



Simulation Settings

Rainfall Methodology	FSR	Summer CV	1.000	Drain Down Time (mins)	240
FSR Region	England and Wales	Winter CV	1.000	Additional Storage (m³/ha)	0.0
M5-60 (mm)	21.000	Analysis Speed	Normal	Check Discharge Rate(s)	x
Ratio-R	0.432	Skip Steady State	x	Check Discharge Volume	x

Storm Durations

15	60	180	360	600	960	2160	4320	7200	10080
30	120	240	480	720	1440	2880	5760	8640	

Return Period (years)	Climate Change (CC %)	Additional Area (A %)	Additional Flow (Q %)
1	0	0	0



Results for 1 year Critical Storm Duration. Lowest mass balance: 98.49%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute summer	EX S9	10	23.809	0.019	1.1	0.0213	0.0000	OK
15 minute summer	EX S10	10	23.590	0.018	1.1	0.0207	0.0000	OK
15 minute summer	EX S11	10	23.560	0.110	6.2	0.1185	0.0000	OK
15 minute summer	2.000:50%	10	23.554	0.219	12.1	0.0000	0.0000	OK
15 minute summer	EX S12	10	23.544	0.324	27.4	0.3660	0.0000	SURCHARGED
15 minute summer	TW 1372mm SEWER	1	23.446	1.372	27.5	0.0000	0.0000	OK

Link Event (Outflow)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
15 minute summer	EX S9	1.000	EX S10	1.1	0.886	0.031	0.0070	
15 minute summer	EX S10	1.001	EX S12	1.1	0.098	0.031	0.0861	
15 minute summer	EX S11	2.000	2.000:50%	7.0	0.440	0.129	0.3109	
15 minute summer	EX S11	2.000	EX S12	12.9	0.361	0.238	0.4195	
15 minute summer	EX S12	1.002	TW 1372mm SEWER	27.5	0.692	0.279	1.2780	9.4



Simulation Settings

Rainfall Methodology	FEH-22	Analysis Speed	Normal	Additional Storage (m³/ha)	0.0
Summer CV	1.000	Skip Steady State	x	Check Discharge Rate(s)	x
Winter CV	1.000	Drain Down Time (mins)	240	Check Discharge Volume	x

Storm Durations

15	60	180	360	600	960	2160	4320	7200	10080
30	120	240	480	720	1440	2880	5760	8640	

Return Period (years)	Climate Change (CC %)	Additional Area (A %)	Additional Flow (Q %)
2	0	0	0



Results for 2 year Critical Storm Duration. Lowest mass balance: 98.35%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute summer	EX S9	10	23.808	0.018	1.0	0.0203	0.0000	OK
15 minute summer	EX S10	10	23.589	0.017	1.0	0.0198	0.0000	OK
15 minute summer	EX S11	10	23.533	0.083	5.7	0.0899	0.0000	OK
15 minute summer	2.000:50%	10	23.539	0.204	11.9	0.0000	0.0000	OK
15 minute summer	EX S12	10	23.539	0.319	24.8	0.3606	0.0000	SURCHARGED
15 minute summer	TW 1372mm SEWER	1	23.446	1.372	25.9	0.0000	0.0000	OK

Link Event (Outflow)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
15 minute summer	EX S9	1.000	EX S10	1.0	0.862	0.029	0.0066	
15 minute summer	EX S10	1.001	EX S12	1.0	0.089	0.029	0.0858	
15 minute summer	EX S11	2.000	2.000:50%	6.8	0.429	0.126	0.2714	
15 minute summer	EX S11	2.000	EX S12	10.9	0.342	0.201	0.4115	
15 minute summer	EX S12	1.002	TW 1372mm SEWER	25.9	0.650	0.262	1.2780	8.6



Simulation Settings

Rainfall Methodology	FEH-22	Analysis Speed	Normal	Additional Storage (m³/ha)	0.0
Summer CV	1.000	Skip Steady State	x	Check Discharge Rate(s)	x
Winter CV	1.000	Drain Down Time (mins)	240	Check Discharge Volume	x

Storm Durations

15	60	180	360	600	960	2160	4320	7200	10080
30	120	240	480	720	1440	2880	5760	8640	

Return Period (years)	Climate Change (CC %)	Additional Area (A %)	Additional Flow (Q %)
5	0	0	0

Results for 5 year Critical Storm Duration. Lowest mass balance: 99.03%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute summer	EX S9	10	23.813	0.023	1.7	0.0255	0.0000	OK
15 minute summer	EX S10	10	23.692	0.120	3.6	0.1355	0.0000	OK
15 minute summer	EX S11	10	23.715	0.265	10.0	0.2857	0.0000	SURCHARGED
15 minute summer	2.000:50%	10	23.710	0.375	19.7	0.0000	0.0000	SURCHARGED
15 minute summer	EX S12	10	23.692	0.472	43.2	0.5333	0.0000	SURCHARGED
15 minute summer	TW 1372mm SEWER	1	23.446	1.372	42.6	0.0000	0.0000	OK

Link Event (Outflow)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
15 minute summer	EX S9	1.000	EX S10	1.7	0.951	0.049	0.0473	
15 minute summer	EX S10	1.001	EX S12	3.0	0.230	0.085	0.1495	
15 minute summer	EX S11	2.000	2.000:50%	9.7	0.482	0.179	0.4213	
15 minute summer	EX S11	2.000	EX S12	19.3	0.485	0.356	0.4213	
15 minute summer	EX S12	1.002	TW 1372mm SEWER	42.6	1.071	0.432	1.2780	16.1



Simulation Settings

Rainfall Methodology	FEH-22	Analysis Speed	Normal	Additional Storage (m³/ha)	0.0
Summer CV	1.000	Skip Steady State	x	Check Discharge Rate(s)	x
Winter CV	1.000	Drain Down Time (mins)	240	Check Discharge Volume	x

Storm Durations

15	60	180	360	600	960	2160	4320	7200	10080
30	120	240	480	720	1440	2880	5760	8640	

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



Results for 30 year Critical Storm Duration. Lowest mass balance: 99.42%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute summer	EX S9	11	24.138	0.348	5.5	0.3933	0.0000	SURCHARGED
15 minute summer	EX S10	11	24.134	0.562	7.8	0.6355	0.0000	SURCHARGED
15 minute summer	EX S11	11	24.185	0.735	17.7	0.7933	0.0000	SURCHARGED
15 minute summer	2.000:50%	11	24.172	0.837	33.4	0.0000	0.0000	SURCHARGED
15 minute summer	EX S12	11	24.123	0.903	73.1	1.0215	0.0000	SURCHARGED
15 minute summer	TW 1372mm SEWER	1	23.446	1.372	71.7	0.0000	0.0000	OK

Link Event (Outflow)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
15 minute summer	EX S9	1.000	EX S10	5.7	0.969	0.163	0.0996	
15 minute summer	EX S10	1.001	EX S12	10.0	0.569	0.286	0.1611	
15 minute summer	EX S11	2.000	2.000:50%	15.9	0.512	0.293	0.4213	
15 minute summer	EX S11	2.000	EX S12	31.7	0.796	0.585	0.4213	
15 minute summer	EX S12	1.002	TW 1372mm SEWER	71.7	1.802	0.727	1.2780	29.7



Simulation Settings

Rainfall Methodology	FEH-22	Analysis Speed	Normal	Additional Storage (m³/ha)	0.0
Summer CV	1.000	Skip Steady State	x	Check Discharge Rate(s)	x
Winter CV	1.000	Drain Down Time (mins)	240	Check Discharge Volume	x

Storm Durations

15	60	180	360	600	960	2160	4320	7200	10080
30	120	240	480	720	1440	2880	5760	8640	

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

Results for 100 year Critical Storm Duration. Lowest mass balance: 99.57%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute summer	EX S9	10	24.465	0.675	7.4	0.7637	0.0000	FLOOD RISK
15 minute summer	EX S10	10	24.462	0.890	7.8	1.0067	0.0000	FLOOD RISK
15 minute summer	EX S11	10	24.500	1.050	23.2	1.1340	0.9526	FLOOD
15 minute summer	2.000:50%	10	24.503	1.168	40.1	0.0000	0.0000	SURCHARGED
15 minute summer	EX S12	10	24.450	1.230	90.2	1.3910	0.0000	SURCHARGED
15 minute summer	TW 1372mm SEWER	1	23.446	1.372	86.6	0.0000	0.0000	OK

Link Event (Outflow)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
15 minute summer	EX S9	1.000	EX S10	7.4	0.907	0.212	0.0996	
15 minute summer	EX S10	1.001	EX S12	13.6	0.775	0.389	0.1611	
15 minute winter	EX S11	2.000	2.000:50%	18.6	0.550	0.343	0.4213	
15 minute winter	EX S11	2.000	EX S12	37.1	0.932	0.684	0.4213	
15 minute summer	EX S12	1.002	TW 1372mm SEWER	86.6	2.178	0.878	1.2780	38.6



Simulation Settings

Rainfall Methodology	FEH-22	Analysis Speed	Normal	Additional Storage (m³/ha)	0.0
Summer CV	1.000	Skip Steady State	x	Check Discharge Rate(s)	x
Winter CV	1.000	Drain Down Time (mins)	240	Check Discharge Volume	x

Storm Durations

15	60	180	360	600	960	2160	4320	7200	10080
30	120	240	480	720	1440	2880	5760	8640	

Return Period (years)	Climate Change (CC %)	Additional Area (A %)	Additional Flow (Q %)
100	40	0	0

Results for 100 year +40% CC Critical Storm Duration. Lowest mass balance: 99.77%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute summer	EX S9	9	24.560	0.770	9.0	0.8709	0.3422	FLOOD
15 minute summer	EX S10	9	24.562	0.990	13.3	1.1193	0.0000	FLOOD RISK
15 minute summer	EX S11	9	24.500	1.050	58.0	1.1340	8.5449	FLOOD
15 minute summer	2.000:50%	10	24.531	1.196	43.2	0.0000	0.0000	SURCHARGED
15 minute summer	EX S12	9	24.531	1.311	96.9	1.4825	0.0000	SURCHARGED
15 minute summer	TW 1372mm SEWER	1	23.446	1.372	90.4	0.0000	0.0000	OK

Link Event (Outflow)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
15 minute summer	EX S9	1.000	EX S10	7.1	0.907	0.204	0.0996	
15 minute summer	EX S10	1.001	EX S12	-13.3	-0.756	-0.380	0.1611	
15 minute summer	EX S11	2.000	2.000:50%	-25.4	-0.640	-0.469	0.4213	
30 minute summer	EX S11	2.000	EX S12	38.4	0.967	0.710	0.4213	
15 minute summer	EX S12	1.002	TW 1372mm SEWER	90.4	2.272	0.916	1.2780	47.2

