

Network Details

Manhole Schedule

Manhole	Catchment Area (ha)	Diameter (m)	Type	CL (m)	IL (m)	Depth To Soffit (m)	Easting (m)	Northing (m)
S40	0.090	1.350	Type C	6.125	4.675	1.225	488763.155	98323.136
S34	0.055	1.200	Type B	5.823	3.900	1.623	488757.057	98345.163
S35	0.049	1.350	Type C	5.498	3.775	1.423	488751.536	98375.967
RWP130A	0.000	0.180	Type E	5.624	5.300	0.224	488733.805	98376.816
RE130B	0.000	0.250	250	5.623	5.000	0.523	488734.030	98375.773
YG130	0.000	0.180	Type E	5.530	4.950	0.480	488742.656	98373.599
PS76	0.000	0.450	450	5.578	4.700	0.778	488743.558	98379.634
RWP130B	0.000	0.180	Type E	5.624	5.300	0.224	488729.829	98386.576
RE130A	0.000	0.180	Type E	5.572	5.000	0.472	488724.099	98386.583
PS74	0.000	0.450	450	5.787	4.800	0.887	488724.635	98395.107
PS73	0.000	0.450	450	5.691	4.500	1.091	488737.144	98394.626
S41	0.000	0.450	Unknown	6.000	3.900	1.950	488750.755	98401.067
S36	0.005	1.200	Type B	5.629	3.690	1.639	488743.027	98397.430
RWP1-4A	0.000	0.180	Type E	5.900	5.400	0.400	488730.792	98420.045
PS90	0.000	0.450	450	5.826	5.150	0.576	488730.018	98429.115
PS91	0.000	0.450	450	6.013	5.000	0.913	488742.454	98430.072
S42 (D)	0.044	1.350	Type E	5.845	5.250	0.445	488755.932	98427.973
PS89	0.000	0.450	450	6.054	4.750	1.154	488746.831	98415.795
S37	0.000	1.200	Type B	5.715	3.650	1.765	488736.014	98406.897
S43	0.017	0.000	Type C	5.300	4.000	1.000	488722.610	98418.635
S48 (D)	0.005	1.350	Type E	5.741	5.150	0.441	488729.286	98401.670
S38	0.020	1.200	Type B	5.785	3.600	1.885	488723.866	98408.018
S47 (D)	0.005	1.350	Type E	5.638	5.000	0.488	488705.903	98398.527
S39	0.037	1.200	Type B	5.672	3.520	1.852	488701.939	98405.049
YG143	0.000	0.180	Type E	5.660	5.150	0.410	488719.079	98316.339
RWP143A	0.000	0.180	Type E	5.736	5.300	0.336	488717.333	98321.957
PS61	0.000	0.450	450	5.733	5.000	0.633	488718.354	98322.065
YG142	0.000	0.180	Type E	5.709	5.090	0.519	488718.372	98335.120
PS60	0.000	0.180	Type E	5.735	4.850	0.785	488718.036	98333.615
RWP143C	0.000	0.180	Type E	5.789	5.300	0.389	488708.007	98321.573
RE143A	0.000	0.180	Type E	5.930	5.000	0.830	488703.968	98322.871
PS59	0.000	0.450	450	5.877	4.700	1.077	488702.973	98333.134
S45	0.022	0.450	Unknown	5.550	3.950	1.450	488690.794	98320.106
S27	0.035	1.200	Type B	5.679	3.750	1.629	488696.906	98320.071
S28	0.023	1.350	Type B	5.583	3.700	1.583	488695.318	98335.482
S29	0.049	1.200	Type B	5.559	3.640	1.619	488690.300	98351.676
RWP137B	0.000	0.180	Type E	5.391	5.000	0.291	488708.156	98370.951
YG137	0.000	0.180	Type E	5.351	4.801	0.450	488713.551	98371.864
PS65	0.000	0.250	Unknown	5.360	4.650	0.610	488712.468	98372.054
YG141	0.000	0.180	Type E	5.609	4.980	0.529	488717.603	98341.649
RWP141A	0.000	0.180	Type E	5.649	5.200	0.349	488714.318	98342.154
PS62	0.000	0.450	450	5.628	4.900	0.628	488715.776	98342.265
PS63	0.000	0.450	450	5.565	4.500	0.965	488714.029	98357.564
RWP141C	0.000	0.180	Type E	5.668	5.200	0.368	488705.324	98340.726
RE141A	0.000	0.450	450	5.801	5.100	0.601	488701.938	98340.746
RWP137C	0.000	0.180	Type E	5.415	5.000	0.315	488702.914	98370.122
RE137A	0.000	0.180	Type E	5.494	4.800	0.594	488700.860	98369.128
YG139	0.000	0.180	Type E	5.389	4.900	0.389	488703.535	98360.679
PS72	0.000	0.450	450	5.500	4.300	1.100	488701.738	98361.095
PS64	0.000	1.200	Type E	5.569	4.200	1.269	488700.202	98356.121
S30	0.048	1.200	Type B	5.470	3.600	1.570	488694.875	98360.726
RWP136A	0.000	0.180	Type E	5.510	4.950	0.460	488710.739	98379.695
RE136A	0.000	0.180	Type E	5.515	4.900	0.515	488712.037	98379.943
PS67	0.000	0.450	450	5.652	4.625	0.927	488710.760	98392.626
PS68	0.000	0.450	450	5.581	4.475	1.006	488697.699	98391.205
RWP136F	0.000	0.180	Type E	5.538	5.000	0.438	488700.900	98378.408
RE136B	0.000	0.180	Type E	5.504	4.800	0.604	488697.801	98380.294
PS70	0.000	0.450	450	5.536	4.400	1.036	488696.755	98386.464
S44	0.000	0.450	Unknown	5.600	3.700	1.750	488685.127	98385.553
S31	0.000	1.200	Type B	5.474	3.505	1.669	488690.471	98386.603
S32	0.000	1.200	Type B	5.572	3.465	1.957	488692.131	98397.549
S33	0.000	0.000	Type C	3.770	3.400	0.220	488684.457	98403.457

Pipe Schedule

Pipe Number	US Manhole	US IL (m)	DS Manhole	DS IL (m)	Shape	Dimension (m)	Length (m)	Gradient (1:x)	Roughness (mm)	US Depth To Soffit (m)	DS Depth To Soffit (m)
1.000	S40	4.675	S34	3.975	Circ	0.225mØ	22.854	32.6	0.600	1.225	1.623
1.001	S34	3.900	S35	3.797	Circ	0.3mØ	31.295	302.7	0.600	1.623	1.401
1.002	S35	3.775	S36	3.690	Circ	0.3mØ	23.088	271.6	0.600	1.423	1.639
2.000	RWP130A	5.300	RE130B	5.000	Circ	0.1mØ	1.067	3.6	0.600	0.224	0.523
2.001	RE130B	5.000	PS76	4.700	Circ	0.1mØ	10.281	34.3	0.600	0.523	0.778
3.000	YG130	4.950	PS76	4.700	Circ	0.1mØ	6.102	24.4	0.600	0.480	0.778
2.002	PS76	4.700	PS73	4.500	Circ	0.1mØ	16.307	81.5	0.600	0.778	1.091
4.000	RWP130B	5.300	RE130A	5.000	Circ	0.1mØ	5.730	19.1	0.600	0.224	0.472
4.001	RE130A	5.000	PS74	4.800	Circ	0.1mØ	8.542	42.7	0.600	0.472	0.887
4.002	PS74	4.800	PS73	4.500	Circ	0.1mØ	12.517	41.7	0.600	0.887	1.091
2.003	PS73	4.500	S36	3.890	Circ	0.1mØ	6.518	10.7	0.600	1.091	1.639
5.000	S41	3.900	S36	3.840	Circ	0.15mØ	8.541	142.3	0.600	1.950	1.639
1.003	S36	3.690	S37	3.650	Circ	0.3mØ	11.781	294.5	0.600	1.639	1.765
6.000	RWP1-4A	5.400	PS90	5.150	Circ	0.1mØ	9.103	36.4	0.600	0.400	0.576
6.001	PS90	5.150	PS91	5.000	Circ	0.1mØ	12.472	83.1	0.600	0.576	0.913
6.002	PS91	5.000	PS89	4.800	Circ	0.1mØ	14.933	74.7	0.600	0.913	1.154
7.000	S42 (D)	5.250	PS89	4.750	Circ	0.15mØ	15.203	30.4	0.600	0.445	1.154
6.003	PS89	4.750	S37	3.800	Circ	0.15mØ	14.007	14.7	0.600	1.154	1.765
1.004	S37	3.650	S38	3.600	Circ	0.3mØ	12.200	244.0	0.600	1.765	1.885
8.000	S43	4.000	S38	3.600	Circ	0.3mØ	10.691	26.7	0.600	1.000	1.885
9.000	S48 (D)	5.150	S38	3.750	Circ	0.15mØ	8.348	6.0	0.600	0.441	1.885
1.005	S38	3.600	S39	3.520	Circ	0.3mØ	22.126	276.6	0.600	1.885	1.852
10.000	S47 (D)	5.000	S39	3.670	Circ	0.15mØ	7.632	5.7	0.600	0.488	1.852
1.006	S39	3.520	S32	3.465	Circ	0.3mØ	12.348	224.5	0.600	1.852	1.807
11.000	YG143	5.150	PS61	5.000	Circ	0.1mØ	5.772	38.5	0.600	0.410	0.633
12.000	RWP143A	5.300	PS61	5.000	Circ	0.1mØ	1.027	3.4	0.600	0.336	0.633
11.001	PS61	5.000	PS60	4.850	Circ	0.1mØ	11.554	77.0	0.600	0.633	0.785
13.000	YG142	5.090	PS60	4.850	Circ	0.1mØ	1.542	6.4	0.600	0.519	0.785
11.002	PS60	4.850	PS59	4.700	Circ	0.1mØ	15.070	100.5	0.600	0.785	1.077
14.000	RWP143C	5.300	RE143A	5.000	Circ	0.1mØ	4.242	14.1	0.600	0.389	0.830
14.001	RE143A	5.000	PS59	4.700	Circ	0.1mØ	10.311	34.4	0.600	0.830	1.077
11.003	PS59	4.700	S28	3.900	Circ	0.1mØ	8.007	10.0	0.600	1.077	1.583
15.000	S45	3.950	S27	3.900	Circ	0.15mØ	6.112	122.2	0.600	1.450	1.629
15.001	S27	3.750	S28	3.700	Circ	0.3mØ	15.492	309.8	0.600	1.629	1.583
11.004	S28	3.700	S29	3.640	Circ	0.3mØ	16.953	282.6	0.600	1.583	1.619
11.005	S29	3.640	S30	3.600	Circ	0.3mØ	10.141	253.5	0.600	1.619	1.570
16.000	RWP137B	5.000	PS65	4.650	Circ	0.1mØ	4.450	12.7	0.600	0.291	0.610
17.000	YG137	4.801	PS65	4.650	Circ	0.1mØ	1.100	7.3	0.600	0.450	0.610
16.001	PS65	4.650	PS63	4.500	Circ	0.1mØ	14.573	97.2	0.600	0.610	0.965
18.000	YG141	4.980	PS62	4.900	Circ	0.1mØ	1.929	24.1	0.600	0.529	0.628
19.000	RWP141A	5.200	PS62	4.900	Circ	0.1mØ	1.462	4.9	0.600	0.349	0.628
18.001	PS62	4.900	PS63	4.500	Circ	0.1mØ	15.398	38.5	0.600	0.628	0.965
16.002	PS63	4.500	PS64	4.200	Circ	0.1mØ	13.902	46.3	0.600	0.965	1.269
20.000	RWP141C	5.200	RE141A	5.100	Circ	0.1mØ	3.387	33.9	0.600	0.368	0.601
20.001	RE141A	5.100	PS64	4.200	Circ	0.1mØ	15.473	17.2	0.600	0.601	1.269
21.000	RWP137C	5.000	RE137A	4.800	Circ	0.1mØ	2.282	11.4	0.600	0.315	0.594
21.001	RE137A	4.800	PS72	4.300	Circ	0.1mØ	8.080	16.2	0.600	0.594	1.100
22.000	YG139	4.900	PS72	4.300	Circ	0.1mØ	1.845	3.1	0.600	0.389	1.100
21.002	PS72	4.300	PS64	4.200	Circ	0.1mØ	5.207	52.1	0.600	1.100	1.269
16.003	PS64	4.200	S30	3.800	Circ	0.1mØ	7.041	17.6	0.600	1.269	1.570
11.006	S30	3.600	S31	3.505	Circ	0.3mØ	26.249	276.3	0.600	1.570	1.669
23.000	RWP136A	4.950	RE136A	4.900	Circ	0.1mØ	1.322	26.4	0.600	0.460	0.515
23.001	RE136A	4.900	PS67	4.625	Circ	0.1mØ	12.747	46.4	0.600	0.515	0.927
23.002	PS67	4.625	PS68	4.475	Circ	0.1mØ	13.138	87.6	0.600	0.927	1.006
23.003	PS68	4.475	PS70	4.400	Circ	0.1mØ	4.834	64.5	0.600	1.006	1.036
24.000	RWP136F	5.000	RE136B	4.800	Circ	0.1mØ	3.628	18.1	0.600	0.438	0.604
24.001	RE136B	4.800	PS70	4.400	Circ	0.1mØ	6.257	15.6	0.600	0.604	1.036
23.004	PS70	4.400	S31	3.705	Circ	0.1mØ	6.285	9.0	0.600	1.036	1.669
25.000	S44	3.700	S31	3.655	Circ	0.15mØ	5.446	121.0	0.600	1.750	1.669
11.007	S31	3.505	S32	3.465	Circ	0.3mØ	11.071	276.8	0.600	1.669	1.807
1.007	S32	3.465	S33	3.400	Circ	0.15mØ	9.685	149.0	0.600	1.957	0.220

Permeable Paving Schedule

Permeable Paving	Assigned Manhole	Effective Storage Volume (m3)	CL (m)	IL (m)	Storage Infil Rate (m/hr)	Safety Factor	Easting (m)	Northing (m)
S42	S42 (D)	37.478	5.845	5.265	0.00000000	2.00	488751.765	98424.182
S48	S48 (D)	6.863	5.741	5.161	0.00000000	2.00	488725.026	98399.217
S47	S47 (D)	6.889	5.638	5.058	0.00000000	2.00	488710.772	98397.337

Outfall Details

Outfall Manhole S33 : Surcharged (Constant Level)

Surcharged Constant

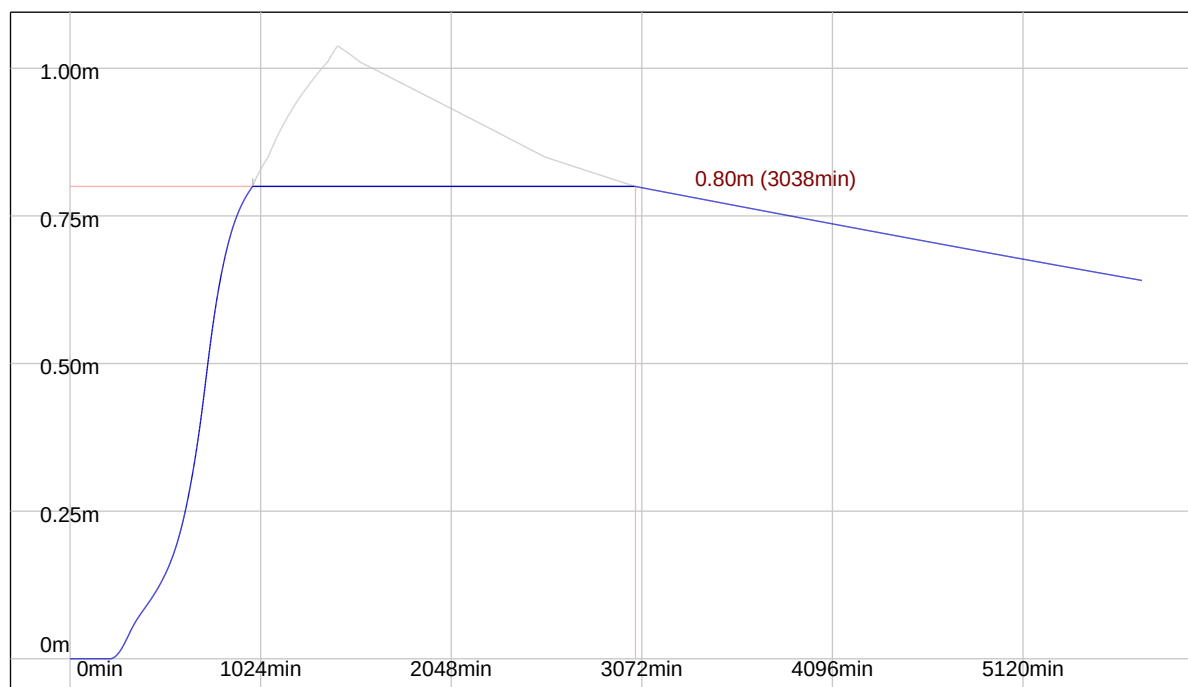
Water Elevation (m)	Water Depth (m)
4.000	0.600

Flow Control Details

Tank Structure at Manhole S41

Tank Invert (m)	Tank Height (m)	Porosity Ratio (%)	Area (m2)	Effective Area (m2) Area x Porosity Ratio	Max Storage (m3) Effective Area x Height	Infil Base (m/hr)	Infil Side (m/hr)	Safety Factor
3.900	0.800	95.00	280.000	266.000	212.800	0.00000000	0.00000000	2.00

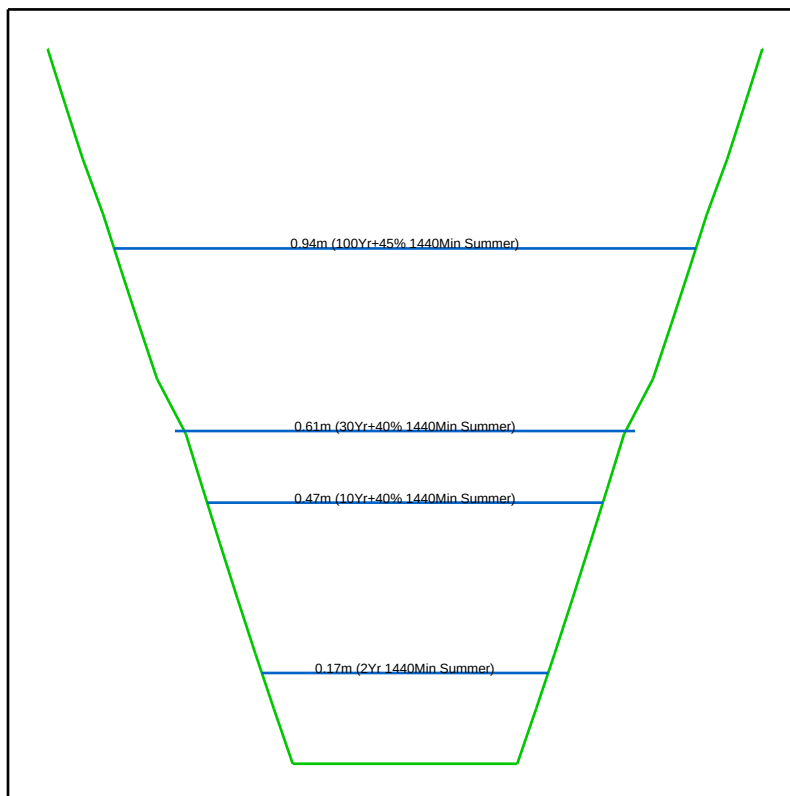
Tank at S41 (100Yr+45% 1440Min Summer)



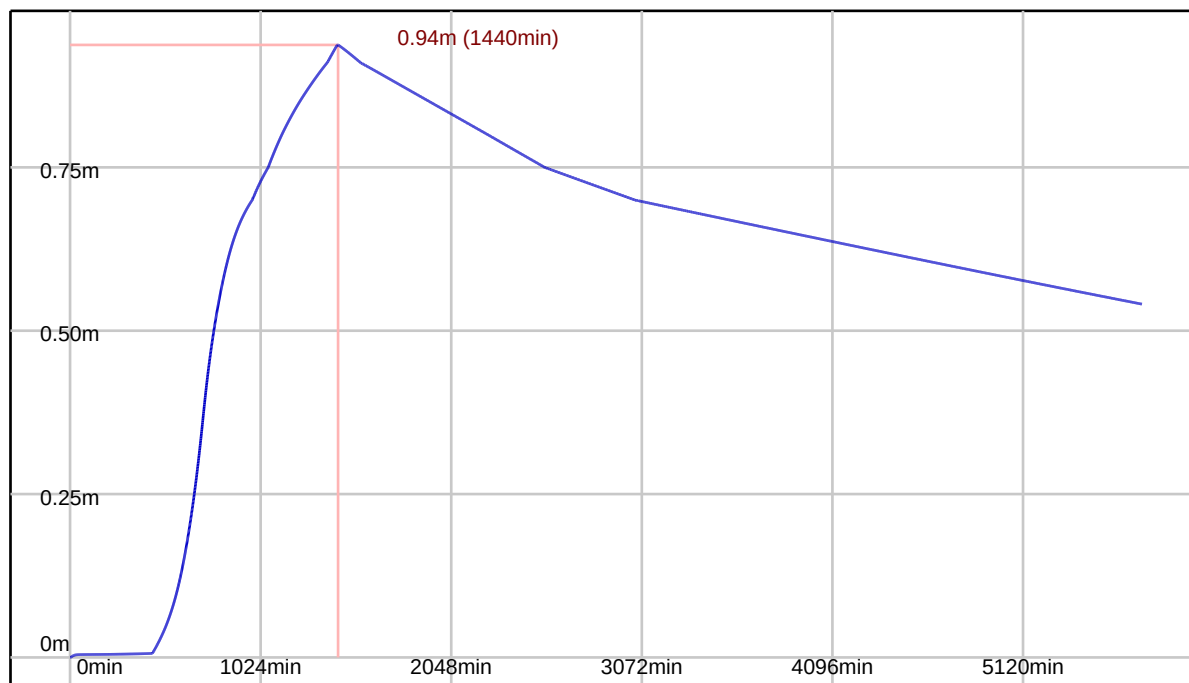
Pond Structure at Manhole S43

Pond Invert (m)	Max Depth (m)	Volume To Water Level (m3)	Water Level (m)	Freeboard (m)	Infil Base (m/hr)	Infil Side (m/hr)	Safety Factor
4.000	1.300	81.780	5.150	0.150	0.00000000	0.00000000	2.00

Pond Depth/Area Diagram at S43



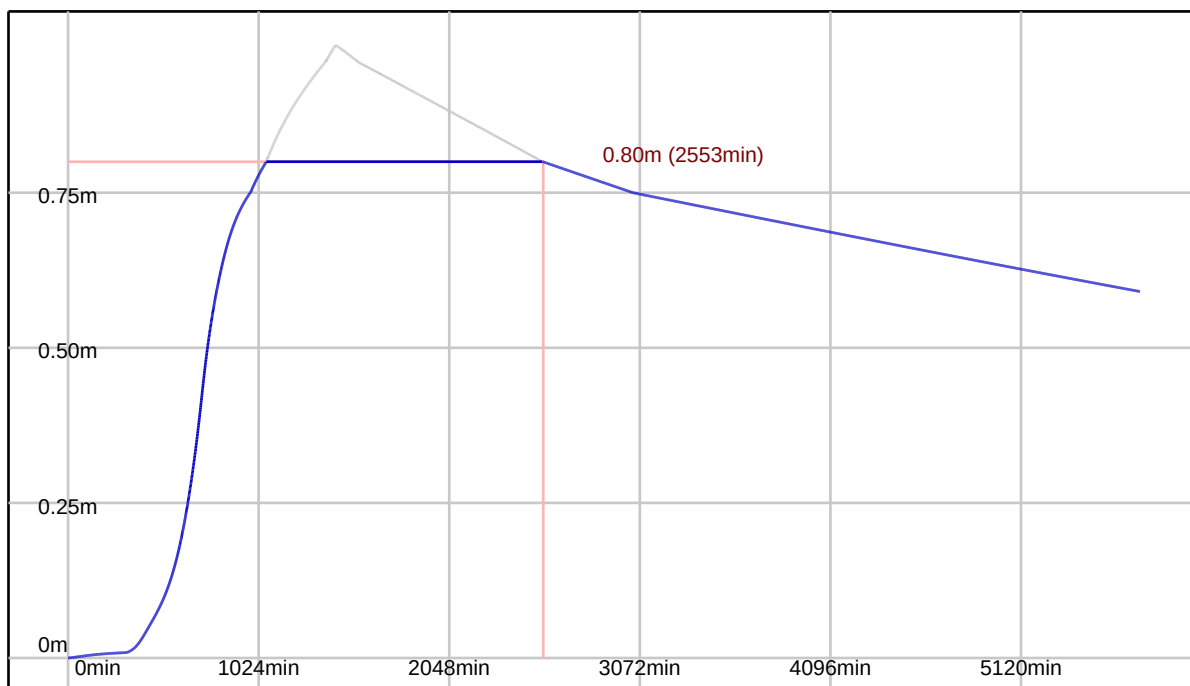
Pond at S43 (100Yr+45% 1440Min Summer)



Tank Structure at Manhole S45

Tank Invert (m)	Tank Height (m)	Porosity Ratio (%)	Area (m2)	Effective Area (m2) Area x Porosity Ratio	Max Storage (m3) Effective Area x Height	Infil Base (m/hr)	Infil Side (m/hr)	Safety Factor
3.950	0.800	95.00	150.000	142.500	114.000	0.00000000	0.00000000	2.00

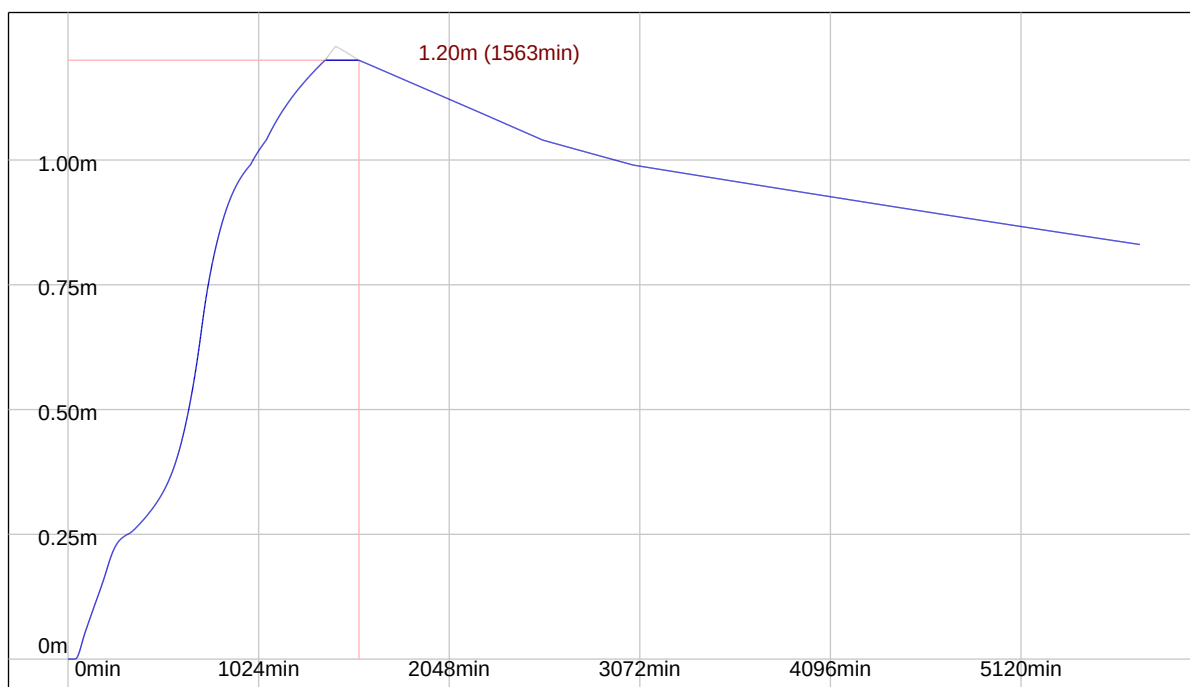
Tank at S45 (100Yr+45% 1440Min Summer)



Tank Structure at Manhole S44

Tank Invert (m)	Tank Height (m)	Porosity Ratio (%)	Area (m2)	Effective Area (m2) Area x Porosity Ratio	Max Storage (m3) Effective Area x Height	Infil Base (m/hr)	Infil Side (m/hr)	Safety Factor
3.700	1.200	95.00	100.000	95.000	114.000	0.00000000	0.00000000	2.00

Tank at S44 (100Yr+45% 1440Min Summer)

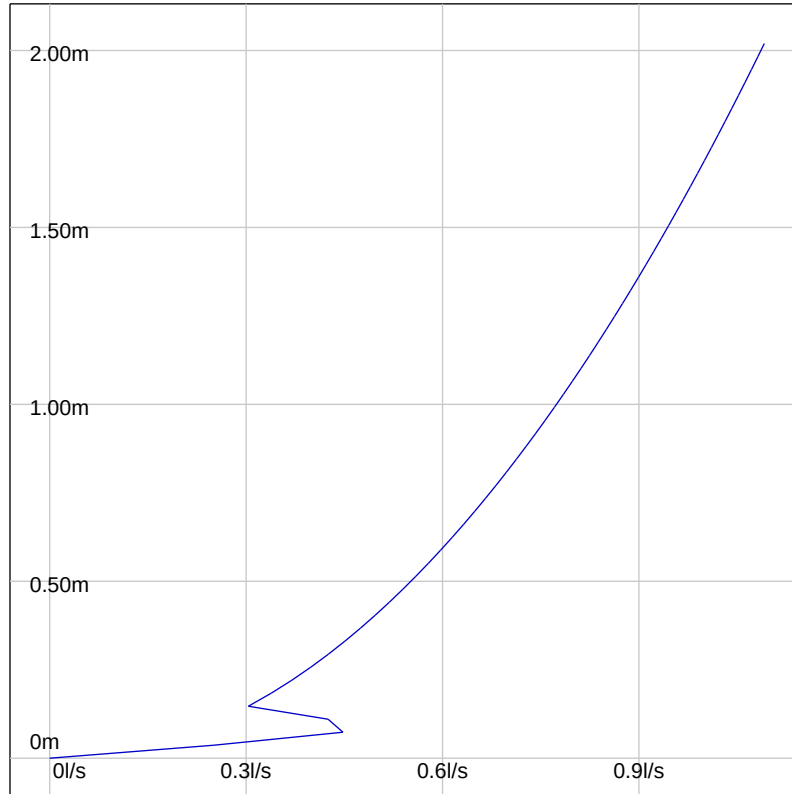


Controls within Manhole S32

Hydro-Brake® Optimum Control at Manhole S32

Model Ref	Design Depth (m)	Design Flow (l/s)	Depth Above Invert (m)	FF Head (m)	FF Flow (l/s)	KF Head (m)	KF Flow (l/s)
CHE-0040-1000-1700-1000 ID:628776	1.700	1.000	0.000	0.095	0.498	0.136	0.299

Hydro-Brake® Optimum Control at S32



Simulation Settings

FEH2022 (point): Filename=FEH_Point_Descriptors_488693_97897_v5_0_1.xml

Summer (Cv: 1.00), Winter (Cv: 1.00)

Global Time of Entry: 5.0 mins

Durations (mins): 15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440

Return Periods (yrs) + Climate Change: (2, +0%), (10, +40%), (30, +40%), (100, +45%)

Simulated Rainfall Events

Storm	Average Intensity (mm/hr)	Runoff Continuity %	Flow Continuity %	Storm	Average Intensity (mm/hr)	Runoff Continuity %	Flow Continuity %
2Yr 15Min Winter	32.920	0.00	2.58	30Yr+40% 15Min Summer	112.863	0.00	2.03
2Yr 15Min Summer	32.920	0.00	2.60	30Yr+40% 15Min Winter	112.863	0.00	2.02
2Yr 30Min Winter	21.400	0.00	2.60	30Yr+40% 30Min Summer	74.071	0.00	2.64
2Yr 30Min Summer	21.400	0.00	2.64	30Yr+40% 30Min Winter	74.071	0.00	2.66
2Yr 60Min Winter	13.300	0.00	2.59	30Yr+40% 60Min Summer	46.547	0.00	2.90
2Yr 60Min Summer	13.300	0.00	2.60	30Yr+40% 60Min Winter	46.547	0.00	2.90
2Yr 120Min Summer	8.917	0.00	2.50	30Yr+40% 120Min Summer	27.731	0.00	3.08
2Yr 120Min Winter	8.917	0.00	2.50	30Yr+40% 120Min Winter	27.731	0.00	3.07
2Yr 180Min Summer	6.969	0.00	2.29	30Yr+40% 180Min Summer	20.307	0.00	3.17
2Yr 180Min Winter	6.969	0.00	2.30	30Yr+40% 180Min Winter	20.307	0.00	3.16
2Yr 240Min Summer	5.692	0.00	2.20	30Yr+40% 240Min Summer	16.265	0.00	3.24
2Yr 240Min Winter	5.692	0.00	2.21	30Yr+40% 240Min Winter	16.265	0.00	3.23
2Yr 360Min Summer	4.267	0.00	2.09	30Yr+40% 360Min Summer	11.803	0.00	3.31
2Yr 360Min Winter	4.267	0.00	2.10	30Yr+40% 360Min Winter	11.803	0.00	3.31
2Yr 480Min Summer	3.462	0.00	2.04	30Yr+40% 480Min Summer	9.367	0.00	3.36
2Yr 480Min Winter	3.462	0.00	2.05	30Yr+40% 480Min Winter	9.367	0.00	3.35
2Yr 600Min Summer	2.922	0.00	1.90	30Yr+40% 600Min Summer	7.810	0.00	3.24
2Yr 600Min Winter	2.922	0.00	1.91	30Yr+40% 600Min Winter	7.810	0.00	3.23
2Yr 720Min Winter	2.536	0.00	1.78	30Yr+40% 720Min Summer	6.721	0.00	3.13
2Yr 720Min Summer	2.536	0.00	1.77	30Yr+40% 720Min Winter	6.721	0.00	3.12
2Yr 960Min Summer	2.031	0.00	1.58	30Yr+40% 960Min Summer	5.302	0.00	2.89
2Yr 960Min Winter	2.031	0.00	1.59	30Yr+40% 960Min Winter	5.302	0.00	2.88
2Yr 1440Min Summer	1.486	0.00	1.32	30Yr+40% 1440Min Summer	3.817	0.00	2.45
2Yr 1440Min Winter	1.486	0.00	1.32	30Yr+40% 1440Min Winter	3.817	0.00	2.44
10Yr+40% 15Min Summer	87.036	0.00	2.19	100Yr+45% 15Min Summer	146.276	0.00	2.65
10Yr+40% 15Min Winter	87.036	0.00	2.22	100Yr+45% 15Min Winter	146.276	0.00	2.58
10Yr+40% 30Min Summer	56.678	0.00	2.11	100Yr+45% 30Min Summer	96.982	0.00	2.93
10Yr+40% 30Min Winter	56.678	0.00	2.11	100Yr+45% 30Min Winter	96.982	0.00	2.92
10Yr+40% 60Min Summer	35.401	0.00	2.57	100Yr+45% 60Min Summer	61.530	0.00	3.20
10Yr+40% 60Min Winter	35.401	0.00	2.56	100Yr+45% 60Min Winter	61.530	0.00	3.20
10Yr+40% 120Min Winter	21.745	0.00	2.81	100Yr+45% 120Min Summer	35.946	0.00	3.37
10Yr+40% 120Min Summer	21.745	0.00	2.82	100Yr+45% 120Min Winter	35.946	0.00	3.36
10Yr+40% 180Min Summer	16.178	0.00	2.92	100Yr+45% 180Min Summer	26.053	0.00	3.45
10Yr+40% 180Min Winter	16.178	0.00	2.92	100Yr+45% 180Min Winter	26.053	0.00	3.45
10Yr+40% 240Min Summer	13.001	0.00	2.99	100Yr+45% 240Min Summer	20.923	0.00	3.51
10Yr+40% 240Min Winter	13.001	0.00	2.98	100Yr+45% 240Min Winter	20.923	0.00	3.51
10Yr+40% 360Min Summer	9.488	0.00	3.06	100Yr+45% 360Min Summer	15.176	0.00	3.58
10Yr+40% 360Min Winter	9.488	0.00	3.06	100Yr+45% 360Min Winter	15.176	0.00	3.57
10Yr+40% 480Min Summer	7.563	0.00	3.11	100Yr+45% 480Min Summer	12.028	0.00	3.61
10Yr+40% 480Min Winter	7.563	0.00	3.10	100Yr+45% 480Min Winter	12.028	0.00	3.60
10Yr+40% 600Min Winter	6.323	0.00	2.99	100Yr+45% 600Min Summer	10.033	0.00	3.50
10Yr+40% 600Min Summer	6.323	0.00	3.00	100Yr+45% 600Min Winter	10.033	0.00	3.50
10Yr+40% 720Min Summer	5.451	0.00	2.88	100Yr+45% 720Min Summer	8.641	0.00	3.40
10Yr+40% 720Min Winter	5.451	0.00	2.87	100Yr+45% 720Min Winter	8.641	0.00	3.40
10Yr+40% 960Min Summer	4.313	0.00	2.65	100Yr+45% 960Min Summer	6.827	0.00	3.17
10Yr+40% 960Min Winter	4.313	0.00	2.64	100Yr+45% 960Min Winter	6.827	0.00	3.17
10Yr+40% 1440Min Summer	3.111	0.00	2.21	100Yr+45% 1440Min Winter	4.922	0.00	2.73
10Yr+40% 1440Min Winter	3.111	0.00	2.20	100Yr+45% 1440Min Summer	4.922	0.00	2.75

Simulation Results

Return Period Yrs: 2.0

Climate Change %: 0

Manholes

Manhole	Critical Storm	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Flood (m3)	Status
S40	15 min Summer	8	4.741	0.066	17.496		OK
S34	1440 min Summer	1437	4.165	0.265	0.115		OK
S35	1440 min Summer	1437	4.165	0.390	0.151		Surcharged
RWP130A	-	0	5.300	0.000	0.000		OK
RE130B	-	0	5.000	0.000	0.000		OK
YG130	-	0	4.950	0.000	0.000		OK
PS76	-	0	4.700	0.000	0.000		OK
RWP130B	-	0	5.300	0.000	0.000		OK
RE130A	-	0	5.000	0.000	0.000		OK
PS74	-	0	4.800	0.000	0.000		OK
PS73	-	0	4.500	0.000	0.000		OK
S41	1440 min Summer	1438	4.165	0.265	0.023		Surcharged
S36	1440 min Summer	1437	4.165	0.475	0.153		Surcharged
RWP1-4A	-	0	5.400	0.000	0.000		OK
PS90	-	0	5.150	0.000	0.000		OK
PS91	-	0	5.000	0.000	0.000		OK
S42 (D)	15 min Summer	8	5.281	0.031	3.220		OK
PS89	15 min Summer	8	4.775	0.025	2.782		OK
S37	1440 min Summer	1437	4.165	0.515	0.158		Surcharged
S43	1440 min Summer	1438	4.165	0.165	0.008		OK
S48 (D)	120 min Summer	68	5.157	0.007	0.338		OK
S38	1440 min Summer	1437	4.165	0.565	0.180		Surcharged
S47 (D)	120 min Summer	68	5.007	0.007	0.338		OK
S39	1440 min Summer	1437	4.165	0.645	0.209		Surcharged
YG143	-	0	5.150	0.000	0.000		OK
RWP143A	-	0	5.300	0.000	0.000		OK
PS61	-	0	5.000	0.000	0.000		OK
YG142	-	0	5.090	0.000	0.000		OK
PS60	-	0	4.850	0.000	0.000		OK
RWP143C	-	0	5.300	0.000	0.000		OK
RE143A	-	0	5.000	0.000	0.000		OK
PS59	-	0	4.700	0.000	0.000		OK
S45	1440 min Summer	1437	4.165	0.215	0.014		Surcharged
S27	1440 min Summer	1437	4.165	0.415	0.033		Surcharged
S28	1440 min Summer	1437	4.165	0.465	0.048		Surcharged
S29	1440 min Summer	1437	4.165	0.525	0.079		Surcharged
RWP137B	-	0	5.000	0.000	0.000		OK
YG137	-	0	4.801	0.000	0.000		OK
PS65	-	0	4.650	0.000	0.000		OK
YG141	-	0	4.980	0.000	0.000		OK
RWP141A	-	0	5.200	0.000	0.000		OK
PS62	-	0	4.900	0.000	0.000		OK
PS63	-	0	4.500	0.000	0.000		OK
RWP141C	-	0	5.200	0.000	0.000		OK
RE141A	-	0	5.100	0.000	0.000		OK
RWP137C	-	0	5.000	0.000	0.000		OK
RE137A	-	0	4.800	0.000	0.000		OK
YG139	-	0	4.900	0.000	0.000		OK
PS72	-	0	4.300	0.000	0.000		OK
PS64	-	0	4.200	0.000	0.000		OK
S30	1440 min Summer	1437	4.165	0.565	0.110		Surcharged
RWP136A	-	0	4.950	0.000	0.000		OK
RE136A	-	0	4.900	0.000	0.000		OK
PS67	-	0	4.625	0.000	0.000		OK
PS68	-	0	4.475	0.000	0.000		OK
RWP136F	-	0	5.000	0.000	0.000		OK
RE136B	-	0	4.800	0.000	0.000		OK
PS70	-	0	4.400	0.000	0.000		OK
S44	1440 min Summer	1436	4.165	0.455	0.007		Surcharged

Manholes

Manhole	Critical Storm	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Flood (m3)	Status
S31	1440 min Summer	1437	4.165	0.660	0.117		Surcharged
S32	1440 min Summer	1437	4.165	0.700	0.322		Surcharged
S33	15 min Winter	0	4.000	0.600	0.577		Outfall

Conduits

Pipe No.	Critical Storm	Peak (mins)	US Manhole	DS Manhole	Flow Depth (m)	Max Velocity (m/s)	Max Flow (l/s)	Flow / Capacity	Status
1.000	1440 min Summer	1431	S40	S34	0.098	0.772	1.454	0.016	OK
1.001	1440 min Summer	1437	S34	S35	0.283	0.242	2.248	0.035	OK
1.002	480 min Summer	355	S35	S36	0.300	0.305	7.040	0.105	Surcharged
2.000	15 min Winter	0	RWP130A	RE130B	0.000	0.000	0.000	0.000	OK
2.001	15 min Winter	0	RE130B	PS76	0.000	0.000	0.000	0.000	OK
3.000	15 min Winter	0	YG130	PS76	0.000	0.000	0.000	0.000	OK
2.002	15 min Winter	0	PS76	PS73	0.000	0.000	0.000	0.000	OK
4.000	15 min Winter	0	RWP130B	RE130A	0.000	0.000	0.000	0.000	OK
4.001	15 min Winter	0	RE130A	PS74	0.000	0.000	0.000	0.000	OK
4.002	15 min Winter	0	PS74	PS73	0.000	0.000	0.000	0.000	OK
2.003	15 min Winter	10	PS73	S36	0.050	0.000	0.000	0.000	OK
5.000	360 min Summer	404	S41	S36	0.150	0.014	0.254	0.017	Surcharged
1.003	15 min Summer	10	S36	S37	0.300	0.779	25.649	0.399	Surcharged
6.000	15 min Winter	0	RWP1-4A	PS90	0.000	0.000	0.000	0.000	OK
6.001	15 min Winter	0	PS90	PS91	0.000	0.000	0.000	0.000	OK
6.002	15 min Winter	0	PS91	PS89	0.000	0.000	0.000	0.000	OK
7.000	15 min Summer	8	S42 (D)	PS89	0.028	1.240	2.782	0.086	OK
6.003	15 min Summer	9	PS89	S37	0.087	1.295	2.766	0.059	OK
1.004	15 min Summer	9	S37	S38	0.300	0.692	22.617	0.320	Surcharged
8.000	1440 min Summer	1438	S43	S38	0.233	0.026	0.222	0.001	OK
9.000	120 min Summer	68	S48 (D)	S38	0.079	0.036	0.337	0.005	OK
1.005	15 min Summer	8	S38	S39	0.300	0.440	23.315	0.351	Surcharged
10.000	120 min Summer	68	S47 (D)	S39	0.079	0.036	0.338	0.005	OK
1.006	30 min Summer	19	S39	S32	0.300	0.355	25.091	0.340	Surcharged
11.000	15 min Winter	0	YG143	PS61	0.000	0.000	0.000	0.000	OK
12.000	15 min Winter	0	RWP143A	PS61	0.000	0.000	0.000	0.000	OK
11.001	15 min Winter	0	PS61	PS60	0.000	0.000	0.000	0.000	OK
13.000	15 min Winter	0	YG142	PS60	0.000	0.000	0.000	0.000	OK
11.002	15 min Winter	0	PS60	PS59	0.000	0.000	0.000	0.000	OK
14.000	15 min Winter	0	RWP143C	RE143A	0.000	0.000	0.000	0.000	OK
14.001	15 min Winter	0	RE143A	PS59	0.000	0.000	0.000	0.000	OK
11.003	15 min Winter	10	PS59	S28	0.050	0.000	0.000	0.000	OK
15.000	600 min Winter	505	S45	S27	0.150	0.251	0.147	0.009	Surcharged
15.001	240 min Winter	219	S27	S28	0.300	0.180	1.140	0.018	Surcharged
11.004	15 min Summer	14	S28	S29	0.300	0.472	6.970	0.106	Surcharged
11.005	30 min Summer	16	S29	S30	0.300	0.425	13.250	0.191	Surcharged
16.000	15 min Winter	0	RWP137B	PS65	0.000	0.000	0.000	0.000	OK
17.000	15 min Winter	0	YG137	PS65	0.000	0.000	0.000	0.000	OK
16.001	15 min Winter	0	PS65	PS63	0.000	0.000	0.000	0.000	OK
18.000	15 min Winter	0	YG141	PS62	0.000	0.000	0.000	0.000	OK
19.000	15 min Winter	0	RWP141A	PS62	0.000	0.000	0.000	0.000	OK
18.001	15 min Winter	0	PS62	PS63	0.000	0.000	0.000	0.000	OK
16.002	15 min Winter	0	PS63	PS64	0.000	0.000	0.000	0.000	OK
20.000	15 min Winter	0	RWP141C	RE141A	0.000	0.000	0.000	0.000	OK
20.001	15 min Winter	0	RE141A	PS64	0.000	0.000	0.000	0.000	OK
21.000	15 min Winter	0	RWP137C	RE137A	0.000	0.000	0.000	0.000	OK
21.001	15 min Winter	0	RE137A	PS72	0.000	0.000	0.000	0.000	OK
22.000	15 min Winter	0	YG139	PS72	0.000	0.000	0.000	0.000	OK
21.002	15 min Winter	0	PS72	PS64	0.000	0.000	0.000	0.000	OK
16.003	15 min Winter	9	PS64	S30	0.050	0.000	0.000	0.000	OK
11.006	15 min Summer	10	S30	S31	0.300	0.536	17.541	0.264	Surcharged
23.000	15 min Winter	0	RWP136A	RE136A	0.000	0.000	0.000	0.000	OK
23.001	15 min Winter	0	RE136A	PS67	0.000	0.000	0.000	0.000	OK
23.002	15 min Winter	0	PS67	PS68	0.000	0.000	0.000	0.000	OK
23.003	15 min Winter	0	PS68	PS70	0.000	0.000	0.000	0.000	OK
24.000	15 min Winter	0	RWP136F	RE136B	0.000	0.000	0.000	0.000	OK
24.001	15 min Winter	0	RE136B	PS70	0.000	0.000	0.000	0.000	OK
23.004	15 min Winter	7	PS70	S31	0.050	0.000	0.000	0.000	OK

Conduits

Pipe No.	Critical Storm	Peak (mins)	US Manhole	DS Manhole	Flow Depth (m)	Max Velocity (m/s)	Max Flow (l/s)	Flow / Capacity	Status
25.000	60 min Summer	63	S44	S31	0.150	0.127	2.240	0.139	Surcharged
11.007	60 min Summer	64	S31	S32	0.300	0.057	3.996	0.060	Surcharged
1.007	1440 min Winter	807	S32	S33	0.150	0.025	0.448	0.031	Surcharged

Permeable Paving Storage

Permeable Paving	Critical Storm	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Flood (m3)	Status
S42	180 min Summer	109	5.292	0.027	0.893		OK
S48	120 min Summer	68	5.174	0.013	0.337		OK
S47	120 min Summer	68	5.071	0.013	0.338		OK

Return Period Yrs: 10.0

Climate Change %: 40

Manholes

Manhole	Critical Storm	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Flood (m3)	Status
S40	15 min Summer	9	4.815	0.140	44.326		OK
S34	15 min Summer	10	4.640	0.740	60.866		Surcharged
S35	15 min Summer	10	4.554	0.779	81.815		Surcharged
RWP130A	-	0	5.300	0.000	0.000		OK
RE130B	-	0	5.000	0.000	0.000		OK
YG130	-	0	4.950	0.000	0.000		OK
PS76	-	0	4.700	0.000	0.000		OK
RWP130B	-	0	5.300	0.000	0.000		OK
RE130A	-	0	5.000	0.000	0.000		OK
PS74	-	0	4.800	0.000	0.000		OK
PS73	-	0	4.500	0.000	0.000		OK
S41	1440 min Summer	1439	4.475	0.575	0.000		Surcharged
S36	1440 min Summer	1440	4.475	0.785	0.185		Surcharged
RWP1-4A	-	0	5.400	0.000	0.000		OK
PS90	-	0	5.150	0.000	0.000		OK
PS91	-	0	5.000	0.000	0.000		OK
S42 (D)	15 min Summer	8	5.299	0.049	8.516		OK
PS89	15 min Summer	8	4.789	0.039	7.121		OK
S37	1440 min Summer	1440	4.475	0.825	0.269		Surcharged
S43	1440 min Summer	1439	4.475	0.475	0.010		Surcharged
S48 (D)	30 min Summer	23	5.163	0.013	1.225		OK
S38	1440 min Summer	1438	4.475	0.875	0.281		Surcharged
S47 (D)	30 min Summer	23	5.013	0.013	1.235		OK
S39	1440 min Summer	1439	4.475	0.955	0.344		Surcharged
YG143	-	0	5.150	0.000	0.000		OK
RWP143A	-	0	5.300	0.000	0.000		OK
PS61	-	0	5.000	0.000	0.000		OK
YG142	-	0	5.090	0.000	0.000		OK
PS60	-	0	4.850	0.000	0.000		OK
RWP143C	-	0	5.300	0.000	0.000		OK
RE143A	-	0	5.000	0.000	0.000		OK
PS59	-	0	4.700	0.000	0.000		OK
S45	1440 min Summer	1438	4.475	0.525	0.022		Surcharged
S27	1440 min Summer	1438	4.475	0.725	0.054		Surcharged
S28	1440 min Summer	1439	4.475	0.775	0.117		Surcharged
S29	1440 min Summer	1439	4.475	0.835	0.144		Surcharged
RWP137B	-	0	5.000	0.000	0.000		OK
YG137	-	0	4.801	0.000	0.000		OK
PS65	-	0	4.650	0.000	0.000		OK
YG141	-	0	4.980	0.000	0.000		OK
RWP141A	-	0	5.200	0.000	0.000		OK
PS62	-	0	4.900	0.000	0.000		OK
PS63	-	0	4.500	0.000	0.000		OK
RWP141C	-	0	5.200	0.000	0.000		OK
RE141A	-	0	5.100	0.000	0.000		OK
RWP137C	-	0	5.000	0.000	0.000		OK
RE137A	-	0	4.800	0.000	0.000		OK
YG139	-	0	4.900	0.000	0.000		OK
PS72	1440 min Summer	1439	4.475	0.175	0.000		Surcharged
PS64	1440 min Summer	1439	4.475	0.275	0.025		Surcharged
S30	1440 min Summer	1444	4.475	0.875	0.072		Surcharged
RWP136A	-	0	4.950	0.000	0.000		OK
RE136A	-	0	4.900	0.000	0.000		OK
PS67	-	0	4.625	0.000	0.000		OK
PS68	1440 min Summer	1438	4.475	0.000	0.000		OK
RWP136F	-	0	5.000	0.000	0.000		OK
RE136B	-	0	4.800	0.000	0.000		OK
PS70	1440 min Summer	1442	4.475	0.075	0.006		OK
S44	1440 min Summer	1438	4.475	0.765	0.000		Surcharged
S31	1440 min Summer	1437	4.475	0.970	0.197		Surcharged
S32	1440 min Summer	1438	4.475	1.010	0.535		Surcharged
S33	15 min Summer	0	4.000	0.600	0.576		Outfall

Conduits

Pipe No.	Critical Storm	Peak (mins)	US Manhole	DS Manhole	Flow Depth (m)	Max Velocity (m/s)	Max Flow (l/s)	Flow / Capacity	Status
1.000	15 min Summer	9	S40	S34	0.182	1.822	44.439	0.487	OK
1.001	15 min Winter	9	S34	S35	0.300	0.910	60.869	0.960	Surcharged
1.002	15 min Winter	9	S35	S36	0.300	1.111	78.508	1.172	Surcharged
2.000	15 min Summer	0	RWP130A	RE130B	0.000	0.000	0.000	0.000	OK
2.001	15 min Summer	0	RE130B	PS76	0.000	0.000	0.000	0.000	OK
3.000	15 min Summer	0	YG130	PS76	0.000	0.000	0.000	0.000	OK
2.002	15 min Summer	0	PS76	PS73	0.000	0.000	0.000	0.000	OK
4.000	15 min Summer	0	RWP130B	RE130A	0.000	0.000	0.000	0.000	OK
4.001	15 min Summer	0	RE130A	PS74	0.000	0.000	0.000	0.000	OK
4.002	15 min Summer	0	PS74	PS73	0.000	0.000	0.000	0.000	OK
2.003	15 min Summer	6	PS73	S36	0.050	0.000	0.000	0.000	OK
5.000	120 min Summer	137	S41	S36	0.150	0.056	0.987	0.067	Surcharged
1.003	15 min Winter	9	S36	S37	0.300	0.842	53.474	0.832	Surcharged
6.000	15 min Summer	0	RWP1-4A	PS90	0.000	0.000	0.000	0.000	OK
6.001	15 min Summer	0	PS90	PS91	0.000	0.000	0.000	0.000	OK
6.002	15 min Summer	0	PS91	PS89	0.000	0.000	0.000	0.000	OK
7.000	15 min Summer	8	S42 (D)	PS89	0.044	1.628	7.121	0.220	OK
6.003	15 min Summer	8	PS89	S37	0.095	1.313	7.088	0.152	OK
1.004	15 min Winter	9	S37	S38	0.300	0.811	56.250	0.795	Surcharged
8.000	15 min Winter	15	S43	S38	0.300	0.498	34.323	0.159	Surcharged
9.000	30 min Summer	23	S48 (D)	S38	0.082	0.124	1.224	0.017	OK
1.005	15 min Winter	13	S38	S39	0.300	0.618	43.662	0.658	Surcharged
10.000	30 min Summer	23	S47 (D)	S39	0.082	0.125	1.234	0.016	OK
1.006	15 min Winter	13	S39	S32	0.300	0.725	51.260	0.695	Surcharged
11.000	15 min Summer	0	YG143	PS61	0.000	0.000	0.000	0.000	OK
12.000	15 min Summer	0	RWP143A	PS61	0.000	0.000	0.000	0.000	OK
11.001	15 min Summer	0	PS61	PS60	0.000	0.000	0.000	0.000	OK
13.000	15 min Summer	0	YG142	PS60	0.000	0.000	0.000	0.000	OK
11.002	15 min Summer	0	PS60	PS59	0.000	0.000	0.000	0.000	OK
14.000	15 min Summer	0	RWP143C	RE143A	0.000	0.000	0.000	0.000	OK
14.001	15 min Summer	0	RE143A	PS59	0.000	0.000	0.000	0.000	OK
11.003	15 min Summer	7	PS59	S28	0.050	0.000	0.000	0.000	OK
15.000	15 min Winter	22	S45	S27	0.150	0.759	13.406	0.837	Surcharged
15.001	15 min Winter	22	S27	S28	0.300	0.496	13.435	0.214	Surcharged
11.004	15 min Winter	21	S28	S29	0.300	0.506	13.763	0.210	Surcharged
11.005	15 min Winter	8	S29	S30	0.300	0.637	18.082	0.261	Surcharged
16.000	15 min Summer	0	RWP137B	PS65	0.000	0.000	0.000	0.000	OK
17.000	15 min Summer	0	YG137	PS65	0.000	0.000	0.000	0.000	OK
16.001	15 min Summer	0	PS65	PS63	0.000	0.000	0.000	0.000	OK
18.000	15 min Summer	0	YG141	PS62	0.000	0.000	0.000	0.000	OK
19.000	15 min Summer	0	RWP141A	PS62	0.000	0.000	0.000	0.000	OK
18.001	15 min Summer	0	PS62	PS63	0.000	0.000	0.000	0.000	OK
16.002	15 min Summer	10	PS63	PS64	0.050	0.000	0.000	0.000	OK
20.000	15 min Summer	0	RWP141C	RE141A	0.000	0.000	0.000	0.000	OK
20.001	15 min Summer	10	RE141A	PS64	0.050	0.000	0.000	0.000	OK
21.000	15 min Summer	0	RWP137C	RE137A	0.000	0.000	0.000	0.000	OK
21.001	720 min Summer	667	RE137A	PS72	0.050	0.000	0.000	0.000	OK
22.000	720 min Summer	667	YG139	PS72	0.050	0.000	0.000	0.000	OK
21.002	960 min Winter	1432	PS72	PS64	0.100	0.009	0.049	0.006	Surcharged
16.003	15 min Winter	14	PS64	S30	0.100	0.290	1.911	0.132	Surcharged
11.006	15 min Winter	8	S30	S31	0.300	0.654	36.179	0.545	Surcharged
23.000	15 min Summer	0	RWP136A	RE136A	0.000	0.000	0.000	0.000	OK
23.001	15 min Summer	0	RE136A	PS67	0.000	0.000	0.000	0.000	OK
23.002	1440 min Summer	1438	PS67	PS68	0.000	0.000	0.000	0.000	OK
23.003	1440 min Summer	1442	PS68	PS70	0.038	0.000	0.000	0.000	OK
24.000	15 min Summer	0	RWP136F	RE136B	0.000	0.000	0.000	0.000	OK
24.001	1440 min Summer	1442	RE136B	PS70	0.038	0.000	0.000	0.000	OK
23.004	1440 min Summer	2142	PS70	S31	0.088	0.007	0.034	0.002	OK
25.000	60 min Summer	46	S44	S31	0.150	0.375	6.626	0.412	Surcharged
11.007	30 min Winter	32	S31	S32	0.300	0.223	15.761	0.238	Surcharged
1.007	1440 min Summer	1439	S32	S33	0.150	0.030	0.538	0.037	Surcharged

Permeable Paving Storage

Permeable Paving	Critical Storm	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Flood (m3)	Status
S42	60 min Summer	42	5.332	0.067	2.947		OK
S48	30 min Summer	23	5.192	0.031	1.252		OK
S47	30 min Summer	23	5.090	0.031	1.256		OK

Return Period Yrs: 30.0

Climate Change %: 40

Manholes

Manhole	Critical Storm	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Flood (m3)	Status
S40	15 min Summer	10	5.148	0.473	47.812		Surcharged
S34	15 min Summer	10	4.951	1.051	78.955		Surcharged
S35	15 min Summer	10	4.804	1.029	105.399		Surcharged
RWP130A	-	0	5.300	0.000	0.000		OK
RE130B	-	0	5.000	0.000	0.000		OK
YG130	-	0	4.950	0.000	0.000		OK
PS76	-	0	4.700	0.000	0.000		OK
RWP130B	-	0	5.300	0.000	0.000		OK
RE130A	-	0	5.000	0.000	0.000		OK
PS74	-	0	4.800	0.000	0.000		OK
PS73	15 min Summer	11	4.634	0.134	0.000		Surcharged
S41	1440 min Summer	1439	4.605	0.705	0.013		Surcharged
S36	15 min Summer	11	4.629	0.939	93.056		Surcharged
RWP1-4A	-	0	5.400	0.000	0.000		OK
PS90	-	0	5.150	0.000	0.000		OK
PS91	-	0	5.000	0.000	0.000		OK
S42 (D)	15 min Summer	8	5.306	0.056	11.043		OK
PS89	15 min Summer	8	4.795	0.045	9.211		OK
S37	1440 min Summer	1441	4.605	0.955	0.353		Surcharged
S43	1440 min Summer	1441	4.605	0.605	0.003		Surcharged
S48 (D)	30 min Summer	22	5.165	0.015	1.650		OK
S38	1440 min Summer	1440	4.605	1.005	0.342		Surcharged
S47 (D)	30 min Summer	22	5.015	0.015	1.669		OK
S39	1440 min Summer	1440	4.605	1.085	0.347		Surcharged
YG143	-	0	5.150	0.000	0.000		OK
RWP143A	-	0	5.300	0.000	0.000		OK
PS61	-	0	5.000	0.000	0.000		OK
YG142	-	0	5.090	0.000	0.000		OK
PS60	-	0	4.850	0.000	0.000		OK
RWP143C	-	0	5.300	0.000	0.000		OK
RE143A	-	0	5.000	0.000	0.000		OK
PS59	-	0	4.700	0.000	0.000		OK
S45	1440 min Summer	1438	4.605	0.655	0.026		Surcharged
S27	1440 min Summer	1440	4.605	0.855	0.085		Surcharged
S28	1440 min Summer	1440	4.605	0.905	0.095		Surcharged
S29	1440 min Summer	1440	4.605	0.965	0.118		Surcharged
RWP137B	-	0	5.000	0.000	0.000		OK
YG137	-	0	4.801	0.000	0.000		OK
PS65	-	0	4.650	0.000	0.000		OK
YG141	-	0	4.980	0.000	0.000		OK
RWP141A	-	0	5.200	0.000	0.000		OK
PS62	-	0	4.900	0.000	0.000		OK
PS63	1440 min Summer	1439	4.606	0.106	0.025		Surcharged
RWP141C	-	0	5.200	0.000	0.000		OK
RE141A	-	0	5.100	0.000	0.000		OK
RWP137C	-	0	5.000	0.000	0.000		OK
RE137A	-	0	4.800	0.000	0.000		OK
YG139	-	0	4.900	0.000	0.000		OK
PS72	1440 min Summer	1442	4.606	0.306	0.005		Surcharged
PS64	1440 min Summer	1439	4.606	0.406	0.042		Surcharged
S30	1440 min Summer	1440	4.605	1.005	0.194		Surcharged
RWP136A	-	0	4.950	0.000	0.000		OK
RE136A	-	0	4.900	0.000	0.000		OK
PS67	-	0	4.625	0.000	0.000		OK
PS68	1440 min Summer	1436	4.606	0.131	0.007		Surcharged
RWP136F	-	0	5.000	0.000	0.000		OK
RE136B	-	0	4.800	0.000	0.000		OK
PS70	1440 min Summer	1436	4.606	0.206	0.023		Surcharged
S44	1440 min Summer	1438	4.605	0.895	0.000		Surcharged
S31	1440 min Summer	1440	4.605	1.100	0.233		Surcharged
S32	1440 min Summer	1440	4.605	1.140	0.592		Surcharged
S33	15 min Summer	0	4.000	0.600	0.576		Outfall

Conduits

Pipe No.	Critical Storm	Peak (mins)	US Manhole	DS Manhole	Flow Depth (m)	Max Velocity (m/s)	Max Flow (l/s)	Flow / Capacity	Status
1.000	15 min Winter	9	S40	S34	0.225	1.829	50.902	0.558	OK
1.001	15 min Winter	9	S34	S35	0.300	1.055	74.556	1.176	Surcharged
1.002	15 min Winter	9	S35	S36	0.300	1.364	96.389	1.439	Surcharged
2.000	15 min Summer	0	RWP130A	RE130B	0.000	0.000	0.000	0.000	OK
2.001	15 min Summer	0	RE130B	PS76	0.000	0.000	0.000	0.000	OK
3.000	15 min Summer	0	YG130	PS76	0.000	0.000	0.000	0.000	OK
2.002	15 min Summer	10	PS76	PS73	0.050	0.000	0.000	0.000	OK
4.000	15 min Summer	0	RWP130B	RE130A	0.000	0.000	0.000	0.000	OK
4.001	15 min Summer	0	RE130A	PS74	0.000	0.000	0.000	0.000	OK
4.002	15 min Summer	10	PS74	PS73	0.050	0.000	0.000	0.000	OK
2.003	30 min Summer	21	PS73	S36	0.100	0.180	1.169	0.063	Surcharged
5.000	15 min Winter	61	S41	S36	0.150	0.055	0.968	0.065	Surcharged
1.003	15 min Winter	9	S36	S37	0.300	0.933	65.955	1.026	Surcharged
6.000	15 min Summer	0	RWP1-4A	PS90	0.000	0.000	0.000	0.000	OK
6.001	15 min Summer	0	PS90	PS91	0.000	0.000	0.000	0.000	OK
6.002	15 min Summer	0	PS91	PS89	0.000	0.000	0.000	0.000	OK
7.000	15 min Summer	8	S42 (D)	PS89	0.051	1.751	9.211	0.285	OK
6.003	15 min Summer	8	PS89	S37	0.098	1.411	9.171	0.197	OK
1.004	15 min Winter	9	S37	S38	0.300	0.994	70.293	0.994	Surcharged
8.000	15 min Winter	15	S43	S38	0.300	0.672	47.483	0.220	Surcharged
9.000	30 min Summer	22	S48 (D)	S38	0.083	0.165	1.648	0.022	OK
1.005	15 min Winter	13	S38	S39	0.300	0.725	51.220	0.772	Surcharged
10.000	30 min Summer	22	S47 (D)	S39	0.083	0.167	1.668	0.022	OK
1.006	15 min Winter	13	S39	S32	0.300	0.849	59.984	0.813	Surcharged
11.000	15 min Summer	0	YG143	PS61	0.000	0.000	0.000	0.000	OK
12.000	15 min Summer	0	RWP143A	PS61	0.000	0.000	0.000	0.000	OK
11.001	15 min Summer	0	PS61	PS60	0.000	0.000	0.000	0.000	OK
13.000	15 min Summer	0	YG142	PS60	0.000	0.000	0.000	0.000	OK
11.002	15 min Summer	0	PS60	PS59	0.000	0.000	0.000	0.000	OK
14.000	15 min Summer	0	RWP143C	RE143A	0.000	0.000	0.000	0.000	OK
14.001	15 min Summer	0	RE143A	PS59	0.000	0.000	0.000	0.000	OK
11.003	15 min Summer	6	PS59	S28	0.050	0.000	0.000	0.000	OK
15.000	15 min Winter	23	S45	S27	0.150	0.706	12.472	0.779	Surcharged
15.001	15 min Winter	23	S27	S28	0.300	0.534	12.726	0.203	Surcharged
11.004	15 min Winter	23	S28	S29	0.300	0.519	13.044	0.199	Surcharged
11.005	15 min Winter	8	S29	S30	0.300	0.636	25.614	0.369	Surcharged
16.000	15 min Summer	0	RWP137B	PS65	0.000	0.000	0.000	0.000	OK
17.000	15 min Summer	0	YG137	PS65	0.000	0.000	0.000	0.000	OK
16.001	1440 min Summer	1386	PS65	PS63	0.050	0.000	0.000	0.000	OK
18.000	15 min Summer	0	YG141	PS62	0.000	0.000	0.000	0.000	OK
19.000	15 min Summer	0	RWP141A	PS62	0.000	0.000	0.000	0.000	OK
18.001	1440 min Summer	1386	PS62	PS63	0.050	0.000	0.000	0.000	OK
16.002	1440 min Winter	1851	PS63	PS64	0.100	0.011	0.061	0.007	Surcharged
20.000	15 min Summer	0	RWP141C	RE141A	0.000	0.000	0.000	0.000	OK
20.001	15 min Summer	8	RE141A	PS64	0.050	0.000	0.000	0.000	OK
21.000	15 min Summer	0	RWP137C	RE137A	0.000	0.000	0.000	0.000	OK
21.001	15 min Summer	9	RE137A	PS72	0.050	0.000	0.000	0.000	OK
22.000	15 min Summer	9	YG139	PS72	0.050	0.000	0.000	0.000	OK
21.002	15 min Winter	16	PS72	PS64	0.100	0.146	0.782	0.093	Surcharged
16.003	15 min Winter	16	PS64	S30	0.100	0.347	2.346	0.162	Surcharged
11.006	15 min Winter	8	S30	S31	0.300	0.655	44.902	0.676	Surcharged
23.000	15 min Summer	0	RWP136A	RE136A	0.000	0.000	0.000	0.000	OK
23.001	15 min Summer	0	RE136A	PS67	0.000	0.000	0.000	0.000	OK
23.002	1440 min Summer	1203	PS67	PS68	0.050	0.000	0.000	0.000	OK
23.003	1440 min Winter	3326	PS68	PS70	0.100	0.011	0.042	0.006	Surcharged
24.000	15 min Summer	0	RWP136F	RE136B	0.000	0.000	0.000	0.000	OK
24.001	600 min Summer	552	RE136B	PS70	0.050	0.000	0.000	0.000	OK
23.004	720 min Winter	1608	PS70	S31	0.100	0.009	0.068	0.003	Surcharged
25.000	30 min Summer	33	S44	S31	0.150	0.534	9.438	0.586	Surcharged
11.007	15 min Winter	24	S31	S32	0.300	0.266	18.772	0.283	Surcharged
1.007	1440 min Summer	1440	S32	S33	0.150	0.034	0.606	0.042	Surcharged

Permeable Paving Storage

Permeable Paving	Critical Storm	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Flood (m3)	Status
S42	60 min Summer	44	5.351	0.085	4.944		OK
S48	30 min Summer	22	5.199	0.039	1.719		OK
S47	30 min Summer	22	5.097	0.038	1.725		OK

Return Period Yrs: 100.0

Climate Change %: 45

Manholes

Manhole	Critical Storm	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Flood (m3)	Status
S40	15 min Summer	10	5.727	1.052	61.940		Surcharged
S34	15 min Summer	10	5.399	1.499	101.858		Surcharged
S35	15 min Summer	10	5.156	1.381	135.035		Surcharged
RWP130A	-	0	5.300	0.000	0.000		OK
RE130B	-	0	5.000	0.000	0.000		OK
YG130	-	0	4.950	0.000	0.000		OK
PS76	1440 min Summer	1438	4.938	0.238	0.010		Surcharged
RWP130B	-	0	5.300	0.000	0.000		OK
RE130A	-	0	5.000	0.000	0.000		OK
PS74	1440 min Summer	1438	4.938	0.138	0.000		Surcharged
PS73	1440 min Summer	1438	4.937	0.437	0.014		Surcharged
S41	1440 min Summer	1438	4.937	1.037	0.002		Surcharged
S36	1440 min Summer	1440	4.937	1.247	0.157		Surcharged
RWP1-4A	-	0	5.400	0.000	0.000		OK
PS90	-	0	5.150	0.000	0.000		OK
PS91	-	0	5.000	0.000	0.000		OK
S42 (D)	15 min Summer	8	5.315	0.065	14.313		OK
PS89	1440 min Summer	1440	4.937	0.187	0.138		Surcharged
S37	1440 min Summer	1440	4.937	1.287	0.274		Surcharged
S43	1440 min Summer	1439	4.937	0.937	0.018		Surcharged
S48 (D)	30 min Summer	22	5.168	0.018	2.301		OK
S38	1440 min Summer	1439	4.937	1.337	0.444		Surcharged
S47 (D)	30 min Summer	21	5.018	0.018	2.336		OK
S39	1440 min Summer	1439	4.937	1.417	0.515		Surcharged
YG143	-	0	5.150	0.000	0.000		OK
RWP143A	-	0	5.300	0.000	0.000		OK
PS61	-	0	5.000	0.000	0.000		OK
YG142	-	0	5.090	0.000	0.000		OK
PS60	1440 min Summer	1438	4.938	0.088	0.000		OK
RWP143C	-	0	5.300	0.000	0.000		OK
RE143A	-	0	5.000	0.000	0.000		OK
PS59	1440 min Summer	1438	4.938	0.238	0.006		Surcharged
S45	1440 min Summer	1437	4.937	0.987	0.047		Surcharged
S27	1440 min Summer	1439	4.937	1.187	0.058		Surcharged
S28	1440 min Summer	1439	4.937	1.237	0.084		Surcharged
S29	1440 min Summer	1439	4.937	1.297	0.136		Surcharged
RWP137B	-	0	5.000	0.000	0.000		OK
YG137	1440 min Summer	1438	4.938	0.136	0.007		Surcharged
PS65	1440 min Summer	1438	4.938	0.288	0.021		Surcharged
YG141	-	0	4.980	0.000	0.000		OK
RWP141A	-	0	5.200	0.000	0.000		OK
PS62	1440 min Summer	1439	4.938	0.038	0.000		OK
PS63	1440 min Summer	1439	4.938	0.438	0.016		Surcharged
RWP141C	-	0	5.200	0.000	0.000		OK
RE141A	-	0	5.100	0.000	0.000		OK
RWP137C	-	0	5.000	0.000	0.000		OK
RE137A	1440 min Summer	1438	4.938	0.138	0.023		Surcharged
YG139	1440 min Summer	1438	4.938	0.038	0.008		OK
PS72	1440 min Summer	1438	4.938	0.638	0.037		Surcharged
PS64	1440 min Summer	1438	4.938	0.738	0.037		Surcharged
S30	1440 min Summer	1439	4.937	1.337	0.240		Surcharged
RWP136A	-	0	4.950	0.000	0.000		OK
RE136A	1440 min Summer	1439	4.938	0.038	0.000		OK
PS67	1440 min Summer	1439	4.937	0.312	0.011		Surcharged
PS68	1440 min Summer	1439	4.938	0.463	0.015		Surcharged
RWP136F	-	0	5.000	0.000	0.000		OK
RE136B	1440 min Summer	1439	4.938	0.138	0.002		Surcharged
PS70	1440 min Summer	1439	4.938	0.538	0.004		Surcharged
S44	1440 min Summer	1439	4.937	1.227	0.003		Surcharged
S31	1440 min Summer	1439	4.937	1.432	0.256		Surcharged
S32	1440 min Summer	1439	4.937	1.472	0.759		Surcharged
S33	15 min Summer	0	4.000	0.600	0.569		Outfall

Conduits

Pipe No.	Critical Storm	Peak (mins)	US Manhole	DS Manhole	Flow Depth (m)	Max Velocity (m/s)	Max Flow (l/s)	Flow / Capacity	Status
1.000	15 min Winter	9	S40	S34	0.225	1.807	62.512	0.685	OK
1.001	15 min Winter	9	S34	S35	0.300	1.342	94.863	1.496	Surcharged
1.002	30 min Summer	17	S35	S36	0.300	1.737	122.795	1.833	Surcharged
2.000	15 min Summer	0	RWP130A	RE130B	0.000	0.000	0.000	0.000	OK
2.001	15 min Summer	11	RE130B	PS76	0.050	0.000	0.000	0.000	OK
3.000	15 min Summer	11	YG130	PS76	0.050	0.000	0.000	0.000	OK
2.002	15 min Winter	13	PS76	PS73	0.100	0.221	1.348	0.202	Surcharged
4.000	15 min Summer	0	RWP130B	RE130A	0.000	0.000	0.000	0.000	OK
4.001	1440 min Winter	1322	RE130A	PS74	0.050	0.000	0.000	0.000	OK
4.002	1440 min Summer	1390	PS74	PS73	0.100	0.013	0.079	0.008	Surcharged
2.003	15 min Winter	13	PS73	S36	0.100	0.348	2.489	0.133	Surcharged
5.000	180 min Summer	197	S41	S36	0.150	0.062	1.094	0.074	Surcharged
1.003	15 min Winter	10	S36	S37	0.300	1.154	81.586	1.269	Surcharged
6.000	15 min Summer	0	RWP1-4A	PS90	0.000	0.000	0.000	0.000	OK
6.001	15 min Summer	0	PS90	PS91	0.000	0.000	0.000	0.000	OK
6.002	1440 min Winter	1322	PS91	PS89	0.050	0.000	0.000	0.000	OK
7.000	1440 min Summer	1354	S42 (D)	PS89	0.079	1.163	2.247	0.069	OK
6.003	1440 min Summer	1354	PS89	S37	0.150	0.500	2.247	0.048	Surcharged
1.004	15 min Winter	10	S37	S38	0.300	1.248	88.201	1.247	Surcharged
8.000	15 min Winter	16	S43	S38	0.300	0.906	64.019	0.297	Surcharged
9.000	30 min Summer	22	S48 (D)	S38	0.084	0.226	2.304	0.031	OK
1.005	15 min Winter	14	S38	S39	0.300	0.789	55.741	0.840	Surcharged
10.000	30 min Summer	22	S47 (D)	S39	0.084	0.229	2.333	0.031	OK
1.006	15 min Winter	14	S39	S32	0.300	0.918	64.901	0.880	Surcharged
11.000	15 min Summer	0	YG143	PS61	0.000	0.000	0.000	0.000	OK
12.000	15 min Summer	0	RWP143A	PS61	0.000	0.000	0.000	0.000	OK
11.001	1440 min Summer	1438	PS61	PS60	0.044	0.000	0.000	0.000	OK
13.000	1440 min Summer	1438	YG142	PS60	0.044	0.000	0.000	0.000	OK
11.002	1440 min Summer	1438	PS60	PS59	0.094	0.013	0.089	0.015	OK
14.000	15 min Summer	0	RWP143C	RE143A	0.000	0.000	0.000	0.000	OK
14.001	1440 min Winter	1121	RE143A	PS59	0.050	0.000	0.000	0.000	OK
11.003	1440 min Summer	1387	PS59	S28	0.100	0.018	0.143	0.007	Surcharged
15.000	15 min Winter	27	S45	S27	0.150	0.619	10.936	0.683	Surcharged
15.001	15 min Winter	27	S27	S28	0.300	0.546	10.979	0.175	Surcharged
11.004	15 min Winter	26	S28	S29	0.300	0.514	11.294	0.172	Surcharged
11.005	15 min Winter	8	S29	S30	0.300	0.679	31.930	0.460	Surcharged
16.000	960 min Summer	880	RWP137B	PS65	0.050	0.000	0.000	0.000	OK
17.000	1440 min Summer	1562	YG137	PS65	0.100	0.007	0.047	0.002	Surcharged
16.001	1440 min Winter	1067	PS65	PS63	0.100	0.021	0.168	0.028	Surcharged
18.000	1440 min Summer	1439	YG141	PS62	0.019	0.000	0.000	0.000	OK
19.000	1440 min Summer	1439	RWP141A	PS62	0.019	0.000	0.000	0.000	OK
18.001	1440 min Summer	1507	PS62	PS63	0.069	0.011	0.050	0.005	OK
16.002	15 min Winter	15	PS63	PS64	0.100	0.189	1.169	0.131	Surcharged
20.000	15 min Summer	0	RWP141C	RE141A	0.000	0.000	0.000	0.000	OK
20.001	15 min Summer	8	RE141A	PS64	0.050	0.000	0.000	0.000	OK
21.000	1440 min Winter	1322	RWP137C	RE137A	0.050	0.000	0.000	0.000	OK
21.001	1440 min Summer	2212	RE137A	PS72	0.100	0.013	0.053	0.003	Surcharged
22.000	1440 min Summer	1438	YG139	PS72	0.069	0.013	0.060	0.002	OK
21.002	15 min Winter	16	PS72	PS64	0.100	0.126	0.989	0.118	Surcharged
16.003	15 min Winter	16	PS64	S30	0.100	0.437	3.433	0.236	Surcharged
11.006	15 min Winter	8	S30	S31	0.300	0.762	53.852	0.811	Surcharged
23.000	1440 min Summer	1439	RWP136A	RE136A	0.019	0.000	0.000	0.000	OK
23.001	1440 min Summer	1439	RE136A	PS67	0.069	0.011	0.054	0.006	OK
23.002	1440 min Summer	1018	PS67	PS68	0.100	0.011	0.081	0.013	Surcharged
23.003	30 min Summer	20	PS68	PS70	0.100	0.146	1.143	0.152	Surcharged
24.000	1440 min Winter	1322	RWP136F	RE136B	0.050	0.000	0.000	0.000	OK
24.001	1440 min Summer	1388	RE136B	PS70	0.100	0.013	0.101	0.007	Surcharged
23.004	15 min Winter	16	PS70	S31	0.100	0.212	1.636	0.081	Surcharged
25.000	30 min Summer	36	S44	S31	0.150	0.725	12.817	0.796	Surcharged
11.007	15 min Winter	26	S31	S32	0.300	0.285	20.141	0.304	Surcharged
1.007	1440 min Summer	1439	S32	S33	0.150	0.042	0.750	0.052	Surcharged

Permeable Paving Storage

Permeable Paving	Critical Storm	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Flood (m3)	Status
S42	60 min Summer	43	5.371	0.106	6.837		OK
S48	30 min Summer	21	5.209	0.048	2.477		OK
S47	30 min Summer	21	5.106	0.048	2.487		OK