

Design Settings

Rainfall Methodology	FSR	Maximum Time of Concentration (mins)	30.00
Return Period (years)	2	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)	1.000
Ratio-R	0.400	Preferred Cover Depth (m)	1.200
CV	0.750	Include Intermediate Ground	✓
Time of Entry (mins)	5.00	Enforce best practice design rules	✓

Adoptable Manhole Type

Max Width (mm)	Diameter (mm)	Max Width (mm)	Diameter (mm)	Max Width (mm)	Diameter (mm)	Max Width (mm)	Diameter (mm)
374	1200	499	1350	749	1500	900	1800

>900 Link+900 mm

Max Depth (m)	Diameter (mm)	Max Depth (m)	Diameter (mm)
1.500	1050	99.999	1200

Circular Default Sewer Type Link Type

Shape Circular | Barrels 1 | Auto Increment (mm) 75 | Follow Ground x

Available Diameters (mm)

100 | 150

Nodes

Name	Area (ha)	T of E (mins)	Cover Level (m)	Diameter (mm)	Easting (m)	Northing (m)	Depth (m)
1	0.157	5.00	68.330	2400	388206.910	397832.859	2.500
2	0.102	5.00	67.919	2400	388201.237	397768.746	2.250
3	0.000		68.065	2400	388208.232	397755.601	2.433
4			68.189	1500	388212.665	397751.846	2.816

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	1	2	64.363	0.600	65.830	65.669	0.161	400.0	1050	5.62	50.0
1.001	2	3	14.890	0.600	65.669	65.632	0.037	400.0	1050	5.77	50.0
1.002	3	4	5.810	0.600	65.632	65.373	0.259	22.4	225	5.80	50.0

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	1.717	1486.3	21.3	1.450	1.200	0.157	0.0	86	0.638
1.001	1.717	1486.3	35.1	1.200	1.383	0.259	0.0	109	0.740
1.002	2.774	110.3	35.1	2.208	2.591	0.259	0.0	87	2.478

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	64.363	400.0	1050	Circular_Default Sewer Type	68.330	65.830	1.450	67.919	65.669	1.200
1.001	14.890	400.0	1050	Circular_Default Sewer Type	67.919	65.669	1.200	68.065	65.632	1.383
1.002	5.810	22.4	225	Circular_Default Sewer Type	68.065	65.632	2.208	68.189	65.373	2.591

Link	US Node	Dia (mm)	Node Type	MH Type	DS Node	Dia (mm)	Node Type	MH Type
1.000	1	2400	Manhole	Adoptable	2	2400	Manhole	Adoptable
1.001	2	2400	Manhole	Adoptable	3	2400	Manhole	Adoptable
1.002	3	2400	Manhole	Adoptable	4	1500	Manhole	Adoptable

Manhole Schedule

Node	Easting (m)	Northing (m)	CL (m)	Depth (m)	Dia (mm)	Connections	Link	IL (m)	Dia (mm)
1	388206.910	397832.859	68.330	2.500	2400		0	1.000	65.830 1050
2	388201.237	397768.746	67.919	2.250	2400		1	1.000	65.669 1050
3	388208.232	397755.601	68.065	2.433	2400		0	1.001	65.669 1050
							1	1.001	65.632 1050
4	388212.665	397751.846	68.189	2.816	1500		0	1.002	65.632 225
							1	1.002	65.373 225

Node 3 Online Hydro-Brake® Control

Flap Valve	x	Objective	(HE) Minimise upstream storage
Replaces Downstream Link	✓	Sump Available	✓
Invert Level (m)	65.632	Product Number	CTL-SHE-0089-5000-2283-5000
Design Depth (m)	2.283	Min Outlet Diameter (m)	0.150
Design Flow (l/s)	5.0	Min Node Diameter (mm)	1200

Other (defaults)

Entry Loss (manhole)	0.250	Entry Loss (junction)	0.000	Apply Recommended Losses	x
Exit Loss (manhole)	0.250	Exit Loss (junction)	0.000	Flood Risk (m)	0.300

Approval Settings

Node Size	✓	Backdrops	✓	Maximum Surcharged Depth (m)	0.100
Node Losses	✓	Minimum Backdrop Height (m)	1.000	Flooding	✓
Link Size	✓	Maximum Backdrop Height (m)	1.500	Return Period (years)	30
Minimum Diameter (mm)	150	Full Bore Velocity	✓	Time to Half Empty	✓
Link Length	✓	Minimum Full Bore Velocity (m/s)	1.000	Return Period (years)	2
Maximum Length (m)	100.000	Maximum Full Bore Velocity (m/s)	3.000	Discharge Rates	✓
Coordinates	✓	Proportional Velocity	✓	1 year (l/s)	5.0
Accuracy (m)	1.000	Return Period (years)	2	2 year (l/s)	5.0
Crossings	✓	Minimum Proportional Velocity (m/s)	0.750	30 year (l/s)	5.0
Cover Depth	✓	Maximum Proportional Velocity (m/s)	3.000	100 year (l/s)	5.0
Minimum Cover Depth (m)	1.200	Surcharged Depth	✓	Discharge Volume	x
Maximum Cover Depth (m)	3.000	Return Period (years)	2		

Approval Results

The network has been designed for a 1 in 2 year storm using FSR rainfall
It contains 4 nodes (1 outfall) and 3 links
The total impermeable area is 0.259 ha
1 online control has been defined
No additional storage is present
Simulations have been completed using FSR summer and winter storms from 15 to 1440 minute duration

No manholes are smaller than that required by the library

No connections have combined exit and entry losses less than the recommended total

No circular links have diameters < 150mm

No links have lengths > 100.000m

No links have lengths that differ from their coordinated length by more than 1.000m

No links cross one or more other links

No links have cover depth outside the range 1.200-3.000m

No nodes have backdrops outside the range 1.000-1.500m

No links have full bore velocity outside the range 1.000-3.000m/s

2 links have peak proportional velocity outside the range 0.750-3.000m/s during the 2 year return period

US Node	DS Node	Link	Velocity (m/s)	Event
1	2	1.000	0.459	2 year 15 minute winter
2	3	1.001	0.447	2 year 15 minute winter

No links have a surcharged depth greater than 0.100m during the 2 year return period

No nodes flood during the 30 year return period

No infiltrating structures failed to half empty in 1440 minutes during the 2 year return period

No outfalls have a discharge rate greater than 5.0l/s during the 1 year return period

No outfalls have a discharge rate greater than 5.0l/s during the 2 year return period

No outfalls have a discharge rate greater than 5.0l/s during the 30 year return period

No outfalls have a discharge rate greater than 5.0l/s during the 100 year return period

The discharge volume test has not been completed

Rainfall

Event	Peak Intensity (mm/hr)	Average Intensity (mm/hr)	Event	Peak Intensity (mm/hr)	Average Intensity (mm/hr)
1 year 15 minute summer	92.521	26.180	2 year 360 minute winter	9.436	3.735
1 year 15 minute winter	64.927	26.180	2 year 480 minute summer	11.436	3.022
1 year 30 minute summer	60.022	16.984	2 year 480 minute winter	7.598	3.022
1 year 30 minute winter	42.121	16.984	2 year 600 minute summer	9.363	2.561
1 year 60 minute summer	40.398	10.676	2 year 600 minute winter	6.398	2.561
1 year 60 minute winter	26.839	10.676	2 year 720 minute summer	8.339	2.235
1 year 120 minute summer	24.980	6.602	2 year 720 minute winter	5.605	2.235
1 year 120 minute winter	16.596	6.602	2 year 960 minute summer	6.846	1.803
1 year 180 minute summer	19.271	4.959	2 year 960 minute winter	4.535	1.803
1 year 180 minute winter	12.527	4.959	2 year 1440 minute summer	4.967	1.331
1 year 240 minute summer	15.301	4.043	2 year 1440 minute winter	3.338	1.331
1 year 240 minute winter	10.165	4.043	30 year 15 minute summer	226.195	64.005
1 year 360 minute summer	11.775	3.030	30 year 15 minute winter	158.733	64.005
1 year 360 minute winter	7.654	3.030	30 year 30 minute summer	147.452	41.724
1 year 480 minute summer	9.342	2.469	30 year 30 minute winter	103.475	41.724
1 year 480 minute winter	6.207	2.469	30 year 60 minute summer	98.615	26.061
1 year 600 minute summer	7.682	2.101	30 year 60 minute winter	65.517	26.061
1 year 600 minute winter	5.249	2.101	30 year 120 minute summer	59.946	15.842
1 year 720 minute summer	6.859	1.838	30 year 120 minute winter	39.827	15.842
1 year 720 minute winter	4.609	1.838	30 year 180 minute summer	45.598	11.734
1 year 960 minute summer	5.653	1.489	30 year 180 minute winter	29.640	11.734
1 year 960 minute winter	3.745	1.489	30 year 240 minute summer	35.759	9.450
1 year 1440 minute summer	4.127	1.106	30 year 240 minute winter	23.758	9.450
1 year 1440 minute winter	2.773	1.106	30 year 360 minute summer	26.939	6.932
2 year 15 minute summer	119.760	33.888	30 year 360 minute winter	17.511	6.932
2 year 15 minute winter	84.042	33.888	30 year 480 minute summer	20.981	5.545
2 year 30 minute summer	77.518	21.935	30 year 480 minute winter	13.940	5.545
2 year 30 minute winter	54.399	21.935	30 year 600 minute summer	17.039	4.661
2 year 60 minute summer	51.720	13.668	30 year 600 minute winter	11.642	4.661
2 year 60 minute winter	34.361	13.668	30 year 720 minute summer	15.093	4.045
2 year 120 minute summer	31.549	8.338	30 year 720 minute winter	10.143	4.045
2 year 120 minute winter	20.961	8.338	30 year 960 minute summer	12.278	3.233
2 year 180 minute summer	24.133	6.210	30 year 960 minute winter	8.133	3.233
2 year 180 minute winter	15.687	6.210	30 year 1440 minute summer	8.788	2.355
2 year 240 minute summer	19.039	5.032	30 year 1440 minute winter	5.906	2.355
2 year 240 minute winter	12.649	5.032	100 year +40% CC 15 minute summer	408.473	115.584
2 year 360 minute summer	14.516	3.735	100 year +40% CC 15 minute winter	286.647	115.584

Rainfall

Event	Peak Intensity (mm/hr)	Average Intensity (mm/hr)	Event	Peak Intensity (mm/hr)	Average Intensity (mm/hr)
100 year +40% CC 30 minute summer	268.775	76.054	100 year +40% CC 360 minute winter	32.092	12.705
100 year +40% CC 30 minute winter	188.614	76.054	100 year +40% CC 480 minute summer	38.291	10.119
100 year +40% CC 60 minute summer	180.954	47.821	100 year +40% CC 480 minute winter	25.439	10.119
100 year +40% CC 60 minute winter	120.222	47.821	100 year +40% CC 600 minute summer	30.992	8.477
100 year +40% CC 120 minute summer	110.370	29.168	100 year +40% CC 600 minute winter	21.176	8.477
100 year +40% CC 120 minute winter	73.327	29.168	100 year +40% CC 720 minute summer	27.387	7.340
100 year +40% CC 180 minute summer	83.953	21.604	100 year +40% CC 720 minute winter	18.406	7.340
100 year +40% CC 180 minute winter	54.572	21.604	100 year +40% CC 960 minute summer	22.191	5.844
100 year +40% CC 240 minute summer	65.765	17.380	100 year +40% CC 960 minute winter	14.700	5.844
100 year +40% CC 240 minute winter	43.693	17.380	100 year +40% CC 1440 minute summer	15.789	4.232
100 year +40% CC 360 minute summer	49.370	12.705	100 year +40% CC 1440 minute winter	10.611	4.232

Results for 1 year Critical Storm Duration. Lowest mass balance: 99.05%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
60 minute winter	1	49	65.951	0.121	9.6	0.6975	0.0000	OK
60 minute winter	2	51	65.948	0.279	15.7	1.5169	0.0000	OK
60 minute winter	3	51	65.948	0.316	6.5	1.4318	0.0000	SURCHARGED
15 minute summer	4	1	65.373	0.000	3.8	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 winter	1	1.000	2	9.5	0.257	0.006	7.5597	
60 minute winter	2	1.001	3	6.5	0.360	0.004	2.9973	
60 minute winter	3	Hydro-Brake®	4	3.8				23.2

Results for 2 year Critical Storm Duration. Lowest mass balance: 99.05%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
60 minute winter	1	50	66.016	0.186	12.3	1.0744	0.0000	OK
60 minute winter	2	55	66.014	0.345	19.2	1.8715	0.0000	OK
60 minute winter	3	55	66.014	0.382	7.4	1.7271	0.0000	SURCHARGED
15 minute summer	4	1	65.373	0.000	3.8	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 winter	1	1.000	2	11.4	0.276	0.008	11.0650	
60 minute winter	2	1.001	3	7.4	0.367	0.005	3.9423	
60 minute winter	3	Hydro-Brake®	4	3.8				29.7

Results for 30 year Critical Storm Duration. Lowest mass balance: 99.05%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
120 minute winter	1	116	66.296	0.466	14.5	2.6938	0.0000	OK
120 minute winter	2	114	66.296	0.627	20.3	3.4057	0.0000	OK
120 minute winter	3	114	66.296	0.664	7.4	3.0051	0.0000	SURCHARGED
15 minute summer	4	1	65.373	0.000	3.8	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)
120 minute winter	1	1.000	2	10.9	0.280	0.007	29.1181	
120 minute winter	2	1.001	3	7.4	0.357	0.005	8.2866	
120 minute winter	3	Hydro-Brake®	4	3.8				68.9

Results for 100 year +40% CC Critical Storm Duration. Lowest mass balance: 99.05%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
180 minute winter	1	172	67.832	2.002	19.7	11.5713	0.0000	SURCHARGED
180 minute winter	2	172	67.829	2.160	22.5	11.7328	0.0000	FLOOD RISK
180 minute winter	3	172	67.829	2.197	15.9	9.9399	0.0000	FLOOD RISK
15 minute summer	4	1	65.373	0.000	3.8	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)
180 minute winter	1	1.000	2	10.2	0.279	0.007	55.5219	
180 minute winter	2	1.001	3	15.9	0.274	0.011	12.8447	
180 minute winter	3	Hydro-Brake®	4	4.9				90.8

Results for 1 year 15 minute summer. 255 minute analysis at 1 minute timestep. 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	1	17	65.909	0.079	17.8	0.4558	0.0000	OK
15 minute summer	2	15	65.902	0.233	28.0	1.2675	0.0000	OK
15 minute summer	3	15	65.906	0.274	12.5	1.2383	0.0000	SURCHARGED
15 minute summer	4	1	65.373	0.000	3.8	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
15 minute summer	1	1.000	2	17.0	0.449	0.011	5.3767	
15 minute summer	2	1.001	3	12.5	0.428	0.008	2.3907	
15 minute summer	3	Hydro-Brake®	4	3.8				12.7

Results for 1 year 15 minute winter. 255 minute analysis at 1 minute timestep. 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	1	16	65.928	0.098	18.7	0.5676	0.0000	OK
15 minute winter	2	18	65.926	0.257	29.3	1.3933	0.0000	OK
15 minute winter	3	18	65.919	0.287	12.8	1.2987	0.0000	SURCHARGED
15 minute winter	4	1	65.373	0.000	3.8	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
15 minute winter	1	1.000	2	17.8	0.446	0.012	6.2634	
15 minute winter	2	1.001	3	12.8	0.450	0.009	2.6348	
15 minute winter	3	Hydro-Brake®	4	3.8				14.2

Results for 1 year 30 minute summer. 270 minute analysis at 1 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
30 minute summer	1	27	65.928	0.098	15.8	0.5639	0.0000	OK
30 minute summer	2	30	65.923	0.254	25.5	1.3810	0.0000	OK
30 minute summer	3	30	65.923	0.291	8.2	1.3170	0.0000	SURCHARGED
30 minute summer	4	1	65.373	0.000	3.8	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
30 minute summer	1	1.000	2	15.2	0.328	0.010	6.2446	
30 minute summer	2	1.001	3	8.2	0.376	0.006	2.6479	
30 minute summer	3	Hydro-Brake®	4	3.8				16.4

Results for 1 year 30 minute winter. 270 minute analysis at 1 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
30 minute winter	1	30	65.948	0.118	14.3	0.6848	0.0000	OK
30 minute winter	2	28	65.946	0.277	23.2	1.5043	0.0000	OK
30 minute winter	3	28	65.947	0.315	8.1	1.4250	0.0000	SURCHARGED
30 minute winter	4	1	65.373	0.000	3.8	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
30 minute winter	1	1.000	2	13.9	0.325	0.009	7.3649	
30 minute winter	2	1.001	3	8.1	0.392	0.005	2.9706	
30 minute winter	3	Hydro-Brake®	4	3.8				18.4

Results for 1 year 60 minute summer. 300 minute analysis at 1 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
60 minute summer	1	47	65.930	0.100	11.9	0.5789	0.0000	OK
60 minute summer	2	44	65.928	0.259	19.2	1.4078	0.0000	OK
60 minute summer	3	44	65.928	0.296	7.2	1.3408	0.0000	SURCHARGED
60 minute summer	4	1	65.373	0.000	3.8	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
60 minute summer	1	1.000	2	11.5	0.253	0.008	6.4660	
60 minute summer	2	1.001	3	7.2	0.343	0.005	2.7180	
60 minute summer	3	Hydro-Brake®	4	3.8				20.7

Results for 1 year 60 minute winter. 300 minute analysis at 1 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
60 minute winter	1	49	65.951	0.121	9.6	0.6975	0.0000	OK
60 minute winter	2	51	65.948	0.279	15.7	1.5169	0.0000	OK
60 minute winter	3	51	65.948	0.316	6.5	1.4318	0.0000	SURCHARGED
60 minute winter	4	1	65.373	0.000	3.8	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
60 minute winter	1	1.000	2	9.5	0.257	0.006	7.5597	
60 minute winter	2	1.001	3	6.5	0.360	0.004	2.9973	
60 minute winter	3	Hydro-Brake®	4	3.8				23.2

Results for 1 year 120 minute summer. 360 minute analysis at 2 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
120 minute summer	1	78	65.916	0.086	7.8	0.4991	0.0000	OK
120 minute summer	2	80	65.915	0.246	12.8	1.3349	0.0000	OK
120 minute summer	3	80	65.915	0.283	5.8	1.2797	0.0000	SURCHARGED
120 minute summer	4	2	65.373	0.000	3.8	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
120 minute summer	1	1.000	2	7.7	0.220	0.005	5.9168	
120 minute summer	2	1.001	3	5.8	0.262	0.004	2.5347	
120 minute summer	3	Hydro-Brake®	4	3.8				25.7

Results for 1 year 120 minute winter. 360 minute analysis at 2 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
120 minute winter	1	90	65.929	0.099	6.0	0.5694	0.0000	OK
120 minute winter	2	88	65.928	0.259	9.9	1.4091	0.0000	OK
120 minute winter	3	88	65.929	0.297	5.1	1.3415	0.0000	SURCHARGED
120 minute winter	4	2	65.373	0.000	3.8	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
120 minute winter	1	1.000	2	6.0	0.221	0.004	6.5858	
120 minute winter	2	1.001	3	5.1	0.318	0.003	2.7207	
120 minute winter	3	Hydro-Brake®	4	3.8				28.6

Results for 1 year 180 minute summer. 420 minute analysis at 4 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
180 minute summer	1	112	65.899	0.069	5.9	0.3989	0.0000	OK
180 minute summer	2	116	65.898	0.229	9.7	1.2456	0.0000	OK
180 minute summer	3	116	65.898	0.266	5.1	1.2050	0.0000	SURCHARGED
180 minute summer	4	4	65.373	0.000	3.7	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
180 minute summer	1	1.000	2	5.9	0.221	0.004	5.1888	
180 minute summer	2	1.001	3	5.1	0.238	0.003	2.3142	
180 minute summer	3	Hydro-Brake®	4	3.7				28.9

Results for 1 year 180 minute winter. 420 minute analysis at 4 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
180 minute winter	1	124	65.902	0.072	4.5	0.4175	0.0000	OK
180 minute winter	2	120	65.901	0.232	7.4	1.2603	0.0000	OK
180 minute winter	3	120	65.901	0.269	4.5	1.2171	0.0000	SURCHARGED
180 minute winter	4	4	65.373	0.000	3.8	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
180 minute winter	1	1.000	2	4.5	0.223	0.003	5.3618	
180 minute winter	2	1.001	3	4.5	0.236	0.003	2.3498	
180 minute winter	3	Hydro-Brake®	4	3.8				32.2

Results for 1 year 240 minute summer. 480 minute analysis at 4 minute timestep. Mass balance: 99.90%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
240 minute summer	1	148	65.884	0.054	5.0	0.3126	0.0000	OK
240 minute summer	2	144	65.883	0.214	8.2	1.1625	0.0000	OK
240 minute summer	3	144	65.883	0.251	4.6	1.1359	0.0000	SURCHARGED
240 minute summer	4	4	65.373	0.000	3.7	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
240 minute summer	1	1.000	2	4.9	0.223	0.003	4.5701	
240 minute summer	2	1.001	3	4.6	0.200	0.003	2.1145	
240 minute summer	3	Hydro-Brake®	4	3.7				31.4

Results for 1 year 240 minute winter. 480 minute analysis at 4 minute timestep. Mass balance: 99.90%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
240 minute winter	1	152	65.879	0.049	3.7	0.2821	0.0000	OK
240 minute winter	2	156	65.879	0.210	6.1	1.1420	0.0000	OK
240 minute winter	3	156	65.879	0.247	4.2	1.1187	0.0000	SURCHARGED
240 minute winter	4	4	65.373	0.000	3.7	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
240 minute winter	1	1.000	2	3.7	0.221	0.002	4.4035	
240 minute winter	2	1.001	3	4.2	0.210	0.003	2.0657	
240 minute winter	3	Hydro-Brake®	4	3.7				35.3

Results for 1 year 360 minute summer. 600 minute analysis at 8 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
360 minute summer	1	184	65.869	0.039	3.9	0.2237	0.0000	OK
360 minute summer	2	208	65.849	0.180	6.3	0.9780	0.0000	OK
360 minute summer	3	208	65.849	0.217	4.1	0.9819	0.0000	OK
360 minute summer	4	8	65.373	0.000	3.6	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
360 minute summer	1	1.000	2	3.8	0.218	0.003	3.3912	
360 minute summer	2	1.001	3	4.1	0.154	0.003	1.6878	
360 minute summer	3	Hydro-Brake®	4	3.6				35.1

Results for 1 year 360 minute winter. 600 minute analysis at 8 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
360 minute winter	1	184	65.864	0.034	2.8	0.1947	0.0000	OK
360 minute winter	2	216	65.822	0.152	4.6	0.8282	0.0000	OK
360 minute winter	3	216	65.821	0.189	3.7	0.8571	0.0000	OK
360 minute winter	4	8	65.373	0.000	3.5	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
360 minute winter	1	1.000	2	2.8	0.211	0.002	2.7101	
360 minute winter	2	1.001	3	3.7	0.165	0.002	1.3614	
360 minute winter	3	Hydro-Brake®	4	3.5				39.7

Results for 1 year 480 minute summer. 720 minute analysis at 8 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
480 minute summer	1	248	65.865	0.035	3.1	0.2045	0.0000	OK
480 minute summer	2	272	65.816	0.147	5.1	0.7967	0.0000	OK
480 minute summer	3	272	65.816	0.184	3.8	0.8310	0.0000	OK
480 minute summer	4	8	65.373	0.000	3.5	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
480 minute summer	1	1.000	2	3.1	0.217	0.002	2.5585	
480 minute summer	2	1.001	3	3.8	0.154	0.003	1.2950	
480 minute summer	3	Hydro-Brake®	4	3.5				38.4

Results for 1 year 480 minute winter. 720 minute analysis at 8 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
480 minute winter	1	248	65.861	0.031	2.3	0.1790	0.0000	OK
480 minute winter	2	280	65.775	0.106	3.8	0.5739	0.0000	OK
480 minute winter	3	280	65.775	0.143	3.4	0.6449	0.0000	OK
480 minute winter	4	8	65.373	0.000	3.3	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
480 minute winter	1	1.000	2	2.3	0.211	0.002	1.6604	
480 minute winter	2	1.001	3	3.4	0.185	0.002	0.8560	
480 minute winter	3	Hydro-Brake®	4	3.3				43.0

Results for 1 year 600 minute summer. 840 minute analysis at 15 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
600 minute summer	1	315	65.862	0.032	2.5	0.1857	0.0000	OK
600 minute summer	2	330	65.781	0.112	4.1	0.6071	0.0000	OK
600 minute summer	3	330	65.781	0.149	3.5	0.6726	0.0000	OK
600 minute summer	4	15	65.373	0.000	3.3	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
600 minute summer	1	1.000	2	2.5	0.215	0.002	1.7893	
600 minute summer	2	1.001	3	3.5	0.173	0.002	0.9178	
600 minute summer	3	Hydro-Brake®	4	3.3				40.7

Results for 1 year 600 minute winter. 840 minute analysis at 15 minute timestep. Mass balance: 99.78%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
600 minute winter	1	315	65.858	0.028	1.9	0.1645	0.0000	OK
600 minute winter	2	345	65.741	0.072	3.1	0.3906	0.0000	OK
600 minute winter	3	345	65.741	0.109	3.0	0.4915	0.0000	OK
600 minute winter	4	15	65.373	0.000	2.9	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
600 minute winter	1	1.000	2	1.9	0.211	0.001	1.0110	
600 minute winter	2	1.001	3	3.0	0.156	0.002	0.5378	
600 minute winter	3	Hydro-Brake®	4	2.9				44.8

Results for 1 year 720 minute summer. 960 minute analysis at 15 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
720 minute summer	1	375	65.860	0.030	2.2	0.1755	0.0000	OK
720 minute summer	2	390	65.762	0.093	3.7	0.5073	0.0000	OK
720 minute summer	3	390	65.762	0.130	3.3	0.5892	0.0000	OK
720 minute summer	4	15	65.373	0.000	3.2	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
720 minute summer	1	1.000	2	2.2	0.211	0.001	1.4116	
720 minute summer	2	1.001	3	3.3	0.174	0.002	0.7348	
720 minute summer	3	Hydro-Brake®	4	3.2				42.3

Results for 1 year 720 minute winter. 960 minute analysis at 15 minute timestep. Mass balance: 99.72%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
720 minute winter	1	375	65.857	0.027	1.7	0.1568	0.0000	OK
720 minute winter	2	375	65.729	0.060	2.8	0.3285	0.0000	OK
720 minute winter	3	375	65.729	0.097	2.7	0.4388	0.0000	OK
720 minute winter	4	15	65.373	0.000	2.7	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
720 minute winter	1	1.000	2	1.7	0.214	0.001	0.8150	
720 minute winter	2	1.001	3	2.7	0.132	0.002	0.4416	
720 minute winter	3	Hydro-Brake®	4	2.7				47.7

Results for 1 year 960 minute summer. 1200 minute analysis at 15 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
960 minute summer	1	495	65.858	0.028	1.8	0.1607	0.0000	OK
960 minute summer	2	510	65.736	0.067	3.0	0.3622	0.0000	OK
960 minute summer	3	510	65.735	0.103	2.9	0.4673	0.0000	OK
960 minute summer	4	15	65.373	0.000	2.8	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
960 minute summer	1	1.000	2	1.8	0.211	0.001	0.9165	
960 minute summer	2	1.001	3	2.9	0.174	0.002	0.4928	
960 minute summer	3	Hydro-Brake®	4	2.8				46.3

Results for 1 year 960 minute winter. 1200 minute analysis at 15 minute timestep. Mass balance: 99.66%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
960 minute winter	1	495	65.855	0.025	1.4	0.1436	0.0000	OK
960 minute winter	2	495	65.713	0.044	2.3	0.2385	0.0000	OK
960 minute winter	3	495	65.712	0.080	2.2	0.3619	0.0000	OK
960 minute winter	4	15	65.373	0.000	2.2	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
960 minute winter	1	1.000	2	1.4	0.214	0.001	0.5415	
960 minute winter	2	1.001	3	2.2	0.131	0.001	0.3109	
960 minute winter	3	Hydro-Brake®	4	2.2				51.7

Results for 1 year 1440 minute summer. 1680 minute analysis at 30 minute timestep. Mass balance: 99.66%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
1440 minute summer	1	750	65.854	0.024	1.3	0.1398	0.0000	OK
1440 minute summer	2	750	65.710	0.041	2.2	0.2237	0.0000	OK
1440 minute summer	3	750	65.709	0.077	2.1	0.3491	0.0000	OK
1440 minute summer	4	30	65.373	0.000	2.1	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
1440 minute summer	1	1.000	2	1.3	0.207	0.001	0.4992	
1440 minute summer	2	1.001	3	2.1	0.131	0.001	0.2909	
1440 minute summer	3	Hydro-Brake®	4	2.1				50.4

Results for 1 year 1440 minute winter. 1680 minute analysis at 30 minute timestep. Mass balance: 99.38%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
1440 minute winter	1	720	65.852	0.022	1.0	0.1244	0.0000	OK
1440 minute winter	2	720	65.698	0.029	1.7	0.1556	0.0000	OK
1440 minute winter	3	720	65.696	0.064	1.6	0.2886	0.0000	OK
1440 minute winter	4	30	65.373	0.000	1.6	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
1440 minute winter	1	1.000	2	1.0	0.214	0.001	0.3244	
1440 minute winter	2	1.001	3	1.6	0.141	0.001	0.2041	
1440 minute winter	3	Hydro-Brake®	4	1.6				56.5

Results for 2 year 15 minute summer. 1455 minute analysis at 1 minute timestep. 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	1	15	65.955	0.125	23.0	0.7234	0.0000	OK
15 minute summer	2	17	65.951	0.282	36.4	1.5304	0.0000	OK
15 minute summer	3	17	65.953	0.321	13.9	1.4536	0.0000	SURCHARGED
15 minute summer	4	1	65.373	0.000	3.8	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
15 minute summer	1	1.000	2	22.1	0.452	0.015	7.4446	
15 minute summer	2	1.001	3	13.9	0.437	0.009	3.0483	
15 minute summer	3	Hydro-Brake®	4	3.8				16.4

Results for 2 year 15 minute winter. 1455 minute analysis at 1 minute timestep. 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	1	18	65.980	0.150	24.2	0.8654	0.0000	OK
15 minute winter	2	16	65.976	0.307	38.1	1.6664	0.0000	OK
15 minute winter	3	19	65.975	0.343	16.1	1.5538	0.0000	SURCHARGED
15 minute winter	4	1	65.373	0.000	3.8	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
15 minute winter	1	1.000	2	23.1	0.459	0.016	8.7399	
15 minute winter	2	1.001	3	16.1	0.447	0.011	3.3552	
15 minute winter	3	Hydro-Brake®	4	3.8				18.4

Results for 2 year 30 minute summer. 1470 minute analysis at 1 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
30 minute summer	1	28	65.982	0.152	20.4	0.8770	0.0000	OK
30 minute summer	2	30	65.979	0.310	33.1	1.6835	0.0000	OK
30 minute summer	3	30	65.979	0.347	9.9	1.5682	0.0000	SURCHARGED
30 minute summer	4	1	65.373	0.000	3.8	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
30 minute summer	1	1.000	2	19.8	0.318	0.013	8.9736	
30 minute summer	2	1.001	3	9.9	0.396	0.007	3.4308	
30 minute summer	3	Hydro-Brake®	4	3.8				21.3

Results for 2 year 30 minute winter. 1470 minute analysis at 1 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
30 minute winter	1	30	66.010	0.180	18.5	1.0401	0.0000	OK
30 minute winter	2	32	66.007	0.338	30.1	1.8338	0.0000	OK
30 minute winter	3	32	66.008	0.376	9.4	1.7003	0.0000	SURCHARGED
30 minute winter	4	1	65.373	0.000	3.8	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
30 minute winter	1	1.000	2	18.1	0.336	0.012	10.5776	
30 minute winter	2	1.001	3	9.4	0.404	0.006	3.8474	
30 minute winter	3	Hydro-Brake®	4	3.8				23.9

Results for 2 year 60 minute summer. 1500 minute analysis at 1 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
60 minute summer	1	46	65.988	0.158	15.2	0.9126	0.0000	OK
60 minute summer	2	49	65.985	0.316	24.7	1.7178	0.0000	OK
60 minute summer	3	49	65.986	0.354	8.6	1.6000	0.0000	SURCHARGED
60 minute summer	4	1	65.373	0.000	3.8	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
60 minute summer	1	1.000	2	14.8	0.255	0.010	9.3929	
60 minute summer	2	1.001	3	8.6	0.359	0.006	3.5280	
60 minute summer	3	Hydro-Brake®	4	3.8				26.6

Results for 2 year 60 minute winter. 1500 minute analysis at 1 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
60 minute winter	1	50	66.016	0.186	12.3	1.0744	0.0000	OK
60 minute winter	2	55	66.014	0.345	19.2	1.8715	0.0000	OK
60 minute winter	3	55	66.014	0.382	7.4	1.7271	0.0000	SURCHARGED
60 minute winter	4	1	65.373	0.000	3.8	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
60 minute winter	1	1.000	2	11.4	0.276	0.008	11.0650	
60 minute winter	2	1.001	3	7.4	0.367	0.005	3.9423	
60 minute winter	3	Hydro-Brake®	4	3.8				29.7

Results for 2 year 120 minute summer. 1560 minute analysis at 2 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
120 minute summer	1	80	65.974	0.144	9.9	0.8307	0.0000	OK
120 minute summer	2	82	65.973	0.304	15.7	1.6484	0.0000	OK
120 minute summer	3	82	65.973	0.341	6.5	1.5413	0.0000	SURCHARGED
120 minute summer	4	2	65.373	0.000	3.8	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
120 minute summer	1	1.000	2	9.3	0.218	0.006	8.7903	
120 minute summer	2	1.001	3	6.5	0.319	0.004	3.3416	
120 minute summer	3	Hydro-Brake®	4	3.8				32.3

Results for 2 year 120 minute winter. 1560 minute analysis at 2 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
120 minute winter	1	92	65.995	0.165	7.6	0.9534	0.0000	OK
120 minute winter	2	90	65.994	0.325	12.0	1.7673	0.0000	OK
120 minute winter	3	90	65.994	0.362	5.6	1.6398	0.0000	SURCHARGED
120 minute winter	4	2	65.373	0.000	3.8	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
120 minute winter	1	1.000	2	7.2	0.233	0.005	10.0477	
120 minute winter	2	1.001	3	5.6	0.289	0.004	3.6584	
120 minute winter	3	Hydro-Brake®	4	3.8				36.2

Results for 2 year 180 minute summer. 1620 minute analysis at 4 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
180 minute summer	1	116	65.955	0.125	7.4	0.7249	0.0000	OK
180 minute summer	2	120	65.953	0.284	11.8	1.5443	0.0000	OK
180 minute summer	3	120	65.953	0.321	5.5	1.4539	0.0000	SURCHARGED
180 minute summer	4	4	65.373	0.000	3.8	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
180 minute summer	1	1.000	2	7.0	0.219	0.005	7.8819	
180 minute summer	2	1.001	3	5.5	0.248	0.004	3.0674	
180 minute summer	3	Hydro-Brake®	4	3.8				36.0

Results for 2 year 180 minute winter. 1620 minute analysis at 4 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
180 minute winter	1	128	65.970	0.140	5.7	0.8117	0.0000	OK
180 minute winter	2	128	65.969	0.300	8.8	1.6275	0.0000	OK
180 minute winter	3	128	65.969	0.337	4.9	1.5229	0.0000	SURCHARGED
180 minute winter	4	4	65.373	0.000	3.8	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
180 minute winter	1	1.000	2	5.3	0.214	0.004	8.7263	
180 minute winter	2	1.001	3	4.9	0.245	0.003	3.2846	
180 minute winter	3	Hydro-Brake®	4	3.8				40.7

Results for 2 year 240 minute summer. 1680 minute analysis at 4 minute timestep. Mass balance: 99.90%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
240 minute summer	1	148	65.938	0.108	6.2	0.6222	0.0000	OK
240 minute summer	2	152	65.937	0.268	10.1	1.4565	0.0000	OK
240 minute summer	3	152	65.937	0.305	5.2	1.3809	0.0000	SURCHARGED
240 minute summer	4	4	65.373	0.000	3.8	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
240 minute summer	1	1.000	2	6.1	0.219	0.004	7.0270	
240 minute summer	2	1.001	3	5.2	0.235	0.003	2.8413	
240 minute summer	3	Hydro-Brake®	4	3.8				39.1

Results for 2 year 240 minute winter. 1680 minute analysis at 4 minute timestep. Mass balance: 99.87%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
240 minute winter	1	164	65.943	0.113	4.6	0.6542	0.0000	OK
240 minute winter	2	164	65.942	0.273	7.5	1.4843	0.0000	OK
240 minute winter	3	164	65.942	0.310	4.6	1.4038	0.0000	SURCHARGED
240 minute winter	4	4	65.373	0.000	3.8	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
240 minute winter	1	1.000	2	4.5	0.215	0.003	7.3365	
240 minute winter	2	1.001	3	4.6	0.230	0.003	2.9121	
240 minute winter	3	Hydro-Brake®	4	3.8				43.8

Results for 2 year 360 minute summer. 1800 minute analysis at 8 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
360 minute summer	1	216	65.904	0.074	4.7	0.4291	0.0000	OK
360 minute summer	2	216	65.904	0.235	7.7	1.2737	0.0000	OK
360 minute summer	3	216	65.904	0.271	4.6	1.2282	0.0000	SURCHARGED
360 minute summer	4	8	65.373	0.000	3.8	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
360 minute summer	1	1.000	2	4.6	0.218	0.003	5.4732	
360 minute summer	2	1.001	3	4.6	0.216	0.003	2.3827	
360 minute summer	3	Hydro-Brake®	4	3.8				43.4

Results for 2 year 360 minute winter. 1800 minute analysis at 8 minute timestep. Mass balance: 99.83%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
360 minute winter	1	224	65.890	0.060	3.5	0.3466	0.0000	OK
360 minute winter	2	224	65.890	0.221	5.7	1.2025	0.0000	OK
360 minute winter	3	224	65.890	0.258	4.1	1.1691	0.0000	SURCHARGED
360 minute winter	4	8	65.373	0.000	3.7	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
360 minute winter	1	1.000	2	3.5	0.218	0.002	4.8797	
360 minute winter	2	1.001	3	4.1	0.165	0.003	2.2101	
360 minute winter	3	Hydro-Brake®	4	3.7				48.7

Results for 2 year 480 minute summer. 1920 minute analysis at 8 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
480 minute summer	1	280	65.871	0.041	3.7	0.2379	0.0000	OK
480 minute summer	2	272	65.871	0.202	6.1	1.0980	0.0000	OK
480 minute summer	3	272	65.871	0.239	4.2	1.0820	0.0000	SURCHARGED
480 minute summer	4	8	65.373	0.000	3.7	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
480 minute summer	1	1.000	2	3.7	0.211	0.002	4.0773	
480 minute summer	2	1.001	3	4.2	0.154	0.003	1.9627	
480 minute summer	3	Hydro-Brake®	4	3.7				46.5

Results for 2 year 480 minute winter. 1920 minute analysis at 8 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
480 minute winter	1	248	65.864	0.034	2.8	0.1953	0.0000	OK
480 minute winter	2	288	65.841	0.172	4.6	0.9347	0.0000	OK
480 minute winter	3	288	65.841	0.209	3.8	0.9458	0.0000	OK
480 minute winter	4	8	65.373	0.000	3.6	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
480 minute winter	1	1.000	2	2.8	0.218	0.002	3.1866	
480 minute winter	2	1.001	3	3.8	0.186	0.003	1.5912	
480 minute winter	3	Hydro-Brake®	4	3.6				52.4

Results for 2 year 600 minute summer. 2040 minute analysis at 15 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
600 minute summer	1	315	65.865	0.035	3.1	0.2045	0.0000	OK
600 minute summer	2	345	65.843	0.174	5.1	0.9438	0.0000	OK
600 minute summer	3	345	65.843	0.211	3.9	0.9536	0.0000	OK
600 minute summer	4	15	65.373	0.000	3.6	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
600 minute summer	1	1.000	2	3.1	0.209	0.002	3.2163	
600 minute summer	2	1.001	3	3.9	0.143	0.003	1.6118	
600 minute summer	3	Hydro-Brake®	4	3.6				50.0

Results for 2 year 600 minute winter. 2040 minute analysis at 15 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
600 minute winter	1	315	65.861	0.031	2.3	0.1790	0.0000	OK
600 minute winter	2	345	65.786	0.117	3.8	0.6364	0.0000	OK
600 minute winter	3	345	65.786	0.154	3.4	0.6971	0.0000	OK
600 minute winter	4	15	65.373	0.000	3.3	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
600 minute winter	1	1.000	2	2.3	0.215	0.002	1.9004	
600 minute winter	2	1.001	3	3.4	0.188	0.002	0.9730	
600 minute winter	3	Hydro-Brake®	4	3.3				55.1

Results for 2 year 720 minute summer. 2160 minute analysis at 15 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
720 minute summer	1	375	65.863	0.033	2.7	0.1922	0.0000	OK
720 minute summer	2	405	65.811	0.142	4.5	0.7696	0.0000	OK
720 minute summer	3	405	65.811	0.179	3.7	0.8081	0.0000	OK
720 minute summer	4	15	65.373	0.000	3.5	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
720 minute summer	1	1.000	2	2.7	0.211	0.002	2.4484	
720 minute summer	2	1.001	3	3.7	0.142	0.002	1.2386	
720 minute summer	3	Hydro-Brake®	4	3.5				52.6

Results for 2 year 720 minute winter. 2160 minute analysis at 15 minute timestep. Mass balance: 99.93%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
720 minute winter	1	375	65.860	0.030	2.1	0.1719	0.0000	OK
720 minute winter	2	390	65.760	0.091	3.4	0.4931	0.0000	OK
720 minute winter	3	390	65.760	0.128	3.2	0.5774	0.0000	OK
720 minute winter	4	15	65.373	0.000	3.2	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
720 minute winter	1	1.000	2	2.1	0.207	0.001	1.3616	
720 minute winter	2	1.001	3	3.2	0.131	0.002	0.7101	
720 minute winter	3	Hydro-Brake®	4	3.2				58.6

Results for 2 year 960 minute summer. 2400 minute analysis at 15 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
960 minute summer	1	495	65.860	0.030	2.2	0.1755	0.0000	OK
960 minute summer	2	510	65.768	0.099	3.7	0.5389	0.0000	OK
960 minute summer	3	510	65.768	0.136	3.3	0.6156	0.0000	OK
960 minute summer	4	15	65.373	0.000	3.2	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
960 minute summer	1	1.000	2	2.2	0.211	0.001	1.5294	
960 minute summer	2	1.001	3	3.3	0.174	0.002	0.7916	
960 minute summer	3	Hydro-Brake®	4	3.2				55.5

Results for 2 year 960 minute winter. 2400 minute analysis at 15 minute timestep. Mass balance: 99.76%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
960 minute winter	1	495	65.857	0.027	1.7	0.1565	0.0000	OK
960 minute winter	2	495	65.729	0.060	2.8	0.3285	0.0000	OK
960 minute winter	3	495	65.729	0.097	2.7	0.4388	0.0000	OK
960 minute winter	4	15	65.373	0.000	2.7	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
960 minute winter	1	1.000	2	1.7	0.214	0.001	0.8143	
960 minute winter	2	1.001	3	2.7	0.131	0.002	0.4415	
960 minute winter	3	Hydro-Brake®	4	2.7				63.0

Results for 2 year 1440 minute summer. 2880 minute analysis at 30 minute timestep. Mass balance: 99.75%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
1440 minute summer	1	750	65.856	0.026	1.6	0.1527	0.0000	OK
1440 minute summer	2	750	65.726	0.057	2.7	0.3091	0.0000	OK
1440 minute summer	3	750	65.725	0.093	2.6	0.4223	0.0000	OK
1440 minute summer	4	30	65.373	0.000	2.6	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
1440 minute summer	1	1.000	2	1.6	0.206	0.001	0.7528	
1440 minute summer	2	1.001	3	2.6	0.130	0.002	0.4120	
1440 minute summer	3	Hydro-Brake®	4	2.6				61.9

Results for 2 year 1440 minute winter. 2880 minute analysis at 30 minute timestep. Mass balance: 99.05%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
1440 minute winter	1	720	65.853	0.023	1.2	0.1349	0.0000	OK
1440 minute winter	2	720	65.705	0.036	2.0	0.1945	0.0000	OK
1440 minute winter	3	720	65.704	0.072	1.9	0.3235	0.0000	OK
1440 minute winter	4	30	65.373	0.000	1.9	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
1440 minute winter	1	1.000	2	1.2	0.207	0.001	0.4233	
1440 minute winter	2	1.001	3	1.9	0.141	0.001	0.2519	
1440 minute winter	3	Hydro-Brake®	4	1.9				67.8

Results for 30 year 15 minute summer. 255 minute analysis at 1 minute timestep. 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	1	20	66.120	0.290	43.5	1.6741	0.0000	OK
15 minute summer	2	19	66.112	0.443	68.8	2.4081	0.0000	OK
15 minute summer	3	19	66.113	0.481	19.5	2.1759	0.0000	SURCHARGED
15 minute summer	4	1	65.373	0.000	3.8	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
15 minute summer	1	1.000	2	40.5	0.460	0.027	16.6950	
15 minute summer	2	1.001	3	19.5	0.488	0.013	5.4483	
15 minute summer	3	Hydro-Brake®	4	3.8				31.0

Results for 30 year 15 minute winter. 255 minute analysis at 1 minute timestep. 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	1	19	66.159	0.329	52.5	1.9022	0.0000	OK
15 minute winter	2	18	66.154	0.485	65.6	2.6320	0.0000	OK
15 minute winter	3	18	66.160	0.528	21.0	2.3888	0.0000	SURCHARGED
15 minute winter	4	1	65.373	0.000	3.8	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
15 minute winter	1	1.000	2	37.6	0.493	0.025	19.2852	
15 minute winter	2	1.001	3	21.0	0.503	0.014	6.1308	
15 minute winter	3	Hydro-Brake®	4	3.8				34.7

Results for 30 year 30 minute summer. 270 minute analysis at 1 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
30 minute summer	1	33	66.185	0.355	38.9	2.0515	0.0000	OK
30 minute summer	2	34	66.180	0.511	56.0	2.7728	0.0000	OK
30 minute summer	3	34	66.181	0.549	16.7	2.4816	0.0000	SURCHARGED
30 minute summer	4	1	65.373	0.000	3.8	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
30 minute summer	1	1.000	2	33.0	0.366	0.022	21.2184	
30 minute summer	2	1.001	3	16.7	0.437	0.011	6.4940	
30 minute summer	3	Hydro-Brake®	4	3.8				40.5

Results for 30 year 30 minute winter. 270 minute analysis at 1 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
30 minute winter	1	31	66.233	0.403	35.2	2.3291	0.0000	OK
30 minute winter	2	32	66.230	0.561	53.1	3.0471	0.0000	OK
30 minute winter	3	32	66.231	0.599	18.1	2.7120	0.0000	SURCHARGED
30 minute winter	4	1	65.373	0.000	3.8	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
30 minute winter	1	1.000	2	30.2	0.388	0.020	24.5093	
30 minute winter	2	1.001	3	18.1	0.451	0.012	7.2826	
30 minute winter	3	Hydro-Brake®	4	3.8				45.4

Results for 30 year 60 minute summer. 300 minute analysis at 1 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
60 minute summer	1	63	66.223	0.393	28.9	2.2714	0.0000	OK
60 minute summer	2	62	66.222	0.553	36.2	3.0042	0.0000	OK
60 minute summer	3	62	66.223	0.591	10.8	2.6717	0.0000	SURCHARGED
60 minute summer	4	1	65.373	0.000	3.8	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
60 minute summer	1	1.000	2	19.0	0.307	0.013	24.0824	
60 minute summer	2	1.001	3	10.8	0.407	0.007	7.1522	
60 minute summer	3	Hydro-Brake®	4	3.8				50.6

Results for 30 year 60 minute winter. 300 minute analysis at 1 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
60 minute winter	1	59	66.287	0.457	23.4	2.6398	0.0000	OK
60 minute winter	2	60	66.286	0.617	32.3	3.3503	0.0000	OK
60 minute winter	3	60	66.286	0.654	9.6	2.9597	0.0000	SURCHARGED
60 minute winter	4	1	65.373	0.000	3.8	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
60 minute winter	1	1.000	2	18.1	0.335	0.012	28.3162	
60 minute winter	2	1.001	3	9.6	0.414	0.006	8.1328	
60 minute winter	3	Hydro-Brake®	4	3.8				56.6

Results for 30 year 120 minute summer. 360 minute analysis at 2 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
120 minute summer	1	106	66.223	0.393	18.7	2.2710	0.0000	OK
120 minute summer	2	96	66.221	0.552	25.9	2.9983	0.0000	OK
120 minute summer	3	96	66.221	0.589	8.6	2.6658	0.0000	SURCHARGED
120 minute summer	4	2	65.373	0.000	3.8	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
120 minute summer	1	1.000	2	13.7	0.260	0.009	24.1631	
120 minute summer	2	1.001	3	8.6	0.363	0.006	7.1338	
120 minute summer	3	Hydro-Brake®	4	3.8				61.4

Results for 30 year 120 minute winter. 360 minute analysis at 2 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
120 minute winter	1	116	66.296	0.466	14.5	2.6938	0.0000	OK
120 minute winter	2	114	66.296	0.627	20.3	3.4057	0.0000	OK
120 minute winter	3	114	66.296	0.664	7.4	3.0051	0.0000	SURCHARGED
120 minute winter	4	2	65.373	0.000	3.8	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
120 minute winter	1	1.000	2	10.9	0.280	0.007	29.1181	
120 minute winter	2	1.001	3	7.4	0.357	0.005	8.2866	
120 minute winter	3	Hydro-Brake®	4	3.8				68.9

Results for 30 year 180 minute summer. 420 minute analysis at 4 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
180 minute summer	1	132	66.207	0.377	13.9	2.1779	0.0000	OK
180 minute summer	2	136	66.206	0.537	17.9	2.9172	0.0000	OK
180 minute summer	3	136	66.206	0.574	7.0	2.5982	0.0000	SURCHARGED
180 minute summer	4	4	65.373	0.000	3.8	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
180 minute summer	1	1.000	2	9.0	0.235	0.006	23.1371	
180 minute summer	2	1.001	3	7.0	0.235	0.005	6.9017	
180 minute summer	3	Hydro-Brake®	4	3.8				68.2

Results for 30 year 180 minute winter. 420 minute analysis at 4 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
180 minute winter	1	148	66.273	0.443	10.7	2.5607	0.0000	OK
180 minute winter	2	144	66.273	0.604	14.2	3.2793	0.0000	OK
180 minute winter	3	144	66.273	0.641	6.1	2.8993	0.0000	SURCHARGED
180 minute winter	4	4	65.373	0.000	3.8	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
180 minute winter	1	1.000	2	7.8	0.248	0.005	27.6190	
180 minute winter	2	1.001	3	6.1	0.276	0.004	7.9309	
180 minute winter	3	Hydro-Brake®	4	3.8				76.6

Results for 30 year 240 minute summer. 480 minute analysis at 4 minute timestep. 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 summer	1	164	66.190	0.360	11.7	2.0794	0.0000	OK
240 minute summer	2	168	66.189	0.520	15.0	2.8261	0.0000	OK
240 minute summer	3	168	66.189	0.557	6.3	2.5218	0.0000	SURCHARGED
240 minute summer	4	4	65.373	0.000	3.8	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
240 minute summer	1	1.000	2	7.9	0.220	0.005	22.0559	
240 minute summer	2	1.001	3	6.3	0.245	0.004	6.6397	
240 minute summer	3	Hydro-Brake®	4	3.8				73.4

Results for 30 year 240 minute winter. 480 minute analysis at 4 minute timestep. 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	188	66.246	0.416	8.7	2.4063	0.0000	OK
240 minute winter	2	184	66.246	0.577	11.9	3.1342	0.0000	OK
240 minute winter	3	184	66.246	0.614	5.6	2.7784	0.0000	SURCHARGED
240 minute winter	4	4	65.373	0.000	3.8	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
240 minute winter	1	1.000	2	6.3	0.234	0.004	25.8409	
240 minute winter	2	1.001	3	5.6	0.287	0.004	7.5200	
240 minute winter	3	Hydro-Brake®	4	3.8				82.3

Results for 30 year 360 minute summer. 600 minute analysis at 8 minute timestep. Mass balance: 99.90%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
360 minute summer	1	232	66.149	0.319	8.8	1.8449	0.0000	OK
360 minute summer	2	240	66.148	0.479	12.3	2.5990	0.0000	OK
360 minute summer	3	240	66.147	0.515	5.7	2.3321	0.0000	SURCHARGED
360 minute summer	4	8	65.373	0.000	3.8	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
360 minute summer	1	1.000	2	6.6	0.215	0.004	19.4396	
360 minute summer	2	1.001	3	5.7	0.234	0.004	5.9872	
360 minute summer	3	Hydro-Brake®	4	3.8				80.3

Results for 30 year 360 minute winter. 600 minute analysis at 8 minute timestep. Mass balance: 99.89%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
360 minute winter	1	256	66.185	0.355	6.4	2.0507	0.0000	OK
360 minute winter	2	256	66.186	0.517	9.0	2.8072	0.0000	OK
360 minute winter	3	256	66.186	0.554	5.0	2.5060	0.0000	SURCHARGED
360 minute winter	4	8	65.373	0.000	3.8	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
360 minute winter	1	1.000	2	4.9	0.218	0.003	21.8573	
360 minute winter	2	1.001	3	5.0	0.235	0.003	6.5854	
360 minute winter	3	Hydro-Brake®	4	3.8				90.1

Results for 30 year 480 minute summer. 720 minute analysis at 8 minute timestep. Mass balance: 99.82%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
480 minute summer	1	304	66.112	0.282	6.9	1.6291	0.0000	OK
480 minute summer	2	304	66.112	0.443	9.6	2.4074	0.0000	OK
480 minute summer	3	304	66.112	0.480	5.1	2.1729	0.0000	SURCHARGED
480 minute summer	4	8	65.373	0.000	3.8	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
480 minute summer	1	1.000	2	5.1	0.215	0.003	17.1299	
480 minute summer	2	1.001	3	5.1	0.237	0.003	5.4408	
480 minute summer	3	Hydro-Brake®	4	3.8				85.8

Results for 30 year 480 minute winter. 720 minute analysis at 8 minute timestep. Mass balance: 99.79%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
480 minute winter	1	328	66.125	0.295	5.1	1.7068	0.0000	OK
480 minute winter	2	328	66.125	0.456	7.3	2.4762	0.0000	OK
480 minute winter	3	328	66.125	0.493	4.6	2.2300	0.0000	SURCHARGED
480 minute winter	4	8	65.373	0.000	3.8	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
480 minute winter	1	1.000	2	4.1	0.209	0.003	17.9563	
480 minute winter	2	1.001	3	4.6	0.159	0.003	5.6364	
480 minute winter	3	Hydro-Brake®	4	3.8				96.2

Results for 30 year 600 minute summer. 840 minute analysis at 15 minute timestep. Mass balance: 99.82%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
600 minute summer	1	375	66.069	0.239	5.6	1.3813	0.0000	OK
600 minute summer	2	375	66.068	0.399	8.1	2.1669	0.0000	OK
600 minute summer	3	375	66.068	0.436	4.8	1.9721	0.0000	SURCHARGED
600 minute summer	4	15	65.373	0.000	3.8	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
600 minute summer	1	1.000	2	4.5	0.211	0.003	14.4200	
600 minute summer	2	1.001	3	4.8	0.137	0.003	4.7594	
600 minute summer	3	Hydro-Brake®	4	3.8				89.5

Results for 30 year 600 minute winter. 840 minute analysis at 15 minute timestep. Mass balance: 99.79%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
600 minute winter	1	390	66.067	0.237	4.3	1.3714	0.0000	OK
600 minute winter	2	390	66.067	0.398	6.3	2.1628	0.0000	OK
600 minute winter	3	390	66.067	0.435	4.4	1.9690	0.0000	SURCHARGED
600 minute winter	4	15	65.373	0.000	3.8	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
600 minute winter	1	1.000	2	3.7	0.214	0.002	14.3474	
600 minute winter	2	1.001	3	4.4	0.173	0.003	4.7484	
600 minute winter	3	Hydro-Brake®	4	3.8				101.6

Results for 30 year 720 minute summer. 960 minute analysis at 15 minute timestep. Mass balance: 99.91%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
720 minute summer	1	435	66.035	0.205	4.9	1.1869	0.0000	OK
720 minute summer	2	435	66.036	0.367	7.2	1.9908	0.0000	OK
720 minute summer	3	435	66.036	0.404	4.6	1.8257	0.0000	SURCHARGED
720 minute summer	4	15	65.373	0.000	3.8	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
720 minute summer	1	1.000	2	4.0	0.207	0.003	12.4440	
720 minute summer	2	1.001	3	4.6	0.136	0.003	4.2690	
720 minute summer	3	Hydro-Brake®	4	3.8				94.0

Results for 30 year 720 minute winter. 960 minute analysis at 15 minute timestep. Mass balance: 99.84%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
720 minute winter	1	465	66.013	0.183	3.7	1.0596	0.0000	OK
720 minute winter	2	465	66.013	0.344	5.6	1.8698	0.0000	OK
720 minute winter	3	450	66.013	0.381	4.2	1.7249	0.0000	SURCHARGED
720 minute winter	4	15	65.373	0.000	3.8	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
720 minute winter	1	1.000	2	3.4	0.207	0.002	11.1549	
720 minute winter	2	1.001	3	4.2	0.191	0.003	3.9363	
720 minute winter	3	Hydro-Brake®	4	3.8				105.5

Results for 30 year 960 minute summer. 1200 minute analysis at 15 minute timestep. Mass balance: 99.96%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
960 minute summer	1	555	65.974	0.144	4.0	0.8351	0.0000	OK
960 minute summer	2	555	65.974	0.305	6.0	1.6583	0.0000	OK
960 minute summer	3	555	65.974	0.342	4.3	1.5487	0.0000	SURCHARGED
960 minute summer	4	15	65.373	0.000	3.8	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
960 minute summer	1	1.000	2	3.5	0.207	0.002	8.9952	
960 minute summer	2	1.001	3	4.3	0.143	0.003	3.3664	
960 minute summer	3	Hydro-Brake®	4	3.8				100.4

Results for 30 year 960 minute winter. 1200 minute analysis at 15 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
960 minute winter	1	585	65.922	0.092	3.0	0.5325	0.0000	OK
960 minute winter	2	585	65.922	0.253	4.8	1.3748	0.0000	OK
960 minute winter	3	585	65.922	0.290	3.9	1.3126	0.0000	SURCHARGED
960 minute winter	4	15	65.373	0.000	3.8	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
960 minute winter	1	1.000	2	2.9	0.207	0.002	6.3231	
960 minute winter	2	1.001	3	3.9	0.156	0.003	2.6336	
960 minute winter	3	Hydro-Brake®	4	3.8				111.6

Results for 30 year 1440 minute summer. 1680 minute analysis at 30 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
1440 minute summer	1	780	65.881	0.051	2.9	0.2930	0.0000	OK
1440 minute summer	2	780	65.881	0.212	4.8	1.1499	0.0000	OK
1440 minute summer	3	780	65.881	0.249	3.9	1.1252	0.0000	SURCHARGED
1440 minute summer	4	30	65.373	0.000	3.7	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
1440 minute summer	1	1.000	2	2.9	0.205	0.002	4.4733	
1440 minute summer	2	1.001	3	3.9	0.129	0.003	2.0843	
1440 minute summer	3	Hydro-Brake®	4	3.7				111.1

Results for 30 year 1440 minute winter. 1680 minute analysis at 30 minute timestep. Mass balance: 99.86%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
1440 minute winter	1	750	65.860	0.030	2.2	0.1755	0.0000	OK
1440 minute winter	2	780	65.792	0.123	3.6	0.6670	0.0000	OK
1440 minute winter	3	780	65.792	0.160	3.4	0.7226	0.0000	OK
1440 minute winter	4	30	65.373	0.000	3.4	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
1440 minute winter	1	1.000	2	2.2	0.207	0.001	2.0243	
1440 minute winter	2	1.001	3	3.4	0.131	0.002	1.0326	
1440 minute winter	3	Hydro-Brake®	4	3.4				122.8

Results for 100 year +40% CC 15 minute summer. 255 minute analysis at 1 minute timestep. Mass balance: 99.82%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute summer	1	20	66.378	0.548	88.9	3.1664	0.0000	OK
15 minute summer	2	21	66.371	0.702	117.2	3.8130	0.0000	OK
15 minute summer	3	21	66.373	0.741	37.2	3.3505	0.0000	SURCHARGED
15 minute summer	4	1	65.373	0.000	3.8	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
15 minute summer	1	1.000	2	68.5	0.500	0.046	33.6128	
15 minute summer	2	1.001	3	37.2	0.539	0.025	9.4097	
15 minute summer	3	Hydro-Brake®	4	3.8				54.8

Results for 100 year +40% CC 15 minute winter. 255 minute analysis at 1 minute timestep. Mass balance: 99.47%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute winter	1	19	66.448	0.618	82.5	3.5742	0.0000	OK
15 minute winter	2	20	66.446	0.777	105.4	4.2203	0.0000	OK
15 minute winter	3	20	66.448	0.816	57.7	3.6907	0.0000	SURCHARGED
15 minute winter	4	1	65.373	0.000	3.8	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
15 minute winter	1	1.000	2	56.1	0.532	0.038	38.3029	
15 minute winter	2	1.001	3	57.7	0.552	0.039	10.4559	
15 minute winter	3	Hydro-Brake®	4	3.8				54.6

Results for 100 year +40% CC 30 minute summer. 270 minute analysis at 1 minute timestep. Mass balance: 99.73%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
30 minute summer	1	33	66.530	0.700	70.9	4.0448	0.0000	OK
30 minute summer	2	35	66.529	0.860	80.4	4.6706	0.0000	OK
30 minute summer	3	35	66.530	0.898	21.6	4.0612	0.0000	SURCHARGED
30 minute summer	4	1	65.373	0.000	3.8	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
30 minute summer	1	1.000	2	38.5	0.425	0.026	43.7301	
30 minute summer	2	1.001	3	21.6	0.483	0.015	11.4826	
30 minute summer	3	Hydro-Brake®	4	3.8				55.8

Results for 100 year +40% CC 30 minute winter. 270 minute analysis at 1 minute timestep. Mass balance: 99.83%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
30 minute winter	1	36	66.641	0.811	64.1	4.6857	0.0000	OK
30 minute winter	2	34	66.643	0.974	73.1	5.2914	0.0000	OK
30 minute winter	3	34	66.644	1.012	29.9	4.5786	0.0000	SURCHARGED
30 minute winter	4	1	65.373	0.000	3.8	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
30 minute winter	1	1.000	2	37.8	0.451	0.025	49.6225	
30 minute winter	2	1.001	3	29.9	0.507	0.020	12.5694	
30 minute winter	3	Hydro-Brake®	4	3.8				54.6

Results for 100 year +40% CC 60 minute summer. 300 minute analysis at 1 minute timestep. Mass balance: 99.87%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
60 minute summer	1	62	66.702	0.872	53.1	5.0379	0.0000	OK
60 minute summer	2	63	66.705	1.036	58.5	5.6264	0.0000	OK
60 minute summer	3	63	66.705	1.073	16.2	4.8556	0.0000	SURCHARGED
60 minute summer	4	1	65.373	0.000	3.8	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
60 minute summer	1	1.000	2	24.0	0.368	0.016	52.2841	
60 minute summer	2	1.001	3	16.2	0.450	0.011	12.8283	
60 minute summer	3	Hydro-Brake®	4	3.8				60.2

Results for 100 year +40% CC 60 minute winter. 300 minute analysis at 1 minute timestep. Mass balance: 99.91%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
60 minute winter	1	62	67.206	1.376	43.0	7.9539	0.0000	SURCHARGED
60 minute winter	2	61	67.207	1.538	50.0	8.3539	0.0000	SURCHARGED
60 minute winter	3	62	67.206	1.574	17.3	7.1201	0.0000	SURCHARGED
60 minute winter	4	1	65.373	0.000	4.2	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
60 minute winter	1	1.000	2	25.0	0.385	0.017	55.5219	
60 minute winter	2	1.001	3	17.3	0.457	0.012	12.8447	
60 minute winter	3	Hydro-Brake®	4	4.2				60.9

Results for 100 year +40% CC 120 minute summer. 360 minute analysis at 2 minute timestep. Mass balance: 99.91%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
120 minute summer	1	122	67.005	1.175	34.5	6.7902	0.0000	SURCHARGED
120 minute summer	2	122	67.005	1.336	32.5	7.2551	0.0000	SURCHARGED
120 minute summer	3	122	67.006	1.374	13.7	6.2181	0.0000	SURCHARGED
120 minute summer	4	2	65.373	0.000	4.0	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
120 minute summer	1	1.000	2	12.7	0.314	0.009	55.5219	
120 minute summer	2	1.001	3	13.7	0.404	0.009	12.8447	
120 minute summer	3	Hydro-Brake®	4	4.0				72.8

Results for 100 year +40% CC 120 minute winter. 360 minute analysis at 2 minute timestep. Mass balance: 99.95%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
120 minute winter	1	118	67.780	1.950	26.6	11.2713	0.0000	SURCHARGED
120 minute winter	2	118	67.779	2.110	28.8	11.4613	0.0000	FLOOD RISK
120 minute winter	3	118	67.780	2.148	23.2	9.7160	0.0000	FLOOD RISK
120 minute winter	4	2	65.373	0.000	4.9	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
120 minute winter	1	1.000	2	13.5	0.323	0.009	55.5219	
120 minute winter	2	1.001	3	23.2	0.345	0.016	12.8447	
120 minute winter	3	Hydro-Brake®	4	4.9				77.0

Results for 100 year +40% CC 180 minute summer. 420 minute analysis at 4 minute timestep. Mass balance: 99.94%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
180 minute summer	1	172	67.013	1.183	25.6	6.8379	0.0000	SURCHARGED
180 minute summer	2	172	67.010	1.341	28.8	7.2851	0.0000	SURCHARGED
180 minute summer	3	172	67.011	1.379	13.2	6.2394	0.0000	SURCHARGED
180 minute summer	4	4	65.373	0.000	4.0	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
180 minute summer	1	1.000	2	12.2	0.281	0.008	55.5219	
180 minute summer	2	1.001	3	13.2	0.385	0.009	12.8447	
180 minute summer	3	Hydro-Brake®	4	4.0				85.0

Results for 100 year +40% CC 180 minute winter. 420 minute analysis at 4 minute timestep. Mass balance: 99.95%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
180 minute winter	1	172	67.832	2.002	19.7	11.5713	0.0000	SURCHARGED
180 minute winter	2	172	67.829	2.160	22.5	11.7328	0.0000	FLOOD RISK
180 minute winter	3	172	67.829	2.197	15.9	9.9399	0.0000	FLOOD RISK
180 minute winter	4	4	65.373	0.000	4.9	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
180 minute winter	1	1.000	2	10.2	0.279	0.007	55.5219	
180 minute winter	2	1.001	3	15.9	0.274	0.011	12.8447	
180 minute winter	3	Hydro-Brake®	4	4.9				90.8

Results for 100 year +40% CC 240 minute summer. 480 minute analysis at 4 minute timestep. Mass balance: 99.93%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
240 minute summer	1	204	66.919	1.089	21.5	6.2927	0.0000	SURCHARGED
240 minute summer	2	204	66.919	1.250	21.1	6.7871	0.0000	SURCHARGED
240 minute summer	3	204	66.920	1.288	13.4	5.8252	0.0000	SURCHARGED
240 minute summer	4	4	65.373	0.000	3.8	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
240 minute summer	1	1.000	2	9.8	0.264	0.007	55.5219	
240 minute summer	2	1.001	3	13.4	0.370	0.009	12.8447	
240 minute summer	3	Hydro-Brake®	4	3.8				96.5

Results for 100 year +40% CC 240 minute winter. 480 minute analysis at 4 minute timestep. Mass balance: 99.85%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
240 minute winter	1	200	67.714	1.884	16.0	10.8901	0.0000	SURCHARGED
240 minute winter	2	200	67.712	2.043	19.3	11.0968	0.0000	FLOOD RISK
240 minute winter	3	196	67.713	2.081	19.3	9.4136	0.0000	SURCHARGED
240 minute winter	4	4	65.373	0.000	4.8	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
240 minute winter	1	1.000	2	8.9	0.270	0.006	55.5219	
240 minute winter	2	1.001	3	19.3	0.282	0.013	12.8447	
240 minute winter	3	Hydro-Brake®	4	4.8				103.2

Results for 100 year +40% CC 360 minute summer. 600 minute analysis at 8 minute timestep. Mass balance: 99.91%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
360 minute summer	1	272	66.761	0.931	16.1	5.3840	0.0000	OK
360 minute summer	2	272	66.759	1.090	19.4	5.9194	0.0000	SURCHARGED
360 minute summer	3	272	66.759	1.127	6.9	5.0967	0.0000	SURCHARGED
360 minute summer	4	8	65.373	0.000	3.8	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
360 minute summer	1	1.000	2	8.9	0.239	0.006	53.8087	
360 minute summer	2	1.001	3	6.9	0.201	0.005	12.8447	
360 minute summer	3	Hydro-Brake®	4	3.8				116.9

Results for 100 year +40% CC 360 minute winter. 600 minute analysis at 8 minute timestep. Mass balance: 99.94%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
360 minute winter	1	280	67.453	1.623	11.8	9.3808	0.0000	SURCHARGED
360 minute winter	2	280	67.453	1.784	14.4	9.6878	0.0000	SURCHARGED
360 minute winter	3	280	67.454	1.822	13.0	8.2413	0.0000	SURCHARGED
360 minute winter	4	8	65.373	0.000	4.5	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
360 minute winter	1	1.000	2	7.0	0.239	0.005	55.5219	
360 minute winter	2	1.001	3	13.0	0.264	0.009	12.8447	
360 minute winter	3	Hydro-Brake®	4	4.5				124.6

Results for 100 year +40% CC 480 minute summer. 720 minute analysis at 8 minute timestep. Mass balance: 99.94%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
480 minute summer	1	352	66.673	0.843	12.5	4.8736	0.0000	OK
480 minute summer	2	344	66.674	1.005	15.6	5.4566	0.0000	OK
480 minute summer	3	344	66.674	1.042	6.1	4.7129	0.0000	SURCHARGED
480 minute summer	4	8	65.373	0.000	3.8	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
480 minute summer	1	1.000	2	7.5	0.223	0.005	51.2515	
480 minute summer	2	1.001	3	6.1	0.208	0.004	12.7419	
480 minute summer	3	Hydro-Brake®	4	3.8				136.2

Results for 100 year +40% CC 480 minute winter. 720 minute analysis at 8 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
480 minute winter	1	360	67.146	1.316	9.3	7.6079	0.0000	SURCHARGED
480 minute winter	2	360	67.146	1.477	11.9	8.0230	0.0000	SURCHARGED
480 minute winter	3	360	67.147	1.515	12.3	6.8550	0.0000	SURCHARGED
480 minute winter	4	8	65.373	0.000	4.1	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
480 minute winter	1	1.000	2	5.8	0.223	0.004	55.5219	
480 minute winter	2	1.001	3	12.3	0.249	0.008	12.8447	
480 minute winter	3	Hydro-Brake®	4	4.1				143.1

Results for 100 year +40% CC 600 minute summer. 840 minute analysis at 15 minute timestep. Mass balance: 99.93%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
600 minute summer	1	420	66.612	0.782	10.1	4.5211	0.0000	OK
600 minute summer	2	420	66.612	0.942	10.8	5.1187	0.0000	OK
600 minute summer	3	420	66.611	0.979	5.2	4.4311	0.0000	SURCHARGED
600 minute summer	4	15	65.373	0.000	3.8	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
600 minute summer	1	1.000	2	4.9	0.214	0.003	48.4691	
600 minute summer	2	1.001	3	5.2	0.140	0.004	12.3178	
600 minute summer	3	Hydro-Brake®	4	3.8				153.3

Results for 100 year +40% CC 600 minute winter. 840 minute analysis at 15 minute timestep. Mass balance: 99.93%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
600 minute winter	1	450	66.845	1.015	7.8	5.8685	0.0000	OK
600 minute winter	2	450	66.844	1.175	10.0	6.3816	0.0000	SURCHARGED
600 minute winter	3	450	66.845	1.213	7.6	5.4891	0.0000	SURCHARGED
600 minute winter	4	15	65.373	0.000	3.8	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
600 minute winter	1	1.000	2	5.0	0.211	0.003	55.2545	
600 minute winter	2	1.001	3	7.6	0.159	0.005	12.8447	
600 minute winter	3	Hydro-Brake®	4	3.8				159.8

Results for 100 year +40% CC 720 minute summer. 960 minute analysis at 15 minute timestep. Mass balance: 99.84%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
720 minute summer	1	495	66.561	0.731	9.0	4.2243	0.0000	OK
720 minute summer	2	480	66.561	0.892	11.3	4.8431	0.0000	OK
720 minute summer	3	480	66.561	0.929	5.4	4.2018	0.0000	SURCHARGED
720 minute summer	4	15	65.373	0.000	3.8	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
720 minute summer	1	1.000	2	5.5	0.214	0.004	45.7697	
720 minute summer	2	1.001	3	5.4	0.138	0.004	11.8289	
720 minute summer	3	Hydro-Brake®	4	3.8				169.2

Results for 100 year +40% CC 720 minute winter. 960 minute analysis at 15 minute timestep. Mass balance: 99.96%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
720 minute winter	1	525	66.687	0.857	6.7	4.9550	0.0000	OK
720 minute winter	2	525	66.687	1.018	8.3	5.5292	0.0000	OK
720 minute winter	3	525	66.687	1.055	4.8	4.7732	0.0000	SURCHARGED
720 minute winter	4	15	65.373	0.000	3.8	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
720 minute winter	1	1.000	2	4.2	0.211	0.003	51.8027	
720 minute winter	2	1.001	3	4.8	0.171	0.003	12.7871	
720 minute winter	3	Hydro-Brake®	4	3.8				177.8

Results for 100 year +40% CC 960 minute summer. 1200 minute analysis at 15 minute timestep. Mass balance: 99.70%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
960 minute summer	1	630	66.473	0.643	7.3	3.7162	0.0000	OK
960 minute summer	2	630	66.473	0.804	8.5	4.3652	0.0000	OK
960 minute summer	3	630	66.473	0.841	4.8	3.8035	0.0000	SURCHARGED
960 minute summer	4	15	65.373	0.000	3.8	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
960 minute summer	1	1.000	2	3.8	0.214	0.003	40.6384	
960 minute summer	2	1.001	3	4.8	0.136	0.003	10.7932	
960 minute summer	3	Hydro-Brake®	4	3.8				180.2

Results for 100 year +40% CC 960 minute winter. 1200 minute analysis at 15 minute timestep. Mass balance: 99.79%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
960 minute winter	1	675	66.533	0.703	5.4	4.0659	0.0000	OK
960 minute winter	2	675	66.533	0.864	7.1	4.6944	0.0000	OK
960 minute winter	3	675	66.533	0.901	4.5	4.0778	0.0000	SURCHARGED
960 minute winter	4	15	65.373	0.000	3.8	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
960 minute winter	1	1.000	2	3.6	0.214	0.002	44.2381	
960 minute winter	2	1.001	3	4.5	0.182	0.003	11.5288	
960 minute winter	3	Hydro-Brake®	4	3.8				203.0

Results for 100 year +40% CC 1440 minute summer. 1680 minute analysis at 30 minute timestep. Mass balance: 99.74%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
1440 minute summer	1	870	66.289	0.459	5.2	2.6546	0.0000	OK
1440 minute summer	2	870	66.289	0.620	6.6	3.3677	0.0000	OK
1440 minute summer	3	870	66.289	0.657	4.4	2.9726	0.0000	SURCHARGED
1440 minute summer	4	30	65.373	0.000	3.8	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
1440 minute summer	1	1.000	2	3.3	0.207	0.002	28.7431	
1440 minute summer	2	1.001	3	4.4	0.131	0.003	8.1790	
1440 minute summer	3	Hydro-Brake®	4	3.8				196.3

Results for 100 year +40% CC 1440 minute winter. 1680 minute analysis at 30 minute timestep. Mass balance: 99.74%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
1440 minute winter	1	930	66.242	0.412	3.9	2.3811	0.0000	OK
1440 minute winter	2	930	66.242	0.573	5.4	3.1115	0.0000	OK
1440 minute winter	3	930	66.242	0.610	4.2	2.7593	0.0000	SURCHARGED
1440 minute winter	4	30	65.373	0.000	3.8	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
1440 minute winter	1	1.000	2	2.9	0.207	0.002	25.5973	
1440 minute winter	2	1.001	3	4.2	0.131	0.003	7.4551	
1440 minute winter	3	Hydro-Brake®	4	3.8				219.2