

Design Settings

Rainfall Methodology	FSR	Maximum Time of Concentration (mins)	30.00
Return Period (years)	1	Maximum Rainfall (mm/hr)	50.0
Additional Flow (%)	0	Minimum Velocity (m/s)	1.00
FSR Region	England and Wales	Connection Type	Level Soffits
M5-60 (mm)	17.000	Minimum Backdrop Height (m)	0.200
Ratio-R	0.300	Preferred Cover Depth (m)	0.500
CV	0.750	Include Intermediate Ground	✓
Time of Entry (mins)	5.00	Enforce best practice design rules	✓

Nodes

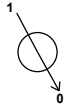
Name	Area (ha)	T of E (mins)	Cover Level (m)	Diameter (mm)	Easting (m)	Northing (m)	Depth (m)
1	0.006	5.00	71.780	450	2336022.957	3355393.030	0.600
2	0.008	5.00	71.780	450	2336025.819	3355387.650	1.740
3 - Soakaway			71.540		2336028.555	3355382.738	1.300

Pipeline Schedule

Link	Length (m)	Slope (1:X)	Dia (mm)	Link Type	US CL (m)	US IL (m)	US Depth (m)	DS CL (m)	DS IL (m)	DS Depth (m)
4.000	6.094	59.2	100	Circular	71.780	71.180	0.500	71.780	71.077	0.603
4.001	5.623	56.2	100	Circular	71.780	70.340	1.340	71.540	70.240	1.200

Link	US Node	Dia (mm)	Node Type	MH Type	DS Node	Dia (mm)	Node Type	MH Type
4.000	1	450	Manhole	Adoptable	2	450	Manhole	Adoptable
4.001	2	450	Manhole	Adoptable	3 - Soakaway		Junction	

Manhole Schedule

Node	Easting (m)	Northing (m)	CL (m)	Depth (m)	Dia (mm)	Connections	Link	IL (m)	Dia (mm)
1	2336022.957	3355393.030	71.780	0.600	450		0	4.000	71.180 100
2	2336025.819	3355387.650	71.780	1.740	450		1	4.000	71.077 100
3 - Soakaway	2336028.555	3355382.738	71.540	1.300			0	4.001	70.340 100
							1	4.001	70.240 100

Simulation Settings

Rainfall Methodology	FSR	Summer CV	0.750	Drain Down Time (mins)	240
FSR Region	England and Wales	Winter CV	0.840	Additional Storage (m³/ha)	20.0
M5-60 (mm)	17.000	Analysis Speed	Normal	Check Discharge Rate(s)	x
Ratio-R	0.300	Skip Steady State	x	Check Discharge Volume	x

Storm Durations

15 | 30 | 60 | 120 | 180 | 240 | 360 | 480 | 600 | 720 | 960 | 1440

Return Period (years)	Climate Change (CC %)	Additional Area (A %)	Additional Flow (Q %)
100	30	10	0

Node 3 - Soakaway Soakaway Storage Structure

BRE-365: Volume (m³)	0.405	Base Inf Coefficient (m/hr)	0.24545	Invert Level (m)	69.900	Depth (m)	0.800
BRE-365: Area (m²)	3.300	Side Inf Coefficient (m/hr)	0.24545	Time to half empty (mins)	108	Inf Depth (m)	
BRE-365: Time (hrs)	0.500	Safety Factor	2.0	Pit Width (m)	2.000	Number Required	1
BRE-365: Inf Coef (m/hr)	0.24545	Porosity	0.95	Pit Length (m)	2.500		

Results for 100 year +30% CC +10% A Critical Storm Duration. Lowest mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
240 minute winter	1	184	71.243	0.063	0.7	0.0239	0.0000	OK
240 minute winter	2	184	71.243	0.903	1.6	0.2537	0.0000	SURCHARGED
240 minute winter	3 - Soakaway	184	71.243	1.003	1.4	3.8024	0.0000	OK

Link Event (Upstream Depth)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)
240 minute winter	1	4.000	2	0.7	0.610	0.089	0.0397
240 minute winter	2	4.001	3 - Soakaway	1.4	0.729	0.172	0.0440
240 minute winter	3 - Soakaway	Infiltration		0.4			