

Network Details

Manhole Schedule

Manhole	Catchment Area (ha)	Size (mm)	Type	CL (m)	IL (m)	Depth To Soffit (m)	Easting (m)	Northing (m)
S4-1	0.013	450	Type E	51.350	50.100	1.150	995.950	1069.065
S4-2 (ST)	0.000	450	Type E	51.500	50.000	1.400	1002.712	1072.071
PLOT 4 SOAKAWAY	0.000	180	Type E	51.267	49.300	1.867	1004.774	1067.431

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	S4-1	50.100	S4-2 (ST)	50.000	Circ	100	7.400	74	0.600	1.150	1.400
1.001	S4-2 (ST)	50.000	PLOT 4 SOAKAWAY	49.300	Circ	100	5.078	7	0.600	1.400	1.867

Outfall Details

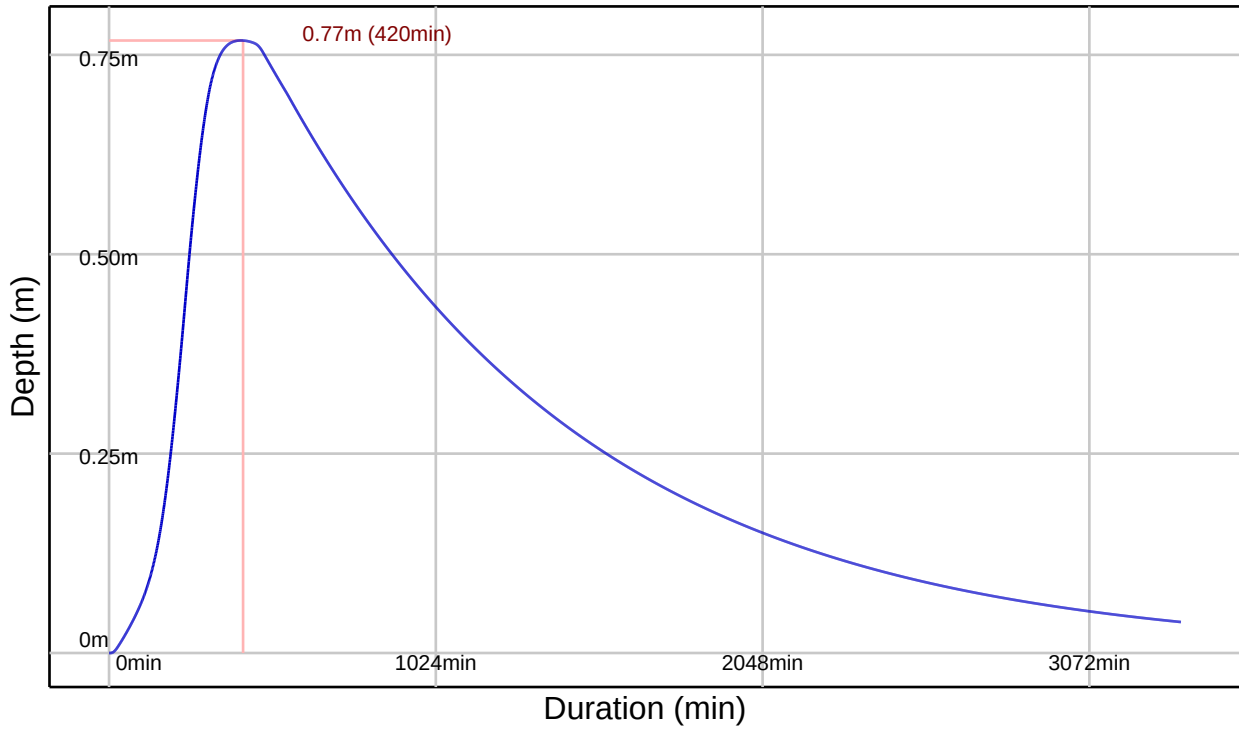
Outfall Manhole PLOT 4 SOAKAWAY : Infiltration Tank

Flow Control Details

Tank Structure at Manhole PLOT 4 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
49.300	0.800	95.00	14.000	13.300	10.640	0.00000000	0.11160000	2.00

Plot 4 Soakaway at PLOT 4 SOAKAWAY (100Yr+40% 480Min 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
S4-1	15 min Summer	8	50.176	0.076	6.421		OK
S4-2 (ST)	15 min Summer	8	50.036	0.036	6.374		OK
PLOT 4 SOAKAWAY	480 min Winter	412	49.744	0.444	0.103		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	S4-1	S4-2 (ST)	0.056	1.409	6.374	0.908	OK
1.001	15 min Summer	9	S4-2 (ST)	PLOT 4 SOAKAWAY	0.068	2.083	6.359	0.280	OK

Return Period (yrs) + Climate Change (%):
100yr+40%

Manholes

Manhole	Critical Storm	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Flood (m3)	Status
S4-1	15 min Summer	9	50.353	0.253	10.827		Surcharged
S4-2 (ST)	480 min Winter	413	50.068	0.068	0.179		OK
PLOT 4 SOAKAWAY	480 min Winter	413	50.068	0.768	0.179		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	S4-1	S4-2 (ST)	0.075	1.719	10.835	1.543	OK
1.001	480 min Winter	413	S4-2 (ST)	PLOT 4 SOAKAWAY	0.084	0.990	1.143	0.050	OK