

Simulation Settings

Rainfall Methodology	FSR	Analysis Speed	Normal
Rainfall Events	Singular	Skip Steady State	x
FSR Region	England and Wales	Drain Down Time (mins)	240
M5-60 (mm)	20.000	Additional Storage (m ³ /ha)	20.0
Ratio-R	0.400	Starting Level (m)	
Summer CV	1.000	Check Discharge Rate(s)	x
Winter CV	1.000	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 %)
1	0	0	0
30	40	0	0
100	45	0	0

Design Settings

Rainfall Methodology	FSR	Maximum Time of Concentration (mins)	30.00
Return Period (years)	10	Maximum Rainfall (mm/hr)	150.0
Additional Flow (%)	0	Minimum Velocity (m/s)	1.00
FSR Region	England and Wales	Connection Type	Level Soffits
M5-60 (mm)	20.000	Minimum Backdrop Height (m)	0.200
Ratio-R	0.400	Preferred Cover Depth (m)	1.200
CV	1.000	Include Intermediate Ground	✓
Time of Entry (mins)	4.00	Enforce best practice design rules	x

Nodes

Name	Area (ha)	T of E (mins)	Cover Level (m)	Diameter (mm)	Depth (m)	Invert Level (m)
SW01	0.005	4.00	134.250	450	0.550	133.700
SW02			134.250	450	0.750	133.500
SW03	0.002	4.00	134.250	450	1.250	133.000
SW04			134.250	450	1.350	132.900
SW05	0.005	4.00	133.775	450	0.550	133.225
SW06			133.775	450	0.775	133.000
SW07	0.002	4.00	133.775	450	1.275	132.500
SW08			133.775	450	1.375	132.400
SW09	0.005	4.00	133.300	450	0.550	132.750
SW10			133.300	450	0.750	132.550
SW11	0.002	4.00	133.300	450	1.000	132.300
SW12			133.300	450	1.100	132.200
SW13	0.005	4.00	132.825	450	0.550	132.275
SW14			132.825	450	0.750	132.075
SW15	0.002	4.00	132.825	450	1.000	131.825
SW16			132.825	450	1.150	131.675
RE	0.004	4.00	132.350	100	0.450	131.900
SW17			132.350	450	0.600	131.750
RE02	0.003	4.00	132.350	100	0.450	131.900
SW18			132.350	1200	0.675	131.675
SW19			132.350	1200	0.775	131.575
WATERCOURSE			132.000	1200	0.500	131.500

Links

Name	US Node	DS Node	Length (m)	ks (mm) / n	US IL (m)	DS IL (m)	Fall (m)	Slope (1:X)	Dia (mm)	T of C (mins)	Rain (mm/hr)
1.000	SW01	SW02	15.000	0.600	133.700	133.500	0.200	75.0	100	4.28	110.7
1.001	SW02	SW03	6.000	0.600	133.500	133.350	0.150	40.0	100	4.36	109.9
1.002	SW03	SW04	3.500	0.600	133.000	132.900	0.100	35.0	100	4.41	109.5
1.003	SW04	SW08	10.000	0.600	132.900	132.400	0.500	20.0	100	4.50	108.6
2.000	SW05	SW06	15.000	0.600	133.225	133.000	0.225	66.7	100	4.26	110.9

Name	Vel (m/s)	Cap (l/s)	Flow (l/s)	US Depth (m)	DS Depth (m)	Σ Area (ha)	Σ Add Inflow (l/s)	Pro Depth (mm)	Pro Velocity (m/s)
1.000	0.889	7.0	2.0	0.450	0.650	0.005	0.0	36	0.764
1.001	1.223	9.6	2.0	0.650	0.800	0.005	0.0	31	0.963
1.002	1.308	10.3	2.8	1.150	1.250	0.007	0.0	36	1.112
1.003	1.734	13.6	2.7	1.250	1.275	0.007	0.0	30	1.348
2.000	0.944	7.4	2.0	0.450	0.675	0.005	0.0	36	0.802

Links

Name	US Node	DS Node	Length (m)	ks (mm) / n	US IL (m)	DS IL (m)	Fall (m)	Slope (1:X)	Dia (mm)	T of C (mins)	Rain (mm/hr)
2.001	SW06	SW07	6.000	0.600	133.000	132.900	0.100	60.0	100	4.37	109.9
2.002	SW07	SW08	3.500	0.600	132.500	132.400	0.100	35.0	100	4.41	109.5
1.004	SW08	SW12	10.000	0.600	132.400	132.200	0.200	50.0	100	4.66	107.2
3.000	SW09	SW10	15.000	0.600	132.750	132.550	0.200	75.0	100	4.28	110.7
3.001	SW10	SW11	6.000	0.600	132.550	132.400	0.150	40.0	100	4.36	109.9
3.002	SW11	SW12	3.500	0.600	132.300	132.200	0.100	35.0	100	4.41	109.5
1.005	SW12	SW16	12.000	0.600	132.200	131.825	0.375	32.0	100	4.80	105.7
4.000	SW13	SW14	15.000	0.600	132.275	132.075	0.200	75.0	100	4.28	110.7
4.001	SW14	SW15	6.000	0.600	132.075	131.925	0.150	40.0	100	4.36	109.9
4.002	SW15	SW16	3.500	0.600	131.825	131.725	0.100	35.0	100	4.41	109.5
1.006	SW16	SW19	10.000	0.600	131.675	131.575	0.100	100.0	150	4.97	104.4
5.000	RE	SW17	12.000	0.600	131.900	131.750	0.150	80.0	100	4.23	111.2
5.001	SW17	SW18	6.000	0.600	131.750	131.675	0.075	80.0	100	4.35	110.1
6.000	RE02	SW18	16.000	0.600	131.900	131.700	0.200	80.0	100	4.31	110.4
5.002	SW18	SW19	2.000	0.600	131.675	131.625	0.050	40.0	100	4.38	109.8
1.007	SW19	WATERCOURSE	6.000	0.600	131.575	131.500	0.075	80.0	100	5.08	103.7

Name	Vel (m/s)	Cap (l/s)	Flow (l/s)	US Depth (m)	DS Depth (m)	Σ Area (ha)	Σ Add Inflow (l/s)	Pro Depth (mm)	Pro Velocity (m/s)
2.001	0.996	7.8	2.0	0.675	0.775	0.005	0.0	34	0.826
2.002	1.308	10.3	2.8	1.175	1.275	0.007	0.0	36	1.112
1.004	1.092	8.6	5.4	1.275	1.000	0.014	0.0	57	1.153
3.000	0.889	7.0	2.0	0.450	0.650	0.005	0.0	36	0.764
3.001	1.223	9.6	2.0	0.650	0.800	0.005	0.0	31	0.963
3.002	1.308	10.3	2.8	0.900	1.000	0.007	0.0	36	1.112
1.005	1.368	10.7	8.0	1.000	0.900	0.021	0.0	64	1.499
4.000	0.889	7.0	2.0	0.450	0.650	0.005	0.0	36	0.764
4.001	1.223	9.6	2.0	0.650	0.800	0.005	0.0	31	0.963
4.002	1.308	10.3	2.8	0.900	1.000	0.007	0.0	36	1.112
1.006	1.005	17.8	10.6	1.000	0.625	0.028	0.0	83	1.048
5.000	0.861	6.8	1.6	0.350	0.500	0.004	0.0	33	0.705
5.001	0.861	6.8	1.6	0.500	0.575	0.004	0.0	33	0.705
6.000	0.861	6.8	1.2	0.350	0.550	0.003	0.0	29	0.648
5.002	1.223	9.6	2.8	0.575	0.625	0.007	0.0	37	1.062
1.007	0.861	6.8	13.1	0.675	0.400	0.035	0.0	100	0.884

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	15.000	75.0	100	Circular	134.250	133.700	0.450	134.250	133.500	0.650
1.001	6.000	40.0	100	Circular	134.250	133.500	0.650	134.250	133.350	0.800
1.002	3.500	35.0	100	Circular	134.250	133.000	1.150	134.250	132.900	1.250
1.003	10.000	20.0	100	Circular	134.250	132.900	1.250	133.775	132.400	1.275

Link	US Node	Dia (mm)	Node Type	MH Type	DS Node	Dia (mm)	Node Type	MH Type
1.000	SW01	450	Manhole	Adoptable	SW02	450	Manhole	Adoptable
1.001	SW02	450	Manhole	Adoptable	SW03	450	Manhole	Adoptable
1.002	SW03	450	Manhole	Adoptable	SW04	450	Manhole	Adoptable
1.003	SW04	450	Manhole	Adoptable	SW08	450	Manhole	Adoptable

Pipeline Schedule

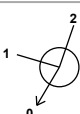
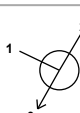
Link	Length (m)	Slope (1:X)	Dia (mm)	Link Type	US CL (m)	US IL (m)	US Depth (m)	DS CL (m)	DS IL (m)	DS Depth (m)
2.000	15.000	66.7	100	Circular	133.775	133.225	0.450	133.775	133.000	0.675
2.001	6.000	60.0	100	Circular	133.775	133.000	0.675	133.775	132.900	0.775
2.002	3.500	35.0	100	Circular	133.775	132.500	1.175	133.775	132.400	1.275
1.004	10.000	50.0	100	Circular	133.775	132.400	1.275	133.300	132.200	1.000
3.000	15.000	75.0	100	Circular	133.300	132.750	0.450	133.300	132.550	0.650
3.001	6.000	40.0	100	Circular	133.300	132.550	0.650	133.300	132.400	0.800
3.002	3.500	35.0	100	Circular	133.300	132.300	0.900	133.300	132.200	1.000
1.005	12.000	32.0	100	Circular	133.300	132.200	1.000	132.825	131.825	0.900
4.000	15.000	75.0	100	Circular	132.825	132.275	0.450	132.825	132.075	0.650
4.001	6.000	40.0	100	Circular	132.825	132.075	0.650	132.825	131.925	0.800
4.002	3.500	35.0	100	Circular	132.825	131.825	0.900	132.825	131.725	1.000
1.006	10.000	100.0	150	Circular	132.825	131.675	1.000	132.350	131.575	0.625
5.000	12.000	80.0	100	Circular	132.350	131.900	0.350	132.350	131.750	0.500
5.001	6.000	80.0	100	Circular	132.350	131.750	0.500	132.350	131.675	0.575
6.000	16.000	80.0	100	Circular	132.350	131.900	0.350	132.350	131.700	0.550
5.002	2.000	40.0	100	Circular	132.350	131.675	0.575	132.350	131.625	0.625
1.007	6.000	80.0	100	Circular	132.350	131.575	0.675	132.000	131.500	0.400

Link	US Node	Dia (mm)	Node Type	MH Type	DS Node	Dia (mm)	Node Type	MH Type
2.000	SW05	450	Manhole	Adoptable	SW06	450	Manhole	Adoptable
2.001	SW06	450	Manhole	Adoptable	SW07	450	Manhole	Adoptable
2.002	SW07	450	Manhole	Adoptable	SW08	450	Manhole	Adoptable
1.004	SW08	450	Manhole	Adoptable	SW12	450	Manhole	Adoptable
3.000	SW09	450	Manhole	Adoptable	SW10	450	Manhole	Adoptable
3.001	SW10	450	Manhole	Adoptable	SW11	450	Manhole	Adoptable
3.002	SW11	450	Manhole	Adoptable	SW12	450	Manhole	Adoptable
1.005	SW12	450	Manhole	Adoptable	SW16	450	Manhole	Adoptable
4.000	SW13	450	Manhole	Adoptable	SW14	450	Manhole	Adoptable
4.001	SW14	450	Manhole	Adoptable	SW15	450	Manhole	Adoptable
4.002	SW15	450	Manhole	Adoptable	SW16	450	Manhole	Adoptable
1.006	SW16	450	Manhole	Adoptable	SW19	1200	Manhole	Adoptable
5.000	RE	100	Manhole	Adoptable	SW17	450	Manhole	Adoptable
5.001	SW17	450	Manhole	Adoptable	SW18	1200	Manhole	Adoptable
6.000	RE02	100	Manhole	Adoptable	SW18	1200	Manhole	Adoptable
5.002	SW18	1200	Manhole	Adoptable	SW19	1200	Manhole	Adoptable
1.007	SW19	1200	Manhole	Adoptable	WATERCOURSE	1200	Manhole	Adoptable

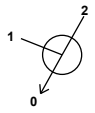
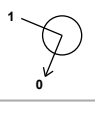
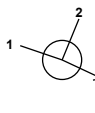
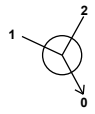
Manhole Schedule

Node	Easting (m)	Northing (m)	CL (m)	Depth (m)	Dia (mm)	Connections	Link	IL (m)	Dia (mm)
SW01	5.944	91.356	134.250	0.550	450				
						0	1.000	133.700	100
SW02	33.401	82.335	134.250	0.750	450				
						1	1.000	133.500	100
						0	1.001	133.500	100

Manhole Schedule

Node	Easting (m)	Northing (m)	CL (m)	Depth (m)	Dia (mm)	Connections	Link	IL (m)	Dia (mm)	
SW03	29.465	69.831	134.250	1.250	450		1	1.001	133.350	100
							0	1.002	133.000	100
SW04	41.198	66.102	134.250	1.350	450		1	1.002	132.900	100
							0	1.003	132.900	100
SW05	-1.019	69.607	133.775	0.550	450					
							0	2.000	133.225	100
SW06	25.356	63.013	133.775	0.775	450		1	2.000	133.000	100
							0	2.001	133.000	100
SW07	20.741	52.199	133.775	1.275	450		1	2.001	132.900	100
							0	2.002	132.500	100
SW08	34.994	47.987	133.775	1.375	450		1	2.002	132.400	100
							2	1.003	132.400	100
							0	1.004	132.400	100
SW09	-7.613	52.199	133.300	0.550	450					
							0	3.000	132.750	100
SW10	16.916	44.813	133.300	0.750	450		1	3.000	132.550	100
							0	3.001	132.550	100
SW11	12.037	34.791	133.300	1.000	450		1	3.001	132.400	100
							0	3.002	132.300	100
SW12	23.827	29.127	133.300	1.100	450		1	3.002	132.200	100
							2	1.004	132.200	100
							0	1.005	132.200	100
SW13	-15.104	29.001	132.825	0.550	450					
							0	4.000	132.275	100
SW14	6.234	20.812	132.825	0.750	450		1	4.000	132.075	100
							0	4.001	132.075	100
SW15	2.673	13.822	132.825	1.000	450		1	4.001	131.925	100
							0	4.002	131.825	100

Manhole Schedule

Node	Easting (m)	Northing (m)	CL (m)	Depth (m)	Dia (mm)	Connections	Link	IL (m)	Dia (mm)	
SW16	12.908	9.771	132.825	1.150	450		1	4.002	131.725	100
							2	1.005	131.825	100
							0	1.006	131.675	150
RE	-20.933	9.206	132.350	0.450	100		0	5.000	131.900	100
SW17	-2.788	1.689	132.350	0.600	450		1	5.000	131.750	100
							0	5.001	131.750	100
RE02	-24.120	-2.628	132.350	0.450	100		0	6.000	131.900	100
SW18	-6.954	-8.465	132.350	0.675	1200		1	6.000	131.700	100
							2	5.001	131.675	100
							0	5.002	131.675	100
SW19	0.749	-12.066	132.350	0.775	1200		1	5.002	131.625	100
							2	1.006	131.575	150
							0	1.007	131.575	100
WATERCOURSE	7.201	-23.978	132.000	0.500	1200		1	1.007	131.500	100

Node SW03 Online Orifice Control

Flap Valve	x	Design Depth (m)	1.000	Discharge Coefficient	0.600
Replaces Downstream Link	x	Design Flow (l/s)	1.0		
Invert Level (m)	133.000	Diameter (m)	0.021		

Node SW07 Online Orifice Control

Flap Valve	x	Design Depth (m)	1.000	Discharge Coefficient	0.600
Replaces Downstream Link	x	Design Flow (l/s)	1.0		
Invert Level (m)	132.500	Diameter (m)	0.021		

Node SW11 Online Orifice Control

Flap Valve	x	Design Depth (m)	1.000	Discharge Coefficient	0.600
Replaces Downstream Link	x	Design Flow (l/s)	1.0		
Invert Level (m)	132.300	Diameter (m)	0.021		

Node SW15 Online Orifice Control

Flap Valve	x	Design Depth (m)	1.000	Discharge Coefficient	0.600
Replaces Downstream Link	x	Design Flow (l/s)	1.0		
Invert Level (m)	131.825	Diameter (m)	0.021		

Node SW18 Online Orifice Control

Flap Valve	x	Design Depth (m)	0.600	Discharge Coefficient	0.600
Replaces Downstream Link	x	Design Flow (l/s)	1.0		
Invert Level (m)	131.675	Diameter (m)	0.025		

Results for 1 year 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 summer	SW01	10	133.727	0.027	1.0	0.0091	0.0000	OK
15 minute summer	SW02	10	133.523	0.023	1.0	0.0036	0.0000	OK
30 minute summer	SW03	21	133.307	0.307	1.2	0.0587	0.0000	SURCHARGED
30 minute summer	SW04	22	132.913	0.013	0.5	0.0021	0.0000	OK
15 minute summer	SW05	10	133.250	0.025	1.0	0.0086	0.0000	OK
15 minute summer	SW06	10	133.025	0.025	1.0	0.0040	0.0000	OK
30 minute summer	SW07	21	132.807	0.307	1.2	0.0583	0.0000	SURCHARGED
30 minute summer	SW08	22	132.423	0.023	1.0	0.0037	0.0000	OK
15 minute summer	SW09	10	132.777	0.027	1.0	0.0091	0.0000	OK
30 minute summer	SW10	21	132.586	0.036	0.9	0.0057	0.0000	OK
30 minute summer	SW11	21	132.585	0.285	1.2	0.0567	0.0000	SURCHARGED
30 minute summer	SW12	22	132.226	0.026	1.5	0.0041	0.0000	OK
15 minute summer	SW13	10	132.302	0.027	1.0	0.0091	0.0000	OK
30 minute summer	SW14	21	132.111	0.036	0.9	0.0058	0.0000	OK
30 minute summer	SW15	21	132.110	0.285	1.2	0.0567	0.0000	SURCHARGED
30 minute summer	SW16	22	131.709	0.034	1.9	0.0054	0.0000	OK
15 minute summer	RE	10	131.924	0.024	0.8	0.0044	0.0000	OK
30 minute summer	SW17	22	131.819	0.069	0.7	0.0109	0.0000	OK
15 minute summer	RE02	10	131.920	0.020	0.6	0.0028	0.0000	OK
30 minute summer	SW18	22	131.819	0.144	1.2	0.1633	0.0000	SURCHARGED
30 minute summer	SW19	23	131.619	0.044	2.4	0.0494	0.0000	OK
30 minute summer	WATERCOURSE	23	131.541	0.041	2.4	0.0000	0.0000	OK

Link Event (Upstream Depth)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
15 minute summer	SW01	1.000	SW02	1.0	0.673	0.143	0.0223	
15 minute summer	SW02	1.001	SW03	1.0	0.776	0.104	0.0077	
30 minute summer	SW03	1.002	SW04	0.5	0.712	0.048	0.0024	
30 minute summer	SW04	1.003	SW08	0.5	0.516	0.036	0.0098	
15 minute summer	SW05	2.000	SW06	1.0	0.652	0.135	0.0230	
15 minute summer	SW06	2.001	SW07	1.0	0.670	0.128	0.0090	
30 minute summer	SW07	2.002	SW08	0.5	0.511	0.048	0.0037	
30 minute summer	SW08	1.004	SW12	1.0	0.677	0.116	0.0147	
15 minute summer	SW09	3.000	SW10	1.0	0.684	0.143	0.0220	
30 minute summer	SW10	3.001	SW11	0.9	0.659	0.089	0.0311	
30 minute summer	SW11	3.002	SW12	0.5	0.512	0.047	0.0040	
30 minute summer	SW12	1.005	SW16	1.5	0.947	0.137	0.0187	
15 minute summer	SW13	4.000	SW14	1.0	0.684	0.143	0.0220	
30 minute summer	SW14	4.001	SW15	0.9	0.659	0.089	0.0311	
30 minute summer	SW15	4.002	SW16	0.5	0.653	0.047	0.0026	
30 minute summer	SW16	1.006	SW19	1.9	0.543	0.110	0.0361	
15 minute summer	RE	5.000	SW17	0.8	0.574	0.118	0.0356	
30 minute summer	SW17	5.001	SW18	0.7	0.297	0.102	0.0407	
15 minute summer	RE02	6.000	SW18	0.6	0.403	0.089	0.0695	
30 minute summer	SW18	5.002	SW19	0.5	0.609	0.049	0.0015	
30 minute summer	SW19	1.007	WATERCOURSE	2.4	0.762	0.357	0.0190	3.4

Results for 30 year +40% CC Critical Storm Duration. Lowest mass balance: 99.62%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
30 minute summer	SW01	24	133.904	0.204	3.0	0.0696	0.0000	SURCHARGED
30 minute summer	SW02	24	133.902	0.402	3.0	0.0639	0.0000	SURCHARGED
30 minute summer	SW03	24	133.901	0.901	2.9	0.1721	0.0000	SURCHARGED
30 minute summer	SW04	24	132.917	0.017	0.9	0.0027	0.0000	OK
30 minute summer	SW05	24	133.411	0.186	3.0	0.0636	0.0000	SURCHARGED
30 minute summer	SW06	24	133.410	0.410	3.0	0.0651	0.0000	SURCHARGED
30 minute summer	SW07	24	133.409	0.909	3.0	0.1726	0.0000	SURCHARGED
30 minute summer	SW08	24	132.431	0.031	1.7	0.0049	0.0000	OK
30 minute summer	SW09	24	133.054	0.304	3.0	0.1036	0.0000	FLOOD RISK
30 minute summer	SW10	24	133.052	0.502	2.7	0.0798	0.0000	FLOOD RISK
30 minute summer	SW11	24	133.051	0.751	2.2	0.1495	0.0000	FLOOD RISK
30 minute summer	SW12	25	132.234	0.034	2.5	0.0054	0.0000	OK
30 minute summer	SW13	24	132.579	0.304	3.0	0.1036	0.0000	FLOOD RISK
30 minute summer	SW14	24	132.577	0.502	2.7	0.0799	0.0000	FLOOD RISK
30 minute summer	SW15	24	132.576	0.751	2.2	0.1495	0.0000	FLOOD RISK
30 minute summer	SW16	24	131.719	0.044	3.3	0.0070	0.0000	OK
30 minute summer	RE	24	132.133	0.233	2.4	0.0434	0.0000	FLOOD RISK
30 minute summer	SW17	24	132.132	0.382	1.7	0.0607	0.0000	FLOOD RISK
60 minute summer	RE02	41	132.132	0.232	1.3	0.0328	0.0000	FLOOD RISK
30 minute summer	SW18	23	132.132	0.457	2.0	0.5163	0.0000	FLOOD RISK
30 minute summer	SW19	25	131.636	0.061	4.2	0.0695	0.0000	OK
30 minute summer	WATERCOURSE	25	131.557	0.057	4.2	0.0000	0.0000	OK

Link Event (Upstream Depth)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
30 minute summer	SW01	1.000	SW02	3.0	0.848	0.425	0.1174	
30 minute summer	SW02	1.001	SW03	2.0	0.850	0.213	0.0469	
30 minute summer	SW03	1.002	SW04	0.9	0.832	0.084	0.0036	
30 minute summer	SW04	1.003	SW08	0.9	0.600	0.063	0.0147	
30 minute summer	SW05	2.000	SW06	3.0	0.811	0.400	0.1174	
30 minute summer	SW06	2.001	SW07	2.1	0.732	0.268	0.0469	
30 minute summer	SW07	2.002	SW08	0.9	0.567	0.085	0.0055	
30 minute summer	SW08	1.004	SW12	1.7	0.790	0.202	0.0219	
30 minute summer	SW09	3.000	SW10	2.7	0.712	0.388	0.1174	
30 minute summer	SW10	3.001	SW11	1.1	0.597	0.116	0.0469	
30 minute summer	SW11	3.002	SW12	0.8	0.571	0.077	0.0059	
30 minute summer	SW12	1.005	SW16	2.5	1.098	0.234	0.0275	
30 minute summer	SW13	4.000	SW14	2.7	0.712	0.388	0.1174	
30 minute summer	SW14	4.001	SW15	1.1	0.597	0.116	0.0469	
30 minute summer	SW15	4.002	SW16	0.8	0.751	0.077	0.0037	
30 minute summer	SW16	1.006	SW19	3.3	0.597	0.186	0.0556	
30 minute summer	RE	5.000	SW17	1.7	0.503	0.251	0.0939	
30 minute summer	SW17	5.001	SW18	0.8	0.382	0.124	0.0469	
60 minute summer	RE02	6.000	SW18	1.0	0.311	0.141	0.1252	
30 minute summer	SW18	5.002	SW19	0.9	0.719	0.090	0.0024	
30 minute summer	SW19	1.007	WATERCOURSE	4.2	0.866	0.616	0.0289	12.1

Results for 100 year +45% CC Critical Storm Duration. Lowest mass balance: 99.71%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
60 minute summer	SW01	42	134.127	0.427	2.9	0.1455	0.0000	FLOOD RISK
60 minute summer	SW02	42	134.124	0.624	2.4	0.0993	0.0000	FLOOD RISK
60 minute summer	SW03	42	134.124	1.123	2.1	0.2146	0.0000	FLOOD RISK
60 minute summer	SW04	42	132.918	0.018	1.0	0.0029	0.0000	OK
60 minute summer	SW05	42	133.634	0.409	2.9	0.1394	0.0000	FLOOD RISK
60 minute summer	SW06	42	133.632	0.632	2.4	0.1004	0.0000	FLOOD RISK
60 minute summer	SW07	42	133.631	1.131	2.1	0.2148	0.0000	FLOOD RISK
60 minute summer	SW08	43	132.433	0.033	1.9	0.0052	0.0000	OK
60 minute summer	SW09	42	133.286	0.536	2.9	0.1826	0.0000	FLOOD RISK
60 minute summer	SW10	43	133.284	0.734	1.8	0.1167	0.0000	FLOOD RISK
60 minute summer	SW11	42	133.283	0.983	1.9	0.1956	0.0000	FLOOD RISK
60 minute summer	SW12	43	132.236	0.036	2.8	0.0058	0.0000	OK
60 minute summer	SW13	42	132.811	0.536	2.9	0.1827	0.0000	FLOOD RISK
60 minute summer	SW14	43	132.809	0.734	1.8	0.1167	0.0000	FLOOD RISK
60 minute summer	SW15	42	132.808	0.983	1.9	0.1956	0.0000	FLOOD RISK
60 minute summer	SW16	43	131.722	0.047	3.7	0.0075	0.0000	OK
60 minute summer	RE	42	132.303	0.402	2.3	0.0749	0.0000	FLOOD RISK
60 minute summer	SW17	42	132.301	0.551	1.5	0.0876	0.0000	FLOOD RISK
60 minute summer	RE02	41	132.301	0.401	1.7	0.0565	0.0000	FLOOD RISK
60 minute summer	SW18	42	132.300	0.625	1.7	0.7069	0.0000	FLOOD RISK
60 minute summer	SW19	43	131.642	0.067	4.8	0.0762	0.0000	OK
60 minute summer	WATERCOURSE	43	131.562	0.062	4.8	0.0000	0.0000	OK

Link Event (Upstream Depth)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
60 minute summer	SW01	1.000	SW02	2.4	0.773	0.350	0.1174	
60 minute summer	SW02	1.001	SW03	1.5	0.739	0.154	0.0469	
60 minute summer	SW03	1.002	SW04	1.0	0.858	0.094	0.0040	
60 minute summer	SW04	1.003	SW08	1.0	0.618	0.071	0.0159	
60 minute summer	SW05	2.000	SW06	2.4	0.754	0.330	0.1174	
60 minute summer	SW06	2.001	SW07	1.5	0.667	0.189	0.0469	
60 minute summer	SW07	2.002	SW08	1.0	0.577	0.094	0.0060	
60 minute summer	SW08	1.004	SW12	1.9	0.811	0.226	0.0239	
60 minute summer	SW09	3.000	SW10	1.8	0.613	0.264	0.1174	
60 minute summer	SW10	3.001	SW11	0.9	0.564	0.091	0.0469	
60 minute summer	SW11	3.002	SW12	0.9	0.557	0.088	0.0064	
60 minute summer	SW12	1.005	SW16	2.8	1.134	0.264	0.0301	
60 minute summer	SW13	4.000	SW14	1.8	0.613	0.264	0.1174	
60 minute summer	SW14	4.001	SW15	0.9	0.564	0.091	0.0469	
60 minute summer	SW15	4.002	SW16	0.9	0.780	0.088	0.0041	
60 minute summer	SW16	1.006	SW19	3.7	0.607	0.211	0.0619	
60 minute summer	RE	5.000	SW17	1.5	0.463	0.223	0.0939	
60 minute summer	SW17	5.001	SW18	0.7	0.363	0.110	0.0469	
60 minute summer	RE02	6.000	SW18	1.0	0.382	0.141	0.1252	
60 minute summer	SW18	5.002	SW19	1.0	0.750	0.105	0.0027	
60 minute summer	SW19	1.007	WATERCOURSE	4.8	0.890	0.703	0.0321	20.4

Water Quality (TSS)

Node	Cumulative TSS
WATERCOURSE	0.000

Water Quality (Metals)

Node	Cumulative Metals
WATERCOURSE	0.000

Water Quality (Hydrocarbons)

Node	Cumulative Hydrocarbons
WATERCOURSE	0.000