

Network Details

Manhole Schedule

Manhole	Catchment Area (ha)	Diameter (m)	Type	CL (m)	IL (m)	Depth To Soffit (m)	Easting (m)	Northing (m)
ACO1	0.000	0.180	Type E	35.650	35.000	0.500	467475.674	109810.294
PS13	0.165	0.250	Type D	35.650	34.450	0.900	467478.450	109810.907
PS14	0.000	1.200	Type E	35.488	34.000	1.188	467539.347	109850.986
PS27	0.014	1.200	Type E	36.164	34.650	1.214	467560.301	109897.167
PS28	0.018	1.200	Type E	36.077	34.500	1.277	467568.577	109884.786
D6	0.027	0.180	Type E	36.166	35.506	0.510	467549.318	109888.574
PS29	0.000	1.200	Type E	36.117	34.650	1.167	467547.042	109887.365
D5	0.012	0.180	Type E	36.035	35.375	0.510	467555.923	109878.313
PS30	0.036	1.200	Type E	35.950	34.400	1.250	467555.058	109875.384
ACO4	0.022	0.180	Type E	35.550	34.900	0.500	467531.112	109859.773
D1	0.017	0.180	Type E	35.526	34.916	0.460	467536.704	109858.302
D3	0.012	0.180	Type E	35.813	35.153	0.510	467542.504	109869.756
PS15	0.000	1.350	Type B	35.670	33.900	1.470	467539.506	109865.117
RWP11	0.000	0.180	Type E	35.641	35.041	0.500	467498.539	109863.981
RE1	0.048	0.225	Type E	35.606	34.700	0.681	467499.755	109866.239
ACO3	0.017	0.180	Type E	35.600	34.950	0.500	467516.708	109878.794
PS25	0.000	0.450	Type D	35.633	34.550	0.858	467518.419	109878.350
D2	0.018	0.180	Type E	35.610	34.950	0.510	467526.755	109873.163
D4	0.027	0.180	Type E	35.855	35.195	0.510	467535.992	109879.880
S1	0.000	1.350	Type B	35.761	33.750	1.711	467527.028	109883.962
PS31	0.049	0.450	450	36.395	35.300	0.945	467529.469	109954.319
PS32	0.000	0.450	450	36.288	35.000	1.138	467541.729	109935.924
ACO7	0.027	0.180	Type E	36.301	35.551	0.600	467533.090	109921.881
PS33	0.005	1.200	Type E	36.249	34.750	1.199	467540.793	109925.441
PS26	0.023	1.200	Type B	36.144	34.000	1.844	467550.261	109910.039
AC05	0.021	0.180	Type E	36.525	35.875	0.500	467517.205	109941.009
S3	0.052	1.200	Type E	36.583	34.900	1.383	467510.332	109939.022
S2	0.002	1.200	Type B	36.031	33.764	1.968	467535.849	109900.742
D8	0.007	0.180	Type E	36.404	35.744	0.510	467504.988	109927.301
PS38	0.014	1.200	Type E	36.324	34.800	1.224	467498.579	109927.539
D7	0.032	0.180	Type E	36.008	35.348	0.510	467526.253	109903.269
D9	0.039	0.180	Type E	35.954	35.295	0.510	467516.498	109896.696
PS19	0.017	1.350	Type B	35.851	33.600	1.951	467521.854	109891.696
D10	0.022	0.180	Type E	35.958	35.298	0.510	467506.281	109892.929
ACO9	0.000	0.180	Type E	35.729	34.981	0.598	467492.888	109892.373
S7	0.057	1.200	Type B	35.797	33.500	1.997	467498.512	109888.934
D11	0.012	0.180	Type E	35.491	34.881	0.510	467497.290	109869.811
PS20	0.016	1.200	Type B	35.582	33.000	2.282	467491.617	109871.651
PS21	0.046	1.200	Type B	35.592	32.750	2.542	467486.057	109864.750
ACO8	0.013	0.180	Type E	35.810	35.060	0.600	467485.663	109901.335
S4	0.031	1.200	Type E	35.843	34.400	1.143	467477.351	109911.088
ACO6	0.009	0.180	Type E	35.828	35.078	0.600	467478.921	109903.237
S5	0.025	1.200	Type E	35.750	34.250	1.200	467470.782	109902.171
RWP15	0.000	0.180	Type E	35.925	34.925	0.900	467480.029	109875.413
RWP14	0.000	0.180	Type E	35.925	34.925	0.900	467474.375	109878.947
S6	0.030	1.200	Type E	35.538	34.000	1.238	467468.204	109878.917
ACO2	0.022	0.180	Type E	34.480	33.830	0.500	467476.907	109824.756
PS17	0.000	0.450	450	34.587	33.400	1.037	467473.539	109829.789
PS18	0.000	1.200	Type B	35.492	33.000	2.342	467467.208	109846.600
PS22	0.000	1.350	Type B	35.789	32.600	2.889	467471.427	109860.773
EXSW 4850	0.000	1.800	Type A	35.490	32.110	3.080	467451.683	109856.025

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	ACO1	35.000	PS13	34.600	Circ	0.15mØ	2.843	7.1	0.600	0.500	0.900
1.001	PS13	34.450	PS14	34.000	Circ	0.3mØ	72.903	162.0	0.600	0.900	1.188
1.002	PS14	34.000	PS15	33.900	Circ	0.3mØ	14.132	141.3	0.600	1.188	1.470
2.000	PS27	34.650	PS28	34.500	Circ	0.3mØ	14.893	99.3	0.600	1.214	1.277
2.001	PS28	34.500	PS30	34.400	Circ	0.3mØ	16.467	164.7	0.600	1.277	1.250
3.000	D6	35.506	PS29	34.800	Circ	0.15mØ	2.577	3.7	0.600	0.510	1.167

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)
3.001	PS29	34.650	PS30	34.400	Circ	0.3mØ	14.415	57.7	0.600	1.167	1.250
4.000	D5	35.375	PS30	34.550	Circ	0.15mØ	3.054	3.7	0.600	0.510	1.250
2.002	PS30	34.400	PS15	33.900	Circ	0.3mØ	18.635	37.3	0.600	1.250	1.470
5.000	ACO4	34.900	PS15	34.050	Circ	0.15mØ	9.952	11.7	0.600	0.500	1.470
6.000	D1	34.916	PS15	34.050	Circ	0.15mØ	7.369	8.5	0.600	0.460	1.470
7.000	D3	35.153	PS15	34.050	Circ	0.15mØ	5.523	5.0	0.600	0.510	1.470
1.003	PS15	33.900	S1	33.750	Circ	0.3mØ	22.602	150.7	0.600	1.470	1.711
8.000	RWP11	35.041	RE1	34.825	Circ	0.1mØ	2.564	11.9	0.600	0.500	0.681
8.001	RE1	34.700	PS25	34.550	Circ	0.225mØ	22.249	148.3	0.600	0.681	0.858
9.000	ACO3	34.950	PS25	34.625	Circ	0.15mØ	1.768	5.4	0.600	0.500	0.858
8.002	PS25	34.550	S1	33.825	Circ	0.225mØ	10.276	14.2	0.600	0.858	1.711
10.000	D2	34.950	S1	33.900	Circ	0.15mØ	10.803	10.3	0.600	0.510	1.711
11.000	D4	35.195	S1	33.900	Circ	0.15mØ	9.850	7.6	0.600	0.510	1.711
1.004	S1	33.750	PS19	33.600	Circ	0.3mØ	9.305	62.0	0.600	1.711	1.951
12.000	PS31	35.300	PS32	35.000	Circ	0.15mØ	22.106	73.7	0.600	0.945	1.138
12.001	PS32	35.000	PS33	34.900	Circ	0.15mØ	10.525	105.2	0.600	1.138	1.199
13.000	ACO7	35.551	PS33	34.950	Circ	0.15mØ	8.486	14.1	0.600	0.600	1.149
12.002	PS33	34.750	PS26	34.000	Circ	0.3mØ	18.079	24.1	0.600	1.199	1.844
12.003	PS26	34.000	S2	33.764	Circ	0.3mØ	17.151	72.6	0.600	1.844	1.968
14.000	ACO5	35.875	S3	35.050	Circ	0.15mØ	7.154	8.7	0.600	0.500	1.383
14.001	S3	34.900	S2	33.764	Circ	0.3mØ	46.005	40.5	0.600	1.383	1.968
12.004	S2	33.764	PS19	33.600	Circ	0.3mØ	16.664	101.9	0.600	1.968	1.951
15.000	D8	35.744	PS38	34.950	Circ	0.15mØ	6.414	8.1	0.600	0.510	1.224
15.001	PS38	34.800	PS19	33.600	Circ	0.3mØ	42.737	35.6	0.600	1.224	1.951
16.000	D7	35.348	PS19	33.750	Circ	0.15mØ	12.381	7.7	0.600	0.510	1.951
17.000	D9	35.295	PS19	33.750	Circ	0.15mØ	7.327	4.7	0.600	0.510	1.951
1.005	PS19	33.600	PS20	33.000	Circ	0.3mØ	36.278	60.5	0.600	1.951	2.282
18.000	D10	35.298	S7	33.650	Circ	0.15mØ	8.737	5.3	0.600	0.510	1.997
19.000	ACO9	34.981	S7	33.650	Circ	0.15mØ	6.592	5.0	0.600	0.598	1.997
18.001	S7	33.500	PS20	33.000	Circ	0.3mØ	18.608	37.2	0.600	1.997	2.282
20.000	D11	34.881	PS20	33.200	Circ	0.1mØ	5.964	3.5	0.600	0.510	2.282
1.006	PS20	33.000	PS21	32.750	Circ	0.3mØ	8.862	35.4	0.600	2.282	2.542
1.007	PS21	32.750	PS22	32.600	Circ	0.3mØ	15.161	101.1	0.600	2.542	2.889
21.000	ACO8	35.060	S5	34.400	Circ	0.15mØ	14.905	22.6	0.600	0.600	1.200
22.000	S4	34.400	S5	34.250	Circ	0.3mØ	11.075	73.8	0.600	1.143	1.200
23.000	ACO6	35.078	S5	34.400	Circ	0.15mØ	8.209	12.1	0.600	0.600	1.200
21.001	S5	34.250	S6	34.000	Circ	0.3mØ	23.396	93.6	0.600	1.200	1.238
24.000	RWP15	34.925	S6	34.200	Circ	0.1mØ	12.333	17.0	0.600	0.900	1.238
25.000	RWP14	34.925	S6	34.200	Circ	0.1mØ	6.170	8.5	0.600	0.900	1.238
21.002	S6	34.000	PS22	32.600	Circ	0.3mØ	18.429	13.2	0.600	1.238	2.889
26.000	ACO2	33.830	PS17	33.400	Circ	0.15mØ	6.057	14.1	0.600	0.500	1.037
26.001	PS17	33.400	PS18	33.000	Circ	0.15mØ	17.963	44.9	0.600	1.037	2.342
26.002	PS18	33.000	PS22	32.750	Circ	0.15mØ	14.787	59.1	0.600	2.342	2.889
1.008	PS22	32.600	EXSW 4850	32.110	Circ	0.3mØ	20.307	41.4	0.600	2.889	3.080

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)
Permeable Paving5	D6	20.250	36.166	35.586	0.00000000	2.00	467549.217	109896.593
Permeable Paving6	D5	13.500	36.035	35.455	0.00000000	2.00	467557.222	109884.503
Permeable Paving10	D1	10.800	35.526	34.946	0.00000000	2.00	467534.280	109865.716
Permeable Paving8	D3	13.500	35.813	35.233	0.00000000	2.00	467543.880	109875.670
Permeable Paving9	D2	10.125	35.610	35.030	0.00000000	2.00	467524.619	109880.308
Permeable Paving7	D4	20.250	35.855	35.275	0.00000000	2.00	467535.876	109887.761
Permeable Paving1	D8	10.122	36.404	35.824	0.00000000	2.00	467506.899	109932.439
Permeable Paving2	D7	40.500	36.008	35.428	0.00000000	2.00	467518.352	109915.136
Permeable Paving3	D9	20.115	35.954	35.374	0.00000000	2.00	467511.468	109901.084
Permeable Paving4	D10	16.500	35.958	35.428	0.00000000	2.00	467500.568	109904.862
Permeable Paving11	D11	16.153	35.491	34.911	0.00000000	2.00	467504.978	109877.825

Outfall Details

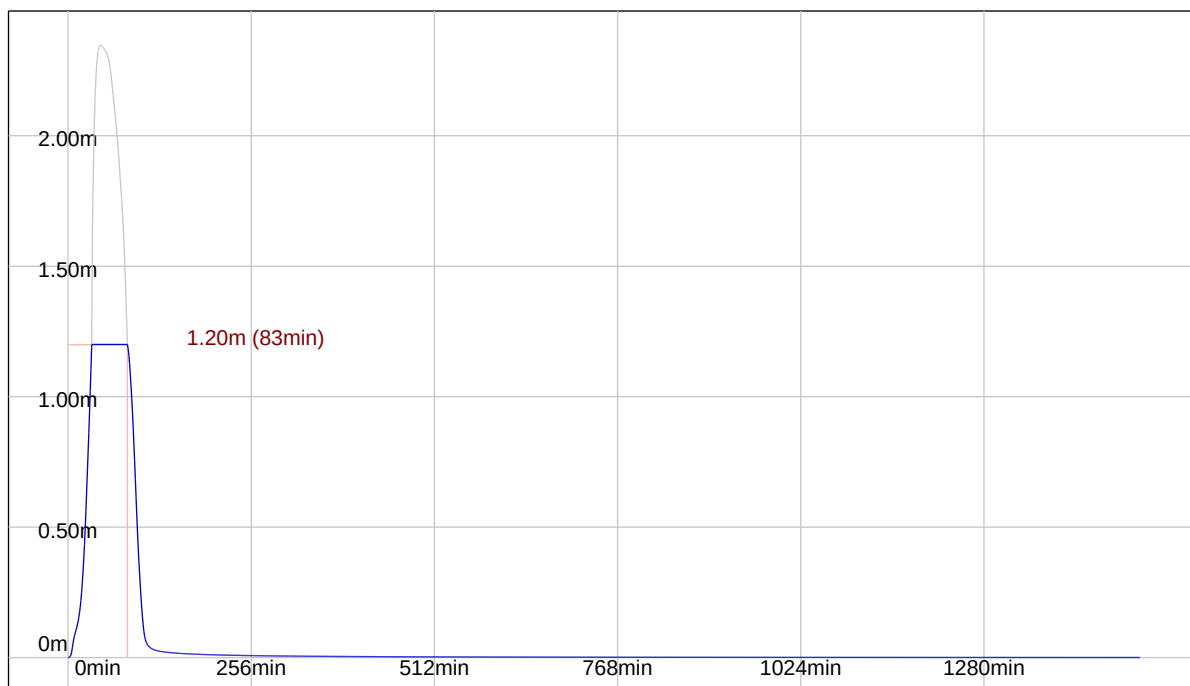
Outfall Manhole EXSW 4850 : Free Discharge

Flow Control Details

Tank Structure at Manhole PS21

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
32.750	1.200	95.00	70.000	66.500	79.800	0.00000000	0.00000000	2.00

Tank at PS21 (100Yr+40% 60Min Winter)



Controls within Manhole PS18

Flap Valve Control

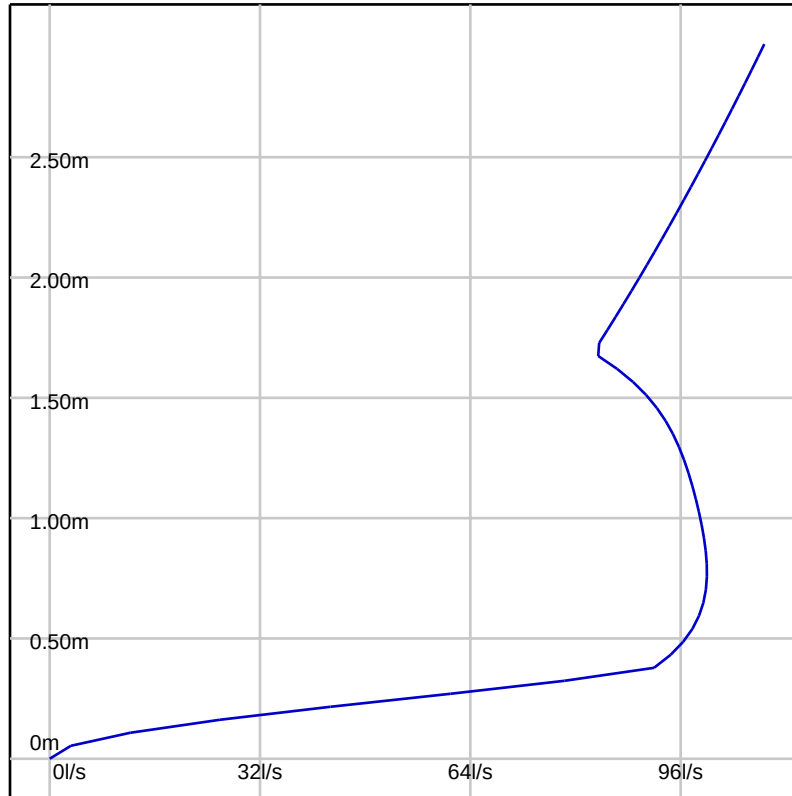
Invert Offset (m)	Orifice Diameter (m)	Discharge Coeff
0.000	0.150	0.600

Controls within Manhole PS22

Hydro-Brake® Optimum Control at Manhole PS22

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)
SHE-0376-1000-2500-1000	2.500	100.000	0.000	0.777	100.004	1.685	82.600

Hydro-Brake® Optimum Control at PS22



Simulation Settings

FEH2022 (point): Filename=FEH_Point_Descriptors_467618_109877_v5_0_1.xml

Summer (Cv: 0.75), Winter (Cv: 0.84)

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, +0%), (100, +40%)

Simulated Rainfall Events

Storm	Average Intensity (mm/hr)	Runoff Continuity %	Flow Continuity %	Storm	Average Intensity (mm/hr)	Runoff Continuity %	Flow Continuity %
2Yr 15Min Winter	32.400	0.00	0.04	30Yr+40% 360Min Summer	11.738	0.00	0.00
2Yr 15Min Summer	32.400	0.00	0.04	30Yr+40% 360Min Winter	11.738	0.00	0.00
2Yr 30Min Winter	21.135	0.00	0.00	30Yr+40% 480Min Summer	9.383	0.00	0.00
2Yr 30Min Summer	21.135	0.00	0.00	30Yr+40% 480Min Winter	9.383	0.00	0.00
2Yr 60Min Summer	13.367	0.00	0.00	30Yr+40% 600Min Summer	7.894	0.00	0.00
2Yr 60Min Winter	13.367	0.00	0.00	30Yr+40% 600Min Winter	7.894	0.00	0.00
2Yr 120Min Winter	8.963	0.00	0.00	30Yr+40% 720Min Summer	6.855	0.00	0.00
2Yr 120Min Summer	8.963	0.00	0.00	30Yr+40% 720Min Winter	6.855	0.00	0.00
2Yr 180Min Summer	7.019	0.00	0.00	30Yr+40% 960Min Summer	5.487	0.00	0.00
2Yr 180Min Winter	7.019	0.00	0.00	30Yr+40% 960Min Winter	5.487	0.00	0.00
2Yr 240Min Winter	5.763	0.00	0.00	30Yr+40% 1440Min Summer	4.019	0.00	0.00
2Yr 240Min Summer	5.763	0.00	0.00	30Yr+40% 1440Min Winter	4.019	0.00	0.00
2Yr 360Min Summer	4.392	0.00	0.00	100Yr 15Min Summer	100.105	0.00	-0.10
2Yr 360Min Winter	4.392	0.00	0.00	100Yr 15Min Winter	100.105	0.00	-0.07
2Yr 480Min Summer	3.617	0.00	0.00	100Yr 30Min Summer	66.931	0.00	-0.33
2Yr 480Min Winter	3.617	0.00	0.00	100Yr 30Min Winter	66.931	0.00	0.23
2Yr 600Min Summer	3.091	0.00	0.00	100Yr 60Min Summer	42.609	0.00	-0.20
2Yr 600Min Winter	3.091	0.00	0.00	100Yr 60Min Winter	42.609	0.00	0.39
2Yr 720Min Winter	2.709	0.00	0.00	100Yr 120Min Summer	24.575	0.00	-0.08
2Yr 720Min Summer	2.709	0.00	0.00	100Yr 120Min Winter	24.575	0.00	-0.03
2Yr 960Min Summer	2.203	0.00	0.00	100Yr 180Min Summer	17.681	0.00	-0.01
2Yr 960Min Winter	2.203	0.00	0.00	100Yr 180Min Winter	17.681	0.00	0.00
2Yr 1440Min Summer	1.646	0.00	0.00	100Yr 240Min Summer	14.182	0.00	0.00
2Yr 1440Min Winter	1.646	0.00	0.00	100Yr 240Min Winter	14.182	0.00	0.00
10Yr+40% 15Min Summer	86.204	0.00	-0.07	100Yr 360Min Summer	10.311	0.00	0.00
10Yr+40% 15Min Winter	86.204	0.00	-0.02	100Yr 360Min Winter	10.311	0.00	0.00
10Yr+40% 30Min Summer	56.494	0.00	0.18	100Yr 480Min Summer	8.224	0.00	0.00
10Yr+40% 30Min Winter	56.494	0.00	-0.26	100Yr 480Min Winter	8.224	0.00	0.00
10Yr+40% 60Min Summer	35.551	0.00	0.30	100Yr 600Min Summer	6.915	0.00	0.00
10Yr+40% 60Min Winter	35.551	0.00	-0.13	100Yr 600Min Winter	6.915	0.00	0.00
10Yr+40% 120Min Summer	21.566	0.00	-0.02	100Yr 720Min Summer	6.004	0.00	0.00
10Yr+40% 120Min Winter	21.566	0.00	0.00	100Yr 720Min Winter	6.004	0.00	0.00
10Yr+40% 180Min Summer	15.982	0.00	0.00	100Yr 960Min Summer	4.801	0.00	0.00
10Yr+40% 180Min Winter	15.982	0.00	0.00	100Yr 960Min Winter	4.801	0.00	0.00
10Yr+40% 240Min Summer	12.909	0.00	0.00	100Yr 1440Min Summer	3.498	0.00	0.00
10Yr+40% 240Min Winter	12.909	0.00	0.00	100Yr 1440Min Winter	3.498	0.00	0.00
10Yr+40% 360Min Summer	9.516	0.00	0.00	100Yr+40% 15Min Summer	140.147	0.00	-0.24
10Yr+40% 360Min Winter	9.516	0.00	0.00	100Yr+40% 15Min Winter	140.147	0.00	-0.17
10Yr+40% 480Min Winter	7.662	0.00	0.00	100Yr+40% 30Min Summer	93.703	0.00	0.11
10Yr+40% 480Min Summer	7.662	0.00	0.00	100Yr+40% 30Min Winter	93.703	0.00	-0.16
10Yr+40% 600Min Summer	6.472	0.00	0.00	100Yr+40% 60Min Summer	59.653	0.00	-0.09
10Yr+40% 600Min Winter	6.472	0.00	0.01	100Yr+40% 60Min Winter	59.653	0.00	-0.05
10Yr+40% 720Min Summer	5.633	0.00	0.00	100Yr+40% 120Min Summer	34.405	0.00	0.47
10Yr+40% 720Min Winter	5.633	0.00	0.00	100Yr+40% 120Min Winter	34.405	0.00	0.45
10Yr+40% 960Min Summer	4.526	0.00	0.00	100Yr+40% 180Min Summer	24.753	0.00	0.34
10Yr+40% 960Min Winter	4.526	0.00	0.00	100Yr+40% 180Min Winter	24.753	0.00	-0.05
10Yr+40% 1440Min Summer	3.328	0.00	0.00	100Yr+40% 240Min Summer	19.854	0.00	-0.05
10Yr+40% 1440Min Winter	3.328	0.00	0.00	100Yr+40% 240Min Winter	19.854	0.00	-0.00
30Yr+40% 15Min Summer	111.535	0.00	-0.17	100Yr+40% 360Min Summer	14.436	0.00	0.00
30Yr+40% 15Min Winter	111.535	0.00	-0.22	100Yr+40% 360Min Winter	14.436	0.00	0.00
30Yr+40% 30Min Summer	73.797	0.00	0.17	100Yr+40% 480Min Summer	11.513	0.00	0.00
30Yr+40% 30Min Winter	73.797	0.00	0.25	100Yr+40% 480Min Winter	11.513	0.00	0.00
30Yr+40% 60Min Summer	46.741	0.00	0.37	100Yr+40% 600Min Summer	9.680	0.00	0.00
30Yr+40% 60Min Winter	46.741	0.00	0.45	100Yr+40% 600Min Winter	9.680	0.00	0.00
30Yr+40% 120Min Summer	27.476	0.00	-0.11	100Yr+40% 720Min Summer	8.405	0.00	0.00

Simulated Rainfall Events

Storm	Average Intensity (mm/hr)	Runoff Continuity %	Flow Continuity %	Storm	Average Intensity (mm/hr)	Runoff Continuity %	Flow Continuity %
30Yr+40% 120Min Winter	27.476	0.00	-0.07	100Yr+40% 720Min Winter	8.405	0.00	0.00
30Yr+40% 180Min Summer	19.997	0.00	-0.03	100Yr+40% 960Min Summer	6.721	0.00	0.00
30Yr+40% 180Min Winter	19.997	0.00	0.00	100Yr+40% 960Min Winter	6.721	0.00	0.00
30Yr+40% 240Min Summer	16.082	0.00	0.00	100Yr+40% 1440Min Winter	4.897	0.00	0.00
30Yr+40% 240Min Winter	16.082	0.00	0.00	100Yr+40% 1440Min Summer	4.897	0.00	0.00

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
ACO1	-	0	35.000	0.000	0.000		OK
PS13	15 min Winter	8	34.557	0.107	24.677		OK
PS14	15 min Winter	9	34.106	0.106	23.816		OK
PS27	15 min Winter	8	34.678	0.028	2.060		OK
PS28	15 min Winter	8	34.547	0.047	4.788		OK
D6	120 min Summer	71	35.518	0.012	1.306		OK
PS29	120 min Summer	72	34.670	0.020	1.305		OK
D5	120 min Summer	70	35.384	0.009	0.640		OK
PS30	15 min Winter	8	34.447	0.047	9.997		OK
ACO4	15 min Winter	8	34.926	0.026	3.368		OK
D1	30 min Winter	25	34.930	0.014	1.113		OK
D3	120 min Summer	70	35.162	0.010	0.640		OK
PS15	15 min Winter	9	34.032	0.132	37.072		OK
RWP11	-	0	35.041	0.000	0.000		OK
RE1	15 min Winter	8	34.764	0.064	7.182		OK
ACO3	15 min Winter	8	34.969	0.019	2.570		OK
PS25	15 min Winter	8	34.590	0.040	9.668		OK
D2	30 min Winter	26	34.965	0.015	1.203		OK
D4	120 min Summer	71	35.210	0.015	1.306		OK
S1	15 min Winter	9	33.870	0.120	46.333		OK
PS31	15 min Winter	8	35.361	0.061	7.407		OK
PS32	15 min Winter	8	35.067	0.067	7.345		OK
ACO7	15 min Winter	8	35.581	0.030	4.089		OK
PS33	15 min Winter	8	34.796	0.046	12.026		OK
PS26	15 min Winter	9	34.068	0.068	14.988		OK
ACO5	15 min Winter	8	35.898	0.023	3.142		OK
S3	15 min Winter	8	34.950	0.050	10.900		OK
S2	15 min Winter	9	33.862	0.098	25.854		OK
D8	120 min Summer	70	35.753	0.009	0.436		OK
PS38	15 min Winter	8	34.822	0.022	2.135		OK
D7	180 min Summer	110	35.361	0.013	1.040		OK
D9	60 min Summer	41	35.311	0.016	2.012		OK
PS19	15 min Winter	9	33.756	0.156	76.972		OK
D10	120 min Summer	71	35.310	0.012	1.059		OK
ACO9	-	0	34.981	0.000	0.000		OK
S7	15 min Winter	8	33.544	0.044	8.549		OK
D11	180 min Summer	103	34.890	0.009	0.574		OK
PS20	15 min Winter	10	33.144	0.144	83.529		OK
PS21	15 min Winter	12	33.040	0.290	64.184		OK
ACO8	15 min Winter	8	35.083	0.023	1.894		OK
S4	15 min Winter	8	34.438	0.038	4.609		OK
ACO6	15 min Winter	8	35.094	0.017	1.359		OK
S5	15 min Winter	8	34.316	0.066	11.532		OK
RWP15	-	0	34.925	0.000	0.000		OK
RWP14	-	0	34.925	0.000	0.000		OK
S6	15 min Winter	8	34.046	0.046	15.872		OK
ACO2	15 min Winter	8	33.857	0.027	3.279		OK
PS17	15 min Winter	8	33.435	0.035	3.264		OK
PS18	15 min Winter	9	33.070	0.070	3.130		OK
PS22	15 min Winter	12	33.007	0.407	65.053		Surcharged
EXSW 4850	15 min Winter	12	32.235	0.125	64.697		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	0	ACO1	PS13	0.000	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
1.001	15 min Winter	9	PS13	PS14	0.106	1.090	24.129	0.277	OK
1.002	15 min Winter	9	PS14	PS15	0.119	0.925	24.112	0.259	OK
2.000	15 min Winter	8	PS27	PS28	0.037	0.400	2.024	0.018	OK
2.001	15 min Winter	8	PS28	PS30	0.047	0.664	4.671	0.054	OK
3.000	120 min Summer	71	D6	PS29	0.012	1.896	1.305	0.014	OK
3.001	120 min Summer	72	PS29	PS30	0.027	0.477	1.305	0.009	OK
4.000	120 min Summer	70	D5	PS30	0.009	1.520	0.639	0.007	OK
2.002	15 min Winter	9	PS30	PS15	0.089	0.578	9.804	0.054	OK
5.000	15 min Winter	8	ACO4	PS15	0.026	1.666	3.353	0.064	OK
6.000	30 min Winter	25	D1	PS15	0.014	1.344	1.114	0.018	OK
7.000	120 min Summer	70	D3	PS15	0.009	1.363	0.639	0.008	OK
1.003	15 min Winter	9	PS15	S1	0.126	1.318	37.014	0.410	OK
8.000	15 min Winter	0	RWP11	RE1	0.000	0.000	0.000	0.000	OK
8.001	15 min Winter	8	RE1	PS25	0.052	1.024	7.109	0.167	OK
9.000	15 min Winter	8	ACO3	PS25	0.019	2.017	2.559	0.033	OK
8.002	15 min Winter	9	PS25	S1	0.042	2.007	9.610	0.069	OK
10.000	30 min Winter	26	D2	S1	0.015	1.289	1.208	0.022	OK
11.000	120 min Summer	71	D4	S1	0.015	1.468	1.306	0.020	OK
1.004	15 min Winter	9	S1	PS19	0.138	1.464	46.371	0.328	OK
12.000	15 min Winter	8	PS31	PS32	0.064	1.014	7.345	0.355	OK
12.001	15 min Winter	8	PS32	PS33	0.067	0.942	7.206	0.417	OK
13.000	15 min Winter	8	ACO7	PS33	0.030	1.650	4.071	0.085	OK
12.002	15 min Winter	8	PS33	PS26	0.057	1.272	11.947	0.053	OK
12.003	15 min Winter	9	PS26	S2	0.083	0.953	15.147	0.116	OK
14.000	15 min Winter	8	ACO5	S3	0.023	1.814	3.129	0.051	OK
14.001	15 min Winter	9	S3	S2	0.074	0.802	10.727	0.061	OK
12.004	15 min Winter	9	S2	PS19	0.127	0.929	26.178	0.238	OK
15.000	120 min Summer	70	D8	PS38	0.009	1.027	0.436	0.007	OK
15.001	15 min Winter	9	PS38	PS19	0.089	0.326	2.057	0.011	OK
16.000	180 min Summer	110	D7	PS19	0.013	1.358	1.040	0.016	OK
17.000	60 min Summer	41	D9	PS19	0.016	1.968	2.013	0.024	OK
1.005	15 min Winter	9	PS19	PS20	0.149	2.184	76.578	0.535	OK
18.000	120 min Summer	71	D10	S7	0.012	1.559	1.058	0.014	OK
19.000	15 min Winter	0	ACO9	S7	0.000	0.000	0.000	0.000	OK
18.001	15 min Winter	9	S7	PS20	0.092	0.670	8.477	0.046	OK
20.000	180 min Summer	103	D11	PS20	0.009	1.586	0.574	0.018	OK
1.006	15 min Winter	11	PS20	PS21	0.206	2.768	86.116	0.460	OK
1.007	15 min Winter	13	PS21	PS22	0.295	0.809	56.876	0.515	OK
21.000	15 min Winter	8	ACO8	S5	0.023	1.112	1.876	0.050	OK
22.000	15 min Winter	8	S4	S5	0.052	0.559	4.566	0.035	OK
23.000	15 min Winter	8	ACO6	S5	0.017	1.251	1.349	0.026	OK
21.001	15 min Winter	8	S5	S6	0.056	1.259	11.359	0.099	OK
24.000	15 min Winter	0	RWP15	S6	0.000	0.000	0.000	0.000	OK
25.000	15 min Winter	0	RWP14	S6	0.000	0.000	0.000	0.000	OK
21.002	15 min Winter	9	S6	PS22	0.173	1.045	15.724	0.051	OK
26.000	15 min Winter	8	ACO2	PS17	0.031	1.247	3.264	0.068	OK
26.001	15 min Winter	9	PS17	PS18	0.052	0.687	3.231	0.122	OK
26.002	15 min Winter	9	PS18	PS22	0.093	0.706	3.064	0.132	OK
1.008	15 min Winter	12	PS22	EXSW 4850	0.125	2.308	64.697	0.374	OK

Permeable Paving Storage

Permeable Paving	Critical Storm	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Flood (m3)	Status
Permeable Paving5	120 min Summer	71	35.619	0.033	1.336		OK
Permeable Paving6	120 min Summer	70	35.475	0.020	0.653		OK
Permeable Paving10	30 min Winter	25	34.975	0.029	0.928		OK
Permeable Paving8	120 min Summer	70	35.253	0.020	0.653		OK
Permeable Paving9	30 min Winter	25	35.061	0.031	1.474		OK
Permeable Paving7	120 min Summer	71	35.308	0.033	1.336		OK
Permeable Paving1	120 min Summer	70	35.839	0.016	0.417		OK
Permeable Paving2	180 min Summer	109	35.456	0.028	1.067		OK
Permeable Paving3	60 min Summer	41	35.418	0.044	1.909		OK
Permeable Paving4	120 min Summer	71	35.456	0.028	1.077		OK
Permeable Paving11	180 min Summer	102	34.930	0.019	0.588		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
ACO1	-	0	35.000	0.000	0.000		OK
PS13	15 min Winter	8	34.640	0.190	65.660		OK
PS14	15 min Winter	11	34.314	0.314	42.537		Surcharged
PS27	15 min Winter	8	34.694	0.044	5.481		OK
PS28	15 min Winter	8	34.577	0.077	12.775		OK
D6	30 min Winter	27	35.528	0.022	4.345		OK
PS29	30 min Winter	27	34.685	0.035	4.346		OK
D5	60 min Summer	41	35.391	0.016	2.262		OK
PS30	15 min Winter	8	34.476	0.076	26.754		OK
ACO4	15 min Winter	8	34.942	0.042	8.961		OK
D1	30 min Winter	24	34.940	0.024	3.502		OK
D3	60 min Summer	41	35.170	0.017	2.262		OK
PS15	15 min Winter	11	34.294	0.394	70.779		Surcharged
RWP11	-	0	35.041	0.000	0.000		OK
RE1	15 min Winter	8	34.806	0.106	19.110		OK
ACO3	15 min Winter	8	34.980	0.030	6.836		OK
PS25	15 min Winter	8	34.615	0.065	25.781		OK
D2	30 min Winter	24	34.976	0.026	3.747		OK
D4	30 min Winter	27	35.222	0.026	4.347		OK
S1	15 min Winter	11	34.208	0.458	90.152		Surcharged
PS31	15 min Winter	8	35.415	0.115	19.707		OK
PS32	15 min Winter	8	35.136	0.136	19.549		OK
ACO7	15 min Winter	8	35.600	0.049	10.878		OK
PS33	15 min Winter	8	34.825	0.075	31.946		OK
PS26	15 min Winter	11	34.172	0.172	26.308		OK
AC05	15 min Winter	8	35.913	0.038	8.362		OK
S3	15 min Winter	8	34.981	0.081	29.017		OK
S2	15 min Winter	11	34.175	0.412	43.414		Surcharged
D8	60 min Summer	40	35.760	0.016	1.602		OK
PS38	15 min Winter	8	34.835	0.035	5.681		OK
D7	60 min Summer	43	35.373	0.025	3.804		OK
D9	30 min Winter	26	35.323	0.029	6.686		OK
PS19	15 min Winter	11	34.153	0.553	143.560		Surcharged
D10	30 min Winter	27	35.319	0.022	3.557		OK
ACO9	-	0	34.981	0.000	0.000		OK
S7	30 min Winter	26	33.826	0.326	6.692		Surcharged
D11	60 min Summer	41	34.899	0.018	2.232		OK
PS20	30 min Winter	26	33.825	0.825	97.289		Surcharged
PS21	30 min Winter	27	33.765	1.015	93.785		Surcharged
ACO8	15 min Winter	8	35.097	0.037	5.038		OK
S4	15 min Winter	8	34.461	0.061	12.264		OK
ACO6	15 min Winter	8	35.104	0.027	3.616		OK
S5	15 min Winter	8	34.357	0.107	30.740		OK
RWP15	-	0	34.925	0.000	0.000		OK
RWP14	-	0	34.925	0.000	0.000		OK
S6	15 min Winter	8	34.074	0.074	42.408		OK
ACO2	15 min Winter	8	33.873	0.043	8.725		OK
PS17	30 min Winter	27	33.666	0.266	1.088		Surcharged
PS18	30 min Winter	27	33.666	0.666	1.069		Surcharged
PS22	30 min Winter	27	33.665	1.065	99.659		Surcharged
EXSW 4850	30 min Winter	20	32.271	0.161	99.996		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	8	ACO1	PS13	0.020	0.000	0.000	0.000	OK
1.001	15 min Winter	10	PS13	PS14	0.229	1.362	64.400	0.740	OK
1.002	15 min Winter	11	PS14	PS15	0.300	1.105	61.175	0.656	Surcharged
2.000	15 min Winter	8	PS27	PS28	0.060	0.533	5.419	0.049	OK
2.001	15 min Winter	8	PS28	PS30	0.076	0.886	12.572	0.146	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
3.000	30 min Winter	27	D6	PS29	0.022	2.726	4.346	0.046	OK
3.001	60 min Winter	44	PS29	PS30	0.045	0.735	4.132	0.028	OK
4.000	60 min Summer	41	D5	PS30	0.016	2.228	2.262	0.024	OK
2.002	15 min Winter	9	PS30	PS15	0.188	0.714	26.428	0.145	OK
5.000	15 min Winter	9	ACO4	PS15	0.095	2.051	8.936	0.171	OK
6.000	30 min Winter	24	D1	PS15	0.086	1.872	3.501	0.057	OK
7.000	30 min Winter	26	D3	PS15	0.082	1.989	2.225	0.028	OK
1.003	15 min Winter	9	PS15	S1	0.300	1.478	91.207	1.010	Surcharged
8.000	15 min Summer	0	RWP11	RE1	0.000	0.000	0.000	0.000	OK
8.001	15 min Winter	8	RE1	PS25	0.085	1.371	18.963	0.446	OK
9.000	15 min Winter	8	ACO3	PS25	0.030	2.696	6.818	0.089	OK
8.002	15 min Winter	9	PS25	S1	0.144	2.144	25.640	0.185	OK
10.000	30 min Winter	24	D2	S1	0.088	1.687	3.748	0.067	OK
11.000	30 min Winter	27	D4	S1	0.088	2.078	4.348	0.067	OK
1.004	15 min Winter	9	S1	PS19	0.300	1.627	100.693	0.713	Surcharged
12.000	15 min Winter	8	PS31	PS32	0.126	1.244	19.549	0.945	OK
12.001	15 min Winter	9	PS32	PS33	0.131	1.170	19.106	1.106	OK
13.000	15 min Winter	8	ACO7	PS33	0.049	2.187	10.847	0.228	OK
12.002	15 min Winter	11	PS33	PS26	0.116	1.674	31.811	0.140	OK
12.003	15 min Winter	11	PS26	S2	0.236	1.191	40.177	0.308	OK
14.000	15 min Winter	8	AC05	S3	0.037	2.418	8.339	0.137	OK
14.001	15 min Winter	9	S3	S2	0.190	1.008	28.688	0.164	OK
12.004	15 min Winter	9	S2	PS19	0.300	1.124	59.566	0.541	Surcharged
15.000	60 min Summer	40	D8	PS38	0.016	1.519	1.603	0.025	OK
15.001	15 min Winter	8	PS38	PS19	0.168	0.359	5.557	0.030	OK
16.000	60 min Winter	43	D7	PS19	0.087	1.906	3.647	0.057	OK
17.000	30 min Winter	26	D9	PS19	0.089	2.607	6.688	0.081	OK
1.005	15 min Winter	8	PS19	PS20	0.300	2.374	149.664	1.046	Surcharged
18.000	30 min Winter	27	D10	S7	0.086	2.008	3.558	0.046	OK
19.000	30 min Winter	23	ACO9	S7	0.075	0.000	0.000	0.000	OK
18.001	30 min Winter	23	S7	PS20	0.300	0.716	17.900	0.098	Surcharged
20.000	60 min Summer	41	D11	PS20	0.059	1.807	2.231	0.069	OK
1.006	15 min Winter	8	PS20	PS21	0.300	3.071	164.964	0.881	Surcharged
1.007	15 min Winter	18	PS21	PS22	0.300	1.387	98.051	0.888	Surcharged
21.000	15 min Winter	8	ACO8	S5	0.037	1.483	5.001	0.133	OK
22.000	15 min Winter	8	S4	S5	0.084	0.748	12.185	0.094	OK
23.000	15 min Winter	8	ACO6	S5	0.027	1.680	3.600	0.070	OK
21.001	15 min Winter	8	S5	S6	0.091	1.686	30.400	0.265	OK
24.000	15 min Summer	0	RWP15	S6	0.000	0.000	0.000	0.000	OK
25.000	15 min Summer	0	RWP14	S6	0.000	0.000	0.000	0.000	OK
21.002	15 min Winter	8	S6	PS22	0.187	1.191	42.152	0.137	OK
26.000	30 min Winter	21	ACO2	PS17	0.088	1.521	6.594	0.138	OK
26.001	60 min Summer	43	PS17	PS18	0.150	0.669	5.512	0.207	Surcharged
26.002	15 min Winter	9	PS18	PS22	0.150	0.727	6.659	0.288	Surcharged
1.008	60 min Summer	38	PS22	EXSW 4850	0.161	2.581	99.993	0.578	OK

Permeable Paving Storage

Permeable Paving	Critical Storm	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Flood (m3)	Status
Permeable Paving5	30 min Winter	27	35.659	0.073	4.188		OK
Permeable Paving6	60 min Summer	41	35.502	0.047	2.209		OK
Permeable Paving10	30 min Winter	24	35.009	0.063	3.568		OK
Permeable Paving8	60 min Summer	41	35.280	0.047	2.209		OK
Permeable Paving9	30 min Winter	24	35.096	0.066	3.643		OK
Permeable Paving7	30 min Winter	27	35.348	0.073	4.189		OK
Permeable Paving1	60 min Summer	40	35.861	0.037	1.573		OK
Permeable Paving2	60 min Summer	43	35.495	0.067	2.346		OK
Permeable Paving3	30 min Winter	26	35.471	0.097	6.295		OK
Permeable Paving4	30 min Winter	27	35.491	0.064	3.472		OK
Permeable Paving11	60 min Summer	41	34.958	0.047	2.343		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
ACO1	-	0	35.000	0.000	0.000		OK
PS13	15 min Winter	10	34.816	0.366	66.560		Surcharged
PS14	60 min Winter	48	34.685	0.685	9.078		Surcharged
PS27	15 min Winter	8	34.700	0.050	7.091		OK
PS28	60 min Winter	47	34.688	0.188	2.386		OK
D6	30 min Winter	25	35.532	0.026	6.077		OK
PS29	30 min Winter	26	34.691	0.041	6.064		OK
D5	60 min Summer	40	35.394	0.019	3.038		OK
PS30	60 min Winter	49	34.685	0.285	12.086		OK
ACO4	15 min Winter	8	34.948	0.048	11.594		OK
D1	30 min Winter	25	34.944	0.028	4.800		OK
D3	60 min Summer	40	35.173	0.020	3.038		OK
PS15	60 min Winter	49	34.683	0.783	28.093		Surcharged
RWP11	-	0	35.041	0.000	0.000		OK
RE1	15 min Winter	8	34.822	0.122	24.726		OK
ACO3	15 min Winter	8	34.984	0.034	8.844		OK
PS25	60 min Winter	48	34.671	0.121	3.775		OK
D2	30 min Winter	26	34.979	0.030	4.820		OK
D4	30 min Winter	25	35.226	0.031	6.080		OK
S1	60 min Winter	48	34.670	0.920	38.610		Surcharged
PS31	15 min Winter	9	35.622	0.322	23.958		Surcharged
PS32	15 min Winter	9	35.222	0.222	24.173		Surcharged
ACO7	15 min Winter	8	35.607	0.056	14.076		OK
PS33	15 min Winter	9	34.834	0.084	39.788		OK
PS26	60 min Winter	48	34.660	0.660	6.177		Surcharged
AC05	15 min Winter	8	35.918	0.043	10.818		OK
S3	15 min Winter	8	34.993	0.093	37.547		OK
S2	60 min Winter	48	34.661	0.897	10.418		Surcharged
D8	30 min Summer	23	35.763	0.019	2.150		OK
PS38	15 min Winter	8	34.840	0.040	7.385		OK
D7	60 min Summer	44	35.378	0.029	5.441		OK
D9	30 min Winter	29	35.327	0.033	8.765		OK
PS19	60 min Winter	48	34.660	1.060	64.356		Surcharged
D10	30 min Winter	25	35.323	0.025	4.933		OK
ACO9	-	0	34.981	0.000	0.000		OK
S7	60 min Winter	48	34.543	1.043	7.371		Surcharged
D11	60 min Summer	41	34.901	0.020	2.966		OK
PS20	60 min Winter	49	34.542	1.542	74.500		Surcharged
PS21	60 min Winter	49	34.504	1.754	77.413		Surcharged
ACO8	15 min Winter	8	35.102	0.042	6.520		OK
S4	15 min Winter	8	34.470	0.070	15.868		OK
ACO6	15 min Winter	8	35.108	0.031	4.680		OK
S5	60 min Winter	49	34.434	0.184	3.913		OK
RWP15	-	0	34.925	0.000	0.000		OK
RWP14	-	0	34.925	0.000	0.000		OK
S6	60 min Winter	48	34.435	0.435	5.704		Surcharged
ACO2	60 min Winter	56	34.316	0.486	0.757		Flood Risk
PS17	60 min Winter	56	34.316	0.916	0.540		Flood Risk
PS18	60 min Winter	56	34.316	1.316	0.340		Surcharged
PS22	60 min Winter	49	34.434	1.834	83.157		Surcharged
EXSW 4850	30 min Winter	17	32.271	0.161	99.999		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	10	ACO1	PS13	0.075	0.000	0.000	0.000	OK
1.001	15 min Winter	10	PS13	PS14	0.300	1.406	82.696	0.950	Surcharged
1.002	15 min Winter	8	PS14	PS15	0.300	1.103	66.585	0.714	Surcharged
2.000	60 min Winter	48	PS27	PS28	0.112	0.473	3.627	0.033	OK
2.001	60 min Winter	48	PS28	PS30	0.236	0.739	8.493	0.098	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
3.000	30 min Winter	25	D6	PS29	0.026	3.010	6.076	0.065	OK
3.001	60 min Winter	48	PS29	PS30	0.161	0.698	5.648	0.039	OK
4.000	60 min Winter	49	D5	PS30	0.075	2.355	2.745	0.029	OK
2.002	60 min Winter	49	PS30	PS15	0.292	0.685	22.444	0.123	OK
5.000	15 min Winter	8	ACO4	PS15	0.099	2.017	11.565	0.221	OK
6.000	30 min Winter	25	D1	PS15	0.089	1.207	4.803	0.078	OK
7.000	60 min Summer	40	D3	PS15	0.085	1.588	3.039	0.038	OK
1.003	15 min Winter	8	PS15	S1	0.300	1.462	97.019	1.075	Surcharged
8.000	15 min Summer	0	RWP11	RE1	0.000	0.000	0.000	0.000	OK
8.001	15 min Winter	8	RE1	PS25	0.098	1.476	24.551	0.577	OK
9.000	15 min Winter	8	ACO3	PS25	0.034	2.906	8.824	0.115	OK
8.002	60 min Winter	48	PS25	S1	0.173	1.949	17.171	0.124	OK
10.000	30 min Winter	26	D2	S1	0.090	1.011	4.814	0.086	OK
11.000	30 min Winter	25	D4	S1	0.090	1.514	6.078	0.094	OK
1.004	30 min Summer	15	S1	PS19	0.300	1.625	108.763	0.770	Surcharged
12.000	15 min Winter	9	PS31	PS32	0.150	1.368	24.173	1.168	Surcharged
12.001	15 min Winter	9	PS32	PS33	0.144	1.384	24.100	1.395	OK
13.000	15 min Winter	8	ACO7	PS33	0.056	2.349	14.037	0.295	OK
12.002	15 min Winter	9	PS33	PS26	0.192	1.709	39.828	0.175	OK
12.003	15 min Winter	9	PS26	S2	0.300	1.193	45.854	0.351	Surcharged
14.000	15 min Winter	8	ACO5	S3	0.043	2.603	10.793	0.177	OK
14.001	15 min Winter	8	S3	S2	0.196	1.040	37.167	0.212	OK
12.004	15 min Winter	8	S2	PS19	0.300	1.140	64.493	0.586	Surcharged
15.000	30 min Summer	23	D8	PS38	0.019	1.664	2.148	0.034	OK
15.001	15 min Winter	8	PS38	PS19	0.170	0.399	7.230	0.039	OK
16.000	60 min Summer	44	D7	PS19	0.090	1.826	5.439	0.085	OK
17.000	30 min Winter	29	D9	PS19	0.091	1.911	8.768	0.107	OK
1.005	15 min Winter	10	PS19	PS20	0.300	2.391	155.048	1.084	Surcharged
18.000	30 min Winter	25	D10	S7	0.088	1.582	4.931	0.063	OK
19.000	15 min Summer	12	ACO9	S7	0.075	0.000	0.000	0.000	OK
18.001	15 min Winter	11	S7	PS20	0.300	0.883	29.324	0.161	Surcharged
20.000	60 min Summer	41	D11	PS20	0.060	1.522	2.967	0.091	OK
1.006	15 min Winter	9	PS20	PS21	0.300	3.146	174.727	0.933	Surcharged
1.007	30 min Winter	23	PS21	PS22	0.300	1.525	107.829	0.976	Surcharged
21.000	15 min Winter	8	ACO8	S5	0.042	1.597	6.474	0.172	OK
22.000	60 min Winter	49	S4	S5	0.109	0.663	8.116	0.063	OK
23.000	15 min Winter	8	ACO6	S5	0.030	1.813	4.662	0.091	OK
21.001	60 min Winter	49	S5	S6	0.242	1.503	20.432	0.178	OK
24.000	30 min Winter	25	RWP15	S6	0.050	0.000	0.000	0.000	OK
25.000	30 min Winter	25	RWP14	S6	0.050	0.000	0.000	0.000	OK
21.002	60 min Winter	42	S6	PS22	0.300	1.026	28.379	0.092	Surcharged
26.000	60 min Summer	45	ACO2	PS17	0.150	1.562	7.247	0.152	Surcharged
26.001	15 min Winter	11	PS17	PS18	0.150	0.817	11.184	0.421	Surcharged
26.002	15 min Winter	8	PS18	PS22	0.150	0.639	6.596	0.285	Surcharged
1.008	30 min Winter	17	PS22	EXSW 4850	0.161	2.581	99.999	0.578	OK

Permeable Paving Storage

Permeable Paving	Critical Storm	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Flood (m3)	Status
Permeable Paving5	30 min Winter	25	35.677	0.091	6.320		OK
Permeable Paving6	60 min Summer	40	35.512	0.057	2.958		OK
Permeable Paving10	30 min Winter	25	35.023	0.078	4.562		OK
Permeable Paving8	60 min Summer	40	35.290	0.057	2.958		OK
Permeable Paving9	30 min Winter	26	35.108	0.078	5.208		OK
Permeable Paving7	30 min Winter	25	35.366	0.091	6.322		OK
Permeable Paving1	30 min Summer	23	35.869	0.046	2.237		OK
Permeable Paving2	60 min Summer	44	35.513	0.085	5.952		OK
Permeable Paving3	30 min Winter	29	35.491	0.116	8.225		OK
Permeable Paving4	30 min Winter	25	35.507	0.079	5.182		OK
Permeable Paving11	60 min Summer	41	34.967	0.056	2.862		OK

Return Period Yrs: 100.0

Climate Change %: 0

Manholes

Manhole	Critical Storm	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Flood (m3)	Status
ACO1	-	0	35.000	0.000	0.000		OK
PS13	15 min Winter	8	34.661	0.211	76.249		OK
PS14	15 min Winter	11	34.520	0.520	50.053		Surcharged
PS27	15 min Winter	8	34.698	0.048	6.365		OK
PS28	15 min Winter	8	34.583	0.083	14.838		OK
D6	30 min Winter	26	35.530	0.024	5.368		OK
PS29	30 min Winter	26	34.689	0.039	5.369		OK
D5	60 min Summer	40	35.393	0.018	2.742		OK
PS30	15 min Winter	12	34.493	0.093	16.598		OK
ACO4	15 min Winter	8	34.945	0.045	10.406		OK
D1	30 min Winter	24	34.943	0.027	4.344		OK
D3	60 min Summer	40	35.172	0.019	2.742		OK
PS15	15 min Winter	11	34.497	0.597	76.952		Surcharged
RWP11	-	0	35.041	0.000	0.000		OK
RE1	15 min Winter	8	34.815	0.115	22.193		OK
ACO3	15 min Winter	8	34.983	0.033	7.938		OK
PS25	15 min Winter	8	34.620	0.070	29.947		OK
D2	30 min Winter	25	34.978	0.029	4.541		OK
D4	30 min Winter	26	35.224	0.029	5.371		OK
S1	30 min Winter	22	34.416	0.666	75.827		Surcharged
PS31	15 min Winter	9	35.507	0.207	21.503		Surcharged
PS32	15 min Winter	9	35.184	0.184	21.736		Surcharged
ACO7	15 min Winter	8	35.604	0.053	12.633		OK
PS33	15 min Winter	9	34.830	0.080	35.779		OK
PS26	30 min Winter	22	34.386	0.386	15.989		Surcharged
AC05	15 min Winter	8	35.915	0.040	9.710		OK
S3	15 min Winter	8	34.988	0.088	33.697		OK
S2	30 min Winter	22	34.384	0.620	27.766		Surcharged
D8	30 min Summer	24	35.762	0.018	1.921		OK
PS38	15 min Winter	8	34.838	0.038	6.614		OK
D7	60 min Summer	44	35.376	0.028	4.852		OK
D9	30 min Winter	27	35.326	0.032	8.125		OK
PS19	30 min Winter	22	34.375	0.775	119.995		Surcharged
D10	60 min Summer	41	35.322	0.024	4.382		OK
ACO9	-	0	34.981	0.000	0.000		OK
S7	30 min Winter	27	34.169	0.669	7.650		Surcharged
D11	60 min Summer	41	34.900	0.019	2.688		OK
PS20	30 min Winter	27	34.166	1.166	86.217		Surcharged
PS21	30 min Winter	27	34.115	1.365	89.781		Surcharged
ACO8	15 min Winter	8	35.100	0.040	5.851		OK
S4	15 min Winter	8	34.466	0.066	14.242		OK
ACO6	15 min Winter	8	35.107	0.029	4.200		OK
S5	15 min Winter	8	34.366	0.116	35.706		OK
RWP15	-	0	34.925	0.000	0.000		OK
RWP14	-	0	34.925	0.000	0.000		OK
S6	15 min Winter	8	34.080	0.080	49.267		OK
ACO2	60 min Winter	47	33.961	0.131	1.246		OK
PS17	60 min Winter	47	33.961	0.561	2.225		Surcharged
PS18	60 min Winter	47	33.952	0.952	0.570		Surcharged
PS22	30 min Winter	27	34.022	1.422	96.443		Surcharged
EXSW 4850	120 min Summer	69	32.271	0.161	99.992		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	8	ACO1	PS13	0.031	0.000	0.000	0.000	OK
1.001	15 min Winter	9	PS13	PS14	0.253	1.385	75.023	0.862	OK
1.002	15 min Winter	9	PS14	PS15	0.300	1.106	60.402	0.648	Surcharged
2.000	15 min Winter	8	PS27	PS28	0.065	0.556	6.295	0.056	OK
2.001	15 min Winter	8	PS28	PS30	0.082	0.925	14.612	0.169	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
3.000	30 min Winter	26	D6	PS29	0.024	2.902	5.369	0.057	OK
3.001	15 min Winter	18	PS29	PS30	0.059	0.873	4.471	0.031	OK
4.000	60 min Summer	40	D5	PS30	0.018	2.363	2.742	0.029	OK
2.002	15 min Winter	12	PS30	PS15	0.197	0.733	30.754	0.168	OK
5.000	15 min Winter	8	ACO4	PS15	0.098	1.968	10.378	0.198	OK
6.000	30 min Winter	24	D1	PS15	0.088	1.587	4.346	0.071	OK
7.000	60 min Summer	40	D3	PS15	0.084	1.858	2.742	0.034	OK
1.003	15 min Winter	8	PS15	S1	0.300	1.485	89.810	0.995	Surcharged
8.000	15 min Summer	0	RWP11	RE1	0.000	0.000	0.000	0.000	OK
8.001	15 min Winter	8	RE1	PS25	0.092	1.431	22.028	0.518	OK
9.000	15 min Winter	8	ACO3	PS25	0.032	2.815	7.919	0.103	OK
8.002	15 min Winter	8	PS25	S1	0.148	2.073	29.791	0.215	OK
10.000	30 min Winter	25	D2	S1	0.089	1.302	4.544	0.081	OK
11.000	30 min Winter	26	D4	S1	0.090	1.779	5.371	0.083	OK
1.004	15 min Winter	8	S1	PS19	0.300	1.629	106.763	0.756	Surcharged
12.000	15 min Winter	9	PS31	PS32	0.150	1.252	21.736	1.050	Surcharged
12.001	15 min Winter	9	PS32	PS33	0.141	1.256	21.697	1.256	OK
13.000	15 min Winter	8	ACO7	PS33	0.053	2.281	12.597	0.265	OK
12.002	15 min Winter	10	PS33	PS26	0.188	1.723	35.819	0.158	OK
12.003	30 min Winter	19	PS26	S2	0.300	1.191	37.269	0.286	Surcharged
14.000	15 min Winter	8	ACO5	S3	0.040	2.523	9.686	0.159	OK
14.001	15 min Winter	8	S3	S2	0.194	1.036	33.341	0.190	OK
12.004	15 min Winter	8	S2	PS19	0.300	1.119	64.453	0.586	Surcharged
15.000	30 min Summer	24	D8	PS38	0.018	1.611	1.921	0.030	OK
15.001	15 min Winter	8	PS38	PS19	0.169	0.381	6.475	0.035	OK
16.000	60 min Summer	44	D7	PS19	0.089	1.905	4.854	0.075	OK
17.000	30 min Winter	27	D9	PS19	0.091	2.174	8.123	0.099	OK
1.005	15 min Winter	8	PS19	PS20	0.300	2.374	153.666	1.074	Surcharged
18.000	60 min Summer	41	D10	S7	0.087	1.902	4.383	0.056	OK
19.000	15 min Winter	13	ACO9	S7	0.075	0.000	0.000	0.000	OK
18.001	30 min Summer	20	S7	PS20	0.300	0.793	23.368	0.128	Surcharged
20.000	60 min Summer	41	D11	PS20	0.060	1.554	2.688	0.083	OK
1.006	15 min Winter	8	PS20	PS21	0.300	3.118	173.974	0.929	Surcharged
1.007	15 min Winter	19	PS21	PS22	0.300	1.390	98.286	0.890	Surcharged
21.000	15 min Winter	8	ACO8	S5	0.040	1.548	5.810	0.155	OK
22.000	15 min Winter	8	S4	S5	0.091	0.781	14.155	0.109	OK
23.000	15 min Winter	8	ACO6	S5	0.029	1.756	4.183	0.081	OK
21.001	15 min Winter	8	S5	S6	0.098	1.761	35.323	0.308	OK
24.000	15 min Summer	0	RWP15	S6	0.000	0.000	0.000	0.000	OK
25.000	15 min Summer	0	RWP14	S6	0.000	0.000	0.000	0.000	OK
21.002	15 min Winter	8	S6	PS22	0.190	1.209	48.985	0.159	OK
26.000	60 min Winter	47	ACO2	PS17	0.140	1.426	5.264	0.110	OK
26.001	15 min Winter	12	PS17	PS18	0.150	0.816	10.034	0.377	Surcharged
26.002	15 min Winter	9	PS18	PS22	0.150	0.607	5.972	0.258	Surcharged
1.008	120 min Summer	69	PS22	EXSW 4850	0.161	2.581	99.992	0.578	OK

Permeable Paving Storage

Permeable Paving	Critical Storm	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Flood (m3)	Status
Permeable Paving5	30 min Winter	26	35.670	0.084	5.232		OK
Permeable Paving6	60 min Summer	40	35.509	0.054	2.751		OK
Permeable Paving10	30 min Winter	24	35.018	0.073	4.199		OK
Permeable Paving8	60 min Summer	40	35.286	0.054	2.751		OK
Permeable Paving9	30 min Winter	25	35.105	0.075	4.250		OK
Permeable Paving7	30 min Winter	26	35.359	0.084	5.234		OK
Permeable Paving1	30 min Summer	24	35.866	0.042	1.879		OK
Permeable Paving2	60 min Summer	44	35.507	0.078	4.433		OK
Permeable Paving3	30 min Winter	27	35.485	0.110	8.339		OK
Permeable Paving4	60 min Summer	41	35.501	0.073	4.249		OK
Permeable Paving11	60 min Summer	41	34.964	0.053	2.673		OK

Return Period Yrs: 100.0

Climate Change %: 40

Manholes

Manhole	Critical Storm	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Flood (m3)	Status
ACO1	60 min Winter	49	35.335	0.335	0.000		Surcharged
PS13	60 min Winter	49	35.335	0.885	11.026		Surcharged
PS14	60 min Winter	49	35.329	1.329	11.187		Flood Risk
PS27	60 min Winter	49	35.330	0.680	0.918		Surcharged
PS28	60 min Winter	49	35.330	0.830	2.027		Surcharged
D6	30 min Winter	27	35.536	0.030	8.109		OK
PS29	60 min Winter	49	35.330	0.680	6.066		Surcharged
D5	30 min Summer	23	35.396	0.021	4.107		OK
PS30	60 min Winter	49	35.330	0.930	13.677		Surcharged
ACO4	60 min Winter	49	35.328	0.428	1.501		Flood Risk
D1	60 min Winter	49	35.329	0.413	2.143		Flood Risk
D3	60 min Winter	49	35.328	0.175	1.387		Surcharged
PS15	60 min Winter	49	35.327	1.427	29.826		Surcharged
RWP11	60 min Winter	49	35.313	0.271	0.000		Surcharged
RE1	60 min Winter	49	35.313	0.613	3.223		Flood Risk
ACO3	60 min Winter	49	35.312	0.362	1.145		Flood Risk
PS25	60 min Winter	49	35.312	0.762	4.398		Surcharged
D2	60 min Winter	49	35.314	0.364	2.549		Flood Risk
D4	60 min Winter	48	35.318	0.123	5.780		OK
S1	60 min Winter	49	35.311	1.561	42.627		Surcharged
PS31	15 min Winter	9	35.940	0.640	30.104		Surcharged
PS32	15 min Winter	9	35.324	0.324	29.992		Surcharged
ACO7	15 min Winter	8	35.615	0.063	17.686		OK
PS33	60 min Winter	47	35.301	0.551	6.539		Surcharged
PS26	60 min Winter	48	35.301	1.301	7.654		Surcharged
AC05	15 min Winter	8	35.923	0.048	13.594		OK
S3	60 min Winter	48	35.302	0.402	5.301		Surcharged
S2	60 min Winter	48	35.301	1.537	13.294		Surcharged
D8	30 min Summer	22	35.766	0.022	2.892		OK
PS38	60 min Winter	47	35.299	0.499	3.151		Surcharged
D7	60 min Summer	44	35.382	0.034	7.251		OK
D9	60 min Winter	48	35.347	0.052	9.935		OK
PS19	60 min Winter	48	35.298	1.698	75.664		Surcharged
D10	30 min Winter	25	35.327	0.030	6.731		OK
ACO9	60 min Winter	46	35.143	0.162	0.000		Surcharged
S7	60 min Winter	46	35.143	1.643	10.675		Surcharged
D11	60 min Winter	52	35.129	0.248	0.528		Surcharged
PS20	60 min Winter	46	35.142	2.142	86.016		Surcharged
PS21	60 min Winter	45	35.097	2.347	84.467		Surcharged
ACO8	15 min Winter	8	35.107	0.047	8.192		OK
S4	60 min Winter	44	35.024	0.624	3.475		Surcharged
ACO6	15 min Winter	8	35.112	0.034	5.880		OK
S5	60 min Winter	46	35.017	0.767	9.759		Surcharged
RWP15	60 min Winter	46	35.015	0.090	0.000		OK
RWP14	60 min Winter	45	35.016	0.091	0.090		OK
S6	60 min Winter	45	35.016	1.016	10.178		Surcharged
ACO2	60 min Winter	41	34.480	0.650	5.692	1.956	Flood
PS17	60 min Winter	41	34.483	1.083	1.406		Flood Risk
PS18	60 min Winter	44	34.489	1.489	0.000		Surcharged
PS22	60 min Winter	45	35.014	2.414	95.437		Surcharged
EXSW 4850	120 min Summer	61	32.271	0.161	99.994		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	30 min Winter	40	ACO1	PS13	0.150	0.062	0.672	0.010	Surcharged
1.001	15 min Winter	8	PS13	PS14	0.300	1.417	91.151	1.048	Surcharged
1.002	15 min Winter	9	PS14	PS15	0.300	1.104	69.233	0.743	Surcharged
2.000	30 min Summer	23	PS27	PS28	0.300	0.584	7.630	0.068	Surcharged
2.001	15 min Winter	10	PS28	PS30	0.300	1.004	20.483	0.237	Surcharged

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
3.000	30 min Winter	27	D6	PS29	0.090	2.562	8.111	0.086	OK
3.001	30 min Summer	24	PS29	PS30	0.300	0.602	9.931	0.068	Surcharged
4.000	30 min Summer	23	D5	PS30	0.086	1.719	4.106	0.044	OK
2.002	15 min Winter	10	PS30	PS15	0.300	0.796	39.375	0.216	Surcharged
5.000	60 min Summer	40	ACO4	PS15	0.150	1.958	9.499	0.182	Surcharged
6.000	60 min Winter	67	D1	PS15	0.150	1.294	11.213	0.183	Surcharged
7.000	60 min Winter	58	D3	PS15	0.150	1.320	3.594	0.045	Surcharged
1.003	15 min Winter	7	PS15	S1	0.300	1.475	93.512	1.036	Surcharged
8.000	60 min Winter	65	RWP11	RE1	0.100	0.143	0.653	0.037	Surcharged
8.001	30 min Winter	20	RE1	PS25	0.225	1.460	23.957	0.563	OK
9.000	60 min Summer	41	ACO3	PS25	0.150	2.745	7.246	0.094	Surcharged
8.002	30 min Summer	19	PS25	S1	0.225	2.037	35.532	0.256	OK
10.000	60 min Winter	63	D2	S1	0.150	1.282	9.131	0.164	Surcharged
11.000	60 min Winter	48	D4	S1	0.136	1.431	7.474	0.115	OK
1.004	15 min Winter	8	S1	PS19	0.300	1.626	114.465	0.810	Surcharged
12.000	15 min Winter	9	PS31	PS32	0.150	1.697	29.992	1.449	Surcharged
12.001	60 min Winter	40	PS32	PS33	0.150	1.127	16.643	0.963	Surcharged
13.000	60 min Winter	39	ACO7	PS33	0.092	2.089	9.189	0.193	OK
12.002	60 min Summer	41	PS33	PS26	0.300	1.675	34.394	0.151	Surcharged
12.003	15 min Winter	9	PS26	S2	0.300	1.219	50.353	0.386	Surcharged
14.000	60 min Winter	41	ACO5	S3	0.087	2.306	7.062	0.116	OK
14.001	60 min Winter	41	S3	S2	0.300	0.939	24.527	0.140	Surcharged
12.004	15 min Winter	10	S2	PS19	0.300	1.121	74.288	0.675	Surcharged
15.000	30 min Winter	24	D8	PS38	0.086	1.688	2.779	0.044	OK
15.001	60 min Summer	43	PS38	PS19	0.300	0.329	7.369	0.039	Surcharged
16.000	60 min Summer	44	D7	PS19	0.092	1.485	7.252	0.113	OK
17.000	60 min Winter	48	D9	PS19	0.101	1.650	9.945	0.121	OK
1.005	15 min Winter	10	PS19	PS20	0.300	2.353	163.229	1.141	Surcharged
18.000	30 min Winter	25	D10	S7	0.090	1.422	6.731	0.086	OK
19.000	60 min Winter	61	ACO9	S7	0.150	0.046	0.509	0.006	Surcharged
18.001	15 min Winter	10	S7	PS20	0.300	0.943	35.714	0.196	Surcharged
20.000	60 min Winter	66	D11	PS20	0.100	1.334	8.444	0.260	Surcharged
1.006	15 min Winter	8	PS20	PS21	0.300	3.229	186.300	0.995	Surcharged
1.007	60 min Summer	35	PS21	PS22	0.300	1.710	120.870	1.095	Surcharged
21.000	60 min Winter	36	ACO8	S5	0.090	1.416	4.256	0.113	OK
22.000	30 min Winter	23	S4	S5	0.300	0.799	15.848	0.122	Surcharged
23.000	60 min Winter	36	ACO6	S5	0.086	1.602	3.055	0.059	OK
21.001	30 min Summer	23	S5	S6	0.300	1.869	42.973	0.374	Surcharged
24.000	60 min Winter	58	RWP15	S6	0.095	0.059	0.278	0.019	OK
25.000	60 min Winter	58	RWP14	S6	0.095	0.065	0.301	0.014	OK
21.002	15 min Winter	14	S6	PS22	0.300	1.391	68.682	0.223	Surcharged
26.000	30 min Summer	21	ACO2	PS17	0.150	1.760	12.146	0.255	Surcharged
26.001	15 min Winter	9	PS17	PS18	0.150	0.919	12.980	0.488	Surcharged
26.002	15 min Winter	8	PS18	PS22	0.150	0.709	7.675	0.332	Surcharged
1.008	15 min Winter	43	PS22	EXSW 4850	0.161	2.581	99.987	0.578	OK

Permeable Paving Storage

Permeable Paving	Critical Storm	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Flood (m3)	Status
Permeable Paving5	30 min Winter	27	35.696	0.110	7.583		OK
Permeable Paving6	30 min Summer	23	35.525	0.070	4.115		OK
Permeable Paving10	60 min Winter	49	35.331	0.385	2.453		OK
Permeable Paving8	60 min Winter	50	35.330	0.097	1.900		OK
Permeable Paving9	60 min Winter	49	35.316	0.287	2.606		OK
Permeable Paving7	30 min Winter	27	35.386	0.110	7.592		OK
Permeable Paving1	30 min Summer	22	35.879	0.055	3.055		OK
Permeable Paving2	60 min Summer	43	35.531	0.102	7.521		OK
Permeable Paving3	60 min Winter	47	35.501	0.126	10.347		OK
Permeable Paving4	30 min Winter	25	35.525	0.097	6.697		OK
Permeable Paving11	60 min Winter	52	35.129	0.218	0.861		OK