

Design Settings

Rainfall Methodology	FSR	Maximum Time of Concentration (mins)	30.00
Return Period (years)	1	Maximum Rainfall (mm/hr)	50.0
Additional Flow (%)	0	Minimum Velocity (m/s)	1.00
FSR Region	England and Wales	Connection Type	Level Soffits
M5-60 (mm)	20.000	Minimum Backdrop Height (m)	0.200
Ratio-R	0.402	Preferred Cover Depth (m)	1.200
CV	0.750	Include Intermediate Ground	✓
Time of Entry (mins)	5.00	Enforce best practice design rules	✓

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)
CP1 - CP4	8.579	150.0	150	Circular	101.860	101.196	0.514	101.810	101.139	0.521
CP2 - CP3	5.961	150.0	150	Circular	102.010	101.228	0.632	101.910	101.188	0.572
CP3 - CP4	7.321	150.0	150	Circular	101.910	101.188	0.572	101.810	101.139	0.521
CP4 - CP5	9.447	150.0	150	Circular	101.810	101.139	0.521	101.730	101.076	0.504
CP5 - CP7	9.562	149.4	150	Circular	101.730	101.076	0.504	101.660	101.012	0.498
CP6 - CP7	6.625	150.0	150	Circular	101.610	101.106	0.354	101.660	101.062	0.448
CP7 - CP8	6.924	150.0	150	Circular	101.660	101.012	0.498	101.650	100.966	0.534
CP8 - CP12	3.490	150.0	150	Circular	101.650	100.966	0.534	101.660	100.943	0.567
CP9 - CP11	5.917	150.0	150	Circular	101.660	101.081	0.429	101.670	101.042	0.478
CP11 - CP12	7.309	150.0	150	Circular	101.670	101.042	0.478	101.660	100.993	0.517
CP10 - CP11	5.943	152.4	150	Circular	101.690	101.131	0.409	101.670	101.092	0.428
S10 - S11	6.723	100.0	100	Circular	101.575	101.072	0.403	101.575	101.005	0.470
CP14 - CP15	7.001	150.0	150	Circular	101.550	100.824	0.576	101.550	100.777	0.623
CP15 - CP16	12.896	150.0	150	Circular	101.550	100.777	0.623	101.250	100.691	0.409
S1-S2	6.307	100.0	100	Circular	102.050	101.425	0.525	102.050	101.362	0.588
S2-S3	4.040	100.0	100	Circular	102.050	101.362	0.588	102.050	101.322	0.628
S3 - S4	6.812	100.0	100	Circular	102.050	101.322	0.628	102.050	101.254	0.696
S4 - CP9A	4.404	100.0	100	Circular	102.050	101.254	0.696	102.000	101.210	0.690
S5 - S6	13.810	100.0	100	Circular	101.625	101.204	0.321	101.675	101.066	0.509

Link	US Node	Dia (mm)	Width (mm)	Sump (m)	Node Type	MH Type	DS Node	Dia (mm)	Width (mm)	Node Type	MH Type
CP1 - CP4	CP1	600		0.200	Manhole	Adoptable	CP4	600		Manhole	Adoptable
CP2 - CP3	CP2	600		0.200	Manhole	Adoptable	CP3	600		Manhole	Adoptable
CP3 - CP4	CP3	600		0.200	Manhole	Adoptable	CP4	600		Manhole	Adoptable
CP4 - CP5	CP4	600		0.200	Manhole	Adoptable	CP5	600	450	Manhole	Adoptable
CP5 - CP7	CP5	600	450	0.200	Manhole	Adoptable	CP7	600		Manhole	Adoptable
CP6 - CP7	CP6	600		0.200	Manhole	Adoptable	CP7	600		Manhole	Adoptable
CP7 - CP8	CP7	600		0.200	Manhole	Adoptable	CP8	600		Manhole	Adoptable
CP8 - CP12	CP8	600		0.200	Manhole	Adoptable	CP12	600		Manhole	Adoptable
CP9 - CP11	CP9	600		0.200	Manhole	Adoptable	CP11	600		Manhole	Adoptable
CP11 - CP12	CP11	600		0.200	Manhole	Adoptable	CP12	600		Manhole	Adoptable
CP10 - CP11	CP10	600		0.200	Manhole	Adoptable	CP11	600		Manhole	Adoptable
S10 - S11	S10	450			Manhole	Adoptable	S11	450		Manhole	Adoptable
CP14 - CP15	CP14	600	450	0.200	Manhole	Adoptable	CP15 Control	1200		Manhole	Adoptable
CP15 - CP16	CP15 Control	1200		0.500	Manhole	Adoptable	CP16	600	450	Manhole	Adoptable
S1-S2	S1	450			Manhole	Adoptable	S2	450		Manhole	Adoptable
S2-S3	S2	450			Manhole	Adoptable	S3	450		Manhole	Adoptable
S3 - S4	S3	450			Manhole	Adoptable	S4	450		Manhole	Adoptable
S4 - CP9A	S4	450			Manhole	Adoptable	CP9A	600	450	Manhole	Adoptable
S5 - S6	S5	450			Manhole	Adoptable	S6	450		Manhole	Adoptable

Pipeline Schedule

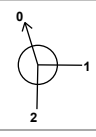
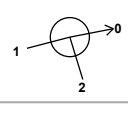
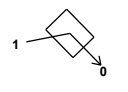
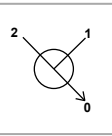
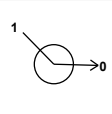
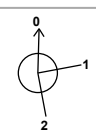
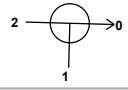
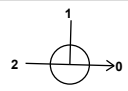
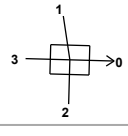
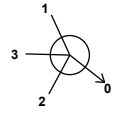
Link	Length (m)	Slope (1:X)	Dia (mm)	Link Type	US CL (m)	US IL (m)	US Depth (m)	DS CL (m)	DS IL (m)	DS Depth (m)
S6 - S7	12.316	100.0	100	Circular	101.675	101.066	0.509	101.625	100.943	0.582
CP14A - CP14	6.974	101.1	150	Circular	101.625	100.893	0.582	101.550	100.824	0.576
CP10A - CP10	3.445	100.0	100	Circular	101.700	101.215	0.385	101.690	101.181	0.409
S7 - CP2A	14.428	100.0	100	Circular	102.025	101.429	0.496	102.050	101.285	0.665
CP2A - CP2	1.059	150.0	150	Circular	102.050	101.235	0.665	102.010	101.228	0.632
S8 - S9	12.316	100.0	100	Circular	101.575	101.135	0.340	101.570	101.012	0.458
S9 - CP14B	12.315	100.0	100	Circular	101.570	101.012	0.458	101.550	100.889	0.561
CP14B - CP14	1.574	105.0	150	Circular	101.550	100.839	0.561	101.550	100.824	0.576
S11 - CP13A	3.785	100.0	100	Circular	101.575	101.005	0.470	101.575	100.967	0.508
CP13A - CP13	1.550	103.3	150	Circular	101.575	100.917	0.508	101.575	100.902	0.523
CP12 - CP13	6.131	150.0	150	Circular	101.660	100.943	0.567	101.575	100.902	0.523
CP13 - CP14	11.768	150.0	150	Circular	101.575	100.902	0.523	101.550	100.824	0.576
Crate (P3) - CP15	2.255	150.3	150	Circular	101.500	100.792	0.558	101.550	100.777	0.623
CP16 - Outfall	2.225	150.0	150	Circular	101.250	100.691	0.409	101.250	100.676	0.424
Crates (P4) - CP15	2.207	147.2	150	Circular	101.490	100.792	0.548	101.550	100.777	0.623
CP3A - CP3	6.248	148.8	150	Circular	101.890	101.280	0.460	101.910	101.238	0.522
CP9A - CP9	7.905	150.0	100	Circular	102.000	101.160	0.740	101.660	101.107	0.453

Link	US Node	Dia (mm)	Width (mm)	Sump (m)	Node Type	MH Type	DS Node	Dia (mm)	Width (mm)	Node Type	MH Type
S6 - S7	S6	450			Manhole	Adoptable	CP14A	600	450	Manhole	Adoptable
CP14A - CP14	CP14A	600	450		Manhole	Adoptable	CP14	600	450	Manhole	Adoptable
CP10A - CP10	CP10A	600	450		Manhole	Adoptable	CP10	600		Manhole	Adoptable
S7 - CP2A	S7	450			Manhole	Adoptable	CP2A	600	450	Manhole	Adoptable
CP2A - CP2	CP2A	600	450		Manhole	Adoptable	CP2	600		Manhole	Adoptable
S8 - S9	S8	450			Manhole	Adoptable	S9	450		Manhole	Adoptable
S9 - CP14B	S9	450			Manhole	Adoptable	CP14B	600	450	Manhole	Adoptable
CP14B - CP14	CP14B	600	450		Manhole	Adoptable	CP14	600	450	Manhole	Adoptable
S11 - CP13A	S11	450			Manhole	Adoptable	CP13A	600	450	Manhole	Adoptable
CP13A - CP13	CP13A	600	450		Manhole	Adoptable	CP13	600		Manhole	Adoptable
CP12 - CP13	CP12	600		0.200	Manhole	Adoptable	CP13	600		Manhole	Adoptable
CP13 - CP14	CP13	600		0.200	Manhole	Adoptable	CP14	600	450	Manhole	Adoptable
Crate (P3) - CP15	Crates. Plot 3				Junction		CP15 Control	1200		Manhole	Adoptable
CP16 - Outfall	CP16	600	450		Manhole	Adoptable	Outfall	450		Manhole	Adoptable
Crates (P4) - CP15	Crates. Plot 4				Junction		CP15 Control	1200		Manhole	Adoptable
CP3A - CP3	CP3A	600			Manhole	Adoptable	CP3	600		Manhole	Adoptable
CP9A - CP9	CP9A	600	450		Manhole	Adoptable	CP9	600		Manhole	Adoptable

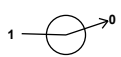
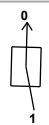
Manhole Schedule

Node	CL (m)	Depth (m)	Dia (mm)	Width (mm)	Sump (m)	Node Type	Connections	Link	IL (m)	Dia (mm)
CP1	101.860	0.864	600		0.200	Manhole				
							0	CP1 - CP4	101.196	150
CP2	102.010	0.982	600		0.200	Manhole				
							1	CP2A - CP2	101.228	150
							0	CP2 - CP3	101.228	150

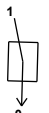
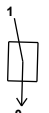
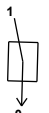
Manhole Schedule

Node	CL (m)	Depth (m)	Dia (mm)	Width (mm)	Sump (m)	Node Type	Connections	Link	IL (m)	Dia (mm)
CP3	101.910	0.922	600		0.200	Manhole		1 CP3A - CP3 2 CP2 - CP3 0 CP3 - CP4	101.238 101.188 101.188	150 150 150
CP4	101.810	0.871	600		0.200	Manhole		1 CP1 - CP4 2 CP3 - CP4 0 CP4 - CP5	101.139 101.139 101.139	150 150 150
CP5	101.730	0.854	600	450	0.200	Manhole		1 CP4 - CP5 0 CP5 - CP7	101.076 101.076	150 150
CP6	101.610	0.704	600		0.200	Manhole		0 CP6 - CP7	101.106	150
CP7	101.660	0.848	600		0.200	Manhole		1 CP6 - CP7 2 CP5 - CP7 0 CP7 - CP8	101.062 101.012 101.012	150 150 150
CP8	101.650	0.884	600		0.200	Manhole		1 CP7 - CP8 0 CP8 - CP12	100.966 100.966	150 150
CP9	101.660	0.779	600		0.200	Manhole		1 CP9A - CP9 0 CP9 - CP11	101.107 101.081	100 150
CP10	101.690	0.759	600		0.200	Manhole		1 CP10A - CP10 0 CP10 - CP11	101.181 101.131	100 150
CP11	101.670	0.828	600		0.200	Manhole		1 CP10 - CP11 2 CP9 - CP11 0 CP11 - CP12	101.092 101.042 101.042	150 150 150
CP12	101.660	0.917	600		0.200	Manhole		1 CP11 - CP12 2 CP8 - CP12 0 CP12 - CP13	100.993 100.943 100.943	150 150 150
CP13	101.575	0.873	600		0.200	Manhole		1 CP13A - CP13 2 CP12 - CP13 0 CP13 - CP14	100.902 100.902 100.902	150 150 150
CP14	101.550	0.926	600	450	0.200	Manhole		1 CP14B - CP14 2 CP14A - CP14 3 CP13 - CP14 0 CP14 - CP15	100.824 100.824 100.824 100.824	150 150 150 150
CP15 Control	101.550	1.273	1200		0.500	Manhole		1 Crates (P4) - CP15 2 Crate (P3) - CP15 3 CP14 - CP15 0 CP15 - CP16	100.777 100.777 100.777 100.777	150 150 150 150

Manhole Schedule

Node	CL (m)	Depth (m)	Dia (mm)	Width (mm)	Sump (m)	Node Type	Connections	Link	IL (m)	Dia (mm)
Outfall	101.250	0.574	450			Manhole	 1	CP16 - Outfall	100.676	150
S1	102.050	0.625	450			Manhole	 0			
S2	102.050	0.688	450			Manhole	 1 0	S1-S2 S1-S2	101.425 101.362	100 100
S3	102.050	0.728	450			Manhole	 1 0	S2-S3 S2-S3	101.362 101.322	100 100
S4	102.050	0.796	450			Manhole	 1 0	S3 - S4 S3 - S4	101.322 101.254	100 100
S5	101.625	0.421	450			Manhole	 0	S4 - CP9A	101.254	100
S6	101.675	0.609	450			Manhole	 1 0	S5 - S6 S5 - S6	101.204 101.066	100 100
CP14A	101.625	0.732	600	450		Manhole	 1 0	S6 - S7 S6 - S7	101.066 100.943	100 100
CP10A	101.700	0.485	600	450		Manhole	 0	CP14A - CP14	100.893	150
S7	102.025	0.596	450			Manhole	 0	CP10A - CP10	101.215	100
CP2A	102.050	0.815	600	450		Manhole	 1 0	S7 - CP2A S7 - CP2A	101.429 101.285	100 100
S8	101.575	0.440	450			Manhole	 0	CP2A - CP2	101.235	150
S9	101.570	0.558	450			Manhole	 1 0	S8 - S9 S8 - S9	101.135 101.012	100 100
								S9 - CP14B	101.012	100

Manhole Schedule

Node	CL (m)	Depth (m)	Dia (mm)	Width (mm)	Sump (m)	Node Type	Connections	Link	IL (m)	Dia (mm)
CP14B	101.550	0.711	600	450		Manhole		S9 - CP14B	100.889	100
S10	101.575	0.503	450			Manhole		CP14B - CP14	100.839	150
S11	101.575	0.570	450			Manhole		S10 - S11	101.072	100
CP13A	101.575	0.658	600	450		Manhole		S10 - S11	101.005	100
CP13A	101.575	0.658	600	450		Manhole		S11 - CP13A	101.005	100
CP13A	101.575	0.658	600	450		Manhole		S11 - CP13A	100.967	100
Crates. Plot 3	101.500	0.708				Junction		CP13A - CP13	100.917	150
CP16	101.250	0.559	600	450		Manhole		Crate (P3) - CP15	100.792	150
CP16	101.250	0.559	600	450		Manhole		CP15 - CP16	100.691	150
Crates. Plot 4	101.490	0.698				Junction		CP16 - Outfall	100.691	150
CP3A	101.890	0.610	600			Manhole		Crates (P4) - CP15	100.792	150
CP3A	101.890	0.610	600			Manhole		CP3A - CP3	101.280	150
CP9A	102.000	0.840	600	450		Manhole		S4 - CP9A	101.210	100
CP9A	102.000	0.840	600	450		Manhole		CP9A - CP9	101.160	100

Simulation Settings

Rainfall Methodology	FSR	Analysis Speed	Detailed
Rainfall Events	Singular	Skip Steady State	x
FSR Region	England and Wales	Drain Down Time (mins)	240
M5-60 (mm)	20.000	Additional Storage (m³/ha)	0.0
Ratio-R	0.400	Starting Level (m)	
Summer CV	0.750	Check Discharge Rate(s)	x
Winter CV	0.840	Check Discharge Volume	x

Storm Durations

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

Return Period (years)	Climate Change (CC %)	Additional Area (A %)	Additional Flow (Q %)
1	0	0	0
2	0	0	0
30	0	0	0
100	0	0	0
100	40	0	0

Node CP15 Control Online Orifice Control

Flap Valve	x	Invert Level (m)	100.777	Discharge Coefficient	0.600
Replaces Downstream Link	x	Diameter (m)	0.036		

Node CP5 Online Orifice Control

Flap Valve	x	Replaces Downstream Link	x	Diameter (m)	0.050
Downstream Link	CP5 - CP7	Invert Level (m)	101.076	Discharge Coefficient	0.600

Node Crates. Plot 3 Carpark Storage Structure

Base Inf Coefficient (m/hr)	0.00000	Invert Level (m)	100.792	Slope (1:X)	1000.0
Side Inf Coefficient (m/hr)	0.00000	Time to half empty (mins)		Depth (m)	0.400
Safety Factor	2.0	Width (m)	5.500	Inf Depth (m)	
Porosity	0.95	Length (m)	6.000		

Node Crates. Plot 4 Carpark Storage Structure

Base Inf Coefficient (m/hr)	0.00000	Invert Level (m)	100.792	Slope (1:X)	1000.0
Side Inf Coefficient (m/hr)	0.00000	Time to half empty (mins)		Depth (m)	0.400
Safety Factor	2.0	Width (m)	3.500	Inf Depth (m)	
Porosity	0.95	Length (m)	10.000		

Results for 1 year Critical Storm Duration. Lowest mass balance: 99.41%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute winter	CP1	13	101.271	0.075	0.8	0.0212	0.0000	OK
15 minute winter	CP2	13	101.269	0.041	1.5	0.0116	0.0000	OK
15 minute winter	CP3	14	101.268	0.080	2.5	0.0227	0.0000	OK
15 minute winter	CP4	13	101.268	0.129	2.8	0.0365	0.0000	OK
15 minute winter	CP5	13	101.267	0.191	2.4	0.0516	0.0000	SURCHARGED
15 minute winter	CP6	10	101.127	0.021	0.6	0.0059	0.0000	OK
15 minute winter	CP7	11	101.058	0.046	2.8	0.0131	0.0000	OK
15 minute winter	CP8	11	101.029	0.063	3.2	0.0179	0.0000	OK
15 minute winter	CP9	10	101.119	0.038	2.1	0.0109	0.0000	OK
15 minute winter	CP10	10	101.163	0.032	1.4	0.0092	0.0000	OK
15 minute winter	CP11	11	101.097	0.055	3.8	0.0156	0.0000	OK
15 minute winter	CP12	11	101.025	0.082	7.0	0.0233	0.0000	OK
15 minute winter	CP13	11	100.985	0.083	7.8	0.0234	0.0000	OK
15 minute winter	CP14	11	100.924	0.100	10.8	0.0270	0.0000	OK
240 minute winter	CP15 Control	168	100.909	0.132	2.8	0.1488	0.0000	OK
240 minute winter	Outfall	168	100.701	0.025	0.9	0.0000	0.0000	OK
60 minute winter	S1	38	101.434	0.009	0.1	0.0014	0.0000	OK
30 minute summer	S2	18	101.382	0.020	0.5	0.0032	0.0000	OK
15 minute winter	S3	11	101.347	0.025	0.8	0.0040	0.0000	OK
15 minute winter	S4	11	101.284	0.030	1.1	0.0048	0.0000	OK
15 minute summer	S5	10	101.229	0.025	0.8	0.0039	0.0000	OK
15 minute winter	S6	11	101.093	0.027	0.9	0.0042	0.0000	OK
15 minute winter	CP14A	11	100.924	0.030	1.6	0.0082	0.0000	OK
15 minute winter	CP10A	10	101.244	0.029	1.0	0.0078	0.0000	OK
15 minute winter	S7	11	101.452	0.023	0.7	0.0037	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 winter	CP1	CP1 - CP4	CP4	0.4	0.135	0.031	0.1067	
15 minute winter	CP2	CP2 - CP3	CP3	1.5	0.436	0.104	0.0401	
15 minute winter	CP3	CP3 - CP4	CP4	2.4	0.475	0.166	0.0938	
15 minute winter	CP4	CP4 - CP5	CP5	2.0	0.325	0.137	0.1592	
15 minute winter	CP5	CP5 - CP7	CP7	2.0	0.527	0.140	0.0386	
15 minute winter	CP6	CP6 - CP7	CP7	0.6	0.392	0.039	0.0096	
15 minute winter	CP7	CP7 - CP8	CP8	2.8	0.520	0.196	0.0403	
15 minute winter	CP8	CP8 - CP12	CP12	3.2	0.476	0.223	0.0295	
15 minute winter	CP9	CP9 - CP11	CP11	2.0	0.434	0.140	0.0278	
15 minute winter	CP10	CP10 - CP11	CP11	1.4	0.501	0.094	0.0161	
15 minute winter	CP11	CP11 - CP12	CP12	3.8	0.671	0.263	0.0414	
15 minute winter	CP12	CP12 - CP13	CP13	7.0	0.708	0.485	0.0608	
15 minute winter	CP13	CP13 - CP14	CP14	7.7	0.688	0.534	0.1318	
15 minute winter	CP14	CP14 - CP15	CP15 Control	10.7	0.997	0.741	0.0750	
240 minute winter	CP15 Control	CP15 - CP16	CP16	0.9	0.433	0.061	0.0263	
60 minute winter	S1	S1-S2	S2	0.1	0.184	0.017	0.0035	
30 minute summer	S2	S2-S3	S3	0.5	0.402	0.082	0.0050	
15 minute winter	S3	S3 - S4	S4	0.8	0.455	0.132	0.0120	
15 minute winter	S4	S4 - CP9A	CP9A	1.1	0.567	0.182	0.0085	
15 minute summer	S5	S5 - S6	S6	0.8	0.511	0.133	0.0218	
15 minute winter	S6	S6 - S7	CP14A	0.9	0.548	0.149	0.0202	
15 minute winter	CP14A	CP14A - CP14	CP14	1.6	0.375	0.091	0.0523	
15 minute winter	CP10A	CP10A - CP10	CP10	1.0	0.542	0.161	0.0062	
15 minute winter	S7	S7 - CP2A	CP2A	0.7	0.511	0.116	0.0198	

Results for 1 year Critical Storm Duration. Lowest mass balance: 99.41%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute winter	CP2A	13	101.271	0.036	1.1	0.0096	0.0000	OK
15 minute winter	S8	11	101.158	0.023	0.7	0.0037	0.0000	OK
15 minute winter	S9	10	101.044	0.032	1.3	0.0050	0.0000	OK
15 minute winter	CP14B	11	100.924	0.085	1.5	0.0230	0.0000	OK
15 minute winter	S10	11	101.087	0.015	0.3	0.0024	0.0000	OK
15 minute winter	S11	11	101.023	0.018	0.4	0.0029	0.0000	OK
15 minute winter	CP13A	11	100.985	0.068	0.8	0.0183	0.0000	OK
240 minute winter	Crates. Plot 3	168	100.909	0.117	1.0	3.5616	0.0000	OK
240 minute winter	CP16	168	100.718	0.027	0.9	0.0072	0.0000	OK
240 minute winter	Crates. Plot 4	168	100.909	0.117	1.1	3.7112	0.0000	OK
15 minute winter	CP3A	10	101.301	0.021	0.6	0.0059	0.0000	OK
15 minute winter	CP9A	11	101.199	0.039	1.5	0.0106	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 winter	CP2A	CP2A - CP2	CP2	1.1	0.388	0.076	0.0038	
15 minute winter	S8	S8 - S9	S9	0.7	0.418	0.116	0.0214	
15 minute winter	S9	S9 - CP14B	CP14B	1.2	0.598	0.206	0.0277	
15 minute winter	CP14B	CP14B - CP14	CP14	1.5	0.269	0.086	0.0179	
15 minute winter	S10	S10 - S11	S11	0.3	0.354	0.050	0.0057	
15 minute winter	S11	S11 - CP13A	CP13A	0.4	0.423	0.066	0.0036	
15 minute winter	CP13A	CP13A - CP13	CP13	0.8	0.324	0.044	0.0137	
240 minute winter	Crates. Plot 3	Crate (P3) - CP15	CP15 Control	-1.0	-0.449	-0.072	0.0350	
240 minute winter	CP16	CP16 - Outfall	Outfall	0.9	0.437	0.061	0.0045	11.5
240 minute winter	Crates. Plot 4	Crates (P4) - CP15	CP15 Control	-1.1	-0.297	-0.078	0.0343	
15 minute winter	CP3A	CP3A - CP3	CP3	0.6	0.393	0.039	0.0109	
15 minute winter	CP9A	CP9A - CP9	CP9	1.5	0.541	0.305	0.0219	

Results for 2 year Critical Storm Duration. Lowest mass balance: 99.41%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute winter	CP1	14	101.311	0.115	1.1	0.0326	0.0000	OK
15 minute winter	CP2	14	101.312	0.084	1.9	0.0236	0.0000	OK
15 minute winter	CP3	14	101.311	0.123	3.1	0.0349	0.0000	OK
15 minute winter	CP4	14	101.310	0.171	3.2	0.0485	0.0000	SURCHARGED
15 minute winter	CP5	13	101.310	0.234	2.7	0.0632	0.0000	SURCHARGED
15 minute winter	CP6	11	101.129	0.023	0.7	0.0065	0.0000	OK
15 minute winter	CP7	11	101.062	0.050	3.3	0.0141	0.0000	OK
15 minute winter	CP8	11	101.042	0.076	3.8	0.0214	0.0000	OK
15 minute winter	CP9	11	101.126	0.045	2.6	0.0127	0.0000	OK
15 minute winter	CP10	10	101.168	0.037	1.8	0.0105	0.0000	OK
15 minute winter	CP11	11	101.106	0.064	4.9	0.0180	0.0000	OK
15 minute winter	CP12	11	101.038	0.095	8.6	0.0269	0.0000	OK
15 minute winter	CP13	11	100.998	0.096	9.6	0.0272	0.0000	OK
60 minute winter	CP14	60	100.945	0.121	8.4	0.0328	0.0000	OK
60 minute winter	CP15 Control	60	100.945	0.168	8.4	0.1902	0.0000	SURCHARGED
60 minute winter	Outfall	60	100.703	0.027	1.0	0.0000	0.0000	OK
15 minute winter	S1	11	101.438	0.012	0.2	0.0020	0.0000	OK
15 minute summer	S2	11	101.386	0.024	0.7	0.0038	0.0000	OK
15 minute winter	S3	10	101.351	0.029	1.1	0.0046	0.0000	OK
15 minute winter	S4	10	101.289	0.034	1.4	0.0055	0.0000	OK
15 minute winter	S5	10	101.233	0.029	1.1	0.0046	0.0000	OK
15 minute winter	S6	11	101.098	0.032	1.3	0.0050	0.0000	OK
60 minute winter	CP14A	60	100.945	0.052	1.2	0.0141	0.0000	OK
15 minute winter	CP10A	10	101.248	0.033	1.3	0.0090	0.0000	OK
15 minute winter	S7	11	101.456	0.027	0.9	0.0042	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 winter	CP1	CP1 - CP4	CP4	-0.6	0.137	-0.043	0.1378	
15 minute winter	CP2	CP2 - CP3	CP3	1.9	0.444	0.131	0.0761	
15 minute winter	CP3	CP3 - CP4	CP4	2.7	0.473	0.187	0.1211	
15 minute winter	CP4	CP4 - CP5	CP5	2.2	0.300	0.149	0.1663	
15 minute winter	CP5	CP5 - CP7	CP7	2.3	0.541	0.158	0.0424	
15 minute winter	CP6	CP6 - CP7	CP7	0.7	0.418	0.048	0.0111	
15 minute winter	CP7	CP7 - CP8	CP8	3.3	0.532	0.228	0.0485	
15 minute winter	CP8	CP8 - CP12	CP12	3.8	0.498	0.261	0.0361	
15 minute winter	CP9	CP9 - CP11	CP11	2.6	0.457	0.181	0.0341	
15 minute winter	CP10	CP10 - CP11	CP11	1.8	0.538	0.122	0.0194	
15 minute winter	CP11	CP11 - CP12	CP12	4.9	0.715	0.338	0.0499	
15 minute winter	CP12	CP12 - CP13	CP13	8.6	0.726	0.594	0.0725	
15 minute winter	CP13	CP13 - CP14	CP14	9.5	0.717	0.657	0.1554	
60 minute winter	CP14	CP14 - CP15	CP15 Control	8.4	0.734	0.580	0.1150	
60 minute winter	CP15 Control	CP15 - CP16	CP16	1.0	0.450	0.070	0.0291	
15 minute winter	S1	S1-S2	S2	0.2	0.205	0.033	0.0063	
15 minute summer	S2	S2-S3	S3	0.7	0.433	0.116	0.0065	
15 minute winter	S3	S3 - S4	S4	1.0	0.491	0.173	0.0145	
15 minute winter	S4	S4 - CP9A	CP9A	1.4	0.602	0.228	0.0101	
15 minute winter	S5	S5 - S6	S6	1.1	0.544	0.178	0.0273	
15 minute winter	S6	S6 - S7	CP14A	1.3	0.601	0.208	0.0257	
60 minute winter	CP14A	CP14A - CP14	CP14	1.2	0.364	0.067	0.0723	
15 minute winter	CP10A	CP10A - CP10	CP10	1.3	0.582	0.211	0.0075	
15 minute winter	S7	S7 - CP2A	CP2A	0.9	0.549	0.149	0.0237	

Results for 2 year Critical Storm Duration. Lowest mass balance: 99.41%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute winter	CP2A	14	101.312	0.077	1.4	0.0207	0.0000	OK
15 minute winter	S8	11	101.161	0.026	0.9	0.0041	0.0000	OK
15 minute winter	S9	10	101.047	0.035	1.6	0.0056	0.0000	OK
60 minute winter	CP14B	58	100.945	0.106	1.1	0.0287	0.0000	OK
15 minute winter	S10	10	101.089	0.017	0.4	0.0027	0.0000	OK
15 minute winter	S11	10	101.026	0.021	0.6	0.0033	0.0000	OK
15 minute winter	CP13A	11	100.998	0.081	1.1	0.0219	0.0000	OK
60 minute winter	Crates. Plot 3	60	100.945	0.153	3.6	4.7072	0.0000	SURCHARGED
60 minute winter	CP16	60	100.720	0.029	1.0	0.0078	0.0000	OK
60 minute winter	Crates. Plot 4	60	100.945	0.153	3.9	4.9263	0.0000	SURCHARGED
15 minute winter	CP3A	14	101.314	0.034	0.7	0.0096	0.0000	OK
15 minute winter	CP9A	11	101.205	0.045	1.9	0.0121	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 winter	CP2A	CP2A - CP2	CP2	1.4	0.413	0.096	0.0101	
15 minute winter	S8	S8 - S9	S9	0.9	0.444	0.149	0.0251	
15 minute winter	S9	S9 - CP14B	CP14B	1.6	0.617	0.267	0.0394	
60 minute winter	CP14B	CP14B - CP14	CP14	1.1	0.231	0.063	0.0225	
15 minute winter	S10	S10 - S11	S11	0.4	0.376	0.060	0.0068	
15 minute winter	S11	S11 - CP13A	CP13A	0.6	0.440	0.092	0.0061	
15 minute winter	CP13A	CP13A - CP13	CP13	1.0	0.352	0.058	0.0168	
60 minute winter	Crates. Plot 3	Crate (P3) - CP15	CP15 Control	-3.6	-0.480	-0.252	0.0397	
60 minute winter	CP16	CP16 - Outfall	Outfall	1.0	0.454	0.070	0.0050	11.9
60 minute winter	Crates. Plot 4	Crates (P4) - CP15	CP15 Control	-3.9	-0.523	-0.264	0.0389	
15 minute winter	CP3A	CP3A - CP3	CP3	0.7	0.412	0.048	0.0360	
15 minute winter	CP9A	CP9A - CP9	CP9	1.9	0.576	0.387	0.0261	

Results for 30 year Critical Storm Duration. Lowest mass balance: 99.41%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
30 minute winter	CP1	23	101.519	0.323	0.8	0.0915	0.0000	SURCHARGED
30 minute winter	CP2	23	101.521	0.293	2.4	0.0830	0.0000	SURCHARGED
30 minute winter	CP3	23	101.521	0.333	3.3	0.0942	0.0000	SURCHARGED
30 minute winter	CP4	23	101.519	0.380	3.3	0.1076	0.0000	FLOOD RISK
30 minute winter	CP5	23	101.516	0.440	3.5	0.1188	0.0000	FLOOD RISK
15 minute winter	CP6	13	101.176	0.070	1.4	0.0199	0.0000	OK
15 minute winter	CP7	13	101.176	0.164	5.0	0.0463	0.0000	SURCHARGED
15 minute winter	CP8	13	101.169	0.203	5.7	0.0573	0.0000	SURCHARGED
15 minute winter	CP9	12	101.183	0.102	5.1	0.0288	0.0000	OK
15 minute winter	CP10	11	101.184	0.053	3.4	0.0149	0.0000	OK
15 minute winter	CP11	12	101.180	0.138	9.3	0.0389	0.0000	OK
15 minute winter	CP12	13	101.163	0.220	12.6	0.0622	0.0000	SURCHARGED
15 minute winter	CP13	13	101.119	0.217	13.7	0.0614	0.0000	SURCHARGED
120 minute winter	CP14	116	101.107	0.283	8.4	0.0763	0.0000	SURCHARGED
120 minute winter	CP15 Control	116	101.106	0.329	8.3	0.3718	0.0000	SURCHARGED
120 minute winter	Outfall	118	100.708	0.032	1.5	0.0000	0.0000	OK
15 minute summer	S1	12	101.440	0.015	0.3	0.0024	0.0000	OK
15 minute winter	S2	11	101.396	0.034	1.3	0.0053	0.0000	OK
15 minute winter	S3	11	101.363	0.041	2.0	0.0066	0.0000	OK
15 minute winter	S4	11	101.305	0.051	2.7	0.0080	0.0000	OK
15 minute winter	S5	10	101.245	0.041	2.1	0.0066	0.0000	OK
15 minute winter	S6	10	101.110	0.044	2.4	0.0069	0.0000	OK
120 minute winter	CP14A	116	101.107	0.214	1.2	0.0577	0.0000	SURCHARGED
15 minute winter	CP10A	10	101.263	0.048	2.4	0.0129	0.0000	OK
30 minute winter	S7	23	101.522	0.093	1.3	0.0148	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 winter	CP1	CP1 - CP4	CP4	0.5	0.141	0.032	0.1510	
30 minute winter	CP2	CP2 - CP3	CP3	1.9	0.413	0.131	0.1049	
30 minute winter	CP3	CP3 - CP4	CP4	2.3	0.429	0.162	0.1289	
30 minute winter	CP4	CP4 - CP5	CP5	2.9	0.302	0.200	0.1663	
30 minute winter	CP5	CP5 - CP7	CP7	3.4	0.611	0.235	0.1185	
15 minute winter	CP6	CP6 - CP7	CP7	1.4	0.491	0.097	0.0743	
15 minute winter	CP7	CP7 - CP8	CP8	5.4	0.572	0.375	0.1219	
15 minute winter	CP8	CP8 - CP12	CP12	6.2	0.575	0.430	0.0614	
15 minute winter	CP9	CP9 - CP11	CP11	5.0	0.489	0.345	0.0876	
15 minute winter	CP10	CP10 - CP11	CP11	3.4	0.627	0.235	0.0466	
15 minute winter	CP11	CP11 - CP12	CP12	9.1	0.796	0.627	0.1261	
15 minute winter	CP12	CP12 - CP13	CP13	12.4	0.750	0.855	0.1079	
15 minute winter	CP13	CP13 - CP14	CP14	13.8	0.781	0.952	0.2072	
120 minute winter	CP14	CP14 - CP15	CP15 Control	8.3	0.565	0.572	0.1233	
120 minute winter	CP15 Control	CP15 - CP16	CP16	1.5	0.497	0.102	0.0382	
15 minute summer	S1	S1-S2	S2	0.3	0.220	0.050	0.0095	
15 minute winter	S2	S2-S3	S3	1.3	0.486	0.215	0.0108	
15 minute winter	S3	S3 - S4	S4	2.0	0.570	0.331	0.0239	
15 minute winter	S4	S4 - CP9A	CP9A	2.7	0.714	0.447	0.0167	
15 minute winter	S5	S5 - S6	S6	2.1	0.658	0.344	0.0436	
15 minute winter	S6	S6 - S7	CP14A	2.4	0.682	0.393	0.0638	
120 minute winter	CP14A	CP14A - CP14	CP14	1.1	0.360	0.063	0.1228	
15 minute winter	CP10A	CP10A - CP10	CP10	2.4	0.683	0.394	0.0120	
30 minute winter	S7	S7 - CP2A	CP2A	1.3	0.574	0.215	0.1113	

Results for 30 year Critical Storm Duration. Lowest mass balance: 99.41%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
30 minute winter	CP2A	23	101.521	0.286	2.1	0.0773	0.0000	SURCHARGED
15 minute winter	S8	10	101.171	0.036	1.7	0.0057	0.0000	OK
120 minute winter	S9	116	101.107	0.095	0.9	0.0151	0.0000	OK
120 minute winter	CP14B	116	101.107	0.268	1.1	0.0722	0.0000	SURCHARGED
15 minute winter	S10	13	101.121	0.049	0.7	0.0078	0.0000	OK
15 minute winter	S11	13	101.120	0.115	1.0	0.0183	0.0000	SURCHARGED
15 minute winter	CP13A	13	101.119	0.202	1.8	0.0546	0.0000	SURCHARGED
120 minute winter	Crates. Plot 3	116	101.106	0.314	3.4	9.7431	0.0000	SURCHARGED
120 minute winter	CP16	118	100.726	0.035	1.5	0.0094	0.0000	OK
120 minute winter	Crates. Plot 4	116	101.106	0.314	3.6	10.2673	0.0000	SURCHARGED
30 minute winter	CP3A	23	101.521	0.241	1.1	0.0682	0.0000	SURCHARGED
15 minute winter	CP9A	11	101.229	0.069	3.7	0.0186	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 winter	CP2A	CP2A - CP2	CP2	1.6	0.412	0.110	0.0186	
15 minute winter	S8	S8 - S9	S9	1.7	0.521	0.278	0.0398	
120 minute winter	S9	S9 - CP14B	CP14B	0.9	0.510	0.149	0.0954	
120 minute winter	CP14B	CP14B - CP14	CP14	1.0	0.194	0.059	0.0277	
15 minute winter	S10	S10 - S11	S11	0.7	0.437	0.116	0.0390	
15 minute winter	S11	S11 - CP13A	CP13A	1.0	0.448	0.163	0.0296	
15 minute winter	CP13A	CP13A - CP13	CP13	1.6	0.365	0.092	0.0273	
120 minute winter	Crates. Plot 3	Crate (P3) - CP15	CP15 Control	-3.4	-0.455	-0.238	0.0397	
120 minute winter	CP16	CP16 - Outfall	Outfall	1.5	0.503	0.102	0.0065	23.0
120 minute winter	Crates. Plot 4	Crates (P4) - CP15	CP15 Control	-3.6	-0.443	-0.249	0.0389	
30 minute winter	CP3A	CP3A - CP3	CP3	0.9	0.393	0.060	0.1100	
15 minute winter	CP9A	CP9A - CP9	CP9	3.7	0.681	0.753	0.0458	

Results for 100 year Critical Storm Duration. Lowest mass balance: 99.41%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
30 minute winter	CP1	24	101.662	0.466	1.0	0.1319	0.0000	FLOOD RISK
30 minute winter	CP2	24	101.664	0.436	2.9	0.1235	0.0000	SURCHARGED
30 minute winter	CP3	24	101.664	0.476	3.4	0.1346	0.0000	FLOOD RISK
30 minute winter	CP4	24	101.662	0.523	3.6	0.1480	0.0000	FLOOD RISK
30 minute winter	CP5	24	101.658	0.582	3.8	0.1572	0.0000	FLOOD RISK
15 minute winter	CP6	13	101.265	0.159	1.8	0.0449	0.0000	SURCHARGED
15 minute winter	CP7	13	101.265	0.253	5.0	0.0715	0.0000	SURCHARGED
15 minute winter	CP8	13	101.257	0.291	5.8	0.0824	0.0000	SURCHARGED
15 minute winter	CP9	13	101.279	0.198	6.1	0.0559	0.0000	SURCHARGED
15 minute winter	CP10	13	101.275	0.144	4.4	0.0407	0.0000	OK
15 minute winter	CP11	13	101.273	0.231	11.0	0.0653	0.0000	SURCHARGED
15 minute winter	CP12	13	101.251	0.308	14.2	0.0871	0.0000	SURCHARGED
180 minute winter	CP13	168	101.236	0.334	6.2	0.0946	0.0000	SURCHARGED
180 minute winter	CP14	172	101.236	0.412	8.1	0.1112	0.0000	SURCHARGED
180 minute winter	CP15 Control	172	101.235	0.458	8.0	0.5177	0.0000	SURCHARGED
180 minute winter	Outfall	172	100.711	0.035	1.8	0.0000	0.0000	OK
15 minute winter	S1	12	101.443	0.017	0.4	0.0028	0.0000	OK
15 minute winter	S2	11	101.401	0.039	1.7	0.0063	0.0000	OK
15 minute winter	S3	10	101.370	0.048	2.6	0.0077	0.0000	OK
15 minute winter	S4	12	101.322	0.068	3.5	0.0108	0.0000	OK
15 minute winter	S5	10	101.252	0.048	2.7	0.0076	0.0000	OK
180 minute winter	S6	172	101.236	0.170	0.7	0.0270	0.0000	SURCHARGED
180 minute winter	CP14A	172	101.236	0.343	1.2	0.0925	0.0000	SURCHARGED
15 minute winter	CP10A	13	101.277	0.062	3.1	0.0168	0.0000	OK
30 minute winter	S7	24	101.667	0.238	1.7	0.0378	0.0000	SURCHARGED

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 winter	CP1	CP1 - CP4	CP4	0.4	0.129	0.030	0.1510	
30 minute winter	CP2	CP2 - CP3	CP3	2.1	0.416	0.148	0.1049	
30 minute winter	CP3	CP3 - CP4	CP4	2.5	0.444	0.175	0.1289	
30 minute winter	CP4	CP4 - CP5	CP5	3.2	0.325	0.218	0.1663	
30 minute winter	CP5	CP5 - CP7	CP7	3.8	0.475	0.265	0.1683	
15 minute winter	CP6	CP6 - CP7	CP7	1.9	0.495	0.130	0.1166	
15 minute winter	CP7	CP7 - CP8	CP8	5.6	0.525	0.387	0.1219	
15 minute winter	CP8	CP8 - CP12	CP12	6.4	0.385	0.440	0.0614	
15 minute winter	CP9	CP9 - CP11	CP11	5.6	0.489	0.389	0.1042	
15 minute winter	CP10	CP10 - CP11	CP11	4.1	0.631	0.283	0.1039	
15 minute winter	CP11	CP11 - CP12	CP12	10.2	0.803	0.707	0.1287	
15 minute winter	CP12	CP12 - CP13	CP13	13.9	0.788	0.959	0.1079	
180 minute winter	CP13	CP13 - CP14	CP14	6.0	0.539	0.416	0.2072	
180 minute winter	CP14	CP14 - CP15	CP15 Control	8.0	0.530	0.555	0.1233	
180 minute winter	CP15 Control	CP15 - CP16	CP16	1.8	0.521	0.122	0.0436	
15 minute winter	S1	S1-S2	S2	0.4	0.231	0.066	0.0119	
15 minute winter	S2	S2-S3	S3	1.7	0.528	0.282	0.0133	
15 minute winter	S3	S3 - S4	S4	2.6	0.605	0.428	0.0303	
15 minute winter	S4	S4 - CP9A	CP9A	3.4	0.755	0.570	0.0297	
15 minute winter	S5	S5 - S6	S6	2.7	0.701	0.441	0.0524	
180 minute winter	S6	S6 - S7	CP14A	0.7	0.488	0.116	0.0964	
180 minute winter	CP14A	CP14A - CP14	CP14	1.1	0.314	0.062	0.1228	
15 minute winter	CP10A	CP10A - CP10	CP10	3.1	0.727	0.510	0.0219	
30 minute winter	S7	S7 - CP2A	CP2A	1.6	0.590	0.270	0.1129	

Results for 100 year Critical Storm Duration. Lowest mass balance: 99.41%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
30 minute winter	CP2A	24	101.665	0.430	2.6	0.1160	0.0000	SURCHARGED
180 minute winter	S8	172	101.236	0.101	0.5	0.0161	0.0000	SURCHARGED
180 minute winter	S9	172	101.236	0.224	0.9	0.0356	0.0000	SURCHARGED
180 minute winter	CP14B	172	101.236	0.397	1.1	0.1071	0.0000	SURCHARGED
180 minute winter	S10	168	101.236	0.164	0.2	0.0261	0.0000	SURCHARGED
180 minute winter	S11	168	101.236	0.231	0.3	0.0368	0.0000	SURCHARGED
180 minute winter	CP13A	168	101.236	0.319	0.6	0.0862	0.0000	SURCHARGED
180 minute winter	Crates. Plot 3	172	101.235	0.443	3.3	12.4619	0.0000	FLOOD RISK
180 minute winter	CP16	172	100.729	0.038	1.8	0.0103	0.0000	OK
180 minute winter	Crates. Plot 4	172	101.235	0.443	3.5	13.1509	0.0000	FLOOD RISK
30 minute winter	CP3A	24	101.664	0.384	1.4	0.1086	0.0000	FLOOD RISK
15 minute winter	CP9A	12	101.314	0.154	4.7	0.0415	0.0000	SURCHARGED

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 winter	CP2A	CP2A - CP2	CP2	1.9	0.394	0.129	0.0186	
180 minute winter	S8	S8 - S9	S9	0.5	0.374	0.083	0.0964	
180 minute winter	S9	S9 - CP14B	CP14B	0.9	0.485	0.149	0.0964	
180 minute winter	CP14B	CP14B - CP14	CP14	1.0	0.199	0.058	0.0277	
180 minute winter	S10	S10 - S11	S11	0.2	0.359	0.033	0.0526	
180 minute winter	S11	S11 - CP13A	CP13A	0.3	0.395	0.050	0.0296	
180 minute winter	CP13A	CP13A - CP13	CP13	0.6	0.092	0.033	0.0273	
180 minute winter	Crates. Plot 3	Crate (P3) - CP15	CP15 Control	-3.3	-0.465	-0.227	0.0397	
180 minute winter	CP16	CP16 - Outfall	Outfall	1.8	0.528	0.122	0.0074	31.5
180 minute winter	Crates. Plot 4	Crates (P4) - CP15	CP15 Control	-3.5	-0.334	-0.238	0.0389	
30 minute winter	CP3A	CP3A - CP3	CP3	0.8	0.405	0.054	0.1100	
15 minute winter	CP9A	CP9A - CP9	CP9	4.3	0.702	0.873	0.0619	

Results for 100 year +40% CC Critical Storm Duration. Lowest mass balance: 99.41%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute winter	CP1	13	101.766	0.570	1.9	0.1614	0.0000	FLOOD RISK
15 minute winter	CP2	13	101.789	0.561	4.3	0.1586	0.0000	FLOOD RISK
15 minute winter	CP3	13	101.783	0.595	7.0	0.1684	0.0000	FLOOD RISK
15 minute winter	CP4	13	101.766	0.627	9.4	0.1774	0.0000	FLOOD RISK
30 minute winter	CP5	19	101.730	0.654	10.3	0.1766	1.9493	FLOOD
120 minute winter	CP6	92	101.517	0.411	0.8	0.1164	0.0000	FLOOD RISK
120 minute winter	CP7	92	101.517	0.505	4.2	0.1430	0.0000	FLOOD RISK
120 minute winter	CP8	92	101.515	0.549	4.6	0.1555	0.0000	FLOOD RISK
120 minute winter	CP9	92	101.515	0.434	3.0	0.1228	0.0000	FLOOD RISK
120 minute winter	CP10	92	101.515	0.384	2.0	0.1086	0.0000	FLOOD RISK
120 minute winter	CP11	92	101.515	0.473	5.3	0.1338	0.0000	FLOOD RISK
120 minute winter	CP12	92	101.514	0.571	9.1	0.1616	0.0000	FLOOD RISK
120 minute winter	CP13	92	101.510	0.608	9.7	0.1719	0.0000	FLOOD RISK
180 minute winter	CP14	128	101.501	0.677	9.9	0.1828	0.0000	FLOOD RISK
180 minute winter	CP15 Control	128	101.491	0.714	9.8	0.8079	0.0000	FLOOD RISK
180 minute winter	Outfall	128	100.716	0.040	2.2	0.0000	0.0000	OK
180 minute winter	S1	128	101.517	0.091	0.2	0.0145	0.0000	OK
180 minute winter	S2	128	101.516	0.154	0.5	0.0246	0.0000	SURCHARGED
180 minute winter	S3	128	101.516	0.194	0.8	0.0309	0.0000	SURCHARGED
120 minute winter	S4	92	101.516	0.262	1.6	0.0417	0.0000	SURCHARGED
180 minute winter	S5	128	101.503	0.299	0.9	0.0475	0.0000	FLOOD RISK
180 minute winter	S6	128	101.502	0.436	1.0	0.0693	0.0000	FLOOD RISK
180 minute winter	CP14A	128	101.501	0.608	1.6	0.1642	0.0000	FLOOD RISK
120 minute winter	CP10A	92	101.515	0.300	1.4	0.0810	0.0000	FLOOD RISK
15 minute winter	S7	13	101.808	0.379	3.1	0.0602	0.0000	FLOOD RISK

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 winter	CP1	CP1 - CP4	CP4	1.4	0.151	0.096	0.1510	
15 minute winter	CP2	CP2 - CP3	CP3	4.4	0.474	0.303	0.1049	
15 minute winter	CP3	CP3 - CP4	CP4	7.1	0.510	0.490	0.1289	
15 minute winter	CP4	CP4 - CP5	CP5	9.5	0.539	0.657	0.1663	
30 minute winter	CP5	CP5 - CP7	CP7	3.7	0.479	0.254	0.1683	
120 minute winter	CP6	CP6 - CP7	CP7	0.7	0.415	0.048	0.1166	
120 minute winter	CP7	CP7 - CP8	CP8	4.1	0.511	0.280	0.1219	
120 minute winter	CP8	CP8 - CP12	CP12	4.4	0.411	0.308	0.0614	
120 minute winter	CP9	CP9 - CP11	CP11	2.8	0.447	0.195	0.1042	
120 minute winter	CP10	CP10 - CP11	CP11	2.0	0.533	0.138	0.1046	
120 minute winter	CP11	CP11 - CP12	CP12	4.9	0.688	0.340	0.1287	
120 minute winter	CP12	CP12 - CP13	CP13	8.9	0.726	0.618	0.1079	
120 minute winter	CP13	CP13 - CP14	CP14	9.5	0.612	0.659	0.2072	
180 minute winter	CP14	CP14 - CP15	CP15 Control	9.8	0.590	0.677	0.1233	
180 minute winter	CP15 Control	CP15 - CP16	CP16	2.2	0.553	0.154	0.0518	
180 minute winter	S1	S1-S2	S2	-0.1	0.186	-0.018	0.0483	
180 minute winter	S2	S2-S3	S3	0.5	0.400	0.083	0.0316	
180 minute winter	S3	S3 - S4	S4	0.8	0.469	0.133	0.0533	
120 minute winter	S4	S4 - CP9A	CP9A	1.6	0.626	0.271	0.0345	
180 minute winter	S5	S5 - S6	S6	0.9	0.511	0.149	0.1081	
180 minute winter	S6	S6 - S7	CP14A	0.9	0.506	0.147	0.0964	
180 minute winter	CP14A	CP14A - CP14	CP14	1.5	0.335	0.083	0.1228	
120 minute winter	CP10A	CP10A - CP10	CP10	1.4	0.598	0.237	0.0270	
15 minute winter	S7	S7 - CP2A	CP2A	2.4	0.642	0.393	0.1129	

Results for 100 year +40% CC Critical Storm Duration. Lowest mass balance: 99.41%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute winter	CP2A	13	101.790	0.555	3.9	0.1498	0.0000	FLOOD RISK
180 minute winter	S8	128	101.502	0.367	0.7	0.0584	0.0000	FLOOD RISK
180 minute winter	S9	128	101.502	0.490	1.3	0.0779	0.0000	FLOOD RISK
180 minute winter	CP14B	128	101.501	0.662	1.5	0.1787	0.0000	FLOOD RISK
120 minute winter	S10	92	101.510	0.438	0.5	0.0696	0.0000	FLOOD RISK
120 minute winter	S11	92	101.510	0.505	0.6	0.0802	0.0000	FLOOD RISK
120 minute winter	CP13A	92	101.510	0.593	1.0	0.1600	0.0000	FLOOD RISK
120 minute winter	Crates. Plot 3	92	101.491	0.699	5.5	12.4619	0.0000	FLOOD RISK
180 minute winter	CP16	128	100.734	0.043	2.2	0.0117	0.0000	OK
180 minute winter	Crates. Plot 4	124	101.490	0.698	4.2	13.1509	4.4146	FLOOD
15 minute winter	CP3A	13	101.784	0.504	2.5	0.1425	0.0000	FLOOD RISK
120 minute winter	CP9A	92	101.516	0.356	2.2	0.0961	0.0000	SURCHARGED

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 winter	CP2A	CP2A - CP2	CP2	3.2	0.408	0.221	0.0186	
180 minute winter	S8	S8 - S9	S9	0.7	0.391	0.116	0.0964	
180 minute winter	S9	S9 - CP14B	CP14B	1.2	0.456	0.194	0.0964	
180 minute winter	CP14B	CP14B - CP14	CP14	1.3	0.187	0.077	0.0277	
120 minute winter	S10	S10 - S11	S11	0.4	0.359	0.063	0.0526	
120 minute winter	S11	S11 - CP13A	CP13A	-0.5	0.414	-0.089	0.0296	
120 minute winter	CP13A	CP13A - CP13	CP13	0.7	0.221	0.042	0.0273	
120 minute winter	Crates. Plot 3	Crate (P3) - CP15	CP15 Control	-5.5	-0.553	-0.381	0.0397	
180 minute winter	CP16	CP16 - Outfall	Outfall	2.2	0.562	0.154	0.0088	38.4
180 minute winter	Crates. Plot 4	Crates (P4) - CP15	CP15 Control	-4.2	-0.441	-0.291	0.0389	
15 minute winter	CP3A	CP3A - CP3	CP3	1.7	0.450	0.115	0.1100	
120 minute winter	CP9A	CP9A - CP9	CP9	2.2	0.591	0.449	0.0619	