

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)	0.600
CV	0.750	Include Intermediate Ground	x
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)
14	0.006	5.00	70.640	450	2336032.929	3355397.496	0.700
15 - Soakaway			69.610		2336040.288	3355390.000	1.110

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)
1.000	10.505	7.3	100	Circular	70.640	69.940	0.600	69.610	68.500	1.010
Link	US Node	Dia (mm)	Node Type	MH Type	DS Node	Node Type				
1.000	14	450	Manhole	Adoptable	15 - Soakaway	Junction				



Manhole Schedule

Node	Easting (m)	Northing (m)	CL (m)	Depth (m)	Dia (mm)	Connections	Link	IL (m)	Dia (mm)
14	2336032.929	3355397.496	70.640	0.700	450	 0	1.000	69.940	100
15 - Soakaway	2336040.288	3355390.000	69.610	1.110		 1	1.000	68.500	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 15 - Soakaway Soakaway Storage Structure

Base Inf Coefficient (m/hr)	0.24545	Porosity	0.95	Pit Width (m)	2.000	Inf Depth (m)	
Side Inf Coefficient (m/hr)	0.24545	Invert Level (m)	68.500	Pit Length (m)	1.500	Number Required	1
Safety Factor	2.0	Time to half empty (mins)	63	Depth (m)	0.400		

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
15 minute winter	14	10	69.964	0.024	2.9	0.0084	0.0000	OK
240 minute winter	15 - Soakaway	188	69.586	1.086	0.7	1.1414	0.0000	OK

Link Event (Upstream Depth)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)
15 minute winter	14	1.000	15 - Soakaway	2.9	1.312	0.127	0.0488
240 minute winter	15 - Soakaway	Infiltration		0.2			