

Network Details

Manhole Schedule

Manhole	Catchment Area (ha)	Size (mm)	Type	CL (m)	IL (m)	Depth To Soffit (m)	Easting (m)	Northing (m)
S3-1	0.011	450	Type E	49.850	48.650	1.100	1017.701	1029.674
S3-2 (ST)	0.000	450	Type E	49.850	48.300	1.450	1015.931	1036.393
PLOT 3 SOAKAWAY	0.000	180	Type E	49.047	48.000	0.947	1010.968	1035.858

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	S3-1	48.650	S3-2 (ST)	48.300	Circ	100	6.948	20	0.600	1.100	1.450
1.001	S3-2 (ST)	48.300	PLOT 3 SOAKAWAY	48.000	Circ	100	4.992	17	0.600	1.450	0.947

Outfall Details

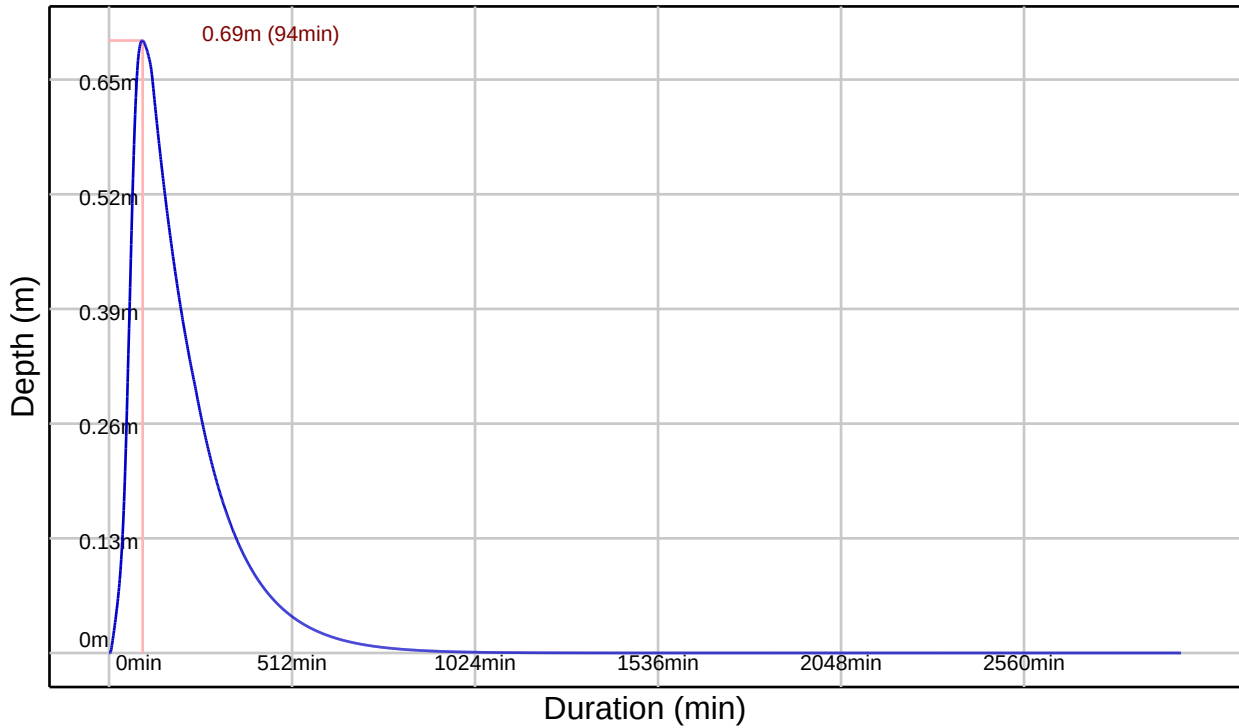
Outfall Manhole PLOT 3 SOAKAWAY : Infiltration Tank

Flow Control Details

Tank Structure at Manhole PLOT 3 SOAKAWAY

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
48.000	0.800	95.00	7.999	7.599	6.079	0.00000000	0.57240000	2.00

Plot 3 Soakaway at PLOT 3 SOAKAWAY (100Yr+40% 120Min Winter)



Simulation Settings

FEH2022 (point): Filename=FEH_Point_Descriptors_501950_103778_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: (30, +0%), (100, +40%)

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 %
30Yr 15Min Winter	83.534	0.00	0.00	100Yr+40% 15Min Summer	146.891	0.00	0.00
30Yr 15Min Summer	83.534	0.00	0.00	100Yr+40% 15Min Winter	146.891	0.00	0.00
30Yr 30Min Winter	55.312	0.00	0.00	100Yr+40% 30Min Summer	98.133	0.00	0.00
30Yr 30Min Summer	55.312	0.00	0.00	100Yr+40% 30Min Winter	98.133	0.00	0.00
30Yr 60Min Winter	35.056	0.00	0.00	100Yr+40% 60Min Summer	62.628	0.00	0.00
30Yr 60Min Summer	35.056	0.00	0.00	100Yr+40% 60Min Winter	62.628	0.00	0.00
30Yr 120Min Winter	21.322	0.00	0.00	100Yr+40% 120Min Summer	37.394	0.00	0.00
30Yr 120Min Summer	21.322	0.00	0.00	100Yr+40% 120Min Winter	37.394	0.00	0.00
30Yr 180Min Summer	15.741	0.00	0.00	100Yr+40% 180Min Summer	27.374	0.00	0.00
30Yr 180Min Winter	15.741	0.00	0.00	100Yr+40% 180Min Winter	27.374	0.00	0.00
30Yr 240Min Summer	12.619	0.00	0.00	100Yr+40% 240Min Summer	21.977	0.00	0.00
30Yr 240Min Winter	12.619	0.00	0.00	100Yr+40% 240Min Winter	21.977	0.00	0.00
30Yr 360Min Summer	9.158	0.00	0.00	100Yr+40% 360Min Summer	15.954	0.00	0.00
30Yr 360Min Winter	9.158	0.00	0.00	100Yr+40% 360Min Winter	15.954	0.00	0.00
30Yr 480Min Winter	7.258	0.00	0.00	100Yr+40% 480Min Summer	12.657	0.00	0.00
30Yr 480Min Summer	7.258	0.00	0.00	100Yr+40% 480Min Winter	12.657	0.00	0.00
30Yr 600Min Summer	6.037	0.00	0.00	100Yr+40% 600Min Summer	10.555	0.00	0.00
30Yr 600Min Winter	6.037	0.00	0.00	100Yr+40% 600Min Winter	10.555	0.00	0.00
30Yr 720Min Summer	5.181	0.00	0.00	100Yr+40% 720Min Summer	9.081	0.00	0.00
30Yr 720Min Winter	5.181	0.00	0.00	100Yr+40% 720Min Winter	9.081	0.00	0.00
30Yr 960Min Winter	4.072	0.00	0.00	100Yr+40% 960Min Summer	7.150	0.00	0.00
30Yr 960Min Summer	4.072	0.00	0.00	100Yr+40% 960Min Winter	7.150	0.00	0.00
30Yr 1440Min Summer	2.912	0.00	0.00	100Yr+40% 1440Min Winter	5.106	0.00	0.00
30Yr 1440Min Winter	2.912	0.00	0.00	100Yr+40% 1440Min Summer	5.106	0.00	0.00

Simulation Results

Return Period (yrs) + Climate Change (%):
30yr+0%

Manholes

Manhole	Critical Storm	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Flood (m3)	Status
S3-1	15 min Summer	8	48.695	0.045	5.433		OK
S3-2 (ST)	180 min Summer	121	48.413	0.113	0.398		Surcharged
PLOT 3 SOAKAWAY	180 min Summer	121	48.413	0.413	0.398		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	109	S3-1	S3-2 (ST)	0.058	1.255	1.835	0.134	OK
1.001	120 min Summer	77	S3-2 (ST)	PLOT 3 SOAKAWAY	0.100	1.053	2.420	0.162	Surcharged

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

100yr+40%

Manholes

Manhole	Critical Storm	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Flood (m3)	Status
S3-1	15 min Summer	8	48.712	0.062	9.556		OK
S3-2 (ST)	120 min Winter	93	48.695	0.395	0.666		Surcharged
PLOT 3 SOAKAWAY	120 min Winter	93	48.694	0.694	0.667		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	S3-1	S3-2 (ST)	0.080	1.792	9.547	0.699	OK
1.001	15 min Winter	10	S3-2 (ST)	PLOT 3 SOAKAWAY	0.100	1.526	8.511	0.570	Surcharged