

Network Details

Manhole Schedule

Manhole	Catchment Area (ha)	Size (mm)	Type	CL (m)	IL (m)	Depth To Soffit (m)	Easting (m)	Northing (m)
PS50-ACO	0.002	180	Type E	16.921	16.771	0.050	494836.990	106270.503
PS51-ACO	0.000	180	Type E	16.759	16.609	0.050	494831.948	106267.976
PS52	0.000	450	Type E	17.000	16.498	0.402	494830.803	106265.461
PS1-DIF	0.016	300x300	Type E	17.000	16.280	0.719	494834.323	106264.062
PP1-Dummy Outfall	0.000	150	Unknown	17.125	16.255	0.870	494830.972	106262.242

Pipe Schedule

Pipe Number	US Manhole	US IL (m)	DS Manhole	DS IL (m)	Shape	Dimension (mm)	Length (m)	Gradient (1:x)	Roughness (mm)	US Depth To Soffit (m)	DS Depth To Soffit (m)
1.000	PS50-ACO	16.771	PS51-ACO	16.609	Circ	100	5.639	35	0.600	0.050	0.050
1.001	PS51-ACO	16.609	PS52	16.498	Circ	100	2.764	25	0.600	0.050	0.402
1.002	PS52	16.498	PS1-DIF	16.280	Circ	100	3.788	17	0.600	0.402	0.620
1.003	PS1-DIF	16.280	PP1-Dummy Outfall	16.255	Circ	1	3.813	150	0.600	0.719	0.870

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 Paving 1	PS1-DIF	13.487	17.000	16.280	0.07812000	2.00	494836.627	106256.494

Outfall Details

Outfall Manhole PP1-Dummy Outfall : Free Discharge

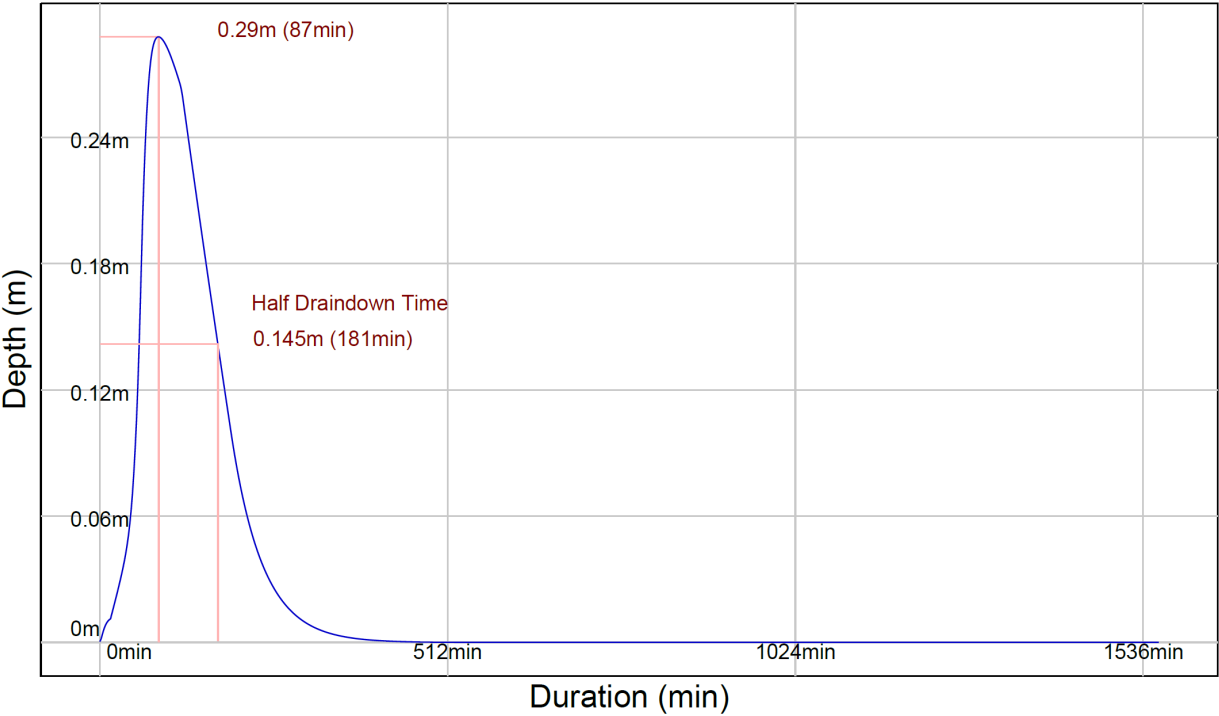
Flow Control Details

Controls within Manhole PP1-Dummy Outfall

Orifice Control

Invert Offset (m)	Orifice Diameter (m)	Discharge Coeff
0.000	0.001	0.600

Permeable Paving 1 at PS1-DIF (100Yr+45% 120Min Summer)



Simulation Settings

FEH2022 (point): Filename=FEH_Point_Descriptors_494812_106233_v5_1_0.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: (1, +0%), (30, +40%), (100, +45%)

Manhole Flood Risk Freeboard: 0.300m

Simulated Rainfall Events

Storm	Average Intensity (mm/hr)	Runoff Continuity %	Flow Continuity %	Storm	Average Intensity (mm/hr)	Runoff Continuity %	Flow Continuity %
1Yr 15Min Winter	15.628	0.00	0.00	30Yr+40% 360Min Summer	12.891	0.00	0.00
1Yr 15Min Summer	15.628	0.00	0.00	30Yr+40% 360Min Winter	12.891	0.00	0.00
1Yr 30Min Winter	10.316	0.00	0.00	30Yr+40% 480Min Summer	10.228	0.00	0.00
1Yr 30Min Summer	10.316	0.00	0.00	30Yr+40% 480Min Winter	10.228	0.00	0.00
1Yr 60Min Winter	6.595	0.00	0.00	30Yr+40% 600Min Summer	8.522	0.00	0.00
1Yr 60Min Summer	6.595	0.00	0.00	30Yr+40% 600Min Winter	8.522	0.00	0.00
1Yr 120Min Summer	5.323	0.00	0.00	30Yr+40% 720Min Summer	7.326	0.00	0.00
1Yr 120Min Winter	5.323	0.00	0.00	30Yr+40% 720Min Winter	7.326	0.00	0.00
1Yr 180Min Winter	4.511	0.00	0.00	30Yr+40% 960Min Summer	5.766	0.00	0.00
1Yr 180Min Summer	4.511	0.00	0.00	30Yr+40% 960Min Winter	5.766	0.00	0.00
1Yr 240Min Winter	3.753	0.00	0.00	30Yr+40% 1440Min Summer	4.126	0.00	0.00
1Yr 240Min Summer	3.753	0.00	0.00	30Yr+40% 1440Min Winter	4.126	0.00	0.00
1Yr 360Min Winter	2.919	0.00	0.00	100Yr+45% 15Min Summer	149.272	0.00	0.00
1Yr 360Min Summer	2.919	0.00	0.00	100Yr+45% 15Min Winter	149.272	0.00	0.00
1Yr 480Min Summer	2.427	0.00	0.00	100Yr+45% 30Min Summer	100.198	0.00	0.00
1Yr 480Min Winter	2.427	0.00	0.00	100Yr+45% 30Min Winter	100.198	0.00	0.00
1Yr 600Min Winter	2.074	0.00	0.00	100Yr+45% 60Min Summer	64.450	0.00	0.00
1Yr 600Min Summer	2.074	0.00	0.00	100Yr+45% 60Min Winter	64.450	0.00	0.00
1Yr 720Min Summer	1.811	0.00	0.00	100Yr+45% 120Min Summer	38.652	0.00	0.00
1Yr 720Min Winter	1.811	0.00	0.00	100Yr+45% 120Min Winter	38.652	0.00	0.00
1Yr 960Min Summer	1.465	0.00	0.00	100Yr+45% 180Min Summer	28.339	0.00	0.00
1Yr 960Min Winter	1.465	0.00	0.00	100Yr+45% 180Min Winter	28.339	0.00	0.00
1Yr 1440Min Winter	1.102	0.00	0.00	100Yr+45% 240Min Summer	22.782	0.00	0.00
1Yr 1440Min Summer	1.102	0.00	0.00	100Yr+45% 240Min Winter	22.782	0.00	0.00
30Yr+40% 15Min Winter	115.253	0.00	0.00	100Yr+45% 360Min Summer	16.530	0.00	0.00
30Yr+40% 15Min Summer	115.253	0.00	0.00	100Yr+45% 360Min Winter	16.530	0.00	0.00
30Yr+40% 30Min Summer	76.731	0.00	0.00	100Yr+45% 480Min Summer	13.117	0.00	0.00
30Yr+40% 30Min Winter	76.731	0.00	0.00	100Yr+45% 480Min Winter	13.117	0.00	0.00
30Yr+40% 60Min Summer	48.847	0.00	0.00	100Yr+45% 600Min Summer	10.952	0.00	0.00
30Yr+40% 60Min Winter	48.847	0.00	0.00	100Yr+45% 600Min Winter	10.952	0.00	0.00
30Yr+40% 120Min Summer	29.859	0.00	0.00	100Yr+45% 720Min Summer	9.434	0.00	0.00
30Yr+40% 120Min Winter	29.859	0.00	0.00	100Yr+45% 720Min Winter	9.434	0.00	0.00
30Yr+40% 180Min Winter	22.126	0.00	0.00	100Yr+45% 960Min Summer	7.431	0.00	0.00
30Yr+40% 180Min Summer	22.126	0.00	0.00	100Yr+45% 960Min Winter	7.431	0.00	0.00
30Yr+40% 240Min Summer	17.757	0.00	0.00	100Yr+45% 1440Min Winter	5.311	0.00	0.00
30Yr+40% 240Min Winter	17.757	0.00	0.00	100Yr+45% 1440Min Summer	5.311	0.00	0.00

Simulation Results

Return Period (yrs) + Climate Change (%):

1yr+0%

Manholes

Manhole	Critical Storm	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Flood (m3)	Status
PS50-ACO	15 min Summer	8	16.781	0.010	0.218		OK
PS51-ACO	15 min Summer	9	16.619	0.009	0.212		OK
PS52	15 min Summer	9	16.506	0.008	0.214		OK
PS1-DIF	180 min Summer	110	16.316	0.036	0.187		Surcharged
PP1-Dummy Outfall	15 min Winter	0	16.255	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
1.000	15 min Summer	9	PS50-ACO	PS51-ACO	0.010	0.552	0.212	0.021	OK
1.001	15 min Summer	9	PS51-ACO	PS52	0.009	0.646	0.214	0.018	OK
1.002	15 min Summer	9	PS52	PS1-DIF	0.021	0.194	0.212	0.015	OK
1.003	15 min Winter	1	PS1-DIF	PP1-Dummy Outfall	0.001	0.000	0.000	0.000	OK

Permeable Paving Storage

Permeable Paving	Critical Storm	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Flood (m3)	Surface Runoff (m3)	Status
Permeable Paving 1	180 min Summer	111	16.316	0.036	0.336			OK

Return Period (yrs) + Climate Change (%):

30yr+40%

Manholes

Manhole	Critical Storm	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Flood (m3)	Status
PS50-ACO	15 min Summer	8	16.798	0.027	1.605		OK
PS51-ACO	15 min Summer	8	16.634	0.025	1.593		OK
PS52	120 min Summer	84	16.527	0.029	0.141		OK
PS1-DIF	120 min Summer	84	16.527	0.247	0.556		Surcharged
PP1-Dummy Outfall	15 min Winter	0	16.255	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
1.000	15 min Summer	8	PS50-ACO	PS51-ACO	0.026	0.976	1.593	0.155	OK
1.001	15 min Summer	8	PS51-ACO	PS52	0.023	1.143	1.582	0.130	OK
1.002	120 min Summer	84	PS52	PS1-DIF	0.065	0.163	0.724	0.050	OK
1.003	15 min Winter	0	PS1-DIF	PP1-Dummy Outfall	0.001	0.000	0.000	0.000	OK

Permeable Paving Storage

Permeable Paving	Critical Storm	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Flood (m3)	Surface Runoff (m3)	Status
Permeable Paving 1	120 min Summer	85	16.527	0.247	1.002			OK

Return Period (yrs) + Climate Change (%):

100yr+45%

Manholes

Manhole	Critical Storm	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Flood (m3)	Status
PS50-ACO	15 min Summer	8	16.802	0.031	2.078		OK
PS51-ACO	15 min Summer	8	16.638	0.029	2.064		OK
PS52	120 min Summer	90	16.618	0.120	0.138		Surcharged
PS1-DIF	120 min Summer	90	16.618	0.338	0.565		Surcharged
PP1-Dummy Outfall	15 min Summer	0	16.255	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
1.000	15 min Summer	8	PS50-ACO	PS51-ACO	0.030	1.046	2.064	0.201	OK
1.001	120 min Winter	80	PS51-ACO	PS52	0.056	0.878	0.626	0.051	OK
1.002	60 min Winter	47	PS52	PS1-DIF	0.100	0.213	1.019	0.070	Surcharged
1.003	15 min Summer	0	PS1-DIF	PP1-Dummy Outfall	0.001	0.000	0.000	0.000	OK

Permeable Paving Storage

Permeable Paving	Critical Storm	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Flood (m3)	Surface Runoff (m3)	Status
Permeable Paving 1	120 min Summer	90	16.618	0.338	1.060			OK