48.750	0.05	
	2475 CARDIGAN RD	53.022	11.800	14.087	0.00	0.30	52.72	52.60	52.32	15.00	2.70%	5200	49.09	0.20	48.885	3.44	
	2480 CARDIGAN RD	51.766	13.341	5.923	2.40	0.30	49.07	48.93	48.81	10.00	4.21%	5205	47.23	0.20	47.009	1.81	

Rutland Catchment
Option 2 - New Gravity Storm

Pump Required	Street and Address	Floor Elevation (Polaris Survey)	Distance from Entrance to PL	Distance From PL to Main	House file assumed Main Entrance Distance to Lower	Slab to inv (assumed) m	Calculated Service Elevation at House (SP)	Calculated Service Elevation at Property Line @ 1% (IC)	Calculated Service Elevation at Main @ 2% (MC)	Distance from Upstream Manhole	Grade from Upstream Manhole	Upstream Manhole	Invert of Upstream Manhole	Diameter of Main	Obvert of Main	Difference (+) Gravity (-) Pump	Comments
		Elev. (m)	Dist. (m)	Dist. (m)	Depth (m)	Depth (m)	Elev. (m)	Elev. (m)	Elev. (m)	Dist. (m)	Grade (%)	MH #	Elev. (m)	Dia. (m)	Elev. (m)	(m)	
	CHILTERN PL																
	2440 CHILTERN PL	54.544	25.524	5.255	2.40	0.30	51.84	51.59	51.48	28.00	0.40%	CHI1	51.15	0.20	51.238	0.25	
P	2450 CHILTERN PL	52.084	28.000	8.000	3.50	0.30	48.28	48.00	47.84	3.00	0.40%	CHI1	51.15	0.20	51.338	-3.49	
	2455 CHILTERN PL	54.782	21.600	7.100	2.80	0.30	51.68	51.47	51.32	20.00	0.40%	CHI1	51.15	0.20	51.270	0.05	
P	2465 CHILTERN PL	52.369	18.600	6.200	2.50	0.30	49.57	49.38	49.26	3.00	0.40%	CHI1	51.15	0.20	51.338	-2.08	
	COTSWOLD RD																
	2440 COTSWOLD RD	56.990	19.336	11.850	2.50	0.30	54.19	54.00	53.76	4.00	4.03%	COT1	51.95	0.20	51.989	1.77	
	2450 COTSWOLD RD	54.654	28.388	10.811	2.60	0.30	51.75	51.47	51.25	29.00	4.03%	COT1	51.95	0.20	50.981	0.27	
	2455 COTSWOLD RD	53.711	13.410	10.429	0.00	0.30	53.41	53.28	53.07	40.00	4.03%	COT1	51.95	0.20	50.537	2.53	
	2460 COTSWOLD RD	52.898	15.377	8.040	1.20	0.30	51.40	51.24	51.08	12.00	5.21%	5272	49.85	0.20	49.424	1.66	
	2475 COTSWOLD RD	52.087	13.237	12.531	2.60	0.30	49.19	49.05	48.80	24.00	5.21%	5272	49.85	0.20	48.799	0.01	
	2500 COTSWOLD RD	48.048	17.042	21.908	2.60	0.30	45.15	44.98	44.54	1.00	5.24%	5293	42.00	0.20	42.148	2.39	
	2505 COTSWOLD RD	45.942	22.351	20.725	2.50	0.30	43.14	42.92	42.50	3.00	5.24%	5293	42.00	0.20	42.043	0.46	
	2515 COTSWOLD RD	44.196	18.274	12.493	2.40	0.30	41.50	41.31	41.06	23.00	5.24%	5293	42.00	0.20	40.995	0.07	
	2520 COTSWOLD RD	46.737	20.233	12.901	2.10	0.30	44.34	44.13	43.88	9.00	5.24%	5293	42.00	0.20	41.728	2.15	
P	2535 COTSWOLD RD	41.369	23.700	13.200	3.00	0.30	38.07	37.83	37.57	31.00	4.11%	5295	39.65	0.20	38.575	-1.01	
	2540 COTSWOLD RD	45.990	24.106	9.259	2.90	0.30	42.79	42.55	42.36	42.00	5.24%	5293	42.00	0.20	39.999	2.36	
	2555 COTSWOLD RD	39.944	34.468	18.193	2.40	0.30	37.24	36.90	36.54	10.00	4.00%	6505	33.30	0.20	33.100	3.44	
	2560 COTSWOLD RD	44.368	25.307	5.859	1.40	0.30	42.67	42.41	42.30	44.00	4.11%	5295	39.65	0.20	38.040	4.26	
	2580 COTSWOLD RD	41.685	19.191	10.427	2.40	0.30	38.99	38.79	38.58	78.00	4.11%	5295	39.65	0.20	36.642	1.94	
P	2605 COTSWOLD RD	37.251	17.217	15.108	2.60	0.30	34.35	34.18	33.88	6.00	2.88%	5288	35.15	0.20	35.177	-1.30	
	LANSDOWNE RD																
	2420 LANSDOWNE RD	53.699	41.162	10.600	0.61	0.30	52.79	52.38	52.17	3.00	5.00%	5331	49.02	0.20	49.070	3.10	
P	2445 LANSDOWNE RD	51.234	18.101	10.787	3.00	0.30	47.93	47.75	47.54	4.00	5.00%	5331	49.02	0.20	49.020	-1.48	
	2450 LANSDOWNE RD	51.836	22.415	9.384	2.40	0.30	49.14	48.91	48.72	31.00	5.00%	5331	49.02	0.20	47.670	1.05	
	2470 LANSDOWNE RD	50.694	29.660	10.167	2.40	0.30	47.99	47.70	47.49	24.00	4.87%	6478	45.29	0.20	44.320	3.17	
	2475 LANSDOWNE RD	48.933	16.627	10.378	2.40	0.30	46.23	46.07	45.86	6.00	4.87%	6478	45.29	0.20	45.198	0.66	
	2525 LANSDOWNE RD	42.093	20.169	8.583	2.30	0.30	39.49	39.29	39.12	42.00	1.49%	5377	19.33	0.38	19.073	20.05	From Design drawings
	2530 LANSDOWNE RD	42.779	16.052	38.690	2.60	0.30	39.88	39.72	38.94	12.00	5.45%	6860	37.10	0.20	36.646	2.30	
E	2545 LANSDOWNE RD	39.923	18.949	8.899	2.40	0.30	37.22	37.03	36.86	22.00	5.45%	6860	37.10	0.20	36.102	0.75	Ex. pump, not req'd
	2550 LANSDOWNE RD	40.163	15.429	9.944	2.40	0.30	37.46	37.31	37.11	48.00	5.45%	6860	37.10	0.20	34.686	2.42	
	2555 LANSDOWNE RD	38.045	34.709	10.359	2.70	0.30	35.05	34.70	34.49	52.00	5.45%	6860	37.10	0.20	34.468	0.02	
	2570 LANSDOWNE RD	37.885	11.948	9.347	2.40	0.30	35.19	35.07	34.88	19.00	4.86%	5351	33.80	0.20	33.076	1.80	
	2575 LANSDOWNE RD	38.800	10.772	10.754	2.40	0.30	36.10	35.99	35.78	21.00	4.86%	5351	33.80	0.20	32.979	2.80	
	2580 LANSDOWNE RD	36.906	18.898	9.349	2.10	0.30	34.51	34.32	34.13	45.00	4.86%	5351	33.80	0.20	31.812	2.32	
	2595 LANSDOWNE RD	33.516	20.756	10.775	2.60	0.30	30.62	30.41	30.19	82.00	4.86%	5351	33.80	0.20	30.013	0.18	
	2625 LANSDOWNE RD	29.633	13.811	10.695	2.40	0.30	26.93	26.79	26.58	40.00	5.40%	5359	27.60	0.20	25.641	0.94	
	2655 LANSDOWNE RD	26.851	16.726	10.782	1.50	0.30	25.05	24.88	24.67	19.00	5.29%	5365	24.30	0.25	23.545	1.12	house file didn't have drawings
	2660 LANSDOWNE RD	29.801	18.321	9.308	2.40	0.30	27.10	26.92	26.73	13.00	5.29%	5365	24.30	0.25	23.862	2.87	
	2695 LANSDOWNE RD	25.720	12.338	10.716	2.70	0.30	22.72	22.60	22.38	46.00	5.29%	5365	24.30	0.25	22.117	0.27	
	2700 LANSDOWNE RD	24.274	24.335	9.450	2.60	0.30	21.37	21.13	20.94	21.00	1.49%	5377	19.33	0.38	19.387	1.56	
	2720 LANSDOWNE RD	23.518	20.729	9.448	2.40	0.30	20.82	20.61	20.42	50.00	1.49%	5377	19.33	0.38	18.954	1.47	
	2725 LANSDOWNE RD	22.771	16.224	10.641	2.70	0.30	19.77	19.61	19.40	23.00	1.49%	5377	19.33	0.38	19.357	0.04	
	2755 LANSDOWNE RD	21.068	23.267	10.680	1.20	0.30	19.57	19.34	19.12	54.00	1.49%	5377	19.33	0.38	18.894	0.23	
	2760 LANSDOWNE RD	21.836	21.948	9.257	2.50	0.30	19.04	18.82	18.63	31.00	1.66%	5381	18.23	0.45	18.162	0.47	
	2765 LANSDOWNE RD	20.803	15.003	10.844	1.50	0.30	19.00	18.85	18.64	33.00	1.66%	5381	18.23	0.45	18.129	0.51	
	2810 LANSDOWNE RD	21.837	16.691	17.821	2.80	0.30	18.74	18.57	18.21	17.00	2.37%	5390	16.67	0.53	16.793	1.42	
	2815 LANSDOWNE RD	19.633	16.793	12.302	0.00	0.30	19.33	19.17	18.92	18.00	2.37%	5390	16.67	0.53	16.769	2.15	
	2830 LANSDOWNE RD	18.786	22.341	16.226	0.40	0.30	18.09	17.86	17.54	54.00	2.37%	5390	16.67	0.53	15.917	1.62	
	2835 LANSDOWNE RD	19.778	11.055	13.744	2.40	0.30	17.08	16.97	16.69	58.00	2.37%	5390	16.67	0.53	15.822	0.87	
	2850 LANSDOWNE RD	19.503	19.054	7.456	2.40	0.30	16.80	16.61	16.46	24.00	2.39%	5396	14.58	0.53	14.532	1.93	
	2855 LANSDOWNE RD	18.504	12.221	10.890	0.50	0.30	17.70	17.58	17.36	2.00	2.39%	5396	14.58	0.53	15.057	2.31	
	2870 LANSDOWNE RD	18.928	26.290	8.043	2.60	0.30	16.03	15.77	15.60	59.00	2.39%	5396	14.58	0.53	13.696	1.91	
	2875 LANSDOWNE RD	18.107	24.692	18.020	2.90	0.30	14.91	14.66	14.30	34.00	2.39%	5396	14.58	0.53	14.293	0.01	
	2880 LANSDOWNE RD	17.596	19.673	12.622	2.60	0.30	14.70	14.50	14.25	5.00	3.86%	5391	12.21	0.53	12.542	1.70	
	2890 LANSDOWNE RD	15.575	22.679	14.906	1.10	0.30	14.18	13.95	13.65	147.00	4.42%	5325	17.50	0.20	11.206	2.44	
	2895 LANSDOWNE RD	17.667	18.136	12.777	2.60	0.30	14.77	14.59	14.33	25.00	3.86%	5391	12.21	0.53	11.770	2.56	
	2925 LANSDOWNE RD	14.007	14.591	12.497	2.40	0.30	11.31	11.16	10.91	9.00	5.10%	5379	8.80	0.53	8.866	2.05	
	2950 LANSDOWNE RD	12.966	23.356	24.378	3.00	0.30	9.67	9.43	8.94	23.00	5.10%	5379	8.80	0.53	8.152	0.79	

Rutland Catchment
Option 2 - New Gravity Storm

Pump Required	Street and Address	Floor Elevation (Polaris Survey)	Distance from Entrance to PL	Distance From PL to Main	House file assumed Main Entrance Distance to Lower	Slab to inv (assumed) m	Calculated Service Elevation at House (SP)	Calculated Service Elevation at Property Line @ 1% (IC)	Calculated Service Elevation at Main @ 2% (MC)	Distance from Upstream Manhole	Grade from Upstream Manhole	Upstream Manhole	Invert of Upstream Manhole	Diameter of Main	Obvert of Main	Difference (+) Gravity (-) Pump	Comments
		Elev. (m)	Dist. (m)	Dist. (m)	Depth (m)	Depth (m)	Elev. (m)	Elev. (m)	Elev. (m)	Dist. (m)	Grade (%)	MH #	Elev. (m)	Dia. (m)	Elev. (m)	(m)	
	MIDLAND RD																
	3110 MIDLAND RD	28.616	12.117	9.411	2.70	0.30	25.62	25.49	25.31	63.00	0.75%	6509	21.75	0.20	21.479	3.83	
	3125 MIDLAND RD	24.970	46.100	1.500	2.60	0.30	22.07	21.61	21.58	67.00	0.75%	6509	21.75	0.20	21.449	0.13	
	3130 MIDLAND RD	29.578	13.901	9.500	0.00	0.30	29.28	29.14	28.95	32.00	0.75%	6509	21.75	0.20	21.711	7.24	
	3135 MIDLAND RD	25.366	45.000	1.500	2.70	0.30	22.37	21.92	21.89	27.00	0.75%	6509	21.75	0.20	21.748	0.14	
	3140 MIDLAND RD	30.315	17.381	9.585	2.40	0.30	27.62	27.44	27.25	3.00	0.75%	6509	21.75	0.20	21.928	5.32	
	3145 MIDLAND RD	27.508	46.500	1.500	2.70	0.30	24.51	24.04	24.01	3.00	0.75%	6509	21.75	0.20	21.928	2.09	
	3150 MIDLAND RD	31.997	19.982	9.424	1.00	0.30	30.70	30.50	30.31	97.00	3.00%	5290	27.75	0.20	25.039	5.27	
	3155 MIDLAND RD	28.524	42.900	1.500	2.70	0.30	25.52	25.10	25.07	4.00	0.75%	6509	21.75	0.20	21.920	3.14	
	3160 MIDLAND RD	32.639	17.534	9.241	2.40	0.30	29.94	29.76	29.58	65.00	3.00%	5290	27.75	0.20	26.000	3.58	
	3165 MIDLAND RD	30.154	13.183	36.441	1.20	0.30	28.65	28.52	27.79	65.00	3.00%	5290	27.75	0.20	26.000	1.79	
	3175 MIDLAND RD	30.705	11.967	36.402	1.10	0.30	29.31	29.19	28.46	38.00	3.00%	5290	27.75	0.20	26.810	1.65	
	3180 MIDLAND RD	33.749	24.077	9.524	2.00	0.30	31.45	31.21	31.02	10.00	3.00%	5290	27.75	0.20	27.650	3.37	
	3185 MIDLAND RD	31.358	33.268	37.023	2.00	0.30	29.06	28.73	27.98	15.00	3.00%	5290	27.75	0.20	27.500	0.48	
	3200 MIDLAND RD	33.940	26.800	9.700	2.70	0.30	30.94	30.67	30.48	68.00	2.86%	7016	32.00	0.20	30.255	0.22	
	NORFOLK RD																
	3105 NORFOLK RD	15.023	9.300	0.228	2.90	0.30	11.82	11.73	11.73	145.00	4.42%	5325	17.50	0.20	11.294	0.43	formerly 2920 Lansdowne Rd
	3110 NORFOLK RD	17.660	15.822	15.544	1.20	0.30	16.16	16.00	15.69	81.00	4.42%	5325	17.50	0.20	14.122	1.57	
	3115 NORFOLK RD	16.840	22.300	2.000	2.40	0.30	14.14	13.92	13.88	95.00	4.42%	5325	17.50	0.20	13.503	0.37	
	3125 NORFOLK RD	18.742	16.382	2.000	2.40	0.30	16.04	15.88	15.84	51.00	4.42%	5325	17.50	0.20	15.447	0.39	
	3130 NORFOLK RD	20.075	26.616	15.961	2.80	0.30	16.98	16.71	16.39	41.00	4.42%	5325	17.50	0.20	15.889	0.50	
	3145 NORFOLK RD	20.443	17.541	2.000	1.40	0.30	18.74	18.57	18.53	10.00	4.42%	5325	17.50	0.20	17.258	1.27	
	3150 NORFOLK RD	22.160	22.184	15.784	2.60	0.30	19.26	19.04	18.72	10.00	4.42%	5325	17.50	0.20	17.258	1.46	
E	3165 NORFOLK RD	21.153	30.712	2.000	2.70	0.30	18.15	17.85	17.81	1.00	4.42%	5325	17.50	0.20	17.656	0.15	Ex. pump, not req'd
	3170 NORFOLK RD	22.070	22.191	18.092	1.20	0.30	20.57	20.35	19.99	3.00	4.42%	5325	17.50	0.20	17.567	2.42	
	NOTTINGHAM RD																
P	2580 NOTTINGHAM RD	34.904	67.308	3.847	2.30	0.30	32.30	31.63	31.55	45.00	4.86%	5351	33.80	0.20	31.812	-0.26	
	RIPON RD																
	3120 RIPON RD	22.022	24.868	10.237	1.20	0.30	20.52	20.27	20.07	54	2.47%	6856	20.41	0.20	19.278	0.79	
	3135 RIPON RD	23.567	28.860	9.900	2.60	0.30	20.67	20.38	20.18	27	2.47%	6856	20.41	0.20	19.944	0.24	
	3140 RIPON RD	24.251	23.694	10.229	2.80	0.30	21.15	20.91	20.71	27	2.47%	6856	20.41	0.20	19.944	0.77	
	3145 RIPON RD	24.632	20.379	9.522	2.70	0.30	21.63	21.43	21.24	60	3.10%	5362	22.50	0.20	20.843	0.40	
	3150 RIPON RD	24.958	20.748	11.434	2.60	0.30	22.06	21.85	21.62	63	3.10%	5362	22.50	0.20	20.750	0.87	
	3155 RIPON RD	25.696	21.319	10.921	2.60	0.30	22.80	22.58	22.36	20	3.10%	5362	22.50	0.20	22.081	0.28	
	3160 RIPON RD	26.248	21.788	9.558	2.70	0.30	23.25	23.03	22.84	17	3.10%	5362	22.50	0.20	22.174	0.67	
	3165 RIPON RD	26.852	16.866	11.998	2.70	0.30	23.85	23.68	23.44	57	3.41%	5303	24.80	0.20	23.058	0.39	
	3170 RIPON RD	27.619	15.834	7.526	2.70	0.30	24.62	24.46	24.31	31	3.41%	5303	24.80	0.20	23.944	0.37	
	3175 RIPON RD	27.960	20.170	11.374	2.70	0.30	24.96	24.76	24.53	18	3.41%	5303	24.80	0.20	24.387	0.14	
	3185 RIPON RD	30.184	37.546	8.693	3.00	0.30	26.88	26.51	26.33	3	3.41%	5303	24.80	0.20	24.898	1.44	
	3190 RIPON RD	30.354	25.803	19.147	1.90	0.30	28.15	27.90	27.51	3	3.41%	5303	24.80	0.20	24.898	2.62	
	3215 RIPON RD	31.079	45.325	41.485	2.70	0.30	28.08	27.63	26.80	0	3.41%	5303	24.80	0.20	25.000	1.80	
	RUTLAND RD																
	2955 RUTLAND RD	11.908	17.516	14.429	2.60	0.30	9.01	8.83	8.54	56.00	5.10%	5379	8.80	0.53	6.468	2.08	
	2970 RUTLAND RD	9.286	45.150	19.396	2.50	0.30	6.49	6.03	5.65	2.00	1.24%	6863	5.10	0.53	5.600	0.05	
	2985 RUTLAND RD	10.759	25.075	16.900	2.70	0.30	7.76	7.51	7.17	53.00	1.29%	5388	4.90	0.60	4.819	2.35	
	2990 RUTLAND RD	8.452	23.360	4.441	2.70	0.30	5.45	5.22	5.13	35.00	1.29%	5388	4.90	0.60	5.050	0.08	
	3000 RUTLAND RD	7.720	13.090	8.340	2.30	0.30	5.12	4.99	4.82	13.00	1.38%	5413	3.60	0.60	4.021	0.80	
	3005 RUTLAND RD	8.567	21.501	15.490	2.70	0.30	5.57	5.35	5.04	72.00	1.29%	5388	4.90	0.60	4.574	0.47	
	3025 RUTLAND RD	8.891	12.202	12.723	2.60	0.30	5.99	5.87	5.61	13.00	1.38%	5413	3.60	0.60	4.021	1.59	
	3055 RUTLAND RD	6.909	16.323	17.656	2.70	0.30	3.91	3.75	3.39	21.00	1.50%	5416	3.10	0.60	3.386	0.01	
	3075 RUTLAND RD	6.735	23.644	15.783	2.60	0.30	3.84	3.60	3.28	53.00	1.50%	5416	3.10	0.60	2.907	0.38	
P	3150 RUTLAND RD	5.277	34.289	9.071	2.70	0.30	2.28	1.93	1.75	0.00	0.59%	CRDR	1.35	0.60	1.950	-0.20	
	3155 RUTLAND RD	7.059	19.992	5.150	3.00	0.30	3.76	3.56	3.46	0.00	0.59%	CRDR	1.35	0.60	1.950	1.51	
	SHERRINGHAM PL																
	3145 SHERRINGHAM PL	55.082	27.000	8.000	2.40	0.30	52.38	52.11	51.95	31.00	0.40%	6476	49.96	0.20	50.036	1.92	
	3155 SHERRINGHAM PL	53.322	22.000	6.000	2.50	0.30	50.52	50.30	50.18	3.00	0.40%	6476	49.96	0.20	50.148	0.03	
P	3165 SHERRINGHAM PL	51.550	14.000	34.000	3.40	0.30	47.85	47.71	47.03	0.00	0.40%	6476	49.96	0.20	50.160	-3.13	
	3175 SHERRINGHAM PL	54.349	23.000	3.000	2.70	0.30	51.35	51.12	51.06	3.00	0.40%	6476	49.96	0.20	50.148	0.91	
	SOUTHDOWNE RD																
	3075 SOUTHDOWNE RD	19.566	34.137	8.628	1.80	0.30	17.47	17.12	16.95	65.00	2.39%	5396	14.58	0.53	13.553	3.40	
	3085 SOUTHDOWNE RD	19.029	31.345	74.465	2.10	0.30	16.63	16.32	14.83	89.00	2.39%	5396	14.58	0.53	12.979	1.85	
	SURREY RD																
	2960 SURREY RD	16.776	50.575	20.901	0.50	0.30	15.98	15.47	15.05	2.00	1.39%	6446	7.35	0.20	7.522	7.53	
P	3065 SURREY RD	7.194	28.761	88.000	2.00	0.30	4.89	4.61	2.85	82.00	1.26%	6582	8.48	0.20	7.649	-4.80	

Rutland Catchment
Option 2 - New Gravity Storm

Pump Required	Street and Address	Floor Elevation (Polaris Survey)	Distance from Entrance to PL	Distance From PL to Main	House file assumed Main Entrance Distance to Lower	Slab to inv (assumed) m	Calculated Service Elevation at House (SP)	Calculated Service Elevation at Property Line @ 1% (IC)	Calculated Service Elevation at Main @ 2% (MC)	Distance from Upstream Manhole	Grade from Upstream Manhole	Upstream Manhole	Invert of Upstream Manhole	Diameter of Main	Obvert of Main	Difference (+) Gravity (-) Pump	Comments
		Elev. (m)	Dist. (m)	Dist. (m)	Depth (m)	Depth (m)	Elev. (m)	Elev. (m)	Elev. (m)	Dist. (m)	Grade (%)	MH #	Elev. (m)	Dia. (m)	Elev. (m)	(m)	
	TARN PL																
	3140 TARN PL	6.487	24.945	9.632	0.90	0.30	5.29	5.04	4.84	11.00	0.40%	6850	3.43	0.20	3.586	1.26	
P	3150 TARN PL	6.543	14.162	9.203	2.40	0.30	3.84	3.70	3.52	20.00	0.40%	5467	3.55	0.20	3.672	-0.15	
P	3165 TARN PL	7.092	24.967	8.272	4.10	0.30	2.69	2.44	2.28	0.00	0.40%	5467	3.55	0.20	3.752	-1.48	
	3175 TARN PL	6.483	45.934	9.335	1.40	0.30	4.78	4.32	4.14	0.00	0.40%	5467	3.55	0.20	3.752	0.38	
	UPLANDS RD																
	3085 UPLANDS RD	44.829	23.076	10.255	2.70	0.30	41.83	41.60	41.39	18.00	6.01%	5337	40.50	0.20	39.619	1.77	
	3090 UPLANDS RD	46.290	29.864	9.401	1.50	0.30	44.49	44.19	44.00	59.00	4.87%	6478	45.29	0.20	42.614	1.39	
	3100 UPLANDS RD	47.540	21.602	10.287	2.40	0.30	44.84	44.62	44.42	64.00	1.10%	5312	42.18	0.20	41.675	2.74	
	3125 UPLANDS RD	44.140	37.179	11.440	2.40	0.30	41.44	41.07	40.84	44.00	6.01%	5337	40.50	0.20	38.057	2.78	Assumed BFE
	3130 UPLANDS RD	48.320	23.673	11.771	2.20	0.30	45.82	45.58	45.35	13.00	1.10%	5312	42.18	0.20	42.237	3.11	
	3155 UPLANDS RD	45.830	16.432	20.146	2.40	0.30	43.13	42.97	42.56	6.00	0.63%	5300A	42.37	0.20	42.532	0.03	
	3160 UPLANDS RD	48.772	23.937	10.225	2.70	0.30	45.77	45.53	45.33	33.00	1.69%	6864	44.73	0.20	44.373	0.95	
E	3200 UPLANDS RD	50.421	23.338	7.206	2.70	0.30	47.42	47.19	47.04	67.00	5.21%	5272	49.85	0.20	46.557	0.49	Ex. pump, not req'd
	3220 UPLANDS RD	52.139	28.261	11.025	2.70	0.30	49.14	48.86	48.64	3.00	2.51%	5260	46.20	0.20	46.325	2.31	
	3225 UPLANDS RD	50.436	27.341	11.216	2.70	0.30	47.44	47.16	46.94	3.00	2.51%	5260	46.20	0.20	46.325	0.61	
	3240 UPLANDS PL	53.160	17.470	17.195	3.20	0.30	49.66	49.49	49.14	0.00	3.45%	5253	48.90	0.20	49.100	0.04	
	3255 UPLANDS RD	49.109	20.200	10.200	3.00	0.30	45.81	45.61	45.40	0.00	0.40%	5257	45.19	0.20	45.390	0.01	
	3260 UPLANDS PL	53.883	24.117	16.323	2.70	0.30	50.88	50.64	50.32	0.00	3.45%	5253	48.90	0.20	49.100	1.22	
	3275 UPLANDS RD	48.669	20.153	9.322	2.40	0.30	45.97	45.77	45.58	28.00	0.40%	5257	45.19	0.20	45.278	0.30	
E	3280 UPLANDS RD	50.909	16.546	10.743	2.90	0.30	47.71	47.54	47.33	21.00	0.40%	5257	45.19	0.20	45.306	2.02	Ex. pump, not req'd
	3295 UPLANDS RD	48.634	20.356	9.089	2.40	0.30	45.93	45.73	45.55	24.00	0.40%	5250	44.98	0.20	45.079	0.47	
	3300 UPLANDS RD	51.934	35.439	11.008	2.70	0.30	48.93	48.58	48.36	26.00	0.40%	5250	44.98	0.20	45.070	3.29	
	3335 UPLANDS RD	49.014	18.240	9.526	3.00	0.30	45.71	45.53	45.34	63.00	0.40%	5250	44.98	0.20	44.922	0.42	
	3350 UPLANDS RD	50.628	35.813	10.526	3.00	0.30	47.33	46.97	46.76	1.00	0.41%	5231	44.62	0.20	44.816	1.94	
	3355 UPLANDS RD	49.034	13.281	9.368	3.00	0.30	45.73	45.60	45.41	21.00	0.41%	5231	44.62	0.20	44.734	0.68	
	3370 UPLANDS RD	50.420	20.258	11.046	2.80	0.30	47.32	47.12	46.90	52.00	0.41%	5231	44.62	0.20	44.608	2.29	
	3375 UPLANDS RD	48.849	14.554	9.373	2.70	0.30	45.85	45.70	45.52	55.00	0.41%	5231	44.62	0.20	44.596	0.92	
	3410 UPLANDS RD	49.378	12.920	4.441	2.40	0.30	46.68	46.55	46.46	49.00	4.21%	5205	47.23	0.20	45.367	1.09	
	3420 UPLANDS RD	49.706	14.858	0.474	2.40	0.30	47.01	46.86	46.85	9.00	5.18%	5201	43.93	0.20	43.664	3.18	
	3430 UPLANDS RD	47.620	16.936		1.40	0.30	45.92	45.75	45.75	30.70	0.96%	5187	41.60	0.20	41.504	4.25	
	UPPER TERR																
	3205 UPPER TERR	37.063	15.500	9.850	2.40	0.30	34.36	34.21	34.01	11.00	3.08%	5282	34.05	0.20	33.911	0.10	
	3210 UPPER TERR	40.270	12.200	10.450	2.70	0.30	37.27	37.15	36.94	34.00	2.88%	5288	35.15	0.20	34.372	2.57	
	3215 UPPER TERR	35.514	27.700	15.600	2.70	0.30	32.51	32.24	31.93	32.00	2.86%	7016	32.00	0.20	31.285	0.64	
	3230 UPPER TERR	40.967	22.965	15.705	2.70	0.30	37.97	37.74	37.42	27.00	3.08%	5282	34.05	0.20	33.417	4.01	
	3250 UPPER TERR	40.346	26.431	23.868	1.00	0.30	39.05	38.78	38.30	70.00	4.05%	5254	35.88	0.20	33.246	5.06	
	3270 UPPER TERR	41.862	20.458	12.058	2.20	0.30	39.36	39.16	38.92	26.00	4.05%	5254	35.88	0.20	35.027	3.89	
	3290 UPPER TERR	42.861	19.193	9.799	2.40	0.30	40.16	39.97	39.77	59.00	3.60%	5236	38.34	0.20	36.416	3.36	
	3320 UPPER TERR	43.607	16.066	9.898	1.20	0.30	42.11	41.95	41.75	10.00	3.60%	5236	38.34	0.20	38.180	3.57	
	3350 UPPER TERR	44.907	10.893	11.761	2.40	0.30	42.21	42.10	41.86	89.00	1.88%	5208	40.50	0.20	39.031	2.83	
	3380 UPPER TERR	47.260	12.883	13.195	2.60	0.30	44.36	44.23	43.97	47.00	1.88%	5208	40.50	0.20	39.819	4.15	
	3400 UPPER TERR	47.527	15.171	6.071	2.40	0.30	44.83	44.68	44.55	40.00	5.18%	5201	43.93	0.20	42.058	2.50	
	3440 UPPER TERR	46.753	17.159	13.154	3.00	0.30	43.45	43.28	43.02	69.00	0.89%	5173	42.25	0.20	41.838	1.18	
	3450 UPPER TERR	48.472	26.162	14.056	2.40	0.30	45.77	45.51	45.23	46.00	0.89%	5173	42.25	0.20	42.042	3.19	
	3460 UPPER TERR	47.855	16.648	14.728	2.40	0.30	45.16	44.99	44.69	5.00	0.89%	5173	42.25	0.20	42.406	2.29	
	3470 UPPER TERR	47.142	26.470	11.909	2.70	0.30	44.14	43.88	43.64	13.00	0.89%	5162	42.70	0.20	42.785	0.85	
	3480 UPPER TERR	46.658	30.237	7.357	2.70	0.30	43.66	43.36	43.21	55.00	0.69%	5138	43.30	0.20	43.121	0.09	
	3490 UPPER TERR	47.442	13.483	10.051	2.30	0.30	44.84	44.71	44.51	5.00	0.69%	5138	43.30	0.20	43.466	1.04	
	3500 UPPER TERR	47.766	20.395	3.667	0.90	0.30	46.57	46.36	46.29	0.00	0.69%	5138	43.30	0.20	43.500	2.79	
	3520 UPPER TERR	48.735	22.857	4.117	1.60	0.30	46.84	46.61	46.52	0.00	0.69%	5138	43.30	0.20	43.500	3.02	
P	3525 UPPER TERR	44.660	30.000	8.000	2.40	0.30	41.96	41.66	41.50	57.00	0.50%	upp1	43.93	0.20	43.844	-2.34	Assumed BFE
P	3535 UPPER TERR	46.800	25.000	11.000	2.40	0.30	44.10	43.85	43.63	19.00	0.50%	upp1	43.93	0.20	44.035	-0.40	Assumed BFE
	VALDEZ PL																
	3000 VALDEZ PL	13.667	30.118	28.000	2.00	0.30	11.37	11.07	10.51	2.00	1.49%	VAL1	5.20	0.25	5.420	5.09	
	3015 VALDEZ PL	12.357	28.920	28.000	0.50	0.30	11.56	11.27	10.71	2.00	1.49%	VAL1	5.20	0.25	5.420	5.29	
	3020 VALDEZ PL	9.624	45.000	7.000	2.40	0.30	6.92	6.47	6.33	0.00	1.49%	VAL1	5.20	0.25	5.450	0.88	Assumed BFE
	3046 VALDEZ PL	9.102	12.000	7.000	2.40	0.30	6.40	6.28	6.14	9.00	1.49%	VAL1	5.20	0.25	5.316	0.83	
	3055 VALDEZ PL	12.433	20.000	6.000	0.90	0.30	11.23	11.03	10.91	18.00	1.49%	VAL1	5.20	0.25	5.181	5.73	
	WEALD RD																
	3110 WEALD RD	35.206	19.761	10.783	2.40	0.30	32.51	32.31	32.09	52.00	3.40%	5327	30.65	0.20	29.083	3.01	
	3125 WEALD RD	32.940	31.540	9.493	2.40	0.30	30.24	29.92	29.73	21.00	5.40%	5359	27.60	0.20	26.667	3.07	
	3130 WEALD RD	35.894	15.077	11.346	2.50	0.30	33.09	32.94	32.72	13.00	3.40%	5327	30.65	0.20	30.408	2.31	
	3135 WEALD RD	32.477	36.954	9.896	1.20	0.30	30.98	30.61	30.41	16.00	3.40%	5327	30.65	0.20	30.306	0.10	
	3145 WEALD RD	35.054	15.845	5.616	2.50	0.30	32.25	32.10	31.98	43.00	4.00%	6505	33.30	0.20	31.782	0.20	
	3160 WEALD RD	36.854	14.831	14.493	0.00	0.30	36.55	36.41	36.12	43.00	4.00%	6505	33.30	0.20	31.782	4.33	
	3165 WEALD RD	36.232	14.538	3.237	2.40	0.30	33.53	33.39	33.32	21.00	4.00%	6505	33.30	0.20	32.661	0.66	
	3185 WEALD RD	36.635	31.684	3.139	2.40	0.30	33.94	33.62	33.56	3.00	4.00%	6505	33.30	0.20	33.380	0.18	
	3220 WEALD RD	46.134	29.384	9.246	3.00	0.30	42.83	42.54	42.36	45.00	1.01%	5259	40.05	0.20	39.798	2.56	
	3235 WEALD RD	44.641	30.584	5.345	3.00	0.30	41.34	41.04	40.93	32.00	1.01%	5259	40.05	0.20	39.928	1.00	
	3250 WEALD RD	46.243	24.509	8.439	2.40	0.30	43.54	43.30	43.13	13.00	1.01%	5259	40.05	0.20	40.119	3.01	
	3280 WEALD RD	46.376	19.147	8.358	2.70	0.30	43.38	43.18	43.02	72.00	0.85%	5244	40.87	0.20	40.461	2.56	
	3285 WEALD RD	44.639	22.601	6.678	2.40	0.30	41.94	41.71	41.58	68.00	0.85%	5244	40.87	0.20	40.495	1.08	
	3305 WEALD RD	44.799	48.380	8.450	3.00	0.30	41.50	41.02	40.85	30.00	0.85%	5244	40.87	0.20	40.816	0.03	
	3320 WEALD RD	46.894	18.431	6.909	2.40	0.30	44.19	44.01	43.87	32.00	0.85%	5244	40.87	0.20	40.799	3.07	
	3335 WEALD RD	45.635	9.300	6.500	2.40	0.30	42.94	42.84	42.71	45.00	1.99%	5227	42.55	0.20	41.855	0.86	
	3350 WEALD RD	47.007	18.524	8.901	2.50	0.30	44.21	44.02	43.84	4.00	0.85%	5244	40.87	0.20	41.036	2.81	
	3355 WEALD RD	46.073	15.977	8.960	3.00	0.30	42.77	42.61	42.43	29.00	1.99%	5227	42.55	0.20	42.173	0.26	
	3375 WEALD RD	47.616	26.224	6.632	2.50	0.30	44.82	44.55	44.42	1.00	1.99%	5227	42.55	0.20	42.730	1.69	
	3395 WEALD RD	48.809	12.037	8.153	3.00	0.30	45.51	45.39	45.23	50.00	0.41%	5220	44.26	0.20	44.253	0.97	

Humber Catchment
Option 4 - New Storm
Gravity, Community LPS LPS

Pump Required	Street and Address	Floor Elevation (Polaris Survey)	Distance from Entrance to PL	Distance From PL to Main	House file assumed Main Entrance Distance to Lower	Slab to inv (assumed) m	Calculated Service Elevation at House (SP)	Calculated Service Elevation at Property Line @ 1% (IC)	Calculated Service Elevation at Main @ 2% (MC)	Distance from Upstream Manhole	Grade from Upstream Manhole	Upstream Manhole	Invert of Upstream Manhole	Diameter of Main	Obvert of Main	Difference (+) Gravity (-) Pump	Comments
		Elev. (m)	Dist. (m)	Dist. (m)	Depth (m)	Depth (m)	Elev. (m)	Elev. (m)	Elev. (m)	Dist. (m)	Grade (%)	MH #	Elev. (m)	Dia. (m)	Elev. (m)	(m)	
	BEACH DR																
	3190 BEACH DR	7.870	20.000	12.000	1.10	0.30	6.47	6.27	6.03	25.00	0.50%	5328	4.45	0.25	4.578	1.45	
	3200 BEACH DR	8.010	25.000	5.000	1.80	0.30	5.91	5.66	5.56	45.00	0.50%	5328	4.45	0.25	4.478	1.08	
	3210 BEACH DR	7.690	25.000	10.000	2.40	0.30	4.99	4.74	4.54	45.00	0.52%	5313	4.09	0.38	4.227	0.31	
	3220 BEACH DR	9.270	30.000	10.000	2.50	0.30	6.47	6.17	5.97	88.00	0.52%	5313	4.09	0.38	4.003	1.97	
P	3225 BEACH DR	6.020	40.000	13.000	2.90	0.30	2.82	2.42	2.16	10.00	0.52%	5313	4.09	0.38	4.410	-2.25	
	3230 BEACH DR	7.020	25.000	12.000	2.40	0.30	4.32	4.07	3.83	25.00	1.31%	5286	3.59	0.38	3.640	0.19	
P	3235 BEACH DR	7.530	35.000	10.000	2.70	0.30	4.53	4.18	3.98	51.00	0.52%	5313	4.09	0.38	4.196	-0.22	
	3240 BEACH DR	6.070	20.000	10.000	1.40	0.30	4.37	4.17	3.97	69.00	1.31%	5286	3.59	0.38	3.062	0.91	
P	3245 BEACH DR	6.720	40.000	10.000	2.30	0.30	4.12	3.72	3.52	2.00	1.31%	5286	3.59	0.38	3.943	-0.42	
	3250 BEACH DR	5.300	25.000	11.000	1.00	0.30	4.00	3.75	3.53	33.00	0.61%	5266	2.50	0.38	2.675	0.86	
	3260 BEACH DR	6.360	25.000	10.000	2.40	0.30	3.66	3.41	3.21	75.00	0.61%	5266	2.50	0.38	2.420	0.79	
P	3265 BEACH DR	6.500	50.000	10.000	2.70	0.30	3.50	3.00	2.80	45.00	1.31%	5286	3.59	0.38	3.378	-0.58	
P	3270 BEACH DR	5.070	25.000	10.000	2.40	0.30	2.37	2.12	1.92	65.00	0.50%	5223	2.32	0.53	2.519	-0.60	
	3275 BEACH DR	5.690	45.000	10.000	1.70	0.30	3.69	3.24	3.04	9.00	0.61%	5266	2.50	0.38	2.820	0.22	
	3280 BEACH DR	4.710	20.000	11.000	0.00	0.30	4.41	4.21	3.99	5.00	0.50%	5223	2.32	0.53	2.819	1.17	
P	3285 BEACH DR	6.040	60.000	10.000	3.00	0.30	2.74	2.14	1.94	2.00	0.40%	5243	1.59	0.53	2.107	-0.17	Must lower end of line to get lower
P	3290 BEACH DR	4.820	15.000	10.000	2.70	0.30	1.82	1.67	1.47	38.00	0.50%	5210	2.76	0.53	3.095	-1.63	
	3295 BEACH DR	4.450	15.000	8.000	1.40	0.30	2.75	2.60	2.44	7.00	0.40%	5243	1.59	0.53	2.087	0.35	
	3340 BEACH DR	6.270	25.000	12.000	1.00	0.30	4.97	4.72	4.48	32.00	1.29%	5197	4.25	0.45	4.282	0.20	
P	3355 BEACH DR	6.750	40.000	8.000	3.40	0.30	3.05	2.65	2.49	98.00	4.33%	5181	9.53	0.38	5.661	-3.17	
	3360 BEACH DR	10.970	45.000	12.000	2.60	0.30	8.07	7.62	7.38	105.00	4.33%	5181	9.53	0.38	5.358	2.02	
	3380 BEACH DR	11.250	20.000	12.000	1.20	0.30	9.75	9.55	9.31	62.00	4.33%	5181	9.53	0.38	7.220	2.09	
	*3385 BEACH DR	9.200	35.000	8.000	0.00	0.30	8.90	8.55	8.39	62.00	4.33%	5181	9.53	0.38	7.220	1.17	Parking Lot
	3390 BEACH DR	13.090	25.000	8.000	2.40	0.30	10.39	10.14	9.98	22.00	4.33%	5181	9.53	0.38	8.952	1.03	
	3420 BEACH DR	17.350	30.000	10.000	2.60	0.30	14.45	14.15	13.95	64.00	5.14%	5167	15.42	0.20	12.326	1.62	
P	3425 BEACH DR	13.070	35.000	10.000	3.00	0.30	9.77	9.42	9.22	74.00	5.14%	5167	15.42	0.20	11.811	-2.59	
P	3445 BEACH DR	15.410	39.000	9.000	3.20	0.30	11.91	11.52	11.34	30.00	5.14%	5167	15.42	0.20	14.075	-2.73	
	3448 BEACH DR	20.010	40.000	12.000	2.70	0.30	17.01	16.61	16.37	16.00	5.14%	5167	15.42	0.20	14.795	1.58	
	3460 BEACH DR	22.200	20.000	12.000	2.60	0.30	19.30	19.10	18.86	81.00	5.15%	5145	21.04	0.20	17.065	1.79	
P	3465 BEACH DR	17.590	43.000	7.000	2.60	0.30	14.69	14.26	14.12	90.00	5.15%	5145	21.04	0.20	16.602	-2.48	
P	3475 BEACH DR	18.980	35.000	7.000	2.40	0.30	16.28	15.93	15.79	56.00	5.15%	5145	21.04	0.20	18.353	-2.56	
	3490 BEACH DR	25.400	20.000	12.000	1.00	0.30	24.10	23.90	23.66	17.00	5.15%	5145	21.04	0.20	20.361	3.30	
	3498 BEACH DR	28.790	25.000	15.000	2.60	0.30	25.89	25.64	25.34	64.00	5.80%	5139	25.68	0.20	22.164	3.18	
P	3515 BEACH DR	18.590	56.000	14.000	0.61	0.30	17.68	17.12	16.84	7.00	5.15%	5145	21.04	0.20	20.876	-4.04	
P	3525 BEACH DR	22.530	38.000	12.000	2.40	0.30	19.83	19.45	19.21	70.00	3.80%	5126	25.71	0.20	23.255	-4.05	
E	3535 BEACH DR	26.280	29.000	14.000	2.70	0.30	23.28	22.99	22.71	29.00	3.80%	5126	25.71	0.20	24.811	-2.10	
	3550 BEACH DR	41.730	30.000	15.000	4.50	0.30	36.93	36.63	36.33	57.00	1.84%	5118	27.67	0.20	26.818	9.51	
P	3555 BEACH DR	28.050	17.000	14.000	2.70	0.30	25.05	24.88	24.60	81.00	1.84%	5118	27.67	0.20	26.377	-1.78	
P	3565 BEACH DR	28.219	21.000	10.000	2.70	0.30	25.22	25.01	24.81	46.00	1.84%	5118	27.67	0.20	27.020	-2.21	
	3570 BEACH DR	37.860	25.000	15.000	1.50	0.30	36.06	35.81	35.51	14.00	1.84%	5118	27.67	0.20	27.608	7.90	
	3572 BEACH DR	37.270	35.000	15.000	1.20	0.30	35.77	35.42	35.12	91.00	1.20%	5107	28.93	0.20	28.045	7.07	
P	3575 BEACH DR	28.870	19.000	9.000	2.40	0.30	26.17	25.98	25.80	84.00	1.20%	5107	28.93	0.20	28.129	-2.33	
P	3585 BEACH DR	29.000	22.000	9.000	3.00	0.30	25.70	25.48	25.30	36.00	1.20%	5107	28.93	0.20	28.703	-3.40	
P	3595 BEACH DR	29.500	37.000	9.000	2.40	0.30	26.80	26.43	26.25	1.00	0.80%	5081	29.90	0.20	30.093	-3.84	
P	3655 BEACH DR	30.000	28.000	9.000	2.70	0.30	27.00	26.72	26.54	45.00	0.80%	5081	29.90	0.20	29.741	-3.20	
P	3695 BEACH DR	31.000	20.000	9.000	3.80	0.30	26.90	26.70	26.52	100.00	0.80%	5081	29.90	0.20	29.301	-2.78	
P	2710 HIBBONS CL	23.000	25.000	110.000	2.40	0.30	20.30	20.05	17.85	1.00	0.80%	5081	29.90	0.20	30.093	-12.24	

Humber Catchment
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		Elev. (m)	Dist. (m)	Dist. (m)	Depth (m)	Depth (m)	Elev. (m)	Elev. (m)	Elev. (m)	Dist. (m)	Grade (%)	MH #	Elev. (m)	Dia. (m)	Elev. (m)	(m)	
	CADBORO BAY RD																
	3611 CADBORO BAY RD	41.560	30.000	17.000	2.70	0.30	38.56	38.26	37.92	61.00	1.20%	5107	28.93	0.20	28.404	9.52	
	3615 CADBORO BAY RD	41.330	30.000	17.000	2.70	0.30	38.33	38.03	37.69	22.00	1.20%	5107	28.93	0.20	28.870	8.82	
	EXETER RD																
	3110 EXETER RD	15.050	40.000	10.000	1.50	0.30	13.25	12.85	12.65	113.00	1.44%	6584	7.70	0.20	6.275	6.37	
	3130 EXETER RD	15.000	30.000	10.000	2.40	0.30	12.30	12.00	11.80	84.00	1.44%	6584	7.70	0.20	6.693	5.11	no hse or bsmt data (assume 2.4)
P	3145 EXETER RD	8.760	20.000	5.000	1.20	0.30	7.26	7.06	6.96	55.00	1.44%	6584	7.70	0.20	7.110	-0.15	
	3160 EXETER RD	12.110	20.000	14.000	3.00	0.30	8.81	8.61	8.33	40.00	1.44%	6584	7.70	0.20	7.326	1.00	
	3170 EXETER RD	11.570	15.000	12.000	2.40	0.30	8.87	8.72	8.48	16.00	1.44%	6584	7.70	0.20	7.672	0.81	no bsmt data (assume 2.4)
P	3175 EXETER RD	9.800	25.000	5.000	1.70	0.30	7.80	7.55	7.45	13.00	1.44%	6584	7.70	0.20	7.715	-0.26	
	3190 EXETER RD	13.040	35.000	15.000	1.20	0.30	11.54	11.19	10.89	2.00	1.44%	6584	7.70	0.20	7.873	3.02	
P	3195 EXETER RD	10.230	25.000	10.000	2.40	0.30	7.53	7.28	7.08	2.00	1.44%	6584	7.70	0.20	7.873	-0.79	
	3200 EXETER RD	11.250	25.000	5.000	1.80	0.30	9.15	8.90	8.80	0.00	2.47%	7021	7.03	0.20	7.230	1.57	
P	3205 EXETER RD	10.030	15.000	15.000	2.40	0.30	7.33	7.18	6.88	5.00	2.47%	7021	7.03	0.20	7.106	-0.23	
	3220 EXETER RD	12.340	20.000	5.000	2.40	0.30	9.64	9.44	9.34	18.00	2.47%	7021	7.03	0.20	6.785	2.56	
P	3225 EXETER RD	9.320	20.000	10.000	2.60	0.30	6.42	6.22	6.02	24.00	2.47%	7021	7.03	0.20	6.636	-0.62	
P	3235 EXETER RD	8.520	15.000	8.000	2.40	0.30	5.82	5.67	5.51	56.00	2.47%	7021	7.03	0.20	5.844	-0.33	
	3240 EXETER RD	12.000	20.000	7.000	2.40	0.30	9.30	9.10	8.96	50.00	2.47%	7021	7.03	0.20	5.993	2.97	no hse or bsmt data (assume 2.4)
P	3245 EXETER RD	6.950	15.000	5.000	2.30	0.30	4.35	4.20	4.10	94.00	2.47%	7021	7.03	0.20	4.904	-0.80	
	3250 EXETER RD	11.520	15.000	12.000	1.40	0.30	9.82	9.67	9.43	78.00	2.47%	7021	7.03	0.20	5.300	4.13	no bsmt data (assume 2.4)
	3260 EXETER RD	9.350	15.000	12.000	1.30	0.30	7.75	7.60	7.36	107.00	2.47%	7021	7.03	0.20	4.582	2.78	
E	3275 EXETER RD	6.210	15.000	5.000	1.10	0.30	4.81	4.66	4.56	126.00	2.47%	7021	7.03	0.20	4.112	0.45	Ex. pump, not req'd
	3280 EXETER RD	8.310	15.000	12.000	2.40	0.30	5.61	5.46	5.22	1.00	0.45%	5246	3.50	0.30	3.795	1.42	
E	3285 EXETER RD	5.200	20.000	5.000	1.10	0.30	3.80	3.60	3.50	26.00	0.45%	5246	3.50	0.30	3.683	-0.18	
P	3290 EXETER RD	6.840	20.000	12.000	2.50	0.30	4.04	3.84	3.60	23.00	0.45%	5246	3.50	0.30	3.696	-0.10	
	3295 EXETER RD	6.980	15.000	5.000	2.70	0.30	3.98	3.83	3.73	62.00	0.45%	5246	3.50	0.30	3.520	0.21	
	3300 EXETER RD	6.780	20.000	13.000	2.20	0.30	4.28	4.08	3.82	61.00	0.45%	5246	3.50	0.30	3.525	0.30	
E	3320 EXETER RD	5.500	20.000	10.000	2.50	0.30	2.70	2.50	2.30	108.00	0.45%	5246	3.50	0.30	3.312	-1.01	
	HUMBER RD																
P	3120 HUMBER RD	4.880	55.000	15.000	3.00	0.30	1.58	1.03	0.73	41.00	0.40%	5243	1.59	0.53	1.951	-1.22	
	3140 HUMBER RD	5.540	30.000	15.000	2.40	0.30	2.84	2.54	2.24	8.00	0.39%	5239	1.22	0.53	1.709	0.53	
P	3145 HUMBER RD	5.050	35.000	7.000	2.70	0.30	2.05	1.70	1.56	61.00	0.40%	5243	1.59	0.53	1.871	-0.31	Must lower end of line to get lower
	3160 HUMBER RD	3.900	150.000	15.000	0.00	0.30	3.60	2.10	1.80	30.00	0.39%	5239	1.22	0.53	1.624	0.18	no bsmt data (assume 2.4)
P	3180 HUMBER RD	3.510	80.000	15.000	1.50	0.30	1.71	0.91	0.61	30.00	0.39%	5239	1.22	0.53	1.624	-1.01	
P	3190 HUMBER RD	4.030	25.000	20.000	1.80	0.30	1.93	1.68	1.28	30.00	0.39%	5239	1.22	0.53	1.624	-0.34	Last MH @ outfall
	3195 HUMBER RD	5.560	40.000	10.000	2.70	0.30	2.56	2.16	1.96	26.00	0.39%	5239	1.22	0.53	1.640	0.32	
	LANSDOWNE RD																
	2980 LANSDOWNE RD	10.810	20.000	20.000	2.40	0.30	8.11	7.91	7.51	1.00	3.52%	5263	6.15	0.20	6.315	1.20	
	3000 LANSDOWNE RD	9.950	20.000	15.000	2.40	0.30	7.25	7.05	6.75	26.00	3.52%	5263	6.15	0.20	5.435	1.32	
	3005 LANSDOWNE RD	9.160	29.000	8.000	2.70	0.30	6.16	5.87	5.71	42.00	3.52%	5263	6.15	0.20	4.872	0.84	
	3020 LANSDOWNE RD	8.660	20.000	12.000	2.70	0.30	5.66	5.46	5.22	32.00	5.00%	5344	5.20	0.25	3.853	1.37	
E	3035 LANSDOWNE RD	7.350	20.000	7.000	1.00	0.30	6.05	5.85	5.71	11.00	5.00%	5344	5.20	0.25	4.903	0.81	
	3050 LANSDOWNE RD	8.240	25.000	10.000	2.40	0.30	5.54	5.29	5.09	9.00	0.50%	5328	4.45	0.25	4.658	0.43	

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		Elev. (m)	Dist. (m)	Dist. (m)	Depth (m)	Depth (m)	Elev. (m)	Elev. (m)	Elev. (m)	Dist. (m)	Grade (%)	MH #	Elev. (m)	Dia. (m)	Elev. (m)	(m)	
	MIDLAND RD																
	3215 MIDLAND RD	32.070	30.000	12.000	2.50	0.30	29.27	28.97	28.73	1.00	0.50%	5264	28.48	0.20	28.672	0.06	
P	3235 MIDLAND RD	31.910	35.000	12.000	2.60	0.30	29.01	28.66	28.42	14.00	0.50%	5264	28.48	0.20	28.607	-0.19	
P	3265 MIDLAND RD	29.860	30.000	14.000	2.70	0.30	26.86	26.56	26.28	64.00	0.50%	5264	28.48	0.20	28.356	-2.08	
P	3295 MIDLAND RD	30.320	30.000	10.000	1.50	0.30	28.52	28.22	28.02	105.00	0.50%	5264	28.48	0.20	28.151	-0.13	
P	3315 MIDLAND RD	29.700	25.000	10.000	2.60	0.30	26.80	26.55	26.35	40.00	0.50%	5241	27.89	0.20	27.892	-1.54	
E	3335 MIDLAND RD	26.150	35.000	10.000	3.00	0.30	22.85	22.50	22.30	91.00	0.50%	5241	27.89	0.20	27.637	-5.34	
P	3355 MIDLAND RD	26.000	30.000	10.000	2.60	0.30	23.10	22.80	22.60	18.00	0.50%	5211	27.25	0.20	27.356	-4.76	no house elev surveyed
P	3375 MIDLAND RD	28.040	35.000	10.000	2.60	0.30	25.14	24.79	24.59	54.00	0.50%	5211	27.25	0.20	27.175	-2.59	
P	3405 MIDLAND RD	27.700	35.000	10.000	3.00	0.30	24.40	24.05	23.85	15.00	0.50%	6861	26.71	0.20	26.835	-2.98	
P	3435 MIDLAND RD	28.680	30.000	10.000	2.60	0.30	25.78	25.48	25.28	49.00	0.50%	6861	26.71	0.20	26.665	-1.38	
	3465 MIDLAND RD	30.860	25.000	10.000	2.40	0.30	28.16	27.91	27.71	94.00	0.50%	6861	26.71	0.20	26.440	1.27	
	3530 MIDLAND RD	38.840	40.000	27.000	3.00	0.30	35.54	35.14	34.60	2.00	5.80%	5139	25.68	0.20	25.759	8.84	
	NORFOLK RD																
P	3175 NORFOLK RD	21.890	20.000	15.000	2.60	0.30	18.99	18.79	18.49	2.00	1.00%	5306	18.36	0.20	18.540	-0.05	
	3180 NORFOLK RD	22.100	20.000	15.000	2.40	0.30	19.40	19.20	18.90	2.00	1.00%	5306	18.36	0.20	18.540	0.36	
	3185 NORFOLK RD	20.400	20.000	5.000	1.10	0.30	19.00	18.80	18.70	15.00	1.00%	5306	18.36	0.20	18.410	0.29	
	3190 NORFOLK RD	21.690	20.000	12.000	1.10	0.30	20.29	20.09	19.85	19.00	1.00%	5306	18.36	0.20	18.370	1.48	
P	3195 NORFOLK RD	20.000	25.000	5.000	2.70	0.30	17.00	16.75	16.65	51.00	1.00%	5306	18.36	0.20	18.050	-1.40	
	3200 NORFOLK RD	23.900	25.000	10.000	2.40	0.30	21.20	20.95	20.75	3.00	1.82%	nor1	17.79	0.20	17.932	2.82	
P	3215 NORFOLK RD	18.330	30.000	5.000	1.10	0.30	16.93	16.63	16.53	23.00	1.82%	nor1	17.79	0.20	17.567	-1.04	
	3220 NORFOLK RD	24.940	25.000	10.000	2.60	0.30	22.04	21.79	21.59	32.00	1.82%	nor1	17.79	0.20	17.403	4.19	
P	3225 NORFOLK RD	18.240	25.000	8.000	2.50	0.30	15.44	15.19	15.03	18.00	1.20%	7025	16.99	0.20	16.978	-1.95	
	3240 NORFOLK RD	23.890	30.000	10.000	1.90	0.30	21.69	21.39	21.19	30.00	1.20%	7025	16.99	0.20	16.834	4.36	
P	3245 NORFOLK RD	18.320	15.000	10.000	2.80	0.30	15.22	15.07	14.87	51.00	1.20%	7025	16.99	0.20	16.583	-1.71	
	3250 NORFOLK RD	24.050	30.000	10.000	2.40	0.30	21.35	21.05	20.85	75.00	1.20%	7025	16.99	0.20	16.297	4.55	
	3255 NORFOLK RD	20.010	20.000	10.000	2.70	0.30	17.01	16.81	16.61	81.00	1.20%	7025	16.99	0.20	16.225	0.39	
	3270 NORFOLK RD	20.850	20.000	10.000	1.00	0.30	19.55	19.35	19.15	105.00	1.20%	7025	16.99	0.20	15.938	3.21	
E	3275 NORFOLK RD	17.320	25.000	5.000	2.30	0.30	14.72	14.47	14.37	120.00	1.20%	7025	16.99	0.20	15.759	-1.39	
	3285 NORFOLK RD	18.980	15.000	8.000	2.70	0.30	15.98	15.83	15.67	14.00	1.64%	5251	15.43	0.20	15.403	0.27	
	3290 NORFOLK RD	19.430	20.000	10.000	1.50	0.30	17.63	17.43	17.23	15.00	1.64%	5251	15.43	0.20	15.387	1.84	
P	3295 NORFOLK RD	16.770	20.000	10.000	2.70	0.30	13.77	13.57	13.37	45.00	1.64%	5251	15.43	0.20	14.895	-1.53	
	3300 NORFOLK RD	19.330	20.000	5.000	0.90	0.30	18.13	17.93	17.83	58.00	1.64%	5251	15.43	0.20	14.682	3.15	
P	3315 NORFOLK RD	16.170	25.000	7.000	2.70	0.30	13.17	12.92	12.78	72.00	1.64%	5251	15.43	0.20	14.453	-1.67	
P	3335 NORFOLK RD	15.890	20.000	5.000	2.50	0.30	13.09	12.89	12.79	20.00	0.50%	5229	14.09	0.20	14.191	-1.40	
P	3355 NORFOLK RD	15.400	20.000	10.000	1.30	0.30	13.80	13.60	13.40	57.00	0.50%	5229	14.09	0.20	14.007	-0.61	

Humber Catchment
Option 4 - New Storm
Gravity, Community LPS LPS

Pump Required	Street and Address	Floor Elevation (Polaris Survey)	Distance from Entrance to PL	Distance From PL to Main	House file assumed Main Entrance Distance to Lower	Slab to inv (assumed) m	Calculated Service Elevation at House (SP)	Calculated Service Elevation at Property Line @ 1% (IC)	Calculated Service Elevation at Main @ 2% (MC)	Distance from Upstream Manhole	Grade from Upstream Manhole	Upstream Manhole	Invert of Upstream Manhole	Diameter of Main	Obvert of Main	Difference (+) Gravity (-) Pump	Comments
		Elev. (m)	Dist. (m)	Dist. (m)	Depth (m)	Depth (m)	Elev. (m)	Elev. (m)	Elev. (m)	Dist. (m)	Grade (%)	MH #	Elev. (m)	Dia. (m)	Elev. (m)	(m)	
	RIPON RD																
	3210 RIPON RD	32.410	30.000	11.000	2.40	0.30	29.71	29.41	29.19	2.00	4.48%	rip1	28.19	0.20	28.304	0.89	
P	3225 RIPON RD	29.540	27.000	11.000	2.40	0.30	26.84	26.57	26.35	17.00	4.48%	rip1	28.19	0.20	27.632	-1.28	
	3230 RIPON RD	31.650	22.000	10.000	2.70	0.30	28.65	28.43	28.23	13.00	4.48%	rip1	28.19	0.20	27.812	0.42	
P	3245 RIPON RD	28.250	25.000	10.000	2.40	0.30	25.55	25.30	25.10	7.00	6.01%	5265	25.69	0.20	25.469	-0.37	
	3250 RIPON RD	30.610	30.000	15.000	2.60	0.30	27.71	27.41	27.11	5.00	6.01%	5265	25.69	0.20	25.590	1.52	
P	3275 RIPON RD	24.910	25.000	12.000	2.70	0.30	21.91	21.66	21.42	52.00	6.01%	5265	25.69	0.20	22.766	-1.35	
	3280 RIPON RD	25.950	35.000	10.000	1.50	0.30	24.15	23.80	23.60	46.00	6.01%	5265	25.69	0.20	23.126	0.47	
P	3295 RIPON RD	23.500	20.000	10.000	2.70	0.30	20.50	20.30	20.10	80.00	6.01%	5265	25.69	0.20	21.083	-0.98	
	3300 RIPON RD	25.930	30.000	10.000	2.70	0.30	22.93	22.63	22.43	8.00	4.14%	5248	20.71	0.20	20.583	1.85	
P	3315 RIPON RD	21.200	20.000	15.000	2.40	0.30	18.50	18.30	18.00	38.00	4.14%	5248	20.71	0.20	19.340	-1.34	
	3320 RIPON RD	23.270	35.000	10.000	2.60	0.30	20.37	20.02	19.82	60.00	4.14%	5248	20.71	0.20	18.429	1.39	
	3335 RIPON RD	19.330	20.000	12.000	2.60	0.30	16.43	16.23	15.99	44.00	0.45%	6520	13.72	0.20	13.725	2.26	
	3340 RIPON RD	21.190	30.000	12.000	2.60	0.30	18.29	17.99	17.75	114.00	4.14%	5248	20.71	0.20	16.192	1.56	
	3360 RIPON RD	19.790	30.000	15.000	2.50	0.30	16.99	16.69	16.39	12.00	1.49%	5215	13.50	0.30	13.621	2.77	
P	3375 RIPON RD	15.930	20.000	3.000	3.00	0.30	12.63	12.43	12.37	46.00	1.49%	5215	13.50	0.30	13.115	-0.74	
	3380 RIPON RD	18.200	20.000	20.000	2.40	0.30	15.50	15.30	14.90	53.00	1.49%	5215	13.50	0.30	13.010	1.89	
P	3475 RIPON RD	7.670	21.000	75.000	2.70	0.30	4.67	4.46	2.96	0.00	4.33%	5181	9.53	0.38	9.905	-6.95	Yaught Club, Eas through parking lot
P	3480 RIPON RD	8.970	20.000	75.000	2.00	0.30	6.67	6.47	4.97	0.00	4.33%	5181	9.53	0.38	9.905	-4.94	
	UPPER TERR																
	3275 UPPER TERR	37.080	80.000	8.000	2.70	0.30	34.08	33.28	33.12	29.00	0.50%	5264	28.48	0.20	28.532	4.59	Serviced from Midland
	3295 UPPER TERR	39.130	80.000	6.000	3.00	0.30	35.83	35.03	34.91	70.00	0.50%	5264	28.48	0.20	28.326	6.58	Serviced from Midland
	3325 UPPER TERR	41.460	80.000	10.000	2.48	0.30	38.68	37.88	37.68	5.00	0.50%	5241	27.89	0.20	28.067	9.61	Serviced from Midland
	3375 UPPER TERR	43.550	75.000	12.000	2.70	0.30	40.55	39.80	39.56	50.00	0.50%	5241	27.89	0.20	27.842	11.72	Serviced from Midland
	3385 UPPER TERR	42.390	60.000	12.000	2.60	0.30	39.49	38.89	38.65	95.00	0.50%	5241	27.89	0.20	27.617	11.03	Serviced from Midland
	3393 UPPER TERR	42.210	50.000	12.000	2.80	0.30	39.11	38.61	38.37	18.00	0.50%	5211	27.25	0.20	27.356	11.01	Serviced from Midland
	3435 UPPER TERR	44.500	80.000	12.000	3.00	0.30	41.20	40.40	40.16	66.00	0.50%	5211	27.25	0.20	27.115	13.04	Serviced from Midland
	3455 UPPER TERR	44.030	50.000	18.000	2.40	0.30	41.33	40.83	40.47	31.00	0.50%	6861	26.71	0.20	26.755	13.72	Serviced from Midland
	3475 UPPER TERR	42.850	50.000	10.000	2.40	0.30	40.15	39.65	39.45	76.00	0.50%	6861	26.71	0.20	26.530	12.92	Serviced from Midland
	3485 UPPER TERR	42.810	50.000	30.000	2.40	0.30	40.11	39.61	39.01	2.00	0.50%	5166	26.14	0.20	26.326	12.68	Serviced from Midland
	3495 UPPER TERR	43.460	50.000	22.000	2.40	0.30	40.76	40.26	39.82	45.00	0.50%	5166	26.14	0.20	26.111	13.71	Serviced from Midland
	3505 UPPER TERR	42.510	50.000	16.000	2.50	0.30	39.71	39.21	38.89	63.00	0.50%	5166	26.14	0.20	26.021	12.87	Serviced from Midland
	3515 UPPER TERR	42.320	50.000	14.000	2.10	0.30	39.92	39.42	39.14	2.00	5.80%	5139	25.68	0.20	25.759	13.38	Serviced from Midland
	3565 UPPER TERR	42.340	46.000	21.000	1.90	0.30	40.14	39.68	39.26	93.00	1.84%	5118	27.67	0.20	26.156	13.10	Serviced from Beach

Rutland Catchment
Option 4 - New Storm
Gravity LSP

Pump Required	Street and Address	Floor Elevation (Polaris Survey)	Distance from Entrance to PL	Distance From PL to Main	House file assumed Main Entrance Distance to Lower	Slab to inv (assumed) m	Calculated Service Elevation at House (SP)	Calculated Service Elevation at Property Line @ 1% (IC)	Calculated Service Elevation at Main @ 2% (MC)	Distance from Upstream Manhole	Grade from Upstream Manhole	Upstream Manhole	Invert of Upstream Manhole	Diameter of Main	Obvert of Main	Difference (+) Gravity (-) Pump	Comments
		Elev. (m)	Dist. (m)	Dist. (m)	Depth (m)	Depth (m)	Elev. (m)	Elev. (m)	Elev. (m)	Dist. (m)	Grade (%)	MH #	Elev. (m)	Dia. (m)	Elev. (m)	(m)	
	BEACH DR																
	2970 BEACH DR	12.222	28.354	6.513	1.00	0.30	10.92	10.64	10.51	22.00	0.50%	6581	8.73	0.20	8.818	1.69	
P	2975 BEACH DR	7.727	59.641	21.522	1.70	0.30	5.73	5.13	4.70	0.00	0.50%	6581	8.73	0.20	8.928	-4.23	
	2980 BEACH DR	13.392	16.535	6.301	2.60	0.30	10.49	10.33	10.20	19.00	0.50%	6582	8.45	0.20	8.559	1.64	
E	2985 BEACH DR	7.822	70.770	14.037	3.00	0.30	4.52	3.81	3.53	10.00	0.50%	6581	8.73	0.20	8.878	-5.34	
	2990 BEACH DR	19.264	45.540	4.299	3.00	0.30	15.96	15.51	15.42	51.00	0.50%	6582	8.45	0.20	8.399	7.02	
	2997 BEACH DR	10.952	22.380	13.719	0.00	0.30	10.65	10.43	10.15	13.00	0.50%	6582	8.45	0.20	8.589	1.56	
P	2999 BEACH DR	11.124	25.000	20.000	2.30	0.30	8.52	8.27	7.87	65.00	0.50%	6582	8.45	0.20	8.329	-0.46	
	3000 BEACH DR	12.796	19.411	4.315	2.40	0.30	10.10	9.90	9.82	25.00	2.53%	6446	7.98	0.20	7.543	2.27	
P	3005 BEACH DR	8.230	17.689	17.901	2.70	0.30	5.23	5.05	4.70	56.00	2.53%	6446	7.98	0.20	6.759	-2.06	
E	3023 BEACH DR	8.951	16.486	17.265	3.10	0.30	5.55	5.39	5.04	17.00	1.79%	6445	6.28	0.25	6.229	-1.19	
	3030 BEACH DR	12.942	22.552	2.259	2.70	0.30	9.94	9.72	9.67	3.00	1.79%	6445	6.28	0.25	6.480	3.19	
	3040 BEACH DR	8.976	26.619	5.096	1.20	0.30	7.48	7.21	7.11	46.00	1.79%	6445	6.28	0.25	5.709	1.40	
	3045 BEACH DR	8.141	28.856	12.750	1.50	0.30	6.34	6.05	5.80	56.00	1.79%	6445	6.28	0.25	5.529	0.27	
	3050 BEACH DR	7.647	17.034	15.964	2.30	0.30	5.05	4.88	4.56	1.00	1.80%	5448	3.61	0.25	3.843	0.71	
P	3055 BEACH DR	5.705	15.610	4.618	2.40	0.30	3.01	2.85	2.76	14.00	1.80%	5448	3.61	0.25	3.609	-0.85	
P	3065 BEACH DR	6.072	16.473	4.131	2.60	0.30	3.17	3.01	2.92	42.00	1.80%	5448	3.61	0.25	3.104	-0.18	
P	3100 BEACH DR	6.626	21.357	4.589	2.80	0.30	3.53	3.31	3.22	47.00	2.37%	5416	4.29	0.60	3.774	-0.55	
P	3115 BEACH DR	5.200	25.000	12.000	2.40	0.30	2.50	2.25	2.01	44.00	0.50%	5424	2.08	0.60	2.455	-0.44	No house, assume MFE, BFE
	3120 BEACH DR	6.543	41.957	8.200	0.00	0.30	6.24	5.82	5.66	41.00	0.73%	6531	3.83	0.20	3.731	1.93	
P	3125 BEACH DR	7.308	57.155	13.000	2.60	0.30	4.41	3.84	3.58	49.00	0.73%	6531	3.83	0.20	3.672	-0.10	
P	3140 BEACH DR	7.000	30.000	9.500	2.40	0.30	4.30	4.00	3.81	65.00	1.26%	7030	4.73	0.20	4.112	-0.30	No house, assume MFE, BFE
P	3152 BEACH DR	7.472	26.665	8.913	2.90	0.30	4.27	4.01	3.83	29.00	1.26%	7030	4.73	0.20	4.565	-0.74	
P	3155 BEACH DR	5.200	51.000	9.526	3.15	0.30	1.75	1.24	1.05	60.00	1.26%	7030	4.73	0.20	4.175	-3.13	From Design drawings
	3170 BEACH DR	8.908	30.000	11.040	2.30	0.30	6.31	6.01	5.79	3.00	1.26%	7030	4.73	0.20	4.892	0.89	
P	3175 BEACH DR	7.214	55.400	10.632	2.60	0.30	4.31	3.76	3.55	5.00	1.26%	7030	4.73	0.20	4.867	-1.32	
	CADBORO BAY RD																
*	3185 CADBORO BAY RD	56.427	27.030	2.568	2.70	0.30	53.43	53.16	53.11	44.00	#DIV/0!		0.00	0.00	#DIV/0!	#DIV/0!	Option Gravity to Comm. PS
P	3195 CADBORO BAY RD	55.801	20.213	6.417	2.70	0.30	52.80	52.60	52.47	4.00	4.43%	COT1	53.00	0.20	53.023	-0.55	
P	3225 CADBORO BAY RD	56.868	50.500	5.000	2.40	0.30	54.17	53.66	53.56	42.00	#DIV/0!		0.00	0.00	#DIV/0!	#DIV/0!	pump to ex. separated main
P	3245 CADBORO BAY RD	56.595	56.000	5.000	1.00	0.30	55.30	54.74	54.64	11.00	#DIV/0!		0.00	0.00	#DIV/0!	#DIV/0!	pump to ex. separated main
P	3265 CADBORO BAY RD	57.404	46.000	5.000	2.40	0.30	54.70	54.24	54.14	61.00	#DIV/0!		0.00	0.00	#DIV/0!	#DIV/0!	pump to ex. separated main
P	3285 CADBORO BAY RD	58.599	56.000	5.000	2.40	0.30	55.90	55.34	55.24	31.00	#DIV/0!		0.00	0.00	#DIV/0!	#DIV/0!	pump to ex. separated main
P	3315 CADBORO BAY RD	58.965	54.000	5.000	2.40	0.30	56.27	55.73	55.63	0.00	#DIV/0!		0.00	0.00	#DIV/0!	#DIV/0!	pump to ex. separated main
P	3325 CADBORO BAY RD	59.080	54.000	16.000	2.70	0.30	56.08	55.54	55.22	10.00	#DIV/0!		0.00	0.00	#DIV/0!	#DIV/0!	pump to new low pressure main
P	3355 CADBORO BAY RD	58.690	23.831	13.126	1.70	0.30	56.69	56.45	56.19	45.00	#DIV/0!		0.00	0.00	#DIV/0!	#DIV/0!	pump to new low pressure main
P	3375 CADBORO BAY RD	59.071	16.092	13.138	2.40	0.30	56.37	56.21	55.95	71.00	#DIV/0!		0.00	0.00	#DIV/0!	#DIV/0!	pump to new low pressure main
P	3395 CADBORO BAY RD	59.233	26.744	11.800	2.40	0.30	56.53	56.27	56.03	102.00	#DIV/0!		0.00	0.00	#DIV/0!	#DIV/0!	pump to new low pressure main
P	3405 CADBORO BAY RD	57.945	31.828	11.800	2.70	0.30	54.95	54.63	54.39	39.00	#DIV/0!		0.00	0.00	#DIV/0!	#DIV/0!	pump to new low pressure main
P	3415 CADBORO BAY RD	57.119	24.500	11.800	2.40	0.30	54.42	54.17	53.94	78.00	#DIV/0!		0.00	0.00	#DIV/0!	#DIV/0!	pump to ex. separated main
*	3425 CADBORO BAY RD	55.173	17.800	11.800	2.40	0.30	52.47	52.30	52.06	105.00	#DIV/0!		0.00	0.00	#DIV/0!	#DIV/0!	Option Gravity to Comm. PS
*	3435 CADBORO BAY RD	56.079	19.700	11.800	1.00	0.30	54.78	54.58	54.35	22.00	#DIV/0!		0.00	0.00	#DIV/0!	#DIV/0!	Option Gravity to Comm. PS
P	3445 CADBORO BAY RD	55.782	20.100	11.800	1.00	0.30	54.48	54.28	54.05	43.00	#DIV/0!		0.00	0.00	#DIV/0!	#DIV/0!	pump to ex. separated main
P	3455 CADBORO BAY RD	55.644	20.400	11.800	2.40	0.30	52.94	52.74	52.50	71.00	#DIV/0!		0.00	0.00	#DIV/0!	#DIV/0!	pump to ex. separated main
P	3465 CADBORO BAY RD	55.341	16.500	11.800	2.70	0.30	52.34	52.18	51.94	105.00	#DIV/0!		0.00	0.00	#DIV/0!	#DIV/0!	pump to ex. separated main
P	3475 CADBORO BAY RD	53.547	23.200	11.800	2.70	0.30	50.55	50.32	50.08	19.00	#DIV/0!		0.00	0.00	#DIV/0!	#DIV/0!	pump to ex. separated main
P	3495 CADBORO BAY RD	51.471	26.000	11.800	2.70	0.30	48.47	48.21	47.98	59.00	#DIV/0!		0.00	0.00	#DIV/0!	#DIV/0!	pump to ex. separated main
P	3507 CADBORO BAY RD	49.652	23.000	11.800	2.40	0.30	46.95	46.72	46.49	23.00	#DIV/0!		0.00	0.00	#DIV/0!	#DIV/0!	pump to ex. separated main
P	3605 CADBORO BAY RD	47.560	18.700	51.000	2.40	0.30	44.86	44.67	43.65	0.00	1.90%	Upp1	45.55	0.20	45.750	-2.10	no bsmt data (assume 2.4)
	CARDIGAN RD																
	2440 CARDIGAN RD	55.776	16.272	7.615	2.40	0.30	53.08	52.91	52.76	2.00	3.37%	5200	51.00	0.20	51.133	1.63	
	2455 CARDIGAN RD	55.450	15.971	12.432	2.70	0.30	52.45	52.29	52.04	2.00	3.37%	5200	51.00	0.20	51.133	0.91	
P	2460 CARDIGAN RD	52.939	21.528	6.310	3.50	0.30	49.14	48.92	48.80	27.50	3.37%	5200	51.00	0.20	50.273	-1.48	
	2475 CARDIGAN RD	53.022	11.800	14.087	0.00	0.30	52.72	52.60	52.32	23.30	3.37%	5200	51.00	0.20	50.415	1.91	
	2480 CARDIGAN RD	51.766	13.341	5.923	2.40	0.30	49.07	48.93	48.81	10.00	4.16%	5205	48.42	0.20	48.207	0.61	

Rutland Catchment
Option 4 - New Storm
Gravity LSP

Pump Required	Street and Address	Floor Elevation (Polaris Survey)	Distance from Entrance to PL	Distance From PL to Main	House file assumed Main Entrance Distance to Lower	Slab to inv (assumed) m	Calculated Service Elevation at House (SP)	Calculated Service Elevation at Property Line @ 1% (IC)	Calculated Service Elevation at Main @ 2% (MC)	Distance from Upstream Manhole	Grade from Upstream Manhole	Upstream Manhole	Invert of Upstream Manhole	Diameter of Main	Obvert of Main	Difference (+) Gravity (-) Pump	Comments
		Elev. (m)	Dist. (m)	Dist. (m)	Depth (m)	Depth (m)	Elev. (m)	Elev. (m)	Elev. (m)	Dist. (m)	Grade (%)	MH #	Elev. (m)	Dia. (m)	Elev. (m)	(m)	
	CHILTERN PL																
*	2440 CHILTERN PL	54.544	25.524	5.255	2.40	0.30	51.84	51.59	51.48	28.00	#N/A	CHI1	#N/A	#N/A	#N/A	#N/A	Option Gravity to Comm. PS
*	2450 CHILTERN PL	52.084	28.000	8.000	3.50	0.30	48.28	48.00	47.84	3.00	#N/A	CHI1	#N/A	#N/A	#N/A	#N/A	Option Gravity to Comm. PS
*	2455 CHILTERN PL	54.782	21.600	7.100	2.80	0.30	51.68	51.47	51.32	20.00	#N/A	CHI1	#N/A	#N/A	#N/A	#N/A	Option Gravity to Comm. PS
*	2465 CHILTERN PL	52.369	18.600	6.200	2.50	0.30	49.57	49.38	49.26	3.00	#N/A	CHI1	#N/A	#N/A	#N/A	#N/A	Option Gravity to Comm. PS
	COTSWOLD RD																
	2440 COTSWOLD RD	56.990	19.336	11.850	2.50	0.30	54.19	54.00	53.76	4.00	4.43%	COT1	53.00	0.20	53.023	0.74	
P	2450 COTSWOLD RD	54.654	28.388	10.811	2.60	0.30	51.75	51.47	51.25	29.00	4.43%	COT1	53.00	0.20	51.917	-0.66	
	2455 COTSWOLD RD	53.711	13.410	10.429	0.00	0.30	53.41	53.28	53.07	40.00	4.43%	COT1	53.00	0.20	51.430	1.64	
	2460 COTSWOLD RD	52.898	15.377	8.040	1.20	0.30	51.40	51.24	51.08	12.00	4.89%	5272	50.75	0.20	50.364	0.72	
P	2475 COTSWOLD RD	52.087	13.237	12.531	2.60	0.30	49.19	49.05	48.80	24.00	4.89%	5272	50.75	0.20	49.777	-0.97	
	2500 COTSWOLD RD	48.048	17.042	21.908	2.60	0.30	45.15	44.98	44.54	1.00	5.22%	5293	42.71	0.20	42.858	1.68	
P	2505 COTSWOLD RD	45.942	22.351	20.725	2.50	0.30	43.14	42.92	42.50	3.00	5.22%	5293	42.71	0.20	42.753	-0.25	
P	2515 COTSWOLD RD	44.196	18.274	12.493	2.40	0.30	41.50	41.31	41.06	23.00	5.22%	5293	42.71	0.20	41.709	-0.65	
	2520 COTSWOLD RD	46.737	20.233	12.901	2.10	0.30	44.34	44.13	43.88	9.00	5.22%	5293	42.71	0.20	42.440	1.44	
P	2535 COTSWOLD RD	41.369	23.700	13.200	3.00	0.30	38.07	37.83	37.57	31.00	4.87%	5295	40.42	0.20	39.106	-1.54	
	2540 COTSWOLD RD	45.990	24.106	9.259	2.90	0.30	42.79	42.55	42.36	42.00	5.22%	5293	42.71	0.20	40.716	1.65	
	2555 COTSWOLD RD	39.944	34.468	18.193	2.40	0.30	37.24	36.90	36.54	10.00	2.79%	6505	33.92	0.20	33.841	2.69	
	2560 COTSWOLD RD	44.368	25.307	5.859	1.40	0.30	42.67	42.41	42.30	44.00	4.87%	5295	40.42	0.20	38.472	3.83	
	2580 COTSWOLD RD	41.685	19.191	10.427	2.40	0.30	38.99	38.79	38.58	78.00	4.87%	5295	40.42	0.20	36.815	1.77	
P	2605 COTSWOLD RD	37.251	17.217	15.108	2.60	0.30	34.35	34.18	33.88	6.00	1.83%	5288	35.25	0.20	35.341	-1.46	
	LANSDOWNE RD																
	2420 LANSDOWNE RD	53.699	41.162	10.600	0.61	0.30	52.79	52.38	52.17	3.00	#N/A	5331	#N/A	#N/A	#N/A	#N/A	Tie to ex. separated main
P	2445 LANSDOWNE RD	51.234	18.101	10.787	3.00	0.30	47.93	47.75	47.54	4.00	#N/A	5331	#N/A	#N/A	#N/A	#N/A	shallow storm, pump low side
	2450 LANSDOWNE RD	51.836	22.415	9.384	2.40	0.30	49.14	48.91	48.72	31.00	#N/A	5331	#N/A	#N/A	#N/A	#N/A	Tie to ex. separated main
	2470 LANSDOWNE RD	50.694	29.660	10.167	2.40	0.30	47.99	47.70	47.49	24.00	#N/A	6478	#N/A	#N/A	#N/A	#N/A	Tie to ex. separated main
P	2475 LANSDOWNE RD	48.933	16.627	10.378	2.40	0.30	46.23	46.07	45.86	6.00	#N/A	6478	#N/A	#N/A	#N/A	#N/A	shallow storm, pump low side
P	2525 LANSDOWNE RD	42.093	20.169	8.583	2.30	0.30	39.49	39.29	39.12	42.00	#N/A	5337	#N/A	#N/A	#N/A	#N/A	shallow storm, pump low side
	2530 LANSDOWNE RD	42.779	16.052	38.690	2.60	0.30	39.88	39.72	38.94	12.00	#N/A	6860	#N/A	#N/A	#N/A	#N/A	Tie to ex. separated main
E	2545 LANSDOWNE RD	39.923	18.949	8.899	2.40	0.30	37.22	37.03	36.86	22.00	#N/A	6860	#N/A	#N/A	#N/A	#N/A	shallow storm, pump low side
	2550 LANSDOWNE RD	40.163	15.429	9.944	2.40	0.30	37.46	37.31	37.11	48.00	#N/A	6860	#N/A	#N/A	#N/A	#N/A	Tie to ex. separated main
P	2555 LANSDOWNE RD	38.045	34.709	10.359	2.70	0.30	35.05	34.70	34.49	52.00	#N/A	6860	#N/A	#N/A	#N/A	#N/A	shallow storm, pump low side
	2570 LANSDOWNE RD	37.885	11.948	9.347	2.40	0.30	35.19	35.07	34.88	19.00	#N/A	5351	#N/A	#N/A	#N/A	#N/A	Tie to ex. separated main
P	2575 LANSDOWNE RD	38.800	10.772	10.754	2.40	0.30	36.10	35.99	35.78	21.00	#N/A	5351	#N/A	#N/A	#N/A	#N/A	shallow storm, pump low side
	2580 LANSDOWNE RD	36.906	18.898	9.349	2.10	0.30	34.51	34.32	34.13	45.00	#N/A	5351	#N/A	#N/A	#N/A	#N/A	Tie to ex. separated main
P	2595 LANSDOWNE RD	33.516	20.756	10.775	2.60	0.30	30.62	30.41	30.19	82.00	#N/A	5351	#N/A	#N/A	#N/A	#N/A	shallow storm, pump low side
P	2625 LANSDOWNE RD	29.633	13.811	10.695	2.40	0.30	26.93	26.79	26.58	40.00	#N/A	5359	#N/A	#N/A	#N/A	#N/A	shallow storm, pump low side
P	2655 LANSDOWNE RD	26.851	16.726	10.782	1.50	0.30	25.05	24.88	24.67	19.00	#N/A	5365	#N/A	#N/A	#N/A	#N/A	shallow storm, pump low side
	2660 LANSDOWNE RD	29.801	18.321	9.308	2.40	0.30	27.10	26.92	26.73	13.00	#N/A	5365	#N/A	#N/A	#N/A	#N/A	Tie to ex. separated main
P	2695 LANSDOWNE RD	25.720	12.338	10.716	2.70	0.30	22.72	22.60	22.38	46.00	#N/A	5365	#N/A	#N/A	#N/A	#N/A	shallow storm, pump low side
	2700 LANSDOWNE RD	24.274	24.335	9.450	2.60	0.30	21.37	21.13	20.94	21.00	5.00%	5377	20.69	0.38	20.012	0.93	
	2720 LANSDOWNE RD	23.518	20.729	9.448	2.40	0.30	20.82	20.61	20.42	50.00	5.00%	5377	20.69	0.38	18.562	1.86	
P	2725 LANSDOWNE RD	22.771	16.224	10.641	2.70	0.30	19.77	19.61	19.40	23.00	5.00%	5377	20.69	0.38	19.912	-0.52	
	2755 LANSDOWNE RD	21.068	23.267	10.680	1.20	0.30	19.57	19.34	19.12	54.00	5.00%	5377	20.69	0.38	18.362	0.76	
	2760 LANSDOWNE RD	21.836	21.948	9.257	2.50	0.30	19.04	18.82	18.63	31.00	0.50%	5381	18.17	0.45	18.462	0.17	
	2765 LANSDOWNE RD	20.803	15.003	10.844	1.50	0.30	19.00	18.85	18.64	33.00	0.50%	5381	18.17	0.45	18.452	0.18	
	2810 LANSDOWNE RD	21.837	16.691	17.821	2.80	0.30	18.74	18.57	18.21	17.00	1.69%	5390	17.62	0.53	17.862	0.35	
	2815 LANSDOWNE RD	19.633	16.793	12.302	0.00	0.30	19.33	19.17	18.92	18.00	1.69%	5390	17.62	0.53	17.845	1.07	
	2830 LANSDOWNE RD	18.786	22.341	16.226	0.40	0.30	18.09	17.86	17.54	54.00	1.69%	5390	17.62	0.53	17.238	0.30	
P	2835 LANSDOWNE RD	19.778	11.055	13.744	2.40	0.30	17.08	16.97	16.69	58.00	1.69%	5390	17.62	0.53	17.171	-0.48	
	2850 LANSDOWNE RD	19.503	19.054	7.456	2.40	0.30	16.80	16.61	16.46	24.00	2.24%	5396	16.09	0.53	16.072	0.39	
	2855 LANSDOWNE RD	18.504	12.221	10.890	0.50	0.30	17.70	17.58	17.36	2.00	2.24%	5396	16.09	0.53	16.565	0.80	
	2870 LANSDOWNE RD	18.928	26.290	8.043	2.60	0.30	16.03	15.77	15.60	59.00	2.24%	5396	16.09	0.53	15.287	0.32	
P	2875 LANSDOWNE RD	18.107	24.692	18.020	2.90	0.30	14.91	14.66	14.30	34.00	2.24%	5396	16.09	0.53	15.847	-1.55	
	2880 LANSDOWNE RD	17.596	19.673	12.622	2.60	0.30	14.70	14.50	14.25	5.00	3.32%	5391	13.81	0.53	14.168	0.08	
	2890 LANSDOWNE RD	15.575	22.679	14.906	1.10	0.30	14.18	13.95	13.65	147.00	3.84%	5325	18.16	0.20	12.710	0.94	
	2895 LANSDOWNE RD	17.667	18.136	12.777	2.60	0.30	14.77	14.59	14.33	25.00	3.32%	5391	13.81	0.53	13.505	0.82	
	2925 LANSDOWNE RD	14.007	14.591	12.497	2.40	0.30	11.31	11.16	10.91	9.00	5.19%	5379	10.08	0.53	10.133	0.78	
P	2950 LANSDOWNE RD	12.966	23.356	24.378	3.00	0.30	9.67	9.43	8.94	23.00	5.19%	5379	10.08	0.53	9.406	-0.46	

Rutland Catchment
Option 4 - New Storm
Gravity LSP

Pump Required	Street and Address	Floor Elevation (Polaris Survey) Elev. (m)	Distance from Entrance to PL Dist. (m)	Distance From PL to Main Dist. (m)	House file assumed Main Entrance Distance to Lower Depth (m)	Slab to inv (assumed) m Depth (m)	Calculated Service Elevation at House (SP) Elev. (m)	Calculated Service Elevation at Property Line @ 1% (IC) Elev. (m)	Calculated Service Elevation at Main @ 2% (MC) Elev. (m)	Distance from Upstream Manhole Dist. (m)	Grade from Upstream Manhole Grade (%)	Upstream Manhole MH #	Invert of Upstream Manhole Elev. (m)	Diameter of Main Dia. (m)	Obvert of Main Elev. (m)	Difference (+) Gravity (-) Pump (m)	Comments
	MIDLAND RD																
	3110 MIDLAND RD	28.616	12.117	9.411	2.70	0.30	25.62	25.49	25.31	63.00	3.80%	6509	26.28	0.20	24.085	1.22	
P	3125 MIDLAND RD	24.970	46.100	1.500	2.60	0.30	22.07	21.61	21.58	89.00	3.80%	6509	26.28	0.20	23.096	-1.52	
	3130 MIDLAND RD	29.578	13.901	9.500	0.00	0.30	29.28	29.14	28.95	32.00	3.80%	6509	26.28	0.20	25.265	3.68	
P	3135 MIDLAND RD	25.366	45.000	1.500	2.70	0.30	22.37	21.92	21.89	63.00	3.80%	6509	26.28	0.20	24.085	-2.20	
	3140 MIDLAND RD	30.315	17.381	9.585	2.40	0.30	27.62	27.44	27.25	3.00	3.80%	6509	26.28	0.20	26.368	0.88	
P	3145 MIDLAND RD	27.508	46.500	1.500	2.70	0.30	24.51	24.04	24.01	30.00	3.80%	6509	26.28	0.20	25.341	-1.33	
	3150 MIDLAND RD	31.997	19.982	9.424	1.00	0.30	30.70	30.50	30.31	97.00	2.35%	5290	29.35	0.20	27.268	3.04	
P	3155 MIDLAND RD	28.524	42.900	1.500	2.70	0.30	25.52	25.10	25.07	4.00	2.35%	5290	29.35	0.20	29.454	-4.39	
	3160 MIDLAND RD	32.639	17.534	9.241	2.40	0.30	29.94	29.76	29.58	65.00	2.35%	5290	29.35	0.20	28.020	1.56	
P	3165 MIDLAND RD	30.154	13.183	36.441	1.20	0.30	28.65	28.52	27.79	65.00	2.35%	5290	29.35	0.20	28.020	-0.23	
P	3175 MIDLAND RD	30.705	11.967	36.402	1.10	0.30	29.31	29.19	28.46	38.00	2.35%	5290	29.35	0.20	28.655	-0.20	
	3180 MIDLAND RD	33.749	24.077	9.524	2.00	0.30	31.45	31.21	31.02	10.00	2.35%	5290	29.35	0.20	29.313	1.70	
P	3185 MIDLAND RD	31.358	33.268	37.023	2.00	0.30	29.06	28.73	27.98	15.00	2.35%	5290	29.35	0.20	29.195	-1.21	
	3200 MIDLAND RD	33.940	26.800	9.700	2.70	0.30	30.94	30.67	30.48	76.80	3.94%	7016	32.92	0.20	30.092	0.39	
	NORFOLK RD																
P	3105 NORFOLK RD	15.023	9.300	0.228	2.90	0.30	11.82	11.73	11.73	135.00	3.84%	5325	18.16	0.20	13.171	-1.45	NEW ADDRESS 3105 NORFOLK RD
	3110 NORFOLK RD	17.660	15.822	15.544	1.20	0.30	16.16	16.00	15.69	81.00	3.84%	5325	18.16	0.20	15.246	0.44	
P	3115 NORFOLK RD	16.840	22.300	2.000	2.40	0.30	14.14	13.92	13.88	95.00	3.84%	5325	18.16	0.20	14.708	-0.83	
P	3125 NORFOLK RD	18.742	16.382	2.000	2.40	0.30	16.04	15.88	15.84	51.00	3.84%	5325	18.16	0.20	16.399	-0.56	
P	3130 NORFOLK RD	20.075	26.616	15.961	2.80	0.30	16.98	16.71	16.39	41.00	3.84%	5325	18.16	0.20	16.783	-0.39	
	3145 NORFOLK RD	20.443	17.541	2.000	1.40	0.30	18.74	18.57	18.53	10.00	3.84%	5325	18.16	0.20	17.974	0.55	
	3150 NORFOLK RD	22.160	22.184	15.784	2.60	0.30	19.26	19.04	18.72	10.00	3.84%	5325	18.16	0.20	17.974	0.75	
E	3165 NORFOLK RD	21.153	30.712	2.000	2.70	0.30	18.15	17.85	17.81	1.00	3.84%	5325	18.16	0.20	18.320	-0.51	
	3170 NORFOLK RD	22.070	22.191	18.092	1.20	0.30	20.57	20.35	19.99	3.00	3.84%	5325	18.16	0.20	18.243	1.74	
	NOTTINGHAM RD																
P	2580 NOTTINGHAM RD	34.904	67.308	3.847	2.30	0.30	32.30	31.63	31.55	45.00	#N/A	5351	#N/A	#N/A	#N/A	#N/A	shallow storm, pump low side
	RIPON RD																
	3120 RIPON RD	22.022	24.868	10.237	1.20	0.30	20.52	20.27	20.07	54	3.02%	6856	21.24	0.20	19.808	0.26	
P	3135 RIPON RD	23.567	28.860	9.900	2.60	0.30	20.67	20.38	20.18	27	3.02%	6856	21.24	0.20	20.624	-0.44	
	3140 RIPON RD	24.251	23.694	10.229	2.80	0.30	21.15	20.91	20.71	27	3.02%	6856	21.24	0.20	20.624	0.09	
P	3145 RIPON RD	24.632	20.379	9.522	2.70	0.30	21.63	21.43	21.24	60	2.98%	5362	23.25	0.20	21.664	-0.43	
	3150 RIPON RD	24.958	20.748	11.434	2.60	0.30	22.06	21.85	21.62	63	2.98%	5362	23.25	0.20	21.575	0.05	
P	3155 RIPON RD	25.696	21.319	10.921	2.60	0.30	22.80	22.58	22.36	20	2.98%	5362	23.25	0.20	22.856	-0.49	
P	3160 RIPON RD	26.248	21.788	9.558	2.70	0.30	23.25	23.03	22.84	17	2.98%	5362	23.25	0.20	22.945	-0.11	
P	3165 RIPON RD	26.852	16.866	11.998	2.70	0.30	23.85	23.68	23.44	57	3.91%	5303	25.89	0.20	23.862	-0.42	
P	3170 RIPON RD	27.619	15.834	7.526	2.70	0.30	24.62	24.46	24.31	31	3.91%	5303	25.89	0.20	24.878	-0.57	
P	3175 RIPON RD	27.960	20.170	11.374	2.70	0.30	24.96	24.76	24.53	18	3.91%	5303	25.89	0.20	25.386	-0.86	
	3185 RIPON RD	30.184	37.546	8.693	3.00	0.30	26.88	26.51	26.33	3	3.91%	5303	25.89	0.20	25.973	0.36	
	3190 RIPON RD	30.354	25.803	19.147	1.90	0.30	28.15	27.90	27.51	3	3.91%	5303	25.89	0.20	25.973	1.54	
	3215 RIPON RD	31.079	45.325	41.485	2.70	0.30	28.08	27.63	26.80	0	3.91%	5303	25.89	0.20	26.090	0.71	
	RUTLAND RD																
	2955 RUTLAND RD	11.908	17.516	14.429	2.60	0.30	9.01	8.83	8.54	56.00	5.19%	5379	10.08	0.53	7.693	0.85	
P	2970 RUTLAND RD	9.286	45.150	19.396	2.50	0.30	6.49	6.03	5.65	2.00	0.98%	6863	6.31	0.53	6.815	-1.17	
	2985 RUTLAND RD	10.759	25.075	16.900	2.70	0.30	7.76	7.51	7.17	53.00	1.29%	5388	6.21	0.60	6.129	1.04	
P	2990 RUTLAND RD	8.452	23.360	4.441	2.70	0.30	5.45	5.22	5.13	35.00	1.29%	5388	6.21	0.60	6.360	-1.23	
P	3000 RUTLAND RD	7.720	13.090	8.340	2.30	0.30	5.12	4.99	4.82	13.00	1.76%	5413	4.91	0.60	5.281	-0.46	no floor / basement elev (assumed)
P	3005 RUTLAND RD	8.567	21.501	15.490	2.70	0.30	5.57	5.35	5.04	72.00	1.29%	5388	6.21	0.60	5.884	-0.84	
	3025 RUTLAND RD	8.891	12.202	12.723	2.60	0.30	5.99	5.87	5.61	13.00	1.76%	5413	4.91	0.60	5.281	0.33	
P	3055 RUTLAND RD	6.909	16.323	17.656	2.70	0.30	3.91	3.75	3.39	21.00	2.37%	5416	4.29	0.60	4.389	-1.00	
P	3075 RUTLAND RD	6.735	23.644	15.783	2.60	0.30	3.84	3.60	3.28	53.00	2.37%	5416	4.29	0.60	3.632	-0.35	
P	3150 RUTLAND RD	5.277	34.289	9.071	2.70	0.30	2.28	1.93	1.75	17.00	0.50%	5431	1.85	0.60	2.365	-0.61	
	3155 RUTLAND RD	7.059	19.992	5.150	3.00	0.30	3.76	3.56	3.46	40.00	0.50%	5431	1.85	0.60	2.250	1.21	
	SHERRINGHAM PL																
*	3145 SHERRINGHAM PL	55.082	27.000	8.000	2.40	0.30	52.38	52.11	51.95	31.00	#N/A	6476	#N/A	#N/A	#N/A	#N/A	Option Gravity to Comm. PS
*	3155 SHERRINGHAM PL	53.322	22.000	6.000	2.50	0.30	50.52	50.30	50.18	3.00	#N/A	6476	#N/A	#N/A	#N/A	#N/A	Option Gravity to Comm. PS
*	3165 SHERRINGHAM PL	51.550	14.000	34.000	3.40	0.30	47.85	47.71	47.03	0.00	#N/A	6476	#N/A	#N/A	#N/A	#N/A	Option Gravity to Comm. PS
*	3175 SHERRINGHAM PL	54.349	23.000	3.000	2.70	0.30	51.35	51.12	51.06	3.00	#N/A	6476	#N/A	#N/A	#N/A	#N/A	Option Gravity to Comm. PS
	SOUTHDOWNE RD																
	3075 SOUTHDOWNE RD	19.566	34.137	8.628	1.80	0.30	17.47	17.12	16.95	65.00	2.24%	5396	16.09	0.53	15.152	1.80	
	3085 SOUTHDOWNE RD	19.029	31.345	74.465	2.10	0.30	16.63	16.32	14.83	89.00	2.24%	5396	16.09	0.53	14.614	0.21	
	SURREY RD																
	2960 SURREY RD	16.776	50.575	20.901	0.50	0.30	15.98	15.47	15.05	2.00	2.53%	6446	7.98	0.20	8.124	6.93	
P	3065 SURREY RD	7.194	28.761	88.000	2.00	0.30	4.89	4.61	2.85	82.00	0.50%	6582	8.45	0.20	8.244	-5.40	

Rutland Catchment
Option 4 - New Storm
Gravity LSP

Pump Required	Street and Address	Floor Elevation (Polaris Survey) Elev. (m)	Distance from Entrance to PL Dist. (m)	Distance From PL to Main Dist. (m)	House file assumed Main Entrance Distance to Lower Depth (m)	Slab to inv (assumed) m Depth (m)	Calculated Service Elevation at House (SP) Elev. (m)	Calculated Service Elevation at Property Line @ 1% (IC) Elev. (m)	Calculated Service Elevation at Main @ 2% (MC) Elev. (m)	Distance from Upstream Manhole Dist. (m)	Grade from Upstream Manhole Grade (%)	Upstream Manhole MH #	Invert of Upstream Manhole Elev. (m)	Diameter of Main Dia. (m)	Obvert of Main Elev. (m)	Difference (+) Gravity (-) Pump (m)	Comments
	TARN PL																
	3140 TARN PL	6.487	24.945	9.632	0.90	0.30	5.29	5.04	4.84	11.00	0.50%	6850	4.00	0.20	4.149	0.70	
P	3150 TARN PL	6.543	14.162	9.203	2.40	0.30	3.84	3.70	3.52	0.00	0.50%	6850	4.00	0.20	4.204	-0.69	
P	3165 TARN PL	7.092	24.967	8.272	4.10	0.30	2.69	2.44	2.28	0.00	0.50%	6850	4.00	0.20	4.204	-1.93	
P	3175 TARN PL	6.483	45.934	9.335	1.40	0.30	4.78	4.32	4.14	0.00	0.50%	6850	4.00	0.20	4.204	-0.07	
	UPLANDS RD																
P	3085 UPLANDS RD	44.829	23.076	10.255	2.70	0.30	41.83	41.60	41.39	18.00	#N/A	5337	#N/A	#N/A	#N/A	#N/A	existing shallow, pump low side
P	3090 UPLANDS RD	46.290	29.864	9.401	1.50	0.30	44.49	44.19	44.00	59.00	#DIV/0!		0.00	0.00	#DIV/0!	#DIV/0!	existing shallow, pump low side
	3100 UPLANDS RD	47.540	21.602	10.287	2.40	0.30	44.84	44.62	44.42	64.00	1.03%	5312	43.70	0.20	43.235	1.18	
	3125 UPLANDS RD	44.140	37.179	11.440	2.40	0.30	41.44	41.07	40.84	44.00	#N/A	5337	#N/A	#N/A	#N/A	#N/A	no bsmt data (assume 2.4)
	3130 UPLANDS RD	48.320	23.673	11.771	2.20	0.30	45.82	45.58	45.35	13.00	1.03%	5312	43.70	0.20	43.762	1.59	
P	3155 UPLANDS RD	45.830	16.432	20.146	2.40	0.30	43.13	42.97	42.56	6.00	1.06%	5300A	43.98	0.20	44.118	-1.56	
	3160 UPLANDS RD	48.772	23.937	10.225	2.70	0.30	45.77	45.53	45.33	33.00	2.21%	6864	45.34	0.20	44.806	0.52	
E	3200 UPLANDS RD	50.421	23.338	7.206	2.70	0.30	47.42	47.19	47.04	67.00	4.89%	5272	50.75	0.20	47.676	-0.63	
	3220 UPLANDS RD	52.139	28.261	11.025	2.70	0.30	49.14	48.86	48.64	3.00	1.63%	5260	47.73	0.20	47.881	0.75	
P	3225 UPLANDS RD	50.436	27.341	11.216	2.70	0.30	47.44	47.16	46.94	3.00	1.63%	5260	47.73	0.20	47.881	-0.94	
P	3240 UPLANDS PL	53.160	17.470	17.195	3.20	0.30	49.66	49.49	49.14	0.00	4.38%	5253	49.66	0.20	49.860	-0.72	
P	3255 UPLANDS RD	49.109	20.200	10.200	3.00	0.30	45.81	45.61	45.40	0.00	0.61%	5257	47.00	0.20	47.200	-1.80	
	3260 UPLANDS PL	53.883	24.117	16.323	2.70	0.30	50.88	50.64	50.32	0.00	4.38%	5253	49.66	0.20	49.860	0.46	
P	3275 UPLANDS RD	48.669	20.153	9.322	2.40	0.30	45.97	45.77	45.58	28.00	0.61%	5257	47.00	0.20	47.030	-1.45	
E	3280 UPLANDS RD	50.909	16.546	10.743	2.90	0.30	47.71	47.54	47.33	21.00	0.61%	5257	47.00	0.20	47.073	0.26	Ex. Pump, not req'd
P	3295 UPLANDS RD	48.634	20.356	9.089	2.40	0.30	45.93	45.73	45.55	24.00	0.59%	5250	46.70	0.20	46.758	-1.21	
	3300 UPLANDS RD	51.934	35.439	11.008	2.70	0.30	48.93	48.58	48.36	26.00	0.59%	5250	46.70	0.20	46.746	1.61	
P	3335 UPLANDS RD	49.014	18.240	9.526	3.00	0.30	45.71	45.53	45.34	63.00	0.59%	5250	46.70	0.20	46.526	-1.19	
	3350 UPLANDS RD	50.628	35.813	10.526	3.00	0.30	47.33	46.97	46.76	1.00	0.42%	5231	46.20	0.20	46.396	0.36	
P	3355 UPLANDS RD	49.034	13.281	9.368	3.00	0.30	45.73	45.60	45.41	21.00	0.42%	5231	46.20	0.20	46.311	-0.90	
	3370 UPLANDS RD	50.420	20.258	11.046	2.80	0.30	47.32	47.12	46.90	52.00	0.42%	5231	46.20	0.20	46.179	0.72	
P	3375 UPLANDS RD	48.849	14.554	9.373	2.70	0.30	45.85	45.70	45.52	55.00	0.42%	5231	46.20	0.20	46.167	-0.65	
P	3410 UPLANDS RD	49.378	12.920	4.441	2.40	0.30	46.68	46.55	46.46	49.00	4.16%	5205	48.42	0.20	46.586	-0.13	
	3420 UPLANDS RD	49.706	14.858	0.474	2.40	0.30	47.01	46.86	46.85	9.00	2.28%	5201	45.45	0.20	45.444	1.40	
	3430 UPLANDS RD	47.620	16.936		1.40	0.30	45.92	45.75	45.75	30.70	0.50%	5187	42.24	0.20	42.291	3.46	
	UPPER TERR																
P	3205 UPPER TERR	37.063	15.500	9.850	2.40	0.30	34.36	34.21	34.01	11.00	2.49%	5282	34.58	0.20	34.510	-0.50	
	3210 UPPER TERR	40.270	12.200	10.450	2.70	0.30	37.27	37.15	36.94	34.00	1.83%	5288	35.25	0.20	34.830	2.11	
P	3215 UPPER TERR	35.514	27.700	15.600	2.70	0.30	32.51	32.24	31.93	14.00	3.94%	7016	32.92	0.20	32.568	-0.64	
	3230 UPPER TERR	40.967	22.965	15.705	2.70	0.30	37.97	37.74	37.42	27.00	2.49%	5282	34.58	0.20	34.112	3.31	
	3250 UPPER TERR	40.346	26.431	23.868	1.00	0.30	39.05	38.78	38.30	70.00	4.31%	5254	36.78	0.20	33.965	4.34	
	3270 UPPER TERR	41.862	20.458	12.058	2.20	0.30	39.36	39.16	38.92	26.00	4.31%	5254	36.78	0.20	35.862	3.05	
	3290 UPPER TERR	42.861	19.193	9.799	2.40	0.30	40.16	39.97	39.77	59.00	4.99%	5236	40.20	0.20	37.449	2.32	
	3320 UPPER TERR	43.607	16.066	9.898	1.20	0.30	42.11	41.95	41.75	10.00	4.99%	5236	40.20	0.20	39.897	1.85	no basmt data (assume 2.4)
	3350 UPPER TERR	44.907	10.893	11.761	2.40	0.30	42.21	42.10	41.86	89.00	1.39%	5208	41.80	0.20	40.768	1.10	
	3380 UPPER TERR	47.260	12.883	13.195	2.60	0.30	44.36	44.23	43.97	47.00	1.39%	5208	41.80	0.20	41.351	2.62	
	3400 UPPER TERR	47.527	15.171	6.071	2.40	0.30	44.83	44.68	44.55	46.50	1.39%	5208	41.80	0.20	41.358	3.20	
	3440 UPPER TERR	46.753	17.159	13.154	3.00	0.30	43.45	43.28	43.02	69.00	0.50%	5173	42.61	0.20	42.465	0.55	
	3450 UPPER TERR	48.472	26.162	14.056	2.40	0.30	45.77	45.51	45.23	46.00	0.50%	5173	42.61	0.20	42.580	2.65	
	3460 UPPER TERR	47.855	16.648	14.728	2.40	0.30	45.16	44.99	44.69	5.00	0.50%	5173	42.61	0.20	42.785	1.91	
	3470 UPPER TERR	47.142	26.470	11.909	2.70	0.30	44.14	43.88	43.64	13.00	0.50%	5162	42.86	0.20	42.999	0.64	
P	3480 UPPER TERR	46.658	30.237	7.357	2.70	0.30	43.66	43.36	43.21	55.00	0.50%	5138	43.30	0.20	43.225	-0.02	
	3490 UPPER TERR	47.442	13.483	10.051	2.30	0.30	44.84	44.71	44.51	5.00	0.50%	5138	43.30	0.20	43.475	1.03	
	3500 UPPER TERR	47.766	20.395	3.667	0.90	0.30	46.57	46.36	46.29	36.00	1.90%	UPP1	45.55	0.20	45.065	1.22	
	3520 UPPER TERR	48.735	22.857	4.117	1.60	0.30	46.84	46.61	46.52	71.00	1.90%	UPP1	45.55	0.20	44.399	2.12	
P	3525 UPPER TERR	44.660	30.000	8.000	2.40	0.30	41.96	41.66	41.50	57.00	1.90%	UPP1	45.55	0.20	44.666	-3.17	no basmt data (assume 2.4)
P	3535 UPPER TERR	46.800	25.000	11.000	2.40	0.30	44.10	43.85	43.63	19.00	1.90%	UPP1	45.55	0.20	45.389	-1.76	no basmt data (assume 2.4)
	VALDEZ PL																
	3000 VALDEZ PL	13.667	30.118	28.000	2.00	0.30	11.37	11.07	10.51	2.00	1.50%	VAL1	5.01	0.25	5.228	5.28	
	3015 VALDEZ PL	12.357	28.920	28.000	0.50	0.30	11.56	11.27	10.71	2.00	1.50%	VAL1	5.01	0.25	5.228	5.48	
	3020 VALDEZ PL	9.624	45.000	7.000	2.40	0.30	6.92	6.47	6.33	0.00	1.50%	VAL1	5.01	0.25	5.258	1.08	Assumed BFE
	3046 VALDEZ PL	9.102	12.000	7.000	2.40	0.30	6.40	6.28	6.14	9.00	1.50%	VAL1	5.01	0.25	5.123	1.02	no basmt data (assume 2.4)
	3055 VALDEZ PL	12.433	20.000	6.000	0.90	0.30	11.23	11.03	10.91	18.00	1.50%	VAL1	5.01	0.25	4.988	5.92	
	WEALD RD																
	3110 WEALD RD	35.206	19.761	10.783	2.40	0.30	32.51	32.31	32.09	52.00	3.63%	5327	32.11	0.20	30.417	1.68	
	3125 WEALD RD	32.940	31.540	9.493	2.40	0.30	30.24	29.92	29.73	21.00	#N/A	5359	#N/A	#N/A	#N/A	#N/A	Tie to ex. separated main
	3130 WEALD RD	35.894	15.077	11.346	2.50	0.30	33.09	32.94	32.72	13.00	3.63%	5327	32.11	0.20	31.834	0.88	
P	3135 WEALD RD	32.477	36.954	9.896	1.20	0.30	30.98	30.61	30.41	16.00	3.63%	5327	32.11	0.20	31.725	-1.32	
P	3145 WEALD RD	35.054	15.845	5.616	2.50	0.30	32.25	32.10	31.98	43.00	2.79%	6505	33.92	0.20	32.921	-0.94	
	3160 WEALD RD	36.854	14.831	14.493	0.00	0.30	36.55	36.41	36.12	43.00	2.79%	6505	33.92	0.20	32.921	3.19	
P	3165 WEALD RD	36.232	14.538	3.237	2.40	0.30	33.53	33.39	33.32	21.00	2.79%	6505	33.92	0.20	33.534	-0.21	
P	3185 WEALD RD	36.635	31.684	3.139	2.40	0.30	33.94	33.62	33.56	3.00	2.79%	6505	33.92	0.20	34.036	-0.48	
	3220 WEALD RD	46.134	29.384	9.246	3.00	0.30	42.83	42.54	42.36	45.00	3.10%	5259	41.98	0.20	40.789	1.57	
P	3235 WEALD RD	44.641	30.584	5.345	3.00	0.30	41.34	41.04	40.93	32.00	3.10%	5259	41.98	0.20	41.192	-0.26	
	3250 WEALD RD	46.243	24.509	8.439	2.40	0.30	43.54	43.30	43.13	13.00	3.10%	5259	41.98	0.20	41.780	1.35	
	3280 WEALD RD	46.376	19.147	8.358	2.70	0.30	43.38	43.18	43.02	72.00	0.77%	5244	42.69	0.20	42.330	0.69	
P	3285 WEALD RD	44.639	22.601	6.678	2.40	0.30	41.94	41.71	41.58	68.00	0.77%	5244	42.69	0.20	42.361	-0.78	
P	3305 WEALD RD	44.799	48.380	8.450	3.00	0.30	41.50	41.02	40.85	30.00	0.77%	5244	42.69	0.20	42.655	-1.81	
	3320 WEALD RD	46.894	18.431	6.909	2.40	0.30	44.19	44.01	43.87	32.00	0.77%	5244	42.69	0.20	42.640	1.23	
P	3335 WEALD RD	45.635	9.300	6.500	2.40	0.30	42.94	42.84	42.71	45.00	1.68%	5227	43.60	0.20	43.043	-0.33	
	3350 WEALD RD	47.007	18.524	8.901	2.50	0.30	44.21	44.02	43.84	4.00	0.77%	5244	42.69	0.20	42.856	0.99	
P	3355 WEALD RD	46.073	15.977	8.960	3.00	0.30	42.77	42.61	42.43	29.00	1.68%	5227	43.60	0.20	43.312	-0.88	
	3375 WEALD RD	47.616	26.224	6.632	2.50	0.30	44.82	44.55	44.42	1.00	1.68%	5227	43.60	0.20	43.783	0.64	
P	3395 WEALD RD	48.809	12.037	8.153	3.00	0.30	45.51	45.39	45.23	50.00	0.48%	5220	45.83	0.20	45.786	-0.56	

Humber Catchment
Option 5 - New Sanitary
Gravity LPS

Pump Required	Street and Address	Floor Elevation (Polaris Survey)	Distance from Entrance to PL	Distance From PL to Main	House file assumed Main Entrance Distance to Lower	Slab to inv (assumed) m	Calculated Service Elevation at House (SP)	Calculated Service Elevation at Property Line @ 1% (IC)	Calculated Service Elevation at Main @ 2% (MC)	Distance from Upstream Manhole	Grade from Upstream Manhole	Upstream Manhole	Invert of Upstream Manhole	Diameter of Main	Obvert of Main	Difference (+) Gravity (-) Pump	Comments
		Elev. (m)	Dist. (m)	Dist. (m)	Depth (m)	Depth (m)	Elev. (m)	Elev. (m)	Elev. (m)	Dist. (m)	Grade (%)	MH #	Elev. (m)	Dia. (m)	Elev. (m)	(m)	
	BEACH DR																
	3190 BEACH DR	7.870	20.000	12.000	1.10	0.60	6.17	5.97	5.73	25.00	0.50%	5328	4.45	0.20	4.528	1.20	
	3200 BEACH DR	8.010	25.000	5.000	1.80	0.60	5.61	5.36	5.26	45.00	0.50%	5328	4.45	0.20	4.428	0.83	
	3210 BEACH DR	7.690	25.000	10.000	2.40	0.60	4.69	4.44	4.24	45.00	0.52%	5313	4.09	0.20	4.052	0.19	
	3220 BEACH DR	9.270	30.000	10.000	2.50	0.60	6.17	5.87	5.67	88.00	0.52%	5313	4.09	0.20	3.828	1.84	
E	3225 BEACH DR	6.020	40.000	13.000	2.90	0.60	2.52	2.12	1.86	10.00	0.52%	5313	4.09	0.20	4.235	-2.37	
	3230 BEACH DR	7.020	25.000	12.000	2.40	0.60	4.02	3.77	3.53	25.00	1.31%	5286	3.59	0.20	3.465	0.06	
P	3235 BEACH DR	7.530	35.000	10.000	2.70	0.60	4.23	3.88	3.68	51.00	0.52%	5313	4.09	0.20	4.021	-0.34	
	3240 BEACH DR	6.070	20.000	10.000	1.40	0.60	4.07	3.87	3.67	69.00	1.31%	5286	3.59	0.20	2.887	0.78	
P	3245 BEACH DR	6.720	40.000	10.000	2.30	0.60	3.82	3.42	3.22	2.00	1.31%	5286	3.59	0.20	3.768	-0.55	
	3250 BEACH DR	5.300	25.000	11.000	1.00	0.60	3.70	3.45	3.23	33.00	0.61%	5266	2.50	0.20	2.500	0.73	
	3260 BEACH DR	6.360	25.000	10.000	2.40	0.60	3.36	3.11	2.91	75.00	0.61%	5266	2.50	0.20	2.245	0.66	
P	3265 BEACH DR	6.500	50.000	10.000	2.70	0.60	3.20	2.70	2.50	45.00	1.31%	5286	3.59	0.20	3.203	-0.70	
P	3270 BEACH DR	5.070	25.000	10.000	2.40	0.60	2.07	1.82	1.62	65.00	0.50%	5223	2.32	0.30	2.294	-0.67	
	3275 BEACH DR	5.690	45.000	10.000	1.70	0.60	3.39	2.94	2.74	9.00	0.61%	5266	2.50	0.20	2.645	0.09	
	3280 BEACH DR	4.710	20.000	11.000	0.00	0.60	4.11	3.91	3.69	5.00	0.50%	5223	2.32	0.30	2.594	1.10	
E	3285 BEACH DR	6.040	60.000	10.000	3.00	0.60	2.44	1.84	1.64	2.00	0.40%	5243	1.59	0.38	1.957	-0.32	Must lower end of line to get lower
P	3290 BEACH DR	4.820	15.000	10.000	2.70	0.60	1.52	1.37	1.17	38.00	0.50%	5210	2.76	0.30	2.870	-1.70	
	3295 BEACH DR	4.450	15.000	8.000	1.40	0.60	2.45	2.30	2.14	7.00	0.40%	5243	1.59	0.38	1.937	0.20	
	3340 BEACH DR	6.270	25.000	12.000	1.00	0.60	4.67	4.42	4.18	32.00	1.29%	5197	4.25	0.25	4.082	0.10	
E	3355 BEACH DR	6.750	40.000	8.000	3.40	0.60	2.75	2.35	2.19	98.00	4.33%	5181	9.53	0.25	5.536	-3.35	
	3360 BEACH DR	10.970	45.000	12.000	2.60	0.60	7.77	7.32	7.08	105.00	4.33%	5181	9.53	0.25	5.233	1.85	
	3380 BEACH DR	11.250	20.000	12.000	1.20	0.60	9.45	9.25	9.01	62.00	4.33%	5181	9.53	0.25	7.095	1.92	
	*3385 BEACH DR	9.200	35.000	8.000	0.00	0.60	8.60	8.25	8.09	62.00	4.33%	5181	9.53	0.25	7.095	1.00	Parking Lot
	3390 BEACH DR	13.090	25.000	8.000	2.40	0.60	10.09	9.84	9.68	22.00	4.33%	5181	9.53	0.25	8.827	0.85	
	3420 BEACH DR	17.350	30.000	10.000	2.60	0.60	14.15	13.85	13.65	64.00	5.14%	5167	15.42	0.20	12.326	1.32	
P	3425 BEACH DR	13.070	35.000	10.000	3.00	0.60	9.47	9.12	8.92	74.00	5.14%	5167	15.42	0.20	11.811	-2.89	
P	3445 BEACH DR	15.410	39.000	9.000	3.20	0.60	11.61	11.22	11.04	30.00	5.14%	5167	15.42	0.20	14.075	-3.03	
	3448 BEACH DR	20.010	40.000	12.000	2.70	0.60	16.71	16.31	16.07	16.00	5.14%	5167	15.42	0.20	14.795	1.28	
	3460 BEACH DR	22.200	20.000	12.000	2.60	0.60	19.00	18.80	18.56	81.00	5.15%	5145	21.04	0.20	17.065	1.49	
P	3465 BEACH DR	17.590	43.000	7.000	2.60	0.60	14.39	13.96	13.82	90.00	5.15%	5145	21.04	0.20	16.602	-2.78	
P	3475 BEACH DR	18.980	35.000	7.000	2.40	0.60	15.98	15.63	15.49	56.00	5.15%	5145	21.04	0.20	18.353	-2.86	
	3490 BEACH DR	25.400	20.000	12.000	1.00	0.60	23.80	23.60	23.36	17.00	5.15%	5145	21.04	0.20	20.361	3.00	
	3498 BEACH DR	28.790	25.000	15.000	2.60	0.60	25.59	25.34	25.04	64.00	5.17%	5139	25.18	0.20	22.068	2.97	
P	3515 BEACH DR	18.590	56.000	14.000	0.61	0.60	17.38	16.82	16.54	7.00	5.15%	5145	21.04	0.20	20.876	-4.34	
P	3525 BEACH DR	22.530	38.000	12.000	2.40	0.60	19.53	19.15	18.91	70.00	3.80%	5126	25.71	0.20	23.255	-4.35	
E	3535 BEACH DR	26.280	29.000	14.000	2.70	0.60	22.98	22.69	22.41	29.00	3.80%	5126	25.71	0.20	24.811	-2.40	
	3550 BEACH DR	41.730	30.000	15.000	4.50	0.60	36.63	36.33	36.03	57.00	1.84%	5118	27.67	0.20	26.818	9.21	
E	3555 BEACH DR	28.050	17.000	14.000	2.70	0.60	24.75	24.58	24.30	81.00	1.84%	5118	27.67	0.20	26.377	-2.08	
P	3565 BEACH DR	28.219	21.000	10.000	2.70	0.60	24.92	24.71	24.51	46.00	1.84%	5118	27.67	0.20	27.020	-2.51	
	3570 BEACH DR	37.860	25.000	15.000	1.50	0.60	35.76	35.51	35.21	14.00	1.84%	5118	27.67	0.20	27.608	7.60	
	3572 BEACH DR	37.270	35.000	15.000	1.20	0.60	35.47	35.12	34.82	91.00	1.20%	5107	28.93	0.20	28.045	6.77	
P	3575 BEACH DR	28.870	19.000	9.000	2.40	0.60	25.87	25.68	25.50	84.00	1.20%	5107	28.93	0.20	28.129	-2.63	
P	3585 BEACH DR	29.000	22.000	9.000	3.00	0.60	25.40	25.18	25.00	36.00	1.20%	5107	28.93	0.20	28.703	-3.70	
P	3595 BEACH DR	29.500	37.000	9.000	2.40	0.60	26.50	26.13	25.95	1.00	0.80%	5081	29.90	0.20	30.093	-4.14	
P	3655 BEACH DR	30.000	28.000	9.000	2.70	0.60	26.70	26.42	26.24	45.00	0.80%	5081	29.90	0.20	29.741	-3.50	
P	3695 BEACH DR	31.000	20.000	9.000	3.80	0.60	26.60	26.40	26.22	100.00	0.80%	5081	29.90	0.20	29.301	-3.08	
P	2710 HIBBONS CL	23.000	25.000	110.000	2.40	0.60	20.00	19.75	17.55	0.00	0.80%	5081	29.90	0.20	30.101	-12.55	

Humber Catchment
Option 5 - New Sanitary
Gravity LPS

Pump Required	Street and Address	Floor Elevation (Polaris Survey)	Distance from Entrance to PL	Distance From PL to Main	House file assumed Main Entrance Distance to Lower	Slab to inv (assumed) m	Calculated Service Elevation at House (SP)	Calculated Service Elevation at Property Line @ 1% (IC)	Calculated Service Elevation at Main @ 2% (MC)	Distance from Upstream Manhole	Grade from Upstream Manhole	Upstream Manhole	Invert of Upstream Manhole	Diameter of Main	Obvert of Main	Difference (+) Gravity (-) Pump	Comments
		Elev. (m)	Dist. (m)	Dist. (m)	Depth (m)	Depth (m)	Elev. (m)	Elev. (m)	Elev. (m)	Dist. (m)	Grade (%)	MH #	Elev. (m)	Dia. (m)	Elev. (m)	(m)	
	CADBORO BAY RD																
	3611 CADBORO BAY RD	41.560	30.000	17.000	2.70	0.60	38.26	37.96	37.62	61.00	1.20%	5107	28.93	0.20	28.404	9.22	
	3615 CADBORO BAY RD	41.330	30.000	17.000	2.70	0.60	38.03	37.73	37.39	22.00	1.20%	5107	28.93	0.20	28.870	8.52	
	EXETER RD																
	3110 EXETER RD	15.050	40.000	10.000	1.50	0.60	12.95	12.55	12.35	113.00	1.44%	6584	7.70	0.20	6.275	6.07	
	3130 EXETER RD	15.000	30.000	10.000	2.40	0.60	12.00	11.70	11.50	84.00	1.44%	6584	7.70	0.20	6.693	4.81	no hse or bsmt data (assume 2.4)
P	3145 EXETER RD	8.760	20.000	5.000	1.20	0.60	6.96	6.76	6.66	55.00	1.44%	6584	7.70	0.20	7.110	-0.45	
	3160 EXETER RD	12.110	20.000	14.000	3.00	0.60	8.51	8.31	8.03	40.00	1.44%	6584	7.70	0.20	7.326	0.70	
	3170 EXETER RD	11.570	15.000	12.000	2.40	0.60	8.57	8.42	8.18	16.00	1.44%	6584	7.70	0.20	7.672	0.51	no bsmt data (assume 2.4)
P	3175 EXETER RD	9.800	25.000	5.000	1.70	0.60	7.50	7.25	7.15	13.00	1.44%	6584	7.70	0.20	7.715	-0.56	
	3190 EXETER RD	13.040	35.000	15.000	1.20	0.60	11.24	10.89	10.59	2.00	1.44%	6584	7.70	0.20	7.873	2.72	
P	3195 EXETER RD	10.230	25.000	10.000	2.40	0.60	7.23	6.98	6.78	2.00	1.44%	6584	7.70	0.20	7.873	-1.09	
	3200 EXETER RD	11.250	25.000	5.000	1.80	0.60	8.85	8.60	8.50	0.00	2.47%	7021	7.03	0.20	7.230	1.27	
P	3205 EXETER RD	10.030	15.000	15.000	2.40	0.60	7.03	6.88	6.58	5.00	2.47%	7021	7.03	0.20	7.106	-0.53	
	3220 EXETER RD	12.340	20.000	5.000	2.40	0.60	9.34	9.14	9.04	18.00	2.47%	7021	7.03	0.20	6.785	2.26	
P	3225 EXETER RD	9.320	20.000	10.000	2.60	0.60	6.12	5.92	5.72	24.00	2.47%	7021	7.03	0.20	6.636	-0.92	
P	3235 EXETER RD	8.520	15.000	8.000	2.40	0.60	5.52	5.37	5.21	56.00	2.47%	7021	7.03	0.20	5.844	-0.63	
	3240 EXETER RD	12.000	20.000	7.000	2.40	0.60	9.00	8.80	8.66	50.00	2.47%	7021	7.03	0.20	5.993	2.67	no hse or bsmt data (assume 2.4)
P	3245 EXETER RD	6.950	15.000	5.000	2.30	0.60	4.05	3.90	3.80	94.00	2.47%	7021	7.03	0.20	4.904	-1.10	
	3250 EXETER RD	11.520	15.000	12.000	1.40	0.60	9.52	9.37	9.13	78.00	2.47%	7021	7.03	0.20	5.300	3.83	no bsmt data (assume 2.4)
	3260 EXETER RD	9.350	15.000	12.000	1.30	0.60	7.45	7.30	7.06	107.00	2.47%	7021	7.03	0.20	4.582	2.48	
	3275 EXETER RD	6.210	15.000	5.000	1.10	0.60	4.51	4.36	4.26	126.00	2.47%	7021	7.03	0.20	4.112	0.15	
	3280 EXETER RD	8.310	15.000	12.000	2.40	0.60	5.31	5.16	4.92	1.00	0.45%	5246	3.50	0.20	3.695	1.22	
P	3285 EXETER RD	5.200	20.000	5.000	1.10	0.60	3.50	3.30	3.20	26.00	0.45%	5246	3.50	0.20	3.583	-0.38	
P	3290 EXETER RD	6.840	20.000	12.000	2.50	0.60	3.74	3.54	3.30	23.00	0.45%	5246	3.50	0.20	3.596	-0.30	
	3295 EXETER RD	6.980	15.000	5.000	2.70	0.60	3.68	3.53	3.43	62.00	0.45%	5246	3.50	0.20	3.420	0.01	
	3300 EXETER RD	6.780	20.000	13.000	2.20	0.60	3.98	3.78	3.52	61.00	0.45%	5246	3.50	0.20	3.425	0.10	
P	3320 EXETER RD	5.500	20.000	10.000	2.50	0.60	2.40	2.20	2.00	108.00	0.45%	5246	3.50	0.20	3.212	-1.21	
	HUMBER RD																
P	3120 HUMBER RD	4.880	55.000	15.000	3.00	0.60	1.28	0.73	0.43	41.00	0.40%	5243	1.59	0.38	1.801	-1.37	
	3140 HUMBER RD	5.540	30.000	15.000	2.40	0.60	2.54	2.24	1.94	8.00	0.39%	5239	1.22	0.38	1.559	0.38	
P	3145 HUMBER RD	5.050	35.000	7.000	2.70	0.60	1.75	1.40	1.26	61.00	0.40%	5243	1.59	0.38	1.721	-0.46	Must lower end of line to get lower
E	3160 HUMBER RD	3.900	150.000	15.000	0.00	0.60	3.30	1.80	1.50	30.00	0.39%	5239	1.22	0.38	1.474	0.03	no bsmt data (assume 2.4)
E	3180 HUMBER RD	3.510	80.000	15.000	1.50	0.60	1.41	0.61	0.31	30.00	0.39%	5239	1.22	0.38	1.474	-1.16	
P	3190 HUMBER RD	4.030	25.000	20.000	1.80	0.60	1.63	1.38	0.98	30.00	0.39%	5239	1.22	0.38	1.474	-0.49	Last MH @ outfall
	3195 HUMBER RD	5.560	40.000	10.000	2.70	0.60	2.26	1.86	1.66	26.00	0.39%	5239	1.22	0.38	1.490	0.17	Ex. pump, not req'd
	LANSDOWNE RD																
	2980 LANSDOWNE RD	10.810	20.000	20.000	2.40	0.60	7.81	7.61	7.21	1.00	3.52%	5263	6.15	0.20	6.315	0.90	
	3000 LANSDOWNE RD	9.950	20.000	15.000	2.40	0.60	6.95	6.75	6.45	26.00	3.52%	5263	6.15	0.20	5.435	1.02	
	3005 LANSDOWNE RD	9.160	29.000	8.000	2.70	0.60	5.86	5.57	5.41	42.00	3.52%	5263	6.15	0.20	4.872	0.54	
	3020 LANSDOWNE RD	8.660	20.000	12.000	2.70	0.60	5.36	5.16	4.92	32.00	5.00%	5344	5.20	0.20	3.803	1.12	
	3035 LANSDOWNE RD	7.350	20.000	7.000	1.00	0.60	5.75	5.55	5.41	11.00	5.00%	5344	5.20	0.20	4.853	0.56	
	3050 LANSDOWNE RD	8.240	25.000	10.000	2.40	0.60	5.24	4.99	4.79	9.00	0.50%	5328	4.45	0.20	4.608	0.18	

Humber Catchment
Option 5 - New Sanitary
Gravity LPS

Pump Required	Street and Address	Floor Elevation (Polaris Survey)	Distance from Entrance to PL	Distance From PL to Main	House file assumed Main Entrance Distance to Lower	Slab to inv (assumed) m	Calculated Service Elevation at House (SP)	Calculated Service Elevation at Property Line @ 1% (IC)	Calculated Service Elevation at Main @ 2% (MC)	Distance from Upstream Manhole	Grade from Upstream Manhole	Upstream Manhole	Invert of Upstream Manhole	Diameter of Main	Obvert of Main	Difference (+) Gravity (-) Pump	Comments
		Elev. (m)	Dist. (m)	Dist. (m)	Depth (m)	Depth (m)	Elev. (m)	Elev. (m)	Elev. (m)	Dist. (m)	Grade (%)	MH #	Elev. (m)	Dia. (m)	Elev. (m)	(m)	
	MIDLAND RD																
	3215 MIDLAND RD	32.070	30.000	12.000	2.50	0.60	28.97	28.67	28.43	1.00	0.50%	5264	27.98	0.20	28.172	0.26	
	3235 MIDLAND RD	31.910	35.000	12.000	2.60	0.60	28.71	28.36	28.12	14.00	0.50%	5264	27.98	0.20	28.107	0.01	
P	3265 MIDLAND RD	29.860	30.000	14.000	2.70	0.60	26.56	26.26	25.98	64.00	0.50%	5264	27.98	0.20	27.855	-1.88	
E	3295 MIDLAND RD	30.320	30.000	10.000	1.50	0.60	28.22	27.92	27.72	105.00	0.50%	5264	27.98	0.20	27.649	0.07	Ex. pump, not req'd
P	3315 MIDLAND RD	29.700	25.000	10.000	2.60	0.60	26.50	26.25	26.05	40.00	0.50%	5241	27.39	0.20	27.392	-1.34	
E	3335 MIDLAND RD	26.150	35.000	10.000	3.00	0.60	22.55	22.20	22.00	91.00	0.50%	5241	27.39	0.20	27.139	-5.14	
P	3355 MIDLAND RD	26.000	30.000	10.000	2.60	0.60	22.80	22.50	22.30	18.00	0.51%	5211	26.75	0.20	26.859	-4.56	no house elev surveyed
P	3375 MIDLAND RD	28.040	35.000	10.000	2.60	0.60	24.84	24.49	24.29	54.00	0.51%	5211	26.75	0.20	26.677	-2.39	
P	3405 MIDLAND RD	27.700	35.000	10.000	3.00	0.60	24.10	23.75	23.55	15.00	0.49%	6861	26.21	0.20	26.337	-2.79	
P	3435 MIDLAND RD	28.680	30.000	10.000	2.60	0.60	25.48	25.18	24.98	49.00	0.49%	6861	26.21	0.20	26.171	-1.19	
	3465 MIDLAND RD	30.860	25.000	10.000	2.40	0.60	27.86	27.61	27.41	94.00	0.49%	6861	26.21	0.20	25.952	1.46	
	3530 MIDLAND RD	38.840	40.000	27.000	3.00	0.60	35.24	34.84	34.30	2.00	5.17%	5139	25.18	0.20	25.272	9.03	
	NORFOLK RD																
	3175 NORFOLK RD	21.890	20.000	15.000	2.60	0.60	18.69	18.49	18.19	2.00	1.01%	5306	18.00	0.20	18.180	0.01	
	3180 NORFOLK RD	22.100	20.000	15.000	2.40	0.60	19.10	18.90	18.60	2.00	1.01%	5306	18.00	0.20	18.180	0.42	
	3185 NORFOLK RD	20.400	20.000	5.000	1.10	0.60	18.70	18.50	18.40	15.00	1.01%	5306	18.00	0.20	18.048	0.35	
	3190 NORFOLK RD	21.690	20.000	12.000	1.10	0.60	19.99	19.79	19.55	19.00	1.01%	5306	18.00	0.20	18.008	1.54	
P	3195 NORFOLK RD	20.000	25.000	5.000	2.70	0.60	16.70	16.45	16.35	51.00	1.01%	5306	18.00	0.20	17.684	-1.33	
	3200 NORFOLK RD	23.900	25.000	10.000	2.40	0.60	20.90	20.65	20.45	3.00	1.01%	nor1	17.37	0.20	17.540	2.91	
P	3215 NORFOLK RD	18.330	30.000	5.000	1.10	0.60	16.63	16.33	16.23	23.00	1.01%	nor1	17.37	0.20	17.338	-1.11	
	3220 NORFOLK RD	24.940	25.000	10.000	2.60	0.60	21.74	21.49	21.29	32.00	1.01%	nor1	17.37	0.20	17.247	4.04	
P	3225 NORFOLK RD	18.240	25.000	8.000	2.50	0.60	15.14	14.89	14.73	18.00	1.13%	7025	16.88	0.20	16.876	-2.15	
	3240 NORFOLK RD	23.890	30.000	10.000	1.90	0.60	21.39	21.09	20.89	30.00	1.13%	7025	16.88	0.20	16.740	4.15	
P	3245 NORFOLK RD	18.320	15.000	10.000	2.80	0.60	14.92	14.77	14.57	51.00	1.13%	7025	16.88	0.20	16.502	-1.93	
	3250 NORFOLK RD	24.050	30.000	10.000	2.40	0.60	21.05	20.75	20.55	75.00	1.13%	7025	16.88	0.20	16.230	4.32	
	3255 NORFOLK RD	20.010	20.000	10.000	2.70	0.60	16.71	16.51	16.31	81.00	1.13%	7025	16.88	0.20	16.161	0.15	
	3270 NORFOLK RD	20.850	20.000	10.000	1.00	0.60	19.25	19.05	18.85	105.00	1.13%	7025	16.88	0.20	15.889	2.96	
P	3275 NORFOLK RD	17.320	25.000	5.000	2.30	0.60	14.42	14.17	14.07	120.00	1.13%	7025	16.88	0.20	15.719	-1.65	
	3285 NORFOLK RD	18.980	15.000	8.000	2.70	0.60	15.68	15.53	15.37	14.00	1.53%	5251	15.35	0.20	15.335	0.03	
	3290 NORFOLK RD	19.430	20.000	10.000	1.50	0.60	17.33	17.13	16.93	15.00	1.53%	5251	15.35	0.20	15.320	1.61	
P	3295 NORFOLK RD	16.770	20.000	10.000	2.70	0.60	13.47	13.27	13.07	45.00	1.53%	5251	15.35	0.20	14.860	-1.79	
	3300 NORFOLK RD	19.330	20.000	5.000	0.90	0.60	17.83	17.63	17.53	58.00	1.53%	5251	15.35	0.20	14.660	2.87	
P	3315 NORFOLK RD	16.170	25.000	7.000	2.70	0.60	12.87	12.62	12.48	72.00	1.53%	5251	15.35	0.20	14.445	-1.97	
P	3335 NORFOLK RD	15.890	20.000	5.000	2.50	0.60	12.79	12.59	12.49	20.00	0.50%	5229	14.09	0.20	14.191	-1.70	
P	3355 NORFOLK RD	15.400	20.000	10.000	1.30	0.60	13.50	13.30	13.10	57.00	0.50%	5229	14.09	0.20	14.007	-0.91	

Humber Catchment
Option 5 - New Sanitary
Gravity LPS

Pump Required	Street and Address	Floor Elevation (Polaris Survey)	Distance from Entrance to PL	Distance From PL to Main	House file assumed Main Entrance Distance to Lower	Slab to inv (assumed) m	Calculated Service Elevation at House (SP)	Calculated Service Elevation at Property Line @ 1% (IC)	Calculated Service Elevation at Main @ 2% (MC)	Distance from Upstream Manhole	Grade from Upstream Manhole	Upstream Manhole	Invert of Upstream Manhole	Diameter of Main	Obvert of Main	Difference (+) Gravity (-) Pump	Comments
		Elev. (m)	Dist. (m)	Dist. (m)	Depth (m)	Depth (m)	Elev. (m)	Elev. (m)	Elev. (m)	Dist. (m)	Grade (%)	MH #	Elev. (m)	Dia. (m)	Elev. (m)	(m)	
	RIPON RD																
	3210 RIPON RD	32.410	30.000	11.000	2.40	0.60	29.41	29.11	28.89	2.00	4.48%	rip1	28.19	0.20	28.304	0.59	
P	3225 RIPON RD	29.540	27.000	11.000	2.40	0.60	26.54	26.27	26.05	17.00	4.48%	rip1	28.19	0.20	27.632	-1.58	
	3230 RIPON RD	31.650	22.000	10.000	2.70	0.60	28.35	28.13	27.93	13.00	4.48%	rip1	28.19	0.20	27.812	0.12	
P	3245 RIPON RD	28.250	25.000	10.000	2.40	0.60	25.25	25.00	24.80	7.00	6.01%	5265	25.69	0.20	25.469	-0.67	
	3250 RIPON RD	30.610	30.000	15.000	2.60	0.60	27.41	27.11	26.81	5.00	6.01%	5265	25.69	0.20	25.590	1.22	
P	3275 RIPON RD	24.910	25.000	12.000	2.70	0.60	21.61	21.36	21.12	52.00	6.01%	5265	25.69	0.20	22.766	-1.65	
	3280 RIPON RD	25.950	35.000	10.000	1.50	0.60	23.85	23.50	23.30	46.00	6.01%	5265	25.69	0.20	23.126	0.17	
P	3295 RIPON RD	23.500	20.000	10.000	2.70	0.60	20.20	20.00	19.80	80.00	6.01%	5265	25.69	0.20	21.083	-1.28	
	3300 RIPON RD	25.930	30.000	10.000	2.70	0.60	22.63	22.33	22.13	8.00	4.14%	5248	20.71	0.20	20.583	1.55	
P	3315 RIPON RD	21.200	20.000	15.000	2.40	0.60	18.20	18.00	17.70	38.00	4.14%	5248	20.71	0.20	19.340	-1.64	
	3320 RIPON RD	23.270	35.000	10.000	2.60	0.60	20.07	19.72	19.52	60.00	4.14%	5248	20.71	0.20	18.429	1.09	
	3335 RIPON RD	19.330	20.000	12.000	2.60	0.60	16.13	15.93	15.69	44.00	0.45%	6520	13.72	0.20	13.725	1.96	
	3340 RIPON RD	21.190	30.000	12.000	2.60	0.60	17.99	17.69	17.45	114.00	4.14%	5248	20.71	0.20	16.192	1.26	
	3360 RIPON RD	19.790	30.000	15.000	2.50	0.60	16.69	16.39	16.09	12.00	1.49%	5215	13.50	0.20	13.521	2.57	
P	3375 RIPON RD	15.930	20.000	3.000	3.00	0.60	12.33	12.13	12.07	46.00	1.49%	5215	13.50	0.20	13.015	-0.94	
	3380 RIPON RD	18.200	20.000	20.000	2.40	0.60	15.20	15.00	14.60	53.00	1.49%	5215	13.50	0.20	12.910	1.69	
p	3475 RIPON RD	7.670	21.000	75.000	2.70	0.60	4.37	4.16	2.66	0.00	4.33%	5181	9.53	0.25	9.780	-7.12	pump
p	3480 RIPON RD	8.970	20.000	75.000	2.00	0.60	6.37	6.17	4.67	0.00	4.33%	5181	9.53	0.25	9.780	-5.11	pump
	UPPER TERR																
	3275 UPPER TERR	37.080	80.000	8.000	2.70	0.60	33.78	32.98	32.82	29.00	0.50%	5264	27.98	0.20	28.031	4.79	Serviced from Midland
	3295 UPPER TERR	39.130	80.000	6.000	3.00	0.60	35.53	34.73	34.61	70.00	0.50%	5264	27.98	0.20	27.825	6.79	Serviced from Midland
	3325 UPPER TERR	41.460	80.000	10.000	2.48	0.60	38.38	37.58	37.38	5.00	0.50%	5241	27.39	0.20	27.565	9.81	Serviced from Midland
	3375 UPPER TERR	43.550	75.000	12.000	2.70	0.60	40.25	39.50	39.26	50.00	0.50%	5241	27.39	0.20	27.342	11.92	Serviced from Midland
	3385 UPPER TERR	42.390	60.000	12.000	2.60	0.60	39.19	38.59	38.35	95.00	0.50%	5241	27.39	0.20	27.119	11.23	Serviced from Midland
	3393 UPPER TERR	42.210	50.000	12.000	2.80	0.60	38.81	38.31	38.07	18.00	0.51%	5211	26.75	0.20	26.859	11.21	Serviced from Midland
	3435 UPPER TERR	44.500	80.000	12.000	3.00	0.60	40.90	40.10	39.86	66.00	0.51%	5211	26.75	0.20	26.616	13.24	Serviced from Midland
	3455 UPPER TERR	44.030	50.000	18.000	2.40	0.60	41.03	40.53	40.17	31.00	0.49%	6861	26.21	0.20	26.259	13.91	Serviced from Midland
	3475 UPPER TERR	42.850	50.000	10.000	2.40	0.60	39.85	39.35	39.15	76.00	0.49%	6861	26.21	0.20	26.040	13.11	Serviced from Midland (Pumped)
	3485 UPPER TERR	42.810	50.000	30.000	2.40	0.60	39.81	39.31	38.71	2.00	0.52%	5166	25.65	0.20	25.840	12.87	Serviced from Midland
	3495 UPPER TERR	43.460	50.000	22.000	2.40	0.60	40.46	39.96	39.52	45.00	0.52%	5166	25.65	0.20	25.617	13.90	Serviced from Midland
	3505 UPPER TERR	42.510	50.000	16.000	2.50	0.60	39.41	38.91	38.59	63.00	0.52%	5166	25.65	0.20	25.524	13.07	Serviced from Midland
	3515 UPPER TERR	42.320	50.000	14.000	2.10	0.60	39.62	39.12	38.84	2.00	5.17%	5139	25.18	0.20	25.272	13.57	Serviced from Midland
	3565 UPPER TERR	42.340	46.000	21.000	1.90	0.60	39.84	39.38	38.96	93.00	1.84%	5118	27.67	0.20	26.156	12.80	Serviced from Beach

Rutland Catchment
Option 5 - New Sanitary
Gravity LPS

Pump Required	Street and Address	Floor Elevation (Polaris Survey) Elev. (m)	Distance from Entrance to PL Dist. (m)	Distance From PL to Main Dist. (m)	House file assumed Main Entrance Distance to Lower Depth (m)	Slab to inv (assumed) m Depth (m)	Calculated Service Elevation at House (SP) Elev. (m)	Calculated Service Elevation at Property Line @ 1% (IC) Elev. (m)	Calculated Service Elevation at Main @ 2% (MC) Elev. (m)	Distance from Upstream Manhole Dist. (m)	Grade from Upstream Manhole Grade (%)	Upstream Manhole MH #	Invert of Upstream Manhole Elev. (m)	Diameter of Main Dia. (m)	Obvert of Main Elev. (m)	Difference (+) Gravity (-) Pump (m)	Comments
	BEACH DR																
	2970 BEACH DR	12.222	28.354	6.513	1.00	0.60	10.62	10.34	10.21	22.00	0.50%	6581	8.73	0.20	8.818	1.39	
E	2975 BEACH DR	7.727	59.641	21.522	1.70	0.60	5.43	4.83	4.40	0.00	0.50%	6581	8.73	0.20	8.928	-4.53	
	2980 BEACH DR	13.392	16.535	6.301	2.60	0.60	10.19	10.03	9.90	19.00	0.50%	6582	8.45	0.20	8.559	1.34	
E	2985 BEACH DR	7.822	70.770	14.037	3.00	0.60	4.22	3.51	3.23	10.00	0.50%	6581	8.73	0.20	8.878	-5.64	
	2990 BEACH DR	19.264	45.540	4.299	3.00	0.60	15.66	15.21	15.12	51.00	0.50%	6582	8.45	0.20	8.399	6.72	
	2997 BEACH DR	10.952	22.380	13.719	0.00	0.60	10.35	10.13	9.85	13.00	0.50%	6582	8.45	0.20	8.589	1.26	
P	2999 BEACH DR	11.124	25.000	20.000	2.30	0.60	8.22	7.97	7.57	65.00	0.50%	6582	8.45	0.20	8.329	-0.76	
	3000 BEACH DR	12.796	19.411	4.315	2.40	0.60	9.80	9.60	9.52	25.00	2.53%	6446	7.98	0.20	7.543	1.97	
P	3005 BEACH DR	8.230	17.689	17.901	2.70	0.60	4.93	4.75	4.40	56.00	2.53%	6446	7.98	0.20	6.759	-2.36	
P	3023 BEACH DR	8.951	16.486	17.265	3.10	0.60	5.25	5.09	4.74	17.00	1.79%	6445	6.28	0.20	6.179	-1.44	
	3030 BEACH DR	12.942	22.552	2.259	2.70	0.60	9.64	9.42	9.37	3.00	1.79%	6445	6.28	0.20	6.430	2.94	
	3040 BEACH DR	8.976	26.619	5.096	1.20	0.60	7.18	6.91	6.81	46.00	1.79%	6445	6.28	0.20	5.659	1.15	
	3045 BEACH DR	8.141	28.856	12.750	1.50	0.60	6.04	5.75	5.50	56.00	1.79%	6445	6.28	0.20	5.479	0.02	
	3050 BEACH DR	7.647	17.034	15.964	2.30	0.60	4.75	4.58	4.26	1.00	1.80%	5448	3.61	0.20	3.793	0.46	
P	3055 BEACH DR	5.705	15.610	4.618	2.40	0.60	2.71	2.55	2.46	14.00	1.80%	5448	3.61	0.20	3.559	-1.10	
P	3065 BEACH DR	6.072	16.473	4.131	2.60	0.60	2.87	2.71	2.62	42.00	1.80%	5448	3.61	0.20	3.054	-0.43	
P	3100 BEACH DR	6.626	21.357	4.589	2.80	0.60	3.23	3.01	2.92	47.00	2.37%	5416	4.29	0.30	3.474	-0.55	
P	3115 BEACH DR	5.200	25.000	12.000	2.40	0.60	2.20	1.95	1.71	44.00	0.50%	5424	2.08	0.38	2.230	-0.52	No house, assume MFE, BFE
	3120 BEACH DR	6.543	41.957	8.200	0.00	0.60	5.94	5.52	5.36	41.00	0.73%	6531	3.83	0.20	3.731	1.63	
E	3125 BEACH DR	7.308	57.155	13.000	2.60	0.60	4.11	3.54	3.28	49.00	0.73%	6531	3.83	0.20	3.672	-0.40	
P	3140 BEACH DR	7.000	30.000	9.500	2.40	0.60	4.00	3.70	3.51	65.00	1.26%	7030	4.73	0.20	4.112	-0.60	No house
P	3152 BEACH DR	7.472	26.665	8.913	2.90	0.60	3.97	3.71	3.53	29.00	1.26%	7030	4.73	0.20	4.565	-1.04	
P	3155 BEACH DR	5.200	51.000	9.526	3.15	0.60	1.45	0.94	0.75	60.00	1.26%	7030	4.73	0.20	4.175	-3.43	From Design drawings
	3170 BEACH DR	8.908	30.000	11.040	2.30	0.60	6.01	5.71	5.49	3.00	1.26%	7030	4.73	0.20	4.892	0.59	
P	3175 BEACH DR	7.214	55.400	10.632	2.60	0.60	4.01	3.46	3.25	5.00	1.26%	7030	4.73	0.20	4.867	-1.62	
	CADBORO BAY RD																
P	3185 CADBORO BAY RD	56.427	27.030	2.568	2.70	0.60	53.13	52.86	52.81	44.00	#DIV/0!		0.00	0.00	#DIV/0!	#DIV/0!	pump to low pressure main
P	3195 CADBORO BAY RD	55.801	20.213	6.417	2.70	0.60	52.50	52.30	52.17	4.00	4.43%	COT1	53.00	0.20	53.023	-0.85	pump to low pressure main
P	3225 CADBORO BAY RD	56.868	50.500	5.000	2.40	0.60	53.87	53.36	53.26	42.00	#DIV/0!		0.00	0.00	#DIV/0!	#DIV/0!	pump to low pressure main
P	3245 CADBORO BAY RD	56.595	56.000	5.000	1.00	0.60	55.00	54.44	54.34	11.00	#DIV/0!		0.00	0.00	#DIV/0!	#DIV/0!	pump to low pressure main
P	3265 CADBORO BAY RD	57.404	46.000	5.000	2.40	0.60	54.40	53.94	53.84	61.00	#DIV/0!		0.00	0.00	#DIV/0!	#DIV/0!	pump to low pressure main
P	3285 CADBORO BAY RD	58.599	56.000	5.000	2.40	0.60	55.60	55.04	54.94	31.00	#DIV/0!		0.00	0.00	#DIV/0!	#DIV/0!	pump to low pressure main
P	3315 CADBORO BAY RD	58.965	54.000	5.000	2.40	0.60	55.97	55.43	55.33	0.00	#DIV/0!		0.00	0.00	#DIV/0!	#DIV/0!	pump to low pressure main
P	3325 CADBORO BAY RD	59.080	54.000	16.000	2.70	0.60	55.78	55.24	54.92	10.00	#DIV/0!		0.00	0.00	#DIV/0!	#DIV/0!	pump to low pressure main
P	3355 CADBORO BAY RD	58.690	23.831	13.126	1.70	0.60	56.39	56.15	55.89	45.00	#DIV/0!		0.00	0.00	#DIV/0!	#DIV/0!	pump to low pressure main
P	3375 CADBORO BAY RD	59.071	16.092	13.138	2.40	0.60	56.07	55.91	55.65	71.00	#DIV/0!		0.00	0.00	#DIV/0!	#DIV/0!	pump to low pressure main
P	3395 CADBORO BAY RD	59.233	26.744	11.800	2.40	0.60	56.23	55.97	55.73	102.00	#DIV/0!		0.00	0.00	#DIV/0!	#DIV/0!	pump to low pressure main
P	3405 CADBORO BAY RD	57.945	31.828	11.800	2.70	0.60	54.65	54.33	54.09	39.00	#DIV/0!		0.00	0.00	#DIV/0!	#DIV/0!	pump to low pressure main
P	3415 CADBORO BAY RD	57.119	24.500	11.800	2.40	0.60	54.12	53.87	53.64	78.00	#DIV/0!		0.00	0.00	#DIV/0!	#DIV/0!	pump to low pressure main
P	3425 CADBORO BAY RD	55.173	17.800	11.800	2.40	0.60	52.17	52.00	51.76	105.00	#DIV/0!		0.00	0.00	#DIV/0!	#DIV/0!	pump to low pressure main
P	3435 CADBORO BAY RD	56.079	19.700	11.800	1.00	0.60	54.48	54.28	54.05	22.00	#DIV/0!		0.00	0.00	#DIV/0!	#DIV/0!	pump to low pressure main
P	3445 CADBORO BAY RD	55.782	20.100	11.800	1.00	0.60	54.18	53.98	53.75	43.00	#DIV/0!		0.00	0.00	#DIV/0!	#DIV/0!	pump to low pressure main
P	3455 CADBORO BAY RD	55.644	20.400	11.800	2.40	0.60	52.64	52.44	52.20	71.00	#DIV/0!		0.00	0.00	#DIV/0!	#DIV/0!	pump to low pressure main
P	3465 CADBORO BAY RD	55.341	16.500	11.800	2.70	0.60	52.04	51.88	51.64	105.00	#DIV/0!		0.00	0.00	#DIV/0!	#DIV/0!	pump to low pressure main
P	3475 CADBORO BAY RD	53.547	23.200	11.800	2.70	0.60	50.25	50.02	49.78	19.00	#DIV/0!		0.00	0.00	#DIV/0!	#DIV/0!	pump to low pressure main
P	3495 CADBORO BAY RD	51.471	26.000	11.800	2.70	0.60	48.17	47.91	47.68	59.00	#DIV/0!		0.00	0.00	#DIV/0!	#DIV/0!	pump to low pressure main
P	3507 CADBORO BAY RD	49.652	23.000	11.800	2.40	0.60	46.65	46.42	46.19	23.00	#DIV/0!		0.00	0.00	#DIV/0!	#DIV/0!	pump to low pressure main
P	3605 CADBORO BAY RD	47.560	18.700	51.000	2.40	0.60	44.56	44.37	43.35	0.00	1.90%	Upp1	45.55	0.20	45.750	-2.40	no bsmt data (assume 2.4)
	CADBORO BAY RD																
	2440 CARDIGAN RD	55.776	16.272	7.615	2.40	0.60	52.78	52.61	52.46	2.00	3.37%	5200	51.00	0.20	51.133	1.33	
	2455 CARDIGAN RD	55.450	15.971	12.432	2.70	0.60	52.15	51.99	51.74	2.00	3.37%	5200	51.00	0.20	51.133	0.61	
P	2460 CARDIGAN RD	52.939	21.528	6.310	3.50	0.60	48.84	48.62	48.50	27.50	3.37%	5200	51.00	0.20	50.273	-1.78	
	2475 CARDIGAN RD	53.022	11.800	14.087	0.00	0.60	52.42	52.30	52.02	23.30	3.37%	5200	51.00	0.20	50.415	1.61	
	2480 CARDIGAN RD	51.766	13.341	5.923	2.40	0.60	48.77	48.63	48.51	10.00	5.25%	5205	48.42	0.20	48.098	0.42	

Rutland Catchment
Option 5 - New Sanitary
Gravity LPS

Pump Required	Street and Address	Floor Elevation (Polaris Survey) Elev. (m)	Distance from Entrance to PL Dist. (m)	Distance From PL to Main Dist. (m)	House file assumed Main Entrance Distance to Lower Depth (m)	Slab to inv (assumed) m Depth (m)	Calculated Service Elevation at House (SP) Elev. (m)	Calculated Service Elevation at Property Line @ 1% (IC) Elev. (m)	Calculated Service Elevation at Main @ 2% (MC) Elev. (m)	Distance from Upstream Manhole Dist. (m)	Grade from Upstream Manhole Grade (%)	Upstream Manhole MH #	Invert of Upstream Manhole Elev. (m)	Diameter of Main Dia. (m)	Obvert of Main Elev. (m)	Difference (+) Gravity (-) Pump (m)	Comments
	CHILTERN PL																
P	2440 CHILTERN PL	54.544	25.524	5.255	2.40	0.60	51.54	51.29	51.18	28.00	#DIV/0!		0.00	0.00	#DIV/0!	#DIV/0!	pump to low pressure main
P	2450 CHILTERN PL	52.084	28.000	8.000	3.50	0.60	47.98	47.70	47.54	3.00	#DIV/0!		0.00	0.00	#DIV/0!	#DIV/0!	pump to low pressure main
P	2455 CHILTERN PL	54.782	21.600	7.100	2.80	0.60	51.38	51.17	51.02	20.00	#DIV/0!		0.00	0.00	#DIV/0!	#DIV/0!	pump to low pressure main
P	2465 CHILTERN PL	52.369	18.600	6.200	2.50	0.60	49.27	49.08	48.96	3.00	#DIV/0!		0.00	0.00	#DIV/0!	#DIV/0!	pump to low pressure main
	COTSWOLD RD																
	2440 COTSWOLD RD	56.990	19.336	11.850	2.50	0.60	53.89	53.70	53.46	4.00	4.43%	COT1	53.00	0.20	53.023	0.44	
P	2450 COTSWOLD RD	54.654	28.388	10.811	2.60	0.60	51.45	51.17	50.95	29.00	4.43%	COT1	53.00	0.20	51.917	-0.96	
	2455 COTSWOLD RD	53.711	13.410	10.429	0.00	0.60	53.11	52.98	52.77	40.00	4.43%	COT1	53.00	0.20	51.430	1.34	
	2460 COTSWOLD RD	52.898	15.377	8.040	1.20	0.60	51.10	50.94	50.78	12.00	4.89%	5272	50.75	0.20	50.364	0.42	
P	2475 COTSWOLD RD	52.087	13.237	12.531	2.60	0.60	48.89	48.75	48.50	24.00	4.89%	5272	50.75	0.20	49.777	-1.27	
	2500 COTSWOLD RD	48.048	17.042	21.908	2.60	0.60	44.85	44.68	44.24	1.00	5.22%	5293	42.71	0.20	42.858	1.38	
P	2505 COTSWOLD RD	45.942	22.351	20.725	2.50	0.60	42.84	42.62	42.20	3.00	5.22%	5293	42.71	0.20	42.753	-0.55	
P	2515 COTSWOLD RD	44.196	18.274	12.493	2.40	0.60	41.20	41.01	40.76	23.00	5.22%	5293	42.71	0.20	41.709	-0.95	
	2520 COTSWOLD RD	46.737	20.233	12.901	2.10	0.60	44.04	43.83	43.58	9.00	5.22%	5293	42.71	0.20	42.440	1.14	
P	2535 COTSWOLD RD	41.369	23.700	13.200	3.00	0.60	37.77	37.53	37.27	31.00	4.87%	5295	40.42	0.20	39.106	-1.84	
	2540 COTSWOLD RD	45.990	24.106	9.259	2.90	0.60	42.49	42.25	42.06	42.00	5.22%	5293	42.71	0.20	40.716	1.35	
	2555 COTSWOLD RD	39.944	34.468	18.193	2.40	0.60	36.94	36.60	36.24	10.00	2.79%	6505	33.92	0.20	33.841	2.39	
	2560 COTSWOLD RD	44.368	25.307	5.859	1.40	0.60	42.37	42.11	42.00	44.00	4.87%	5295	40.42	0.20	38.472	3.53	
	2580 COTSWOLD RD	41.685	19.191	10.427	2.40	0.60	38.69	38.49	38.28	78.00	4.87%	5295	40.42	0.20	36.815	1.47	
P	2605 COTSWOLD RD	37.251	17.217	15.108	2.60	0.60	34.05	33.88	33.58	6.00	1.83%	5288	35.25	0.20	35.341	-1.76	
	LANSDOWNE RD																
	2420 LANSDOWNE RD	53.699	41.162	10.600	0.61	0.60	52.49	52.08	51.87	3.00	3.52%	5331	48.50	0.20	48.594	3.27	
P	2445 LANSDOWNE RD	51.234	18.101	10.787	3.00	0.60	47.63	47.45	47.24	4.00	3.52%	5331	48.50	0.20	48.559	-1.32	
	2450 LANSDOWNE RD	51.836	22.415	9.384	2.40	0.60	48.84	48.61	48.42	31.00	3.52%	5331	48.50	0.20	47.609	0.82	
	2470 LANSDOWNE RD	50.694	29.660	10.167	2.40	0.60	47.69	47.40	47.19	24.00	5.00%	6478	46.85	0.20	45.848	1.35	
P	2475 LANSDOWNE RD	48.933	16.627	10.378	2.40	0.60	45.93	45.77	45.56	6.00	5.00%	6478	46.85	0.20	46.748	-1.19	
P	2525 LANSDOWNE RD	42.093	20.169	8.583	2.30	0.60	39.19	38.99	38.82	42.00	5.79%	5337	42.33	0.20	40.097	-1.28	From Design drawings
	2530 LANSDOWNE RD	42.779	16.052	38.690	2.60	0.60	39.58	39.42	38.64	12.00	6.23%	6860	39.05	0.20	38.502	0.14	
P	2545 LANSDOWNE RD	39.923	18.949	8.899	2.40	0.60	36.92	36.73	36.56	22.00	6.23%	6860	39.05	0.20	37.879	-1.32	
	2550 LANSDOWNE RD	40.163	15.429	9.944	2.40	0.60	37.16	37.01	36.81	48.00	6.23%	6860	39.05	0.20	36.258	0.55	
P	2555 LANSDOWNE RD	38.045	34.709	10.359	2.70	0.60	34.75	34.40	34.19	52.00	6.23%	6860	39.05	0.20	36.009	-1.82	
	2570 LANSDOWNE RD	37.885	11.948	9.347	2.40	0.60	34.89	34.77	34.58	19.00	5.04%	5351	35.28	0.20	34.522	0.06	
	2575 LANSDOWNE RD	38.800	10.772	10.754	2.40	0.60	35.80	35.69	35.48	21.00	5.04%	5351	35.28	0.20	34.421	1.06	
	2580 LANSDOWNE RD	36.906	18.898	9.349	2.10	0.60	34.21	34.02	33.83	45.00	5.04%	5351	35.28	0.20	33.210	0.62	
P	2595 LANSDOWNE RD	33.516	20.756	10.775	2.60	0.60	30.32	30.11	29.89	82.00	5.04%	5351	35.28	0.20	31.344	-1.45	
P	2625 LANSDOWNE RD	29.633	13.811	10.695	2.40	0.60	26.63	26.49	26.28	40.00	5.81%	5359	28.85	0.20	26.725	-0.44	
P	2655 LANSDOWNE RD	26.851	16.726	10.782	1.50	0.60	24.75	24.58	24.37	19.00	4.85%	5365	25.30	0.20	24.579	-0.21	(2.4 assumed) house file didn't have drawing
	2660 LANSDOWNE RD	29.801	18.321	9.308	2.40	0.60	26.80	26.62	26.43	13.00	4.85%	5365	25.30	0.20	24.870	1.56	
P	2695 LANSDOWNE RD	25.720	12.338	10.716	2.70	0.60	22.42	22.30	22.08	46.00	4.85%	5365	25.30	0.20	23.271	-1.19	
	2700 LANSDOWNE RD	24.274	24.335	9.450	2.60	0.60	21.07	20.83	20.64	21.00	3.60%	5377	20.69	0.25	20.182	0.46	
	2720 LANSDOWNE RD	23.518	20.729	9.448	2.40	0.60	20.52	20.31	20.12	50.00	3.60%	5377	20.69	0.25	19.139	0.98	
P	2725 LANSDOWNE RD	22.771	16.224	10.641	2.70	0.60	19.47	19.31	19.10	23.00	3.60%	5377	20.69	0.25	20.110	-1.01	
P	2755 LANSDOWNE RD	21.068	23.267	10.680	1.20	0.60	19.27	19.04	18.82	54.00	3.60%	5377	20.69	0.25	18.995	-0.17	
	2760 LANSDOWNE RD	21.836	21.948	9.257	2.50	0.60	18.74	18.52	18.33	31.00	0.50%	5381	18.17	0.25	18.262	0.07	
	2765 LANSDOWNE RD	20.803	15.003	10.844	1.50	0.60	18.70	18.55	18.34	33.00	0.50%	5381	18.17	0.25	18.252	0.08	
	2810 LANSDOWNE RD	21.837	16.691	17.821	2.80	0.60	18.44	18.27	17.91	17.00	1.69%	5390	17.62	0.25	17.587	0.33	
	2815 LANSDOWNE RD	19.633	16.793	12.302	0.00	0.60	19.03	18.87	18.62	18.00	1.69%	5390	17.62	0.25	17.570	1.05	
	2830 LANSDOWNE RD	18.786	22.341	16.226	0.40	0.60	17.79	17.56	17.24	54.00	1.69%	5390	17.62	0.25	16.963	0.27	
P	2835 LANSDOWNE RD	19.778	11.055	13.744	2.40	0.60	16.78	16.67	16.39	58.00	1.69%	5390	17.62	0.25	16.896	-0.50	
	2850 LANSDOWNE RD	19.503	19.054	7.456	2.40	0.60	16.50	16.31	16.16	24.00	2.24%	5396	16.09	0.25	15.797	0.37	
	2855 LANSDOWNE RD	18.504	12.221	10.890	0.50	0.60	17.40	17.28	17.06	2.00	2.24%	5396	16.09	0.25	16.290	0.77	
	2870 LANSDOWNE RD	18.928	26.290	8.043	2.60	0.60	15.73	15.47	15.30	59.00	2.24%	5396	16.09	0.25	15.012	0.29	
P	2875 LANSDOWNE RD	18.107	24.692	18.020	2.90	0.60	14.61	14.36	14.00	34.00	2.24%	5396	16.09	0.25	15.572	-1.57	
	2880 LANSDOWNE RD	17.596	19.673	12.622	2.60	0.60	14.40	14.20	13.95	5.00	3.32%	5391	13.81	0.25	13.893	0.05	
	2890 LANSDOWNE RD	15.575	22.679	14.906	1.10	0.60	13.88	13.65	13.35	147.00	3.84%	5325	18.16	0.20	12.710	0.64	
	2895 LANSDOWNE RD	17.667	18.136	12.777	2.60	0.60	14.47	14.29	14.03	25.00	3.32%	5391	13.81	0.25	13.230	0.80	
	2925 LANSDOWNE RD	14.007	14.591	12.497	2.40	0.60	11.01	10.86	10.61	9.00	5.19%	5379	10.08	0.30	9.908	0.70	
P	2950 LANSDOWNE RD	12.966	23.356	24.378	3.00	0.60	9.37	9.13	8.64	23.00	5.19%	5379	10.08	0.30	9.181	-0.54	

Rutland Catchment
Option 5 - New Sanitary
Gravity LPS

Pump Required	Street and Address	Floor Elevation (Polaris Survey) Elev. (m)	Distance from Entrance to PL Dist. (m)	Distance From PL to Main Dist. (m)	House file assumed Main Entrance Distance to Lower Depth (m)	Slab to inv (assumed) m Depth (m)	Calculated Service Elevation at House (SP) Elev. (m)	Calculated Service Elevation at Property Line @ 1% (IC) Elev. (m)	Calculated Service Elevation at Main @ 2% (MC) Elev. (m)	Distance from Upstream Manhole Dist. (m)	Grade from Upstream Manhole Grade (%)	Upstream Manhole MH #	Invert of Upstream Manhole Elev. (m)	Diameter of Main Dia. (m)	Obvert of Main Elev. (m)	Difference (+) Gravity (-) Pump (m)	Comments
	MIDLAND RD																
	3110 MIDLAND RD	28.616	12.117	9.411	2.70	0.60	25.32	25.19	25.01	63.00	3.80%	6509	26.28	0.20	24.085	0.92	
P	3125 MIDLAND RD	24.970	46.100	1.500	2.60	0.60	21.77	21.31	21.28	89.00	3.80%	6509	26.28	0.20	23.096	-1.82	
	3130 MIDLAND RD	29.578	13.901	9.500	0.00	0.60	28.98	28.84	28.65	32.00	3.80%	6509	26.28	0.20	25.265	3.38	
P	3135 MIDLAND RD	25.366	45.000	1.500	2.70	0.60	22.07	21.62	21.59	63.00	3.80%	6509	26.28	0.20	24.085	-2.50	
	3140 MIDLAND RD	30.315	17.381	9.585	2.40	0.60	27.32	27.14	26.95	3.00	3.80%	6509	26.28	0.20	26.368	0.58	
P	3145 MIDLAND RD	27.508	46.500	1.500	2.70	0.60	24.21	23.74	23.71	30.00	3.80%	6509	26.28	0.20	25.341	-1.63	
	3150 MIDLAND RD	31.997	19.982	9.424	1.00	0.60	30.40	30.20	30.01	97.00	2.35%	5290	29.35	0.20	27.268	2.74	
P	3155 MIDLAND RD	28.524	42.900	1.500	2.70	0.60	25.22	24.80	24.77	4.00	2.35%	5290	29.35	0.20	29.454	-4.69	
	3160 MIDLAND RD	32.639	17.534	9.241	2.40	0.60	29.64	29.46	29.28	65.00	2.35%	5290	29.35	0.20	28.020	1.26	
P	3165 MIDLAND RD	30.154	13.183	36.441	1.20	0.60	28.35	28.22	27.49	65.00	2.35%	5290	29.35	0.20	28.020	-0.53	
P	3175 MIDLAND RD	30.705	11.967	36.402	1.10	0.60	29.01	28.89	28.16	38.00	2.35%	5290	29.35	0.20	28.655	-0.50	
	3180 MIDLAND RD	33.749	24.077	9.524	2.00	0.60	31.15	30.91	30.72	10.00	2.35%	5290	29.35	0.20	29.313	1.40	
P	3185 MIDLAND RD	31.358	33.268	37.023	2.00	0.60	28.76	28.43	27.68	15.00	2.35%	5290	29.35	0.20	29.195	-1.51	
	3200 MIDLAND RD	33.940	26.800	9.700	2.70	0.60	30.64	30.37	30.18	76.80	3.94%	7016	32.92	0.20	30.092	0.09	
	NORFOLK RD																
P	3105 NORFOLK RD	15.023	9.300	0.228	2.90	0.60	11.52	11.43	11.43	135.00	3.84%	5325	18.16	0.20	13.171	-1.75	NEW ADDRESS 3105 NORFOLK RD
	3110 NORFOLK RD	17.660	15.822	15.544	1.20	0.60	15.86	15.70	15.39	81.00	3.84%	5325	18.16	0.20	15.246	0.14	
P	3115 NORFOLK RD	16.840	22.300	2.000	2.40	0.60	13.84	13.62	13.58	95.00	3.84%	5325	18.16	0.20	14.708	-1.13	
P	3125 NORFOLK RD	18.742	16.382	2.000	2.40	0.60	15.74	15.58	15.54	51.00	3.84%	5325	18.16	0.20	16.399	-0.86	
P	3130 NORFOLK RD	20.075	26.616	15.961	2.80	0.60	16.68	16.41	16.09	41.00	3.84%	5325	18.16	0.20	16.783	-0.69	
	3145 NORFOLK RD	20.443	17.541	2.000	1.40	0.60	18.44	18.27	18.23	10.00	3.84%	5325	18.16	0.20	17.974	0.25	
	3150 NORFOLK RD	22.160	22.184	15.784	2.60	0.60	18.96	18.74	18.42	10.00	3.84%	5325	18.16	0.20	17.974	0.45	
P	3165 NORFOLK RD	21.153	30.712	2.000	2.70	0.60	17.85	17.55	17.51	1.00	3.84%	5325	18.16	0.20	18.320	-0.81	
	3170 NORFOLK RD	22.070	22.191	18.092	1.20	0.60	20.27	20.05	19.69	3.00	3.84%	5325	18.16	0.20	18.243	1.44	
	NOTTINGHAM RD																
P	2580 NOTTINGHAM RD	34.904	67.308	3.847	2.30	0.60	32.00	31.33	31.25	45.00	5.04%	5351	35.28	0.20	33.210	-1.96	
	RIPON RD																
	3120 RIPON RD	22.022	24.868	10.237	1.20	0.60	20.22	19.97	19.77	54	1.98%	6856	20.14	0.20	19.270	0.50	
	3135 RIPON RD	23.567	28.860	9.900	2.60	0.60	20.37	20.08	19.88	27	1.98%	6856	20.14	0.20	19.805	0.08	
	3140 RIPON RD	24.251	23.694	10.229	2.80	0.60	20.85	20.61	20.41	27	1.98%	6856	20.14	0.20	19.805	0.60	
	3145 RIPON RD	24.632	20.379	9.522	2.70	0.60	21.33	21.13	20.94	60	2.98%	5362	22.20	0.20	20.614	0.32	
	3150 RIPON RD	24.958	20.748	11.434	2.60	0.60	21.76	21.55	21.32	63	2.98%	5362	22.20	0.20	20.524	0.80	
	3155 RIPON RD	25.696	21.319	10.921	2.60	0.60	22.50	22.28	22.06	20	2.98%	5362	22.20	0.20	21.805	0.26	
	3160 RIPON RD	26.248	21.788	9.558	2.70	0.60	22.95	22.73	22.54	17	2.98%	5362	22.20	0.20	21.894	0.65	
	3165 RIPON RD	26.852	16.866	11.998	2.70	0.60	23.55	23.38	23.14	57	3.54%	5303	24.64	0.20	22.822	0.32	
	3170 RIPON RD	27.619	15.834	7.526	2.70	0.60	24.32	24.16	24.01	31	3.54%	5303	24.64	0.20	23.742	0.27	
	3175 RIPON RD	27.960	20.170	11.374	2.70	0.60	24.66	24.46	24.23	18	3.54%	5303	24.64	0.20	24.203	0.03	
	3185 RIPON RD	30.184	37.546	8.693	3.00	0.60	26.58	26.21	26.03	3	3.54%	5303	24.64	0.20	24.734	1.30	
	3190 RIPON RD	30.354	25.803	19.147	1.90	0.60	27.85	27.60	27.21	3	3.54%	5303	24.64	0.20	24.734	2.48	
	3215 RIPON RD	31.079	45.325	41.485	2.70	0.60	27.78	27.33	26.50	0	3.54%	5303	24.64	0.20	24.840	1.66	
	RUTLAND RD																
	2955 RUTLAND RD	11.908	17.516	14.429	2.60	0.60	8.71	8.53	8.24	56.00	5.19%	5379	10.08	0.30	7.468	0.78	
P	2970 RUTLAND RD	9.286	45.150	19.396	2.50	0.60	6.19	5.73	5.35	2.00	0.98%	6863	6.31	0.30	6.590	-1.24	
	2985 RUTLAND RD	10.759	25.075	16.900	2.70	0.60	7.46	7.21	6.87	53.00	1.29%	5388	6.21	0.30	5.829	1.04	
P	2990 RUTLAND RD	8.452	23.360	4.441	2.70	0.60	5.15	4.92	4.83	35.00	1.29%	5388	6.21	0.30	6.060	-1.23	
P	3000 RUTLAND RD	7.720	13.090	8.340	2.30	0.60	4.82	4.69	4.52	13.00	1.76%	5413	4.91	0.30	4.981	-0.46	no floor / basement elev (assumed)
P	3005 RUTLAND RD	8.567	21.501	15.490	2.70	0.60	5.27	5.05	4.74	72.00	1.29%	5388	6.21	0.30	5.584	-0.84	
	3025 RUTLAND RD	8.891	12.202	12.723	2.60	0.60	5.69	5.57	5.31	13.00	1.76%	5413	4.91	0.30	4.981	0.33	
P	3055 RUTLAND RD	6.909	16.323	17.656	2.70	0.60	3.61	3.45	3.09	21.00	2.37%	5416	4.29	0.30	4.089	-1.00	
P	3075 RUTLAND RD	6.735	23.644	15.783	2.60	0.60	3.54	3.30	2.98	53.00	2.37%	5416	4.29	0.30	3.332	-0.35	
P	3150 RUTLAND RD	5.277	34.289	9.071	2.70	0.60	1.98	1.63	1.45	17.00	0.50%	5431	1.85	0.38	2.140	-0.69	
	3155 RUTLAND RD	7.059	19.992	5.150	3.00	0.60	3.46	3.26	3.16	40.00	0.50%	5431	1.85	0.38	2.025	1.13	
	SHERRINGHAM PL																
P	3145 SHERRINGHAM PL	55.082	27.000	8.000	2.40	0.60	52.08	51.81	51.65	31.00	#DIV/0!		0.00	0.00	#DIV/0!	#DIV/0!	pump to low pressure main
P	3155 SHERRINGHAM PL	53.322	22.000	6.000	2.50	0.60	50.22	50.00	49.88	3.00	#DIV/0!		0.00	0.00	#DIV/0!	#DIV/0!	pump to low pressure main
E	3165 SHERRINGHAM PL	51.550	14.000	34.000	3.40	0.60	47.55	47.41	46.73	0.00	#DIV/0!		0.00	0.00	#DIV/0!	#DIV/0!	pump to low pressure main
P	3175 SHERRINGHAM PL	54.349	23.000	3.000	2.70	0.60	51.05	50.82	50.76	3.00	#DIV/0!		0.00	0.00	#DIV/0!	#DIV/0!	pump to low pressure main
	SOUTHDOWNE RD																
	3075 SOUTHDOWNE RD	19.566	34.137	8.628	1.80	0.60	17.17	16.82	16.65	65.00	2.24%	5396	16.09	0.25	14.877	1.78	
	3085 SOUTHDOWNE RD	19.029	31.345	74.465	2.10	0.60	16.33	16.02	14.53	89.00	2.24%	5396	16.09	0.25	14.339	0.19	
	SURREY RD																
	2960 SURREY RD	16.776	50.575	20.901	0.50	0.60	15.68	15.17	14.75	2.00	2.53%	6446	7.98	0.20	8.124	6.63	
E	3065 SURREY RD	7.194	28.761	88.000	2.00	0.60	4.59	4.31	2.55	82.00	0.50%	6582	8.45	0.20	8.244	-5.70	
	TARN PL																

Rutland Catchment
Option 5 - New Sanitary
Gravity LPS

Pump Required	Street and Address	Floor Elevation (Polaris Survey) Elev. (m)	Distance from Entrance to PL Dist. (m)	Distance From PL to Main Dist. (m)	House file assumed Main Entrance Distance to Lower Depth (m)	Slab to inv (assumed) m Depth (m)	Calculated Service Elevation at House (SP) Elev. (m)	Calculated Service Elevation at Property Line @ 1% (IC) Elev. (m)	Calculated Service Elevation at Main @ 2% (MC) Elev. (m)	Distance from Upstream Manhole Dist. (m)	Grade from Upstream Manhole Grade (%)	Upstream Manhole MH #	Invert of Upstream Manhole Elev. (m)	Diameter of Main Dia. (m)	Obvert of Main Elev. (m)	Difference (+) Gravity (-) Pump (m)	Comments
	3140 TARN PL	6.487	24.945	9.632	0.90	0.60	4.99	4.74	4.54	11.00	0.50%	6850	4.00	0.20	4.149	0.40	
E	3150 TARN PL	6.543	14.162	9.203	2.40	0.60	3.54	3.40	3.22	0.00	0.50%	6850	4.00	0.20	4.204	-0.99	
E	3165 TARN PL	7.092	24.967	8.272	4.10	0.60	2.39	2.14	1.98	0.00	0.50%	6850	4.00	0.20	4.204	-2.23	
P	3175 TARN PL	6.483	45.934	9.335	1.40	0.60	4.48	4.02	3.84	0.00	0.50%	6850	4.00	0.20	4.204	-0.37	
	UPLANDS RD																
P	3085 UPLANDS RD	44.829	23.076	10.255	2.70	0.60	41.53	41.30	41.09	18.00	5.79%	5337	42.33	0.20	41.487	-0.39	
P	3090 UPLANDS RD	46.290	29.864	9.401	1.50	0.60	44.19	43.89	43.70	59.00	5.00%	6478	46.85	0.20	44.098	-0.39	
	3100 UPLANDS RD	47.540	21.602	10.287	2.40	0.60	44.54	44.32	44.12	64.00	1.03%	5312	43.70	0.20	43.235	0.88	
	3125 UPLANDS RD	44.140	37.179	11.440	2.40	0.60	41.14	40.77	40.54	44.00	5.79%	5337	42.33	0.20	39.981	0.56	no bsmt data (assume 2.4)
	3130 UPLANDS RD	48.320	23.673	11.771	2.20	0.60	45.52	45.28	45.05	13.00	1.03%	5312	43.70	0.20	43.762	1.29	
P	3155 UPLANDS RD	45.830	16.432	20.146	2.40	0.60	42.83	42.67	42.26	6.00	1.06%	5300A	43.98	0.20	44.118	-1.86	
	3160 UPLANDS RD	48.772	23.937	10.225	2.70	0.60	45.47	45.23	45.03	33.00	2.21%	6864	45.34	0.20	44.806	0.22	
P	3200 UPLANDS RD	50.421	23.338	7.206	2.70	0.60	47.12	46.89	46.74	67.00	4.89%	5272	50.75	0.20	47.676	-0.93	
	3220 UPLANDS RD	52.139	28.261	11.025	2.70	0.60	48.84	48.56	48.34	3.00	2.31%	5260	46.48	0.20	46.611	1.73	
	3225 UPLANDS RD	50.436	27.341	11.216	2.70	0.60	47.14	46.86	46.64	3.00	2.31%	5260	46.48	0.20	46.611	0.03	
	3240 UPLANDS PL	53.160	17.470	17.195	3.20	0.60	49.36	49.19	48.84	0.00	2.38%	5253	48.56	0.20	48.760	0.08	
	3255 UPLANDS RD	49.109	20.200	10.200	3.00	0.60	45.51	45.31	45.10	7.00	0.50%	5257	44.94	0.20	45.100	0.00	
	3260 UPLANDS PL	53.883	24.117	16.323	2.70	0.60	50.58	50.34	50.02	0.00	2.38%	5253	48.56	0.20	48.760	1.26	
	3275 UPLANDS RD	48.669	20.153	9.322	2.40	0.60	45.67	45.47	45.28	28.00	0.50%	5257	44.94	0.20	44.995	0.29	
	3280 UPLANDS RD	50.909	16.546	10.743	2.90	0.60	47.41	47.24	47.03	21.00	0.50%	5257	44.94	0.20	45.030	2.00	
	3295 UPLANDS RD	48.634	20.356	9.089	2.40	0.60	45.63	45.43	45.25	24.00	0.50%	5250	44.68	0.20	44.759	0.49	
	3300 UPLANDS RD	51.934	35.439	11.008	2.70	0.60	48.63	48.28	48.06	26.00	0.50%	5250	44.68	0.20	44.749	3.31	
	3335 UPLANDS RD	49.014	18.240	9.526	3.00	0.60	45.41	45.23	45.04	63.00	0.50%	5250	44.68	0.20	44.564	0.48	
	3350 UPLANDS RD	50.628	35.813	10.526	3.00	0.60	47.03	46.67	46.46	1.00	0.50%	5231	44.25	0.20	44.444	2.02	
	3355 UPLANDS RD	49.034	13.281	9.368	3.00	0.60	45.43	45.30	45.11	21.00	0.50%	5231	44.25	0.20	44.344	0.77	
	3370 UPLANDS RD	50.420	20.258	11.046	2.80	0.60	47.02	46.82	46.60	52.00	0.50%	5231	44.25	0.20	44.189	2.41	
	3375 UPLANDS RD	48.849	14.554	9.373	2.70	0.60	45.55	45.40	45.22	55.00	0.50%	5231	44.25	0.20	44.174	1.04	
	3410 UPLANDS RD	49.378	12.920	4.441	2.40	0.60	46.38	46.25	46.16	49.00	5.25%	5205	48.42	0.20	46.048	0.11	
	3420 UPLANDS RD	49.706	14.858	0.474	2.40	0.60	46.71	46.56	46.55	9.00	1.00%	5201	43.43	0.20	43.540	3.01	
	3430 UPLANDS RD	47.620	16.936		1.40	0.60	45.62	45.45	45.45	30.70	0.50%	5187	42.24	0.20	42.291	3.16	
	UPPER TERR																
P	3205 UPPER TERR	37.063	15.500	9.850	2.40	0.60	34.06	33.91	33.71	11.00	2.49%	5282	34.58	0.20	34.510	-0.80	
	3210 UPPER TERR	40.270	12.200	10.450	2.70	0.60	36.97	36.85	36.64	34.00	1.83%	5288	35.25	0.20	34.830	1.81	
P	3215 UPPER TERR	35.514	27.700	15.600	2.70	0.60	32.21	31.94	31.63	14.00	3.94%	7016	32.92	0.20	32.568	-0.94	
	3230 UPPER TERR	40.967	22.965	15.705	2.70	0.60	37.67	37.44	37.12	27.00	2.49%	5282	34.58	0.20	34.112	3.01	
	3250 UPPER TERR	40.346	26.431	23.868	1.00	0.60	38.75	38.48	38.00	70.00	4.31%	5254	36.78	0.20	33.965	4.04	
	3270 UPPER TERR	41.862	20.458	12.058	2.20	0.60	39.06	38.86	38.62	26.00	4.31%	5254	36.78	0.20	35.862	2.75	
	3290 UPPER TERR	42.861	19.193	9.799	2.40	0.60	39.86	39.67	39.47	59.00	4.99%	5236	40.20	0.20	37.449	2.02	
	3320 UPPER TERR	43.607	16.066	9.898	1.20	0.60	41.81	41.65	41.45	10.00	4.99%	5236	40.20	0.20	39.897	1.55	no basmt data (assume 2.4)
	3350 UPPER TERR	44.907	10.893	11.761	2.40	0.60	41.91	41.80	41.56	89.00	1.39%	5208	41.80	0.20	40.768	0.80	
	3380 UPPER TERR	47.260	12.883	13.195	2.60	0.60	44.06	43.93	43.67	47.00	1.39%	5208	41.80	0.20	41.351	2.32	
	3400 UPPER TERR	47.527	15.171	6.071	2.40	0.60	44.53	44.38	44.25	46.50	1.39%	5208	41.80	0.20	41.358	2.90	
	3440 UPPER TERR	46.753	17.159	13.154	3.00	0.60	43.15	42.98	42.72	69.00	0.50%	5173	42.61	0.20	42.465	0.25	
	3450 UPPER TERR	48.472	26.162	14.056	2.40	0.60	45.47	45.21	44.93	46.00	0.50%	5173	42.61	0.20	42.580	2.35	
	3460 UPPER TERR	47.855	16.648	14.728	2.40	0.60	44.86	44.69	44.39	5.00	0.50%	5173	42.61	0.20	42.785	1.61	
	3470 UPPER TERR	47.142	26.470	11.909	2.70	0.60	43.84	43.58	43.34	13.00	0.50%	5162	42.86	0.20	42.999	0.34	
P	3480 UPPER TERR	46.658	30.237	7.357	2.70	0.60	43.36	43.06	42.91	55.00	0.50%	5138	43.30	0.20	43.225	-0.32	
	3490 UPPER TERR	47.442	13.483	10.051	2.30	0.60	44.54	44.41	44.21	5.00	0.50%	5138	43.30	0.20	43.475	0.73	
	3500 UPPER TERR	47.766	20.395	3.667	0.90	0.60	46.27	46.06	45.99	36.00	1.90%	UPP1	45.55	0.20	45.065	0.92	
	3520 UPPER TERR	48.735	22.857	4.117	1.60	0.60	46.54	46.31	46.22	71.00	1.90%	UPP1	45.55	0.20	44.399	1.82	
P	3525 UPPER TERR	44.660	30.000	8.000	2.40	0.60	41.66	41.36	41.20	57.00	1.90%	UPP1	45.55	0.20	44.666	-3.47	no basmt data (assume 2.4)
P	3535 UPPER TERR	46.800	25.000	11.000	2.40	0.60	43.80	43.55	43.33	19.00	1.90%	UPP1	45.55	0.20	45.389	-2.06	no basmt data (assume 2.4)
	VALDEZ PL																
	3000 VALDEZ PL	13.667	30.118	28.000	2.00	0.60	11.07	10.77	10.21	2.00	1.50%	VAL1	5.01	0.20	5.178	5.03	no basmt data (assume 2.4)
	3015 VALDEZ PL	12.357	28.920	28.000	0.50	0.60	11.26	10.97	10.41	2.00	1.50%	VAL1	5.01	0.20	5.178	5.23	
	3020 VALDEZ PL	9.624	45.000	7.000	2.40	0.60	6.62	6.17	6.03	0.00	1.50%	VAL1	5.01	0.20	5.208	0.83	
	3046 VALDEZ PL	9.102	12.000	7.000	2.40	0.60	6.10	5.98	5.84	9.00	1.50%	VAL1	5.01	0.20	5.073	0.77	no basmt data (assume 2.4)
	3055 VALDEZ PL	12.433	20.000	6.000	0.90	0.60	10.93	10.73	10.61	18.00	1.50%	VAL1	5.01	0.20	4.938	5.67	
	WEALD RD																
	3110 WEALD RD	35.206	19.761	10.783	2.40	0.60	32.21	32.01	31.79	52.00	3.63%	5327	32.11	0.20	30.417	1.38	
	3125 WEALD RD	32.940	31.540	9.493	2.40	0.60	29.94	29.62	29.43	21.00	5.81%	5359	28.85	0.20	27.829	1.61	
	3130 WEALD RD	35.894	15.077	11.346	2.50	0.60	32.79	32.64	32.42	13.00	3.63%	5327	32.11	0.20	31.834	0.58	
P	3135 WEALD RD	32.477	36.954	9.896	1.20	0.60	30.68	30.31	30.11	16.00	3.63%	5327	32.11	0.20	31.725	-1.62	
P	3145 WEALD RD	35.054	15.845	5.616	2.50	0.60	31.95	31.80	31.68	43.00	2.79%	6505	33.92	0.20	32.921	-1.24	
	3160 WEALD RD	36.854	14.831	14.493	0.00	0.60	36.25	36.11	35.82	43.00	2.79%	6505	33.92	0.20	32.921	2.89	
P	3165 WEALD RD	36.232	14.538	3.237	2.40	0.60	33.23	33.09	33.02	21.00	2.79%	6505	33.92	0.20	33.534	-0.51	
P	3185 WEALD RD	36.635	31.684	3.139	2.40	0.60	33.64	33.32	33.26	3.00	2.79%	6505	33.92	0.20	34.036	-0.78	
	3220 WEALD RD	46.134	29.384	9.246	3.00	0.60	42.53	42.24	42.06	45.00	3.10%	5259	41.98	0.20	40.789	1.27	
P	3235 WEALD RD	44.641	30.584	5.345	3.00	0.60	41.04	40.74	40.63	32.00	3.10%	5259	41.98	0.20	41.192	-0.56	
	3250 WEALD RD	46.243	24.509	8.439	2.40	0.60	43.24	43.00	42.83	13.00	3.10%	5259	41.98	0.20	41.780	1.05	
	3280 WEALD RD	46.376	19.147	8.358	2.70	0.60	43.08	42.88	42.72	72.00	0.77%	5244	42.69	0.20	42.330	0.39	
P	3285 WEALD RD	44.639	22.601	6.678	2.40	0.60	41.64	41.41	41.28	68.00	0.77%	5244	42.69	0.20	42.361	-1.08	
P	3305 WEALD RD	44.799	48.380	8.450	3.00	0.60	41.20	40.72	40.55	30.00	0.77%	5244	42.69	0.20	42.655	-2.11	
	3320 WEALD RD	46.894	18.431	6.909	2.40	0.60	43.89	43.71	43.57	32.00	0.77%	5244	42.69	0.20	42.640	0.93	
P	3335 WEALD RD	45.635	9.300	6.500	2.40	0.60	42.64	42.54	42.41	45.00	1.68%	5227	43.60	0.20	43.043	-0.63	
	3350 WEALD RD	47.007	18.524	8.901	2.50	0.60	43.91	43.72	43.54	4.00	0.77%	5244	42.69	0.20	42.856	0.69	
P	3355 WEALD RD	46.073	15.977	8.960	3.00	0.60	42.47	42.31	42.13	29.00	1.68%	5227	43.60	0.20	43.312	-1.18	
	3375 WEALD RD	47.616	26.224	6.632	2.50	0.60	44.52	44.25	44.12	1.00	1.68%	5227	43.60	0.20	43.783	0.34	
	3395 WEALD RD	48.809	12.037	8.153	3.00	0.60	45.21	45.09	44.93	50.00	0.50%	5220	43.82	0.20	43.769	1.16	

Humber Catchment
Option 6 - New Sanitary
Gravity, Community PS LPS

Pump Required	Street and Address	Floor Elevation (Polaris Survey)	Distance from Entrance to PL	Distance From PL to Main	House file assumed Main Entrance Distance to Lower	Slab to inv (assumed) m	Calculated Service Elevation at House (SP)	Calculated Service Elevation at Property Line @ 1% (IC)	Calculated Service Elevation at Main @ 2% (MC)	Distance from Upstream Manhole	Grade from Upstream Manhole	Upstream Manhole	Invert of Upstream Manhole	Diameter of Main	Obvert of Main	Difference (+) Gravity (-) Pump	Comments
		Elev. (m)	Dist. (m)	Dist. (m)	Depth (m)	Depth (m)	Elev. (m)	Elev. (m)	Elev. (m)	Dist. (m)	Grade (%)	MH #	Elev. (m)	Dia. (m)	Elev. (m)	(m)	
	BEACH DR																
	3190 BEACH DR	7.870	20.000	12.000	1.10	0.60	6.17	5.97	5.73	25.00	0.50%	5328	4.45	0.20	4.528	1.20	
	3200 BEACH DR	8.010	25.000	5.000	1.80	0.60	5.61	5.36	5.26	45.00	0.50%	5328	4.45	0.20	4.428	0.83	
	3210 BEACH DR	7.690	25.000	10.000	2.40	0.60	4.69	4.44	4.24	45.00	0.52%	5313	4.09	0.20	4.052	0.19	
	3220 BEACH DR	9.270	30.000	10.000	2.50	0.60	6.17	5.87	5.67	88.00	0.52%	5313	4.09	0.20	3.828	1.84	
E	3225 BEACH DR	6.020	40.000	13.000	2.90	0.60	2.52	2.12	1.86	10.00	0.52%	5313	4.09	0.20	4.235	-2.37	
	3230 BEACH DR	7.020	25.000	12.000	2.40	0.60	4.02	3.77	3.53	25.00	1.31%	5286	3.59	0.20	3.465	0.06	
P	3235 BEACH DR	7.530	35.000	10.000	2.70	0.60	4.23	3.88	3.68	51.00	0.52%	5313	4.09	0.20	4.021	-0.34	
	3240 BEACH DR	6.070	20.000	10.000	1.40	0.60	4.07	3.87	3.67	69.00	1.31%	5286	3.59	0.20	2.887	0.78	
P	3245 BEACH DR	6.720	40.000	10.000	2.30	0.60	3.82	3.42	3.22	2.00	1.31%	5286	3.59	0.20	3.768	-0.55	
	3250 BEACH DR	5.300	25.000	11.000	1.00	0.60	3.70	3.45	3.23	33.00	0.61%	5266	2.50	0.20	2.500	0.73	
	3260 BEACH DR	6.360	25.000	10.000	2.40	0.60	3.36	3.11	2.91	75.00	0.61%	5266	2.50	0.20	2.245	0.66	
P	3265 BEACH DR	6.500	50.000	10.000	2.70	0.60	3.20	2.70	2.50	45.00	1.31%	5286	3.59	0.20	3.203	-0.70	
P	3270 BEACH DR	5.070	25.000	10.000	2.40	0.60	2.07	1.82	1.62	65.00	0.50%	5223	2.32	0.30	2.294	-0.67	
	3275 BEACH DR	5.690	45.000	10.000	1.70	0.60	3.39	2.94	2.74	9.00	0.61%	5266	2.50	0.20	2.645	0.09	
	3280 BEACH DR	4.710	20.000	11.000	0.00	0.60	4.11	3.91	3.69	5.00	0.50%	5223	2.32	0.30	2.594	1.10	
E	3285 BEACH DR	6.040	60.000	10.000	3.00	0.60	2.44	1.84	1.64	2.00	0.40%	5243	1.59	0.38	1.957	-0.32	Must lower end of line to get lower
P	3290 BEACH DR	4.820	15.000	10.000	2.70	0.60	1.52	1.37	1.17	38.00	0.50%	5210	2.76	0.30	2.870	-1.70	
	3295 BEACH DR	4.450	15.000	8.000	1.40	0.60	2.45	2.30	2.14	7.00	0.40%	5243	1.59	0.38	1.937	0.20	
	3340 BEACH DR	6.270	25.000	12.000	1.00	0.60	4.67	4.42	4.18	32.00	1.29%	5197	4.25	0.25	4.082	0.10	
E	3355 BEACH DR	6.750	40.000	8.000	3.40	0.60	2.75	2.35	2.19	98.00	4.33%	5181	9.53	0.25	5.536	-3.35	
	3360 BEACH DR	10.970	45.000	12.000	2.60	0.60	7.77	7.32	7.08	105.00	4.33%	5181	9.53	0.25	5.233	1.85	
	3380 BEACH DR	11.250	20.000	12.000	1.20	0.60	9.45	9.25	9.01	62.00	4.33%	5181	9.53	0.25	7.095	1.92	
	*3385 BEACH DR	9.200	35.000	8.000	0.00	0.60	8.60	8.25	8.09	62.00	4.33%	5181	9.53	0.25	7.095	1.00	Parking Lot
	3390 BEACH DR	13.090	25.000	8.000	2.40	0.60	10.09	9.84	9.68	22.00	4.33%	5181	9.53	0.25	8.827	0.85	
	3420 BEACH DR	17.350	30.000	10.000	2.60	0.60	14.15	13.85	13.65	64.00	5.14%	5167	15.42	0.20	12.326	1.32	
P	3425 BEACH DR	13.070	35.000	10.000	3.00	0.60	9.47	9.12	8.92	74.00	5.14%	5167	15.42	0.20	11.811	-2.89	
P	3445 BEACH DR	15.410	39.000	9.000	3.20	0.60	11.61	11.22	11.04	30.00	5.14%	5167	15.42	0.20	14.075	-3.03	
	3448 BEACH DR	20.010	40.000	12.000	2.70	0.60	16.71	16.31	16.07	16.00	5.14%	5167	15.42	0.20	14.795	1.28	
	3460 BEACH DR	22.200	20.000	12.000	2.60	0.60	19.00	18.80	18.56	81.00	5.15%	5145	21.04	0.20	17.065	1.49	
P	3465 BEACH DR	17.590	43.000	7.000	2.60	0.60	14.39	13.96	13.82	90.00	5.15%	5145	21.04	0.20	16.602	-2.78	
P	3475 BEACH DR	18.980	35.000	7.000	2.40	0.60	15.98	15.63	15.49	56.00	5.15%	5145	21.04	0.20	18.353	-2.86	
	3490 BEACH DR	25.400	20.000	12.000	1.00	0.60	23.80	23.60	23.36	17.00	5.15%	5145	21.04	0.20	20.361	3.00	
	3498 BEACH DR	28.790	25.000	15.000	2.60	0.60	25.59	25.34	25.04	64.00	9.16%	5139	28.15	0.20	22.487	2.55	
P	3515 BEACH DR	18.590	56.000	14.000	0.61	0.60	17.38	16.82	16.54	7.00	5.15%	5145	21.04	0.20	20.876	-4.34	
P	3525 BEACH DR	22.530	38.000	12.000	2.40	0.60	19.53	19.15	18.91	70.00	3.80%	5126	25.71	0.20	23.255	-4.35	
E	3535 BEACH DR	26.280	29.000	14.000	2.70	0.60	22.98	22.69	22.41	29.00	3.80%	5126	25.71	0.20	24.811	-2.40	
	3550 BEACH DR	41.730	30.000	15.000	4.50	0.60	36.63	36.33	36.03	57.00	1.84%	5118	27.67	0.20	26.818	9.21	
E	3555 BEACH DR	28.050	17.000	14.000	2.70	0.60	24.75	24.58	24.30	81.00	1.84%	5118	27.67	0.20	26.377	-2.08	
P	3565 BEACH DR	28.219	21.000	10.000	2.70	0.60	24.92	24.71	24.51	46.00	1.84%	5118	27.67	0.20	27.020	-2.51	
	3570 BEACH DR	37.860	25.000	15.000	1.50	0.60	35.76	35.51	35.21	14.00	1.84%	5118	27.67	0.20	27.608	7.60	
	3572 BEACH DR	37.270	35.000	15.000	1.20	0.60	35.47	35.12	34.82	91.00	1.20%	5107	28.93	0.20	28.045	6.77	
P	3575 BEACH DR	28.870	19.000	9.000	2.40	0.60	25.87	25.68	25.50	84.00	1.20%	5107	28.93	0.20	28.129	-2.63	
P	3585 BEACH DR	29.000	22.000	9.000	3.00	0.60	25.40	25.18	25.00	36.00	1.20%	5107	28.93	0.20	28.703	-3.70	
P	3595 BEACH DR	29.500	37.000	9.000	2.40	0.60	26.50	26.13	25.95	1.00	0.80%	5081	29.90	0.20	30.093	-4.14	
P	3655 BEACH DR	30.000	28.000	9.000	2.70	0.60	26.70	26.42	26.24	45.00	0.80%	5081	29.90	0.20	29.741	-3.50	
P	3695 BEACH DR	31.000	20.000	9.000	3.80	0.60	26.60	26.40	26.22	100.00	0.80%	5081	29.90	0.20	29.301	-3.08	
P	2710 HIBBONS CL	23.000	25.000	110.000	2.40	1.60	19.00	18.75	16.55	0.00	0.80%	5081	29.90	0.20	30.101	-13.55	

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		Elev. (m)	Dist. (m)	Dist. (m)	Depth (m)	Depth (m)	Elev. (m)	Elev. (m)	Elev. (m)	Dist. (m)	Grade (%)	MH #	Elev. (m)	Dia. (m)	Elev. (m)	(m)	
	CADBORO BAY RD																
	3611 CADBORO BAY RD	41.560	30.000	17.000	2.70	0.60	38.26	37.96	37.62	61.00	1.20%	5107	28.93	0.20	28.404	9.22	
	3615 CADBORO BAY RD	41.330	30.000	17.000	2.70	0.60	38.03	37.73	37.39	22.00	1.20%	5107	28.93	0.20	28.870	8.52	
	EXETER RD																
	3110 EXETER RD	15.050	40.000	10.000	1.50	0.60	12.95	12.55	12.35	113.00	1.44%	6584	7.70	0.20	6.275	6.07	
	3130 EXETER RD	15.000	30.000	10.000	2.40	0.60	12.00	11.70	11.50	84.00	1.44%	6584	7.70	0.20	6.693	4.81	no hse or bsmt data (assume 2.4)
P	3145 EXETER RD	8.760	20.000	5.000	1.20	0.60	6.96	6.76	6.66	55.00	1.44%	6584	7.70	0.20	7.110	-0.45	
	3160 EXETER RD	12.110	20.000	14.000	3.00	0.60	8.51	8.31	8.03	40.00	1.44%	6584	7.70	0.20	7.326	0.70	
	3170 EXETER RD	11.570	15.000	12.000	2.40	0.60	8.57	8.42	8.18	16.00	1.44%	6584	7.70	0.20	7.672	0.51	no bsmt data (assume 2.4)
P	3175 EXETER RD	9.800	25.000	5.000	1.70	0.60	7.50	7.25	7.15	13.00	1.44%	6584	7.70	0.20	7.715	-0.56	
	3190 EXETER RD	13.040	35.000	15.000	1.20	0.60	11.24	10.89	10.59	2.00	1.44%	6584	7.70	0.20	7.873	2.72	
P	3195 EXETER RD	10.230	25.000	10.000	2.40	0.60	7.23	6.98	6.78	2.00	1.44%	6584	7.70	0.20	7.873	-1.09	
	3200 EXETER RD	11.250	25.000	5.000	1.80	0.60	8.85	8.60	8.50	0.00	2.47%	7021	7.03	0.20	7.230	1.27	
P	3205 EXETER RD	10.030	15.000	15.000	2.40	0.60	7.03	6.88	6.58	5.00	2.47%	7021	7.03	0.20	7.106	-0.53	
	3220 EXETER RD	12.340	20.000	5.000	2.40	0.60	9.34	9.14	9.04	18.00	2.47%	7021	7.03	0.20	6.785	2.26	
P	3225 EXETER RD	9.320	20.000	10.000	2.60	0.60	6.12	5.92	5.72	24.00	2.47%	7021	7.03	0.20	6.636	-0.92	
P	3235 EXETER RD	8.520	15.000	8.000	2.40	0.60	5.52	5.37	5.21	56.00	2.47%	7021	7.03	0.20	5.844	-0.63	
	3240 EXETER RD	12.000	20.000	7.000	2.40	0.60	9.00	8.80	8.66	50.00	2.47%	7021	7.03	0.20	5.993	2.67	no hse or bsmt data (assume 2.4)
P	3245 EXETER RD	6.950	15.000	5.000	2.30	0.60	4.05	3.90	3.80	94.00	2.47%	7021	7.03	0.20	4.904	-1.10	
	3250 EXETER RD	11.520	15.000	12.000	1.40	0.60	9.52	9.37	9.13	78.00	2.47%	7021	7.03	0.20	5.300	3.83	no bsmt data (assume 2.4)
	3260 EXETER RD	9.350	15.000	12.000	1.30	0.60	7.45	7.30	7.06	107.00	2.47%	7021	7.03	0.20	4.582	2.48	
	3275 EXETER RD	6.210	15.000	5.000	1.10	0.60	4.51	4.36	4.26	126.00	2.47%	7021	7.03	0.20	4.112	0.15	
	3280 EXETER RD	8.310	15.000	12.000	2.40	0.60	5.31	5.16	4.92	1.00	0.45%	5246	3.50	0.20	3.695	1.22	
P	3285 EXETER RD	5.200	20.000	5.000	1.10	0.60	3.50	3.30	3.20	26.00	0.45%	5246	3.50	0.20	3.583	-0.38	
P	3290 EXETER RD	6.840	20.000	12.000	2.50	0.60	3.74	3.54	3.30	23.00	0.45%	5246	3.50	0.20	3.596	-0.30	
	3295 EXETER RD	6.980	15.000	5.000	2.70	0.60	3.68	3.53	3.43	62.00	0.45%	5246	3.50	0.20	3.420	0.01	
	3300 EXETER RD	6.780	20.000	13.000	2.20	0.60	3.98	3.78	3.52	61.00	0.45%	5246	3.50	0.20	3.425	0.10	
P	3320 EXETER RD	5.500	20.000	10.000	2.50	0.60	2.40	2.20	2.00	108.00	0.45%	5246	3.50	0.20	3.212	-1.21	
	HUMBER RD																
P	3120 HUMBER RD	4.880	55.000	15.000	3.00	0.60	1.28	0.73	0.43	41.00	0.40%	5243	1.59	0.38	1.801	-1.37	
	3140 HUMBER RD	5.540	30.000	15.000	2.40	0.60	2.54	2.24	1.94	8.00	0.39%	5239	1.22	0.38	1.559	0.38	
P	3145 HUMBER RD	5.050	35.000	7.000	2.70	0.60	1.75	1.40	1.26	61.00	0.40%	5243	1.59	0.38	1.721	-0.46	Must lower end of line to get lower
E	3160 HUMBER RD	3.900	150.000	15.000	0.00	0.60	3.30	1.80	1.50	30.00	0.39%	5239	1.22	0.38	1.474	0.03	no bsmt data (assume 2.4)
E	3180 HUMBER RD	3.510	80.000	15.000	1.50	0.60	1.41	0.61	0.31	30.00	0.39%	5239	1.22	0.38	1.474	-1.16	
P	3190 HUMBER RD	4.030	25.000	20.000	1.80	0.60	1.63	1.38	0.98	30.00	0.39%	5239	1.22	0.38	1.474	-0.49	Last MH @ outfall
	3195 HUMBER RD	5.560	40.000	10.000	2.70	0.60	2.26	1.86	1.66	26.00	0.39%	5239	1.22	0.38	1.490	0.17	
	LANSDOWNE RD																
	2980 LANSDOWNE RD	10.810	20.000	20.000	2.40	0.60	7.81	7.61	7.21	1.00	1.30%	5263	6.15	0.20	6.337	0.87	
	3000 LANSDOWNE RD	9.950	20.000	15.000	2.40	0.60	6.95	6.75	6.45	26.00	1.30%	5263	6.15	0.20	6.012	0.44	
P	3005 LANSDOWNE RD	9.160	29.000	8.000	2.70	0.60	5.86	5.57	5.41	42.00	1.30%	5263	6.15	0.20	5.803	-0.39	
	3020 LANSDOWNE RD	8.660	20.000	12.000	2.70	0.60	5.36	5.16	4.92	32.00	1.61%	5344	5.20	0.20	4.889	0.03	
	3035 LANSDOWNE RD	7.350	20.000	7.000	1.00	0.60	5.75	5.55	5.41	11.00	1.61%	5344	5.20	0.20	5.226	0.18	
	3050 LANSDOWNE RD	8.240	25.000	10.000	2.40	0.60	5.24	4.99	4.79	9.00	0.50%	5328	4.45	0.20	4.608	0.18	

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		Elev. (m)	Dist. (m)	Dist. (m)	Depth (m)	Depth (m)	Elev. (m)	Elev. (m)	Elev. (m)	Dist. (m)	Grade (%)	MH #	Elev. (m)	Dia. (m)	Elev. (m)	(m)	
	MIDLAND RD																
	3215 MIDLAND RD	32.070	30.000	12.000	2.50	0.60	28.97	28.67	28.43	1.00	0.50%	5264	26.10	0.20	26.290	2.14	
	3235 MIDLAND RD	31.910	35.000	12.000	2.60	0.60	28.71	28.36	28.12	14.00	0.50%	5264	26.10	0.20	26.225	1.90	
	3265 MIDLAND RD	29.860	30.000	14.000	2.70	0.60	26.56	26.26	25.98	64.00	0.50%	5264	26.10	0.20	25.975	0.01	
E	3295 MIDLAND RD	30.320	30.000	10.000	1.50	0.60	28.22	27.92	27.72	105.00	0.50%	5264	26.10	0.20	25.770	1.95	Ex. pump, not req'd
	3315 MIDLAND RD	29.700	25.000	10.000	2.60	0.60	26.50	26.25	26.05	40.00	1.30%	5241	25.51	0.20	25.191	0.86	
E	3335 MIDLAND RD	26.150	35.000	10.000	3.00	0.60	22.55	22.20	22.00	91.00	1.30%	5241	25.51	0.20	24.528	-2.53	
P	3355 MIDLAND RD	26.000	30.000	10.000	2.60	0.60	22.80	22.50	22.30	18.00	0.50%	6861	24.24	0.20	24.354	-2.05	no house elev surveyed
	3375 MIDLAND RD	28.040	35.000	10.000	2.60	0.60	24.84	24.49	24.29	54.00	0.50%	6861	24.24	0.20	24.176	0.11	
P	3405 MIDLAND RD	27.700	35.000	10.000	3.00	0.60	24.10	23.75	23.55	15.00	0.50%	5166B	24.78	0.20	24.905	-1.36	
	3435 MIDLAND RD	28.680	30.000	10.000	2.60	0.60	25.48	25.18	24.98	49.00	0.50%	5166B	24.78	0.20	24.734	0.25	
	3465 MIDLAND RD	30.860	25.000	10.000	2.40	0.60	27.86	27.61	27.41	94.00	0.50%	5166B	24.78	0.20	24.507	2.90	
	3530 MIDLAND RD	38.840	40.000	27.000	3.00	0.60	35.24	34.84	34.30	2.00	9.16%	5139	28.15	0.20	28.167	6.13	
	NORFOLK RD																
	3175 NORFOLK RD	21.890	20.000	15.000	2.60	0.60	18.69	18.49	18.19	2.00	2.50%	5306	17.41	0.20	17.557	0.63	
	3180 NORFOLK RD	22.100	20.000	15.000	2.40	0.60	19.10	18.90	18.60	2.00	2.50%	5306	17.41	0.20	17.557	1.04	
	3185 NORFOLK RD	20.400	20.000	5.000	1.10	0.60	18.70	18.50	18.40	15.00	2.50%	5306	17.41	0.20	17.232	1.17	
	3190 NORFOLK RD	21.690	20.000	12.000	1.10	0.60	19.99	19.79	19.55	19.00	2.50%	5306	17.41	0.20	17.132	2.42	
	3195 NORFOLK RD	20.000	25.000	5.000	2.70	0.60	16.70	16.45	16.35	51.00	2.50%	5306	17.41	0.20	16.331	0.02	
	3200 NORFOLK RD	23.900	25.000	10.000	2.40	0.60	20.90	20.65	20.45	3.00	3.00%	nor1	15.92	0.20	16.034	4.42	
	3215 NORFOLK RD	18.330	30.000	5.000	1.10	0.60	16.63	16.33	16.23	23.00	3.00%	nor1	15.92	0.20	15.434	0.80	
	3220 NORFOLK RD	24.940	25.000	10.000	2.60	0.60	21.74	21.49	21.29	32.00	3.00%	nor1	15.92	0.20	15.165	6.13	
	3225 NORFOLK RD	18.240	25.000	8.000	2.50	0.60	15.14	14.89	14.73	18.00	0.58%	7025	14.54	0.20	14.639	0.09	
	3240 NORFOLK RD	23.890	30.000	10.000	1.90	0.60	21.39	21.09	20.89	30.00	0.58%	7025	14.54	0.20	14.570	6.32	
	3245 NORFOLK RD	18.320	15.000	10.000	2.80	0.60	14.92	14.77	14.57	51.00	0.58%	7025	14.54	0.20	14.447	0.12	
	3250 NORFOLK RD	24.050	30.000	10.000	2.40	0.60	21.05	20.75	20.55	75.00	0.58%	7025	14.54	0.20	14.308	6.24	
	3255 NORFOLK RD	20.010	20.000	10.000	2.70	0.60	16.71	16.51	16.31	81.00	0.58%	7025	14.54	0.20	14.273	2.04	
	3270 NORFOLK RD	20.850	20.000	10.000	1.00	0.60	19.25	19.05	18.85	105.00	0.58%	7025	14.54	0.20	14.133	4.72	
	3275 NORFOLK RD	17.320	25.000	5.000	2.30	0.60	14.42	14.17	14.07	120.00	0.58%	7025	14.54	0.20	14.046	0.02	
	3285 NORFOLK RD	18.980	15.000	8.000	2.70	0.60	15.68	15.53	15.37	14.00	2.11%	5251	13.74	0.20	13.639	1.73	
	3290 NORFOLK RD	19.430	20.000	10.000	1.50	0.60	17.33	17.13	16.93	15.00	2.11%	5251	13.74	0.20	13.618	3.31	
	3295 NORFOLK RD	16.770	20.000	10.000	2.70	0.60	13.47	13.27	13.07	45.00	2.11%	5251	13.74	0.20	12.984	0.09	
	3300 NORFOLK RD	19.330	20.000	5.000	0.90	0.60	17.83	17.63	17.53	58.00	2.11%	5251	13.74	0.20	12.709	4.82	
	3315 NORFOLK RD	16.170	25.000	7.000	2.70	0.60	12.87	12.62	12.48	72.00	2.11%	5251	13.74	0.20	12.413	0.07	
	3335 NORFOLK RD	15.890	20.000	5.000	2.50	0.60	12.79	12.59	12.49	20.00	0.50%	5229	12.02	0.20	12.119	0.37	
	3355 NORFOLK RD	15.400	20.000	10.000	1.30	0.60	13.50	13.30	13.10	57.00	0.50%	5229	12.02	0.20	11.934	1.17	

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		Elev. (m)	Dist. (m)	Dist. (m)	Depth (m)	Depth (m)	Elev. (m)	Elev. (m)	Elev. (m)	Dist. (m)	Grade (%)	MH #	Elev. (m)	Dia. (m)	Elev. (m)	(m)	
	RIPON RD																
	3210 RIPON RD	32.410	30.000	11.000	2.40	0.60	29.41	29.11	28.89	2.00	4.63%	rip1	26.60	0.20	26.702	2.19	
	3225 RIPON RD	29.540	27.000	11.000	2.40	0.60	26.54	26.27	26.05	17.00	4.63%	rip1	26.60	0.20	26.008	0.04	
	3230 RIPON RD	31.650	22.000	10.000	2.70	0.60	28.35	28.13	27.93	13.00	4.63%	rip1	26.60	0.20	26.193	1.74	
	3245 RIPON RD	28.250	25.000	10.000	2.40	0.60	25.25	25.00	24.80	7.00	6.01%	5265	24.01	0.20	23.789	1.01	
	3250 RIPON RD	30.610	30.000	15.000	2.60	0.60	27.41	27.11	26.81	5.00	6.01%	5265	24.01	0.20	23.910	2.90	
	3275 RIPON RD	24.910	25.000	12.000	2.70	0.60	21.61	21.36	21.12	52.00	6.01%	5265	24.01	0.20	21.086	0.03	
	3280 RIPON RD	25.950	35.000	10.000	1.50	0.60	23.85	23.50	23.30	46.00	6.01%	5265	24.01	0.20	21.446	1.85	
	3295 RIPON RD	23.500	20.000	10.000	2.70	0.60	20.20	20.00	19.80	80.00	6.01%	5265	24.01	0.20	19.403	0.40	
	3300 RIPON RD	25.930	30.000	10.000	2.70	0.60	22.63	22.33	22.13	8.00	4.10%	5248	19.03	0.20	18.906	3.22	
	3315 RIPON RD	21.200	20.000	15.000	2.40	0.60	18.20	18.00	17.70	38.00	4.10%	5248	19.03	0.20	17.676	0.02	
	3320 RIPON RD	23.270	35.000	10.000	2.60	0.60	20.07	19.72	19.52	60.00	4.10%	5248	19.03	0.20	16.775	2.75	
	3335 RIPON RD	19.330	20.000	12.000	2.60	0.60	16.13	15.93	15.69	44.00	0.50%	5229	12.02	0.20	11.999	3.69	
	3340 RIPON RD	21.190	30.000	12.000	2.60	0.60	17.99	17.69	17.45	114.00	4.10%	5248	19.03	0.20	14.561	2.89	
	3360 RIPON RD	19.790	30.000	15.000	2.50	0.60	16.69	16.39	16.09	12.00	3.40%	5215	15.18	0.20	14.972	1.12	
P	3375 RIPON RD	15.930	20.000	3.000	3.00	0.60	12.33	12.13	12.07	16.00	6.20%	Rip2	14.00	0.20	13.207	-1.14	
	3380 RIPON RD	18.200	20.000	20.000	2.40	0.60	15.20	15.00	14.60	53.00	3.40%	5215	15.18	0.20	13.578	1.02	
P	3475 RIPON RD	7.670	21.000	75.000	2.70	0.60	4.37	4.16	2.66	0.00	4.33%	5181	9.53	0.25	9.780	-7.12	Yaught Club, Eas through parking lot
P	3480 RIPON RD	8.970	20.000	75.000	2.00	0.60	6.37	6.17	4.67	0.00	4.33%	5181	9.53	0.25	9.780	-5.11	
	UPPER TERR																
	3275 UPPER TERR	37.080	80.000	8.000	2.70	0.60	33.78	32.98	32.82	29.00	0.50%	5264	26.10	0.20	26.150	6.67	Serviced from Midland
	3295 UPPER TERR	39.130	80.000	6.000	3.00	0.60	35.53	34.73	34.61	70.00	0.50%	5264	26.10	0.20	25.945	8.67	Serviced from Midland
	3325 UPPER TERR	41.460	80.000	10.000	2.48	0.60	38.38	37.58	37.38	5.00	1.30%	5241	25.51	0.20	25.646	11.73	Serviced from Midland
	3375 UPPER TERR	43.550	75.000	12.000	2.70	0.60	40.25	39.50	39.26	50.00	1.30%	5241	25.51	0.20	25.061	14.20	Serviced from Midland
	3385 UPPER TERR	42.390	60.000	12.000	2.60	0.60	39.19	38.59	38.35	95.00	1.30%	5241	25.51	0.20	24.476	13.87	Serviced from Midland
	3393 UPPER TERR	42.210	50.000	12.000	2.80	0.60	38.81	38.31	38.07	18.00	0.50%	6861	24.24	0.20	24.354	13.72	Serviced from Midland xxx
	3435 UPPER TERR	44.500	80.000	12.000	3.00	0.60	40.90	40.10	39.86	66.00	0.50%	6861	24.24	0.20	24.116	15.74	Serviced from Midland xxx
	3455 UPPER TERR	44.030	50.000	18.000	2.40	0.60	41.03	40.53	40.17	31.00	0.50%	5166B	24.78	0.20	24.825	15.35	Serviced from Midland xxx
	3475 UPPER TERR	42.850	50.000	10.000	2.40	0.60	39.85	39.35	39.15	76.00	0.50%	5166B	24.78	0.20	24.598	14.55	Serviced from Midland xxx
	3485 UPPER TERR	42.810	50.000	30.000	2.40	0.60	39.81	39.31	38.71	2.00	1.39%	5166	29.29	0.20	29.462	9.25	Serviced from Midland
	3495 UPPER TERR	43.460	50.000	22.000	2.40	0.60	40.46	39.96	39.52	45.00	1.39%	5166	29.29	0.20	28.866	10.65	Serviced from Midland
	3505 UPPER TERR	42.510	50.000	16.000	2.50	0.60	39.41	38.91	38.59	63.00	1.39%	5166	29.29	0.20	28.616	9.97	Serviced from Midland
	3515 UPPER TERR	42.320	50.000	14.000	2.10	0.60	39.62	39.12	38.84	2.00	9.16%	5139	28.15	0.20	28.167	10.67	Serviced from Midland
	3565 UPPER TERR	42.340	46.000	21.000	1.90	0.60	39.84	39.38	38.96	93.00	1.84%	5118	27.67	0.20	26.156	12.80	Serviced from Beach

Rutland Catchment
Option 6 - New Sanitary
Gravity, Community PS LPS

Pump Required	Street and Address	Floor Elevation (Polaris Survey) Elev. (m)	Distance from Entrance to PL Dist. (m)	Distance From PL to Main Dist. (m)	House file assumed Main Entrance Distance to Lower Depth (m)	Slab to inv (assumed) m Depth (m)	Calculated Service Elevation at House (SP) Elev. (m)	Calculated Service Elevation at Property Line @ 1% (IC) Elev. (m)	Calculated Service Elevation at Main @ 2% (MC) Elev. (m)	Distance from Upstream Manhole Dist. (m)	Grade from Upstream Manhole Grade (%)	Upstream Manhole MH #	Invert of Upstream Manhole Elev. (m)	Diameter of Main Dia. (m)	Obvert of Main Elev. (m)	Difference (+) Gravity (-) Pump (m)	Comments
	BEACH DR																
	2970 BEACH DR	12.222	28.354	6.513	1.00	0.60	10.62	10.34	10.21	22.00	3.52%	6581	8.73	0.20	8.154	2.05	
E	2975 BEACH DR	7.727	59.641	21.522	1.70	0.60	5.43	4.83	4.40	0.00	3.52%	6581	8.73	0.20	8.928	-4.53	
	2980 BEACH DR	13.392	16.535	6.301	2.60	0.60	10.19	10.03	9.90	19.00	5.00%	6582	8.45	0.20	7.704	2.20	
E	2985 BEACH DR	7.822	70.770	14.037	3.00	0.60	4.22	3.51	3.23	10.00	3.52%	6581	8.73	0.20	8.576	-5.34	
	2990 BEACH DR	19.264	45.540	4.299	3.00	0.60	15.66	15.21	15.12	51.00	5.00%	6582	8.45	0.20	6.104	9.02	
	2997 BEACH DR	10.952	22.380	13.719	0.00	0.60	10.35	10.13	9.85	13.00	5.00%	6582	8.45	0.20	8.004	1.85	
	2999 BEACH DR	11.124	25.000	20.000	2.30	0.60	8.22	7.97	7.57	65.00	5.00%	6582	8.45	0.20	5.404	2.17	
	3000 BEACH DR	12.796	19.411	4.315	2.40	0.60	9.80	9.60	9.52	25.00	2.53%	6446	7.98	0.20	7.543	1.97	
P	3005 BEACH DR	8.230	17.689	17.901	2.70	0.60	4.93	4.75	4.40	56.00	2.53%	6446	7.98	0.20	6.759	-2.36	
P	3023 BEACH DR	8.951	16.486	17.265	3.10	0.60	5.25	5.09	4.74	17.00	1.79%	6445	6.28	0.20	6.179	-1.44	
	3030 BEACH DR	12.942	22.552	2.259	2.70	0.60	9.64	9.42	9.37	3.00	1.79%	6445	6.28	0.20	6.430	2.94	
	3040 BEACH DR	8.976	26.619	5.096	1.20	0.60	7.18	6.91	6.81	46.00	1.79%	6445	6.28	0.20	5.659	1.15	
	3045 BEACH DR	8.141	28.856	12.750	1.50	0.60	6.04	5.75	5.50	56.00	1.79%	6445	6.28	0.20	5.479	0.02	
	3050 BEACH DR	7.647	17.034	15.964	2.30	0.60	4.75	4.58	4.26	1.00	1.80%	5448	3.61	0.20	3.793	0.46	
P	3055 BEACH DR	5.705	15.610	4.618	2.40	0.60	2.71	2.55	2.46	14.00	1.80%	5448	3.61	0.20	3.559	-1.10	
P	3065 BEACH DR	6.072	16.473	4.131	2.60	0.60	2.87	2.71	2.62	42.00	1.80%	5448	3.61	0.20	3.054	-0.43	
P	3100 BEACH DR	6.626	21.357	4.589	2.80	0.60	3.23	3.01	2.92	47.00	2.37%	5416	4.29	0.30	3.474	-0.55	
P	3115 BEACH DR	5.200	25.000	12.000	2.40	0.60	2.20	1.95	1.71	44.00	0.50%	5424	2.08	0.38	2.230	-0.52	No house, assume MFE, BFE
	3120 BEACH DR	6.543	41.957	8.200	0.00	0.60	5.94	5.52	5.36	41.00	0.73%	6531	3.83	0.20	3.731	1.63	
E	3125 BEACH DR	7.308	57.155	13.000	2.60	0.60	4.11	3.54	3.28	49.00	0.73%	6531	3.83	0.20	3.672	-0.40	
P	3140 BEACH DR	7.000	30.000	9.500	2.40	0.60	4.00	3.70	3.51	65.00	1.26%	7030	4.73	0.20	4.112	-0.60	No house
P	3152 BEACH DR	7.472	26.665	8.913	2.90	0.60	3.97	3.71	3.53	29.00	1.26%	7030	4.73	0.20	4.565	-1.04	
P	3155 BEACH DR	5.200	51.000	9.526	3.15	0.60	1.45	0.94	0.75	60.00	1.26%	7030	4.73	0.20	4.175	-3.43	From Design drawings
	3170 BEACH DR	8.908	30.000	11.040	2.30	0.60	6.01	5.71	5.49	3.00	1.26%	7030	4.73	0.20	4.892	0.59	
P	3175 BEACH DR	7.214	55.400	10.632	2.60	0.60	4.01	3.46	3.25	5.00	1.26%	7030	4.73	0.20	4.867	-1.62	
	CADBORO BAY RD																
*	3185 CADBORO BAY RD	56.427	27.030	2.568	2.70	0.60	53.13	52.86	52.81	44.00	#DIV/0!		0.00	0.00	#DIV/0!	#DIV/0!	Grav to comm PS
P	3195 CADBORO BAY RD	55.801	20.213	6.417	2.70	0.60	52.50	52.30	52.17	4.00	4.43%	COT1	53.00	0.20	53.023	-0.85	pump to low pressure main
P	3225 CADBORO BAY RD	56.868	50.500	5.000	2.40	0.60	53.87	53.36	53.26	42.00	#DIV/0!		0.00	0.00	#DIV/0!	#DIV/0!	pump to low pressure main
P	3245 CADBORO BAY RD	56.595	56.000	5.000	1.00	0.60	55.00	54.44	54.34	11.00	#DIV/0!		0.00	0.00	#DIV/0!	#DIV/0!	pump to low pressure main
P	3265 CADBORO BAY RD	57.404	46.000	5.000	2.40	0.60	54.40	53.94	53.84	61.00	#DIV/0!		0.00	0.00	#DIV/0!	#DIV/0!	pump to low pressure main
P	3285 CADBORO BAY RD	58.599	56.000	5.000	2.40	0.60	55.60	55.04	54.94	31.00	#DIV/0!		0.00	0.00	#DIV/0!	#DIV/0!	pump to low pressure main
P	3315 CADBORO BAY RD	58.965	54.000	5.000	2.40	0.60	55.97	55.43	55.33	0.00	#DIV/0!		0.00	0.00	#DIV/0!	#DIV/0!	pump to low pressure main
P	3325 CADBORO BAY RD	59.080	54.000	16.000	2.70	0.60	55.78	55.24	54.92	10.00	#DIV/0!		0.00	0.00	#DIV/0!	#DIV/0!	pump to low pressure main
P	3355 CADBORO BAY RD	58.690	23.831	13.126	1.70	0.60	56.39	56.15	55.89	45.00	#DIV/0!		0.00	0.00	#DIV/0!	#DIV/0!	pump to low pressure main
P	3375 CADBORO BAY RD	59.071	16.092	13.138	2.40	0.60	56.07	55.91	55.65	71.00	#DIV/0!		0.00	0.00	#DIV/0!	#DIV/0!	pump to low pressure main
P	3395 CADBORO BAY RD	59.233	26.744	11.800	2.40	0.60	56.23	55.97	55.73	102.00	#DIV/0!		0.00	0.00	#DIV/0!	#DIV/0!	pump to low pressure main
P	3405 CADBORO BAY RD	57.945	31.828	11.800	2.70	0.60	54.65	54.33	54.09	39.00	#DIV/0!		0.00	0.00	#DIV/0!	#DIV/0!	pump to low pressure main
P	3415 CADBORO BAY RD	57.119	24.500	11.800	2.40	0.60	54.12	53.87	53.64	78.00	#DIV/0!		0.00	0.00	#DIV/0!	#DIV/0!	pump to low pressure main
*	3425 CADBORO BAY RD	55.173	17.800	11.800	2.40	0.60	52.17	52.00	51.76	105.00	#DIV/0!		0.00	0.00	#DIV/0!	#DIV/0!	Grav to comm PS
*	3435 CADBORO BAY RD	56.079	19.700	11.800	1.00	0.60	54.48	54.28	54.05	22.00	#DIV/0!		0.00	0.00	#DIV/0!	#DIV/0!	Grav to comm PS
P	3445 CADBORO BAY RD	55.782	20.100	11.800	1.00	0.60	54.18	53.98	53.75	43.00	#DIV/0!		0.00	0.00	#DIV/0!	#DIV/0!	pump to low pressure main
P	3455 CADBORO BAY RD	55.644	20.400	11.800	2.40	0.60	52.64	52.44	52.20	71.00	#DIV/0!		0.00	0.00	#DIV/0!	#DIV/0!	pump to low pressure main
P	3465 CADBORO BAY RD	55.341	16.500	11.800	2.70	0.60	52.04	51.88	51.64	105.00	#DIV/0!		0.00	0.00	#DIV/0!	#DIV/0!	pump to low pressure main
P	3475 CADBORO BAY RD	53.547	23.200	11.800	2.70	0.60	50.25	50.02	49.78	19.00	#DIV/0!		0.00	0.00	#DIV/0!	#DIV/0!	pump to low pressure main
P	3495 CADBORO BAY RD	51.471	26.000	11.800	2.70	0.60	48.17	47.91	47.68	59.00	#DIV/0!		0.00	0.00	#DIV/0!	#DIV/0!	pump to low pressure main
P	3507 CADBORO BAY RD	49.652	23.000	11.800	2.40	0.60	46.65	46.42	46.19	23.00	#DIV/0!		0.00	0.00	#DIV/0!	#DIV/0!	pump to low pressure main
P	3605 CADBORO BAY RD	47.560	18.700	51.000	2.40	0.60	44.56	44.37	43.35	0.00	1.90%	UPP1	45.55	0.20	45.750	-2.40	no bsmt data (assume 2.4)
	CADBORO BAY RD																
	2440 CARDIGAN RD	55.776	16.272	7.615	2.40	0.60	52.78	52.61	52.46	2.00	3.37%	5200	51.00	0.20	51.133	1.33	
	2455 CARDIGAN RD	55.450	15.971	12.432	2.70	0.60	52.15	51.99	51.74	2.00	3.37%	5200	51.00	0.20	51.133	0.61	
P	2460 CARDIGAN RD	52.939	21.528	6.310	3.50	0.60	48.84	48.62	48.50	27.50	3.37%	5200	51.00	0.20	50.273	-1.78	
	2475 CARDIGAN RD	53.022	11.800	14.087	0.00	0.60	52.42	52.30	52.02	23.30	3.37%	5200	51.00	0.20	50.415	1.61	
	2480 CARDIGAN RD	51.766	13.341	5.923	2.40	0.60	48.77	48.63	48.51	10.00	5.25%	5205	48.42	0.20	48.098	0.42	

Rutland Catchment
Option 6 - New Sanitary
Gravity, Community PS LPS

Pump Required	Street and Address	Floor Elevation (Polaris Survey) Elev. (m)	Distance from Entrance to PL Dist. (m)	Distance From PL to Main Dist. (m)	House file assumed Main Entrance Distance to Lower Depth (m)	Slab to inv (assumed) m Depth (m)	Calculated Service Elevation at House (SP) Elev. (m)	Calculated Service Elevation at Property Line @ 1% (IC) Elev. (m)	Calculated Service Elevation at Main @ 2% (MC) Elev. (m)	Distance from Upstream Manhole Dist. (m)	Grade from Upstream Manhole Grade (%)	Upstream Manhole MH #	Invert of Upstream Manhole Elev. (m)	Diameter of Main Dia. (m)	Obvert of Main Elev. (m)	Difference (+) Gravity (-) Pump (m)	Comments
	CHILTERN PL																
*	2440 CHILTERN PL	54.544	25.524	5.255	2.40	0.60	51.54	51.29	51.18	28.00	#DIV/0!		0.00	0.00	#DIV/0!	#DIV/0!	Grav to comm PS
*	2450 CHILTERN PL	52.084	28.000	8.000	3.50	0.60	47.98	47.70	47.54	3.00	#DIV/0!		0.00	0.00	#DIV/0!	#DIV/0!	Grav to comm PS
*	2455 CHILTERN PL	54.782	21.600	7.100	2.80	0.60	51.38	51.17	51.02	20.00	#DIV/0!		0.00	0.00	#DIV/0!	#DIV/0!	Grav to comm PS
*	2465 CHILTERN PL	52.369	18.600	6.200	2.50	0.60	49.27	49.08	48.96	3.00	#DIV/0!		0.00	0.00	#DIV/0!	#DIV/0!	Grav to comm PS
	COTSWOLD RD																
	2440 COTSWOLD RD	56.990	19.336	11.850	2.50	0.60	53.89	53.70	53.46	4.00	4.43%	COT1	53.00	0.20	53.023	0.44	
P	2450 COTSWOLD RD	54.654	28.388	10.811	2.60	0.60	51.45	51.17	50.95	29.00	4.43%	COT1	53.00	0.20	51.917	-0.96	
	2455 COTSWOLD RD	53.711	13.410	10.429	0.00	0.60	53.11	52.98	52.77	40.00	4.43%	COT1	53.00	0.20	51.430	1.34	
	2460 COTSWOLD RD	52.898	15.377	8.040	1.20	0.60	51.10	50.94	50.78	12.00	4.89%	5272	50.75	0.20	50.364	0.42	
P	2475 COTSWOLD RD	52.087	13.237	12.531	2.60	0.60	48.89	48.75	48.50	24.00	4.89%	5272	50.75	0.20	49.777	-1.27	
	2500 COTSWOLD RD	48.048	17.042	21.908	2.60	0.60	44.85	44.68	44.24	1.00	5.22%	5293	42.71	0.20	42.858	1.38	
P	2505 COTSWOLD RD	45.942	22.351	20.725	2.50	0.60	42.84	42.62	42.20	3.00	5.22%	5293	42.71	0.20	42.753	-0.55	
P	2515 COTSWOLD RD	44.196	18.274	12.493	2.40	0.60	41.20	41.01	40.76	23.00	5.22%	5293	42.71	0.20	41.709	-0.95	
	2520 COTSWOLD RD	46.737	20.233	12.901	2.10	0.60	44.04	43.83	43.58	9.00	5.22%	5293	42.71	0.20	42.440	1.14	
P	2535 COTSWOLD RD	41.369	23.700	13.200	3.00	0.60	37.77	37.53	37.27	31.00	4.87%	5295	40.42	0.20	39.106	-1.84	
	2540 COTSWOLD RD	45.990	24.106	9.259	2.90	0.60	42.49	42.25	42.06	42.00	5.22%	5293	42.71	0.20	40.716	1.35	
	2555 COTSWOLD RD	39.944	34.468	18.193	2.40	0.60	36.94	36.60	36.24	10.00	2.79%	6505	33.92	0.20	33.841	2.39	
	2560 COTSWOLD RD	44.368	25.307	5.859	1.40	0.60	42.37	42.11	42.00	44.00	4.87%	5295	40.42	0.20	38.472	3.53	
	2580 COTSWOLD RD	41.685	19.191	10.427	2.40	0.60	38.69	38.49	38.28	78.00	4.87%	5295	40.42	0.20	36.815	1.47	
P	2605 COTSWOLD RD	37.251	17.217	15.108	2.60	0.60	34.05	33.88	33.58	6.00	1.83%	5288	35.25	0.20	35.341	-1.76	
	LANSDOWNE RD																
	2420 LANSDOWNE RD	53.699	41.162	10.600	0.61	0.60	52.49	52.08	51.87	3.00	3.25%	5331	48.50	0.20	48.603	3.26	
P	2445 LANSDOWNE RD	51.234	18.101	10.787	3.00	0.60	47.63	47.45	47.24	4.00	3.25%	5331	48.50	0.20	48.570	-1.33	
	2450 LANSDOWNE RD	51.836	22.415	9.384	2.40	0.60	48.84	48.61	48.42	31.00	3.25%	5331	48.50	0.20	47.693	0.73	
	2470 LANSDOWNE RD	50.694	29.660	10.167	2.40	0.60	47.69	47.40	47.19	24.00	4.32%	6478	46.85	0.20	46.012	1.18	
P	2475 LANSDOWNE RD	48.933	16.627	10.378	2.40	0.60	45.93	45.77	45.56	6.00	4.32%	6478	46.85	0.20	46.789	-1.23	
P	2525 LANSDOWNE RD	42.093	20.169	8.583	2.30	0.60	39.19	38.99	38.82	42.00	5.79%	5337	42.33	0.20	40.097	-1.28	From Design drawings
	2530 LANSDOWNE RD	42.779	16.052	38.690	2.60	0.60	39.58	39.42	38.64	12.00	6.23%	6860	39.05	0.20	38.502	0.14	
P	2545 LANSDOWNE RD	39.923	18.949	8.899	2.40	0.60	36.92	36.73	36.56	22.00	6.23%	6860	39.05	0.20	37.879	-1.32	
	2550 LANSDOWNE RD	40.163	15.429	9.944	2.40	0.60	37.16	37.01	36.81	48.00	6.23%	6860	39.05	0.20	36.258	0.55	
P	2555 LANSDOWNE RD	38.045	34.709	10.359	2.70	0.60	34.75	34.40	34.19	52.00	6.23%	6860	39.05	0.20	36.009	-1.82	
	2570 LANSDOWNE RD	37.885	11.948	9.347	2.40	0.60	34.89	34.77	34.58	19.00	5.04%	5351	35.28	0.20	34.522	0.06	
	2575 LANSDOWNE RD	38.800	10.772	10.754	2.40	0.60	35.80	35.69	35.48	21.00	5.04%	5351	35.28	0.20	34.421	1.06	
	2580 LANSDOWNE RD	36.906	18.898	9.349	2.10	0.60	34.21	34.02	33.83	45.00	5.04%	5351	35.28	0.20	33.210	0.62	
P	2595 LANSDOWNE RD	33.516	20.756	10.775	2.60	0.60	30.32	30.11	29.89	82.00	5.04%	5351	35.28	0.20	31.344	-1.45	
P	2625 LANSDOWNE RD	29.633	13.811	10.695	2.40	0.60	26.63	26.49	26.28	40.00	5.81%	5359	28.85	0.20	26.725	-0.44	
P	2655 LANSDOWNE RD	26.851	16.726	10.782	1.50	0.60	24.75	24.58	24.37	19.00	4.85%	5365	25.30	0.20	24.579	-0.21	(2.4 assumed) house file didn't have drawing
	2660 LANSDOWNE RD	29.801	18.321	9.308	2.40	0.60	26.80	26.62	26.43	13.00	4.85%	5365	25.30	0.20	24.870	1.56	
P	2695 LANSDOWNE RD	25.720	12.338	10.716	2.70	0.60	22.42	22.30	22.08	46.00	4.85%	5365	25.30	0.20	23.271	-1.19	
	2700 LANSDOWNE RD	24.274	24.335	9.450	2.60	0.60	21.07	20.83	20.64	21.00	3.60%	5377	20.69	0.25	20.182	0.46	
	2720 LANSDOWNE RD	23.518	20.729	9.448	2.40	0.60	20.52	20.31	20.12	50.00	3.60%	5377	20.69	0.25	19.139	0.98	
P	2725 LANSDOWNE RD	22.771	16.224	10.641	2.70	0.60	19.47	19.31	19.10	23.00	3.60%	5377	20.69	0.25	20.110	-1.01	
P	2755 LANSDOWNE RD	21.068	23.267	10.680	1.20	0.60	19.27	19.04	18.82	54.00	3.60%	5377	20.69	0.25	18.995	-0.17	
	2760 LANSDOWNE RD	21.836	21.948	9.257	2.50	0.60	18.74	18.52	18.33	31.00	0.50%	5381	18.17	0.25	18.262	0.07	
	2765 LANSDOWNE RD	20.803	15.003	10.844	1.50	0.60	18.70	18.55	18.34	33.00	0.50%	5381	18.17	0.25	18.252	0.08	
	2810 LANSDOWNE RD	21.837	16.691	17.821	2.80	0.60	18.44	18.27	17.91	17.00	1.69%	5390	17.62	0.25	17.587	0.33	
	2815 LANSDOWNE RD	19.633	16.793	12.302	0.00	0.60	19.03	18.87	18.62	18.00	1.69%	5390	17.62	0.25	17.570	1.05	
	2830 LANSDOWNE RD	18.786	22.341	16.226	0.40	0.60	17.79	17.56	17.24	54.00	1.69%	5390	17.62	0.25	16.963	0.27	
P	2835 LANSDOWNE RD	19.778	11.055	13.744	2.40	0.60	16.78	16.67	16.39	58.00	1.69%	5390	17.62	0.25	16.896	-0.50	
	2850 LANSDOWNE RD	19.503	19.054	7.456	2.40	0.60	16.50	16.31	16.16	24.00	2.24%	5396	16.09	0.25	15.797	0.37	
	2855 LANSDOWNE RD	18.504	12.221	10.890	0.50	0.60	17.40	17.28	17.06	2.00	2.24%	5396	16.09	0.25	16.290	0.77	
	2870 LANSDOWNE RD	18.928	26.290	8.043	2.60	0.60	15.73	15.47	15.30	59.00	2.24%	5396	16.09	0.25	15.012	0.29	
P	2875 LANSDOWNE RD	18.107	24.692	18.020	2.90	0.60	14.61	14.36	14.00	34.00	2.24%	5396	16.09	0.25	15.572	-1.57	
	2880 LANSDOWNE RD	17.596	19.673	12.622	2.60	0.60	14.40	14.20	13.95	5.00	3.32%	5391	13.81	0.25	13.893	0.05	
	2890 LANSDOWNE RD	15.575	22.679	14.906	1.10	0.60	13.88	13.65	13.35	147.00	3.84%	5325	18.16	0.20	12.710	0.64	
	2895 LANSDOWNE RD	17.667	18.136	12.777	2.60	0.60	14.47	14.29	14.03	25.00	3.32%	5391	13.81	0.25	13.230	0.80	
	2925 LANSDOWNE RD	14.007	14.591	12.497	2.40	0.60	11.01	10.86	10.61	9.00	5.19%	5379	10.08	0.30	9.908	0.70	
P	2950 LANSDOWNE RD	12.966	23.356	24.378	3.00	0.60	9.37	9.13	8.64	23.00	5.19%	5379	10.08	0.30	9.181	-0.54	

Rutland Catchment
Option 6 - New Sanitary
Gravity, Community PS LPS

Pump Required	Street and Address	Floor Elevation (Polaris Survey) Elev. (m)	Distance from Entrance to PL Dist. (m)	Distance From PL to Main Dist. (m)	House file assumed Main Entrance Distance to Lower Depth (m)	Slab to inv (assumed) m Depth (m)	Calculated Service Elevation at House (SP) Elev. (m)	Calculated Service Elevation at Property Line @ 1% (IC) Elev. (m)	Calculated Service Elevation at Main @ 2% (MC) Elev. (m)	Distance from Upstream Manhole Dist. (m)	Grade from Upstream Manhole Grade (%)	Upstream Manhole MH #	Invert of Upstream Manhole Elev. (m)	Diameter of Main Dia. (m)	Obvert of Main Elev. (m)	Difference (+) Gravity (-) Pump (m)	Comments
	MIDLAND RD																
	3110 MIDLAND RD	28.616	12.117	9.411	2.70	0.60	25.32	25.19	25.01	63.00	3.80%	6509	26.28	0.20	24.085	0.92	
P	3125 MIDLAND RD	24.970	46.100	1.500	2.60	0.60	21.77	21.31	21.28	89.00	3.80%	6509	26.28	0.20	23.096	-1.82	
	3130 MIDLAND RD	29.578	13.901	9.500	0.00	0.60	28.98	28.84	28.65	32.00	3.80%	6509	26.28	0.20	25.265	3.38	
P	3135 MIDLAND RD	25.366	45.000	1.500	2.70	0.60	22.07	21.62	21.59	63.00	3.80%	6509	26.28	0.20	24.085	-2.50	
	3140 MIDLAND RD	30.315	17.381	9.585	2.40	0.60	27.32	27.14	26.95	3.00	3.80%	6509	26.28	0.20	26.368	0.58	
P	3145 MIDLAND RD	27.508	46.500	1.500	2.70	0.60	24.21	23.74	23.71	30.00	3.80%	6509	26.28	0.20	25.341	-1.63	
	3150 MIDLAND RD	31.997	19.982	9.424	1.00	0.60	30.40	30.20	30.01	97.00	2.35%	5290	29.35	0.20	27.268	2.74	
P	3155 MIDLAND RD	28.524	42.900	1.500	2.70	0.60	25.22	24.80	24.77	4.00	2.35%	5290	29.35	0.20	29.454	-4.69	
	3160 MIDLAND RD	32.639	17.534	9.241	2.40	0.60	29.64	29.46	29.28	65.00	2.35%	5290	29.35	0.20	28.020	1.26	
P	3165 MIDLAND RD	30.154	13.183	36.441	1.20	0.60	28.35	28.22	27.49	65.00	2.35%	5290	29.35	0.20	28.020	-0.53	
P	3175 MIDLAND RD	30.705	11.967	36.402	1.10	0.60	29.01	28.89	28.16	38.00	2.35%	5290	29.35	0.20	28.655	-0.50	
	3180 MIDLAND RD	33.749	24.077	9.524	2.00	0.60	31.15	30.91	30.72	10.00	2.35%	5290	29.35	0.20	29.313	1.40	
P	3185 MIDLAND RD	31.358	33.268	37.023	2.00	0.60	28.76	28.43	27.68	15.00	2.35%	5290	29.35	0.20	29.195	-1.51	
	3200 MIDLAND RD	33.940	26.800	9.700	2.70	0.60	30.64	30.37	30.18	76.80	3.94%	7016	32.92	0.20	30.092	0.09	
	NORFOLK RD																
P	3105 NORFOLK RD	15.023	9.300	0.228	2.90	0.60	11.52	11.43	11.43	135.00	3.84%	5325	18.16	0.20	13.171	-1.75	
	3110 NORFOLK RD	17.660	15.822	15.544	1.20	0.60	15.86	15.70	15.39	81.00	3.84%	5325	18.16	0.20	15.246	0.14	
P	3115 NORFOLK RD	16.840	22.300	2.000	2.40	0.60	13.84	13.62	13.58	95.00	3.84%	5325	18.16	0.20	14.708	-1.13	
P	3125 NORFOLK RD	18.742	16.382	2.000	2.40	0.60	15.74	15.58	15.54	51.00	3.84%	5325	18.16	0.20	16.399	-0.86	
P	3130 NORFOLK RD	20.075	26.616	15.961	2.80	0.60	16.68	16.41	16.09	41.00	3.84%	5325	18.16	0.20	16.783	-0.69	
	3145 NORFOLK RD	20.443	17.541	2.000	1.40	0.60	18.44	18.27	18.23	10.00	3.84%	5325	18.16	0.20	17.974	0.25	
	3150 NORFOLK RD	22.160	22.184	15.784	2.60	0.60	18.96	18.74	18.42	10.00	3.84%	5325	18.16	0.20	17.974	0.45	
P	3165 NORFOLK RD	21.153	30.712	2.000	2.70	0.60	17.85	17.55	17.51	1.00	3.84%	5325	18.16	0.20	18.320	-0.81	
	3170 NORFOLK RD	22.070	22.191	18.092	1.20	0.60	20.27	20.05	19.69	3.00	3.84%	5325	18.16	0.20	18.243	1.44	
	NOTTINGHAM RD																
P	2580 NOTTINGHAM RD	34.904	67.308	3.847	2.30	0.60	32.00	31.33	31.25	45.00	5.04%	5351	35.28	0.20	33.210	-1.96	
	RIPON RD																
	3120 RIPON RD	22.022	24.868	10.237	1.20	0.60	20.22	19.97	19.77	54	1.98%	6856	20.14	0.20	19.270	0.50	
	3135 RIPON RD	23.567	28.860	9.900	2.60	0.60	20.37	20.08	19.88	27	1.98%	6856	20.14	0.20	19.806	0.07	
	3140 RIPON RD	24.251	23.694	10.229	2.80	0.60	20.85	20.61	20.41	27	1.98%	6856	20.14	0.20	19.806	0.60	
	3145 RIPON RD	24.632	20.379	9.522	2.70	0.60	21.33	21.13	20.94	60	2.98%	5362	22.20	0.20	20.614	0.32	
	3150 RIPON RD	24.958	20.748	11.434	2.60	0.60	21.76	21.55	21.32	63	2.98%	5362	22.20	0.20	20.525	0.80	
	3155 RIPON RD	25.696	21.319	10.921	2.60	0.60	22.50	22.28	22.06	20	2.98%	5362	22.20	0.20	21.806	0.26	
	3160 RIPON RD	26.248	21.788	9.558	2.70	0.60	22.95	22.73	22.54	17	2.98%	5362	22.20	0.20	21.895	0.64	
	3165 RIPON RD	26.852	16.866	11.998	2.70	0.60	23.55	23.38	23.14	57	3.54%	5303	24.64	0.20	22.823	0.32	
	3170 RIPON RD	27.619	15.834	7.526	2.70	0.60	24.32	24.16	24.01	31	3.54%	5303	24.64	0.20	23.743	0.27	
	3175 RIPON RD	27.960	20.170	11.374	2.70	0.60	24.66	24.46	24.23	18	3.54%	5303	24.64	0.20	24.203	0.03	
	3185 RIPON RD	30.184	37.546	8.693	3.00	0.60	26.58	26.21	26.03	3	3.54%	5303	24.64	0.20	24.734	1.30	
	3190 RIPON RD	30.354	25.803	19.147	1.90	0.60	27.85	27.60	27.21	3	3.54%	5303	24.64	0.20	24.734	2.48	
	3215 RIPON RD	31.079	45.325	41.485	2.70	0.60	27.78	27.33	26.50	0	3.54%	5303	24.64	0.20	24.840	1.66	
	RUTLAND RD																
	2955 RUTLAND RD	11.908	17.516	14.429	2.60	0.60	8.71	8.53	8.24	56.00	5.19%	5379	10.08	0.30	7.468	0.78	
P	2970 RUTLAND RD	9.286	45.150	19.396	2.50	0.60	6.19	5.73	5.35	2.00	0.98%	6863	6.31	0.30	6.590	-1.24	
	2985 RUTLAND RD	10.759	25.075	16.900	2.70	0.60	7.46	7.21	6.87	53.00	1.29%	5388	6.21	0.30	5.829	1.04	
P	2990 RUTLAND RD	8.452	23.360	4.441	2.70	0.60	5.15	4.92	4.83	35.00	1.29%	5388	6.21	0.30	6.060	-1.23	
P	3000 RUTLAND RD	7.720	13.090	8.340	2.30	0.60	4.82	4.69	4.52	13.00	1.76%	5413	4.91	0.30	4.981	-0.46	no floor / basement elev (assumed)
P	3005 RUTLAND RD	8.567	21.501	15.490	2.70	0.60	5.27	5.05	4.74	72.00	1.29%	5388	6.21	0.30	5.584	-0.84	
	3025 RUTLAND RD	8.891	12.202	12.723	2.60	0.60	5.69	5.57	5.31	13.00	1.76%	5413	4.91	0.30	4.981	0.33	
P	3055 RUTLAND RD	6.909	16.323	17.656	2.70	0.60	3.61	3.45	3.09	21.00	2.37%	5416	4.29	0.30	4.089	-1.00	
P	3075 RUTLAND RD	6.735	23.644	15.783	2.60	0.60	3.54	3.30	2.98	53.00	2.37%	5416	4.29	0.30	3.332	-0.35	
P	3150 RUTLAND RD	5.277	34.289	9.071	2.70	0.60	1.98	1.63	1.45	17.00	0.50%	5431	1.85	0.38	2.140	-0.69	
	3155 RUTLAND RD	7.059	19.992	5.150	3.00	0.60	3.46	3.26	3.16	40.00	0.50%	5431	1.85	0.38	2.025	1.13	
	SHERRINGHAM PL																
P	3145 SHERRINGHAM PL	55.082	27.000	8.000	2.40	0.60	52.08	51.81	51.65	31.00	#DIV/0!		0.00	0.00	#DIV/0!	#DIV/0!	Grav to comm PS
P	3155 SHERRINGHAM PL	53.322	22.000	6.000	2.50	0.60	50.22	50.00	49.88	3.00	#DIV/0!		0.00	0.00	#DIV/0!	#DIV/0!	Grav to comm PS
E	3165 SHERRINGHAM PL	51.550	14.000	34.000	3.40	0.60	47.55	47.41	46.73	0.00	#DIV/0!		0.00	0.00	#DIV/0!	#DIV/0!	Grav to comm PS
P	3175 SHERRINGHAM PL	54.349	23.000	3.000	2.70	0.60	51.05	50.82	50.76	3.00	#DIV/0!		0.00	0.00	#DIV/0!	#DIV/0!	Grav to comm PS
	SOUTHDOWNE RD																
	3075 SOUTHDOWNE RD	19.566	34.137	8.628	1.80	0.60	17.17	16.82	16.65	65.00	2.24%	5396	16.09	0.25	14.877	1.78	
	3085 SOUTHDOWNE RD	19.029	31.345	74.465	2.10	0.60	16.33	16.02	14.53	89.00	2.24%	5396	16.09	0.25	14.339	0.19	
	SURREY RD																
	2960 SURREY RD	16.776	50.575	20.901	0.50	0.60	15.68	15.17	14.75	2.00	2.53%	6446	7.98	0.20	8.124	6.63	
E	3065 SURREY RD	7.194	28.761	88.000	2.00	0.60	4.59	4.31	2.55	82.00	5.00%	6582	8.45	0.20	4.554	-2.01	

Rutland Catchment
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Pump Required	Street and Address	Floor Elevation (Polaris Survey) Elev. (m)	Distance from Entrance to PL Dist. (m)	Distance From PL to Main Dist. (m)	House file assumed Main Entrance Distance to Lower Depth (m)	Slab to inv (assumed) m Depth (m)	Calculated Service Elevation at House (SP) Elev. (m)	Calculated Service Elevation at Property Line @ 1% (IC) Elev. (m)	Calculated Service Elevation at Main @ 2% (MC) Elev. (m)	Distance from Upstream Manhole Dist. (m)	Grade from Upstream Manhole Grade (%)	Upstream Manhole MH #	Invert of Upstream Manhole Elev. (m)	Diameter of Main Dia. (m)	Obvert of Main Elev. (m)	Difference (+) Gravity (-) Pump (m)	Comments
	TARN PL																
	3140 TARN PL	6.487	24.945	9.632	0.90	0.60	4.99	4.74	4.54	11.00	0.72%	6850	4.29	0.20	4.414	0.13	
E	3150 TARN PL	6.543	14.162	9.203	2.40	0.60	3.54	3.40	3.22	20.00	0.50%	5467	4.50	0.20	4.595	-1.38	
E	3165 TARN PL	7.092	24.967	8.272	4.10	0.60	2.39	2.14	1.98	0.00	0.50%	5467	4.50	0.20	4.695	-2.72	
P	3175 TARN PL	6.483	45.934	9.335	1.40	0.60	4.48	4.02	3.84	0.00	0.50%	5467	4.50	0.20	4.695	-0.86	
	UPLANDS RD																
P	3085 UPLANDS RD	44.829	23.076	10.255	2.70	0.60	41.53	41.30	41.09	18.00	5.79%	5337	42.33	0.20	41.487	-0.39	
P	3090 UPLANDS RD	46.290	29.864	9.401	1.50	0.60	44.19	43.89	43.70	59.00	4.32%	6478	46.85	0.20	44.502	-0.80	
	3100 UPLANDS RD	47.540	21.602	10.287	2.40	0.60	44.54	44.32	44.12	64.00	1.03%	5312	43.70	0.20	43.235	0.88	
	3125 UPLANDS RD	44.140	37.179	11.440	2.40	0.60	41.14	40.77	40.54	44.00	5.79%	5337	42.33	0.20	39.981	0.56	no bsmt data (assume 2.4)
	3130 UPLANDS RD	48.320	23.673	11.771	2.20	0.60	45.52	45.28	45.05	13.00	1.03%	5312	43.70	0.20	43.762	1.29	
P	3155 UPLANDS RD	45.830	16.432	20.146	2.40	0.60	42.83	42.67	42.26	6.00	1.06%	5300A	43.98	0.20	44.118	-1.86	
	3160 UPLANDS RD	48.772	23.937	10.225	2.70	0.60	45.47	45.23	45.03	33.00	2.21%	6864	45.34	0.20	44.806	0.22	
P	3200 UPLANDS RD	50.421	23.338	7.206	2.70	0.60	47.12	46.89	46.74	67.00	4.89%	5272	50.75	0.20	47.676	-0.93	
	3220 UPLANDS RD	52.139	28.261	11.025	2.70	0.60	48.84	48.56	48.34	3.00	2.32%	5260	46.48	0.20	46.614	1.72	
	3225 UPLANDS RD	50.436	27.341	11.216	2.70	0.60	47.14	46.86	46.64	3.00	2.32%	5260	46.48	0.20	46.614	0.02	
	3240 UPLANDS PL	53.160	17.470	17.195	3.20	0.60	49.36	49.19	48.84	0.00	2.38%	5253	48.56	0.20	48.760	0.08	
	3255 UPLANDS RD	49.109	20.200	10.200	3.00	0.60	45.51	45.31	45.10	7.00	0.50%	5257	44.94	0.20	45.100	0.00	
	3260 UPLANDS PL	53.883	24.117	16.323	2.70	0.60	50.58	50.34	50.02	0.00	2.38%	5253	48.56	0.20	48.760	1.26	
	3275 UPLANDS RD	48.669	20.153	9.322	2.40	0.60	45.67	45.47	45.28	28.00	0.50%	5257	44.94	0.20	44.995	0.29	
	3280 UPLANDS RD	50.909	16.546	10.743	2.90	0.60	47.41	47.24	47.03	21.00	0.50%	5257	44.94	0.20	45.030	2.00	
	3295 UPLANDS RD	48.634	20.356	9.089	2.40	0.60	45.63	45.43	45.25	24.00	0.50%	5250	44.68	0.20	44.759	0.49	
	3300 UPLANDS RD	51.934	35.439	11.008	2.70	0.60	48.63	48.28	48.06	26.00	0.50%	5250	44.68	0.20	44.749	3.31	
	3335 UPLANDS RD	49.014	18.240	9.526	3.00	0.60	45.41	45.23	45.04	63.00	0.50%	5250	44.68	0.20	44.564	0.48	
	3350 UPLANDS RD	50.628	35.813	10.526	3.00	0.60	47.03	46.67	46.46	1.00	0.50%	5231	44.25	0.20	44.444	2.02	
	3355 UPLANDS RD	49.034	13.281	9.368	3.00	0.60	45.43	45.30	45.11	21.00	0.50%	5231	44.25	0.20	44.344	0.77	
	3370 UPLANDS RD	50.420	20.258	11.046	2.80	0.60	47.02	46.82	46.60	52.00	0.50%	5231	44.25	0.20	44.189	2.41	
	3375 UPLANDS RD	48.849	14.554	9.373	2.70	0.60	45.55	45.40	45.22	55.00	0.50%	5231	44.25	0.20	44.174	1.04	
	3410 UPLANDS RD	49.378	12.920	4.441	2.40	0.60	46.38	46.25	46.16	49.00	5.25%	5205	48.42	0.20	46.048	0.11	
	3420 UPLANDS RD	49.706	14.858	0.474	2.40	0.60	46.71	46.56	46.55	9.00	1.00%	5201	43.43	0.20	43.540	3.01	
	3430 UPLANDS RD	47.620	16.936		1.40	0.60	45.62	45.45	45.45	30.70	0.50%	5187	42.24	0.20	42.291	3.16	
	UPPER TERR																
P	3205 UPPER TERR	37.063	15.500	9.850	2.40	0.60	34.06	33.91	33.71	11.00	2.49%	5282	34.58	0.20	34.510	-0.80	
	3210 UPPER TERR	40.270	12.200	10.450	2.70	0.60	36.97	36.85	36.64	34.00	1.83%	5288	35.25	0.20	34.830	1.81	
P	3215 UPPER TERR	35.514	27.700	15.600	2.70	0.60	32.21	31.94	31.63	14.00	3.94%	7016	32.92	0.20	32.568	-0.94	
	3230 UPPER TERR	40.967	22.965	15.705	2.70	0.60	37.67	37.44	37.12	27.00	2.49%	5282	34.58	0.20	34.112	3.01	
	3250 UPPER TERR	40.346	26.431	23.868	1.00	0.60	38.75	38.48	38.00	70.00	4.31%	5254	36.78	0.20	33.965	4.04	
	3270 UPPER TERR	41.862	20.458	12.058	2.20	0.60	39.06	38.86	38.62	26.00	4.31%	5254	36.78	0.20	35.862	2.75	
	3290 UPPER TERR	42.861	19.193	9.799	2.40	0.60	39.86	39.67	39.47	59.00	4.99%	5236	40.20	0.20	37.449	2.02	
	3320 UPPER TERR	43.607	16.066	9.898	1.20	0.60	41.81	41.65	41.45	10.00	4.99%	5236	40.20	0.20	39.897	1.55	no basmt data (assume 2.4)
	3350 UPPER TERR	44.907	10.893	11.761	2.40	0.60	41.91	41.80	41.56	89.00	1.39%	5208	41.80	0.20	40.768	0.80	
	3380 UPPER TERR	47.260	12.883	13.195	2.60	0.60	44.06	43.93	43.67	47.00	1.39%	5208	41.80	0.20	41.351	2.32	
	3400 UPPER TERR	47.527	15.171	6.071	2.40	0.60	44.53	44.38	44.25	46.50	1.39%	5208	41.80	0.20	41.358	2.90	
	3440 UPPER TERR	46.753	17.159	13.154	3.00	0.60	43.15	42.98	42.72	69.00	0.50%	5173	42.61	0.20	42.465	0.25	
	3450 UPPER TERR	48.472	26.162	14.056	2.40	0.60	45.47	45.21	44.93	46.00	0.50%	5173	42.61	0.20	42.580	2.35	
	3460 UPPER TERR	47.855	16.648	14.728	2.40	0.60	44.86	44.69	44.39	5.00	0.50%	5173	42.61	0.20	42.785	1.61	
	3470 UPPER TERR	47.142	26.470	11.909	2.70	0.60	43.84	43.58	43.34	13.00	0.50%	5162	42.86	0.20	42.999	0.34	
P	3480 UPPER TERR	46.658	30.237	7.357	2.70	0.60	43.36	43.06	42.91	55.00	0.50%	5138	43.30	0.20	43.225	-0.32	
	3490 UPPER TERR	47.442	13.483	10.051	2.30	0.60	44.54	44.41	44.21	5.00	0.50%	5138	43.30	0.20	43.475	0.73	
	3500 UPPER TERR	47.766	20.395	3.667	0.90	0.60	46.27	46.06	45.99	36.00	1.90%	UPP1	45.55	0.20	45.065	0.92	
	3520 UPPER TERR	48.735	22.857	4.117	1.60	0.60	46.54	46.31	46.22	71.00	1.90%	UPP1	45.55	0.20	44.399	1.82	
P	3525 UPPER TERR	44.660	30.000	8.000	2.40	0.60	41.66	41.36	41.20	57.00	1.90%	UPP1	45.55	0.20	44.666	-3.47	no basmt data (assume 2.4)
P	3535 UPPER TERR	46.800	25.000	11.000	2.40	0.60	43.80	43.55	43.33	19.00	1.90%	UPP1	45.55	0.20	45.389	-2.06	no basmt data (assume 2.4)
	VALDEZ PL																
	3000 VALDEZ PL	13.667	30.118	28.000	2.00	0.60	11.07	10.77	10.21	2.00	1.50%	VAL1	5.01	0.20	5.178	5.03	no basmt data (assume 2.4)
	3015 VALDEZ PL	12.357	28.920	28.000	0.50	0.60	11.26	10.97	10.41	2.00	1.50%	VAL1	5.01	0.20	5.178	5.23	
	3020 VALDEZ PL	9.624	45.000	7.000	2.40	0.60	6.62	6.17	6.03	0.00	1.50%	VAL1	5.01	0.20	5.208	0.83	
	3046 VALDEZ PL	9.102	12.000	7.000	2.40	0.60	6.10	5.98	5.84	9.00	1.50%	VAL1	5.01	0.20	5.073	0.77	no basmt data (assume 2.4)
	3055 VALDEZ PL	12.433	20.000	6.000	0.90	0.60	10.93	10.73	10.61	18.00	1.50%	VAL1	5.01	0.20	4.938	5.67	
	WEALD RD																
	3110 WEALD RD	35.206	19.761	10.783	2.40	0.60	32.21	32.01	31.79	52.00	3.63%	5327	32.11	0.20	30.417	1.38	
	3125 WEALD RD	32.940	31.540	9.493	2.40	0.60	29.94	29.62	29.43	21.00	5.81%	5359	28.85	0.20	27.829	1.61	
	3130 WEALD RD	35.894	15.077	11.346	2.50	0.60	32.79	32.64	32.42	13.00	3.63%	5327	32.11	0.20	31.834	0.58	
P	3135 WEALD RD	32.477	36.954	9.896	1.20	0.60	30.68	30.31	30.11	16.00	3.63%	5327	32.11	0.20	31.725	-1.62	
P	3145 WEALD RD	35.054	15.845	5.616	2.50	0.60	31.95	31.80	31.68	43.00	2.79%	6505	33.92	0.20	32.921	-1.24	
	3160 WEALD RD	36.854	14.831	14.493	0.00	0.60	36.25	36.11	35.82	43.00	2.79%	6505	33.92	0.20	32.921	2.89	
P	3165 WEALD RD	36.232	14.538	3.237	2.40	0.60	33.23	33.09	33.02	21.00	2.79%	6505	33.92	0.20	33.534	-0.51	
P	3185 WEALD RD	36.635	31.684	3.139	2.40	0.60	33.64	33.32	33.26	3.00	2.79%	6505	33.92	0.20	34.036	-0.78	
	3220 WEALD RD	46.134	29.384	9.246	3.00	0.60	42.53	42.24	42.06	45.00	3.10%	5259	41.98	0.20	40.789	1.27	
P	3235 WEALD RD	44.641	30.584	5.345	3.00	0.60	41.04	40.74	40.63	32.00	3.10%	5259	41.98	0.20	41.192	-0.56	
	3250 WEALD RD	46.243	24.509	8.439	2.40	0.60	43.24	43.00	42.83	13.00	3.10%	5259	41.98	0.20	41.780	1.05	
	3280 WEALD RD	46.376	19.147	8.358	2.70	0.60	43.08	42.88	42.72	72.00	0.77%	5244	42.69	0.20	42.330	0.39	
P	3285 WEALD RD	44.639	22.601	6.678	2.40	0.60	41.64	41.41	41.28	68.00	0.77%	5244	42.69	0.20	42.361	-1.08	
P	3305 WEALD RD	44.799	48.380	8.450	3.00	0.60	41.20	40.72	40.55	30.00	0.77%	5244	42.69	0.20	42.655	-2.11	
	3320 WEALD RD	46.894	18.431	6.909	2.40	0.60	43.89	43.71	43.57	32.00	0.77%	5244	42.69	0.20	42.640	0.93	
P	3335 WEALD RD	45.635	9.300	6.500	2.40	0.60	42.64	42.54	42.41	45.00	1.68%	5227	43.60	0.20	43.043	-0.63	
	3350 WEALD RD	47.007	18.524	8.901	2.50	0.60	43.91	43.72	43.54	4.00	0.77%	5244	42.69	0.20	42.856	0.69	
P	3355 WEALD RD	46.073	15.977	8.960	3.00	0.60	42.47	42.31	42.13	29.00	1.68%	5227	43.60	0.20	43.312	-1.18	
	3375 WEALD RD	47.616	26.224	6.632	2.50	0.60	44.52	44.25	44.12	1.00	1.68%	5227	43.60	0.20	43.783	0.34	
	3395 WEALD RD	48.809	12.037	8.153	3.00	0.60	45.21	45.09	44.93	50.00	0.50%	5220	43.82	0.20	43.769	1.16	