

Network Details

Manhole Schedule

Manhole	Catchment Area (ha)	Size (mm)	Type	CL (m)	IL (m)	Depth To Soffit (m)	Easting (m)	Northing (m)
DIF1	0.017	1000x500	Unknown	13.491	12.531	0.810	497661.337	105575.893
DIF1 WEIR (Dummy Node)	0.000	1350	Type C	13.531	12.000	1.381	497662.371	105570.417

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	DIF1	12.531	DIF1 WEIR (Dummy)	12.000	Circ	150	5.573	10	0.600	0.810	1.381

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 4	DIF1	28.840	13.491	12.561	0.07200000	3.00	497655.420	105578.815

Outfall Details

Outfall Manhole DIF1 WEIR (Dummy Node) : Free Discharge

Flow Control Details

Controls within Manhole DIF1 WEIR (Dummy Node)

Weir Control

Invert Offset (m)	Weir Width (m)	Discharge Coeff
10.000	2.000	0.620

Simulation Settings

FEH2022 (point): Filename=FEH_Point_Descriptors_496433_104778_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, +10%), (10, +10%), (30, +10%), (100, +0%), (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 %
2Yr+10% 15Min Winter	35.918	0.00	1.94	30Yr+10% 360Min Summer	10.048	0.00	0.56
2Yr+10% 15Min Summer	35.918	0.00	1.99	30Yr+10% 360Min Winter	10.048	0.00	0.56
2Yr+10% 30Min Winter	23.540	0.00	3.02	30Yr+10% 480Min Summer	7.971	0.00	0.53
2Yr+10% 30Min Summer	23.540	0.00	3.00	30Yr+10% 480Min Winter	7.971	0.00	0.53
2Yr+10% 60Min Summer	14.850	0.00	2.48	30Yr+10% 600Min Summer	6.638	0.00	0.50
2Yr+10% 60Min Winter	14.850	0.00	2.49	30Yr+10% 600Min Winter	6.638	0.00	0.51
2Yr+10% 120Min Winter	10.300	0.00	1.73	30Yr+10% 720Min Summer	5.703	0.00	0.49
2Yr+10% 120Min Summer	10.300	0.00	1.72	30Yr+10% 720Min Winter	5.703	0.00	0.49
2Yr+10% 180Min Summer	8.145	0.00	1.43	30Yr+10% 960Min Summer	4.487	0.00	0.46
2Yr+10% 180Min Winter	8.145	0.00	1.44	30Yr+10% 960Min Winter	4.487	0.00	0.47
2Yr+10% 240Min Winter	6.640	0.00	1.31	30Yr+10% 1440Min Summer	3.210	0.00	0.43
2Yr+10% 240Min Summer	6.640	0.00	1.31	30Yr+10% 1440Min Winter	3.210	0.00	0.43
2Yr+10% 360Min Summer	4.982	0.00	1.15	100Yr 15Min Summer	102.583	0.00	1.36
2Yr+10% 360Min Winter	4.982	0.00	1.16	100Yr 15Min Winter	102.583	0.00	1.38
2Yr+10% 480Min Summer	4.040	0.00	1.06	100Yr 30Min Summer	68.853	0.00	1.01
2Yr+10% 480Min Winter	4.040	0.00	1.07	100Yr 30Min Winter	68.853	0.00	1.00
2Yr+10% 600Min Summer	3.401	0.00	1.00	100Yr 60Min Summer	44.290	0.00	0.77
2Yr+10% 600Min Winter	3.401	0.00	1.01	100Yr 60Min Winter	44.290	0.00	0.77
2Yr+10% 720Min Winter	2.942	0.00	0.97	100Yr 120Min Summer	26.526	0.00	0.64
2Yr+10% 720Min Summer	2.942	0.00	0.97	100Yr 120Min Winter	26.526	0.00	0.64
2Yr+10% 960Min Summer	2.351	0.00	0.91	100Yr 180Min Summer	19.432	0.00	0.58
2Yr+10% 960Min Winter	2.351	0.00	0.91	100Yr 180Min Winter	19.432	0.00	0.58
2Yr+10% 1440Min Summer	1.725	0.00	0.82	100Yr 240Min Summer	15.604	0.00	0.54
2Yr+10% 1440Min Winter	1.725	0.00	0.82	100Yr 240Min Winter	15.604	0.00	0.54
10Yr+10% 15Min Summer	69.643	0.00	2.08	100Yr 360Min Summer	11.333	0.00	0.49
10Yr+10% 15Min Winter	69.643	0.00	2.10	100Yr 360Min Winter	11.333	0.00	0.49
10Yr+10% 30Min Summer	45.861	0.00	1.55	100Yr 480Min Summer	8.998	0.00	0.46
10Yr+10% 30Min Winter	45.861	0.00	1.54	100Yr 480Min Winter	8.998	0.00	0.47
10Yr+10% 60Min Summer	29.050	0.00	1.19	100Yr 600Min Summer	7.509	0.00	0.44
10Yr+10% 60Min Winter	29.050	0.00	1.20	100Yr 600Min Winter	7.509	0.00	0.45
10Yr+10% 120Min Summer	18.245	0.00	0.94	100Yr 720Min Summer	6.464	0.00	0.43
10Yr+10% 120Min Winter	18.245	0.00	0.94	100Yr 720Min Winter	6.464	0.00	0.43
10Yr+10% 180Min Summer	13.715	0.00	0.83	100Yr 960Min Summer	5.091	0.00	0.41
10Yr+10% 180Min Winter	13.715	0.00	0.83	100Yr 960Min Winter	5.091	0.00	0.41
10Yr+10% 240Min Summer	11.037	0.00	0.77	100Yr 1440Min Summer	3.638	0.00	0.38
10Yr+10% 240Min Winter	11.037	0.00	0.77	100Yr 1440Min Winter	3.638	0.00	0.38
10Yr+10% 360Min Summer	8.063	0.00	0.70	100Yr+45% 15Min Summer	148.745	0.00	0.92
10Yr+10% 360Min Winter	8.063	0.00	0.70	100Yr+45% 15Min Winter	148.745	0.00	0.93
10Yr+10% 480Min Winter	6.423	0.00	0.66	100Yr+45% 30Min Summer	99.837	0.00	0.68
10Yr+10% 480Min Summer	6.423	0.00	0.65	100Yr+45% 30Min Winter	99.837	0.00	0.68
10Yr+10% 600Min Summer	5.358	0.00	0.63	100Yr+45% 60Min Summer	64.220	0.00	0.52
10Yr+10% 600Min Winter	5.358	0.00	0.63	100Yr+45% 60Min Winter	64.220	0.00	0.52
10Yr+10% 720Min Summer	4.607	0.00	0.61	100Yr+45% 120Min Summer	38.463	0.00	0.43
10Yr+10% 720Min Winter	4.607	0.00	0.61	100Yr+45% 120Min Winter	38.463	0.00	0.44
10Yr+10% 960Min Summer	3.634	0.00	0.58	100Yr+45% 180Min Summer	28.177	0.00	0.39
10Yr+10% 960Min Winter	3.634	0.00	0.58	100Yr+45% 180Min Winter	28.177	0.00	0.40
10Yr+10% 1440Min Summer	2.614	0.00	0.53	100Yr+45% 240Min Summer	22.626	0.00	0.37
10Yr+10% 1440Min Winter	2.614	0.00	0.53	100Yr+45% 240Min Winter	22.626	0.00	0.37
30Yr+10% 15Min Summer	90.034	0.00	1.57	100Yr+45% 360Min Summer	16.433	0.00	0.34
30Yr+10% 15Min Winter	90.034	0.00	1.59	100Yr+45% 360Min Winter	16.433	0.00	0.34
30Yr+10% 30Min Summer	59.952	0.00	1.16	100Yr+45% 480Min Summer	13.047	0.00	0.32
30Yr+10% 30Min Winter	59.952	0.00	1.16	100Yr+45% 480Min Winter	13.047	0.00	0.32
30Yr+10% 60Min Summer	38.227	0.00	0.89	100Yr+45% 600Min Summer	10.888	0.00	0.30
30Yr+10% 60Min Winter	38.227	0.00	0.90	100Yr+45% 600Min Winter	10.888	0.00	0.30

Simulated Rainfall Events

Storm	Average Intensity (mm/hr)	Runoff Continuity %	Flow Continuity %	Storm	Average Intensity (mm/hr)	Runoff Continuity %	Flow Continuity %
30Yr+10% 120Min Summer	23.316	0.00	0.72	100Yr+45% 720Min Summer	9.373	0.00	0.29
30Yr+10% 120Min Winter	23.316	0.00	0.73	100Yr+45% 720Min Winter	9.373	0.00	0.29
30Yr+10% 180Min Summer	17.236	0.00	0.65	100Yr+45% 960Min Summer	7.382	0.00	0.28
30Yr+10% 180Min Winter	17.236	0.00	0.65	100Yr+45% 960Min Winter	7.382	0.00	0.28
30Yr+10% 240Min Summer	13.833	0.00	0.61	100Yr+45% 1440Min Winter	5.275	0.00	0.26
30Yr+10% 240Min Winter	13.833	0.00	0.61	100Yr+45% 1440Min Summer	5.275	0.00	0.26

Simulation Results

Return Period (yrs) + Climate Change (%):
2yr+10%

Manholes

Manhole	Critical Storm	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Flood (m3)	Status
DIF1	360 min Summer	228	12.598	0.067	0.021		OK
DIF1 WEIR (Dummy Node)	360 min Summer	226	12.598	0.598	0.011		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	360 min Summer	228	DIF1	DIF1 WEIR (Dummy)	0.109	0.217	0.532	0.010	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 4	360 min Summer	225	12.598	0.037	0.313			OK

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

10yr+10%

Manholes

Manhole	Critical Storm	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Flood (m3)	Status
DIF1	180 min Summer	119	12.637	0.106	0.011		OK
DIF1 WEIR (Dummy Node)	180 min Summer	120	12.637	0.637	0.023		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	180 min Summer	119	DIF1	DIF1 WEIR (Dummy)	0.128	0.407	1.094	0.020	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 4	180 min Summer	119	12.637	0.076	0.656			OK

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

30yr+10%

Manholes

Manhole	Critical Storm	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Flood (m3)	Status
DIF1	180 min Summer	118	12.663	0.133	0.004		OK
DIF1 WEIR (Dummy Node)	180 min Summer	119	12.663	0.663	0.026		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	180 min Summer	118	DIF1	DIF1 WEIR (Dummy)	0.141	0.429	1.001	0.018	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 4	180 min Summer	118	12.663	0.102	0.865			OK

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

100yr+0%

Manholes

Manhole	Critical Storm	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Flood (m3)	Status
DIF1	120 min Summer	86	12.683	0.152	0.054		Surcharged
DIF1 WEIR (Dummy Node)	120 min Summer	87	12.683	0.683	0.001		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	180 min Summer	116	DIF1	DIF1 WEIR (Dummy)	0.150	0.405	0.955	0.017	Surcharged

Permeable Paving Storage

Permeable Paving	Critical Storm	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Flood (m3)	Surface Runoff (m3)	Status
Permeable Paving 4	120 min Summer	86	12.683	0.122	0.851			OK

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

100yr+45%

Manholes

Manhole	Critical Storm	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Flood (m3)	Status
DIF1	180 min Summer	129	12.766	0.236	0.024		Surcharged
DIF1 WEIR (Dummy Node)	180 min Summer	130	12.766	0.766	0.016		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	30 min Winter	26	DIF1	DIF1 WEIR (Dummy)	0.150	0.771	3.568	0.065	Surcharged

Permeable Paving Storage

Permeable Paving	Critical Storm	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Flood (m3)	Surface Runoff (m3)	Status
Permeable Paving 4	180 min Summer	129	12.766	0.206	0.877			OK