

Design Settings

Rainfall Methodology	FSR	Maximum Time of Concentration (mins)	30.00
Return Period (years)	100	Maximum Rainfall (mm/hr)	50.0
Additional Flow (%)	40	Minimum Velocity (m/s)	1.00
FSR Region	England and Wales	Connection Type	Level Soffits
M5-60 (mm)	17.000	Minimum Backdrop Height (m)	0.200
Ratio-R	0.400	Preferred Cover Depth (m)	1.200
CV	1.000	Include Intermediate Ground	✓
Time of Entry (mins)	5.00	Enforce best practice design rules	x

Nodes

Name	Area (ha)	T of E (mins)	Cover Level (m)	Diameter (mm)	Width (mm)	Easting (m)	Northing (m)	Depth (m)
OU-01	0.003	5.00	64.420	350	350	388204.601	396773.900	1.000
OU-02	0.068	5.00	64.063	350	350	388193.388	396777.976	1.000
S01			64.107	600		388191.358	396781.014	1.129
OU-03	0.055	5.00	64.252	350	350	388164.599	396784.686	1.000
S03			64.291	1500		388166.728	396786.723	1.343
OU-04	0.130	5.00	64.093	350	350	388149.305	396788.915	1.000
S04			64.410	1500		388169.830	396797.996	1.924
OU-05	0.060	5.00	64.417	350	350	388157.495	396819.066	1.000
OU-06	0.030	5.00	64.592	350	350	388173.565	396817.213	1.000
S05			64.621	1500		388175.406	396818.260	2.219
S06			64.889	1500		388182.812	396845.172	2.567
S07	0.011	5.00	64.477	600		388214.211	396778.207	1.047
S08			64.403	600		388202.250	396781.488	1.350
S09			64.460	1500		388202.428	396789.026	1.482
OU-07	0.040	5.00	64.345	350	350	388197.166	396791.687	1.000
JUN-01			64.448			388201.880	396794.247	1.505
OU-08	0.017	5.00	64.159	350	350	388226.770	396791.214	1.000
S10			64.418	600		388213.783	396797.871	1.405
OU-09	0.088	5.00	64.322	350	350	388210.650	396801.817	1.000
S11	0.013	5.00	64.522	1500		388200.799	396804.528	1.954
OU-10	0.051	5.00	64.494	350	350	388215.196	396818.325	1.000
S12	0.013	5.00	64.598	1500		388205.342	396821.037	2.098
OU-11	0.019	5.00	64.802	350	350	388223.217	396846.588	1.000
S13			64.802	1500		388215.386	396857.536	2.410
OU-12	0.140	5.00	64.076	350	350	388166.406	396933.001	1.000
OU-13	0.126	5.00	64.031	350	350	388160.291	396909.984	1.000
S14			64.109	1500		388161.619	396906.443	1.453
OU-14	0.061	5.00	64.083	350	350	388154.700	396888.867	1.000
JUN-02			64.198			388157.755	396886.834	1.599
OU-15	0.087	5.00	64.232	350	350	388134.099	396812.930	1.000
S15	0.020	5.00	64.337	1500		388139.128	396813.380	1.155
OU-16	0.054	5.00	64.189	350	350	388143.485	396846.718	0.891
JUN-03			64.298			388148.482	396847.344	1.468
OU-17	0.067	5.00	64.136	350	350	388149.095	396867.801	1.000
S16			64.268	1500		388153.752	396866.521	1.787
OU-18	0.020	5.00	64.610	350	350	388162.166	396859.305	1.000
JUN-04			64.695			388168.548	396865.720	2.319
S17			64.696	1500		388188.174	396864.658	2.610
OU-19	0.066	5.00	64.800	350	350	388256.281	396929.299	1.000
S18			64.649	1500		388236.014	396932.498	1.334

Nodes

Name	Area (ha)	T of E (mins)	Cover Level (m)	Diameter (mm)	Width (mm)	Easting (m)	Northing (m)	Depth (m)
OU-20	0.105	5.00	64.507	350	350	388223.207	396917.885	1.000
OU-21	0.067	5.00	64.564	350	350	388239.483	396908.335	1.000
S19			64.604	1500		388230.077	396910.923	1.379
KO-01	0.042	5.00	64.412	350	350	388264.098	396869.487	1.000
OU-22	0.046	5.00	64.615	350	350	388265.455	396876.733	1.000
S20			64.586	1500		388261.407	396877.847	1.425
OU-23	0.049	5.00	64.573	350	350	388229.757	396871.909	1.000
OU-24	0.064	5.00	64.528	350	350	388234.620	396890.122	1.000
S21			64.576	1500		388223.821	396888.190	1.900
OU-25	0.099	5.00	64.507	350	350	388212.192	396876.626	1.000
OU-26	0.110	5.00	64.462	350	350	388217.051	396894.830	1.000
S22			64.569	1500		388208.104	396888.061	1.938
OU-27	0.090	5.00	64.473	350	350	388192.039	396926.186	1.350
S23			64.499	600		388189.987	396910.486	1.843
OU-28	0.118	5.00	64.457	350	350	388185.887	396903.148	1.000
JUN-05			64.483			388187.729	396902.281	1.861
OU-29	0.061	5.00	64.500	350	350	388181.023	396884.928	1.000
S24			64.526	1500		388182.786	396884.320	1.979
S25			64.656	1500		388192.842	396881.619	2.151
S26			64.598	1500		388191.620	396877.181	2.541
PI			64.529	600		388183.532	396879.407	2.629
S27			64.592	1800		388173.722	396882.106	3.337
TANK			64.540			388179.598	396903.460	3.370
S28			64.536	1500		388180.505	396907.460	3.384
S29			64.578	1800		388191.433	396939.763	4.028

Links

Name	US Node	DS Node	Length (m)	ks (mm) / n	US IL (m)	DS IL (m)	Fall (m)	Slope (1:X)	Dia (mm)	T of C (mins)	Rain (mm/hr)
2.000	OU-01	S08	7.944	0.600	63.420	63.053	0.367	21.6	225	5.05	50.0
5.000	OU-02	S01	3.654	0.600	63.063	62.978	0.085	43.0	300	5.03	50.0
5.001	S01	S11	25.339	0.600	62.978	62.809	0.169	150.0	300	5.35	50.0
17.000	OU-03	S03	2.947	0.600	63.252	62.948	0.304	9.7	150	5.02	50.0
17.001	S03	S04	11.692	0.600	62.948	62.870	0.078	150.0	150	5.25	50.0
16.000	OU-04	S04	22.444	0.600	63.093	62.636	0.457	49.1	300	5.17	50.0
16.001	S04	S05	21.017	0.600	62.486	62.402	0.084	250.0	450	5.53	50.0
18.000	OU-05	S05	17.929	0.600	63.417	62.627	0.790	22.7	225	5.11	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)
2.000	2.824	112.3	0.8	0.775	1.125	0.003	0.0	14	0.823
5.000	2.404	170.0	17.2	0.700	0.829	0.068	0.0	64	1.563
5.001	1.281	90.6	17.2	0.829	1.413	0.068	0.0	88	0.992
17.000	3.255	57.5	13.9	0.850	1.193	0.055	0.0	50	2.688
17.001	0.818	14.5	13.9	1.193	1.390	0.055	0.0	119	0.929
16.000	2.249	158.9	32.9	0.700	1.474	0.130	0.0	92	1.786
16.001	1.281	203.7	46.8	1.474	1.769	0.185	0.0	146	1.049
18.000	2.758	109.7	15.2	0.775	1.769	0.060	0.0	57	1.961

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)
19.000	OU-06	S05	2.118	0.600	63.592	62.786	0.806	2.6	150	5.01	50.0
16.002	S05	S06	27.912	0.600	62.402	62.322	0.080	350.0	450	5.96	50.0
16.003	S06	S17	20.210	0.600	62.322	62.264	0.058	350.0	450	6.27	50.0
1.000	S07	S08	12.403	0.600	63.430	63.128	0.302	41.1	150	5.13	50.0
1.001	S08	S09	7.540	0.600	63.053	62.978	0.075	100.0	225	5.23	50.0
1.002	S09	JUN-01	5.250	0.600	62.978	62.943	0.035	150.0	225	5.31	50.0
3.000	OU-07	JUN-01	5.364	0.600	63.345	63.121	0.224	23.9	225	5.03	50.0
1.003	JUN-01	S11	10.338	0.600	62.943	62.874	0.069	150.0	225	5.47	50.0
4.000	OU-08	S10	14.594	0.600	63.159	63.013	0.146	100.0	225	5.19	50.0
4.001	S10	S11	14.591	0.600	63.013	62.793	0.220	66.3	225	5.34	50.0
6.000	OU-09	S11	10.217	0.600	63.322	62.793	0.529	19.3	225	5.06	50.0
1.004	S11	S12	17.123	0.600	62.568	62.519	0.049	350.0	450	5.74	50.0
7.000	OU-10	S12	10.220	0.600	63.494	62.725	0.769	13.3	225	5.05	50.0
1.005	S12	S13	37.856	0.600	62.500	62.392	0.108	350.0	450	6.32	50.0
8.000	OU-11	S13	13.460	0.600	63.802	63.667	0.135	100.0	150	5.22	50.0
1.006	S13	S17	28.129	0.600	62.392	62.236	0.156	180.3	450	6.63	50.0
9.000	OU-12	S14	26.986	0.600	63.076	62.806	0.270	100.0	300	5.29	50.0
10.000	OU-13	S14	3.782	0.600	63.031	62.806	0.225	16.8	300	5.02	50.0
9.001	S14	JUN-02	19.986	0.600	62.656	62.599	0.057	350.0	450	5.59	50.0
11.000	OU-14	JUN-02	3.670	0.600	63.083	62.824	0.259	14.2	225	5.02	50.0
9.002	JUN-02	S16	20.704	0.600	62.599	62.540	0.059	350.0	450	5.91	50.0
12.000	OU-15	S15	5.049	0.600	63.232	63.182	0.050	100.0	300	5.05	50.0
12.001	S15	JUN-03	35.229	0.600	63.182	62.830	0.352	100.0	300	5.43	50.0
13.000	OU-16	JUN-03	5.036	0.600	63.298	62.980	0.318	15.8	150	5.03	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)
19.000	6.264	110.7	7.6	0.850	1.685	0.030	0.0	27	3.616
16.002	1.081	171.9	69.6	1.769	2.117	0.275	0.0	199	1.026
16.003	1.081	171.9	69.6	2.117	1.982	0.275	0.0	199	1.026
1.000	1.575	27.8	2.8	0.897	1.125	0.011	0.0	32	1.009
1.001	1.307	52.0	3.5	1.125	1.257	0.014	0.0	40	0.756
1.002	1.065	42.3	3.5	1.257	1.280	0.014	0.0	44	0.647
3.000	2.685	106.7	10.1	0.775	1.102	0.040	0.0	46	1.696
1.003	1.065	42.3	13.7	1.280	1.423	0.054	0.0	87	0.950
4.000	1.307	52.0	4.3	0.775	1.180	0.017	0.0	44	0.796
4.001	1.608	63.9	4.3	1.180	1.504	0.017	0.0	39	0.919
6.000	2.991	118.9	22.3	0.775	1.504	0.088	0.0	65	2.302
1.004	1.081	171.9	60.7	1.504	1.629	0.240	0.0	184	0.990
7.000	3.608	143.5	12.9	0.775	1.648	0.051	0.0	45	2.256
1.005	1.081	171.9	76.9	1.648	1.960	0.304	0.0	210	1.051
8.000	1.005	17.8	4.8	0.850	0.985	0.019	0.0	53	0.853
1.006	1.511	240.2	81.7	1.960	2.010	0.323	0.0	181	1.372
9.000	1.572	111.1	35.4	0.700	1.003	0.140	0.0	116	1.403
10.000	3.853	272.3	31.9	0.700	1.003	0.126	0.0	69	2.609
9.001	1.081	171.9	67.3	1.003	1.149	0.266	0.0	196	1.018
11.000	3.494	138.9	15.4	0.775	1.149	0.061	0.0	51	2.329
9.002	1.081	171.9	82.7	1.149	1.278	0.327	0.0	220	1.071
12.000	1.572	111.1	22.0	0.700	0.855	0.087	0.0	90	1.231
12.001	1.572	111.1	27.1	0.855	1.168	0.107	0.0	100	1.304
13.000	2.544	44.9	13.7	0.741	1.168	0.054	0.0	57	2.234

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)
12.002	JUN-03	S16	19.888	0.600	62.830	62.631	0.199	100.0	300	5.64	50.0
14.000	OU-17	S16	4.830	0.600	63.136	63.104	0.032	150.0	225	5.08	50.0
9.003	S16	JUN-04	14.818	0.600	62.481	62.376	0.105	140.7	450	6.06	50.0
15.000	OU-18	JUN-04	9.049	0.600	63.610	62.676	0.934	9.7	150	5.05	50.0
9.004	JUN-04	S17	19.655	0.600	62.376	62.236	0.140	140.7	450	6.25	50.0
1.007	S17	S26	12.988	0.600	62.086	62.057	0.029	450.0	600	6.82	50.0
20.000	OU-19	S18	20.518	0.600	63.800	63.390	0.410	50.0	225	5.18	50.0
20.001	S18	S19	22.377	0.600	63.315	63.225	0.090	250.0	300	5.56	50.0
21.000	OU-20	S19	9.781	0.600	63.507	63.300	0.207	47.3	225	5.09	50.0
22.000	OU-21	S19	9.756	0.600	63.564	63.300	0.264	37.0	225	5.08	50.0
20.002	S19	S21	23.578	0.600	63.225	62.826	0.399	59.1	300	5.75	50.0
23.000	KO-01	S20	8.782	0.600	63.412	63.236	0.176	50.0	225	5.08	50.0
24.000	OU-22	S20	4.198	0.600	63.615	63.236	0.379	11.1	150	5.02	50.0
23.001	S20	S21	38.983	0.600	63.161	62.901	0.260	150.0	225	5.69	50.0
25.000	OU-23	S21	17.329	0.600	63.573	63.400	0.173	100.0	225	5.22	50.0
26.000	OU-24	S21	10.970	0.600	63.528	63.418	0.110	100.0	300	5.12	50.0
20.003	S21	S22	15.718	0.600	62.676	62.631	0.045	350.0	450	6.00	50.0
27.000	OU-25	S22	12.144	0.600	63.507	63.281	0.226	53.7	225	5.11	50.0
28.000	OU-26	S22	11.219	0.600	63.462	63.273	0.189	59.4	300	5.09	50.0
20.004	S22	S26	19.751	0.600	62.631	62.207	0.424	46.6	450	6.11	50.0
29.000	OU-27	S23	15.834	0.600	63.123	62.731	0.392	40.4	225	5.13	50.0
29.001	S23	JUN-05	8.510	0.600	62.656	62.622	0.034	250.0	300	5.27	50.0
30.000	OU-28	JUN-05	2.036	0.600	63.457	62.697	0.760	2.7	225	5.00	50.0
29.002	JUN-05	S24	18.629	0.600	62.622	62.547	0.075	250.0	300	5.58	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)
12.002	1.572	111.1	40.7	1.168	1.337	0.161	0.0	126	1.455
14.000	1.065	42.3	16.9	0.775	0.939	0.067	0.0	99	1.007
9.003	1.712	272.2	140.4	1.337	1.869	0.555	0.0	229	1.724
15.000	3.256	57.5	5.1	0.850	1.869	0.020	0.0	30	2.022
9.004	1.712	272.2	145.5	1.869	2.010	0.575	0.0	234	1.739
1.007	1.141	322.7	296.7	2.010	1.941	1.173	0.0	456	1.286
20.000	1.854	73.7	16.7	0.775	1.034	0.066	0.0	73	1.506
20.001	0.990	70.0	16.7	1.034	1.079	0.066	0.0	99	0.816
21.000	1.907	75.8	26.6	0.775	1.079	0.105	0.0	92	1.744
22.000	2.159	85.8	16.9	0.775	1.079	0.067	0.0	67	1.685
20.002	2.049	144.8	60.2	1.079	1.450	0.238	0.0	134	1.956
23.000	1.854	73.7	10.6	0.775	1.125	0.042	0.0	58	1.328
24.000	3.044	53.8	11.6	0.850	1.200	0.046	0.0	47	2.435
23.001	1.065	42.3	22.3	1.200	1.450	0.088	0.0	116	1.077
25.000	1.307	52.0	12.4	0.775	0.951	0.049	0.0	74	1.074
26.000	1.572	111.1	16.2	0.700	0.858	0.064	0.0	77	1.132
20.003	1.081	171.9	111.1	1.450	1.488	0.439	0.0	264	1.147
27.000	1.788	71.1	25.0	0.775	1.063	0.099	0.0	92	1.634
28.000	2.044	144.5	27.8	0.700	0.996	0.110	0.0	89	1.590
20.004	2.984	474.6	163.9	1.488	1.941	0.648	0.0	181	2.718
29.000	2.064	82.1	22.8	1.125	1.543	0.090	0.0	80	1.768
29.001	0.990	70.0	22.8	1.543	1.561	0.090	0.0	117	0.887
30.000	8.053	320.2	29.9	0.775	1.561	0.118	0.0	46	5.098
29.002	0.990	70.0	52.6	1.561	1.679	0.208	0.0	195	1.083

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)
31.000	OU-29	S24	1.865	0.600	63.500	63.481	0.019	100.0	150	5.03	50.0
29.003	S24	S25	10.412	0.600	62.547	62.505	0.042	250.0	300	5.76	50.0
29.004	S25	S26	4.603	0.600	62.505	62.487	0.018	250.0	300	5.84	50.0
1.008	S26	PI	8.389	0.600	62.057	62.038	0.019	450.0	600	6.94	50.0
1.009	PI	S27	5.432	0.600	61.900	61.878	0.022	246.9	600	7.00	50.0
1.010	S27	TANK	21.145	0.600	61.255	61.170	0.085	248.8	375	7.31	50.0
1.011	TANK	S28	4.601	0.600	61.170	61.152	0.018	255.6	375	7.38	50.0
1.012	S28	S29	37.587	0.600	61.152	60.550	0.602	62.4	300	7.69	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)
31.000	1.005	17.8	15.4	0.850	0.895	0.061	0.0	108	1.129
29.003	0.990	70.0	68.1	1.679	1.851	0.269	0.0	240	1.122
29.004	0.990	70.0	68.1	1.851	1.811	0.269	0.0	240	1.122
1.008	1.141	322.7	528.7	1.941	1.891	2.090	0.0	600	1.151
1.009	1.545	436.8	528.7	2.029	2.114	2.090	0.0	600	1.559
1.010	1.144	379.0	528.7	2.962	2.995	2.090	0.0	375	1.159
1.011	1.128	373.9	528.7	2.995	3.009	2.090	0.0	375	1.143
1.012	1.993	140.9	528.7	3.084	3.728	2.090	0.0	300	2.018

Pipeline Schedule

Link	Length (m)	Slope (1:X)	Dia (mm)	Link Type	US CL (m)	US IL (m)	US Depth (m)	DS CL (m)	DS IL (m)	DS Depth (m)
2.000	7.944	21.6	225	1 STANDARD	64.420	63.420	0.775	64.403	63.053	1.125
5.000	3.654	43.0	300	1 STANDARD	64.063	63.063	0.700	64.107	62.978	0.829
5.001	25.339	150.0	300	1 STANDARD	64.107	62.978	0.829	64.522	62.809	1.413
17.000	2.947	9.7	150	1 STANDARD	64.252	63.252	0.850	64.291	62.948	1.193
17.001	11.692	150.0	150	1 STANDARD	64.291	62.948	1.193	64.410	62.870	1.390
16.000	22.444	49.1	300	1 STANDARD	64.093	63.093	0.700	64.410	62.636	1.474
16.001	21.017	250.0	450	1 STANDARD	64.410	62.486	1.474	64.621	62.402	1.769
18.000	17.929	22.7	225	1 STANDARD	64.417	63.417	0.775	64.621	62.627	1.769
19.000	2.118	2.6	150	1 STANDARD	64.592	63.592	0.850	64.621	62.786	1.685
16.002	27.912	350.0	450	1 STANDARD	64.621	62.402	1.769	64.889	62.322	2.117
16.003	20.210	350.0	450	1 STANDARD	64.889	62.322	2.117	64.696	62.264	1.982

Link	US Node	Dia (mm)	Width (mm)	Node Type	MH Type	DS Node	Dia (mm)	Node Type	MH Type
2.000	OU-01	350	350	Manhole	1 STANDARD	S08	600	Manhole	1 STANDARD
5.000	OU-02	350	350	Manhole	1 STANDARD	S01	600	Manhole	1 STANDARD
5.001	S01	600		Manhole	1 STANDARD	S11	1500	Manhole	1 STANDARD
17.000	OU-03	350	350	Manhole	1 STANDARD	S03	1500	Manhole	1 STANDARD
17.001	S03	1500		Manhole	1 STANDARD	S04	1500	Manhole	1 STANDARD
16.000	OU-04	350	350	Manhole	1 STANDARD	S04	1500	Manhole	1 STANDARD
16.001	S04	1500		Manhole	1 STANDARD	S05	1500	Manhole	1 STANDARD
18.000	OU-05	350	350	Manhole	1 STANDARD	S05	1500	Manhole	1 STANDARD
19.000	OU-06	350	350	Manhole	1 STANDARD	S05	1500	Manhole	1 STANDARD
16.002	S05	1500		Manhole	1 STANDARD	S06	1500	Manhole	1 STANDARD
16.003	S06	1500		Manhole	1 STANDARD	S17	1500	Manhole	1 STANDARD

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	12.403	41.1	150	1 STANDARD	64.477	63.430	0.897	64.403	63.128	1.125
1.001	7.540	100.0	225	1 STANDARD	64.403	63.053	1.125	64.460	62.978	1.257
1.002	5.250	150.0	225	1 STANDARD	64.460	62.978	1.257	64.448	62.943	1.280
3.000	5.364	23.9	225	1 STANDARD	64.345	63.345	0.775	64.448	63.121	1.102
1.003	10.338	150.0	225	1 STANDARD	64.448	62.943	1.280	64.522	62.874	1.423
4.000	14.594	100.0	225	1 STANDARD	64.159	63.159	0.775	64.418	63.013	1.180
4.001	14.591	66.3	225	1 STANDARD	64.418	63.013	1.180	64.522	62.793	1.504
6.000	10.217	19.3	225	1 STANDARD	64.322	63.322	0.775	64.522	62.793	1.504
1.004	17.123	350.0	450	1 STANDARD	64.522	62.568	1.504	64.598	62.519	1.629
7.000	10.220	13.3	225	1 STANDARD	64.494	63.494	0.775	64.598	62.725	1.648
1.005	37.856	350.0	450	1 STANDARD	64.598	62.500	1.648	64.802	62.392	1.960
8.000	13.460	100.0	150	1 STANDARD	64.802	63.802	0.850	64.802	63.667	0.985
1.006	28.129	180.3	450	1 STANDARD	64.802	62.392	1.960	64.696	62.236	2.010
9.000	26.986	100.0	300	1 STANDARD	64.076	63.076	0.700	64.109	62.806	1.003
10.000	3.782	16.8	300	1 STANDARD	64.031	63.031	0.700	64.109	62.806	1.003
9.001	19.986	350.0	450	1 STANDARD	64.109	62.656	1.003	64.198	62.599	1.149
11.000	3.670	14.2	225	1 STANDARD	64.083	63.083	0.775	64.198	62.824	1.149
9.002	20.704	350.0	450	1 STANDARD	64.198	62.599	1.149	64.268	62.540	1.278
12.000	5.049	100.0	300	1 STANDARD	64.232	63.232	0.700	64.337	63.182	0.855
12.001	35.229	100.0	300	1 STANDARD	64.337	63.182	0.855	64.298	62.830	1.168
13.000	5.036	15.8	150	1 STANDARD	64.189	63.298	0.741	64.298	62.980	1.168
12.002	19.888	100.0	300	1 STANDARD	64.298	62.830	1.168	64.268	62.631	1.337
14.000	4.830	150.0	225	1 STANDARD	64.136	63.136	0.775	64.268	63.104	0.939
9.003	14.818	140.7	450	1 STANDARD	64.268	62.481	1.337	64.695	62.376	1.869
15.000	9.049	9.7	150	1 STANDARD	64.610	63.610	0.850	64.695	62.676	1.869

Link	US Node	Dia (mm)	Width (mm)	Node Type	MH Type	DS Node	Dia (mm)	Node Type	MH Type
1.000	S07	600		Manhole	1 STANDARD	S08	600	Manhole	1 STANDARD
1.001	S08	600		Manhole	1 STANDARD	S09	1500	Manhole	1 STANDARD
1.002	S09	1500		Manhole	1 STANDARD	JUN-01		Junction	
3.000	OU-07	350	350	Manhole	1 STANDARD	JUN-01		Junction	
1.003	JUN-01			Junction		S11	1500	Manhole	1 STANDARD
4.000	OU-08	350	350	Manhole	1 STANDARD	S10	600	Manhole	1 STANDARD
4.001	S10	600		Manhole	1 STANDARD	S11	1500	Manhole	1 STANDARD
6.000	OU-09	350	350	Manhole	1 STANDARD	S11	1500	Manhole	1 STANDARD
1.004	S11	1500		Manhole	1 STANDARD	S12	1500	Manhole	1 STANDARD
7.000	OU-10	350	350	Manhole	1 STANDARD	S12	1500	Manhole	1 STANDARD
1.005	S12	1500		Manhole	1 STANDARD	S13	1500	Manhole	1 STANDARD
8.000	OU-11	350	350	Manhole	1 STANDARD	S13	1500	Manhole	1 STANDARD
1.006	S13	1500		Manhole	1 STANDARD	S17	1500	Manhole	1 STANDARD
9.000	OU-12	350	350	Manhole	1 STANDARD	S14	1500	Manhole	1 STANDARD
10.000	OU-13	350	350	Manhole	1 STANDARD	S14	1500	Manhole	1 STANDARD
9.001	S14	1500		Manhole	1 STANDARD	JUN-02		Junction	
11.000	OU-14	350	350	Manhole	1 STANDARD	JUN-02		Junction	
9.002	JUN-02			Junction		S16	1500	Manhole	1 STANDARD
12.000	OU-15	350	350	Manhole	1 STANDARD	S15	1500	Manhole	1 STANDARD
12.001	S15	1500		Manhole	1 STANDARD	JUN-03		Junction	
13.000	OU-16	350	350	Manhole	1 STANDARD	JUN-03		Junction	
12.002	JUN-03			Junction		S16	1500	Manhole	1 STANDARD
14.000	OU-17	350	350	Manhole	1 STANDARD	S16	1500	Manhole	1 STANDARD
9.003	S16	1500		Manhole	1 STANDARD	JUN-04		Junction	
15.000	OU-18	350	350	Manhole	1 STANDARD	JUN-04		Junction	

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)
9.004	19.655	140.7	450	1 STANDARD	64.695	62.376	1.869	64.696	62.236	2.010
1.007	12.988	450.0	600	1 STANDARD	64.696	62.086	2.010	64.598	62.057	1.941
20.000	20.518	50.0	225	1 STANDARD	64.800	63.800	0.775	64.649	63.390	1.034
20.001	22.377	250.0	300	1 STANDARD	64.649	63.315	1.034	64.604	63.225	1.079
21.000	9.781	47.3	225	1 STANDARD	64.507	63.507	0.775	64.604	63.300	1.079
22.000	9.756	37.0	225	1 STANDARD	64.564	63.564	0.775	64.604	63.300	1.079
20.002	23.578	59.1	300	1 STANDARD	64.604	63.225	1.079	64.576	62.826	1.450
23.000	8.782	50.0	225	1 STANDARD	64.412	63.412	0.775	64.586	63.236	1.125
24.000	4.198	11.1	150	1 STANDARD	64.615	63.615	0.850	64.586	63.236	1.200
23.001	38.983	150.0	225	1 STANDARD	64.586	63.161	1.200	64.576	62.901	1.450
25.000	17.329	100.0	225	1 STANDARD	64.573	63.573	0.775	64.576	63.400	0.951
26.000	10.970	100.0	300	1 STANDARD	64.528	63.528	0.700	64.576	63.418	0.858
20.003	15.718	350.0	450	1 STANDARD	64.576	62.676	1.450	64.569	62.631	1.488
27.000	12.144	53.7	225	1 STANDARD	64.507	63.507	0.775	64.569	63.281	1.063
28.000	11.219	59.4	300	1 STANDARD	64.462	63.462	0.700	64.569	63.273	0.996
20.004	19.751	46.6	450	1 STANDARD	64.569	62.631	1.488	64.598	62.207	1.941
29.000	15.834	40.4	225	1 STANDARD	64.473	63.123	1.125	64.499	62.731	1.543
29.001	8.510	250.0	300	1 STANDARD	64.499	62.656	1.543	64.483	62.622	1.561
30.000	2.036	2.7	225	1 STANDARD	64.457	63.457	0.775	64.483	62.697	1.561
29.002	18.629	250.0	300	1 STANDARD	64.483	62.622	1.561	64.526	62.547	1.679
31.000	1.865	100.0	150	1 STANDARD	64.500	63.500	0.850	64.526	63.481	0.895
29.003	10.412	250.0	300	1 STANDARD	64.526	62.547	1.679	64.656	62.505	1.851
29.004	4.603	250.0	300	1 STANDARD	64.656	62.505	1.851	64.598	62.487	1.811
1.008	8.389	450.0	600	1 STANDARD	64.598	62.057	1.941	64.529	62.038	1.891
1.009	5.432	246.9	600	1 STANDARD	64.529	61.900	2.029	64.592	61.878	2.114

Link	US Node	Dia (mm)	Width (mm)	Node Type	MH Type	DS Node	Dia (mm)	Node Type	MH Type
9.004	JUN-04			Junction		S17	1500	Manhole	1 STANDARD
1.007	S17	1500		Manhole	1 STANDARD	S26	1500	Manhole	1 STANDARD
20.000	OU-19	350	350	Manhole	1 STANDARD	S18	1500	Manhole	1 STANDARD
20.001	S18	1500		Manhole	1 STANDARD	S19	1500	Manhole	1 STANDARD
21.000	OU-20	350	350	Manhole	1 STANDARD	S19	1500	Manhole	1 STANDARD
22.000	OU-21	350	350	Manhole	1 STANDARD	S19	1500	Manhole	1 STANDARD
20.002	S19	1500		Manhole	1 STANDARD	S21	1500	Manhole	1 STANDARD
23.000	KO-01	350	350	Manhole	1 STANDARD	S20	1500	Manhole	1 STANDARD
24.000	OU-22	350	350	Manhole	1 STANDARD	S20	1500	Manhole	1 STANDARD
23.001	S20	1500		Manhole	1 STANDARD	S21	1500	Manhole	1 STANDARD
25.000	OU-23	350	350	Manhole	1 STANDARD	S21	1500	Manhole	1 STANDARD
26.000	OU-24	350	350	Manhole	1 STANDARD	S21	1500	Manhole	1 STANDARD
20.003	S21	1500		Manhole	1 STANDARD	S22	1500	Manhole	1 STANDARD
27.000	OU-25	350	350	Manhole	1 STANDARD	S22	1500	Manhole	1 STANDARD
28.000	OU-26	350	350	Manhole	1 STANDARD	S22	1500	Manhole	1 STANDARD
20.004	S22	1500		Manhole	1 STANDARD	S26	1500	Manhole	1 STANDARD
29.000	OU-27	350	350	Manhole	1 STANDARD	S23	600	Manhole	1 STANDARD
29.001	S23	600		Manhole	1 STANDARD	JUN-05		Junction	
30.000	OU-28	350	350	Manhole	1 STANDARD	JUN-05		Junction	
29.002	JUN-05			Junction		S24	1500	Manhole	1 STANDARD
31.000	OU-29	350	350	Manhole	1 STANDARD	S24	1500	Manhole	1 STANDARD
29.003	S24	1500		Manhole	1 STANDARD	S25	1500	Manhole	1 STANDARD
29.004	S25	1500		Manhole	1 STANDARD	S26	1500	Manhole	1 STANDARD
1.008	S26	1500		Manhole	1 STANDARD	PI	600	Manhole	1 STANDARD
1.009	PI	600		Manhole	1 STANDARD	S27	1800	Manhole	1 STANDARD

Pipeline Schedule

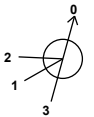
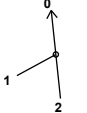
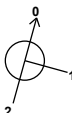
Link	Length (m)	Slope (1:X)	Dia (mm)	Link Type	US CL (m)	US IL (m)	US Depth (m)	DS CL (m)	DS IL (m)	DS Depth (m)
1.010	21.145	248.8	375	Tank Connection X 3	64.592	61.255	2.962	64.540	61.170	2.995
1.011	4.601	255.6	375	Tank Connection X 3	64.540	61.170	2.995	64.536	61.152	3.009
1.012	37.587	62.4	300	1 STANDARD	64.536	61.152	3.084	64.578	60.550	3.728

Link	US Node	Dia (mm)	Width (mm)	Node Type	MH Type	DS Node	Dia (mm)	Node Type	MH Type
1.010	S27	1800		Manhole	1 STANDARD	TANK		Junction	
1.011	TANK			Junction		S28	1500	Manhole	1 STANDARD
1.012	S28	1500		Manhole	1 STANDARD	S29	1800	Manhole	1 STANDARD

Manhole Schedule

Node	Easting (m)	Northing (m)	CL (m)	Depth (m)	Dia (mm)	Width (mm)	Connections	Link	IL (m)	Dia (mm)
OU-01	388204.601	396773.900	64.420	1.000	350	350		0	2.000	63.420 225
OU-02	388193.388	396777.976	64.063	1.000	350	350		0	5.000	63.063 300
S01	388191.358	396781.014	64.107	1.129	600			1	5.000	62.978 300
OU-03	388164.599	396784.686	64.252	1.000	350	350		0	5.001	62.978 300
S03	388166.728	396786.723	64.291	1.343	1500			1	17.000	63.252 150
OU-04	388149.305	396788.915	64.093	1.000	350	350		0	17.000	62.948 150
S04	388169.830	396797.996	64.410	1.924	1500			1	17.001	62.948 150
OU-05	388157.495	396819.066	64.417	1.000	350	350		2	16.000	62.636 300
OU-06	388173.565	396817.213	64.592	1.000	350	350		0	16.001	62.486 450
								0	18.000	63.417 225
								0	19.000	63.592 150

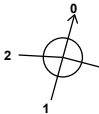
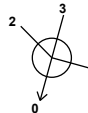
Manhole Schedule

Node	Easting (m)	Northing (m)	CL (m)	Depth (m)	Dia (mm)	Width (mm)	Connections	Link	IL (m)	Dia (mm)	
S05	388175.406	396818.260	64.621	2.219	1500			1 2 3 0	19.000 18.000 16.001 16.002	62.786 62.627 62.402 62.402	150 225 450 450
S06	388182.812	396845.172	64.889	2.567	1500			1 0	16.002 16.003	62.322 62.322	450 450
S07	388214.211	396778.207	64.477	1.047	600			0	1.000	63.430	150
S08	388202.250	396781.488	64.403	1.350	600			1 2 0	2.000 1.000 1.001	63.053 63.128 63.053	225 150 225
S09	388202.428	396789.026	64.460	1.482	1500			1 0	1.001 1.002	62.978 62.978	225 225
OU-07	388197.166	396791.687	64.345	1.000	350	350		0	3.000	63.345	225
JUN-01	388201.880	396794.247	64.448	1.505				1 2 0	3.000 1.002 1.003	63.121 62.943 62.943	225 225 225
OU-08	388226.770	396791.214	64.159	1.000	350	350		0	4.000	63.159	225
S10	388213.783	396797.871	64.418	1.405	600			1 0	4.000 4.001	63.013 63.013	225 225
OU-09	388210.650	396801.817	64.322	1.000	350	350		0	6.000	63.322	225
S11	388200.799	396804.528	64.522	1.954	1500			1 2 3 4 0	6.000 5.001 4.001 1.003 1.004	62.793 62.809 62.793 62.874 62.568	225 300 225 225 450
OU-10	388215.196	396818.325	64.494	1.000	350	350		0	7.000	63.494	225
S12	388205.342	396821.037	64.598	2.098	1500			1 2 0	7.000 1.004 1.005	62.725 62.519 62.500	225 450 450

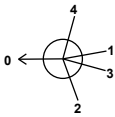
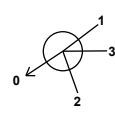
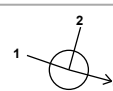
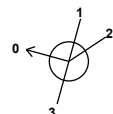
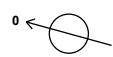
Manhole Schedule

Node	Easting (m)	Northing (m)	CL (m)	Depth (m)	Dia (mm)	Width (mm)	Connections	Link	IL (m)	Dia (mm)	
OU-11	388223.217	396846.588	64.802	1.000	350	350		0	8.000	63.802	150
S13	388215.386	396857.536	64.802	2.410	1500			1 2 0	8.000 1.005 1.006	63.667 62.392 62.392	150 450 450
OU-12	388166.406	396933.001	64.076	1.000	350	350		0	9.000	63.076	300
OU-13	388160.291	396909.984	64.031	1.000	350	350		0	10.000	63.031	300
S14	388161.619	396906.443	64.109	1.453	1500			1 2 0	10.000 9.000 9.001	62.806 62.806 62.656	300 300 450
OU-14	388154.700	396888.867	64.083	1.000	350	350		0	11.000	63.083	225
JUN-02	388157.755	396886.834	64.198	1.599				1 2 0	11.000 9.001 9.002	62.824 62.599 62.599	225 450 450
OU-15	388134.099	396812.930	64.232	1.000	350	350		0	12.000	63.232	300
S15	388139.128	396813.380	64.337	1.155	1500			1 0	12.000 12.001	63.182 63.182	300 300
OU-16	388143.485	396846.718	64.189	0.891	350	350		0	13.000	63.298	150
JUN-03	388148.482	396847.344	64.298	1.468				1 2 0	13.000 12.001 12.002	62.980 62.830 62.830	150 300 300
OU-17	388149.095	396867.801	64.136	1.000	350	350		0	14.000	63.136	225
S16	388153.752	396866.521	64.268	1.787	1500			1 2 3 0	14.000 12.002 9.002 9.003	63.104 62.631 62.540 62.481	225 300 450 450

Manhole Schedule

Node	Easting (m)	Northing (m)	CL (m)	Depth (m)	Dia (mm)	Width (mm)	Connections	Link	IL (m)	Dia (mm)	
OU-18	388162.166	396859.305	64.610	1.000	350	350		0	15.000	63.610	150
JUN-04	388168.548	396865.720	64.695	2.319				1 2 0	15.000 9.003 9.004	62.676 62.376 62.376	150 450 450
S17	388188.174	396864.658	64.696	2.610	1500			1 2 3 0	16.003 9.004 1.006 1.007	62.264 62.236 62.236 62.086	450 450 450 600
OU-19	388256.281	396929.299	64.800	1.000	350	350		0	20.000	63.800	225
S18	388236.014	396932.498	64.649	1.334	1500			1 0	20.000 20.001	63.390 63.315	225 300
OU-20	388223.207	396917.885	64.507	1.000	350	350		0	21.000	63.507	225
OU-21	388239.483	396908.335	64.564	1.000	350	350		0	22.000	63.564	225
S19	388230.077	396910.923	64.604	1.379	1500			1 2 3 0	22.000 21.000 20.001 20.002	63.300 63.300 63.225 63.225	225 225 300 300
KO-01	388264.098	396869.487	64.412	1.000	350	350		0	23.000	63.412	225
OU-22	388265.455	396876.733	64.615	1.000	350	350		0	24.000	63.615	150
S20	388261.407	396877.847	64.586	1.425	1500			1 2 0	24.000 23.000 23.001	63.236 63.236 63.161	150 225 225
OU-23	388229.757	396871.909	64.573	1.000	350	350		0	25.000	63.573	225
OU-24	388234.620	396890.122	64.528	1.000	350	350		0	26.000	63.528	300

Manhole Schedule

Node	Easting (m)	Northing (m)	CL (m)	Depth (m)	Dia (mm)	Width (mm)	Connections	Link	IL (m)	Dia (mm)	
S21	388223.821	396888.190	64.576	1.900	1500			1 2 3 4 0	26.000 25.000 23.001 20.002 20.003	63.418 63.400 62.901 62.826 62.676	300 225 225 300 450
OU-25	388212.192	396876.626	64.507	1.000	350	350		0	27.000	63.507	225
OU-26	388217.051	396894.830	64.462	1.000	350	350		0	28.000	63.462	300
S22	388208.104	396888.061	64.569	1.938	1500			1 2 3 0	28.000 27.000 20.003 20.004	63.273 63.281 62.631 62.631	300 225 450 450
OU-27	388192.039	396926.186	64.473	1.350	350	350		0	29.000	63.123	225
S23	388189.987	396910.486	64.499	1.843	600			1 0	29.000 29.001	62.731 62.656	225 300
OU-28	388185.887	396903.148	64.457	1.000	350	350		0	30.000	63.457	225
JUN-05	388187.729	396902.281	64.483	1.861				1 2 0	30.000 29.001 29.002	62.697 62.622 62.622	225 300 300
OU-29	388181.023	396884.928	64.500	1.000	350	350		0	31.000	63.500	150
S24	388182.786	396884.320	64.526	1.979	1500			1 2 0	31.000 29.002 29.003	63.481 62.547 62.547	150 300 300
S25	388192.842	396881.619	64.656	2.151	1500			1 0	29.003 29.004	62.505 62.505	300 300
S26	388191.620	396877.181	64.598	2.541	1500			1 2 3 0	29.004 20.004 1.007 1.008	62.487 62.207 62.057 62.057	300 450 600 600
PI	388183.532	396879.407	64.529	2.629	600			1 0	1.008 1.009	62.038 61.900	600 600

Manhole Schedule

Node	Easting (m)	Northing (m)	CL (m)	Depth (m)	Dia (mm)	Width (mm)	Connections	Link	IL (m)	Dia (mm)	
S27	388173.722	396882.106	64.592	3.337	1800			1	1.009	61.878	600
TANK	388179.598	396903.460	64.540	3.370				0	1.010	61.255	375
								1	1.010	61.170	375
S28	388180.505	396907.460	64.536	3.384	1500			0	1.011	61.170	375
								1	1.011	61.152	375
S29	388191.433	396939.763	64.578	4.028	1800			0	1.012	61.152	300
								1	1.012	60.550	300

Simulation Settings

Rainfall Methodology	FSR	Analysis Speed	Normal
FSR Region	England and Wales	Skip Steady State	x
M5-60 (mm)	17.000	Drain Down Time (mins)	240
Ratio-R	0.400	Additional Storage (m³/ha)	20.0
Summer CV	1.000	Check Discharge Rate(s)	x
Winter CV	1.000	Check Discharge Volume	x

Storm Durations

15 | 30 | 60 | 120 | 180 | 240 | 360 | 480 | 600 | 720 | 960 | 1440

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

Node S29 Surcharged Outfall

Overrides Design Area	x	Depression Storage Area (m²)	0	Evapo-transpiration (mm/day)	0
Overrides Design Additional Inflow	x	Depression Storage Depth (mm)	0		

Applies to 100yr+40% CC 15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440 minute storms

Time (mins)	Depth (m)	Time (mins)	Depth (m)
0	1.300	1440	1.300

Node S28 Online Hydro-Brake® Control

Flap Valve	✓	Objective	(HE) Minimise upstream storage
Downstream Link	1.012	Sump Available	✓
Replaces Downstream Link	x	Product Number	CTL-SHE-0252-3300-0600-3300
Invert Level (m)	61.152	Min Outlet Diameter (m)	0.300
Design Depth (m)	0.600	Min Node Diameter (mm)	1500
Design Flow (l/s)	33.0		

Node S28 Online Orifice Control

Flap Valve	x	Invert Level (m)	62.170	Discharge Coefficient	0.600
Replaces Downstream Link	x	Diameter (m)	0.190		

Node TANK Depth/Area Storage Structure

Base Inf Coefficient (m/hr)	0.00000	Safety Factor	2.0	Invert Level (m)	61.170
Side Inf Coefficient (m/hr)	0.00000	Porosity	0.95	Time to half empty (mins)	124

Depth (m)	Area (m²)	Inf Area (m²)	Depth (m)	Area (m²)	Inf Area (m²)	Depth (m)	Area (m²)	Inf Area (m²)
0.000	323.0	0.0	2.400	323.0	0.0	2.401	0.0	0.0

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	30 year 360 minute summer	26.939	6.932
1 year 15 minute winter	64.927	26.180	30 year 360 minute winter	17.511	6.932
1 year 30 minute summer	60.022	16.984	30 year 480 minute summer	20.981	5.545
1 year 30 minute winter	42.121	16.984	30 year 480 minute winter	13.940	5.545
1 year 60 minute summer	40.398	10.676	30 year 600 minute summer	17.039	4.661
1 year 60 minute winter	26.839	10.676	30 year 600 minute winter	11.642	4.661
1 year 120 minute summer	24.980	6.602	30 year 720 minute summer	15.093	4.045
1 year 120 minute winter	16.596	6.602	30 year 720 minute winter	10.143	4.045
1 year 180 minute summer	19.271	4.959	30 year 960 minute summer	12.278	3.233
1 year 180 minute winter	12.527	4.959	30 year 960 minute winter	8.133	3.233
1 year 240 minute summer	15.301	4.043	30 year 1440 minute summer	8.788	2.355
1 year 240 minute winter	10.165	4.043	30 year 1440 minute winter	5.906	2.355
1 year 360 minute summer	11.775	3.030	100 year +40% CC 15 minute summer	408.473	115.584
1 year 360 minute winter	7.654	3.030	100 year +40% CC 15 minute winter	286.647	115.584
1 year 480 minute summer	9.342	2.469	100 year +40% CC 30 minute summer	268.775	76.054
1 year 480 minute winter	6.207	2.469	100 year +40% CC 30 minute winter	188.614	76.054
1 year 600 minute summer	7.682	2.101	100 year +40% CC 60 minute summer	180.954	47.821
1 year 600 minute winter	5.249	2.101	100 year +40% CC 60 minute winter	120.222	47.821
1 year 720 minute summer	6.859	1.838	100 year +40% CC 120 minute summer	110.370	29.168
1 year 720 minute winter	4.609	1.838	100 year +40% CC 120 minute winter	73.327	29.168
1 year 960 minute summer	5.653	1.489	100 year +40% CC 180 minute summer	83.953	21.604
1 year 960 minute winter	3.745	1.489	100 year +40% CC 180 minute winter	54.572	21.604
1 year 1440 minute summer	4.127	1.106	100 year +40% CC 240 minute summer	65.765	17.380
1 year 1440 minute winter	2.773	1.106	100 year +40% CC 240 minute winter	43.693	17.380
30 year 15 minute summer	226.195	64.005	100 year +40% CC 360 minute summer	49.370	12.705
30 year 15 minute winter	158.733	64.005	100 year +40% CC 360 minute winter	32.092	12.705
30 year 30 minute summer	147.452	41.724	100 year +40% CC 480 minute summer	38.291	10.119
30 year 30 minute winter	103.475	41.724	100 year +40% CC 480 minute winter	25.439	10.119
30 year 60 minute summer	98.615	26.061	100 year +40% CC 600 minute summer	30.992	8.477
30 year 60 minute winter	65.517	26.061	100 year +40% CC 600 minute winter	21.176	8.477
30 year 120 minute summer	59.946	15.842	100 year +40% CC 720 minute summer	27.387	7.340
30 year 120 minute winter	39.827	15.842	100 year +40% CC 720 minute winter	18.406	7.340
30 year 180 minute summer	45.598	11.734	100 year +40% CC 960 minute summer	22.191	5.844
30 year 180 minute winter	29.640	11.734	100 year +40% CC 960 minute winter	14.700	5.844
30 year 240 minute summer	35.759	9.450	100 year +40% CC 1440 minute summer	15.789	4.232
30 year 240 minute winter	23.758	9.450	100 year +40% CC 1440 minute winter	10.611	4.232

Results for 1 year Critical Storm Duration. Lowest mass balance: 97.51%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute summer	OU-01	10	63.431	0.011	0.5	0.0020	0.0000	OK
15 minute summer	OU-02	10	63.119	0.056	10.3	0.0834	0.0000	OK
15 minute summer	S01	10	63.047	0.069	10.2	0.0195	0.0000	OK
15 minute summer	OU-03	10	63.291	0.039	8.3	0.0471	0.0000	OK
15 minute summer	S03	10	63.033	0.085	8.3	0.1503	0.0000	OK
15 minute summer	OU-04	10	63.166	0.073	19.6	0.1988	0.0000	OK
15 minute summer	S04	10	62.601	0.115	27.4	0.2025	0.0000	OK
15 minute summer	OU-05	10	63.462	0.045	9.1	0.0591	0.0000	OK
15 minute summer	OU-06	10	63.615	0.023	4.5	0.0163	0.0000	OK
15 minute summer	S05	11	62.557	0.155	40.6	0.2747	0.0000	OK
15 minute summer	S06	12	62.527	0.205	40.2	0.3621	0.0000	OK
15 minute summer	S07	10	63.455	0.025	1.7	0.0125	0.0000	OK
15 minute summer	S08	10	63.085	0.032	2.1	0.0090	0.0000	OK
15 minute summer	S09	11	63.012	0.034	2.1	0.0602	0.0000	OK
15 minute summer	OU-07	10	63.382	0.037	6.0	0.0344	0.0000	OK
15 minute summer	JUN-01	11	63.011	0.068	8.0	0.0000	0.0000	OK
15 minute summer	OU-08	10	63.194	0.035	2.6	0.0163	0.0000	OK
15 minute summer	S10	11	63.044	0.031	2.6	0.0088	0.0000	OK
15 minute summer	OU-09	10	63.375	0.053	13.3	0.1005	0.0000	OK
15 minute summer	S11	11	62.715	0.147	35.5	0.2796	0.0000	OK
15 minute summer	OU-10	10	63.531	0.037	7.7	0.0418	0.0000	OK
15 minute summer	S12	11	62.659	0.159	44.9	0.2998	0.0000	OK
15 minute summer	OU-11	10	63.844	0.042	2.9	0.0209	0.0000	OK
15 minute summer	S13	11	62.525	0.133	48.0	0.2355	0.0000	OK
Link Event (Outflow)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
15 minute summer	OU-01	2.000	S08	0.5	0.253	0.004	0.0162	
15 minute summer	OU-02	5.000	S01	10.2	0.973	0.060	0.0389	
15 minute summer	S01	5.001	S11	10.1	0.845	0.111	0.3016	
15 minute summer	OU-03	17.000	S03	8.3	1.324	0.144	0.0204	
15 minute summer	S03	17.001	S04	8.1	0.819	0.560	0.1159	
15 minute summer	OU-04	16.000	S04	19.3	1.504	0.122	0.2888	
15 minute summer	S04	16.001	S05	27.4	0.686	0.134	0.8432	
15 minute summer	OU-05	18.000	S05	9.0	1.647	0.082	0.0980	
15 minute summer	OU-06	19.000	S05	4.5	2.911	0.041	0.0033	
15 minute summer	S05	16.002	S06	40.2	0.818	0.234	1.6430	
15 minute summer	S06	16.003	S17	38.7	0.744	0.225	1.6300	
15 minute summer	S07	1.000	S08	1.7	0.857	0.060	0.0241	
15 minute summer	S08	1.001	S09	2.1	0.597	0.040	0.0269	
15 minute summer	S09	1.002	JUN-01	2.1	0.317	0.050	0.0362	
15 minute summer	OU-07	3.000	JUN-01	6.0	1.425	0.056	0.0225	
15 minute summer	JUN-01	1.003	S11	8.0	0.813	0.189	0.1016	
15 minute summer	OU-08	4.000	S10	2.6	0.714	0.050	0.0528	
15 minute summer	S10	4.001	S11	2.6	0.781	0.040	0.0477	
15 minute summer	OU-09	6.000	S11	13.2	1.912	0.111	0.0706	
15 minute summer	S11	1.004	S12	35.5	0.819	0.207	0.7433	
15 minute summer	OU-10	7.000	S12	7.7	1.884	0.053	0.0416	
15 minute summer	S12	1.005	S13	45.2	1.017	0.263	1.6864	
15 minute summer	OU-11	8.000	S13	2.8	0.725	0.159	0.0524	
15 minute summer	S13	1.006	S17	47.5	0.844	0.198	1.9968	

Results for 1 year Critical Storm Duration. Lowest mass balance: 97.51%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute summer	OU-12	10	63.167	0.091	21.2	0.2655	0.0000	OK
15 minute summer	OU-13	10	63.092	0.061	19.0	0.1625	0.0000	OK
15 minute summer	S14	10	62.809	0.153	39.7	0.2706	0.0000	OK
15 minute summer	OU-14	10	63.124	0.041	9.2	0.0553	0.0000	OK
15 minute summer	JUN-02	11	62.763	0.164	48.4	0.0000	0.0000	OK
15 minute summer	OU-15	10	63.310	0.078	13.1	0.1454	0.0000	OK
15 minute summer	S15	10	63.258	0.076	16.0	0.1600	0.0000	OK
15 minute summer	OU-16	10	63.343	0.045	8.2	0.0605	0.0000	OK
15 minute summer	JUN-03	11	62.926	0.096	23.9	0.0000	0.0000	OK
15 minute summer	OU-17	10	63.218	0.082	10.1	0.1198	0.0000	OK
15 minute summer	S16	11	62.662	0.181	82.3	0.3193	0.0000	OK
15 minute summer	OU-18	10	63.634	0.024	3.0	0.0123	0.0000	OK
15 minute summer	JUN-04	11	62.560	0.184	85.5	0.0000	0.0000	OK
15 minute summer	S17	12	62.515	0.429	169.8	0.7589	0.0000	OK
15 minute summer	OU-19	10	63.857	0.057	10.0	0.0825	0.0000	OK
15 minute summer	S18	11	63.390	0.075	9.9	0.1320	0.0000	OK
15 minute summer	OU-20	10	63.582	0.075	15.9	0.1665	0.0000	OK
15 minute summer	OU-21	10	63.619	0.055	10.1	0.0803	0.0000	OK
15 minute summer	S19	11	63.330	0.105	35.4	0.1859	0.0000	OK
15 minute summer	KO-01	10	63.458	0.046	6.3	0.0447	0.0000	OK
15 minute summer	OU-22	10	63.655	0.040	7.0	0.0415	0.0000	OK
15 minute summer	S20	11	63.248	0.087	13.2	0.1535	0.0000	OK
15 minute summer	OU-23	10	63.632	0.059	7.4	0.0649	0.0000	OK
15 minute summer	OU-24	10	63.590	0.062	9.7	0.0876	0.0000	OK
15 minute summer	S21	11	62.862	0.186	64.7	0.3289	0.0000	OK

Link Event (Outflow)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
15 minute summer	OU-12	9.000	S14	20.8	1.192	0.187	0.4711	
15 minute summer	OU-13	10.000	S14	18.9	2.016	0.069	0.0355	
15 minute summer	S14	9.001	JUN-02	39.2	0.791	0.228	0.9948	
15 minute summer	OU-14	11.000	JUN-02	9.2	1.919	0.066	0.0176	
15 minute summer	JUN-02	9.002	S16	48.7	0.985	0.284	1.0253	
15 minute summer	OU-15	12.000	S15	13.0	0.914	0.117	0.0719	
15 minute summer	S15	12.001	JUN-03	15.8	0.954	0.142	0.5860	
15 minute summer	OU-16	13.000	JUN-03	8.2	1.879	0.182	0.0219	
15 minute summer	JUN-03	12.002	S16	23.8	1.251	0.214	0.3788	
15 minute summer	OU-17	14.000	S16	10.0	0.822	0.237	0.0589	
15 minute summer	S16	9.003	JUN-04	82.6	1.373	0.303	0.8917	
15 minute summer	OU-18	15.000	JUN-04	3.0	1.705	0.052	0.0159	
15 minute summer	JUN-04	9.004	S17	85.9	1.172	0.316	1.5980	
15 minute summer	S17	1.007	S26	170.7	0.801	0.529	2.8160	
15 minute summer	OU-19	20.000	S18	9.9	1.274	0.134	0.1589	
15 minute summer	S18	20.001	S19	9.7	0.550	0.139	0.3992	
15 minute summer	OU-20	21.000	S19	15.7	1.438	0.208	0.1071	
15 minute summer	OU-21	22.000	S19	10.0	1.399	0.117	0.0700	
15 minute summer	S19	20.002	S21	35.2	1.657	0.243	0.5011	
15 minute summer	KO-01	23.000	S20	6.3	1.101	0.085	0.0500	
15 minute summer	OU-22	24.000	S20	7.0	1.978	0.130	0.0148	
15 minute summer	S20	23.001	S21	13.0	0.935	0.307	0.5417	
15 minute summer	OU-23	25.000	S21	7.3	0.909	0.141	0.1392	
15 minute summer	OU-24	26.000	S21	9.6	0.941	0.086	0.1118	
15 minute summer	S21	20.003	S22	65.0	1.246	0.378	0.8270	

Results for 1 year Critical Storm Duration. Lowest mass balance: 97.51%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute summer	OU-25	10	63.581	0.074	15.0	0.1558	0.0000	OK
15 minute summer	OU-26	10	63.535	0.073	16.6	0.1688	0.0000	OK
15 minute summer	S22	11	62.774	0.143	95.5	0.2530	0.0000	OK
15 minute summer	OU-27	10	63.187	0.064	13.6	0.0936	0.0000	OK
15 minute summer	S23	10	62.773	0.117	13.5	0.0332	0.0000	OK
15 minute summer	OU-28	10	63.492	0.035	17.8	0.0877	0.0000	OK
15 minute summer	JUN-05	10	62.769	0.147	31.0	0.0000	0.0000	OK
15 minute summer	OU-29	10	63.589	0.089	9.2	0.1195	0.0000	OK
15 minute summer	S24	11	62.732	0.185	39.7	0.3276	0.0000	OK
15 minute summer	S25	11	62.684	0.179	39.7	0.3162	0.0000	OK
15 minute summer	S26	12	62.490	0.433	298.7	0.7651	0.0000	OK
15 minute summer	PI	12	62.319	0.419	300.1	0.1186	0.0000	OK
120 minute summer	S27	86	61.680	0.425	137.6	1.0824	0.0000	SURCHARGED
120 minute summer	TANK	86	61.680	0.510	133.4	156.4261	0.0000	SURCHARGED
120 minute summer	S28	86	61.680	0.528	34.4	0.9321	0.0000	SURCHARGED
120 minute winter	S29	114	60.648	0.098	32.9	0.0000	0.0000	OK

Link Event (Outflow)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
15 minute summer	OU-25	27.000	S22	14.8	1.364	0.209	0.1322	
15 minute summer	OU-26	28.000	S22	16.5	1.314	0.114	0.1406	
15 minute summer	S22	20.004	S26	96.0	1.821	0.202	1.4525	
15 minute summer	OU-27	29.000	S23	13.5	1.490	0.164	0.1433	
15 minute summer	S23	29.001	JUN-05	13.3	0.452	0.190	0.2542	
15 minute summer	OU-28	30.000	JUN-05	17.8	3.367	0.055	0.0151	
15 minute summer	JUN-05	29.002	S24	30.6	0.772	0.438	0.7446	
15 minute summer	OU-29	31.000	S24	9.1	0.923	0.515	0.0184	
15 minute summer	S24	29.003	S25	39.7	0.888	0.568	0.4661	
15 minute summer	S25	29.004	S26	39.8	0.993	0.569	0.1846	
15 minute summer	S26	1.008	PI	300.1	1.524	0.930	1.6482	
15 minute summer	PI	1.009	S27	300.9	1.566	0.689	1.0422	
15 minute summer	S27	1.010	TANK	302.0	2.039	0.797	5.9862	
180 minute winter	TANK	1.011	S28	39.6	0.156	0.106	1.5224	
120 minute winter	S28	1.012	S29	32.9	1.614	0.234	0.7673	263.8

Results for 30 year Critical Storm Duration. Lowest mass balance: 97.51%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute summer	OU-01	11	63.436	0.016	1.1	0.0029	0.0000	OK
15 minute summer	OU-02	10	63.160	0.097	25.1	0.1432	0.0000	OK
15 minute summer	S01	10	63.089	0.111	25.0	0.0315	0.0000	OK
15 minute summer	OU-03	10	63.331	0.079	20.3	0.0966	0.0000	OK
15 minute summer	S03	11	63.174	0.226	20.1	0.4001	0.0000	SURCHARGED
15 minute summer	OU-04	10	63.209	0.116	48.0	0.3172	0.0000	OK
15 minute summer	S04	11	63.000	0.514	68.7	0.9078	0.0000	SURCHARGED
15 minute summer	OU-05	9	63.486	0.069	22.2	0.0913	0.0000	OK
15 minute summer	OU-06	9	63.628	0.036	11.1	0.0261	0.0000	OK
15 minute summer	S05	11	62.972	0.570	105.9	1.0079	0.0000	SURCHARGED
15 minute summer	S06	12	62.946	0.624	103.6	1.1019	0.0000	SURCHARGED
15 minute summer	S07	10	63.470	0.040	4.1	0.0197	0.0000	OK
15 minute summer	S08	10	63.101	0.048	5.2	0.0136	0.0000	OK
15 minute summer	S09	10	63.055	0.077	5.1	0.1353	0.0000	OK
15 minute summer	OU-07	10	63.405	0.060	14.8	0.0549	0.0000	OK
15 minute summer	JUN-01	10	63.055	0.112	19.6	0.0000	0.0000	OK
15 minute summer	OU-08	10	63.214	0.055	6.3	0.0254	0.0000	OK
15 minute summer	S10	10	63.062	0.049	6.2	0.0137	0.0000	OK
15 minute summer	OU-09	10	63.410	0.088	32.5	0.1652	0.0000	OK
15 minute summer	S11	12	63.036	0.468	87.4	0.8893	0.0000	SURCHARGED
15 minute summer	OU-10	9	63.551	0.057	18.8	0.0648	0.0000	OK
15 minute summer	S12	12	63.028	0.528	102.1	0.9989	0.0000	SURCHARGED
15 minute summer	OU-11	10	63.870	0.068	7.0	0.0342	0.0000	OK
15 minute summer	S13	12	62.977	0.585	105.6	1.0344	0.0000	SURCHARGED

Link Event (Outflow)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
15 minute summer	OU-01	2.000	S08	1.1	0.325	0.010	0.0293	
15 minute summer	OU-02	5.000	S01	25.0	1.160	0.147	0.0792	
15 minute summer	S01	5.001	S11	25.5	1.073	0.282	0.9745	
15 minute summer	OU-03	17.000	S03	20.1	1.393	0.350	0.0398	
15 minute summer	S03	17.001	S04	19.2	1.097	1.331	0.1976	
15 minute summer	OU-04	16.000	S04	49.5	1.860	0.312	1.0514	
15 minute summer	S04	16.001	S05	74.1	0.748	0.364	3.3300	
15 minute summer	OU-05	18.000	S05	22.1	2.061	0.202	0.4448	
15 minute summer	OU-06	19.000	S05	11.8	3.602	0.107	0.0214	
15 minute summer	S05	16.002	S06	103.6	0.859	0.603	4.4225	
15 minute summer	S06	16.003	S17	100.5	0.804	0.585	3.2021	
15 minute summer	S07	1.000	S08	4.1	1.103	0.146	0.0456	
15 minute summer	S08	1.001	S09	5.1	0.602	0.099	0.0681	
15 minute summer	S09	1.002	JUN-01	5.2	0.403	0.122	0.0828	
15 minute summer	OU-07	3.000	JUN-01	14.7	1.829	0.138	0.0433	
15 minute summer	JUN-01	1.003	S11	19.6	1.031	0.462	0.2575	
15 minute summer	OU-08	4.000	S10	6.2	0.915	0.120	0.1004	
15 minute summer	S10	4.001	S11	6.1	1.001	0.096	0.3298	
15 minute summer	OU-09	6.000	S11	32.3	2.405	0.272	0.2579	
15 minute summer	S11	1.004	S12	78.5	0.936	0.457	2.7130	
15 minute summer	OU-10	7.000	S12	18.8	2.367	0.131	0.2403	
15 minute summer	S12	1.005	S13	99.7	1.108	0.580	5.9980	
15 minute summer	OU-11	8.000	S13	6.9	0.919	0.389	0.1013	
15 minute summer	S13	1.006	S17	107.6	0.815	0.448	4.4569	

Results for 30 year Critical Storm Duration. Lowest mass balance: 97.51%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute summer	OU-12	10	63.227	0.151	51.7	0.4416	0.0000	OK
15 minute summer	OU-13	11	63.137	0.106	46.5	0.2801	0.0000	OK
15 minute summer	S14	12	63.088	0.432	97.3	0.7627	0.0000	OK
15 minute summer	OU-14	10	63.149	0.066	22.5	0.0888	0.0000	OK
15 minute summer	JUN-02	12	63.075	0.476	118.3	0.0000	0.0000	SURCHARGED
15 minute summer	OU-15	10	63.363	0.131	32.1	0.2438	0.0000	OK
15 minute summer	S15	10	63.304	0.122	39.4	0.2581	0.0000	OK
15 minute summer	OU-16	10	63.373	0.075	19.9	0.1004	0.0000	OK
15 minute summer	JUN-03	12	63.112	0.282	58.8	0.0000	0.0000	OK
15 minute summer	OU-17	10	63.275	0.139	24.8	0.2032	0.0000	OK
15 minute summer	S16	12	63.055	0.574	190.0	1.0136	0.0000	SURCHARGED
15 minute summer	OU-18	10	63.646	0.036	7.4	0.0190	0.0000	OK
15 minute summer	JUN-04	12	62.993	0.617	175.3	0.0000	0.0000	SURCHARGED
15 minute summer	S17	12	62.923	0.837	360.5	1.4795	0.0000	SURCHARGED
15 minute summer	OU-19	10	63.893	0.093	24.4	0.1343	0.0000	OK
15 minute summer	S18	10	63.442	0.127	24.2	0.2236	0.0000	OK
15 minute summer	OU-20	10	63.635	0.128	38.8	0.2851	0.0000	OK
15 minute summer	OU-21	10	63.652	0.088	24.8	0.1291	0.0000	OK
15 minute summer	S19	10	63.406	0.181	87.0	0.3201	0.0000	OK
15 minute summer	KO-01	10	63.487	0.075	15.5	0.0724	0.0000	OK
15 minute summer	OU-22	10	63.679	0.064	17.0	0.0668	0.0000	OK
15 minute summer	S20	11	63.311	0.150	32.4	0.2652	0.0000	OK
15 minute summer	OU-23	10	63.669	0.096	18.1	0.1059	0.0000	OK
15 minute summer	OU-24	10	63.629	0.101	23.6	0.1417	0.0000	OK
15 minute summer	S21	11	63.030	0.354	158.6	0.6247	0.0000	OK

Link Event (Outflow)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
15 minute summer	OU-12	9.000	S14	51.6	1.497	0.465	1.3077	
15 minute summer	OU-13	10.000	S14	46.4	2.313	0.170	0.1554	
15 minute summer	S14	9.001	JUN-02	95.7	0.940	0.557	3.1452	
15 minute summer	OU-14	11.000	JUN-02	22.6	2.398	0.163	0.0882	
15 minute winter	JUN-02	9.002	S16	104.4	1.120	0.608	3.1912	
15 minute summer	OU-15	12.000	S15	32.0	1.133	0.288	0.1425	
15 minute summer	S15	12.001	JUN-03	39.0	1.198	0.351	1.6291	
15 minute summer	OU-16	13.000	JUN-03	19.8	2.353	0.441	0.0585	
15 minute summer	JUN-03	12.002	S16	61.9	1.454	0.557	1.3841	
15 minute summer	OU-17	14.000	S16	24.6	1.031	0.581	0.1152	
15 minute summer	S16	9.003	JUN-04	169.5	1.449	0.622	2.3478	
15 minute summer	OU-18	15.000	JUN-04	7.4	2.165	0.128	0.0945	
15 minute summer	JUN-04	9.004	S17	174.4	1.228	0.640	3.1142	
15 minute summer	S17	1.007	S26	360.3	1.279	1.117	3.6584	
15 minute summer	OU-19	20.000	S18	24.2	1.617	0.328	0.3067	
15 minute summer	S18	20.001	S19	23.9	0.673	0.342	0.8133	
15 minute summer	OU-20	21.000	S19	38.5	1.779	0.508	0.2116	
15 minute summer	OU-21	22.000	S19	24.7	1.624	0.288	0.1602	
15 minute summer	S19	20.002	S21	86.2	1.985	0.595	1.1137	
15 minute summer	KO-01	23.000	S20	15.5	1.368	0.210	0.1014	
15 minute summer	OU-22	24.000	S20	17.0	2.293	0.316	0.0334	
15 minute summer	S20	23.001	S21	31.8	1.158	0.750	1.0699	
15 minute summer	OU-23	25.000	S21	17.9	1.153	0.344	0.2691	
15 minute summer	OU-24	26.000	S21	23.4	1.193	0.211	0.2155	
15 minute summer	S21	20.003	S22	155.6	1.390	0.905	1.9594	

Results for 30 year Critical Storm Duration. Lowest mass balance: 97.51%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute summer	OU-25	10	63.633	0.126	36.6	0.2650	0.0000	OK
15 minute summer	OU-26	10	63.582	0.120	40.6	0.2783	0.0000	OK
15 minute summer	S22	11	62.939	0.308	229.9	0.5446	0.0000	OK
15 minute summer	OU-27	10	63.222	0.099	33.2	0.1438	0.0000	OK
15 minute summer	S23	11	63.121	0.465	33.1	0.1316	0.0000	SURCHARGED
15 minute summer	OU-28	11	63.520	0.063	43.6	0.1555	0.0000	OK
15 minute summer	JUN-05	11	63.112	0.490	73.4	0.0000	0.0000	SURCHARGED
15 minute summer	OU-29	10	63.695	0.195	22.5	0.2613	0.0000	SURCHARGED
15 minute summer	S24	11	63.021	0.474	94.1	0.8374	0.0000	SURCHARGED
15 minute summer	S25	12	62.914	0.409	92.1	0.7234	0.0000	SURCHARGED
15 minute summer	S26	12	62.846	0.789	659.9	1.3941	0.0000	SURCHARGED
15 minute summer	PI	12	62.632	0.732	662.5	0.2071	0.0000	SURCHARGED
120 minute summer	S27	84	62.474	1.219	327.0	3.1028	0.0000	SURCHARGED
120 minute summer	TANK	84	62.470	1.300	324.6	398.9933	0.0000	SURCHARGED
120 minute summer	S28	84	62.469	1.317	79.1	2.3267	0.0000	SURCHARGED
120 minute summer	S29	84	60.709	0.159	79.1	0.0000	0.0000	OK

Link Event (Outflow)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
15 minute summer	OU-25	27.000	S22	36.3	1.694	0.510	0.2601	
15 minute summer	OU-26	28.000	S22	40.3	1.651	0.279	0.2741	
15 minute summer	S22	20.004	S26	224.7	1.747	0.473	2.7074	
15 minute summer	OU-27	29.000	S23	33.1	1.526	0.403	0.4476	
15 minute summer	S23	29.001	JUN-05	30.0	0.443	0.429	0.5993	
15 minute summer	OU-28	30.000	JUN-05	43.4	3.488	0.135	0.0497	
15 minute summer	JUN-05	29.002	S24	71.8	1.019	1.026	1.3118	
15 minute summer	OU-29	31.000	S24	22.3	1.269	1.258	0.0319	
15 minute summer	S24	29.003	S25	92.1	1.308	1.316	0.7332	
15 minute summer	S25	29.004	S26	92.1	1.310	1.317	0.3241	
15 minute summer	S26	1.008	PI	662.5	2.352	2.053	2.3612	
15 minute summer	PI	1.009	S27	663.3	2.361	1.518	1.4744	
15 minute summer	S27	1.010	TANK	659.0	2.170	1.739	6.9967	
120 minute summer	TANK	1.011	S28	79.1	0.239	0.211	1.5224	
120 minute summer	S28	1.012	S29	79.1	2.008	0.561	1.4801	636.1

Results for 100 year +40% CC Critical Storm Duration. Lowest mass balance: 97.51%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute summer	OU-01	13	63.942	0.522	11.1	0.0955	0.0000	SURCHARGED
15 minute summer	OU-02	12	63.960	0.897	45.4	1.3298	0.0000	FLOOD RISK
15 minute summer	S01	12	63.947	0.969	41.6	0.2743	0.0000	FLOOD RISK
15 minute summer	OU-03	12	64.252	1.000	36.7	1.2230	0.2255	FLOOD
15 minute summer	S03	12	64.140	1.192	30.2	2.1057	0.0000	FLOOD RISK
15 minute summer	OU-04	12	63.964	0.871	86.7	2.3704	0.0000	FLOOD RISK
15 minute summer	S04	12	63.859	1.373	96.8	2.4258	0.0000	SURCHARGED
15 minute summer	OU-05	12	63.915	0.498	40.0	0.6585	0.0000	SURCHARGED
15 minute summer	OU-06	12	63.870	0.278	20.0	0.2008	0.0000	SURCHARGED
30 minute summer	S05	20	63.835	1.433	128.0	2.5318	0.0000	SURCHARGED
30 minute summer	S06	20	63.786	1.464	121.3	2.5862	0.0000	SURCHARGED
15 minute summer	S07	13	63.955	0.525	7.3	0.2588	0.0000	SURCHARGED
15 minute summer	S08	13	63.942	0.889	10.5	0.2517	0.0000	SURCHARGED
15 minute summer	S09	12	63.940	0.962	16.4	1.6990	0.0000	SURCHARGED
15 minute summer	OU-07	12	63.948	0.603	26.7	0.5565	0.0000	SURCHARGED
15 minute summer	JUN-01	12	63.937	0.994	31.8	0.0000	0.0000	SURCHARGED
15 minute summer	OU-08	12	63.927	0.768	15.4	0.3547	0.0000	FLOOD RISK
15 minute summer	S10	12	63.923	0.910	23.6	0.2575	0.0000	SURCHARGED
15 minute summer	OU-09	12	64.028	0.706	58.7	1.3302	0.0000	FLOOD RISK
15 minute summer	S11	12	63.921	1.353	110.0	2.5700	0.0000	SURCHARGED
15 minute summer	OU-10	12	63.923	0.429	34.0	0.4901	0.0000	SURCHARGED
15 minute summer	S12	12	63.887	1.387	138.7	2.6233	0.0000	SURCHARGED
15 minute summer	OU-11	10	63.902	0.100	12.7	0.0500	0.0000	OK
30 minute summer	S13	20	63.806	1.414	130.6	2.4985	0.0000	SURCHARGED

Link Event (Outflow)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
30 minute summer	OU-01	2.000	S08	-9.7	0.363	-0.086	0.3159	
15 minute summer	OU-02	5.000	S01	41.6	1.270	0.244	0.2573	
15 minute winter	S01	5.001	S11	37.6	1.107	0.415	1.7844	
15 minute summer	OU-03	17.000	S03	30.2	1.715	0.525	0.0519	
15 minute summer	S03	17.001	S04	25.4	1.441	1.755	0.2058	
15 minute summer	OU-04	16.000	S04	73.7	2.009	0.464	1.5805	
15 minute summer	S04	16.001	S05	92.6	0.761	0.455	3.3300	
15 minute summer	OU-05	18.000	S05	36.3	1.989	0.331	0.7131	
15 minute summer	OU-06	19.000	S05	19.2	3.925	0.173	0.0373	
15 minute summer	S05	16.002	S06	138.3	0.873	0.805	4.4225	
15 minute summer	S06	16.003	S17	135.9	0.858	0.791	3.2021	
15 minute summer	S07	1.000	S08	6.7	1.261	0.242	0.2184	
15 minute winter	S08	1.001	S09	17.5	0.613	0.337	0.2999	
15 minute summer	S09	1.002	JUN-01	27.0	0.678	0.637	0.2088	
15 minute summer	OU-07	3.000	JUN-01	25.2	2.099	0.236	0.2133	
15 minute winter	JUN-01	1.003	S11	39.1	1.051	0.924	0.4112	
15 minute summer	OU-08	4.000	S10	10.7	0.996	0.206	0.5804	
15 minute winter	S10	4.001	S11	-16.3	0.940	-0.256	0.5803	
15 minute summer	OU-09	6.000	S11	52.2	2.568	0.439	0.4063	
15 minute summer	S11	1.004	S12	107.5	0.988	0.625	2.7130	
15 minute summer	OU-10	7.000	S12	32.3	2.604	0.225	0.4065	
15 minute summer	S12	1.005	S13	136.9	1.106	0.796	5.9980	
15 minute summer	OU-11	8.000	S13	12.5	1.052	0.706	0.1751	
15 minute summer	S13	1.006	S17	147.0	0.928	0.612	4.4569	

Results for 100 year +40% CC Critical Storm Duration. Lowest mass balance: 97.51%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute summer	OU-12	11	64.076	1.000	93.4	2.9230	3.4423	FLOOD
15 minute summer	OU-13	11	64.031	1.000	84.1	2.6420	2.1674	FLOOD
15 minute summer	S14	12	64.016	1.360	147.7	2.4027	0.0000	FLOOD RISK
15 minute summer	OU-14	12	64.021	0.938	40.7	1.2591	0.0000	FLOOD RISK
15 minute summer	JUN-02	12	63.999	1.400	170.1	0.0000	0.0000	FLOOD RISK
15 minute summer	OU-15	12	64.220	0.988	58.0	1.8411	0.0000	FLOOD RISK
15 minute summer	S15	12	64.200	1.018	66.3	2.1508	0.0000	FLOOD RISK
15 minute summer	OU-16	11	64.189	0.891	36.0	1.1895	0.8482	FLOOD
15 minute summer	JUN-03	12	64.091	1.261	80.9	0.0000	0.0000	FLOOD RISK
15 minute summer	OU-17	12	64.008	0.872	44.7	1.2752	0.0000	FLOOD RISK
15 minute summer	S16	12	63.963	1.482	278.3	2.6182	0.0000	SURCHARGED
30 minute summer	OU-18	20	63.894	0.284	12.0	0.1485	0.0000	SURCHARGED
30 minute summer	JUN-04	20	63.878	1.502	260.1	0.0000	0.0000	SURCHARGED
30 minute summer	S17	21	63.748	1.662	491.5	2.9359	0.0000	SURCHARGED
15 minute summer	OU-19	12	64.483	0.683	44.0	0.9852	0.0000	SURCHARGED
15 minute summer	S18	12	64.376	1.061	41.5	1.8747	0.0000	FLOOD RISK
15 minute summer	OU-20	12	64.506	0.999	70.0	2.2207	0.0000	FLOOD RISK
15 minute summer	OU-21	12	64.411	0.847	44.7	1.2386	0.0000	FLOOD RISK
15 minute summer	S19	12	64.349	1.124	125.7	1.9853	0.0000	FLOOD RISK
15 minute summer	KO-01	12	64.320	0.908	28.0	0.8731	0.0000	FLOOD RISK
15 minute summer	OU-22	12	64.421	0.806	30.7	0.8403	0.0000	FLOOD RISK
15 minute summer	S20	12	64.298	1.137	48.8	2.0086	0.0000	FLOOD RISK
15 minute summer	OU-23	12	64.038	0.465	32.7	0.5127	0.0000	SURCHARGED
15 minute summer	OU-24	12	64.001	0.473	42.7	0.6627	0.0000	SURCHARGED
15 minute summer	S21	12	63.983	1.307	227.2	2.3100	0.0000	SURCHARGED

Link Event (Outflow)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
15 minute summer	OU-12	9.000	S14	78.1	1.544	0.703	1.9003	
15 minute summer	OU-13	10.000	S14	69.6	2.370	0.255	0.2663	
15 minute summer	S14	9.001	JUN-02	137.7	1.001	0.801	3.1667	
15 minute summer	OU-14	11.000	JUN-02	38.2	2.331	0.275	0.1460	
15 minute summer	JUN-02	9.002	S16	163.7	1.122	0.952	3.2804	
15 minute summer	OU-15	12.000	S15	53.6	1.230	0.482	0.3555	
15 minute summer	S15	12.001	JUN-03	59.4	1.231	0.535	2.4808	
30 minute summer	OU-16	13.000	JUN-03	28.8	2.430	0.641	0.0887	
15 minute summer	JUN-03	12.002	S16	81.2	1.393	0.731	1.4005	
15 minute summer	OU-17	14.000	S16	41.5	1.097	0.979	0.1921	
15 minute summer	S16	9.003	JUN-04	274.6	1.733	1.009	2.3478	
15 minute summer	OU-18	15.000	JUN-04	12.6	2.104	0.219	0.1593	
15 minute summer	JUN-04	9.004	S17	279.1	1.762	1.025	3.1142	
15 minute summer	S17	1.007	S26	534.9	1.899	1.658	3.6584	
15 minute summer	OU-19	20.000	S18	41.5	1.706	0.563	0.8160	
15 minute summer	S18	20.001	S19	35.6	0.778	0.509	1.5758	
15 minute winter	OU-20	21.000	S19	58.4	1.845	0.770	0.3890	
15 minute winter	OU-21	22.000	S19	40.9	1.637	0.476	0.3880	
15 minute summer	S19	20.002	S21	120.2	1.860	0.830	1.6603	
15 minute winter	KO-01	23.000	S20	23.9	1.364	0.325	0.3493	
15 minute summer	OU-22	24.000	S20	26.5	2.351	0.493	0.0739	
15 minute summer	S20	23.001	S21	43.1	1.137	1.018	1.5504	
15 minute summer	OU-23	25.000	S21	33.8	1.294	0.651	0.6892	
15 minute summer	OU-24	26.000	S21	42.9	1.353	0.386	0.7725	
15 minute summer	S21	20.003	S22	221.2	1.399	1.287	2.4904	

Results for 100 year +40% CC Critical Storm Duration. Lowest mass balance: 97.51%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute summer	OU-25	12	64.029	0.522	66.0	1.0967	0.0000	SURCHARGED
15 minute summer	OU-26	12	63.907	0.445	73.4	1.0332	0.0000	SURCHARGED
15 minute summer	S22	12	63.872	1.241	334.9	2.1920	0.0000	SURCHARGED
15 minute summer	OU-27	12	64.410	1.287	60.0	1.8732	0.0000	FLOOD RISK
15 minute summer	S23	12	64.237	1.581	52.9	0.4473	0.0000	FLOOD RISK
15 minute summer	OU-28	12	64.275	0.818	78.7	2.0313	0.0000	FLOOD RISK
15 minute summer	JUN-05	12	64.213	1.591	117.2	0.0000	0.0000	FLOOD RISK
15 minute summer	OU-29	12	64.143	0.643	40.7	0.8635	0.0000	SURCHARGED
15 minute summer	S24	12	63.993	1.446	149.3	2.5552	0.0000	SURCHARGED
30 minute summer	S25	20	63.750	1.245	129.0	2.1999	0.0000	SURCHARGED
30 minute summer	S26	20	63.688	1.631	901.7	2.8818	0.0000	SURCHARGED
60 minute summer	PI	64	64.081	2.181	845.5	0.6171	0.0000	SURCHARGED
60 minute winter	S27	63	63.582	2.327	562.1	5.9212	0.0000	SURCHARGED
180 minute summer	TANK	120	63.521	2.351	374.7	721.4649	0.0000	SURCHARGED
180 minute summer	S28	120	63.517	2.365	123.5	4.1797	0.0000	SURCHARGED
15 minute summer	S29	1	61.850	1.300	88.1	0.0000	0.0000	OK

Link Event (Outflow)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
15 minute summer	OU-25	27.000	S22	60.6	1.851	0.853	0.4830	
15 minute summer	OU-26	28.000	S22	72.7	1.856	0.503	0.7900	
15 minute summer	S22	20.004	S26	325.3	2.053	0.685	3.1294	
15 minute summer	OU-27	29.000	S23	52.9	1.578	0.644	0.6297	
15 minute summer	S23	29.001	JUN-05	49.8	0.707	0.712	0.5993	
15 minute summer	OU-28	30.000	JUN-05	67.4	3.430	0.211	0.0810	
15 minute summer	JUN-05	29.002	S24	114.2	1.622	1.633	1.3118	
15 minute summer	OU-29	31.000	S24	38.1	2.162	2.144	0.0328	
15 minute summer	S24	29.003	S25	143.9	2.044	2.058	0.7332	
15 minute summer	S25	29.004	S26	137.7	1.955	1.968	0.3241	
15 minute summer	S26	1.008	PI	1053.5	3.741	3.265	2.3630	
15 minute summer	PI	1.009	S27	988.0	3.508	2.262	1.5301	
15 minute summer	S27	1.010	TANK	988.4	2.988	2.608	6.9967	
180 minute summer	TANK	1.011	S28	123.5	0.373	0.330	1.5224	
180 minute summer	S28	1.012	S29	123.4	1.753	0.876	2.6469	1132.0