Design Settings

Rainfall Methodology	FSR	Maximum Time of Concentration (mins)	30.00
Return Period (years)	100	Maximum Rainfall (mm/hr)	1.0
Additional Flow (%)	40	Minimum Velocity (m/s)	0.10
FSR Region	England and Wales	Connection Type	Level Soffits
M5-60 (mm)	20.000	Minimum Backdrop Height (m)	0.200
Ratio-R	0.400	Preferred Cover Depth (m)	0.450
CV	0.750	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)	Easting (m)	Northing (m)	Depth (m)
Headwall			3.220	1200	524144.107	326607.447	0.660
MH-0001-S	0.012	5.00	3.665	1800	524175.298	326599.402	1.005
MH-0002-S	0.037	5.00	3.590	1350	524187.638	326601.013	0.890
MH-0003-S	0.020	5.00	3.730	1200	524228.830	326591.423	0.910
MH-0005-S	0.020	5.00	4.025	1200	524276.746	326578.179	1.125
MH-0006-S	0.014	5.00	3.695	1350	524199.228	326618.681	0.920
MH-0007-S	0.017	5.00	3.775	1200	524213.196	326622.685	0.950
MH-0008-S			3.850	1200	524214.485	326626.467	1.000
MH-0009-S	0.004	5.00	3.925	1200	524217.309	326634.749	1.025
MH-0010-S	0.020	5.00	3.650	1200	524250.533	326617.725	0.700
MH-0011-S	0.013	5.00	3.700	1200	524258.848	326625.067	0.700
MH-0012-S	0.017	5.00	3.825	1200	524264.929	326650.632	0.745
MH-0013-S	0.019	5.00	3.970	1200	524271.812	326679.563	0.770
MH-0014-S	0.006	5.00	3.800	1200	524275.780	326611.006	0.750
IC-0101-S	0.005	5.00	4.020	450	524271.867	326690.307	0.750
IC-0102-S	0.005	5.00	4.020	450	524282.870	326697.025	0.570
IC-0103-S	0.023	5.00	4.020	450	524276.182	326708.553	0.490
IC-0201-S	0.005	5.00	4.020	450	524263.864	326685.037	0.760
IC-0202-S	0.005	5.00	4.020	450	524251.904	326676.744	0.570
IC-0203-S	0.023	5.00	4.020	450	524244.770	326686.567	0.500
IC-0301-S	0.014	5.00	3.905	450	524268.746	326649.691	0.800
IC-0302-S	0.003	5.00	3.950	450	524271.531	326659.670	0.690
IC-0303-S	0.003	5.00	3.950	450	524285.706	326656.205	0.600
IC-0401-S	0.016	5.00	3.900	450	524263.994	326620.340	0.630
IC-0402-S	0.006	5.00	4.025	450	524277.191	326616.689	0.935
IC-0001-S	0.011	5.00	3.945	450	524284.628	326611.345	0.835
IC-0002-S	0.021	5.00	4.025	450	524291.916	326621.858	0.825
IC-0901-S	0.022	5.00	4.090	450	524289.492	326596.109	0.980
IC-1101-S	0.015	5.00	4.090	450	524286.725	326584.928	1.060
IC-1301-S	0.007	5.00	4.130	450	524294.929	326563.013	0.890
IC-1302-S			4.050	450	524292.546	326550.827	0.730
IC-1303-S	0.007	5.00	4.050	450	524304.629	326547.813	0.650
IC-1401-S	0.030	5.00	4.100	450	524279.975	326567.151	0.960
IC-1501-S	0.018	5.00	4.120	450	524274.304	326568.597	1.110

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Nodes

Name	Area (ha)	T of E (mins)	Cover Level (m)	Diameter (mm)	Easting (m)	Northing (m)	Depth (m)
IC-1701-S	0.022	5.00	3.990	450	524241.717	326577.737	0.920
IC-1801-S	0.014	5.00	3.960	450	524236.458	326579.060	0.920
IC-1901-S	0.008	5.00	3.950	450	524226.375	326581.595	1.060
IC-1902-S	0.003	5.00	3.910	450	524220.685	326583.027	0.900
IC-2001-S	0.028	5.00	3.900	450	524218.332	326583.618	0.870
IC-2201-S	0.017	5.00	3.750	450	524181.227	326591.250	0.780
IC-2301-S	0.022	5.00	3.750	450	524173.539	326592.289	0.920
IC-2401-S	0.011	5.00	3.800	450	524157.669	326596.273	0.780
IC-2402-S			3.800	450	524153.837	326582.186	0.680
IC-2403-S	0.011	5.00	3.800	450	524142.335	326585.448	0.600
IC-2501-S	0.003	5.00	3.700	450	524175.751	326601.200	0.610
IC-2502-S	0.009	5.00	3.820	450	524177.559	326609.675	0.670
IC-2601-S	0.014	5.00	3.800	450	524182.527	326613.872	0.780
IC-2701-S	0.013	5.00	3.925	450	524184.934	326622.182	1.055
IC-2801-S	0.015	5.00	3.975	450	524188.733	326628.929	0.975
IC-3001-S	0.008	5.00	3.990	450	524212.840	326635.859	1.060
IC-3002-S	0.007	5.00	4.050	450	524206.515	326637.389	1.080
IC-3201-S	0.015	5.00	3.890	450	524215.274	326645.696	0.800
IC-3202-S	0.007	5.00	3.925	450	524211.156	326646.731	0.715
IC-3401-S	0.022	5.00	3.800	450	524217.850	326656.105	0.640
IC-3501-S	0.004	5.00	3.975	450	524238.718	326639.933	0.635
IC-3502-S	0.004	5.00	3.900	450	524250.288	326637.422	0.480
IC-3601-S	0.004	5.00	4.025	450	524236.556	326627.530	0.995
IC-3602-S	0.004	5.00	4.000	450	524248.103	326624.978	0.890
Dummy Node			3.665	1800	524172.313	326600.131	1.006

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)
PN-001-S	Dummy Node	Headwall	29.139	0.600	2.659	2.560	0.099	294.3	300	9.90	1.0
PN-002-S	MH-0002-S	MH-0001-S	12.445	0.600	2.700	2.660	0.040	311.1	400	9.28	1.0
PN-003-S	MH-0003-S	MH-0002-S	42.294	0.600	2.820	2.700	0.120	352.4	300	8.34	1.0
PN-004-S	MH-0005-S	MH-0003-S	49.713	0.600	2.900	2.820	0.080	621.4	300	7.50	1.0
PN-006-S	MH-0006-S	MH-0002-S	21.130	0.600	2.775	2.700	0.075	281.7	375	9.08	1.0

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)
PN-001-S	0.911	64.4	2.7	0.706	0.360	0.703	0.0	41	0.452
PN-002-S	1.064	133.8	2.3	0.490	0.605	0.618	0.0	36	0.409
PN-003-S	0.832	58.8	0.8	0.610	0.590	0.214	0.0	25	0.297
PN-004-S	0.623	44.1	0.5	0.825	0.610	0.119	0.0	21	0.200
PN-006-S	1.074	118.6	1.4	0.545	0.515	0.367	0.0	28	0.364

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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)
PN-007-S	MH-0007-S	MH-0006-S	14.531	0.600	2.825	2.775	0.050	290.6	300	8.76	1.0
PN-008-S	MH-0008-S	MH-0007-S	3.996	0.600	2.850	2.825	0.025	159.8	300	8.49	1.0
PN-009-S	MH-0009-S	MH-0008-S	8.750	0.600	2.900	2.850	0.050	175.0	300	6.13	1.0
PN-010-S	MH-0010-S	MH-0008-S	37.093	0.600	2.950	2.850	0.100	370.9	225	8.44	1.0
PN-011-S	MH-0011-S	MH-0010-S	11.093	0.600	3.000	2.950	0.050	221.9	300	7.52	1.0
PN-012-S	MH-0012-S	MH-0011-S	26.278	0.600	3.080	3.000	0.080	328.5	150	7.34	1.0
PN-013-S	MH-0013-S	MH-0012-S	29.739	0.600	3.200	3.080	0.120	247.8	150	6.55	1.0
PN-014-S	MH-0014-S	MH-0010-S	26.126	0.600	3.050	2.950	0.100	261.3	150	6.14	1.0
PN-0101-S	IC-0101-S	MH-0013-S	10.744	0.600	3.270	3.200	0.070	153.5	150	5.76	1.0
PN-0102-S	IC-0102-S	IC-0101-S	12.892	0.600	3.450	3.360	0.090	143.2	150	5.54	1.0
PN-0103-S	IC-0103-S	IC-0102-S	13.328	0.600	3.530	3.450	0.080	166.6	150	5.29	1.0
PN-0201-S	IC-0201-S	MH-0013-S	9.651	0.600	3.260	3.200	0.060	160.8	150	5.76	1.0
PN-0202-S	IC-0202-S	IC-0201-S	14.554	0.600	3.450	3.350	0.100	145.5	150	5.56	1.0
PN-0203-S	IC-0203-S	IC-0202-S	12.140	0.600	3.520	3.450	0.070	173.4	150	5.27	1.0
PN-0301-S	IC-0301-S	MH-0012-S	3.931	0.600	3.105	3.080	0.025	157.3	150	5.61	1.0
PN-0302-S	IC-0302-S	IC-0301-S	10.360	0.600	3.260	3.195	0.065	159.4	150	5.53	1.0
PN-0303-S	IC-0303-S	IC-0302-S	14.592	0.600	3.350	3.260	0.090	162.1	150	5.31	1.0
PN-0401-S	IC-0402-S	MH-0014-S	5.856	0.600	3.090	3.050	0.040	146.4	150	5.40	1.0

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)
PN-007-S	0.917	64.8	1.2	0.650	0.620	0.311	0.0	28	0.353
PN-008-S	1.241	87.7	1.1	0.700	0.650	0.294	0.0	24	0.433
PN-009-S	1.185	83.8	0.3	0.725	0.700	0.079	0.0	13	0.277
PN-010-S	0.673	26.8	0.8	0.475	0.775	0.215	0.0	27	0.301
PN-011-S	1.051	74.3	0.5	0.400	0.400	0.135	0.0	18	0.302
PN-012-S	0.549	9.7	0.5	0.595	0.550	0.122	0.0	23	0.281
PN-013-S	0.634	11.2	0.3	0.620	0.595	0.085	0.0	18	0.279
PN-014-S	0.617	10.9	0.2	0.600	0.550	0.060	0.0	15	0.241
PN-0101-S	0.809	14.3	0.1	0.600	0.620	0.033	0.0	10	0.245
PN-0102-S	0.837	14.8	0.1	0.420	0.510	0.028	0.0	9	0.233
PN-0103-S	0.776	13.7	0.1	0.340	0.420	0.023	0.0	8	0.206
PN-0201-S	0.790	14.0	0.1	0.610	0.620	0.033	0.0	10	0.239
PN-0202-S	0.831	14.7	0.1	0.420	0.520	0.028	0.0	9	0.232
PN-0203-S	0.760	13.4	0.1	0.350	0.420	0.023	0.0	9	0.211
PN-0301-S	0.799	14.1	0.1	0.650	0.595	0.020	0.0	8	0.201
PN-0302-S	0.793	14.0	0.0	0.540	0.560	0.006	0.0	5	0.142
PN-0303-S	0.786	13.9	0.0	0.450	0.540	0.003	0.0	3	0.099
PN-0401-S	0.828	14.6	0.1	0.785	0.600	0.022	0.0	8	0.220

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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)
PN-0402-S	IC-0401-S	IC-0402-S	13.693	0.600	3.270	3.180	0.090	152.1	150	5.28	1.0
PN-0501-S	IC-0001-S	MH-0014-S	8.854	0.600	3.110	3.050	0.060	147.6	150	5.43	1.0
PN-0502-S	IC-0002-S	IC-0001-S	12.792	0.600	3.200	3.110	0.090	142.1	150	5.25	1.0
PN-1201-S	IC-1101-S	MH-0005-S	12.047	0.600	3.030	2.950	0.080	150.6	150	5.48	1.0
PN-1202-S	IC-0901-S	IC-1101-S	11.518	0.600	3.110	3.030	0.080	144.0	150	5.23	1.0
PN-1501-S	IC-1501-S	MH-0005-S	9.888	0.600	3.010	2.950	0.060	164.8	150	6.17	1.0
PN-1502-S	IC-1401-S	IC-1501-S	5.852	0.600	3.140	3.100	0.040	146.3	150	5.96	1.0
PN-1503-S	IC-1301-S	IC-1401-S	15.516	0.600	3.240	3.140	0.100	155.2	150	5.84	1.0
PN-1504-S	IC-1302-S	IC-1301-S	12.417	0.600	3.320	3.240	0.080	155.2	150	5.52	1.0
PN-1505-S	IC-1303-S	IC-1302-S	12.453	0.600	3.400	3.320	0.080	155.7	150	5.26	1.0
PN-1901-S	IC-1901-S	MH-0003-S	10.130	0.600	2.890	2.820	0.070	144.7	225	5.49	1.0
PN-1902-S	IC-1902-S	IC-1901-S	5.867	0.600	3.010	2.970	0.040	146.7	150	5.16	1.0
PN-1903-S	IC-2001-S	IC-1902-S	2.426	0.600	3.030	3.010	0.020	121.3	150	5.04	1.0
PN-1904-S	IC-1801-S	IC-1901-S	10.397	0.600	3.040	2.970	0.070	148.5	150	5.33	1.0
PN-1905-S	IC-1701-S	IC-1801-S	5.423	0.600	3.070	3.040	0.030	180.8	150	5.12	1.0
PN-2301-S	IC-2301-S	MH-0001-S	7.327	0.600	2.830	2.780	0.050	146.5	300	5.98	1.0
PN-2302-S	IC-2401-S	IC-2301-S	16.362	0.600	3.020	2.920	0.100	163.6	150	5.88	1.0
PN-2201-S	IC-2201-S	IC-2301-S	7.758	0.600	2.970	2.920	0.050	155.2	150	5.16	1.0
PN-2401-S	IC-2402-S	IC-2401-S	14.599	0.600	3.120	3.020	0.100	146.0	150	5.54	1.0

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)
PN-0402-S	0.812	14.4	0.1	0.480	0.695	0.016	0.0	7	0.194
PN-0501-S	0.825	14.6	0.1	0.685	0.600	0.032	0.0	10	0.240
PN-0502-S	0.841	14.9	0.1	0.675	0.685	0.021	0.0	8	0.212
PN-1201-S	0.816	14.4	0.1	0.910	0.925	0.037	0.0	11	0.258
PN-1202-S	0.835	14.8	0.1	0.830	0.910	0.022	0.0	8	0.222
PN-1501-S	0.780	13.8	0.2	0.960	0.925	0.062	0.0	14	0.290
PN-1502-S	0.828	14.6	0.2	0.810	0.870	0.044	0.0	11	0.271
PN-1503-S	0.804	14.2	0.1	0.740	0.810	0.014	0.0	7	0.180
PN-1504-S	0.804	14.2	0.0	0.580	0.740	0.007	0.0	5	0.144
PN-1505-S	0.803	14.2	0.0	0.500	0.580	0.007	0.0	5	0.143
PN-1901-S	1.085	43.1	0.3	0.835	0.685	0.075	0.0	13	0.297
PN-1902-S	0.827	14.6	0.1	0.750	0.830	0.031	0.0	10	0.241
PN-1903-S	0.911	16.1	0.1	0.720	0.750	0.028	0.0	9	0.255
PN-1904-S	0.822	14.5	0.1	0.770	0.830	0.036	0.0	10	0.250
PN-1905-S	0.744	13.1	0.1	0.770	0.770	0.022	0.0	8	0.197
PN-2301-S	1.296	91.6	0.2	0.620	0.585	0.061	0.0	11	0.275
PN-2302-S	0.783	13.8	0.1	0.630	0.680	0.022	0.0	8	0.208
PN-2201-S	0.804	14.2	0.1	0.630	0.680	0.017	0.0	7	0.192
PN-2401-S	0.829	14.7	0.0	0.530	0.630	0.011	0.0	6	0.174

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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)
PN-2402-S	IC-2403-S	IC-2402-S	11.956	0.600	3.200	3.120	0.080	149.4	150	5.24	1.0
PN-2501-S	IC-2501-S	MH-0001-S	1.854	0.600	3.090	3.080	0.010	185.4	150	5.22	1.0
PN-2502-S	IC-2502-S	IC-2501-S	8.666	0.600	3.150	3.090	0.060	144.4	150	5.17	1.0
PN-2701-S	IC-2701-S	MH-0006-S	14.717	0.600	2.870	2.775	0.095	154.9	225	5.41	1.0
PN-2702-S	IC-2601-S	IC-2701-S	8.652	0.600	3.020	2.960	0.060	144.2	150	5.17	1.0
PN-2703-S	IC-2801-S	IC-2701-S	7.743	0.600	3.000	2.960	0.040	193.6	150	5.18	1.0
PN-3001-S	IC-3001-S	MH-0009-S	4.605	0.600	2.930	2.900	0.030	153.5	225	6.01	1.0
PN-3002-S	IC-3002-S	IC-3001-S	6.507	0.600	2.970	2.930	0.040	162.7	150	5.14	1.0
PN-3003-S	IC-3201-S	IC-3001-S	10.134	0.600	3.090	3.020	0.070	144.8	150	5.94	1.0
PN-3004-S	IC-3202-S	IC-3201-S	4.246	0.600	3.210	3.180	0.030	141.5	150	5.08	1.0
PN-3005-S	IC-3401-S	IC-3201-S	10.723	0.600	3.160	3.090	0.070	153.2	150	5.22	1.0
PN-3006-S	IC-3601-S	MH-0009-S	20.556	0.600	3.030	2.900	0.130	158.1	150	5.67	1.0
PN-3007-S	IC-3602-S	IC-3601-S	11.826	0.600	3.110	3.030	0.080	147.8	150	5.24	1.0
PN-3008-S	IC-3501-S	IC-3201-S	24.142	0.600	3.340	3.180	0.160	150.9	150	5.73	1.0
PN-3009-S	IC-3502-S	IC-3501-S	11.839	0.600	3.420	3.340	0.080	148.0	150	5.24	1.0
Dummy Pipe	MH-0001-S	Dummy Node	3.073	0.600	2.660	2.659	0.001	3072.7	900	9.37	1.0

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)
PN-2402-S	0.820	14.5	0.0	0.450	0.530	0.011	0.0	6	0.172
PN-2501-S	0.735	13.0	0.0	0.460	0.435	0.012	0.0	7	0.164
PN-2502-S	0.834	14.7	0.0	0.520	0.460	0.009	0.0	6	0.162
PN-2701-S	1.048	41.7	0.2	0.830	0.695	0.042	0.0	10	0.244
PN-2702-S	0.835	14.7	0.1	0.630	0.815	0.014	0.0	7	0.187
PN-2703-S	0.719	12.7	0.1	0.825	0.815	0.015	0.0	7	0.171
PN-3001-S	1.053	41.9	0.3	0.835	0.800	0.067	0.0	13	0.288
PN-3002-S	0.785	13.9	0.0	0.930	0.910	0.007	0.0	5	0.140
PN-3003-S	0.833	14.7	0.2	0.650	0.820	0.052	0.0	12	0.282
PN-3004-S	0.842	14.9	0.0	0.565	0.560	0.007	0.0	5	0.151
PN-3005-S	0.809	14.3	0.1	0.490	0.650	0.022	0.0	8	0.215
PN-3006-S	0.796	14.1	0.0	0.845	0.875	0.008	0.0	6	0.155
PN-3007-S	0.824	14.6	0.0	0.740	0.845	0.004	0.0	4	0.120
PN-3008-S	0.816	14.4	0.0	0.485	0.560	0.008	0.0	6	0.159
PN-3009-S	0.824	14.6	0.0	0.330	0.485	0.004	0.0	4	0.119
Dummy Pipe	0.555	353.3	2.7	0.105	0.106	0.703	0.0	55	0.167

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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)
PN-001-S	29.139	294.3	300	Circular	3.665	2.659	0.706	3.220	2.560	0.360
PN-002-S	12.445	311.1	400	Circular	3.590	2.700	0.490	3.665	2.660	0.605
PN-003-S	42.294	352.4	300	Circular	3.730	2.820	0.610	3.590	2.700	0.590
PN-004-S	49.713	621.4	300	Circular	4.025	2.900	0.825	3.730	2.820	0.610
PN-006-S	21.130	281.7	375	Circular	3.695	2.775	0.545	3.590	2.700	0.515
PN-007-S	14.531	290.6	300	Circular	3.775	2.825	0.650	3.695	2.775	0.620
PN-008-S	3.996	159.8	300	Circular	3.850	2.850	0.700	3.775	2.825	0.650
PN-009-S	8.750	175.0	300	Circular	3.925	2.900	0.725	3.850	2.850	0.700
PN-010-S	37.093	370.9	225	Circular	3.650	2.950	0.475	3.850	2.850	0.775
PN-011-S	11.093	221.9	300	Circular	3.700	3.000	0.400	3.650	2.950	0.400
PN-012-S	26.278	328.5	150	Circular	3.825	3.080	0.595	3.700	3.000	0.550
PN-013-S	29.739	247.8	150	Circular	3.970	3.200	0.620	3.825	3.080	0.595
PN-014-S	26.126	261.3	150	Circular	3.800	3.050	0.600	3.650	2.950	0.550
PN-0101-S	10.744	153.5	150	Circular	4.020	3.270	0.600	3.970	3.200	0.620
PN-0102-S	12.892	143.2	150	Circular	4.020	3.450	0.420	4.020	3.360	0.510
PN-0103-S	13.328	166.6	150	Circular	4.020	3.530	0.340	4.020	3.450	0.420
PN-0201-S	9.651	160.8	150	Circular	4.020	3.260	0.610	3.970	3.200	0.620
PN-0202-S	14.554	145.5	150	Circular	4.020	3.450	0.420	4.020	3.350	0.520
PN-0203-S	12.140	173.4	150	Circular	4.020	3.520	0.350	4.020	3.450	0.420

Link	US Node	Dia (mm)	Node Type	MH Type	DS Node	Dia (mm)	Node Type	MH Type
PN-001-S	Dummy Node	1800	Manhole	Adoptable	Headwall	1200	Manhole	Adoptable
PN-002-S	MH-0002-S	1350	Manhole	Adoptable	MH-0001-S	1800	Manhole	Adoptable
PN-003-S	MH-0003-S	1200	Manhole	Adoptable	MH-0002-S	1350	Manhole	Adoptable
PN-004-S	MH-0005-S	1200	Manhole	Adoptable	MH-0003-S	1200	Manhole	Adoptable
PN-006-S	MH-0006-S	1350	Manhole	Adoptable	MH-0002-S	1350	Manhole	Adoptable
PN-007-S	MH-0007-S	1200	Manhole	Adoptable	MH-0006-S	1350	Manhole	Adoptable
PN-008-S	MH-0008-S	1200	Manhole	Adoptable	MH-0007-S	1200	Manhole	Adoptable
PN-009-S	MH-0009-S	1200	Manhole	Adoptable	MH-0008-S	1200	Manhole	Adoptable
PN-010-S	MH-0010-S	1200	Manhole	Adoptable	MH-0008-S	1200	Manhole	Adoptable
PN-011-S	MH-0011-S	1200	Manhole	Adoptable	MH-0010-S	1200	Manhole	Adoptable
PN-012-S	MH-0012-S	1200	Manhole	Adoptable	MH-0011-S	1200	Manhole	Adoptable
PN-013-S	MH-0013-S	1200	Manhole	Adoptable	MH-0012-S	1200	Manhole	Adoptable
PN-014-S	MH-0014-S	1200	Manhole	Adoptable	MH-0010-S	1200	Manhole	Adoptable
PN-0101-S	IC-0101-S	450	Manhole	Adoptable	MH-0013-S	1200	Manhole	Adoptable
PN-0102-S	IC-0102-S	450	Manhole	Adoptable	IC-0101-S	450	Manhole	Adoptable
PN-0103-S	IC-0103-S	450	Manhole	Adoptable	IC-0102-S	450	Manhole	Adoptable
PN-0201-S	IC-0201-S	450	Manhole	Adoptable	MH-0013-S	1200	Manhole	Adoptable
PN-0202-S	IC-0202-S	450	Manhole	Adoptable	IC-0201-S	450	Manhole	Adoptable
PN-0203-S	IC-0203-S	450	Manhole	Adoptable	IC-0202-S	450	Manhole	Adoptable

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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)
PN-0301-S	3.931	157.3	150	Circular	3.905	3.105	0.650	3.825	3.080	0.595
PN-0302-S	10.360	159.4	150	Circular	3.950	3.260	0.540	3.905	3.195	0.560
PN-0303-S	14.592	162.1	150	Circular	3.950	3.350	0.450	3.950	3.260	0.540
PN-0401-S	5.856	146.4	150	Circular	4.025	3.090	0.785	3.800	3.050	0.600
PN-0402-S	13.693	152.1	150	Circular	3.900	3.270	0.480	4.025	3.180	0.695
PN-0501-S	8.854	147.6	150	Circular	3.945	3.110	0.685	3.800	3.050	0.600
PN-0502-S	12.792	142.1	150	Circular	4.025	3.200	0.675	3.945	3.110	0.685
PN-1201-S	12.047	150.6	150	Circular	4.090	3.030	0.910	4.025	2.950	0.925
PN-1202-S	11.518	144.0	150	Circular	4.090	3.110	0.830	4.090	3.030	0.910
PN-1501-S	9.888	164.8	150	Circular	4.120	3.010	0.960	4.025	2.950	0.925
PN-1502-S	5.852	146.3	150	Circular	4.100	3.140	0.810	4.120	3.100	0.870
PN-1503-S	15.516	155.2	150	Circular	4.130	3.240	0.740	4.100	3.140	0.810
PN-1504-S	12.417	155.2	150	Circular	4.050	3.320	0.580	4.130	3.240	0.740
PN-1505-S	12.453	155.7	150	Circular	4.050	3.400	0.500	4.050	3.320	0.580
PN-1901-S	10.130	144.7	225	Circular	3.950	2.890	0.835	3.730	2.820	0.685
PN-1902-S	5.867	146.7	150	Circular	3.910	3.010	0.750	3.950	2.970	0.830
PN-1903-S	2.426	121.3	150	Circular	3.900	3.030	0.720	3.910	3.010	0.750
PN-1904-S	10.397	148.5	150	Circular	3.960	3.040	0.770	3.950	2.970	0.830
PN-1905-S	5.423	180.8	150	Circular	3.990	3.070	0.770	3.960	3.040	0.770

Link	US Node	Dia (mm)	Node Type	MH Type	DS Node	Dia (mm)	Node Type	MH Type
PN-0301-S	IC-0301-S	450	Manhole	Adoptable	MH-0012-S	1200	Manhole	Adoptable
PN-0302-S	IC-0302-S	450	Manhole	Adoptable	IC-0301-S	450	Manhole	Adoptable
PN-0303-S	IC-0303-S	450	Manhole	Adoptable	IC-0302-S	450	Manhole	Adoptable
PN-0401-S	IC-0402-S	450	Manhole	Adoptable	MH-0014-S	1200	Manhole	Adoptable
PN-0402-S	IC-0401-S	450	Manhole	Adoptable	IC-0402-S	450	Manhole	Adoptable
PN-0501-S	IC-0001-S	450	Manhole	Adoptable	MH-0014-S	1200	Manhole	Adoptable
PN-0502-S	IC-0002-S	450	Manhole	Adoptable	IC-0001-S	450	Manhole	Adoptable
PN-1201-S	IC-1101-S	450	Manhole	Adoptable	MH-0005-S	1200	Manhole	Adoptable
PN-1202-S	IC-0901-S	450	Manhole	Adoptable	IC-1101-S	450	Manhole	Adoptable
PN-1501-S	IC-1501-S	450	Manhole	Adoptable	MH-0005-S	1200	Manhole	Adoptable
PN-1502-S	IC-1401-S	450	Manhole	Adoptable	IC-1501-S	450	Manhole	Adoptable
PN-1503-S	IC-1301-S	450	Manhole	Adoptable	IC-1401-S	450	Manhole	Adoptable
PN-1504-S	IC-1302-S	450	Manhole	Adoptable	IC-1301-S	450	Manhole	Adoptable
PN-1505-S	IC-1303-S	450	Manhole	Adoptable	IC-1302-S	450	Manhole	Adoptable
PN-1901-S	IC-1901-S	450	Manhole	Adoptable	MH-0003-S	1200	Manhole	Adoptable
PN-1902-S	IC-1902-S	450	Manhole	Adoptable	IC-1901-S	450	Manhole	Adoptable
PN-1903-S	IC-2001-S	450	Manhole	Adoptable	IC-1902-S	450	Manhole	Adoptable
PN-1904-S	IC-1801-S	450	Manhole	Adoptable	IC-1901-S	450	Manhole	Adoptable
PN-1905-S	IC-1701-S	450	Manhole	Adoptable	IC-1801-S	450	Manhole	Adoptable

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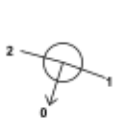
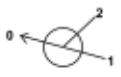
Pipeline Schedule

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)
PN-2301-S	7.327	146.5	300	Circular	3.750	2.830	0.620	3.665	2.780	0.585
PN-2302-S	16.362	163.6	150	Circular	3.800	3.020	0.630	3.750	2.920	0.680
PN-2201-S	7.758	155.2	150	Circular	3.750	2.970	0.630	3.750	2.920	0.680
PN-2401-S	14.599	146.0	150	Circular	3.800	3.120	0.530	3.800	3.020	0.630
PN-2402-S	11.956	149.4	150	Circular	3.800	3.200	0.450	3.800	3.120	0.530
PN-2501-S	1.854	185.4	150	Circular	3.700	3.090	0.460	3.665	3.080	0.435
PN-2502-S	8.666	144.4	150	Circular	3.820	3.150	0.520	3.700	3.090	0.460
PN-2701-S	14.717	154.9	225	Circular	3.925	2.870	0.830	3.695	2.775	0.695
PN-2702-S	8.652	144.2	150	Circular	3.800	3.020	0.630	3.925	2.960	0.815
PN-2703-S	7.743	193.6	150	Circular	3.975	3.000	0.825	3.925	2.960	0.815
PN-3001-S	4.605	153.5	225	Circular	3.990	2.930	0.835	3.925	2.900	0.800
PN-3002-S	6.507	162.7	150	Circular	4.050	2.970	0.930	3.990	2.930	0.910
PN-3003-S	10.134	144.8	150	Circular	3.890	3.090	0.650	3.990	3.020	0.820
PN-3004-S	4.246	141.5	150	Circular	3.925	3.210	0.565	3.890	3.180	0.560
PN-3005-S	10.723	153.2	150	Circular	3.800	3.160	0.490	3.890	3.090	0.650
PN-3006-S	20.556	158.1	150	Circular	4.025	3.030	0.845	3.925	2.900	0.875
PN-3007-S	11.826	147.8	150	Circular	4.000	3.110	0.740	4.025	3.030	0.845
PN-3008-S	24.142	150.9	150	Circular	3.975	3.340	0.485	3.890	3.180	0.560
PN-3009-S	11.839	148.0	150	Circular	3.900	3.420	0.330	3.975	3.340	0.485
Dummy Pipe	3.073	3072.7	900	Circular	3.665	2.660	0.105	3.665	2.659	0.106

Link	US Node	Dia (mm)	Node Type	MH Type	DS Node	Dia (mm)	Node Type	MH Type
PN-2301-S	IC-2301-S	450	Manhole	Adoptable	MH-0001-S	1800	Manhole	Adoptable
PN-2302-S	IC-2401-S	450	Manhole	Adoptable	IC-2301-S	450	Manhole	Adoptable
PN-2201-S	IC-2201-S	450	Manhole	Adoptable	IC-2301-S	450	Manhole	Adoptable
PN-2401-S	IC-2402-S	450	Manhole	Adoptable	IC-2401-S	450	Manhole	Adoptable
PN-2402-S	IC-2403-S	450	Manhole	Adoptable	IC-2402-S	450	Manhole	Adoptable
PN-2501-S	IC-2501-S	450	Manhole	Adoptable	MH-0001-S	1800	Manhole	Adoptable
PN-2502-S	IC-2502-S	450	Manhole	Adoptable	IC-2501-S	450	Manhole	Adoptable
PN-2701-S	IC-2701-S	450	Manhole	Adoptable	MH-0006-S	1350	Manhole	Adoptable
PN-2702-S	IC-2601-S	450	Manhole	Adoptable	IC-2701-S	450	Manhole	Adoptable
PN-2703-S	IC-2801-S	450	Manhole	Adoptable	IC-2701-S	450	Manhole	Adoptable
PN-3001-S	IC-3001-S	450	Manhole	Adoptable	MH-0009-S	1200	Manhole	Adoptable
PN-3002-S	IC-3002-S	450	Manhole	Adoptable	IC-3001-S	450	Manhole	Adoptable
PN-3003-S	IC-3201-S	450	Manhole	Adoptable	IC-3001-S	450	Manhole	Adoptable
PN-3004-S	IC-3202-S	450	Manhole	Adoptable	IC-3201-S	450	Manhole	Adoptable
PN-3005-S	IC-3401-S	450	Manhole	Adoptable	IC-3201-S	450	Manhole	Adoptable
PN-3006-S	IC-3601-S	450	Manhole	Adoptable	MH-0009-S	1200	Manhole	Adoptable
PN-3007-S	IC-3602-S	450	Manhole	Adoptable	IC-3601-S	450	Manhole	Adoptable
PN-3008-S	IC-3501-S	450	Manhole	Adoptable	IC-3201-S	450	Manhole	Adoptable
PN-3009-S	IC-3502-S	450	Manhole	Adoptable	IC-3501-S	450	Manhole	Adoptable
Dummy Pipe	MH-0001-S	1800	Manhole	Adoptable	Dummy Node	1800	Manhole	Adoptable

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Manhole Schedule

Node	Easting (m)	Northing (m)	CL (m)	Depth (m)	Dia (mm)	Connections	Link	IL (m)	Dia (mm)
Headwall	524144.107	326607.447	3.220	0.660	1200	 1	PN-001-S	2.560	300
MH-0001-S	524175.298	326599.402	3.665	1.005	1800	 1	PN-2501-S	3.080	150
						2	PN-2301-S	2.780	300
						3	PN-002-S	2.660	400
						0	Dummy Pipe	2.660	900
MH-0002-S	524187.638	326601.013	3.590	0.890	1350	 1	PN-003-S	2.700	300
						2	PN-006-S	2.700	375
						0	PN-002-S	2.700	400
MH-0003-S	524228.830	326591.423	3.730	0.910	1200	 1	PN-1901-S	2.820	225
						2	PN-004-S	2.820	300
						0	PN-003-S	2.820	300
MH-0005-S	524276.746	326578.179	4.025	1.125	1200	 1	PN-1201-S	2.950	150
						2	PN-1501-S	2.950	150
						0	PN-004-S	2.900	300
MH-0006-S	524199.228	326618.681	3.695	0.920	1350	 1	PN-2701-S	2.775	225
						2	PN-007-S	2.775	300
						0	PN-006-S	2.775	375
MH-0007-S	524213.196	326622.685	3.775	0.950	1200	 1	PN-008-S	2.825	300
						0	PN-007-S	2.825	300
MH-0008-S	524214.485	326626.467	3.850	1.000	1200	 1	PN-009-S	2.850	300
						2	PN-010-S	2.850	225
						0	PN-008-S	2.850	300
MH-0009-S	524217.309	326634.749	3.925	1.025	1200	 1	PN-3006-S	2.900	150
						2	PN-3001-S	2.900	225
						0	PN-009-S	2.900	300
MH-0010-S	524250.533	326617.725	3.650	0.700	1200	 1	PN-014-S	2.950	150
						2	PN-011-S	2.950	300
						0	PN-010-S	2.950	225
MH-0011-S	524258.848	326625.067	3.700	0.700	1200	 1	PN-012-S	3.000	150
						0	PN-011-S	3.000	300
MH-0012-S	524264.929	326650.632	3.825	0.745	1200	 1	PN-0301-S	3.080	150
						2	PN-013-S	3.080	150
						0	PN-012-S	3.080	150
MH-0013-S	524271.812	326679.563	3.970	0.770	1200	 1	PN-0201-S	3.200	150
						2	PN-0101-S	3.200	150
						0	PN-013-S	3.200	150

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Manhole Schedule

Node	Easting (m)	Northing (m)	CL (m)	Depth (m)	Dia (mm)	Connections		Link	IL (m)	Dia (mm)
MH-0014-S	524275.780	326611.006	3.800	0.750	1200		1	PN-0401-S	3.050	150
							2	PN-0501-S	3.050	150
							0	PN-014-S	3.050	150
IC-0101-S	524271.867	326690.307	4.020	0.750	450		1	PN-0102-S	3.360	150
							0	PN-0101-S	3.270	150
IC-0102-S	524282.870	326697.025	4.020	0.570	450		1	PN-0103-S	3.450	150
							0	PN-0102-S	3.450	150
IC-0103-S	524276.182	326708.553	4.020	0.490	450		0	PN-0103-S	3.530	150
IC-0201-S	524263.864	326685.037	4.020	0.760	450		1	PN-0202-S	3.350	150
							0	PN-0201-S	3.260	150
IC-0202-S	524251.904	326676.744	4.020	0.570	450		1	PN-0203-S	3.450	150
							0	PN-0202-S	3.450	150
IC-0203-S	524244.770	326686.567	4.020	0.500	450		0	PN-0203-S	3.520	150
IC-0301-S	524268.746	326649.691	3.905	0.800	450		1	PN-0302-S	3.195	150
							0	PN-0301-S	3.105	150
IC-0302-S	524271.531	326659.670	3.950	0.690	450		1	PN-0303-S	3.260	150
							0	PN-0302-S	3.260	150
IC-0303-S	524285.706	326656.205	3.950	0.600	450		0	PN-0303-S	3.350	150
IC-0401-S	524263.994	326620.340	3.900	0.630	450		0	PN-0402-S	3.270	150
IC-0402-S	524277.191	326616.689	4.025	0.935	450		1	PN-0402-S	3.180	150
							0	PN-0401-S	3.090	150
IC-0001-S	524284.628	326611.345	3.945	0.835	450		1	PN-0502-S	3.110	150
							0	PN-0501-S	3.110	150

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Manhole Schedule

Node	Easting (m)	Northing (m)	CL (m)	Depth (m)	Dia (mm)	Connections	Link	IL (m)	Dia (mm)
IC-0002-S	524291.916	326621.858	4.025	0.825	450	0	PN-0502-S	3.200	150
IC-0901-S	524289.492	326596.109	4.090	0.980	450	0	PN-1202-S	3.110	150
IC-1101-S	524286.725	326584.928	4.090	1.060	450	1	PN-1202-S	3.030	150
						0	PN-1201-S	3.030	150
IC-1301-S	524294.929	326563.013	4.130	0.890	450	1	PN-1504-S	3.240	150
						0	PN-1503-S	3.240	150
IC-1302-S	524292.546	326550.827	4.050	0.730	450	1	PN-1505-S	3.320	150
						0	PN-1504-S	3.320	150
IC-1303-S	524304.629	326547.813	4.050	0.650	450	0	PN-1505-S	3.400	150
IC-1401-S	524279.975	326567.151	4.100	0.960	450	1	PN-1503-S	3.140	150
						0	PN-1502-S	3.140	150
IC-1501-S	524274.304	326568.597	4.120	1.110	450	1	PN-1502-S	3.100	150
						0	PN-1501-S	3.010	150
IC-1701-S	524241.717	326577.737	3.990	0.920	450	0	PN-1905-S	3.070	150
IC-1801-S	524236.458	326579.060	3.960	0.920	450	1	PN-1905-S	3.040	150
						0	PN-1904-S	3.040	150
IC-1901-S	524226.375	326581.595	3.950	1.060	450	1	PN-1902-S	2.970	150
						2	PN-1904-S	2.970	150
						0	PN-1901-S	2.890	225
IC-1902-S	524220.685	326583.027	3.910	0.900	450	1	PN-1903-S	3.010	150
						0	PN-1902-S	3.010	150
IC-2001-S	524218.332	326583.618	3.900	0.870	450	0	PN-1903-S	3.030	150

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Manhole Schedule

Node	Easting (m)	Northing (m)	CL (m)	Depth (m)	Dia (mm)	Connections	Link	IL (m)	Dia (mm)
IC-2201-S	524181.227	326591.250	3.750	0.780	450				
						0	PN-2201-S	2.970	150
IC-2301-S	524173.539	326592.289	3.750	0.920	450		1	PN-2201-S	2.920	150
							2	PN-2302-S	2.920	150
							0	PN-2301-S	2.830	300
IC-2401-S	524157.669	326596.273	3.800	0.780	450		1	PN-2401-S	3.020	150
							0	PN-2302-S	3.020	150
IC-2402-S	524153.837	326582.186	3.800	0.680	450		1	PN-2402-S	3.120	150
							0	PN-2401-S	3.120	150
IC-2403-S	524142.335	326585.448	3.800	0.600	450					
						0	PN-2402-S	3.200	150
IC-2501-S	524175.751	326601.200	3.700	0.610	450		1	PN-2502-S	3.090	150
							0	PN-2501-S	3.090	150
IC-2502-S	524177.559	326609.675	3.820	0.670	450					
						0	PN-2502-S	3.150	150
IC-2601-S	524182.527	326613.872	3.800	0.780	450					
						0	PN-2702-S	3.020	150
IC-2701-S	524184.934	326622.182	3.925	1.055	450		1	PN-2703-S	2.960	150
							2	PN-2702-S	2.960	150
							0	PN-2701-S	2.870	225
IC-2801-S	524188.733	326628.929	3.975	0.975	450					
						0	PN-2703-S	3.000	150
IC-3001-S	524212.840	326635.859	3.990	1.060	450		1	PN-3002-S	2.930	150
							2	PN-3003-S	3.020	150
							0	PN-3001-S	2.930	225
IC-3002-S	524206.515	326637.389	4.050	1.080	450					
						0	PN-3002-S	2.970	150
IC-3201-S	524215.274	326645.696	3.890	0.800	450		1	PN-3004-S	3.180	150
							2	PN-3005-S	3.090	150
							3	PN-3008-S	3.180	150
							0	PN-3003-S	3.090	150

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Manhole Schedule

Node	Easting (m)	Northing (m)	CL (m)	Depth (m)	Dia (mm)	Connections	Link	IL (m)	Dia (mm)
IC-3202-S	524211.156	326646.731	3.925	0.715	450	0	PN-3004-S	3.210	150
IC-3401-S	524217.850	326656.105	3.800	0.640	450	0	PN-3005-S	3.160	150
IC-3501-S	524238.718	326639.933	3.975	0.635	450	1	PN-3009-S	3.340	150
						0	PN-3008-S	3.340	150
IC-3502-S	524250.288	326637.422	3.900	0.480	450	0	PN-3009-S	3.420	150
IC-3601-S	524236.556	326627.530	4.025	0.995	450	1	PN-3007-S	3.030	150
						0	PN-3006-S	3.030	150
IC-3602-S	524248.103	326624.978	4.000	0.890	450	0	PN-3007-S	3.110	150
Dummy Node	524172.313	326600.131	3.665	1.006	1800	1	Dummy Pipe	2.659	900
						0	PN-001-S	2.659	300

Simulation Settings

Rainfall Methodology	FSR	Analysis Speed	Normal
FSR Region	England and Wales	Skip Steady State	x
M5-60 (mm)	20.000	Drain Down Time (mins)	240
Ratio-R	0.400	Additional Storage (m³/ha)	0.0
Summer CV	0.750	Check Discharge Rate(s)	x
Winter CV	0.840	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
5	0	0	0
10	0	0	0
30	0	0	0
100	0	0	0
100	40	0	0

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Node MH-0001-S Online Hydro-Brake® Control

Flap Valve	x	Objective	(HE) Minimise upstream storage
Replaces Downstream Link	x	Sump Available	✓
Invert Level (m)	2.660	Product Number	CTL-SHE-0077-2600-1005-2600
Design Depth (m)	1.005	Min Outlet Diameter (m)	0.100
Design Flow (l/s)	2.6	Min Node Diameter (mm)	1200

Node MH-0001-S Depth/Area Storage Structure

Base Inf Coefficient (m/hr)	0.00000	Safety Factor	2.0	Invert Level (m)	2.660
Side Inf Coefficient (m/hr)	0.00000	Porosity	0.95	Time to half empty (mins)	

Depth (m)	Area (m²)	Inf Area (m²)	Depth (m)	Area (m²)	Inf Area (m²)	Depth (m)	Area (m²)	Inf Area (m²)
0.000	95.0	0.0	0.400	95.0	0.0	0.401	0.0	0.0

Node MH-0002-S Depth/Area Storage Structure

Base Inf Coefficient (m/hr)	0.00000	Safety Factor	2.0	Invert Level (m)	2.700
Side Inf Coefficient (m/hr)	0.00000	Porosity	1.00	Time to half empty (mins)	

Depth (m)	Area (m²)	Inf Area (m²)	Depth (m)	Area (m²)	Inf Area (m²)	Depth (m)	Area (m²)	Inf Area (m²)
0.000	5.0	0.0	0.490	11.0	0.0	0.891	0.0	0.0
0.489	5.0	0.0	0.890	55.0	0.0			

Node MH-0002-S Depth/Area Storage Structure

Base Inf Coefficient (m/hr)	0.00000	Safety Factor	2.0	Invert Level (m)	2.700
Side Inf Coefficient (m/hr)	0.00000	Porosity	1.00	Time to half empty (mins)	

Depth (m)	Area (m²)	Inf Area (m²)	Depth (m)	Area (m²)	Inf Area (m²)	Depth (m)	Area (m²)	Inf Area (m²)
0.000	5.0	0.0	0.490	24.0	0.0	0.891	0.0	0.0
0.489	5.0	0.0	0.890	118.0	0.0			

Node MH-0002-S Depth/Area Storage Structure

Base Inf Coefficient (m/hr)	0.00000	Safety Factor	2.0	Invert Level (m)	2.700
Side Inf Coefficient (m/hr)	0.00000	Porosity	1.00	Time to half empty (mins)	

Depth (m)	Area (m²)	Inf Area (m²)	Depth (m)	Area (m²)	Inf Area (m²)	Depth (m)	Area (m²)	Inf Area (m²)
0.000	50.0	0.0	0.390	715.0	0.0	0.891	0.0	0.0
0.389	75.0	0.0	0.890	1080.0	0.0			

Node IC-0103-S Depth/Area Storage Structure

Base Inf Coefficient (m/hr)	0.00000	Safety Factor	2.0	Invert Level (m)	3.530
Side Inf Coefficient (m/hr)	0.00000	Porosity	0.30	Time to half empty (mins)	22

Depth (m)	Area (m²)	Inf Area (m²)	Depth (m)	Area (m²)	Inf Area (m²)	Depth (m)	Area (m²)	Inf Area (m²)
0.000	118.0	0.0	0.230	118.0	0.0	0.381	0.0	0.0
0.229	118.0	0.0	0.380	118.0	0.0			

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Node IC-0203-S Depth/Area Storage Structure

Base Inf Coefficient (m/hr)	0.00000	Safety Factor	2.0	Invert Level (m)	3.520
Side Inf Coefficient (m/hr)	0.00000	Porosity	0.30	Time to half empty (mins)	23

Depth (m)	Area (m²)	Inf Area (m²)	Depth (m)	Area (m²)	Inf Area (m²)	Depth (m)	Area (m²)	Inf Area (m²)
0.000	118.0	0.0	0.240	118.0	0.0	0.391	0.0	0.0
0.239	118.0	0.0	0.390	118.0	0.0			

Node IC-0301-S Depth/Area Storage Structure

Base Inf Coefficient (m/hr)	0.00000	Safety Factor	2.0	Invert Level (m)	3.105
Side Inf Coefficient (m/hr)	0.00000	Porosity	0.30	Time to half empty (mins)	

Depth (m)	Area (m²)	Inf Area (m²)	Depth (m)	Area (m²)	Inf Area (m²)	Depth (m)	Area (m²)	Inf Area (m²)
0.000	0.0	0.0	0.540	100.0	0.0	0.691	0.0	0.0
0.539	0.0	0.0	0.690	100.0	0.0			

Node IC-0401-S Depth/Area Storage Structure

Base Inf Coefficient (m/hr)	0.00000	Safety Factor	2.0	Invert Level (m)	3.270
Side Inf Coefficient (m/hr)	0.00000	Porosity	0.30	Time to half empty (mins)	

Depth (m)	Area (m²)	Inf Area (m²)	Depth (m)	Area (m²)	Inf Area (m²)	Depth (m)	Area (m²)	Inf Area (m²)
0.000	0.0	0.0	0.370	100.0	0.0	0.521	0.0	0.0
0.369	0.0	0.0	0.520	100.0	0.0			

Node IC-0001-S Depth/Area Storage Structure

Base Inf Coefficient (m/hr)	0.00000	Safety Factor	2.0	Invert Level (m)	3.110
Side Inf Coefficient (m/hr)	0.00000	Porosity	0.30	Time to half empty (mins)	

Depth (m)	Area (m²)	Inf Area (m²)	Depth (m)	Area (m²)	Inf Area (m²)	Depth (m)	Area (m²)	Inf Area (m²)
0.000	0.0	0.0	0.575	57.0	0.0	0.726	0.0	0.0
0.574	0.0	0.0	0.725	57.0	0.0			

Node IC-0002-S Depth/Area Storage Structure

Base Inf Coefficient (m/hr)	0.00000	Safety Factor	2.0	Invert Level (m)	3.200
Side Inf Coefficient (m/hr)	0.00000	Porosity	0.30	Time to half empty (mins)	

Depth (m)	Area (m²)	Inf Area (m²)	Depth (m)	Area (m²)	Inf Area (m²)	Depth (m)	Area (m²)	Inf Area (m²)
0.000	0.0	0.0	0.565	110.0	0.0	0.716	0.0	0.0
0.564	0.0	0.0	0.715	110.0	0.0			

Node IC-0901-S Depth/Area Storage Structure

Base Inf Coefficient (m/hr)	0.00000	Safety Factor	2.0	Invert Level (m)	3.110
Side Inf Coefficient (m/hr)	0.00000	Porosity	0.30	Time to half empty (mins)	

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Depth (m)	Area (m²)	Inf Area (m²)	Depth (m)	Area (m²)	Inf Area (m²)	Depth (m)	Area (m²)	Inf Area (m²)
0.000	0.0	0.0	0.720	54.0	0.0	0.871	0.0	0.0
0.719	0.0	0.0	0.870	54.0	0.0			

Node IC-1101-S Depth/Area Storage Structure

Base Inf Coefficient (m/hr)	0.00000	Safety Factor	2.0	Invert Level (m)	3.030
Side Inf Coefficient (m/hr)	0.00000	Porosity	0.30	Time to half empty (mins)	

Depth (m)	Area (m²)	Inf Area (m²)	Depth (m)	Area (m²)	Inf Area (m²)	Depth (m)	Area (m²)	Inf Area (m²)
0.000	0.0	0.0	0.800	62.0	0.0	0.951	0.0	0.0
0.799	0.0	0.0	0.950	62.0	0.0			

Node IC-1401-S Depth/Area Storage Structure

Base Inf Coefficient (m/hr)	0.00000	Safety Factor	2.0	Invert Level (m)	3.140
Side Inf Coefficient (m/hr)	0.00000	Porosity	0.30	Time to half empty (mins)	

Depth (m)	Area (m²)	Inf Area (m²)	Depth (m)	Area (m²)	Inf Area (m²)	Depth (m)	Area (m²)	Inf Area (m²)
0.000	0.0	0.0	0.700	120.0	0.0	0.851	0.0	0.0
0.699	0.0	0.0	0.850	120.0	0.0			

Node IC-1501-S Depth/Area Storage Structure

Base Inf Coefficient (m/hr)	0.00000	Safety Factor	2.0	Invert Level (m)	3.010
Side Inf Coefficient (m/hr)	0.00000	Porosity	0.30	Time to half empty (mins)	

Depth (m)	Area (m²)	Inf Area (m²)	Depth (m)	Area (m²)	Inf Area (m²)	Depth (m)	Area (m²)	Inf Area (m²)
0.000	0.0	0.0	0.850	130.0	0.0	1.001	0.0	0.0
0.849	0.0	0.0	1.000	130.0	0.0			

Node IC-1701-S Depth/Area Storage Structure

Base Inf Coefficient (m/hr)	0.00000	Safety Factor	2.0	Invert Level (m)	3.070
Side Inf Coefficient (m/hr)	0.00000	Porosity	0.30	Time to half empty (mins)	

Depth (m)	Area (m²)	Inf Area (m²)	Depth (m)	Area (m²)	Inf Area (m²)	Depth (m)	Area (m²)	Inf Area (m²)
0.000	0.0	0.0	0.640	60.0	0.0	0.811	0.0	0.0
0.639	0.0	0.0	0.810	60.0	0.0			

Node IC-1801-S Depth/Area Storage Structure

Base Inf Coefficient (m/hr)	0.00000	Safety Factor	2.0	Invert Level (m)	3.040
Side Inf Coefficient (m/hr)	0.00000	Porosity	0.30	Time to half empty (mins)	

Depth (m)	Area (m²)	Inf Area (m²)	Depth (m)	Area (m²)	Inf Area (m²)	Depth (m)	Area (m²)	Inf Area (m²)
0.000	0.0	0.0	0.640	130.0	0.0	0.811	0.0	0.0
0.639	0.0	0.0	0.810	130.0	0.0			

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Node IC-1902-S Depth/Area Storage Structure

Base Inf Coefficient (m/hr)	0.00000	Safety Factor	2.0	Invert Level (m)	3.010
Side Inf Coefficient (m/hr)	0.00000	Porosity	0.30	Time to half empty (mins)	

Depth (m)	Area (m²)	Inf Area (m²)	Depth (m)	Area (m²)	Inf Area (m²)	Depth (m)	Area (m²)	Inf Area (m²)
0.000	0.0	0.0	0.640	66.0	0.0	0.791	0.0	0.0
0.639	0.0	0.0	0.790	66.0	0.0			

Node IC-2301-S Depth/Area Storage Structure

Base Inf Coefficient (m/hr)	0.00000	Safety Factor	2.0	Invert Level (m)	2.830
Side Inf Coefficient (m/hr)	0.00000	Porosity	0.30	Time to half empty (mins)	

Depth (m)	Area (m²)	Inf Area (m²)	Depth (m)	Area (m²)	Inf Area (m²)	Depth (m)	Area (m²)	Inf Area (m²)
0.000	0.0	0.0	0.660	133.0	0.0	0.811	0.0	0.0
0.659	0.0	0.0	0.810	133.0	0.0			

Node IC-2401-S Depth/Area Storage Structure

Base Inf Coefficient (m/hr)	0.00000	Safety Factor	2.0	Invert Level (m)	3.020
Side Inf Coefficient (m/hr)	0.00000	Porosity	0.30	Time to half empty (mins)	

Depth (m)	Area (m²)	Inf Area (m²)	Depth (m)	Area (m²)	Inf Area (m²)	Depth (m)	Area (m²)	Inf Area (m²)
0.000	0.0	0.0	0.520	70.0	0.0	0.671	0.0	0.0
0.519	0.0	0.0	0.670	70.0	0.0			

Node IC-2601-S Depth/Area Storage Structure

Base Inf Coefficient (m/hr)	0.00000	Safety Factor	2.0	Invert Level (m)	3.020
Side Inf Coefficient (m/hr)	0.00000	Porosity	0.30	Time to half empty (mins)	

Depth (m)	Area (m²)	Inf Area (m²)	Depth (m)	Area (m²)	Inf Area (m²)	Depth (m)	Area (m²)	Inf Area (m²)
0.000	0.0	0.0	0.520	60.0	0.0	0.671	0.0	0.0
0.519	0.0	0.0	0.670	60.0	0.0			

Node IC-2701-S Depth/Area Storage Structure

Base Inf Coefficient (m/hr)	0.00000	Safety Factor	2.0	Invert Level (m)	2.870
Side Inf Coefficient (m/hr)	0.00000	Porosity	0.30	Time to half empty (mins)	

Depth (m)	Area (m²)	Inf Area (m²)	Depth (m)	Area (m²)	Inf Area (m²)	Depth (m)	Area (m²)	Inf Area (m²)
0.000	0.0	0.0	0.795	85.0	0.0	0.946	0.0	0.0
0.794	0.0	0.0	0.945	85.0	0.0			

Node IC-2801-S Depth/Area Storage Structure

Base Inf Coefficient (m/hr)	0.00000	Safety Factor	2.0	Invert Level (m)	3.000
Side Inf Coefficient (m/hr)	0.00000	Porosity	0.30	Time to half empty (mins)	

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Depth (m)	Area (m²)	Inf Area (m²)	Depth (m)	Area (m²)	Inf Area (m²)	Depth (m)	Area (m²)	Inf Area (m²)
0.000	0.0	0.0	0.705	85.0	0.0	0.866	0.0	0.0
0.704	0.0	0.0	0.865	85.0	0.0			

Node IC-3001-S Depth/Area Storage Structure

Base Inf Coefficient (m/hr)	0.00000	Safety Factor	2.0	Invert Level (m)	2.930
Side Inf Coefficient (m/hr)	0.00000	Porosity	0.30	Time to half empty (mins)	0

Depth (m)	Area (m²)	Inf Area (m²)	Depth (m)	Area (m²)	Inf Area (m²)	Depth (m)	Area (m²)	Inf Area (m²)
0.000	0.0	0.0	0.750	80.0	0.0	0.901	0.0	0.0
0.749	0.0	0.0	0.900	80.0	0.0			

Node IC-3201-S Depth/Area Storage Structure

Base Inf Coefficient (m/hr)	0.00000	Safety Factor	2.0	Invert Level (m)	3.090
Side Inf Coefficient (m/hr)	0.00000	Porosity	0.30	Time to half empty (mins)	

Depth (m)	Area (m²)	Inf Area (m²)	Depth (m)	Area (m²)	Inf Area (m²)	Depth (m)	Area (m²)	Inf Area (m²)
0.000	0.0	0.0	0.540	145.0	0.0	0.691	0.0	0.0
0.539	0.0	0.0	0.690	145.0	0.0			

Node IC-3401-S Depth/Area Storage Structure

Base Inf Coefficient (m/hr)	0.00000	Safety Factor	2.0	Invert Level (m)	3.160
Side Inf Coefficient (m/hr)	0.00000	Porosity	0.30	Time to half empty (mins)	

Depth (m)	Area (m²)	Inf Area (m²)	Depth (m)	Area (m²)	Inf Area (m²)	Depth (m)	Area (m²)	Inf Area (m²)
0.000	0.0	0.0	0.380	145.0	0.0	0.531	0.0	0.0
0.379	0.0	0.0	0.530	145.0	0.0			

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Results for 1 year Critical Storm Duration. Lowest mass balance: 97.69%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
60 minute winter	Headwall	64	2.598	0.038	2.6	0.0000	0.0000	OK
360 minute winter	MH-0001-S	328	3.093	0.433	7.8	37.2475	0.0000	OK
360 minute winter	MH-0002-S	328	3.093	0.393	11.1	31.4952	0.0000	OK
360 minute winter	MH-0003-S	320	3.093	0.273	4.6	0.3090	0.0000	OK
360 minute winter	MH-0005-S	320	3.093	0.193	2.5	0.2186	0.0000	OK
360 minute winter	MH-0006-S	328	3.093	0.318	7.1	0.4554	0.0000	OK
360 minute winter	MH-0007-S	328	3.093	0.268	6.2	0.3034	0.0000	OK
360 minute winter	MH-0008-S	320	3.093	0.243	6.1	0.2751	0.0000	OK
360 minute winter	MH-0009-S	320	3.093	0.193	1.9	0.2186	0.0000	OK
15 minute winter	MH-0010-S	12	3.106	0.156	21.4	0.1770	0.0000	OK
15 minute winter	MH-0011-S	12	3.111	0.111	11.8	0.1254	0.0000	OK
15 minute winter	MH-0012-S	12	3.216	0.136	10.8	0.1542	0.0000	OK
15 minute winter	MH-0013-S	12	3.279	0.079	6.3	0.0897	0.0000	OK
15 minute winter	MH-0014-S	12	3.147	0.097	8.1	0.1099	0.0000	OK
30 minute winter	IC-0101-S	21	3.308	0.038	2.1	0.0061	0.0000	OK
30 minute winter	IC-0102-S	21	3.485	0.035	1.7	0.0055	0.0000	OK
30 minute winter	IC-0103-S	23	3.561	0.031	2.5	1.1180	0.0000	OK
15 minute winter	IC-0201-S	12	3.299	0.039	2.1	0.0062	0.0000	OK
30 minute winter	IC-0202-S	21	3.484	0.034	1.6	0.0055	0.0000	OK
30 minute winter	IC-0203-S	23	3.552	0.032	2.5	1.1265	0.0000	OK
15 minute winter	IC-0301-S	12	3.217	0.112	2.7	0.0178	0.0000	OK
15 minute winter	IC-0302-S	11	3.284	0.024	0.8	0.0039	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)
360 minute winter	MH-0001-S	Dummy Pipe	Dummy Node	2.6	0.234	0.007	0.0342	
360 minute winter	MH-0002-S	PN-002-S	MH-0001-S	6.1	0.557	0.045	1.5550	
360 minute winter	MH-0003-S	PN-003-S	MH-0002-S	3.8	0.469	0.064	2.9133	
360 minute winter	MH-0005-S	PN-004-S	MH-0003-S	2.5	0.291	0.057	2.8662	
360 minute winter	MH-0006-S	PN-006-S	MH-0002-S	6.6	0.408	0.056	2.2188	
360 minute winter	MH-0007-S	PN-007-S	MH-0006-S	6.1	0.517	0.094	0.9945	
360 minute winter	MH-0008-S	PN-008-S	MH-0007-S	5.8	0.555	0.067	0.2550	
360 minute winter	MH-0009-S	PN-009-S	MH-0008-S	1.7	0.257	0.020	0.4776	
15 minute winter	MH-0010-S	PN-010-S	MH-0008-S	21.2	0.707	0.792	1.1117	
15 minute winter	MH-0011-S	PN-011-S	MH-0010-S	11.7	0.434	0.157	0.3372	
15 minute winter	MH-0012-S	PN-012-S	MH-0011-S	10.4	0.674	1.069	0.4043	
15 minute winter	MH-0013-S	PN-013-S	MH-0012-S	6.2	0.461	0.556	0.3904	
15 minute winter	MH-0014-S	PN-014-S	MH-0010-S	7.9	0.533	0.726	0.3877	
30 minute winter	IC-0101-S	PN-0101-S	MH-0013-S	2.1	0.341	0.145	0.0665	
30 minute winter	IC-0102-S	PN-0102-S	IC-0101-S	1.7	0.549	0.112	0.0388	
30 minute winter	IC-0103-S	PN-0103-S	IC-0102-S	1.3	0.459	0.095	0.0379	
15 minute winter	IC-0201-S	PN-0201-S	MH-0013-S	2.0	0.322	0.147	0.0629	
30 minute winter	IC-0202-S	PN-0202-S	IC-0201-S	1.6	0.545	0.111	0.0436	
30 minute winter	IC-0203-S	PN-0203-S	IC-0202-S	1.3	0.453	0.096	0.0346	
15 minute winter	IC-0301-S	PN-0301-S	MH-0012-S	2.4	0.265	0.174	0.0608	
15 minute winter	IC-0302-S	PN-0302-S	IC-0301-S	0.8	0.424	0.055	0.0190	

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Results for 1 year Critical Storm Duration. Lowest mass balance: 97.69%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute winter	IC-0303-S	11	3.367	0.017	0.4	0.0028	0.0000	OK
15 minute winter	IC-0401-S	10	3.311	0.041	2.3	0.0065	0.0000	OK
15 minute winter	IC-0402-S	12	3.149	0.059	3.0	0.0094	0.0000	OK
15 minute winter	IC-0001-S	10	3.167	0.057	4.6	0.0090	0.0000	OK
15 minute winter	IC-0002-S	10	3.246	0.046	3.0	0.0073	0.0000	OK
15 minute winter	IC-0901-S	10	3.156	0.046	3.1	0.0073	0.0000	OK
15 minute winter	IC-1101-S	10	3.094	0.064	5.2	0.0102	0.0000	OK
15 minute winter	IC-1301-S	11	3.277	0.037	1.9	0.0058	0.0000	OK
15 minute winter	IC-1302-S	11	3.346	0.026	1.0	0.0042	0.0000	OK
15 minute winter	IC-1303-S	10	3.427	0.027	1.0	0.0043	0.0000	OK
15 minute winter	IC-1401-S	11	3.212	0.072	6.0	0.0114	0.0000	OK
15 minute winter	IC-1501-S	11	3.100	0.090	8.3	0.0143	0.0000	OK
15 minute winter	IC-1701-S	10	3.124	0.054	3.1	0.0085	0.0000	OK
15 minute winter	IC-1801-S	10	3.103	0.063	5.0	0.0101	0.0000	OK
360 minute winter	IC-1901-S	320	3.093	0.203	1.7	0.0323	0.0000	OK
360 minute winter	IC-1902-S	320	3.093	0.083	0.7	0.0132	0.0000	OK
360 minute winter	IC-2001-S	320	3.093	0.063	0.6	0.0101	0.0000	OK
360 minute winter	IC-2201-S	320	3.093	0.123	0.4	0.0196	0.0000	OK
360 minute winter	IC-2301-S	328	3.093	0.263	1.3	0.0418	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	IC-0303-S	PN-0303-S	IC-0302-S	0.4	0.271	0.029	0.0219	
15 minute winter	IC-0401-S	PN-0402-S	IC-0402-S	2.2	0.582	0.154	0.0520	
15 minute winter	IC-0402-S	PN-0401-S	MH-0014-S	2.9	0.369	0.199	0.0542	
15 minute winter	IC-0001-S	PN-0501-S	MH-0014-S	4.5	0.513	0.306	0.0799	
15 minute winter	IC-0002-S	PN-0502-S	IC-0001-S	3.0	0.557	0.199	0.0679	
15 minute winter	IC-0901-S	PN-1202-S	IC-1101-S	3.1	0.520	0.207	0.0679	
15 minute winter	IC-1101-S	PN-1201-S	MH-0005-S	5.1	0.698	0.351	0.0946	
15 minute winter	IC-1301-S	PN-1503-S	IC-1401-S	1.9	0.331	0.132	0.0901	
15 minute winter	IC-1302-S	PN-1504-S	IC-1301-S	1.0	0.356	0.067	0.0334	
15 minute winter	IC-1303-S	PN-1505-S	IC-1302-S	1.0	0.465	0.068	0.0259	
15 minute winter	IC-1401-S	PN-1502-S	IC-1501-S	5.9	0.752	0.405	0.0461	
15 minute winter	IC-1501-S	PN-1501-S	MH-0005-S	8.4	0.790	0.607	0.1047	
15 minute winter	IC-1701-S	PN-1905-S	IC-1801-S	3.0	0.480	0.232	0.0345	
15 minute winter	IC-1801-S	PN-1904-S	IC-1901-S	4.9	0.727	0.340	0.0709	
360 minute winter	IC-1901-S	PN-1901-S	MH-0003-S	1.7	0.299	0.039	0.3927	
360 minute winter	IC-1902-S	PN-1902-S	IC-1901-S	0.7	0.421	0.048	0.0748	
360 minute winter	IC-2001-S	PN-1903-S	IC-1902-S	0.6	0.386	0.037	0.0207	
360 minute winter	IC-2201-S	PN-2201-S	IC-2301-S	0.4	0.351	0.028	0.1283	
360 minute winter	IC-2301-S	PN-2301-S	MH-0001-S	1.2	0.382	0.013	0.4979	

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Results for 1 year Critical Storm Duration. Lowest mass balance: 97.69%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
360 minute winter	IC-2401-S	312	3.093	0.073	0.4	0.0116	0.0000	OK
15 minute winter	IC-2402-S	11	3.153	0.033	1.6	0.0052	0.0000	OK
15 minute winter	IC-2403-S	10	3.234	0.034	1.6	0.0054	0.0000	OK
15 minute winter	IC-2501-S	11	3.129	0.039	1.7	0.0063	0.0000	OK
15 minute winter	IC-2502-S	10	3.180	0.030	1.3	0.0047	0.0000	OK
360 minute winter	IC-2601-S	328	3.093	0.073	0.3	0.0116	0.0000	OK
360 minute winter	IC-2701-S	328	3.093	0.223	0.9	0.0355	0.0000	OK
360 minute winter	IC-2801-S	328	3.093	0.093	0.3	0.0148	0.0000	OK
360 minute winter	IC-3001-S	320	3.093	0.163	1.6	0.0260	0.0000	OK
360 minute winter	IC-3002-S	320	3.093	0.123	0.2	0.0196	0.0000	OK
15 minute winter	IC-3201-S	11	3.167	0.077	7.0	0.0123	0.0000	OK
15 minute winter	IC-3202-S	10	3.237	0.027	1.0	0.0043	0.0000	OK
15 minute winter	IC-3401-S	10	3.207	0.047	3.1	0.0075	0.0000	OK
15 minute winter	IC-3501-S	11	3.368	0.028	1.2	0.0044	0.0000	OK
15 minute winter	IC-3502-S	10	3.440	0.020	0.6	0.0032	0.0000	OK
360 minute winter	IC-3601-S	336	3.093	0.063	0.2	0.0101	0.0000	OK
15 minute winter	IC-3602-S	10	3.130	0.020	0.6	0.0032	0.0000	OK
60 minute winter	Dummy Node	63	2.701	0.042	2.6	0.1067	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)
360 minute winter	IC-2401-S	PN-2302-S	IC-2301-S	0.4	0.348	0.029	0.2139	
15 minute winter	IC-2402-S	PN-2401-S	IC-2401-S	1.6	0.399	0.106	0.0573	
15 minute winter	IC-2403-S	PN-2402-S	IC-2402-S	1.6	0.542	0.108	0.0346	
15 minute winter	IC-2501-S	PN-2501-S	MH-0001-S	1.7	0.477	0.127	0.0064	
15 minute winter	IC-2502-S	PN-2502-S	IC-2501-S	1.3	0.418	0.086	0.0265	
360 minute winter	IC-2601-S	PN-2702-S	IC-2701-S	0.3	0.331	0.020	0.1085	
360 minute winter	IC-2701-S	PN-2701-S	MH-0006-S	0.9	0.159	0.021	0.5849	
360 minute winter	IC-2801-S	PN-2703-S	IC-2701-S	0.3	0.309	0.024	0.1085	
360 minute winter	IC-3001-S	PN-3001-S	MH-0009-S	1.6	0.458	0.038	0.1547	
360 minute winter	IC-3002-S	PN-3002-S	IC-3001-S	0.2	0.122	0.014	0.1077	
15 minute winter	IC-3201-S	PN-3003-S	IC-3001-S	7.0	0.799	0.477	0.0890	
15 minute winter	IC-3202-S	PN-3004-S	IC-3201-S	1.0	0.462	0.065	0.0089	
15 minute winter	IC-3401-S	PN-3005-S	IC-3201-S	3.1	0.449	0.213	0.0734	
15 minute winter	IC-3501-S	PN-3008-S	IC-3201-S	1.0	0.476	0.073	0.0532	
15 minute winter	IC-3502-S	PN-3009-S	IC-3501-S	0.6	0.322	0.038	0.0211	
360 minute winter	IC-3601-S	PN-3006-S	MH-0009-S	0.2	0.152	0.014	0.2534	
15 minute winter	IC-3602-S	PN-3007-S	IC-3601-S	0.6	0.313	0.038	0.0214	
60 minute winter	Dummy Node	PN-001-S	Headwall	2.6	0.471	0.040	0.1613	41.6

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Results for 5 year Critical Storm Duration. Lowest mass balance: 97.69%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute winter	Headwall	57	2.598	0.038	2.6	0.0000	0.0000	OK
480 minute winter	MH-0001-S	456	3.168	0.508	8.3	37.4377	0.0000	OK
480 minute winter	MH-0002-S	456	3.168	0.468	13.9	87.8515	0.0000	SURCHARGED
480 minute winter	MH-0003-S	456	3.168	0.348	5.0	0.3933	0.0000	SURCHARGED
480 minute winter	MH-0005-S	456	3.168	0.268	3.2	0.3028	0.0000	OK
480 minute winter	MH-0006-S	448	3.169	0.394	8.2	0.5634	0.0000	SURCHARGED
360 minute winter	MH-0007-S	320	3.179	0.354	8.6	0.4000	0.0000	SURCHARGED
480 minute winter	MH-0008-S	408	3.176	0.326	6.8	0.3690	0.0000	SURCHARGED
480 minute winter	MH-0009-S	432	3.170	0.270	1.9	0.3057	0.0000	OK
15 minute winter	MH-0010-S	13	3.177	0.227	29.0	0.2567	0.0000	SURCHARGED
15 minute winter	MH-0011-S	13	3.181	0.181	15.6	0.2045	0.0000	OK
15 minute winter	MH-0012-S	13	3.359	0.279	13.8	0.3156	0.0000	SURCHARGED
15 minute winter	MH-0013-S	14	3.452	0.252	9.2	0.2849	0.0000	SURCHARGED
15 minute winter	MH-0014-S	12	3.283	0.233	11.4	0.2636	0.0000	SURCHARGED
15 minute winter	IC-0101-S	14	3.458	0.188	4.1	0.0300	0.0000	SURCHARGED
30 minute winter	IC-0102-S	21	3.498	0.048	3.2	0.0077	0.0000	OK
30 minute winter	IC-0103-S	22	3.575	0.045	4.1	1.5951	0.0000	OK
15 minute winter	IC-0201-S	14	3.458	0.198	4.0	0.0315	0.0000	SURCHARGED
30 minute winter	IC-0202-S	20	3.498	0.048	3.2	0.0076	0.0000	OK
30 minute winter	IC-0203-S	22	3.565	0.045	4.1	1.6111	0.0000	OK
15 minute winter	IC-0301-S	13	3.361	0.256	4.6	0.0407	0.0000	SURCHARGED
15 minute winter	IC-0302-S	13	3.363	0.103	1.4	0.0164	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)
480 minute winter	MH-0001-S	Dummy Pipe	Dummy Node	2.6	0.234	0.007	0.0342	
480 minute winter	MH-0002-S	PN-002-S	MH-0001-S	6.5	0.588	0.049	1.5580	
480 minute winter	MH-0003-S	PN-003-S	MH-0002-S	4.9	0.475	0.083	2.9783	
480 minute winter	MH-0005-S	PN-004-S	MH-0003-S	2.8	0.285	0.063	3.4000	
480 minute winter	MH-0006-S	PN-006-S	MH-0002-S	8.2	0.442	0.069	2.3306	
360 minute winter	MH-0007-S	PN-007-S	MH-0006-S	8.5	0.531	0.132	1.0233	
480 minute winter	MH-0008-S	PN-008-S	MH-0007-S	6.8	0.539	0.077	0.2814	
480 minute winter	MH-0009-S	PN-009-S	MH-0008-S	1.9	0.256	0.022	0.6008	
15 minute winter	MH-0010-S	PN-010-S	MH-0008-S	29.1	0.752	1.088	1.4630	
15 minute winter	MH-0011-S	PN-011-S	MH-0010-S	15.8	0.517	0.213	0.5633	
15 minute winter	MH-0012-S	PN-012-S	MH-0011-S	14.0	0.798	1.448	0.4626	
15 minute winter	MH-0013-S	PN-013-S	MH-0012-S	9.5	0.565	0.850	0.5235	
15 minute winter	MH-0014-S	PN-014-S	MH-0010-S	10.5	0.594	0.960	0.4599	
15 minute winter	IC-0101-S	PN-0101-S	MH-0013-S	3.9	0.332	0.275	0.1891	
30 minute winter	IC-0102-S	PN-0102-S	IC-0101-S	3.2	0.652	0.216	0.0739	
30 minute winter	IC-0103-S	PN-0103-S	IC-0102-S	2.6	0.565	0.186	0.0620	
15 minute winter	IC-0201-S	PN-0201-S	MH-0013-S	4.0	0.331	0.284	0.1699	
30 minute winter	IC-0202-S	PN-0202-S	IC-0201-S	3.2	0.647	0.217	0.0939	
30 minute winter	IC-0203-S	PN-0203-S	IC-0202-S	2.5	0.558	0.188	0.0558	
15 minute winter	IC-0301-S	PN-0301-S	MH-0012-S	3.2	0.290	0.224	0.0692	
15 minute winter	IC-0302-S	PN-0302-S	IC-0301-S	1.7	0.426	0.119	0.1579	

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Results for 5 year Critical Storm Duration. Lowest mass balance: 97.69%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute winter	IC-0303-S	11	3.373	0.023	0.7	0.0036	0.0000	OK
15 minute winter	IC-0401-S	10	3.324	0.054	3.8	0.0086	0.0000	OK
15 minute winter	IC-0402-S	12	3.287	0.197	5.1	0.0314	0.0000	SURCHARGED
15 minute winter	IC-0001-S	12	3.295	0.185	7.5	0.0294	0.0000	SURCHARGED
15 minute winter	IC-0002-S	12	3.299	0.099	5.0	0.0157	0.0000	OK
15 minute winter	IC-0901-S	10	3.171	0.061	5.2	0.0097	0.0000	OK
480 minute winter	IC-1101-S	456	3.168	0.138	1.0	0.0219	0.0000	OK
15 minute winter	IC-1301-S	11	3.289	0.049	3.3	0.0078	0.0000	OK
15 minute winter	IC-1302-S	11	3.354	0.034	1.7	0.0055	0.0000	OK
15 minute winter	IC-1303-S	10	3.436	0.036	1.7	0.0057	0.0000	OK
15 minute winter	IC-1401-S	11	3.241	0.101	10.3	0.0161	0.0000	OK
480 minute winter	IC-1501-S	456	3.168	0.158	1.7	0.0251	0.0000	SURCHARGED
480 minute winter	IC-1701-S	456	3.168	0.098	0.6	0.0155	0.0000	OK
480 minute winter	IC-1801-S	456	3.168	0.128	1.0	0.0203	0.0000	OK
480 minute winter	IC-1901-S	456	3.168	0.278	2.0	0.0442	0.0000	SURCHARGED
480 minute winter	IC-1902-S	456	3.168	0.158	0.8	0.0251	0.0000	SURCHARGED
480 minute winter	IC-2001-S	456	3.168	0.138	0.7	0.0219	0.0000	OK
480 minute winter	IC-2201-S	464	3.168	0.198	0.4	0.0315	0.0000	SURCHARGED
480 minute winter	IC-2301-S	448	3.168	0.338	1.9	0.0538	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	IC-0303-S	PN-0303-S	IC-0302-S	0.7	0.320	0.050	0.1037	
15 minute winter	IC-0401-S	PN-0402-S	IC-0402-S	3.7	0.671	0.259	0.1251	
15 minute winter	IC-0402-S	PN-0401-S	MH-0014-S	4.5	0.378	0.306	0.1031	
15 minute winter	IC-0001-S	PN-0501-S	MH-0014-S	6.3	0.538	0.434	0.1559	
15 minute winter	IC-0002-S	PN-0502-S	IC-0001-S	4.9	0.603	0.332	0.1911	
15 minute winter	IC-0901-S	PN-1202-S	IC-1101-S	5.1	0.592	0.348	0.0999	
480 minute winter	IC-1101-S	PN-1201-S	MH-0005-S	1.0	0.438	0.069	0.2080	
15 minute winter	IC-1301-S	PN-1503-S	IC-1401-S	3.3	0.374	0.230	0.1363	
15 minute winter	IC-1302-S	PN-1504-S	IC-1301-S	1.7	0.416	0.116	0.0497	
15 minute winter	IC-1303-S	PN-1505-S	IC-1302-S	1.7	0.541	0.118	0.0384	
15 minute winter	IC-1401-S	PN-1502-S	IC-1501-S	10.1	0.848	0.689	0.0696	
480 minute winter	IC-1501-S	PN-1501-S	MH-0005-S	1.7	0.497	0.123	0.1741	
480 minute winter	IC-1701-S	PN-1905-S	IC-1801-S	0.6	0.327	0.046	0.0763	
480 minute winter	IC-1801-S	PN-1904-S	IC-1901-S	1.0	0.439	0.069	0.1746	
480 minute winter	IC-1901-S	PN-1901-S	MH-0003-S	1.8	0.282	0.042	0.4029	
480 minute winter	IC-1902-S	PN-1902-S	IC-1901-S	0.8	0.435	0.055	0.1033	
480 minute winter	IC-2001-S	PN-1903-S	IC-1902-S	0.7	0.404	0.044	0.0419	
480 minute winter	IC-2201-S	PN-2201-S	IC-2301-S	0.8	0.349	0.053	0.1366	
480 minute winter	IC-2301-S	PN-2301-S	MH-0001-S	1.5	0.363	0.016	0.5160	

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Results for 5 year Critical Storm Duration. Lowest mass balance: 97.69%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
480 minute winter	IC-2401-S	432	3.168	0.148	0.6	0.0236	0.0000	OK
480 minute winter	IC-2402-S	456	3.168	0.048	0.3	0.0077	0.0000	OK
15 minute winter	IC-2403-S	10	3.244	0.044	2.6	0.0070	0.0000	OK
480 minute winter	IC-2501-S	456	3.168	0.078	0.3	0.0125	0.0000	OK
15 minute winter	IC-2502-S	10	3.188	0.038	2.1	0.0060	0.0000	OK
480 minute winter	IC-2601-S	448	3.169	0.149	0.4	0.0237	0.0000	OK
480 minute winter	IC-2701-S	424	3.169	0.299	1.1	0.0475	0.0000	SURCHARGED
480 minute winter	IC-2801-S	424	3.169	0.169	0.4	0.0269	0.0000	SURCHARGED
480 minute winter	IC-3001-S	432	3.171	0.241	1.7	0.0384	0.0000	SURCHARGED
480 minute winter	IC-3002-S	448	3.171	0.201	0.4	0.0319	0.0000	SURCHARGED
15 minute winter	IC-3201-S	11	3.200	0.110	12.0	0.0175	0.0000	OK
15 minute winter	IC-3202-S	10	3.246	0.036	1.7	0.0057	0.0000	OK
15 minute winter	IC-3401-S	10	3.222	0.062	5.2	0.0098	0.0000	OK
15 minute winter	IC-3501-S	11	3.376	0.036	1.8	0.0057	0.0000	OK
15 minute winter	IC-3502-S	11	3.445	0.025	0.9	0.0040	0.0000	OK
480 minute winter	IC-3601-S	448	3.170	0.140	0.3	0.0222	0.0000	OK
480 minute winter	IC-3602-S	424	3.171	0.061	0.2	0.0096	0.0000	OK
15 minute winter	Dummy Node	56	2.701	0.042	2.6	0.1067	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)
480 minute winter	IC-2401-S	PN-2302-S	IC-2301-S	0.7	0.348	0.049	0.2878	
480 minute winter	IC-2402-S	PN-2401-S	IC-2401-S	0.3	0.250	0.020	0.1638	
15 minute winter	IC-2403-S	PN-2402-S	IC-2402-S	2.5	0.618	0.176	0.0493	
480 minute winter	IC-2501-S	PN-2501-S	MH-0001-S	0.3	0.306	0.025	0.0186	
15 minute winter	IC-2502-S	PN-2502-S	IC-2501-S	2.1	0.470	0.141	0.0384	
480 minute winter	IC-2601-S	PN-2702-S	IC-2701-S	0.4	0.331	0.027	0.1522	
480 minute winter	IC-2701-S	PN-2701-S	MH-0006-S	1.1	0.177	0.026	0.5853	
480 minute winter	IC-2801-S	PN-2703-S	IC-2701-S	0.4	0.309	0.031	0.1363	
480 minute winter	IC-3001-S	PN-3001-S	MH-0009-S	1.6	0.448	0.039	0.1831	
480 minute winter	IC-3002-S	PN-3002-S	IC-3001-S	-0.4	0.126	-0.027	0.1146	
15 minute winter	IC-3201-S	PN-3003-S	IC-3001-S	11.8	0.891	0.802	0.1342	
15 minute winter	IC-3202-S	PN-3004-S	IC-3201-S	1.7	0.539	0.112	0.0132	
15 minute winter	IC-3401-S	PN-3005-S	IC-3201-S	5.1	0.502	0.359	0.1106	
15 minute winter	IC-3501-S	PN-3008-S	IC-3201-S	1.8	0.552	0.122	0.0770	
15 minute winter	IC-3502-S	PN-3009-S	IC-3501-S	0.9	0.363	0.062	0.0306	
480 minute winter	IC-3601-S	PN-3006-S	MH-0009-S	-0.3	0.152	-0.019	0.3567	
480 minute winter	IC-3602-S	PN-3007-S	IC-3601-S	-0.2	0.186	-0.016	0.1404	
15 minute winter	Dummy Node	PN-001-S	Headwall	2.6	0.471	0.040	0.1613	37.6

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Results for 10 year Critical Storm Duration. Lowest mass balance: 97.69%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute summer	Headwall	72	2.598	0.038	2.6	0.0000	0.0000	OK
600 minute winter	MH-0001-S	570	3.201	0.541	7.9	37.5221	0.0000	OK
600 minute winter	MH-0002-S	570	3.201	0.501	16.2	114.8156	0.0000	SURCHARGED
600 minute winter	MH-0003-S	570	3.201	0.381	6.2	0.4312	0.0000	SURCHARGED
600 minute winter	MH-0005-S	570	3.201	0.301	3.4	0.3409	0.0000	SURCHARGED
600 minute winter	MH-0006-S	555	3.202	0.427	9.1	0.6106	0.0000	SURCHARGED
600 minute winter	MH-0007-S	480	3.204	0.379	7.8	0.4283	0.0000	SURCHARGED
480 minute winter	MH-0008-S	432	3.207	0.357	8.1	0.4041	0.0000	SURCHARGED
600 minute winter	MH-0009-S	570	3.203	0.303	2.0	0.3425	0.0000	SURCHARGED
15 minute winter	MH-0010-S	12	3.231	0.281	31.1	0.3172	0.0000	SURCHARGED
15 minute winter	MH-0011-S	12	3.233	0.233	16.2	0.2634	0.0000	OK
15 minute winter	MH-0012-S	13	3.434	0.354	14.6	0.3999	0.0000	SURCHARGED
15 minute winter	MH-0013-S	14	3.536	0.336	10.7	0.3801	0.0000	SURCHARGED
15 minute winter	MH-0014-S	13	3.348	0.298	11.8	0.3371	0.0000	SURCHARGED
15 minute winter	IC-0101-S	14	3.543	0.273	4.8	0.0435	0.0000	SURCHARGED
15 minute winter	IC-0102-S	14	3.548	0.098	4.0	0.0156	0.0000	OK
30 minute winter	IC-0103-S	21	3.580	0.050	4.8	1.7720	0.0000	OK
15 minute winter	IC-0201-S	14	3.543	0.283	4.7	0.0450	0.0000	SURCHARGED
15 minute winter	IC-0202-S	14	3.548	0.098	3.9	0.0155	0.0000	OK
30 minute winter	IC-0203-S	21	3.570	0.050	4.8	1.7891	0.0000	OK
15 minute winter	IC-0301-S	13	3.435	0.330	4.9	0.0524	0.0000	SURCHARGED
15 minute winter	IC-0302-S	13	3.434	0.174	3.2	0.0277	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)
600 minute winter	MH-0001-S	Dummy Pipe	Dummy Node	2.6	0.234	0.007	0.0342	
600 minute winter	MH-0002-S	PN-002-S	MH-0001-S	6.1	0.590	0.045	1.5580	
600 minute winter	MH-0003-S	PN-003-S	MH-0002-S	6.3	0.402	0.107	2.9783	
600 minute winter	MH-0005-S	PN-004-S	MH-0003-S	3.7	0.269	0.083	3.4999	
600 minute winter	MH-0006-S	PN-006-S	MH-0002-S	9.0	0.424	0.076	2.3306	
600 minute winter	MH-0007-S	PN-007-S	MH-0006-S	7.7	0.458	0.119	1.0233	
480 minute winter	MH-0008-S	PN-008-S	MH-0007-S	8.0	0.545	0.091	0.2814	
600 minute winter	MH-0009-S	PN-009-S	MH-0008-S	1.9	0.242	0.023	0.6161	
15 minute winter	MH-0010-S	PN-010-S	MH-0008-S	31.1	0.782	1.163	1.4752	
15 minute winter	MH-0011-S	PN-011-S	MH-0010-S	17.2	0.478	0.231	0.7054	
15 minute winter	MH-0012-S	PN-012-S	MH-0011-S	15.1	0.860	1.561	0.4626	
15 minute winter	MH-0013-S	PN-013-S	MH-0012-S	10.8	0.612	0.962	0.5235	
15 minute winter	MH-0014-S	PN-014-S	MH-0010-S	11.1	0.629	1.015	0.4599	
15 minute winter	IC-0101-S	PN-0101-S	MH-0013-S	4.9	0.325	0.341	0.1891	
15 minute winter	IC-0102-S	PN-0102-S	IC-0101-S	3.9	0.620	0.266	0.1920	
30 minute winter	IC-0103-S	PN-0103-S	IC-0102-S	3.3	0.573	0.240	0.0956	
15 minute winter	IC-0201-S	PN-0201-S	MH-0013-S	4.8	0.317	0.343	0.1699	
15 minute winter	IC-0202-S	PN-0202-S	IC-0201-S	3.9	0.615	0.269	0.2165	
30 minute winter	IC-0203-S	PN-0203-S	IC-0202-S	3.3	0.564	0.243	0.0876	
15 minute winter	IC-0301-S	PN-0301-S	MH-0012-S	3.3	0.313	0.231	0.0692	
15 minute winter	IC-0302-S	PN-0302-S	IC-0301-S	2.2	0.442	0.157	0.1824	

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Results for 10 year Critical Storm Duration. Lowest mass balance: 97.69%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute winter	IC-0303-S	14	3.435	0.085	2.2	0.0136	0.0000	OK
15 minute winter	IC-0401-S	13	3.356	0.086	4.4	0.0137	0.0000	OK
15 minute winter	IC-0402-S	13	3.353	0.263	6.0	0.0418	0.0000	SURCHARGED
15 minute winter	IC-0001-S	12	3.362	0.252	8.1	0.0400	0.0000	SURCHARGED
15 minute winter	IC-0002-S	12	3.371	0.171	5.7	0.0272	0.0000	SURCHARGED
600 minute winter	IC-0901-S	570	3.201	0.091	0.6	0.0145	0.0000	OK
600 minute winter	IC-1101-S	570	3.201	0.171	1.0	0.0273	0.0000	SURCHARGED
15 minute winter	IC-1301-S	11	3.292	0.052	3.7	0.0082	0.0000	OK
15 minute winter	IC-1302-S	11	3.356	0.036	1.9	0.0058	0.0000	OK
15 minute winter	IC-1303-S	10	3.438	0.038	1.9	0.0060	0.0000	OK
15 minute winter	IC-1401-S	11	3.252	0.112	11.8	0.0178	0.0000	OK
600 minute winter	IC-1501-S	570	3.201	0.191	1.7	0.0304	0.0000	SURCHARGED
600 minute winter	IC-1701-S	570	3.201	0.131	0.6	0.0209	0.0000	OK
600 minute winter	IC-1801-S	570	3.201	0.161	1.0	0.0256	0.0000	SURCHARGED
600 minute winter	IC-1901-S	570	3.201	0.311	2.0	0.0495	0.0000	SURCHARGED
600 minute winter	IC-1902-S	570	3.201	0.191	0.8	0.0304	0.0000	SURCHARGED
600 minute winter	IC-2001-S	570	3.202	0.172	0.7	0.0273	0.0000	SURCHARGED
600 minute winter	IC-2201-S	570	3.202	0.232	0.4	0.0368	0.0000	SURCHARGED
600 minute winter	IC-2301-S	570	3.202	0.372	1.6	0.0592	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	IC-0303-S	PN-0303-S	IC-0302-S	-1.6	0.328	-0.112	0.2039	
15 minute winter	IC-0401-S	PN-0402-S	IC-0402-S	4.4	0.672	0.308	0.1922	
15 minute winter	IC-0402-S	PN-0401-S	MH-0014-S	4.4	0.369	0.300	0.1031	
15 minute winter	IC-0001-S	PN-0501-S	MH-0014-S	6.7	0.548	0.457	0.1559	
15 minute winter	IC-0002-S	PN-0502-S	IC-0001-S	5.3	0.602	0.354	0.2252	
600 minute winter	IC-0901-S	PN-1202-S	IC-1101-S	0.6	0.325	0.041	0.1661	
600 minute winter	IC-1101-S	PN-1201-S	MH-0005-S	1.1	0.421	0.078	0.2121	
15 minute winter	IC-1301-S	PN-1503-S	IC-1401-S	3.7	0.377	0.259	0.1515	
15 minute winter	IC-1302-S	PN-1504-S	IC-1301-S	1.9	0.429	0.130	0.0540	
15 minute winter	IC-1303-S	PN-1505-S	IC-1302-S	1.9	0.557	0.132	0.0418	
15 minute winter	IC-1401-S	PN-1502-S	IC-1501-S	11.5	0.864	0.782	0.0783	
600 minute winter	IC-1501-S	PN-1501-S	MH-0005-S	1.8	0.474	0.127	0.1741	
600 minute winter	IC-1701-S	PN-1905-S	IC-1801-S	0.6	0.315	0.044	0.0920	
600 minute winter	IC-1801-S	PN-1904-S	IC-1901-S	1.0	0.438	0.069	0.1830	
600 minute winter	IC-1901-S	PN-1901-S	MH-0003-S	2.0	0.256	0.048	0.4029	
600 minute winter	IC-1902-S	PN-1902-S	IC-1901-S	0.8	0.420	0.056	0.1033	
600 minute winter	IC-2001-S	PN-1903-S	IC-1902-S	0.7	0.375	0.044	0.0427	
600 minute winter	IC-2201-S	PN-2201-S	IC-2301-S	0.4	0.321	0.027	0.1366	
600 minute winter	IC-2301-S	PN-2301-S	MH-0001-S	2.1	0.347	0.023	0.5160	

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Results for 10 year Critical Storm Duration. Lowest mass balance: 97.69%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
600 minute winter	IC-2401-S	585	3.201	0.181	0.6	0.0288	0.0000	SURCHARGED
600 minute winter	IC-2402-S	570	3.201	0.081	0.3	0.0129	0.0000	OK
15 minute winter	IC-2403-S	10	3.248	0.048	3.0	0.0076	0.0000	OK
600 minute winter	IC-2501-S	570	3.202	0.112	0.4	0.0178	0.0000	OK
600 minute winter	IC-2502-S	570	3.201	0.051	0.2	0.0082	0.0000	OK
600 minute winter	IC-2601-S	585	3.201	0.181	0.4	0.0288	0.0000	SURCHARGED
600 minute winter	IC-2701-S	555	3.201	0.331	1.0	0.0527	0.0000	SURCHARGED
600 minute winter	IC-2801-S	585	3.201	0.201	0.4	0.0320	0.0000	SURCHARGED
600 minute winter	IC-3001-S	555	3.204	0.274	1.8	0.0435	0.0000	SURCHARGED
600 minute winter	IC-3002-S	570	3.203	0.233	0.3	0.0371	0.0000	SURCHARGED
15 minute winter	IC-3201-S	11	3.215	0.125	13.8	0.0199	0.0000	OK
15 minute winter	IC-3202-S	10	3.248	0.038	1.9	0.0061	0.0000	OK
15 minute winter	IC-3401-S	10	3.228	0.068	6.0	0.0108	0.0000	OK
15 minute winter	IC-3501-S	11	3.379	0.039	2.2	0.0062	0.0000	OK
15 minute winter	IC-3502-S	10	3.447	0.027	1.1	0.0044	0.0000	OK
600 minute winter	IC-3601-S	570	3.204	0.174	0.2	0.0277	0.0000	SURCHARGED
600 minute winter	IC-3602-S	570	3.204	0.094	0.1	0.0150	0.0000	OK
15 minute summer	Dummy Node	71	2.701	0.042	2.6	0.1067	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)
600 minute winter	IC-2401-S	PN-2302-S	IC-2301-S	0.6	0.348	0.042	0.2881	
600 minute winter	IC-2402-S	PN-2401-S	IC-2401-S	0.3	0.248	0.020	0.1997	
15 minute winter	IC-2403-S	PN-2402-S	IC-2402-S	2.9	0.642	0.204	0.0549	
600 minute winter	IC-2501-S	PN-2501-S	MH-0001-S	0.3	0.306	0.023	0.0272	
600 minute winter	IC-2502-S	PN-2502-S	IC-2501-S	0.2	0.235	0.015	0.0838	
600 minute winter	IC-2601-S	PN-2702-S	IC-2701-S	0.4	0.330	0.024	0.1523	
600 minute winter	IC-2701-S	PN-2701-S	MH-0006-S	1.0	0.161	0.024	0.5853	
600 minute winter	IC-2801-S	PN-2703-S	IC-2701-S	0.4	0.309	0.031	0.1363	
600 minute winter	IC-3001-S	PN-3001-S	MH-0009-S	1.7	0.433	0.042	0.1831	
600 minute winter	IC-3002-S	PN-3002-S	IC-3001-S	-0.3	0.114	-0.025	0.1146	
15 minute winter	IC-3201-S	PN-3003-S	IC-3001-S	13.7	0.928	0.929	0.1487	
15 minute winter	IC-3202-S	PN-3004-S	IC-3201-S	1.9	0.556	0.126	0.0143	
15 minute winter	IC-3401-S	PN-3005-S	IC-3201-S	5.8	0.508	0.408	0.1253	
15 minute winter	IC-3501-S	PN-3008-S	IC-3201-S	2.1	0.579	0.144	0.0864	
15 minute winter	IC-3502-S	PN-3009-S	IC-3501-S	1.1	0.376	0.073	0.0341	
600 minute winter	IC-3601-S	PN-3006-S	MH-0009-S	-0.2	0.143	-0.016	0.3619	
600 minute winter	IC-3602-S	PN-3007-S	IC-3601-S	0.1	0.181	0.010	0.1729	
15 minute summer	Dummy Node	PN-001-S	Headwall	2.6	0.471	0.040	0.1613	37.7

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Results for 30 year Critical Storm Duration. Lowest mass balance: 97.69%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute summer	Headwall	213	2.598	0.038	2.6	0.0000	0.0000	OK
720 minute winter	MH-0001-S	690	3.265	0.605	7.5	37.6843	0.0000	OK
720 minute winter	MH-0002-S	690	3.265	0.565	15.5	170.4244	0.0000	SURCHARGED
720 minute winter	MH-0003-S	690	3.265	0.445	5.7	0.5034	0.0000	SURCHARGED
720 minute winter	MH-0005-S	690	3.265	0.365	3.1	0.4130	0.0000	SURCHARGED
480 minute winter	MH-0006-S	464	3.265	0.490	12.8	0.7013	0.0000	SURCHARGED
480 minute winter	MH-0007-S	480	3.268	0.443	10.8	0.5013	0.0000	SURCHARGED
720 minute winter	MH-0008-S	630	3.275	0.425	7.2	0.4803	0.0000	SURCHARGED
480 minute winter	MH-0009-S	464	3.266	0.366	3.0	0.4137	0.0000	SURCHARGED
15 minute winter	MH-0010-S	12	3.339	0.389	36.4	0.4397	0.0000	SURCHARGED
15 minute winter	MH-0011-S	12	3.344	0.344	18.0	0.3886	0.0000	SURCHARGED
15 minute winter	MH-0012-S	13	3.553	0.473	15.2	0.5354	0.0000	FLOOD RISK
15 minute winter	MH-0013-S	12	3.613	0.413	11.4	0.4675	0.0000	SURCHARGED
15 minute winter	MH-0014-S	13	3.520	0.470	13.9	0.5312	0.0000	FLOOD RISK
15 minute winter	IC-0101-S	12	3.614	0.344	5.6	0.0547	0.0000	SURCHARGED
15 minute winter	IC-0102-S	12	3.609	0.159	5.1	0.0252	0.0000	SURCHARGED
30 minute winter	IC-0103-S	24	3.607	0.077	6.3	2.7246	0.0000	OK
15 minute winter	IC-0201-S	12	3.612	0.352	5.5	0.0559	0.0000	SURCHARGED
30 minute winter	IC-0202-S	23	3.602	0.152	5.1	0.0242	0.0000	SURCHARGED
30 minute winter	IC-0203-S	24	3.605	0.085	7.1	3.0388	0.0000	OK
15 minute winter	IC-0301-S	13	3.559	0.454	5.1	0.0722	0.0000	SURCHARGED
15 minute winter	IC-0302-S	13	3.562	0.302	4.0	0.0480	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)
720 minute winter	MH-0001-S	Dummy Pipe	Dummy Node	2.6	0.234	0.007	0.0342	
720 minute winter	MH-0002-S	PN-002-S	MH-0001-S	5.7	0.591	0.043	1.5580	
720 minute winter	MH-0003-S	PN-003-S	MH-0002-S	5.8	0.393	0.099	2.9783	
720 minute winter	MH-0005-S	PN-004-S	MH-0003-S	3.3	0.270	0.074	3.5008	
480 minute winter	MH-0006-S	PN-006-S	MH-0002-S	12.7	0.462	0.107	2.3306	
480 minute winter	MH-0007-S	PN-007-S	MH-0006-S	10.8	0.471	0.166	1.0233	
720 minute winter	MH-0008-S	PN-008-S	MH-0007-S	7.2	0.499	0.082	0.2814	
480 minute winter	MH-0009-S	PN-009-S	MH-0008-S	2.9	0.261	0.035	0.6162	
15 minute winter	MH-0010-S	PN-010-S	MH-0008-S	36.1	0.908	1.350	1.4752	
15 minute winter	MH-0011-S	PN-011-S	MH-0010-S	17.9	0.402	0.240	0.7812	
15 minute winter	MH-0012-S	PN-012-S	MH-0011-S	14.9	0.847	1.538	0.4626	
15 minute winter	MH-0013-S	PN-013-S	MH-0012-S	11.8	0.670	1.054	0.5235	
15 minute winter	MH-0014-S	PN-014-S	MH-0010-S	13.8	0.783	1.265	0.4599	
15 minute winter	IC-0101-S	PN-0101-S	MH-0013-S	5.5	0.332	0.386	0.1891	
15 minute winter	IC-0102-S	PN-0102-S	IC-0101-S	5.1	0.616	0.346	0.2270	
30 minute winter	IC-0103-S	PN-0103-S	IC-0102-S	4.3	0.542	0.312	0.1776	
15 minute winter	IC-0201-S	PN-0201-S	MH-0013-S	6.1	0.347	0.438	0.1699	
30 minute winter	IC-0202-S	PN-0202-S	IC-0201-S	5.1	0.642	0.350	0.2562	
30 minute winter	IC-0203-S	PN-0203-S	IC-0202-S	4.4	0.561	0.330	0.1698	
15 minute winter	IC-0301-S	PN-0301-S	MH-0012-S	5.3	0.328	0.375	0.0692	
15 minute winter	IC-0302-S	PN-0302-S	IC-0301-S	-2.6	0.426	-0.186	0.1824	

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Results for 30 year Critical Storm Duration. Lowest mass balance: 97.69%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute winter	IC-0303-S	13	3.563	0.213	2.8	0.0338	0.0000	SURCHARGED
15 minute winter	IC-0401-S	13	3.533	0.263	5.5	0.0419	0.0000	SURCHARGED
15 minute winter	IC-0402-S	13	3.527	0.437	7.2	0.0695	0.0000	SURCHARGED
15 minute winter	IC-0001-S	13	3.539	0.429	9.4	0.0682	0.0000	SURCHARGED
15 minute winter	IC-0002-S	13	3.549	0.349	7.3	0.0555	0.0000	SURCHARGED
720 minute winter	IC-0901-S	690	3.265	0.155	0.6	0.0247	0.0000	SURCHARGED
720 minute winter	IC-1101-S	690	3.265	0.235	1.0	0.0374	0.0000	SURCHARGED
15 minute winter	IC-1301-S	12	3.340	0.100	4.7	0.0159	0.0000	OK
15 minute winter	IC-1302-S	11	3.361	0.041	2.4	0.0065	0.0000	OK
15 minute winter	IC-1303-S	10	3.443	0.043	2.4	0.0068	0.0000	OK
15 minute winter	IC-1401-S	12	3.329	0.189	13.8	0.0301	0.0000	SURCHARGED
15 minute winter	IC-1501-S	12	3.281	0.271	19.2	0.0431	0.0000	SURCHARGED
720 minute winter	IC-1701-S	705	3.266	0.196	0.6	0.0311	0.0000	SURCHARGED
720 minute winter	IC-1801-S	705	3.265	0.225	1.0	0.0358	0.0000	SURCHARGED
720 minute winter	IC-1901-S	690	3.265	0.375	2.0	0.0596	0.0000	SURCHARGED
720 minute winter	IC-1902-S	690	3.265	0.255	0.9	0.0405	0.0000	SURCHARGED
480 minute winter	IC-2001-S	456	3.265	0.235	1.1	0.0373	0.0000	SURCHARGED
720 minute winter	IC-2201-S	705	3.265	0.295	0.5	0.0469	0.0000	SURCHARGED
720 minute winter	IC-2301-S	705	3.267	0.437	1.6	0.0694	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	IC-0303-S	PN-0303-S	IC-0302-S	-1.8	0.328	-0.131	0.2569	
15 minute winter	IC-0401-S	PN-0402-S	IC-0402-S	5.2	0.672	0.360	0.2411	
15 minute winter	IC-0402-S	PN-0401-S	MH-0014-S	5.0	0.378	0.344	0.1031	
15 minute winter	IC-0001-S	PN-0501-S	MH-0014-S	7.8	0.549	0.533	0.1559	
15 minute winter	IC-0002-S	PN-0502-S	IC-0001-S	5.6	0.617	0.377	0.2252	
720 minute winter	IC-0901-S	PN-1202-S	IC-1101-S	0.6	0.325	0.041	0.2028	
720 minute winter	IC-1101-S	PN-1201-S	MH-0005-S	1.0	0.420	0.070	0.2121	
15 minute winter	IC-1301-S	PN-1503-S	IC-1401-S	5.3	0.373	0.373	0.2335	
15 minute winter	IC-1302-S	PN-1504-S	IC-1301-S	2.4	0.439	0.166	0.1004	
15 minute winter	IC-1303-S	PN-1505-S	IC-1302-S	2.4	0.594	0.167	0.0498	
15 minute winter	IC-1401-S	PN-1502-S	IC-1501-S	13.1	0.859	0.893	0.1030	
15 minute winter	IC-1501-S	PN-1501-S	MH-0005-S	18.5	1.052	1.344	0.1741	
720 minute winter	IC-1701-S	PN-1905-S	IC-1801-S	0.6	0.315	0.044	0.0955	
720 minute winter	IC-1801-S	PN-1904-S	IC-1901-S	0.9	0.422	0.065	0.1830	
720 minute winter	IC-1901-S	PN-1901-S	MH-0003-S	2.0	0.256	0.045	0.4029	
720 minute winter	IC-1902-S	PN-1902-S	IC-1901-S	0.9	0.402	0.058	0.1033	
480 minute winter	IC-2001-S	PN-1903-S	IC-1902-S	1.1	0.437	0.066	0.0427	
720 minute winter	IC-2201-S	PN-2201-S	IC-2301-S	0.5	0.321	0.035	0.1366	
720 minute winter	IC-2301-S	PN-2301-S	MH-0001-S	1.6	0.324	0.017	0.5160	

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Results for 30 year Critical Storm Duration. Lowest mass balance: 97.69%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
720 minute winter	IC-2401-S	690	3.265	0.245	0.6	0.0390	0.0000	SURCHARGED
720 minute winter	IC-2402-S	705	3.265	0.145	0.3	0.0231	0.0000	OK
720 minute winter	IC-2403-S	690	3.265	0.065	0.3	0.0104	0.0000	OK
720 minute winter	IC-2501-S	705	3.266	0.176	0.4	0.0279	0.0000	SURCHARGED
720 minute winter	IC-2502-S	690	3.265	0.115	0.2	0.0183	0.0000	OK
720 minute winter	IC-2601-S	675	3.266	0.246	0.4	0.0391	0.0000	SURCHARGED
480 minute winter	IC-2701-S	464	3.266	0.396	1.5	0.0629	0.0000	SURCHARGED
720 minute winter	IC-2801-S	675	3.266	0.266	0.4	0.0423	0.0000	SURCHARGED
480 minute winter	IC-3001-S	464	3.268	0.338	2.6	0.0537	0.0000	SURCHARGED
480 minute winter	IC-3002-S	464	3.267	0.297	0.3	0.0473	0.0000	SURCHARGED
480 minute winter	IC-3201-S	464	3.267	0.177	2.1	0.0282	0.0000	SURCHARGED
480 minute winter	IC-3202-S	464	3.267	0.057	0.3	0.0091	0.0000	OK
15 minute winter	IC-3401-S	11	3.272	0.112	7.6	0.0178	0.0000	OK
15 minute winter	IC-3501-S	11	3.384	0.044	2.8	0.0069	0.0000	OK
15 minute winter	IC-3502-S	10	3.451	0.031	1.4	0.0049	0.0000	OK
600 minute winter	IC-3601-S	570	3.267	0.237	0.3	0.0377	0.0000	SURCHARGED
600 minute winter	IC-3602-S	570	3.267	0.157	0.1	0.0250	0.0000	SURCHARGED
15 minute summer	Dummy Node	212	2.701	0.042	2.6	0.1067	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)
720 minute winter	IC-2401-S	PN-2302-S	IC-2301-S	0.7	0.348	0.054	0.2881	
720 minute winter	IC-2402-S	PN-2401-S	IC-2401-S	0.3	0.244	0.020	0.2558	
720 minute winter	IC-2403-S	PN-2402-S	IC-2402-S	0.3	0.329	0.021	0.1480	
720 minute winter	IC-2501-S	PN-2501-S	MH-0001-S	0.5	0.306	0.039	0.0326	
720 minute winter	IC-2502-S	PN-2502-S	IC-2501-S	0.3	0.235	0.017	0.1391	
720 minute winter	IC-2601-S	PN-2702-S	IC-2701-S	0.4	0.330	0.026	0.1523	
480 minute winter	IC-2701-S	PN-2701-S	MH-0006-S	1.5	0.173	0.036	0.5853	
720 minute winter	IC-2801-S	PN-2703-S	IC-2701-S	0.4	0.307	0.035	0.1363	
480 minute winter	IC-3001-S	PN-3001-S	MH-0009-S	2.5	0.458	0.061	0.1831	
480 minute winter	IC-3002-S	PN-3002-S	IC-3001-S	0.3	0.122	0.020	0.1146	
480 minute winter	IC-3201-S	PN-3003-S	IC-3001-S	2.0	0.538	0.138	0.1784	
480 minute winter	IC-3202-S	PN-3004-S	IC-3201-S	0.3	0.331	0.020	0.0358	
15 minute winter	IC-3401-S	PN-3005-S	IC-3201-S	7.1	0.521	0.497	0.1700	
15 minute winter	IC-3501-S	PN-3008-S	IC-3201-S	2.7	0.547	0.186	0.1599	
15 minute winter	IC-3502-S	PN-3009-S	IC-3501-S	1.4	0.402	0.094	0.0405	
600 minute winter	IC-3601-S	PN-3006-S	MH-0009-S	0.3	0.152	0.020	0.3619	
600 minute winter	IC-3602-S	PN-3007-S	IC-3601-S	-0.1	0.181	-0.009	0.2082	
15 minute summer	Dummy Node	PN-001-S	Headwall	2.6	0.471	0.040	0.1613	37.9

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Results for 100 year Critical Storm Duration. Lowest mass balance: 97.69%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
960 minute winter	Headwall	375	2.598	0.038	2.6	0.0000	0.0000	OK
600 minute winter	MH-0001-S	585	3.354	0.694	8.5	37.9112	0.0000	OK
600 minute winter	MH-0002-S	585	3.355	0.655	24.1	256.1465	0.0000	FLOOD RISK
600 minute winter	MH-0003-S	585	3.355	0.535	8.2	0.6052	0.0000	SURCHARGED
600 minute winter	MH-0005-S	585	3.355	0.455	4.6	0.5147	0.0000	SURCHARGED
600 minute winter	MH-0006-S	585	3.356	0.581	14.0	0.8309	0.0000	SURCHARGED
600 minute winter	MH-0007-S	600	3.360	0.535	11.8	0.6048	0.0000	SURCHARGED
480 minute winter	MH-0008-S	480	3.363	0.513	12.9	0.5798	0.0000	SURCHARGED
600 minute winter	MH-0009-S	585	3.357	0.457	3.1	0.5165	0.0000	SURCHARGED
30 minute winter	MH-0010-S	20	3.459	0.509	38.2	0.5760	0.0000	FLOOD RISK
30 minute winter	MH-0011-S	20	3.463	0.463	19.1	0.5241	0.0000	FLOOD RISK
15 minute winter	MH-0012-S	12	3.646	0.566	15.6	0.6402	0.0000	FLOOD RISK
30 minute winter	MH-0013-S	24	3.668	0.468	12.1	0.5292	0.0000	SURCHARGED
15 minute winter	MH-0014-S	11	3.658	0.608	15.7	0.6875	0.0000	FLOOD RISK
30 minute winter	IC-0101-S	24	3.672	0.402	5.9	0.0639	0.0000	SURCHARGED
30 minute winter	IC-0102-S	24	3.675	0.225	5.7	0.0358	0.0000	SURCHARGED
30 minute winter	IC-0103-S	25	3.678	0.148	11.5	5.2729	0.0000	OK
30 minute winter	IC-0201-S	24	3.671	0.411	5.9	0.0654	0.0000	SURCHARGED
30 minute winter	IC-0202-S	25	3.675	0.225	5.7	0.0358	0.0000	SURCHARGED
30 minute winter	IC-0203-S	25	3.678	0.158	12.9	5.6323	0.0000	SURCHARGED
15 minute winter	IC-0301-S	12	3.653	0.548	6.3	0.3296	0.0000	FLOOD RISK
15 minute winter	IC-0302-S	11	3.662	0.402	4.9	0.0639	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)
600 minute winter	MH-0001-S	Dummy Pipe	Dummy Node	2.6	0.234	0.007	0.0342	
600 minute winter	MH-0002-S	PN-002-S	MH-0001-S	6.6	0.580	0.049	1.5580	
600 minute winter	MH-0003-S	PN-003-S	MH-0002-S	8.2	0.440	0.139	2.9783	
600 minute winter	MH-0005-S	PN-004-S	MH-0003-S	4.6	0.256	0.103	3.5008	
600 minute winter	MH-0006-S	PN-006-S	MH-0002-S	13.9	0.459	0.117	2.3306	
600 minute winter	MH-0007-S	PN-007-S	MH-0006-S	11.7	0.418	0.181	1.0233	
480 minute winter	MH-0008-S	PN-008-S	MH-0007-S	12.9	0.532	0.147	0.2814	
600 minute winter	MH-0009-S	PN-009-S	MH-0008-S	3.1	0.244	0.037	0.6162	
30 minute winter	MH-0010-S	PN-010-S	MH-0008-S	37.3	0.938	1.395	1.4752	
30 minute winter	MH-0011-S	PN-011-S	MH-0010-S	18.0	0.396	0.243	0.7812	
15 minute winter	MH-0012-S	PN-012-S	MH-0011-S	14.4	0.820	1.487	0.4626	
30 minute winter	MH-0013-S	PN-013-S	MH-0012-S	12.3	0.699	1.099	0.5235	
15 minute winter	MH-0014-S	PN-014-S	MH-0010-S	15.1	0.856	1.381	0.4599	
30 minute winter	IC-0101-S	PN-0101-S	MH-0013-S	6.1	0.345	0.425	0.1891	
30 minute winter	IC-0102-S	PN-0102-S	IC-0101-S	5.9	0.619	0.401	0.2270	
30 minute winter	IC-0103-S	PN-0103-S	IC-0102-S	5.7	0.557	0.415	0.2344	
30 minute winter	IC-0201-S	PN-0201-S	MH-0013-S	6.2	0.353	0.445	0.1699	
30 minute winter	IC-0202-S	PN-0202-S	IC-0201-S	5.9	0.614	0.404	0.2562	
30 minute winter	IC-0203-S	PN-0203-S	IC-0202-S	5.7	0.573	0.425	0.2137	
15 minute winter	IC-0301-S	PN-0301-S	MH-0012-S	7.5	0.425	0.530	0.0692	
15 minute winter	IC-0302-S	PN-0302-S	IC-0301-S	-3.1	0.412	-0.222	0.1824	

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Results for 100 year Critical Storm Duration. Lowest mass balance: 97.69%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute winter	IC-0303-S	11	3.676	0.326	2.8	0.0518	0.0000	FLOOD RISK
15 minute winter	IC-0401-S	14	3.667	0.397	7.2	0.8735	0.0000	FLOOD RISK
15 minute winter	IC-0402-S	13	3.660	0.570	9.3	0.0907	0.0000	SURCHARGED
15 minute winter	IC-0001-S	12	3.695	0.585	12.4	0.2675	0.0000	FLOOD RISK
15 minute winter	IC-0002-S	11	3.727	0.527	9.4	0.0838	0.0000	FLOOD RISK
15 minute winter	IC-0901-S	12	3.429	0.319	9.9	0.0507	0.0000	SURCHARGED
15 minute winter	IC-1101-S	12	3.400	0.370	15.2	0.0589	0.0000	SURCHARGED
15 minute winter	IC-1301-S	13	3.529	0.289	6.5	0.0460	0.0000	SURCHARGED
15 minute winter	IC-1302-S	13	3.536	0.216	4.8	0.0343	0.0000	SURCHARGED
15 minute winter	IC-1303-S	12	3.540	0.140	3.1	0.0222	0.0000	OK
15 minute winter	IC-1401-S	12	3.518	0.378	14.5	0.0602	0.0000	SURCHARGED
15 minute winter	IC-1501-S	12	3.468	0.458	21.8	0.0728	0.0000	SURCHARGED
15 minute winter	IC-1701-S	12	3.368	0.298	9.9	0.0474	0.0000	SURCHARGED
600 minute winter	IC-1801-S	585	3.355	0.315	1.5	0.0501	0.0000	SURCHARGED
600 minute winter	IC-1901-S	585	3.355	0.465	2.9	0.0739	0.0000	SURCHARGED
600 minute winter	IC-1902-S	585	3.355	0.345	1.2	0.0549	0.0000	SURCHARGED
600 minute winter	IC-2001-S	585	3.355	0.325	1.1	0.0517	0.0000	SURCHARGED
600 minute winter	IC-2201-S	585	3.356	0.386	0.7	0.0614	0.0000	SURCHARGED
600 minute winter	IC-2301-S	585	3.357	0.527	2.2	0.0837	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	IC-0303-S	PN-0303-S	IC-0302-S	-1.5	0.324	-0.108	0.2569	
15 minute winter	IC-0401-S	PN-0402-S	IC-0402-S	8.8	0.659	0.615	0.2411	
15 minute winter	IC-0402-S	PN-0401-S	MH-0014-S	9.8	0.558	0.671	0.1031	
15 minute winter	IC-0001-S	PN-0501-S	MH-0014-S	10.5	0.594	0.718	0.1559	
15 minute winter	IC-0002-S	PN-0502-S	IC-0001-S	7.8	0.619	0.522	0.2252	
15 minute winter	IC-0901-S	PN-1202-S	IC-1101-S	8.5	0.623	0.576	0.2028	
15 minute winter	IC-1101-S	PN-1201-S	MH-0005-S	13.8	0.785	0.958	0.2121	
15 minute winter	IC-1301-S	PN-1503-S	IC-1401-S	8.2	0.488	0.574	0.2732	
15 minute winter	IC-1302-S	PN-1504-S	IC-1301-S	5.7	0.435	0.399	0.2186	
15 minute winter	IC-1303-S	PN-1505-S	IC-1302-S	3.2	0.633	0.224	0.2161	
15 minute winter	IC-1401-S	PN-1502-S	IC-1501-S	13.7	0.883	0.936	0.1030	
15 minute winter	IC-1501-S	PN-1501-S	MH-0005-S	20.9	1.185	1.514	0.1741	
15 minute winter	IC-1701-S	PN-1905-S	IC-1801-S	8.6	0.565	0.657	0.0955	
600 minute winter	IC-1801-S	PN-1904-S	IC-1901-S	1.4	0.438	0.099	0.1830	
600 minute winter	IC-1901-S	PN-1901-S	MH-0003-S	2.8	0.250	0.066	0.4029	
600 minute winter	IC-1902-S	PN-1902-S	IC-1901-S	1.1	0.436	0.078	0.1033	
600 minute winter	IC-2001-S	PN-1903-S	IC-1902-S	1.1	0.394	0.067	0.0427	
600 minute winter	IC-2201-S	PN-2201-S	IC-2301-S	0.7	0.321	0.048	0.1366	
600 minute winter	IC-2301-S	PN-2301-S	MH-0001-S	2.6	0.347	0.028	0.5160	

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Results for 100 year Critical Storm Duration. Lowest mass balance: 97.69%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
600 minute winter	IC-2401-S	585	3.355	0.335	0.8	0.0532	0.0000	SURCHARGED
600 minute winter	IC-2402-S	585	3.355	0.235	0.4	0.0374	0.0000	SURCHARGED
600 minute winter	IC-2403-S	585	3.355	0.155	0.4	0.0247	0.0000	SURCHARGED
600 minute winter	IC-2501-S	585	3.356	0.266	0.6	0.0422	0.0000	SURCHARGED
600 minute winter	IC-2502-S	585	3.354	0.204	0.4	0.0325	0.0000	SURCHARGED
600 minute winter	IC-2601-S	585	3.355	0.335	0.6	0.0533	0.0000	SURCHARGED
600 minute winter	IC-2701-S	585	3.356	0.486	1.6	0.0772	0.0000	SURCHARGED
600 minute winter	IC-2801-S	585	3.356	0.356	0.6	0.0565	0.0000	SURCHARGED
960 minute winter	IC-3001-S	930	3.357	0.427	1.7	0.0679	0.0000	SURCHARGED
600 minute winter	IC-3002-S	570	3.356	0.386	0.3	0.0614	0.0000	SURCHARGED
15 minute winter	IC-3201-S	12	3.386	0.296	21.1	0.0470	0.0000	SURCHARGED
15 minute winter	IC-3202-S	12	3.387	0.177	3.1	0.0282	0.0000	SURCHARGED
15 minute winter	IC-3401-S	12	3.412	0.252	9.9	0.0401	0.0000	SURCHARGED
15 minute winter	IC-3501-S	11	3.390	0.050	3.6	0.0080	0.0000	OK
15 minute winter	IC-3502-S	10	3.455	0.035	1.8	0.0056	0.0000	OK
600 minute winter	IC-3601-S	585	3.357	0.327	0.4	0.0520	0.0000	SURCHARGED
600 minute winter	IC-3602-S	585	3.358	0.248	0.2	0.0394	0.0000	SURCHARGED
960 minute winter	Dummy Node	375	2.701	0.042	2.6	0.1067	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)
600 minute winter	IC-2401-S	PN-2302-S	IC-2301-S	0.7	0.341	0.052	0.2881	
600 minute winter	IC-2402-S	PN-2401-S	IC-2401-S	0.4	0.248	0.027	0.2570	
600 minute winter	IC-2403-S	PN-2402-S	IC-2402-S	0.4	0.359	0.028	0.2105	
600 minute winter	IC-2501-S	PN-2501-S	MH-0001-S	0.4	0.329	0.032	0.0326	
600 minute winter	IC-2502-S	PN-2502-S	IC-2501-S	0.4	0.276	0.030	0.1526	
600 minute winter	IC-2601-S	PN-2702-S	IC-2701-S	0.6	0.330	0.039	0.1523	
600 minute winter	IC-2701-S	PN-2701-S	MH-0006-S	1.6	0.196	0.039	0.5853	
600 minute winter	IC-2801-S	PN-2703-S	IC-2701-S	0.6	0.307	0.045	0.1363	
960 minute winter	IC-3001-S	PN-3001-S	MH-0009-S	1.8	0.415	0.042	0.1831	
600 minute winter	IC-3002-S	PN-3002-S	IC-3001-S	0.4	0.118	0.027	0.1146	
15 minute winter	IC-3201-S	PN-3003-S	IC-3001-S	18.9	1.075	1.286	0.1784	
15 minute winter	IC-3202-S	PN-3004-S	IC-3201-S	2.6	0.534	0.172	0.0748	
15 minute winter	IC-3401-S	PN-3005-S	IC-3201-S	9.1	0.526	0.634	0.1888	
15 minute winter	IC-3501-S	PN-3008-S	IC-3201-S	3.5	0.529	0.242	0.2745	
15 minute winter	IC-3502-S	PN-3009-S	IC-3501-S	1.8	0.432	0.121	0.0488	
600 minute winter	IC-3601-S	PN-3006-S	MH-0009-S	0.3	0.148	0.024	0.3619	
600 minute winter	IC-3602-S	PN-3007-S	IC-3601-S	0.2	0.181	0.011	0.2082	
960 minute winter	Dummy Node	PN-001-S	Headwall	2.6	0.471	0.040	0.1613	144.2

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Results for 100 year +40% CC Critical Storm Duration. Lowest mass balance: 97.69%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
1440 minute winter	Headwall	510	2.598	0.038	2.6	0.0000	0.0000	OK
960 minute winter	MH-0001-S	945	3.505	0.845	6.6	38.2961	0.0000	OK
960 minute winter	MH-0002-S	945	3.505	0.805	24.2	418.6451	0.0000	FLOOD RISK
960 minute winter	MH-0003-S	945	3.505	0.685	8.2	0.7748	0.0000	FLOOD RISK
15 minute winter	MH-0005-S	12	3.607	0.707	52.3	0.7996	0.0000	SURCHARGED
960 minute winter	MH-0006-S	930	3.506	0.731	13.7	1.0455	0.0000	FLOOD RISK
960 minute winter	MH-0007-S	930	3.505	0.680	11.7	0.7694	0.0000	FLOOD RISK
960 minute winter	MH-0008-S	870	3.511	0.661	10.8	0.7479	0.0000	SURCHARGED
960 minute winter	MH-0009-S	930	3.506	0.606	3.2	0.6853	0.0000	SURCHARGED
15 minute winter	MH-0010-S	12	3.588	0.638	43.2	0.7219	0.0000	FLOOD RISK
15 minute winter	MH-0011-S	12	3.593	0.593	20.1	0.6704	0.0000	FLOOD RISK
30 minute winter	MH-0012-S	23	3.730	0.650	16.0	0.7350	0.0000	FLOOD RISK
30 minute winter	MH-0013-S	26	3.781	0.581	12.7	0.6567	0.0000	FLOOD RISK
15 minute winter	MH-0014-S	14	3.732	0.682	18.2	0.7708	0.0000	FLOOD RISK
30 minute winter	IC-0101-S	27	3.784	0.514	6.2	0.0817	0.0000	FLOOD RISK
30 minute winter	IC-0102-S	28	3.788	0.338	6.9	0.0537	0.0000	FLOOD RISK
30 minute winter	IC-0103-S	28	3.790	0.260	17.6	9.2483	0.0000	FLOOD RISK
30 minute winter	IC-0201-S	27	3.784	0.524	6.2	0.0833	0.0000	FLOOD RISK
30 minute winter	IC-0202-S	28	3.788	0.338	7.5	0.0537	0.0000	FLOOD RISK
30 minute winter	IC-0203-S	28	3.790	0.270	18.1	9.6083	0.0000	FLOOD RISK
15 minute winter	IC-0301-S	14	3.734	0.629	17.8	2.7962	0.0000	FLOOD RISK
15 minute winter	IC-0302-S	14	3.736	0.476	5.4	0.0756	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)
960 minute winter	MH-0001-S	Dummy Pipe	Dummy Node	2.6	0.234	0.007	0.0342	
960 minute winter	MH-0002-S	PN-002-S	MH-0001-S	5.2	0.535	0.039	1.5580	
960 minute winter	MH-0003-S	PN-003-S	MH-0002-S	8.2	0.401	0.140	2.9783	
15 minute winter	MH-0005-S	PN-004-S	MH-0003-S	50.4	0.716	1.144	3.5008	
960 minute winter	MH-0006-S	PN-006-S	MH-0002-S	13.6	0.424	0.115	2.3306	
960 minute winter	MH-0007-S	PN-007-S	MH-0006-S	11.5	0.386	0.177	1.0233	
960 minute winter	MH-0008-S	PN-008-S	MH-0007-S	11.0	0.450	0.125	0.2814	
960 minute winter	MH-0009-S	PN-009-S	MH-0008-S	3.1	0.208	0.037	0.6162	
15 minute winter	MH-0010-S	PN-010-S	MH-0008-S	42.3	1.064	1.582	1.4752	
15 minute winter	MH-0011-S	PN-011-S	MH-0010-S	18.7	0.404	0.252	0.7812	
30 minute winter	MH-0012-S	PN-012-S	MH-0011-S	16.2	0.921	1.671	0.4626	
30 minute winter	MH-0013-S	PN-013-S	MH-0012-S	12.9	0.730	1.148	0.5235	
15 minute winter	MH-0014-S	PN-014-S	MH-0010-S	16.2	0.918	1.482	0.4599	
30 minute winter	IC-0101-S	PN-0101-S	MH-0013-S	6.3	0.359	0.442	0.1891	
30 minute winter	IC-0102-S	PN-0102-S	IC-0101-S	6.2	0.649	0.416	0.2270	
30 minute winter	IC-0103-S	PN-0103-S	IC-0102-S	-6.4	0.545	-0.466	0.2346	
30 minute winter	IC-0201-S	PN-0201-S	MH-0013-S	6.3	0.360	0.455	0.1699	
30 minute winter	IC-0202-S	PN-0202-S	IC-0201-S	6.2	0.644	0.421	0.2562	
30 minute winter	IC-0203-S	PN-0203-S	IC-0202-S	-6.9	0.549	-0.513	0.2137	
15 minute winter	IC-0301-S	PN-0301-S	MH-0012-S	8.1	0.459	0.572	0.0692	
15 minute winter	IC-0302-S	PN-0302-S	IC-0301-S	5.1	0.454	0.362	0.1824	

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Results for 100 year +40% CC Critical Storm Duration. Lowest mass balance: 97.69%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute winter	IC-0303-S	14	3.736	0.386	3.4	0.0613	0.0000	FLOOD RISK
15 minute winter	IC-0401-S	15	3.742	0.472	14.1	3.1484	0.0000	FLOOD RISK
15 minute winter	IC-0402-S	14	3.736	0.646	11.8	0.1027	0.0000	FLOOD RISK
15 minute winter	IC-0001-S	14	3.762	0.652	17.5	1.4335	0.0000	FLOOD RISK
15 minute winter	IC-0002-S	14	3.782	0.582	13.2	0.6678	0.0000	FLOOD RISK
15 minute winter	IC-0901-S	12	3.832	0.722	13.8	0.1614	0.0000	FLOOD RISK
15 minute winter	IC-1101-S	12	3.775	0.745	19.8	0.1184	0.0000	SURCHARGED
15 minute winter	IC-1301-S	12	3.891	0.651	8.8	0.1034	0.0000	FLOOD RISK
15 minute winter	IC-1302-S	12	3.896	0.576	6.6	0.0915	0.0000	FLOOD RISK
15 minute winter	IC-1303-S	12	3.903	0.503	4.4	0.0800	0.0000	FLOOD RISK
15 minute winter	IC-1401-S	13	3.866	0.726	22.4	1.0751	0.0000	FLOOD RISK
15 minute winter	IC-1501-S	12	3.809	0.799	25.3	0.1270	0.0000	SURCHARGED
15 minute winter	IC-1701-S	12	3.713	0.643	13.8	0.1595	0.0000	FLOOD RISK
15 minute winter	IC-1801-S	12	3.682	0.642	19.5	0.1926	0.0000	FLOOD RISK
15 minute winter	IC-1901-S	12	3.563	0.673	37.0	0.1070	0.0000	SURCHARGED
15 minute winter	IC-1902-S	12	3.635	0.625	16.6	0.0993	0.0000	FLOOD RISK
15 minute winter	IC-2001-S	12	3.668	0.638	17.6	0.1014	0.0000	FLOOD RISK
960 minute winter	IC-2201-S	945	3.505	0.535	0.7	0.0851	0.0000	FLOOD RISK
960 minute winter	IC-2301-S	945	3.505	0.675	2.3	0.7304	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	IC-0303-S	PN-0303-S	IC-0302-S	2.4	0.352	0.174	0.2569	
15 minute winter	IC-0401-S	PN-0402-S	IC-0402-S	11.8	0.673	0.825	0.2411	
15 minute winter	IC-0402-S	PN-0401-S	MH-0014-S	12.2	0.695	0.836	0.1031	
15 minute winter	IC-0001-S	PN-0501-S	MH-0014-S	9.9	0.564	0.681	0.1559	
15 minute winter	IC-0002-S	PN-0502-S	IC-0001-S	10.6	0.617	0.713	0.2252	
15 minute winter	IC-0901-S	PN-1202-S	IC-1101-S	11.0	0.627	0.742	0.2028	
15 minute winter	IC-1101-S	PN-1201-S	MH-0005-S	18.5	1.049	1.280	0.2121	
15 minute winter	IC-1301-S	PN-1503-S	IC-1401-S	11.8	0.673	0.833	0.2732	
15 minute winter	IC-1302-S	PN-1504-S	IC-1301-S	8.0	0.474	0.562	0.2186	
15 minute winter	IC-1303-S	PN-1505-S	IC-1302-S	4.3	0.656	0.300	0.2192	
15 minute winter	IC-1401-S	PN-1502-S	IC-1501-S	22.3	1.266	1.523	0.1030	
15 minute winter	IC-1501-S	PN-1501-S	MH-0005-S	26.2	1.490	1.903	0.1741	
15 minute winter	IC-1701-S	PN-1905-S	IC-1801-S	11.1	0.631	0.845	0.0955	
15 minute winter	IC-1801-S	PN-1904-S	IC-1901-S	18.1	1.028	1.246	0.1830	
15 minute winter	IC-1901-S	PN-1901-S	MH-0003-S	36.6	0.920	0.848	0.4029	
15 minute winter	IC-1902-S	PN-1902-S	IC-1901-S	16.0	0.910	1.096	0.1033	
15 minute winter	IC-2001-S	PN-1903-S	IC-1902-S	14.8	0.841	0.920	0.0427	
960 minute winter	IC-2201-S	PN-2201-S	IC-2301-S	0.7	0.288	0.047	0.1366	
960 minute winter	IC-2301-S	PN-2301-S	MH-0001-S	2.6	0.347	0.028	0.5160	

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Results for 100 year +40% CC Critical Storm Duration. Lowest mass balance: 97.69%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
960 minute winter	IC-2401-S	945	3.505	0.485	0.8	0.0771	0.0000	FLOOD RISK
960 minute winter	IC-2402-S	945	3.505	0.385	0.4	0.0612	0.0000	FLOOD RISK
960 minute winter	IC-2403-S	945	3.505	0.305	0.4	0.0485	0.0000	FLOOD RISK
960 minute winter	IC-2501-S	945	3.505	0.415	0.5	0.0660	0.0000	FLOOD RISK
960 minute winter	IC-2502-S	945	3.505	0.355	0.4	0.0565	0.0000	SURCHARGED
960 minute winter	IC-2601-S	930	3.505	0.485	0.6	0.0772	0.0000	FLOOD RISK
960 minute winter	IC-2701-S	930	3.506	0.636	1.7	0.1011	0.0000	SURCHARGED
960 minute winter	IC-2801-S	930	3.505	0.505	0.6	0.0803	0.0000	SURCHARGED
960 minute winter	IC-3001-S	930	3.509	0.579	2.7	0.0920	0.0000	SURCHARGED
960 minute winter	IC-3002-S	930	3.506	0.536	0.3	0.0853	0.0000	SURCHARGED
15 minute winter	IC-3201-S	12	3.546	0.456	25.3	0.0724	0.0000	SURCHARGED
15 minute winter	IC-3202-S	12	3.547	0.337	4.4	0.0536	0.0000	SURCHARGED
15 minute winter	IC-3401-S	13	3.562	0.402	13.8	1.0268	0.0000	FLOOD RISK
15 minute winter	IC-3501-S	12	3.568	0.228	8.1	0.0362	0.0000	SURCHARGED
15 minute winter	IC-3502-S	11	3.566	0.146	2.9	0.0232	0.0000	OK
960 minute winter	IC-3601-S	900	3.507	0.477	0.4	0.0758	0.0000	SURCHARGED
960 minute winter	IC-3602-S	900	3.507	0.397	0.2	0.0631	0.0000	SURCHARGED
1440 minute winter	Dummy Node	510	2.701	0.042	2.6	0.1067	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)
960 minute winter	IC-2401-S	PN-2302-S	IC-2301-S	0.7	0.286	0.053	0.2881	
960 minute winter	IC-2402-S	PN-2401-S	IC-2401-S	0.4	0.221	0.026	0.2570	
960 minute winter	IC-2403-S	PN-2402-S	IC-2402-S	0.4	0.330	0.030	0.2105	
960 minute winter	IC-2501-S	PN-2501-S	MH-0001-S	1.0	0.306	0.079	0.0326	
960 minute winter	IC-2502-S	PN-2502-S	IC-2501-S	0.4	0.235	0.028	0.1526	
960 minute winter	IC-2601-S	PN-2702-S	IC-2701-S	0.6	0.294	0.039	0.1523	
960 minute winter	IC-2701-S	PN-2701-S	MH-0006-S	1.6	0.155	0.039	0.5853	
960 minute winter	IC-2801-S	PN-2703-S	IC-2701-S	0.6	0.275	0.046	0.1363	
960 minute winter	IC-3001-S	PN-3001-S	MH-0009-S	2.6	0.415	0.062	0.1831	
960 minute winter	IC-3002-S	PN-3002-S	IC-3001-S	0.4	0.118	0.027	0.1146	
15 minute winter	IC-3201-S	PN-3003-S	IC-3001-S	20.8	1.182	1.413	0.1784	
15 minute winter	IC-3202-S	PN-3004-S	IC-3201-S	3.5	0.531	0.233	0.0748	
15 minute winter	IC-3401-S	PN-3005-S	IC-3201-S	12.3	0.696	0.857	0.1888	
15 minute winter	IC-3501-S	PN-3008-S	IC-3201-S	4.5	0.526	0.314	0.4250	
15 minute winter	IC-3502-S	PN-3009-S	IC-3501-S	2.7	0.470	0.186	0.2076	
960 minute winter	IC-3601-S	PN-3006-S	MH-0009-S	0.4	0.094	0.025	0.3619	
960 minute winter	IC-3602-S	PN-3007-S	IC-3601-S	0.2	0.181	0.013	0.2082	
1440 minute winter	Dummy Node	PN-001-S	Headwall	2.6	0.471	0.040	0.1613	214.7

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