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20 Milton Park Abingdon Oxfordshire OX14 4SH	Land of Green Lane Chesterton	
Date 14/04/2016 File JNY8140 SW Network Desi...	Designed by HSS Checked by SF	
Causeway		Network 2014.1.1

STORM SEWER DESIGN by the Modified Rational Method

Design Criteria for JNY8140 SW NETWORK DESIGN 2015 09 25.SWS

Pipe Sizes STANDARD Manhole Sizes STANDARD

FSR Rainfall Model - England and Wales

Return Period (years)	1	Add Flow / Climate Change (%)	0
M5-60 (mm)	20.000	Minimum Backdrop Height (m)	0.200
Ratio R	0.400	Maximum Backdrop Height (m)	1.500
Maximum Rainfall (mm/hr)	50	Min Design Depth for Optimisation (m)	1.200
Maximum Time of Concentration (mins)	30	Min Vel for Auto Design only (m/s)	1.00
Foul Sewage (l/s/ha)	0.000	Min Slope for Optimisation (1:X)	500
Volumetric Runoff Coeff.	0.750		

Designed with Level Soffits

Time Area Diagram for JNY8140 SW NETWORK DESIGN 2015 09 25.SWS






Time (mins)	Area (ha)	Time (mins)	Area (ha)	Time (mins)	Area (ha)
0-4	0.268	4-8	0.533	8-12	0.018

Total Area Contributing (ha) = 0.819

Total Pipe Volume (m<sup>3</sup>) = 42.519

Network Design Table for JNY8140 SW NETWORK DESIGN 2015 09 25.SWS

« - Indicates pipe capacity < flow

PN	Length (m)	Fall (m)	Slope (1:X)	I.Area (ha)	T.E. (mins)	Base Flow (l/s)	k (mm)	HYD SECT	DIA (mm)	Auto Design
1.000	25.810	0.400	64.5	0.035	5.00	0.0	0.600	o	225	
1.001	45.832	0.360	127.3	0.063	0.00	0.0	0.600	o	225	
1.002	27.693	0.200	138.5	0.035	0.00	0.0	0.600	o	300	
1.003	26.099	0.253	103.2	0.019	0.00	0.0	0.600	o	300	
1.004	24.713	0.513	48.2	0.053	0.00	0.0	0.600	o	300	

Network Results Table

PN	Rain (mm/hr)	T.C. (mins)	US/IL (m)	Σ I.Area (ha)	Σ Base Flow (l/s)	Foul (l/s)	Add Flow (l/s)	Vel (m/s)	Cap (l/s)	Flow (l/s)
1.000	50.00	5.26	76.900	0.035	0.0	0.0	0.0	1.63	64.8	4.7
1.001	50.00	5.92	76.500	0.098	0.0	0.0	0.0	1.16	46.0	13.3
1.002	49.32	6.27	76.065	0.133	0.0	0.0	0.0	1.33	94.3	17.8
1.003	48.29	6.55	75.865	0.152	0.0	0.0	0.0	1.55	109.4	19.9
1.004	47.65	6.73	75.612	0.205	0.0	0.0	0.0	2.27	160.5	26.5

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Network Design Table for JNY8140 SW NETWORK DESIGN 2015 09 25.SWS

PN	Length (m)	Fall (m)	Slope (1:X)	I.Area (ha)	T.E. (mins)	Base Flow (l/s)	k (mm)	HYD SECT	DIA (mm)	Auto Design
2.000	16.795	0.190	88.4	0.054	5.00	0.0	0.600	o	225	
2.001	34.270	0.300	114.2	0.039	0.00	0.0	0.600	o	300	
2.002	20.415	0.136	150.1	0.077	0.00	0.0	0.600	o	300	
2.003	26.416	0.200	132.1	0.053	0.00	0.0	0.600	o	450	
1.005	6.274	0.020	313.7	0.000	0.00	0.0	0.600	o	450	
1.006	4.311	0.015	287.4	0.000	0.00	0.0	0.600	o	450	
1.007	20.789	0.200	103.9	0.000	0.00	0.0	0.600	o	450	
1.008	22.627	0.100	226.3	0.085	0.00	0.0	0.600	o	450	
1.009	53.267	0.269	198.0	0.166	0.00	0.0	0.600	o	450	
3.000	17.110	0.355	48.2	0.063	5.00	0.0	0.600	o	225	
3.001	5.157	0.175	29.5	0.025	0.00	0.0	0.600	o	300	
1.010	15.860	0.050	317.2	0.052	0.00	0.0	0.600	o	450	
1.011	6.954	0.100	69.5	0.000	0.00	0.0	0.600	o	450	
1.012	8.064	0.020	403.2	0.000	0.00	0.0	0.600	o	450	
1.013	59.620	0.375	159.0	0.000	0.00	0.0	0.600	o	225	

Network Results Table

PN	Rain (mm/hr)	T.C. (mins)	US/IL (m)	Σ I.Area (ha)	Σ Base Flow (l/s)	Foul (l/s)	Add Flow (l/s)	Vel (m/s)	Cap (l/s)	Flow (l/s)
2.000	50.00	5.20	76.000	0.054	0.0	0.0	0.0	1.39	55.3	7.3
2.001	50.00	5.59	75.735	0.093	0.0	0.0	0.0	1.47	103.9	12.6
2.002	50.00	5.86	75.435	0.170	0.0	0.0	0.0	1.28	90.5	23.0
2.003	49.96	6.10	75.149	0.223	0.0	0.0	0.0	1.77	281.1	30.2
1.005	47.33	6.82	74.949	0.428	0.0	0.0	0.0	1.14	181.7	54.9
1.006	47.13	6.88	74.929	0.428	0.0	0.0	0.0	1.19	189.9	54.9
1.007	46.55	7.06	74.914	0.428	0.0	0.0	0.0	1.99	317.1	54.9
1.008	45.64	7.34	74.714	0.513	0.0	0.0	0.0	1.35	214.3	63.4
1.009	43.79	7.95	74.614	0.679	0.0	0.0	0.0	1.44	229.2	80.5
3.000	50.00	5.15	74.950	0.063	0.0	0.0	0.0	1.89	75.1	8.5
3.001	50.00	5.18	74.520	0.088	0.0	0.0	0.0	2.91	205.5	11.9
1.010	43.13	8.19	74.195	0.819	0.0	0.0	0.0	1.14	180.7	95.7
1.011	43.00	8.23	74.145	0.819	0.0	0.0	0.0	2.44	388.2	95.7
1.012	42.64	8.37	74.045	0.819	0.0	0.0	0.0	1.01	160.0	95.7
1.013	40.28	9.33	74.025	0.819	0.0	0.0	0.0	1.03	41.1	95.7

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Manhole Schedules for JNY8140 SW NETWORK DESIGN 2015 09 25.SWS

MH Name	MH CL (m)	MH Depth (m)	MH Connection	MH Diam.,L*W (mm)	Pipe Out		Pipes In			Backdrop (mm)
					PN	Invert Level (m)	Diameter (mm)	PN	Invert Level (m)	
1	77.500	0.600	Open Manhole	450	1.000	76.900	225			
2	77.251	0.751	Open Manhole	900	1.001	76.500	225	1.000	76.500	225
3	77.793	1.728	Open Manhole	1200	1.002	76.065	300	1.001	76.140	225
4	77.357	1.492	Open Manhole	1200	1.003	75.865	300	1.002	75.865	300
5	77.108	1.496	Open Manhole	1200	1.004	75.612	300	1.003	75.612	300
18	76.650	0.650	Open Manhole	450	2.000	76.000	225			
19	76.839	1.104	Open Manhole	1200	2.001	75.735	300	2.000	75.810	225
20	76.521	1.086	Open Manhole	1200	2.002	75.435	300	2.001	75.435	300
21	76.679	1.530	Open Manhole	1350	2.003	75.149	450	2.002	75.299	300
6	77.203	2.254	Open Manhole	1350	1.005	74.949	450	1.004	75.099	300
								2.003	74.949	450
8	75.976	1.047	Open Manhole	2100	1.006	74.929	450	1.005	74.929	450
9	76.590	1.676	Open Manhole	3660	1.007	74.914	450	1.006	74.914	450
10	76.326	1.612	Open Manhole	1350	1.008	74.714	450	1.007	74.714	450
11	76.132	1.518	Open Manhole	1350	1.009	74.614	450	1.008	74.614	450
22	75.900	0.950	Open Manhole	450	3.000	74.950	225			
23	75.950	1.430	Open Manhole	900	3.001	74.520	300	3.000	74.595	225
12	75.699	1.504	Open Manhole	1350	1.010	74.195	450	1.009	74.345	450
								3.001	74.345	300
13	75.711	1.566	Open Manhole	1350	1.011	74.145	450	1.010	74.145	450
15	75.200	1.155	Open Manhole	2100	1.012	74.045	450	1.011	74.045	450
16	75.150	1.125	Open Manhole	3660	1.013	74.025	225	1.012	74.025	450
17	75.600	1.950	Open Manhole	1200		OUTFALL		1.013	73.650	225

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PIPELINE SCHEDULES for JNY8140 SW NETWORK DESIGN 2015 09 25.SWS

Upstream Manhole

PN	Hyd Sect	Diam (mm)	MH Name	C.Level (m)	I.Level (m)	D.Depth (m)	MH Connection	MH DIAM., L*W (mm)
1.000	o	225	1	77.500	76.900	0.375	Open Manhole	450
1.001	o	225	2	77.251	76.500	0.526	Open Manhole	900
1.002	o	300	3	77.793	76.065	1.428	Open Manhole	1200
1.003	o	300	4	77.357	75.865	1.192	Open Manhole	1200
1.004	o	300	5	77.108	75.612	1.196	Open Manhole	1200
2.000	o	225	18	76.650	76.000	0.425	Open Manhole	450
2.001	o	300	19	76.839	75.735	0.804	Open Manhole	1200
2.002	o	300	20	76.521	75.435	0.786	Open Manhole	1200
2.003	o	450	21	76.679	75.149	1.080	Open Manhole	1350
1.005	o	450	6	77.203	74.949	1.804	Open Manhole	1350
1.006	o	450	8	75.976	74.929	0.597	Open Manhole	2100
1.007	o	450	9	76.590	74.914	1.226	Open Manhole	3660
1.008	o	450	10	76.326	74.714	1.162	Open Manhole	1350
1.009	o	450	11	76.132	74.614	1.068	Open Manhole	1350
3.000	o	225	22	75.900	74.950	0.725	Open Manhole	450
3.001	o	300	23	75.950	74.520	1.130	Open Manhole	900
1.010	o	450	12	75.699	74.195	1.054	Open Manhole	1350

Downstream Manhole

PN	Length (m)	Slope (1:X)	MH Name	C.Level (m)	I.Level (m)	D.Depth (m)	MH Connection	MH DIAM., L*W (mm)
1.000	25.810	64.5	2	77.251	76.500	0.526	Open Manhole	900
1.001	45.832	127.3	3	77.793	76.140	1.428	Open Manhole	1200
1.002	27.693	138.5	4	77.357	75.865	1.192	Open Manhole	1200
1.003	26.099	103.2	5	77.108	75.612	1.196	Open Manhole	1200
1.004	24.713	48.2	6	77.203	75.099	1.804	Open Manhole	1350
2.000	16.795	88.4	19	76.839	75.810	0.804	Open Manhole	1200
2.001	34.270	114.2	20	76.521	75.435	0.786	Open Manhole	1200
2.002	20.415	150.1	21	76.679	75.299	1.080	Open Manhole	1350
2.003	26.416	132.1	6	77.203	74.949	1.804	Open Manhole	1350
1.005	6.274	313.7	8	75.976	74.929	0.597	Open Manhole	2100
1.006	4.311	287.4	9	76.590	74.914	1.226	Open Manhole	3660
1.007	20.789	103.9	10	76.326	74.714	1.162	Open Manhole	1350
1.008	22.627	226.3	11	76.132	74.614	1.068	Open Manhole	1350
1.009	53.267	198.0	12	75.699	74.345	0.904	Open Manhole	1350
3.000	17.110	48.2	23	75.950	74.595	1.130	Open Manhole	900
3.001	5.157	29.5	12	75.699	74.345	1.054	Open Manhole	1350
1.010	15.860	317.2	13	75.711	74.145	1.116	Open Manhole	1350

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PIPELINE SCHEDULES for JNY8140 SW NETWORK DESIGN 2015 09 25.SWS

Upstream Manhole

PN	Hyd Sect	Diam (mm)	MH Name	C.Level (m)	I.Level (m)	D.Depth (m)	MH Connection	MH DIAM., L*W (mm)
1.011	o	450	13	75.711	74.145	1.116	Open Manhole	1350
1.012	o	450	15	75.200	74.045	0.705	Open Manhole	2100
1.013	o	225	16	75.150	74.025	0.900	Open Manhole	3660

Downstream Manhole

PN	Length (m)	Slope (1:X)	MH Name	C.Level (m)	I.Level (m)	D.Depth (m)	MH Connection	MH DIAM., L*W (mm)
1.011	6.954	69.5	15	75.200	74.045	0.705	Open Manhole	2100
1.012	8.064	403.2	16	75.150	74.025	0.675	Open Manhole	3660
1.013	59.620	159.0	17	75.600	73.650	1.725	Open Manhole	1200

Free Flowing Outfall Details for JNY8140 SW NETWORK DESIGN 2015 09 25.SWS


Outfall Pipe Number	Outfall Name	C. Level (m)	I. Level (m)	Min I. Level (m)	D,L (mm)	W (mm)
1.013	17	75.600	73.650	73.615	1200	0

Simulation Criteria for JNY8140 SW NETWORK DESIGN 2015 09 25.SWS

Volumetric Runoff Coeff	0.750	Additional Flow - % of Total Flow	0.000
Areal Reduction Factor	1.000	MADD Factor * 10m <sup>3</sup> /ha Storage	2.000
Hot Start (mins)	0	Inlet Coefficient	0.800
Hot Start Level (mm)	0	Flow per Person per Day (l/per/day)	0.000
Manhole Headloss Coeff (Global)	0.500	Run Time (mins)	60
Foul Sewage per hectare (l/s)	0.000	Output Interval (mins)	1
Number of Input Hydrographs	0	Number of Storage Structures	2
Number of Online Controls	2	Number of Time/Area Diagrams	0
Number of Offline Controls	0	Number of Real Time Controls	0

Synthetic Rainfall Details

Rainfall Model	FSR	Profile Type	Summer
Return Period (years)	1	Cv (Summer)	0.750
Region	England and Wales	Cv (Winter)	0.840
M5-60 (mm)	20.000	Storm Duration (mins)	30
Ratio R	0.400		

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Online Controls for JNY8140 SW NETWORK DESIGN 2015 09 25.SWS

Hydro-Brake Optimum® Manhole: 9, DS/PN: 1.007, Volume (m³): 17.9

Unit Reference MD-SHE-0089-3000-0515-3000  
 Design Head (m) 0.515  
 Design Flow (l/s) 3.0  
 Flush-Flo™ Calculated  
 Objective Minimise upstream storage  
 Diameter (mm) 89  
 Invert Level (m) 74.914  
 Minimum Outlet Pipe Diameter (mm) 150  
 Suggested Manhole Diameter (mm) 1200

Control Points	Head (m)	Flow (l/s)
Design Point (Calculated)	0.515	3.0
Flush-Flo™	0.159	3.0
Kick-Flo®	0.361	2.5
Mean Flow over Head Range	-	2.5


The hydrological calculations have been based on the Head/Discharge relationship for the Hydro-Brake Optimum® as specified. Should another type of control device other than a Hydro-Brake Optimum® be utilised then these storage routing calculations will be invalidated

Depth (m)	Flow (l/s)	Depth (m)	Flow (l/s)	Depth (m)	Flow (l/s)	Depth (m)	Flow (l/s)
0.100	2.8	1.200	4.4	3.000	6.7	7.000	10.1
0.200	2.9	1.400	4.7	3.500	7.3	7.500	10.5
0.300	2.8	1.600	5.0	4.000	7.7	8.000	10.8
0.400	2.7	1.800	5.3	4.500	8.2	8.500	11.2
0.500	2.9	2.000	5.6	5.000	8.6	9.000	11.5
0.600	3.2	2.200	5.8	5.500	9.0	9.500	11.8
0.800	3.6	2.400	6.1	6.000	9.4		
1.000	4.0	2.600	6.3	6.500	9.8		

Hydro-Brake Optimum® Manhole: 15, DS/PN: 1.012, Volume (m³): 4.8

Unit Reference MD-SHE-0098-5000-1500-5000  
 Design Head (m) 1.500  
 Design Flow (l/s) 5.0  
 Flush-Flo™ Calculated  
 Objective Minimise upstream storage  
 Diameter (mm) 98  
 Invert Level (m) 74.045  
 Minimum Outlet Pipe Diameter (mm) 150  
 Suggested Manhole Diameter (mm) 1200

Control Points	Head (m)	Flow (l/s)
Design Point (Calculated)	1.500	5.0
Flush-Flo™	0.431	4.9


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Hydro-Brake Optimum® Manhole: 15, DS/PN: 1.012, Volume (m³): 4.8

Control Points	Head (m)	Flow (l/s)
Kick-Flo®	0.878	3.9
Mean Flow over Head Range	-	4.3

The hydrological calculations have been based on the Head/Discharge relationship for the Hydro-Brake Optimum® as specified. Should another type of control device other than a Hydro-Brake Optimum® be utilised then these storage routing calculations will be invalidated

Depth (m)	Flow (l/s)	Depth (m)	Flow (l/s)	Depth (m)	Flow (l/s)	Depth (m)	Flow (l/s)
0.100	3.2	1.200	4.5	3.000	6.9	7.000	10.3
0.200	4.4	1.400	4.8	3.500	7.4	7.500	10.7
0.300	4.8	1.600	5.1	4.000	7.9	8.000	11.0
0.400	4.9	1.800	5.4	4.500	8.4	8.500	11.3
0.500	4.9	2.000	5.7	5.000	8.8	9.000	11.6
0.600	4.8	2.200	6.0	5.500	9.2	9.500	11.9
0.800	4.3	2.400	6.2	6.000	9.6		
1.000	4.1	2.600	6.5	6.500	10.0		

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Storage Structures for JNY8140 SW NETWORK DESIGN 2015 09 25.SWS

Infiltration Basin Manhole: 8, DS/PN: 1.006

Invert Level (m) 74.929 Safety Factor 2.0  
 Infiltration Coefficient Base (m/hr) 0.00000 Porosity 1.00  
 Infiltration Coefficient Side (m/hr) 0.54720


Depth (m)	Area (m <sup>2</sup> )	Depth (m)	Area (m <sup>2</sup> )	Depth (m)	Area (m <sup>2</sup> )	Depth (m)	Area (m <sup>2</sup> )
0.000	243.0	0.382	415.0	0.764	602.0	1.146	803.0

Tank or Pond Manhole: 15, DS/PN: 1.012

Invert Level (m) 74.045


Depth (m)	Area (m <sup>2</sup> )	Depth (m)	Area (m <sup>2</sup> )	Depth (m)	Area (m <sup>2</sup> )
0.000	392.0	0.350	507.0	0.700	634.0



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Flows and Levels for Pipe 1.000 US/MH 1 (JNY8140 SW NETWORK DESIGN 2015  
09 25.SWS)  
360 minute 30 year Winter I+0%  
Average Rainfall Intensity 8.034 mm/hr

Time (mins)	Upstream Level (m)	Downstream Level (m)	Surcharged Depth (m)	Total O/F (l/s)	Pipe Flow (l/s)
6	76.901	76.503	-0.224	0.0	0.0
12	76.902	76.509	-0.223	0.0	0.1
18	76.904	76.513	-0.221	0.0	0.2
24	76.904	76.517	-0.221	0.0	0.2
30	76.905	76.518	-0.220	0.0	0.3
36	76.905	76.519	-0.220	0.0	0.3
42	76.905	76.520	-0.220	0.0	0.3
48	76.905	76.520	-0.220	0.0	0.3
54	76.905	76.520	-0.220	0.0	0.3
60	76.905	76.520	-0.220	0.0	0.3
66	76.905	76.520	-0.220	0.0	0.3
72	76.905	76.521	-0.220	0.0	0.3
78	76.906	76.522	-0.219	0.0	0.3
84	76.906	76.523	-0.219	0.0	0.4
90	76.907	76.524	-0.218	0.0	0.4
96	76.908	76.525	-0.217	0.0	0.4
102	76.909	76.526	-0.216	0.0	0.5
108	76.910	76.527	-0.215	0.0	0.6
114	76.911	76.529	-0.214	0.0	0.6
120	76.913	76.531	-0.212	0.0	0.7
126	76.915	76.533	-0.210	0.0	0.8
132	76.917	76.535	-0.208	0.0	0.9
138	76.918	76.538	-0.207	0.0	1.0
144	76.920	76.540	-0.205	0.0	1.1
150	76.922	76.542	-0.203	0.0	1.2
156	76.923	76.544	-0.202	0.0	1.4
162	76.924	76.546	-0.201	0.0	1.4
168	76.924	76.547	-0.201	0.0	1.5
174	76.924	76.548	-0.201	0.0	1.6
180	76.925	76.548	-0.200	0.0	1.6
186	76.925	76.548	-0.200	0.0	1.7
192	76.924	76.548	-0.201	0.0	1.6
198	76.924	76.547	-0.201	0.0	1.5
204	76.924	76.546	-0.201	0.0	1.5
210	76.923	76.544	-0.202	0.0	1.4
216	76.922	76.542	-0.203	0.0	1.3
222	76.920	76.540	-0.205	0.0	1.2
228	76.918	76.538	-0.207	0.0	1.0
234	76.917	76.535	-0.208	0.0	0.9
240	76.915	76.533	-0.210	0.0	0.8
246	76.913	76.531	-0.212	0.0	0.7
252	76.911	76.529	-0.214	0.0	0.7
258	76.910	76.527	-0.215	0.0	0.6
264	76.909	76.526	-0.216	0.0	0.5
270	76.908	76.525	-0.217	0.0	0.4

RPS P&D		Page 9
20 Milton Park Abingdon Oxfordshire OX14 4SH	Land of Green Lane Chesterton	
Date 14/04/2016 File JNY8140 SW Network Desi...	Designed by HSS Checked by SF	
Causeway	Network 2014.1.1	


Flows and Levels for Pipe 1.000 US/MH 1 (JNY8140 SW NETWORK DESIGN 2015  
09 25.SWS)  
360 minute 30 year Winter I+0%  
Average Rainfall Intensity 8.034 mm/hr

Time (mins)	Upstream Level (m)	Downstream Level (m)	Surcharged Depth (m)	Total O/F (l/s)	Pipe Flow (l/s)
276	76.907	76.524	-0.218	0.0	0.4
282	76.906	76.523	-0.219	0.0	0.4
288	76.906	76.522	-0.219	0.0	0.3
294	76.905	76.521	-0.220	0.0	0.3
300	76.905	76.520	-0.220	0.0	0.3
306	76.905	76.520	-0.220	0.0	0.3
312	76.905	76.520	-0.220	0.0	0.3
318	76.905	76.520	-0.220	0.0	0.3
324	76.905	76.520	-0.220	0.0	0.3
330	76.905	76.519	-0.220	0.0	0.3
336	76.905	76.518	-0.220	0.0	0.3
342	76.904	76.517	-0.221	0.0	0.2
348	76.904	76.513	-0.221	0.0	0.2
354	76.902	76.509	-0.223	0.0	0.1
360	76.901	76.503	-0.224	0.0	0.1
366	76.900	76.500	-0.225	0.0	0.0
372	76.900	76.500	-0.225	0.0	0.0
378	76.900	76.500	-0.225	0.0	0.0
384	76.900	76.500	-0.225	0.0	0.0
390	76.900	76.500	-0.225	0.0	0.0
396	76.900	76.500	-0.225	0.0	0.0
402	76.900	76.500	-0.225	0.0	0.0
408	76.900	76.500	-0.225	0.0	0.0
414	76.900	76.500	-0.225	0.0	0.0
420	76.900	76.500	-0.225	0.0	0.0
426	76.900	76.500	-0.225	0.0	0.0
432	76.900	76.500	-0.225	0.0	0.0
438	76.900	76.500	-0.225	0.0	0.0
444	76.900	76.500	-0.225	0.0	0.0
450	76.900	76.500	-0.225	0.0	0.0
456	76.900	76.500	-0.225	0.0	0.0
462	76.900	76.500	-0.225	0.0	0.0
468	76.900	76.500	-0.225	0.0	0.0
474	76.900	76.500	-0.225	0.0	0.0
480	76.900	76.500	-0.225	0.0	0.0
486	76.900	76.500	-0.225	0.0	0.0
492	76.900	76.500	-0.225	0.0	0.0
498	76.900	76.500	-0.225	0.0	0.0
504	76.900	76.500	-0.225	0.0	0.0
510	76.900	76.500	-0.225	0.0	0.0
516	76.900	76.500	-0.225	0.0	0.0
522	76.900	76.500	-0.225	0.0	0.0
528	76.900	76.500	-0.225	0.0	0.0
534	76.900	76.500	-0.225	0.0	0.0
540	76.900	76.500	-0.225	0.0	0.0

RPS P&D		Page 10
20 Milton Park Abingdon Oxfordshire OX14 4SH	Land of Green Lane Chesterton	
Date 14/04/2016 File JNY8140 SW Network Desi...	Designed by HSS Checked by SF	
Causeway		Network 2014.1.1

Flows and Levels for Pipe 1.000 US/MH 1 (JNY8140 SW NETWORK DESIGN 2015  
09 25.SWS)  
360 minute 30 year Winter I+0%  
Average Rainfall Intensity 8.034 mm/hr


<b>Time (mins)</b>	<b>Upstream Level (m)</b>	<b>Downstream Level (m)</b>	<b>Surcharged Depth (m)</b>	<b>Total O/F (l/s)</b>	<b>Pipe Flow (l/s)</b>
546	76.900	76.500	-0.225	0.0	0.0
552	76.900	76.500	-0.225	0.0	0.0
558	76.900	76.500	-0.225	0.0	0.0
564	76.900	76.500	-0.225	0.0	0.0
570	76.900	76.500	-0.225	0.0	0.0
576	76.900	76.500	-0.225	0.0	0.0
582	76.900	76.500	-0.225	0.0	0.0
588	76.900	76.500	-0.225	0.0	0.0
594	76.900	76.500	-0.225	0.0	0.0
600	76.900	76.500	-0.225	0.0	0.0
606	76.900	76.500	-0.225	0.0	0.0
612	76.900	76.500	-0.225	0.0	0.0
618	76.900	76.500	-0.225	0.0	0.0
624	76.900	76.500	-0.225	0.0	0.0
630	76.900	76.500	-0.225	0.0	0.0
636	76.900	76.500	-0.225	0.0	0.0
642	76.900	76.500	-0.225	0.0	0.0
648	76.900	76.500	-0.225	0.0	0.0
654	76.900	76.500	-0.225	0.0	0.0
660	76.900	76.500	-0.225	0.0	0.0
666	76.900	76.500	-0.225	0.0	0.0
672	76.900	76.500	-0.225	0.0	0.0
678	76.900	76.500	-0.225	0.0	0.0
684	76.900	76.500	-0.225	0.0	0.0
690	76.900	76.500	-0.225	0.0	0.0
696	76.900	76.500	-0.225	0.0	0.0
702	76.900	76.500	-0.225	0.0	0.0
708	76.900	76.500	-0.225	0.0	0.0
714	76.900	76.500	-0.225	0.0	0.0
720	76.900	76.500	-0.225	0.0	0.0

RPS P&D		Page 11
20 Milton Park Abingdon Oxfordshire OX14 4SH	Land of Green Lane Chesterton	
Date 14/04/2016 File JNY8140 SW Network Desi...	Designed by HSS Checked by SF	
Causeway	Network 2014.1.1	

Flows and Levels for Pipe 1.001 US/MH 2 (JNY8140 SW NETWORK DESIGN 2015  
09 25.SWS)


360 minute 30 year Winter I+0%  
Average Rainfall Intensity 8.034 mm/hr

<b>Time (mins)</b>	<b>Upstream Level (m)</b>	<b>Downstream Level (m)</b>	<b>Surcharged Depth (m)</b>	<b>Total O/F (l/s)</b>	<b>Pipe Flow (l/s)</b>
6	76.503	76.068	-0.222	0.0	0.1
12	76.509	76.073	-0.216	0.0	0.3
18	76.513	76.077	-0.212	0.0	0.5
24	76.517	76.081	-0.208	0.0	0.6
30	76.518	76.082	-0.207	0.0	0.7
36	76.519	76.083	-0.206	0.0	0.8
42	76.520	76.083	-0.205	0.0	0.8
48	76.520	76.084	-0.205	0.0	0.8
54	76.520	76.083	-0.205	0.0	0.8
60	76.520	76.084	-0.205	0.0	0.8
66	76.520	76.084	-0.205	0.0	0.8
72	76.521	76.084	-0.204	0.0	0.9
78	76.522	76.086	-0.203	0.0	0.9
84	76.523	76.087	-0.202	0.0	1.0
90	76.524	76.090	-0.201	0.0	1.1
96	76.525	76.093	-0.200	0.0	1.2
102	76.526	76.095	-0.199	0.0	1.4
108	76.527	76.097	-0.198	0.0	1.5
114	76.529	76.098	-0.196	0.0	1.8
120	76.531	76.100	-0.194	0.0	2.0
126	76.533	76.102	-0.192	0.0	2.3
132	76.535	76.104	-0.190	0.0	2.6
138	76.538	76.106	-0.187	0.0	2.9
144	76.540	76.108	-0.185	0.0	3.1
150	76.542	76.111	-0.183	0.0	3.5
156	76.544	76.113	-0.181	0.0	3.7
162	76.546	76.114	-0.179	0.0	4.0
168	76.547	76.116	-0.178	0.0	4.3
174	76.548	76.117	-0.177	0.0	4.5
180	76.548	76.118	-0.177	0.0	4.6
186	76.548	76.118	-0.177	0.0	4.6
192	76.548	76.117	-0.177	0.0	4.5
198	76.547	76.116	-0.178	0.0	4.3
204	76.546	76.114	-0.179	0.0	4.1
210	76.544	76.113	-0.181	0.0	3.8
216	76.542	76.111	-0.183	0.0	3.6
222	76.540	76.108	-0.185	0.0	3.3
228	76.538	76.106	-0.187	0.0	3.0
234	76.535	76.104	-0.190	0.0	2.7
240	76.533	76.102	-0.192	0.0	2.4
246	76.531	76.100	-0.194	0.0	2.1
252	76.529	76.098	-0.196	0.0	1.9
258	76.527	76.097	-0.198	0.0	1.6
264	76.526	76.095	-0.199	0.0	1.4
270	76.525	76.093	-0.200	0.0	1.3

RPS P&D		Page 12
20 Milton Park Abingdon Oxfordshire OX14 4SH	Land of Green Lane Chesterton	
Date 14/04/2016 File JNY8140 SW Network Desi...	Designed by HSS Checked by SF	
Causeway	Network 2014.1.1	

Flows and Levels for Pipe 1.001 US/MH 2 (JNY8140 SW NETWORK DESIGN 2015  
09 25.SWS)  
360 minute 30 year Winter I+0%  
Average Rainfall Intensity 8.034 mm/hr


Time (mins)	Upstream Level (m)	Downstream Level (m)	Surcharged Depth (m)	Total O/F (l/s)	Pipe Flow (l/s)
276	76.524	76.090	-0.201	0.0	1.1
282	76.523	76.087	-0.202	0.0	1.0
288	76.522	76.086	-0.203	0.0	0.9
294	76.521	76.084	-0.204	0.0	0.9
300	76.520	76.084	-0.205	0.0	0.8
306	76.520	76.084	-0.205	0.0	0.8
312	76.520	76.083	-0.205	0.0	0.8
318	76.520	76.084	-0.205	0.0	0.8
324	76.520	76.083	-0.205	0.0	0.8
330	76.519	76.083	-0.206	0.0	0.8
336	76.518	76.082	-0.207	0.0	0.8
342	76.517	76.081	-0.208	0.0	0.7
348	76.513	76.078	-0.212	0.0	0.6
354	76.509	76.073	-0.216	0.0	0.4
360	76.503	76.068	-0.222	0.0	0.2
366	76.500	76.065	-0.225	0.0	0.0
372	76.500	76.065	-0.225	0.0	0.0
378	76.500	76.065	-0.225	0.0	0.0
384	76.500	76.065	-0.225	0.0	0.0
390	76.500	76.065	-0.225	0.0	0.0
396	76.500	76.065	-0.225	0.0	0.0
402	76.500	76.065	-0.225	0.0	0.0
408	76.500	76.065	-0.225	0.0	0.0
414	76.500	76.065	-0.225	0.0	0.0
420	76.500	76.065	-0.225	0.0	0.0
426	76.500	76.065	-0.225	0.0	0.0
432	76.500	76.065	-0.225	0.0	0.0
438	76.500	76.065	-0.225	0.0	0.0
444	76.500	76.065	-0.225	0.0	0.0
450	76.500	76.065	-0.225	0.0	0.0
456	76.500	76.065	-0.225	0.0	0.0
462	76.500	76.065	-0.225	0.0	0.0
468	76.500	76.065	-0.225	0.0	0.0
474	76.500	76.065	-0.225	0.0	0.0
480	76.500	76.065	-0.225	0.0	0.0
486	76.500	76.065	-0.225	0.0	0.0
492	76.500	76.065	-0.225	0.0	0.0
498	76.500	76.065	-0.225	0.0	0.0
504	76.500	76.065	-0.225	0.0	0.0
510	76.500	76.065	-0.225	0.0	0.0
516	76.500	76.065	-0.225	0.0	0.0
522	76.500	76.065	-0.225	0.0	0.0
528	76.500	76.065	-0.225	0.0	0.0
534	76.500	76.065	-0.225	0.0	0.0
540	76.500	76.065	-0.225	0.0	0.0

RPS P&D		Page 13
20 Milton Park Abingdon Oxfordshire OX14 4SH	Land of Green Lane Chesterton	
Date 14/04/2016 File JNY8140 SW Network Desi...	Designed by HSS Checked by SF	
Causeway	Network 2014.1.1	

Flows and Levels for Pipe 1.001 US/MH 2 (JNY8140 SW NETWORK DESIGN 2015  
09 25.SWS)

360 minute 30 year Winter I+0%  
Average Rainfall Intensity 8.034 mm/hr


<b>Time (mins)</b>	<b>Upstream Level (m)</b>	<b>Downstream Level (m)</b>	<b>Surcharged Depth (m)</b>	<b>Total O/F (l/s)</b>	<b>Pipe Flow (l/s)</b>
546	76.500	76.065	-0.225	0.0	0.0
552	76.500	76.065	-0.225	0.0	0.0
558	76.500	76.065	-0.225	0.0	0.0
564	76.500	76.065	-0.225	0.0	0.0
570	76.500	76.065	-0.225	0.0	0.0
576	76.500	76.065	-0.225	0.0	0.0
582	76.500	76.065	-0.225	0.0	0.0
588	76.500	76.065	-0.225	0.0	0.0
594	76.500	76.065	-0.225	0.0	0.0
600	76.500	76.065	-0.225	0.0	0.0
606	76.500	76.065	-0.225	0.0	0.0
612	76.500	76.065	-0.225	0.0	0.0
618	76.500	76.065	-0.225	0.0	0.0
624	76.500	76.065	-0.225	0.0	0.0
630	76.500	76.065	-0.225	0.0	0.0
636	76.500	76.065	-0.225	0.0	0.0
642	76.500	76.065	-0.225	0.0	0.0
648	76.500	76.065	-0.225	0.0	0.0
654	76.500	76.065	-0.225	0.0	0.0
660	76.500	76.065	-0.225	0.0	0.0
666	76.500	76.065	-0.225	0.0	0.0
672	76.500	76.065	-0.225	0.0	0.0
678	76.500	76.065	-0.225	0.0	0.0
684	76.500	76.065	-0.225	0.0	0.0
690	76.500	76.065	-0.225	0.0	0.0
696	76.500	76.065	-0.225	0.0	0.0
702	76.500	76.065	-0.225	0.0	0.0
708	76.500	76.065	-0.225	0.0	0.0
714	76.500	76.065	-0.225	0.0	0.0
720	76.500	76.065	-0.225	0.0	0.0

RPS P&D		Page 14
20 Milton Park Abingdon Oxfordshire OX14 4SH	Land of Green Lane Chesterton	
Date 14/04/2016 File JNY8140 SW Network Desi...	Designed by HSS Checked by SF	
Causeway	Network 2014.1.1	

Flows and Levels for Pipe 1.002 US/MH 3 (JNY8140 SW NETWORK DESIGN 2015  
09 25.SWS)

360 minute 30 year Winter I+0%  
Average Rainfall Intensity 8.034 mm/hr


Time (mins)	Upstream Level (m)	Downstream Level (m)	Surcharged Depth (m)	Total O/F (l/s)	Pipe Flow (l/s)
6	76.068	75.868	-0.297	0.0	0.1
12	76.073	75.873	-0.292	0.0	0.4
18	76.077	75.877	-0.288	0.0	0.7
24	76.081	75.880	-0.284	0.0	0.9
30	76.082	75.882	-0.283	0.0	1.0
36	76.083	75.883	-0.282	0.0	1.1
42	76.083	75.883	-0.282	0.0	1.1
48	76.084	75.883	-0.281	0.0	1.1
54	76.083	75.883	-0.282	0.0	1.1
60	76.084	75.883	-0.281	0.0	1.1
66	76.084	75.884	-0.281	0.0	1.1
72	76.084	75.884	-0.281	0.0	1.1
78	76.086	75.885	-0.279	0.0	1.2
84	76.087	75.887	-0.278	0.0	1.3
90	76.090	75.889	-0.275	0.0	1.4
96	76.093	75.892	-0.272	0.0	1.6
102	76.095	75.895	-0.270	0.0	1.8
108	76.097	75.897	-0.268	0.0	2.1
114	76.098	75.898	-0.267	0.0	2.4
120	76.100	75.900	-0.265	0.0	2.7
126	76.102	75.902	-0.263	0.0	3.0
132	76.104	75.904	-0.261	0.0	3.4
138	76.106	75.906	-0.259	0.0	3.8
144	76.108	75.908	-0.257	0.0	4.3
150	76.111	75.910	-0.254	0.0	4.7
156	76.113	75.912	-0.252	0.0	5.1
162	76.114	75.914	-0.251	0.0	5.4
168	76.116	75.916	-0.249	0.0	5.8
174	76.117	75.917	-0.248	0.0	6.1
180	76.118	75.918	-0.247	0.0	6.2
186	76.118	75.918	-0.247	0.0	6.3
192	76.117	75.917	-0.248	0.0	6.1
198	76.116	75.916	-0.249	0.0	5.9
204	76.114	75.914	-0.251	0.0	5.6
210	76.113	75.912	-0.252	0.0	5.2
216	76.111	75.910	-0.254	0.0	4.9
222	76.108	75.908	-0.257	0.0	4.4
228	76.106	75.906	-0.259	0.0	4.0
234	76.104	75.904	-0.261	0.0	3.6
240	76.102	75.902	-0.263	0.0	3.2
246	76.100	75.900	-0.265	0.0	2.9
252	76.098	75.898	-0.267	0.0	2.5
258	76.097	75.897	-0.268	0.0	2.2
264	76.095	75.895	-0.270	0.0	1.9
270	76.093	75.893	-0.272	0.0	1.7

RPS P&D		Page 15
20 Milton Park Abingdon Oxfordshire OX14 4SH	Land of Green Lane Chesterton	
Date 14/04/2016 File JNY8140 SW Network Desi...	Designed by HSS Checked by SF	
Causeway		Network 2014.1.1

Flows and Levels for Pipe 1.002 US/MH 3 (JNY8140 SW NETWORK DESIGN 2015  
09 25.SWS)  
360 minute 30 year Winter I+0%  
Average Rainfall Intensity 8.034 mm/hr

Time (mins)	Upstream Level (m)	Downstream Level (m)	Surcharged Depth (m)	Total O/F (l/s)	Pipe Flow (l/s)
276	76.090	75.889	-0.275	0.0	1.5
282	76.087	75.887	-0.278	0.0	1.4
288	76.086	75.885	-0.279	0.0	1.3
294	76.084	75.884	-0.281	0.0	1.2
300	76.084	75.884	-0.281	0.0	1.1
306	76.084	75.883	-0.281	0.0	1.1
312	76.083	75.883	-0.282	0.0	1.1
318	76.084	75.883	-0.281	0.0	1.1
324	76.083	75.883	-0.282	0.0	1.1
330	76.083	75.883	-0.282	0.0	1.1
336	76.082	75.882	-0.283	0.0	1.0
342	76.081	75.880	-0.284	0.0	1.0
348	76.078	75.878	-0.287	0.0	0.8
354	76.073	75.873	-0.292	0.0	0.6
360	76.068	75.868	-0.297	0.0	0.3
366	76.065	75.865	-0.300	0.0	0.0
372	76.065	75.865	-0.300	0.0	0.0
378	76.065	75.865	-0.300	0.0	0.0
384	76.065	75.865	-0.300	0.0	0.0
390	76.065	75.865	-0.300	0.0	0.0
396	76.065	75.865	-0.300	0.0	0.0
402	76.065	75.865	-0.300	0.0	0.0
408	76.065	75.865	-0.300	0.0	0.0
414	76.065	75.865	-0.300	0.0	0.0
420	76.065	75.865	-0.300	0.0	0.0
426	76.065	75.865	-0.300	0.0	0.0
432	76.065	75.865	-0.300	0.0	0.0
438	76.065	75.865	-0.300	0.0	0.0
444	76.065	75.865	-0.300	0.0	0.0
450	76.065	75.865	-0.300	0.0	0.0
456	76.065	75.865	-0.300	0.0	0.0
462	76.065	75.865	-0.300	0.0	0.0
468	76.065	75.865	-0.300	0.0	0.0
474	76.065	75.865	-0.300	0.0	0.0
480	76.065	75.865	-0.300	0.0	0.0
486	76.065	75.865	-0.300	0.0	0.0
492	76.065	75.865	-0.300	0.0	0.0
498	76.065	75.865	-0.300	0.0	0.0
504	76.065	75.865	-0.300	0.0	0.0
510	76.065	75.865	-0.300	0.0	0.0
516	76.065	75.865	-0.300	0.0	0.0
522	76.065	75.865	-0.300	0.0	0.0
528	76.065	75.865	-0.300	0.0	0.0
534	76.065	75.865	-0.300	0.0	0.0
540	76.065	75.865	-0.300	0.0	0.0




RPS P&D		Page 16
20 Milton Park Abingdon Oxfordshire OX14 4SH	Land of Green Lane Chesterton	
Date 14/04/2016 File JNY8140 SW Network Desi...	Designed by HSS Checked by SF	
Causeway		Network 2014.1.1

Flows and Levels for Pipe 1.002 US/MH 3 (JNY8140 SW NETWORK DESIGN 2015  
09 25.SWS)


360 minute 30 year Winter I+0%  
Average Rainfall Intensity 8.034 mm/hr

<b>Time (mins)</b>	<b>Upstream Level (m)</b>	<b>Downstream Level (m)</b>	<b>Surcharged Depth (m)</b>	<b>Total O/F (l/s)</b>	<b>Pipe Flow (l/s)</b>
546	76.065	75.865	-0.300	0.0	0.0
552	76.065	75.865	-0.300	0.0	0.0
558	76.065	75.865	-0.300	0.0	0.0
564	76.065	75.865	-0.300	0.0	0.0
570	76.065	75.865	-0.300	0.0	0.0
576	76.065	75.865	-0.300	0.0	0.0
582	76.065	75.865	-0.300	0.0	0.0
588	76.065	75.865	-0.300	0.0	0.0
594	76.065	75.865	-0.300	0.0	0.0
600	76.065	75.865	-0.300	0.0	0.0
606	76.065	75.865	-0.300	0.0	0.0
612	76.065	75.865	-0.300	0.0	0.0
618	76.065	75.865	-0.300	0.0	0.0
624	76.065	75.865	-0.300	0.0	0.0
630	76.065	75.865	-0.300	0.0	0.0
636	76.065	75.865	-0.300	0.0	0.0
642	76.065	75.865	-0.300	0.0	0.0
648	76.065	75.865	-0.300	0.0	0.0
654	76.065	75.865	-0.300	0.0	0.0
660	76.065	75.865	-0.300	0.0	0.0
666	76.065	75.865	-0.300	0.0	0.0
672	76.065	75.865	-0.300	0.0	0.0
678	76.065	75.865	-0.300	0.0	0.0
684	76.065	75.865	-0.300	0.0	0.0
690	76.065	75.865	-0.300	0.0	0.0
696	76.065	75.865	-0.300	0.0	0.0
702	76.065	75.865	-0.300	0.0	0.0
708	76.065	75.865	-0.300	0.0	0.0
714	76.065	75.865	-0.300	0.0	0.0
720	76.065	75.865	-0.300	0.0	0.0

RPS P&D		Page 17
20 Milton Park Abingdon Oxfordshire OX14 4SH	Land of Green Lane Chesterton	
Date 14/04/2016 File JNY8140 SW Network Desi...	Designed by HSS Checked by SF	
Causeway		Network 2014.1.1


Flows and Levels for Pipe 1.003 US/MH 4 (JNY8140 SW NETWORK DESIGN 2015  
09 25.SWS)  
360 minute 30 year Winter I+0%  
Average Rainfall Intensity 8.034 mm/hr

Time (mins)	Upstream Level (m)	Downstream Level (m)	Surcharged Depth (m)	Total O/F (l/s)	Pipe Flow (l/s)
6	75.868	75.615	-0.297	0.0	0.1
12	75.873	75.620	-0.292	0.0	0.4
18	75.877	75.623	-0.288	0.0	0.7
24	75.880	75.626	-0.285	0.0	1.0
30	75.882	75.628	-0.283	0.0	1.1
36	75.883	75.628	-0.282	0.0	1.2
42	75.883	75.629	-0.282	0.0	1.2
48	75.883	75.629	-0.282	0.0	1.3
54	75.883	75.629	-0.282	0.0	1.3
60	75.883	75.629	-0.282	0.0	1.3
66	75.884	75.629	-0.281	0.0	1.3
72	75.884	75.630	-0.281	0.0	1.3
78	75.885	75.631	-0.280	0.0	1.4
84	75.887	75.632	-0.278	0.0	1.5
90	75.889	75.634	-0.276	0.0	1.6
96	75.892	75.637	-0.273	0.0	1.8
102	75.895	75.640	-0.270	0.0	2.0
108	75.897	75.643	-0.268	0.0	2.3
114	75.898	75.644	-0.267	0.0	2.7
120	75.900	75.646	-0.265	0.0	3.0
126	75.902	75.647	-0.263	0.0	3.4
132	75.904	75.649	-0.261	0.0	3.9
138	75.906	75.651	-0.259	0.0	4.3
144	75.908	75.653	-0.257	0.0	4.8
150	75.910	75.656	-0.255	0.0	5.3
156	75.912	75.657	-0.253	0.0	5.7
162	75.914	75.659	-0.251	0.0	6.2
168	75.916	75.661	-0.249	0.0	6.6
174	75.917	75.662	-0.248	0.0	6.9
180	75.918	75.663	-0.247	0.0	7.1
186	75.918	75.663	-0.247	0.0	7.2
192	75.917	75.662	-0.248	0.0	7.0
198	75.916	75.661	-0.249	0.0	6.8
204	75.914	75.659	-0.251	0.0	6.4
210	75.912	75.657	-0.253	0.0	6.0
216	75.910	75.656	-0.255	0.0	5.6
222	75.908	75.653	-0.257	0.0	5.1
228	75.906	75.651	-0.259	0.0	4.6
234	75.904	75.650	-0.261	0.0	4.2
240	75.902	75.648	-0.263	0.0	3.7
246	75.900	75.646	-0.265	0.0	3.3
252	75.898	75.644	-0.267	0.0	2.9
258	75.897	75.643	-0.268	0.0	2.6
264	75.895	75.641	-0.270	0.0	2.2
270	75.893	75.637	-0.272	0.0	2.0

RPS P&D		Page 18
20 Milton Park Abingdon Oxfordshire OX14 4SH	Land of Green Lane Chesterton	
Date 14/04/2016 File JNY8140 SW Network Desi...	Designed by HSS Checked by SF	
Causeway		Network 2014.1.1

Flows and Levels for Pipe 1.003 US/MH 4 (JNY8140 SW NETWORK DESIGN 2015  
09 25.SWS)  
360 minute 30 year Winter I+0%  
Average Rainfall Intensity 8.034 mm/hr


Time (mins)	Upstream Level (m)	Downstream Level (m)	Surcharged Depth (m)	Total O/F (l/s)	Pipe Flow (l/s)
276	75.889	75.634	-0.276	0.0	1.8
282	75.887	75.632	-0.278	0.0	1.6
288	75.885	75.631	-0.280	0.0	1.5
294	75.884	75.630	-0.281	0.0	1.4
300	75.884	75.629	-0.281	0.0	1.3
306	75.883	75.629	-0.282	0.0	1.3
312	75.883	75.629	-0.282	0.0	1.3
318	75.883	75.629	-0.282	0.0	1.3
324	75.883	75.629	-0.282	0.0	1.3
330	75.883	75.629	-0.282	0.0	1.3
336	75.882	75.628	-0.283	0.0	1.2
342	75.880	75.626	-0.285	0.0	1.1
348	75.878	75.624	-0.287	0.0	1.0
354	75.873	75.620	-0.292	0.0	0.7
360	75.868	75.615	-0.297	0.0	0.4
366	75.865	75.612	-0.300	0.0	0.1
372	75.865	75.612	-0.300	0.0	0.0
378	75.865	75.612	-0.300	0.0	0.0
384	75.865	75.612	-0.300	0.0	0.0
390	75.865	75.612	-0.300	0.0	0.0
396	75.865	75.612	-0.300	0.0	0.0
402	75.865	75.612	-0.300	0.0	0.0
408	75.865	75.612	-0.300	0.0	0.0
414	75.865	75.612	-0.300	0.0	0.0
420	75.865	75.612	-0.300	0.0	0.0
426	75.865	75.612	-0.300	0.0	0.0
432	75.865	75.612	-0.300	0.0	0.0
438	75.865	75.612	-0.300	0.0	0.0
444	75.865	75.612	-0.300	0.0	0.0
450	75.865	75.612	-0.300	0.0	0.0
456	75.865	75.612	-0.300	0.0	0.0
462	75.865	75.612	-0.300	0.0	0.0
468	75.865	75.612	-0.300	0.0	0.0
474	75.865	75.612	-0.300	0.0	0.0
480	75.865	75.612	-0.300	0.0	0.0
486	75.865	75.612	-0.300	0.0	0.0
492	75.865	75.612	-0.300	0.0	0.0
498	75.865	75.612	-0.300	0.0	0.0
504	75.865	75.612	-0.300	0.0	0.0
510	75.865	75.612	-0.300	0.0	0.0
516	75.865	75.612	-0.300	0.0	0.0
522	75.865	75.612	-0.300	0.0	0.0
528	75.865	75.612	-0.300	0.0	0.0
534	75.865	75.612	-0.300	0.0	0.0
540	75.865	75.612	-0.300	0.0	0.0

RPS P&D		Page 19
20 Milton Park Abingdon Oxfordshire OX14 4SH	Land of Green Lane Chesterton	
Date 14/04/2016 File JNY8140 SW Network Desi...	Designed by HSS Checked by SF	
Causeway		Network 2014.1.1

Flows and Levels for Pipe 1.003 US/MH 4 (JNY8140 SW NETWORK DESIGN 2015  
09 25.SWS)


360 minute 30 year Winter I+0%  
Average Rainfall Intensity 8.034 mm/hr

<b>Time (mins)</b>	<b>Upstream Level (m)</b>	<b>Downstream Level (m)</b>	<b>Surcharged Depth (m)</b>	<b>Total O/F (l/s)</b>	<b>Pipe Flow (l/s)</b>
546	75.865	75.612	-0.300	0.0	0.0
552	75.865	75.612	-0.300	0.0	0.0
558	75.865	75.612	-0.300	0.0	0.0
564	75.865	75.612	-0.300	0.0	0.0
570	75.865	75.612	-0.300	0.0	0.0
576	75.865	75.612	-0.300	0.0	0.0
582	75.865	75.612	-0.300	0.0	0.0
588	75.865	75.612	-0.300	0.0	0.0
594	75.865	75.612	-0.300	0.0	0.0
600	75.865	75.612	-0.300	0.0	0.0
606	75.865	75.612	-0.300	0.0	0.0
612	75.865	75.612	-0.300	0.0	0.0
618	75.865	75.612	-0.300	0.0	0.0
624	75.865	75.612	-0.300	0.0	0.0
630	75.865	75.612	-0.300	0.0	0.0
636	75.865	75.612	-0.300	0.0	0.0
642	75.865	75.612	-0.300	0.0	0.0
648	75.865	75.612	-0.300	0.0	0.0
654	75.865	75.612	-0.300	0.0	0.0
660	75.865	75.612	-0.300	0.0	0.0
666	75.865	75.612	-0.300	0.0	0.0
672	75.865	75.612	-0.300	0.0	0.0
678	75.865	75.612	-0.300	0.0	0.0
684	75.865	75.612	-0.300	0.0	0.0
690	75.865	75.612	-0.300	0.0	0.0
696	75.865	75.612	-0.300	0.0	0.0
702	75.865	75.612	-0.300	0.0	0.0
708	75.865	75.612	-0.300	0.0	0.0
714	75.865	75.612	-0.300	0.0	0.0
720	75.865	75.612	-0.300	0.0	0.0

RPS P&D		Page 20
20 Milton Park Abingdon Oxfordshire OX14 4SH	Land of Green Lane Chesterton	
Date 14/04/2016 File JNY8140 SW Network Desi...	Designed by HSS Checked by SF	
Causeway	Network 2014.1.1	


Flows and Levels for Pipe 1.004 US/MH 5 (JNY8140 SW NETWORK DESIGN 2015  
09 25.SWS)  
360 minute 30 year Winter I+0%  
Average Rainfall Intensity 8.034 mm/hr

Time (mins)	Upstream Level (m)	Downstream Level (m)	Surcharged Depth (m)	Total O/F (l/s)	Pipe Flow (l/s)
6	75.615	74.960	-0.297	0.0	0.2
12	75.620	74.979	-0.292	0.0	0.6
18	75.623	74.994	-0.289	0.0	1.0
24	75.626	74.998	-0.286	0.0	1.3
30	75.628	75.000	-0.284	0.0	1.5
36	75.628	75.001	-0.284	0.0	1.6
42	75.629	75.002	-0.283	0.0	1.7
48	75.629	75.002	-0.283	0.0	1.7
54	75.629	75.002	-0.283	0.0	1.7
60	75.629	75.002	-0.283	0.0	1.7
66	75.629	75.002	-0.283	0.0	1.7
72	75.630	75.003	-0.282	0.0	1.8
78	75.631	75.004	-0.281	0.0	1.8
84	75.632	75.006	-0.280	0.0	2.0
90	75.634	75.008	-0.278	0.0	2.1
96	75.637	75.012	-0.275	0.0	2.4
102	75.640	75.016	-0.272	0.0	2.7
108	75.643	75.021	-0.269	0.0	3.1
114	75.644	75.027	-0.268	0.0	3.6
120	75.646	75.034	-0.266	0.0	4.1
126	75.647	75.040	-0.265	0.0	4.6
132	75.649	75.045	-0.263	0.0	5.2
138	75.651	75.050	-0.261	0.0	5.8
144	75.653	75.056	-0.259	0.0	6.5
150	75.656	75.061	-0.256	0.0	7.2
156	75.657	75.066	-0.255	0.0	7.8
162	75.659	75.075	-0.253	0.0	8.3
168	75.661	75.086	-0.251	0.0	8.9
174	75.662	75.096	-0.250	0.0	9.3
180	75.663	75.106	-0.249	0.0	9.6
186	75.663	75.117	-0.249	0.0	9.7
192	75.662	75.126	-0.250	0.0	9.5
198	75.661	75.135	-0.251	0.0	9.1
204	75.659	75.143	-0.253	0.0	8.6
210	75.657	75.149	-0.255	0.0	8.1
216	75.656	75.155	-0.256	0.0	7.5
222	75.653	75.158	-0.259	0.0	6.9
228	75.651	75.161	-0.261	0.0	6.2
234	75.650	75.161	-0.262	0.0	5.6
240	75.648	75.162	-0.264	0.0	5.0
246	75.646	75.160	-0.266	0.0	4.4
252	75.644	75.159	-0.268	0.0	3.9
258	75.643	75.154	-0.269	0.0	3.4
264	75.641	75.152	-0.271	0.0	3.0
270	75.637	75.146	-0.275	0.0	2.7

RPS P&D		Page 21
20 Milton Park Abingdon Oxfordshire OX14 4SH	Land of Green Lane Chesterton	
Date 14/04/2016 File JNY8140 SW Network Desi...	Designed by HSS Checked by SF	
Causeway	Network 2014.1.1	


Flows and Levels for Pipe 1.004 US/MH 5 (JNY8140 SW NETWORK DESIGN 2015  
09 25.SWS)  
360 minute 30 year Winter I+0%  
Average Rainfall Intensity 8.034 mm/hr

Time (mins)	Upstream Level (m)	Downstream Level (m)	Surcharged Depth (m)	Total O/F (l/s)	Pipe Flow (l/s)
276	75.634	75.142	-0.278	0.0	2.4
282	75.632	75.136	-0.280	0.0	2.1
288	75.631	75.132	-0.281	0.0	2.0
294	75.630	75.125	-0.282	0.0	1.8
300	75.629	75.120	-0.283	0.0	1.8
306	75.629	75.114	-0.283	0.0	1.7
312	75.629	75.110	-0.283	0.0	1.7
318	75.629	75.104	-0.283	0.0	1.7
324	75.629	75.099	-0.283	0.0	1.7
330	75.629	75.094	-0.283	0.0	1.7
336	75.628	75.089	-0.284	0.0	1.6
342	75.626	75.085	-0.286	0.0	1.5
348	75.624	75.079	-0.288	0.0	1.3
354	75.620	75.073	-0.292	0.0	0.9
360	75.615	75.066	-0.297	0.0	0.5
366	75.612	75.058	-0.300	0.0	0.1
372	75.612	75.050	-0.300	0.0	0.0
378	75.612	75.042	-0.300	0.0	0.0
384	75.612	75.035	-0.300	0.0	0.0
390	75.612	75.028	-0.300	0.0	0.0
396	75.612	75.020	-0.300	0.0	0.0
402	75.612	75.014	-0.300	0.0	0.0
408	75.612	75.007	-0.300	0.0	0.0
414	75.612	75.002	-0.300	0.0	0.0
420	75.612	74.996	-0.300	0.0	0.0
426	75.612	74.991	-0.300	0.0	0.0
432	75.612	74.987	-0.300	0.0	0.0
438	75.612	74.982	-0.300	0.0	0.0
444	75.612	74.978	-0.300	0.0	0.0
450	75.612	74.975	-0.300	0.0	0.0
456	75.612	74.971	-0.300	0.0	0.0
462	75.612	74.969	-0.300	0.0	0.0
468	75.612	74.966	-0.300	0.0	0.0
474	75.612	74.963	-0.300	0.0	0.0
480	75.612	74.960	-0.300	0.0	0.0
486	75.612	74.958	-0.300	0.0	0.0
492	75.612	74.956	-0.300	0.0	0.0
498	75.612	74.954	-0.300	0.0	0.0
504	75.612	74.952	-0.300	0.0	0.0
510	75.612	74.951	-0.300	0.0	0.0
516	75.612	74.950	-0.300	0.0	0.0
522	75.612	74.949	-0.300	0.0	0.0
528	75.612	74.949	-0.300	0.0	0.0
534	75.612	74.949	-0.300	0.0	0.0
540	75.612	74.949	-0.300	0.0	0.0

RPS P&D		Page 22
20 Milton Park Abingdon Oxfordshire OX14 4SH	Land of Green Lane Chesterton	
Date 14/04/2016 File JNY8140 SW Network Desi...	Designed by HSS Checked by SF	
Causeway		Network 2014.1.1

Flows and Levels for Pipe 1.004 US/MH 5 (JNY8140 SW NETWORK DESIGN 2015  
09 25.SWS)  
360 minute 30 year Winter I+0%  
Average Rainfall Intensity 8.034 mm/hr

Time (mins)	Upstream Level (m)	Downstream Level (m)	Surcharged Depth (m)	Total O/F (l/s)	Pipe Flow (l/s)
546	75.612	74.949	-0.300	0.0	0.0
552	75.612	74.949	-0.300	0.0	0.0
558	75.612	74.949	-0.300	0.0	0.0
564	75.612	74.949	-0.300	0.0	0.0
570	75.612	74.949	-0.300	0.0	0.0
576	75.612	74.949	-0.300	0.0	0.0
582	75.612	74.949	-0.300	0.0	0.0
588	75.612	74.949	-0.300	0.0	0.0
594	75.612	74.949	-0.300	0.0	0.0
600	75.612	74.949	-0.300	0.0	0.0
606	75.612	74.949	-0.300	0.0	0.0
612	75.612	74.949	-0.300	0.0	0.0
618	75.612	74.949	-0.300	0.0	0.0
624	75.612	74.949	-0.300	0.0	0.0
630	75.612	74.949	-0.300	0.0	0.0
636	75.612	74.949	-0.300	0.0	0.0
642	75.612	74.949	-0.300	0.0	0.0
648	75.612	74.949	-0.300	0.0	0.0
654	75.612	74.949	-0.300	0.0	0.0
660	75.612	74.949	-0.300	0.0	0.0
666	75.612	74.949	-0.300	0.0	0.0
672	75.612	74.949	-0.300	0.0	0.0
678	75.612	74.949	-0.300	0.0	0.0
684	75.612	74.949	-0.300	0.0	0.0
690	75.612	74.949	-0.300	0.0	0.0
696	75.612	74.949	-0.300	0.0	0.0
702	75.612	74.949	-0.300	0.0	0.0
708	75.612	74.949	-0.300	0.0	0.0
714	75.612	74.949	-0.300	0.0	0.0
720	75.612	74.949	-0.300	0.0	0.0


RPS P&D		Page 23
20 Milton Park Abingdon Oxfordshire OX14 4SH	Land of Green Lane Chesterton	
Date 14/04/2016 File JNY8140 SW Network Desi...	Designed by HSS Checked by SF	
Causeway		Network 2014.1.1

Flows and Levels for Pipe 2.000 US/MH 18 (JNY8140 SW NETWORK DESIGN 2015  
09 25.SWS)

360 minute 30 year Winter I+0%  
Average Rainfall Intensity 8.034 mm/hr


Time (mins)	Upstream Level (m)	Downstream Level (m)	Surcharged Depth (m)	Total O/F (l/s)	Pipe Flow (l/s)
6	76.002	75.737	-0.223	0.0	0.1
12	76.004	75.740	-0.221	0.0	0.2
18	76.007	75.743	-0.218	0.0	0.3
24	76.008	75.745	-0.217	0.0	0.4
30	76.009	75.746	-0.216	0.0	0.4
36	76.010	75.746	-0.215	0.0	0.4
42	76.010	75.747	-0.215	0.0	0.4
48	76.010	75.747	-0.215	0.0	0.5
54	76.010	75.747	-0.215	0.0	0.5
60	76.010	75.747	-0.215	0.0	0.5
66	76.010	75.747	-0.215	0.0	0.5
72	76.010	75.747	-0.215	0.0	0.5
78	76.011	75.748	-0.214	0.0	0.5
84	76.012	75.749	-0.213	0.0	0.5
90	76.013	75.750	-0.212	0.0	0.6
96	76.015	75.752	-0.210	0.0	0.7
102	76.017	75.755	-0.208	0.0	0.8
108	76.019	75.757	-0.206	0.0	0.9
114	76.022	75.761	-0.203	0.0	1.0
120	76.023	75.764	-0.202	0.0	1.1
126	76.024	75.766	-0.201	0.0	1.3
132	76.025	75.767	-0.200	0.0	1.4
138	76.026	75.768	-0.199	0.0	1.6
144	76.027	75.770	-0.198	0.0	1.8
150	76.029	75.771	-0.196	0.0	1.9
156	76.030	75.772	-0.195	0.0	2.1
162	76.031	75.774	-0.194	0.0	2.2
168	76.032	75.775	-0.193	0.0	2.4
174	76.032	75.775	-0.193	0.0	2.5
180	76.033	75.776	-0.192	0.0	2.5
186	76.033	75.776	-0.192	0.0	2.5
192	76.032	75.775	-0.193	0.0	2.5
198	76.032	75.775	-0.193	0.0	2.4
204	76.031	75.774	-0.194	0.0	2.2
210	76.030	75.772	-0.195	0.0	2.1
216	76.029	75.771	-0.196	0.0	2.0
222	76.027	75.770	-0.198	0.0	1.8
228	76.026	75.768	-0.199	0.0	1.6
234	76.025	75.767	-0.200	0.0	1.5
240	76.024	75.766	-0.201	0.0	1.3
246	76.023	75.764	-0.202	0.0	1.1
252	76.022	75.761	-0.203	0.0	1.0
258	76.019	75.757	-0.206	0.0	0.9
264	76.017	75.755	-0.208	0.0	0.8
270	76.015	75.752	-0.210	0.0	0.7



RPS P&D		Page 24
20 Milton Park Abingdon Oxfordshire OX14 4SH	Land of Green Lane Chesterton	
Date 14/04/2016 File JNY8140 SW Network Desi...	Designed by HSS Checked by SF	
Causeway		Network 2014.1.1

Flows and Levels for Pipe 2.000 US/MH 18 (JNY8140 SW NETWORK DESIGN 2015  
09 25.SWS)  
360 minute 30 year Winter I+0%  
Average Rainfall Intensity 8.034 mm/hr


Time (mins)	Upstream Level (m)	Downstream Level (m)	Surcharged Depth (m)	Total O/F (l/s)	Pipe Flow (l/s)
276	76.013	75.750	-0.212	0.0	0.6
282	76.012	75.749	-0.213	0.0	0.6
288	76.011	75.748	-0.214	0.0	0.5
294	76.010	75.747	-0.215	0.0	0.5
300	76.010	75.747	-0.215	0.0	0.5
306	76.010	75.747	-0.215	0.0	0.5
312	76.010	75.747	-0.215	0.0	0.5
318	76.010	75.747	-0.215	0.0	0.5
324	76.010	75.747	-0.215	0.0	0.5
330	76.010	75.746	-0.215	0.0	0.4
336	76.009	75.746	-0.216	0.0	0.4
342	76.008	75.745	-0.217	0.0	0.4
348	76.007	75.743	-0.218	0.0	0.3
354	76.004	75.740	-0.221	0.0	0.2
360	76.002	75.737	-0.223	0.0	0.1
366	76.000	75.735	-0.225	0.0	0.0
372	76.000	75.735	-0.225	0.0	0.0
378	76.000	75.735	-0.225	0.0	0.0
384	76.000	75.735	-0.225	0.0	0.0
390	76.000	75.735	-0.225	0.0	0.0
396	76.000	75.735	-0.225	0.0	0.0
402	76.000	75.735	-0.225	0.0	0.0
408	76.000	75.735	-0.225	0.0	0.0
414	76.000	75.735	-0.225	0.0	0.0
420	76.000	75.735	-0.225	0.0	0.0
426	76.000	75.735	-0.225	0.0	0.0
432	76.000	75.735	-0.225	0.0	0.0
438	76.000	75.735	-0.225	0.0	0.0
444	76.000	75.735	-0.225	0.0	0.0
450	76.000	75.735	-0.225	0.0	0.0
456	76.000	75.735	-0.225	0.0	0.0
462	76.000	75.735	-0.225	0.0	0.0
468	76.000	75.735	-0.225	0.0	0.0
474	76.000	75.735	-0.225	0.0	0.0
480	76.000	75.735	-0.225	0.0	0.0
486	76.000	75.735	-0.225	0.0	0.0
492	76.000	75.735	-0.225	0.0	0.0
498	76.000	75.735	-0.225	0.0	0.0
504	76.000	75.735	-0.225	0.0	0.0
510	76.000	75.735	-0.225	0.0	0.0
516	76.000	75.735	-0.225	0.0	0.0
522	76.000	75.735	-0.225	0.0	0.0
528	76.000	75.735	-0.225	0.0	0.0
534	76.000	75.735	-0.225	0.0	0.0
540	76.000	75.735	-0.225	0.0	0.0

RPS P&D		Page 25
20 Milton Park Abingdon Oxfordshire OX14 4SH	Land of Green Lane Chesterton	
Date 14/04/2016 File JNY8140 SW Network Desi...	Designed by HSS Checked by SF	
Causeway		Network 2014.1.1

Flows and Levels for Pipe 2.000 US/MH 18 (JNY8140 SW NETWORK DESIGN 2015  
09 25.SWS)

360 minute 30 year Winter I+0%  
Average Rainfall Intensity 8.034 mm/hr


<b>Time (mins)</b>	<b>Upstream Level (m)</b>	<b>Downstream Level (m)</b>	<b>Surcharged Depth (m)</b>	<b>Total O/F (l/s)</b>	<b>Pipe Flow (l/s)</b>
546	76.000	75.735	-0.225	0.0	0.0
552	76.000	75.735	-0.225	0.0	0.0
558	76.000	75.735	-0.225	0.0	0.0
564	76.000	75.735	-0.225	0.0	0.0
570	76.000	75.735	-0.225	0.0	0.0
576	76.000	75.735	-0.225	0.0	0.0
582	76.000	75.735	-0.225	0.0	0.0
588	76.000	75.735	-0.225	0.0	0.0
594	76.000	75.735	-0.225	0.0	0.0
600	76.000	75.735	-0.225	0.0	0.0
606	76.000	75.735	-0.225	0.0	0.0
612	76.000	75.735	-0.225	0.0	0.0
618	76.000	75.735	-0.225	0.0	0.0
624	76.000	75.735	-0.225	0.0	0.0
630	76.000	75.735	-0.225	0.0	0.0
636	76.000	75.735	-0.225	0.0	0.0
642	76.000	75.735	-0.225	0.0	0.0
648	76.000	75.735	-0.225	0.0	0.0
654	76.000	75.735	-0.225	0.0	0.0
660	76.000	75.735	-0.225	0.0	0.0
666	76.000	75.735	-0.225	0.0	0.0
672	76.000	75.735	-0.225	0.0	0.0
678	76.000	75.735	-0.225	0.0	0.0
684	76.000	75.735	-0.225	0.0	0.0
690	76.000	75.735	-0.225	0.0	0.0
696	76.000	75.735	-0.225	0.0	0.0
702	76.000	75.735	-0.225	0.0	0.0
708	76.000	75.735	-0.225	0.0	0.0
714	76.000	75.735	-0.225	0.0	0.0
720	76.000	75.735	-0.225	0.0	0.0

RPS P&D		Page 26
20 Milton Park Abingdon Oxfordshire OX14 4SH	Land of Green Lane Chesterton	
Date 14/04/2016 File JNY8140 SW Network Desi...	Designed by HSS Checked by SF	
Causeway	Network 2014.1.1	

Flows and Levels for Pipe 2.001 US/MH 19 (JNY8140 SW NETWORK DESIGN 2015  
09 25.SWS)

360 minute 30 year Winter I+0%  
Average Rainfall Intensity 8.034 mm/hr


Time (mins)	Upstream Level (m)	Downstream Level (m)	Surcharged Depth (m)	Total O/F (l/s)	Pipe Flow (l/s)
6	75.737	75.439	-0.298	0.0	0.1
12	75.740	75.447	-0.295	0.0	0.3
18	75.743	75.452	-0.292	0.0	0.5
24	75.745	75.456	-0.290	0.0	0.6
30	75.746	75.459	-0.289	0.0	0.7
36	75.746	75.460	-0.289	0.0	0.8
42	75.747	75.460	-0.288	0.0	0.8
48	75.747	75.460	-0.288	0.0	0.8
54	75.747	75.460	-0.288	0.0	0.8
60	75.747	75.460	-0.288	0.0	0.8
66	75.747	75.461	-0.288	0.0	0.8
72	75.747	75.462	-0.288	0.0	0.8
78	75.748	75.463	-0.287	0.0	0.9
84	75.749	75.465	-0.286	0.0	0.9
90	75.750	75.466	-0.285	0.0	1.0
96	75.752	75.468	-0.283	0.0	1.1
102	75.755	75.469	-0.280	0.0	1.3
108	75.757	75.471	-0.278	0.0	1.4
114	75.761	75.473	-0.274	0.0	1.7
120	75.764	75.476	-0.271	0.0	1.9
126	75.766	75.478	-0.269	0.0	2.1
132	75.767	75.481	-0.268	0.0	2.4
138	75.768	75.484	-0.267	0.0	2.7
144	75.770	75.487	-0.265	0.0	3.0
150	75.771	75.490	-0.264	0.0	3.3
156	75.772	75.493	-0.263	0.0	3.6
162	75.774	75.495	-0.261	0.0	3.8
168	75.775	75.497	-0.260	0.0	4.1
174	75.775	75.498	-0.260	0.0	4.2
180	75.776	75.499	-0.259	0.0	4.4
186	75.776	75.499	-0.259	0.0	4.4
192	75.775	75.498	-0.260	0.0	4.3
198	75.775	75.497	-0.260	0.0	4.1
204	75.774	75.495	-0.261	0.0	3.9
210	75.772	75.493	-0.263	0.0	3.6
216	75.771	75.490	-0.264	0.0	3.4
222	75.770	75.487	-0.265	0.0	3.1
228	75.768	75.484	-0.267	0.0	2.8
234	75.767	75.481	-0.268	0.0	2.5
240	75.766	75.478	-0.269	0.0	2.2
246	75.764	75.476	-0.271	0.0	2.0
252	75.761	75.473	-0.274	0.0	1.8
258	75.757	75.471	-0.278	0.0	1.5
264	75.755	75.469	-0.280	0.0	1.4
270	75.752	75.468	-0.283	0.0	1.2

RPS P&D		Page 27
20 Milton Park Abingdon Oxfordshire OX14 4SH	Land of Green Lane Chesterton	
Date 14/04/2016 File JNY8140 SW Network Desi...	Designed by HSS Checked by SF	
Causeway	Network 2014.1.1	

Flows and Levels for Pipe 2.001 US/MH 19 (JNY8140 SW NETWORK DESIGN 2015  
09 25.SWS)


360 minute 30 year Winter I+0%  
Average Rainfall Intensity 8.034 mm/hr

<b>Time (mins)</b>	<b>Upstream Level (m)</b>	<b>Downstream Level (m)</b>	<b>Surcharged Depth (m)</b>	<b>Total O/F (l/s)</b>	<b>Pipe Flow (l/s)</b>
276	75.750	75.466	-0.285	0.0	1.1
282	75.749	75.465	-0.286	0.0	1.0
288	75.748	75.463	-0.287	0.0	0.9
294	75.747	75.462	-0.288	0.0	0.8
300	75.747	75.461	-0.288	0.0	0.8
306	75.747	75.460	-0.288	0.0	0.8
312	75.747	75.460	-0.288	0.0	0.8
318	75.747	75.460	-0.288	0.0	0.8
324	75.747	75.460	-0.288	0.0	0.8
330	75.746	75.460	-0.289	0.0	0.8
336	75.746	75.459	-0.289	0.0	0.7
342	75.745	75.456	-0.290	0.0	0.7
348	75.743	75.452	-0.292	0.0	0.6
354	75.740	75.447	-0.295	0.0	0.4
360	75.737	75.439	-0.298	0.0	0.2
366	75.735	75.435	-0.300	0.0	0.0
372	75.735	75.435	-0.300	0.0	0.0
378	75.735	75.435	-0.300	0.0	0.0
384	75.735	75.435	-0.300	0.0	0.0
390	75.735	75.435	-0.300	0.0	0.0
396	75.735	75.435	-0.300	0.0	0.0
402	75.735	75.435	-0.300	0.0	0.0
408	75.735	75.435	-0.300	0.0	0.0
414	75.735	75.435	-0.300	0.0	0.0
420	75.735	75.435	-0.300	0.0	0.0
426	75.735	75.435	-0.300	0.0	0.0
432	75.735	75.435	-0.300	0.0	0.0
438	75.735	75.435	-0.300	0.0	0.0
444	75.735	75.435	-0.300	0.0	0.0
450	75.735	75.435	-0.300	0.0	0.0
456	75.735	75.435	-0.300	0.0	0.0
462	75.735	75.435	-0.300	0.0	0.0
468	75.735	75.435	-0.300	0.0	0.0
474	75.735	75.435	-0.300	0.0	0.0
480	75.735	75.435	-0.300	0.0	0.0
486	75.735	75.435	-0.300	0.0	0.0
492	75.735	75.435	-0.300	0.0	0.0
498	75.735	75.435	-0.300	0.0	0.0
504	75.735	75.435	-0.300	0.0	0.0
510	75.735	75.435	-0.300	0.0	0.0
516	75.735	75.435	-0.300	0.0	0.0
522	75.735	75.435	-0.300	0.0	0.0
528	75.735	75.435	-0.300	0.0	0.0
534	75.735	75.435	-0.300	0.0	0.0
540	75.735	75.435	-0.300	0.0	0.0

RPS P&D		Page 28
20 Milton Park Abingdon Oxfordshire OX14 4SH	Land of Green Lane Chesterton	
Date 14/04/2016 File JNY8140 SW Network Desi...	Designed by HSS Checked by SF	
Causeway		Network 2014.1.1

Flows and Levels for Pipe 2.001 US/MH 19 (JNY8140 SW NETWORK DESIGN 2015  
09 25.SWS)  
360 minute 30 year Winter I+0%  
Average Rainfall Intensity 8.034 mm/hr


<b>Time (mins)</b>	<b>Upstream Level (m)</b>	<b>Downstream Level (m)</b>	<b>Surcharged Depth (m)</b>	<b>Total O/F (l/s)</b>	<b>Pipe Flow (l/s)</b>
546	75.735	75.435	-0.300	0.0	0.0
552	75.735	75.435	-0.300	0.0	0.0
558	75.735	75.435	-0.300	0.0	0.0
564	75.735	75.435	-0.300	0.0	0.0
570	75.735	75.435	-0.300	0.0	0.0
576	75.735	75.435	-0.300	0.0	0.0
582	75.735	75.435	-0.300	0.0	0.0
588	75.735	75.435	-0.300	0.0	0.0
594	75.735	75.435	-0.300	0.0	0.0
600	75.735	75.435	-0.300	0.0	0.0
606	75.735	75.435	-0.300	0.0	0.0
612	75.735	75.435	-0.300	0.0	0.0
618	75.735	75.435	-0.300	0.0	0.0
624	75.735	75.435	-0.300	0.0	0.0
630	75.735	75.435	-0.300	0.0	0.0
636	75.735	75.435	-0.300	0.0	0.0
642	75.735	75.435	-0.300	0.0	0.0
648	75.735	75.435	-0.300	0.0	0.0
654	75.735	75.435	-0.300	0.0	0.0
660	75.735	75.435	-0.300	0.0	0.0
666	75.735	75.435	-0.300	0.0	0.0
672	75.735	75.435	-0.300	0.0	0.0
678	75.735	75.435	-0.300	0.0	0.0
684	75.735	75.435	-0.300	0.0	0.0
690	75.735	75.435	-0.300	0.0	0.0
696	75.735	75.435	-0.300	0.0	0.0
702	75.735	75.435	-0.300	0.0	0.0
708	75.735	75.435	-0.300	0.0	0.0
714	75.735	75.435	-0.300	0.0	0.0
720	75.735	75.435	-0.300	0.0	0.0

RPS P&D		Page 29
20 Milton Park Abingdon Oxfordshire OX14 4SH	Land of Green Lane Chesterton	
Date 14/04/2016 File JNY8140 SW Network Desi...	Designed by HSS Checked by SF	
Causeway	Network 2014.1.1	

Flows and Levels for Pipe 2.002 US/MH 20 (JNY8140 SW NETWORK DESIGN 2015  
09 25.SWS)

360 minute 30 year Winter I+0%  
Average Rainfall Intensity 8.034 mm/hr


<b>Time (mins)</b>	<b>Upstream Level (m)</b>	<b>Downstream Level (m)</b>	<b>Surcharged Depth (m)</b>	<b>Total O/F (l/s)</b>	<b>Pipe Flow (l/s)</b>
6	75.439	75.152	-0.296	0.0	0.2
12	75.447	75.157	-0.288	0.0	0.6
18	75.452	75.160	-0.283	0.0	0.9
24	75.456	75.163	-0.279	0.0	1.1
30	75.459	75.164	-0.276	0.0	1.3
36	75.460	75.165	-0.275	0.0	1.4
42	75.460	75.166	-0.275	0.0	1.4
48	75.460	75.166	-0.275	0.0	1.4
54	75.460	75.166	-0.275	0.0	1.4
60	75.460	75.166	-0.275	0.0	1.4
66	75.461	75.166	-0.274	0.0	1.4
72	75.462	75.166	-0.273	0.0	1.5
78	75.463	75.167	-0.272	0.0	1.5
84	75.465	75.169	-0.270	0.0	1.7
90	75.466	75.171	-0.269	0.0	1.8
96	75.468	75.174	-0.267	0.0	2.1
102	75.469	75.177	-0.266	0.0	2.3
108	75.471	75.181	-0.264	0.0	2.6
114	75.473	75.186	-0.262	0.0	3.0
120	75.476	75.191	-0.259	0.0	3.4
126	75.478	75.195	-0.257	0.0	3.9
132	75.481	75.197	-0.254	0.0	4.4
138	75.484	75.199	-0.251	0.0	4.9
144	75.487	75.200	-0.248	0.0	5.5
150	75.490	75.202	-0.245	0.0	6.0
156	75.493	75.204	-0.242	0.0	6.5
162	75.495	75.206	-0.240	0.0	7.0
168	75.497	75.207	-0.238	0.0	7.4
174	75.498	75.209	-0.237	0.0	7.7
180	75.499	75.209	-0.236	0.0	8.0
186	75.499	75.209	-0.236	0.0	8.0
192	75.498	75.209	-0.237	0.0	7.8
198	75.497	75.210	-0.238	0.0	7.5
204	75.495	75.210	-0.240	0.0	7.1
210	75.493	75.209	-0.242	0.0	6.7
216	75.490	75.209	-0.245	0.0	6.2
222	75.487	75.207	-0.248	0.0	5.6
228	75.484	75.206	-0.251	0.0	5.1
234	75.481	75.204	-0.254	0.0	4.6
240	75.478	75.202	-0.257	0.0	4.1
246	75.476	75.199	-0.259	0.0	3.6
252	75.473	75.197	-0.262	0.0	3.2
258	75.471	75.195	-0.264	0.0	2.8
264	75.469	75.191	-0.266	0.0	2.5
270	75.468	75.186	-0.267	0.0	2.2

RPS P&D		Page 30
20 Milton Park Abingdon Oxfordshire OX14 4SH	Land of Green Lane Chesterton	
Date 14/04/2016 File JNY8140 SW Network Desi...	Designed by HSS Checked by SF	
Causeway		Network 2014.1.1

Flows and Levels for Pipe 2.002 US/MH 20 (JNY8140 SW NETWORK DESIGN 2015  
09 25.SWS)

360 minute 30 year Winter I+0%  
Average Rainfall Intensity 8.034 mm/hr

<b>Time (mins)</b>	<b>Upstream Level (m)</b>	<b>Downstream Level (m)</b>	<b>Surcharged Depth (m)</b>	<b>Total O/F (l/s)</b>	<b>Pipe Flow (l/s)</b>
276	75.466	75.182	-0.269	0.0	1.9
282	75.465	75.178	-0.270	0.0	1.7
288	75.463	75.175	-0.272	0.0	1.6
294	75.462	75.173	-0.273	0.0	1.5
300	75.461	75.171	-0.274	0.0	1.5
306	75.460	75.170	-0.275	0.0	1.4
312	75.460	75.169	-0.275	0.0	1.4
318	75.460	75.169	-0.275	0.0	1.4
324	75.460	75.168	-0.275	0.0	1.4
330	75.460	75.167	-0.275	0.0	1.4
336	75.459	75.166	-0.276	0.0	1.3
342	75.456	75.164	-0.279	0.0	1.2
348	75.452	75.161	-0.283	0.0	1.0
354	75.447	75.157	-0.288	0.0	0.7
360	75.439	75.152	-0.296	0.0	0.3
366	75.435	75.149	-0.300	0.0	0.1
372	75.435	75.149	-0.300	0.0	0.0
378	75.435	75.149	-0.300	0.0	0.0
384	75.435	75.149	-0.300	0.0	0.0
390	75.435	75.149	-0.300	0.0	0.0
396	75.435	75.149	-0.300	0.0	0.0
402	75.435	75.149	-0.300	0.0	0.0
408	75.435	75.149	-0.300	0.0	0.0
414	75.435	75.149	-0.300	0.0	0.0
420	75.435	75.149	-0.300	0.0	0.0
426	75.435	75.149	-0.300	0.0	0.0
432	75.435	75.149	-0.300	0.0	0.0
438	75.435	75.149	-0.300	0.0	0.0
444	75.435	75.149	-0.300	0.0	0.0
450	75.435	75.149	-0.300	0.0	0.0
456	75.435	75.149	-0.300	0.0	0.0
462	75.435	75.149	-0.300	0.0	0.0
468	75.435	75.149	-0.300	0.0	0.0
474	75.435	75.149	-0.300	0.0	0.0
480	75.435	75.149	-0.300	0.0	0.0
486	75.435	75.149	-0.300	0.0	0.0
492	75.435	75.149	-0.300	0.0	0.0
498	75.435	75.149	-0.300	0.0	0.0
504	75.435	75.149	-0.300	0.0	0.0
510	75.435	75.149	-0.300	0.0	0.0
516	75.435	75.149	-0.300	0.0	0.0
522	75.435	75.149	-0.300	0.0	0.0
528	75.435	75.149	-0.300	0.0	0.0
534	75.435	75.149	-0.300	0.0	0.0
540	75.435	75.149	-0.300	0.0	0.0


RPS P&D		Page 31
20 Milton Park Abingdon Oxfordshire OX14 4SH	Land of Green Lane Chesterton	
Date 14/04/2016 File JNY8140 SW Network Desi...	Designed by HSS Checked by SF	
Causeway		Network 2014.1.1

Flows and Levels for Pipe 2.002 US/MH 20 (JNY8140 SW NETWORK DESIGN 2015  
09 25.SWS)

360 minute 30 year Winter I+0%  
Average Rainfall Intensity 8.034 mm/hr

<b>Time (mins)</b>	<b>Upstream Level (m)</b>	<b>Downstream Level (m)</b>	<b>Surcharged Depth (m)</b>	<b>Total O/F (l/s)</b>	<b>Pipe Flow (l/s)</b>
546	75.435	75.149	-0.300	0.0	0.0
552	75.435	75.149	-0.300	0.0	0.0
558	75.435	75.149	-0.300	0.0	0.0
564	75.435	75.149	-0.300	0.0	0.0
570	75.435	75.149	-0.300	0.0	0.0
576	75.435	75.149	-0.300	0.0	0.0
582	75.435	75.149	-0.300	0.0	0.0
588	75.435	75.149	-0.300	0.0	0.0
594	75.435	75.149	-0.300	0.0	0.0
600	75.435	75.149	-0.300	0.0	0.0
606	75.435	75.149	-0.300	0.0	0.0
612	75.435	75.149	-0.300	0.0	0.0
618	75.435	75.149	-0.300	0.0	0.0
624	75.435	75.149	-0.300	0.0	0.0
630	75.435	75.149	-0.300	0.0	0.0
636	75.435	75.149	-0.300	0.0	0.0
642	75.435	75.149	-0.300	0.0	0.0
648	75.435	75.149	-0.300	0.0	0.0
654	75.435	75.149	-0.300	0.0	0.0
660	75.435	75.149	-0.300	0.0	0.0
666	75.435	75.149	-0.300	0.0	0.0
672	75.435	75.149	-0.300	0.0	0.0
678	75.435	75.149	-0.300	0.0	0.0
684	75.435	75.149	-0.300	0.0	0.0
690	75.435	75.149	-0.300	0.0	0.0
696	75.435	75.149	-0.300	0.0	0.0
702	75.435	75.149	-0.300	0.0	0.0
708	75.435	75.149	-0.300	0.0	0.0
714	75.435	75.149	-0.300	0.0	0.0
720	75.435	75.149	-0.300	0.0	0.0




RPS P&D		Page 32
20 Milton Park Abingdon Oxfordshire OX14 4SH	Land of Green Lane Chesterton	
Date 14/04/2016 File JNY8140 SW Network Desi...	Designed by HSS Checked by SF	
Causeway		Network 2014.1.1

Flows and Levels for Pipe 2.003 US/MH 21 (JNY8140 SW NETWORK DESIGN 2015  
09 25.SWS)

360 minute 30 year Winter I+0%  
Average Rainfall Intensity 8.034 mm/hr


<b>Time (mins)</b>	<b>Upstream Level (m)</b>	<b>Downstream Level (m)</b>	<b>Surcharged Depth (m)</b>	<b>Total O/F (l/s)</b>	<b>Pipe Flow (l/s)</b>
6	75.152	74.960	-0.447	0.0	0.2
12	75.157	74.979	-0.442	0.0	0.7
18	75.160	74.994	-0.439	0.0	1.1
24	75.163	74.998	-0.436	0.0	1.5
30	75.164	75.000	-0.435	0.0	1.7
36	75.165	75.001	-0.434	0.0	1.8
42	75.166	75.002	-0.433	0.0	1.8
48	75.166	75.002	-0.433	0.0	1.9
54	75.166	75.002	-0.433	0.0	1.9
60	75.166	75.002	-0.433	0.0	1.9
66	75.166	75.002	-0.433	0.0	1.9
72	75.166	75.003	-0.433	0.0	1.9
78	75.167	75.004	-0.432	0.0	2.0
84	75.169	75.006	-0.430	0.0	2.2
90	75.171	75.008	-0.428	0.0	2.4
96	75.174	75.012	-0.425	0.0	2.7
102	75.177	75.016	-0.422	0.0	3.0
108	75.181	75.021	-0.418	0.0	3.4
114	75.186	75.027	-0.413	0.0	3.9
120	75.191	75.034	-0.408	0.0	4.4
126	75.195	75.040	-0.404	0.0	5.0
132	75.197	75.045	-0.402	0.0	5.7
138	75.199	75.050	-0.400	0.0	6.4
144	75.200	75.056	-0.399	0.0	7.1
150	75.202	75.061	-0.397	0.0	7.9
156	75.204	75.066	-0.395	0.0	8.5
162	75.206	75.075	-0.393	0.0	9.1
168	75.207	75.086	-0.392	0.0	9.7
174	75.209	75.096	-0.390	0.0	10.1
180	75.209	75.106	-0.390	0.0	10.5
186	75.209	75.117	-0.390	0.0	10.5
192	75.209	75.126	-0.390	0.0	10.3
198	75.210	75.135	-0.389	0.0	9.9
204	75.210	75.143	-0.389	0.0	9.3
210	75.209	75.149	-0.390	0.0	8.8
216	75.209	75.155	-0.390	0.0	8.1
222	75.207	75.158	-0.392	0.0	7.4
228	75.206	75.161	-0.393	0.0	6.7
234	75.204	75.161	-0.395	0.0	6.1
240	75.202	75.162	-0.397	0.0	5.4
246	75.199	75.160	-0.400	0.0	4.8
252	75.197	75.159	-0.402	0.0	4.2
258	75.195	75.154	-0.404	0.0	3.7
264	75.191	75.152	-0.408	0.0	3.3
270	75.186	75.146	-0.413	0.0	2.9

RPS P&D		Page 33
20 Milton Park Abingdon Oxfordshire OX14 4SH	Land of Green Lane Chesterton	
Date 14/04/2016 File JNY8140 SW Network Desi...	Designed by HSS Checked by SF	
Causeway		Network 2014.1.1

Flows and Levels for Pipe 2.003 US/MH 21 (JNY8140 SW NETWORK DESIGN 2015  
09 25.SWS)

360 minute 30 year Winter I+0%  
Average Rainfall Intensity 8.034 mm/hr


<b>Time (mins)</b>	<b>Upstream Level (m)</b>	<b>Downstream Level (m)</b>	<b>Surcharged Depth (m)</b>	<b>Total O/F (l/s)</b>	<b>Pipe Flow (l/s)</b>
276	75.182	75.142	-0.417	0.0	2.6
282	75.178	75.136	-0.421	0.0	2.3
288	75.175	75.132	-0.424	0.0	2.1
294	75.173	75.125	-0.426	0.0	2.0
300	75.171	75.120	-0.428	0.0	1.9
306	75.170	75.114	-0.429	0.0	1.9
312	75.169	75.110	-0.430	0.0	1.9
318	75.169	75.104	-0.430	0.0	1.9
324	75.168	75.099	-0.431	0.0	1.9
330	75.167	75.094	-0.432	0.0	1.8
336	75.166	75.089	-0.433	0.0	1.8
342	75.164	75.085	-0.435	0.0	1.6
348	75.161	75.079	-0.438	0.0	1.4
354	75.157	75.073	-0.442	0.0	1.0
360	75.152	75.066	-0.447	0.0	0.4
366	75.149	75.058	-0.450	0.0	0.1
372	75.149	75.050	-0.450	0.0	0.0
378	75.149	75.042	-0.450	0.0	0.0
384	75.149	75.035	-0.450	0.0	0.0
390	75.149	75.028	-0.450	0.0	0.0
396	75.149	75.020	-0.450	0.0	0.0
402	75.149	75.014	-0.450	0.0	0.0
408	75.149	75.007	-0.450	0.0	0.0
414	75.149	75.002	-0.450	0.0	0.0
420	75.149	74.996	-0.450	0.0	0.0
426	75.149	74.991	-0.450	0.0	0.0
432	75.149	74.987	-0.450	0.0	0.0
438	75.149	74.982	-0.450	0.0	0.0
444	75.149	74.978	-0.450	0.0	0.0
450	75.149	74.975	-0.450	0.0	0.0
456	75.149	74.971	-0.450	0.0	0.0
462	75.149	74.969	-0.450	0.0	0.0
468	75.149	74.966	-0.450	0.0	0.0
474	75.149	74.963	-0.450	0.0	0.0
480	75.149	74.960	-0.450	0.0	0.0
486	75.149	74.958	-0.450	0.0	0.0
492	75.149	74.956	-0.450	0.0	0.0
498	75.149	74.954	-0.450	0.0	0.0
504	75.149	74.952	-0.450	0.0	0.0
510	75.149	74.951	-0.450	0.0	0.0
516	75.149	74.950	-0.450	0.0	0.0
522	75.149	74.949	-0.450	0.0	0.0
528	75.149	74.949	-0.450	0.0	0.0
534	75.149	74.949	-0.450	0.0	0.0
540	75.149	74.949	-0.450	0.0	0.0

RPS P&D		Page 34
20 Milton Park Abingdon Oxfordshire OX14 4SH	Land of Green Lane Chesterton	
Date 14/04/2016 File JNY8140 SW Network Desi...	Designed by HSS Checked by SF	
Causeway	Network 2014.1.1	

Flows and Levels for Pipe 2.003 US/MH 21 (JNY8140 SW NETWORK DESIGN 2015  
09 25.SWS)


360 minute 30 year Winter I+0%  
Average Rainfall Intensity 8.034 mm/hr

<b>Time (mins)</b>	<b>Upstream Level (m)</b>	<b>Downstream Level (m)</b>	<b>Surcharged Depth (m)</b>	<b>Total O/F (l/s)</b>	<b>Pipe Flow (l/s)</b>
546	75.149	74.949	-0.450	0.0	0.0
552	75.149	74.949	-0.450	0.0	0.0
558	75.149	74.949	-0.450	0.0	0.0
564	75.149	74.949	-0.450	0.0	0.0
570	75.149	74.949	-0.450	0.0	0.0
576	75.149	74.949	-0.450	0.0	0.0
582	75.149	74.949	-0.450	0.0	0.0
588	75.149	74.949	-0.450	0.0	0.0
594	75.149	74.949	-0.450	0.0	0.0
600	75.149	74.949	-0.450	0.0	0.0
606	75.149	74.949	-0.450	0.0	0.0
612	75.149	74.949	-0.450	0.0	0.0
618	75.149	74.949	-0.450	0.0	0.0
624	75.149	74.949	-0.450	0.0	0.0
630	75.149	74.949	-0.450	0.0	0.0
636	75.149	74.949	-0.450	0.0	0.0
642	75.149	74.949	-0.450	0.0	0.0
648	75.149	74.949	-0.450	0.0	0.0
654	75.149	74.949	-0.450	0.0	0.0
660	75.149	74.949	-0.450	0.0	0.0
666	75.149	74.949	-0.450	0.0	0.0
672	75.149	74.949	-0.450	0.0	0.0
678	75.149	74.949	-0.450	0.0	0.0
684	75.149	74.949	-0.450	0.0	0.0
690	75.149	74.949	-0.450	0.0	0.0
696	75.149	74.949	-0.450	0.0	0.0
702	75.149	74.949	-0.450	0.0	0.0
708	75.149	74.949	-0.450	0.0	0.0
714	75.149	74.949	-0.450	0.0	0.0
720	75.149	74.949	-0.450	0.0	0.0

RPS P&D		Page 35
20 Milton Park Abingdon Oxfordshire OX14 4SH	Land of Green Lane Chesterton	
Date 14/04/2016 File JNY8140 SW Network Desi...	Designed by HSS Checked by SF	
Causeway	Network 2014.1.1	


Flows and Levels for Pipe 1.005 US/MH 6 (JNY8140 SW NETWORK DESIGN 2015  
09 25.SWS)  
360 minute 30 year Winter I+0%  
Average Rainfall Intensity 8.034 mm/hr

Time (mins)	Upstream Level (m)	Downstream Level (m)	Surcharged Depth (m)	Total O/F (l/s)	Pipe Flow (l/s)
6	74.960	74.929	-0.439	0.0	0.3
12	74.979	74.931	-0.420	0.0	1.1
18	74.994	74.933	-0.405	0.0	2.0
24	74.998	74.936	-0.401	0.0	2.7
30	75.000	74.940	-0.399	0.0	3.1
36	75.001	74.943	-0.398	0.0	3.4
42	75.002	74.946	-0.397	0.0	3.5
48	75.002	74.950	-0.397	0.0	3.6
54	75.002	74.953	-0.397	0.0	3.6
60	75.002	74.956	-0.397	0.0	3.6
66	75.002	74.959	-0.397	0.0	3.6
72	75.003	74.961	-0.396	0.0	3.7
78	75.004	74.964	-0.395	0.0	3.8
84	75.006	74.966	-0.393	0.0	4.1
90	75.008	74.969	-0.391	0.0	4.4
96	75.012	74.972	-0.387	0.0	4.9
102	75.016	74.975	-0.383	0.0	5.6
108	75.021	74.980	-0.378	0.0	6.3
114	75.027	74.984	-0.372	0.0	7.2
120	75.034	74.990	-0.365	0.0	8.3
126	75.040	74.996	-0.359	0.0	9.4
132	75.045	75.003	-0.354	0.0	10.6
138	75.050	75.012	-0.349	0.0	11.9
144	75.056	75.023	-0.343	0.0	13.5
150	75.061	75.033	-0.338	0.0	14.9
156	75.066	75.044	-0.333	0.0	16.1
162	75.075	75.058	-0.324	0.0	17.2
168	75.086	75.070	-0.313	0.0	18.4
174	75.096	75.083	-0.303	0.0	19.2
180	75.106	75.097	-0.293	0.0	19.8
186	75.117	75.109	-0.282	0.0	20.0
192	75.126	75.120	-0.273	0.0	19.5
198	75.135	75.131	-0.264	0.0	18.8
204	75.143	75.139	-0.256	0.0	17.8
210	75.149	75.146	-0.250	0.0	16.7
216	75.155	75.152	-0.244	0.0	15.5
222	75.158	75.155	-0.241	0.0	14.2
228	75.161	75.159	-0.238	0.0	12.9
234	75.161	75.159	-0.238	0.0	11.7
240	75.162	75.160	-0.237	0.0	10.4
246	75.160	75.158	-0.239	0.0	9.3
252	75.159	75.157	-0.240	0.0	8.3
258	75.154	75.153	-0.245	0.0	7.3
264	75.152	75.150	-0.247	0.0	6.4
270	75.146	75.145	-0.253	0.0	5.7

RPS P&D		Page 36
20 Milton Park Abingdon Oxfordshire OX14 4SH	Land of Green Lane Chesterton	
Date 14/04/2016 File JNY8140 SW Network Desi...	Designed by HSS Checked by SF	
Causeway		Network 2014.1.1

Flows and Levels for Pipe 1.005 US/MH 6 (JNY8140 SW NETWORK DESIGN 2015  
09 25.SWS)  
360 minute 30 year Winter I+0%  
Average Rainfall Intensity 8.034 mm/hr


Time (mins)	Upstream Level (m)	Downstream Level (m)	Surcharged Depth (m)	Total O/F (l/s)	Pipe Flow (l/s)
276	75.142	75.141	-0.257	0.0	5.1
282	75.136	75.135	-0.263	0.0	4.6
288	75.132	75.131	-0.267	0.0	4.2
294	75.125	75.125	-0.274	0.0	4.0
300	75.120	75.120	-0.279	0.0	3.8
306	75.114	75.114	-0.285	0.0	3.7
312	75.110	75.109	-0.289	0.0	3.7
318	75.104	75.103	-0.295	0.0	3.7
324	75.099	75.099	-0.300	0.0	3.7
330	75.094	75.094	-0.305	0.0	3.6
336	75.089	75.089	-0.310	0.0	3.5
342	75.085	75.084	-0.314	0.0	3.3
348	75.079	75.079	-0.320	0.0	2.8
354	75.073	75.073	-0.326	0.0	2.1
360	75.066	75.066	-0.333	0.0	1.1
366	75.058	75.058	-0.341	0.0	0.3
372	75.050	75.050	-0.349	0.0	0.1
378	75.042	75.042	-0.357	0.0	0.1
384	75.035	75.035	-0.364	0.0	0.1
390	75.028	75.028	-0.371	0.0	0.1
396	75.020	75.020	-0.379	0.0	0.1
402	75.014	75.014	-0.385	0.0	0.1
408	75.007	75.007	-0.392	0.0	0.0
414	75.002	75.002	-0.397	0.0	0.0
420	74.996	74.996	-0.403	0.0	0.0
426	74.991	74.991	-0.408	0.0	0.0
432	74.987	74.987	-0.412	0.0	0.0
438	74.982	74.982	-0.417	0.0	0.0
444	74.978	74.978	-0.421	0.0	0.0
450	74.975	74.975	-0.424	0.0	0.0
456	74.971	74.971	-0.428	0.0	0.0
462	74.969	74.968	-0.430	0.0	0.0
468	74.966	74.966	-0.433	0.0	0.0
474	74.963	74.963	-0.436	0.0	0.0
480	74.960	74.960	-0.439	0.0	0.0
486	74.958	74.958	-0.441	0.0	0.0
492	74.956	74.956	-0.443	0.0	0.0
498	74.954	74.954	-0.445	0.0	0.0
504	74.952	74.952	-0.447	0.0	0.0
510	74.951	74.951	-0.448	0.0	0.0
516	74.950	74.949	-0.449	0.0	0.0
522	74.949	74.948	-0.450	0.0	0.0
528	74.949	74.947	-0.450	0.0	0.0
534	74.949	74.945	-0.450	0.0	0.0
540	74.949	74.944	-0.450	0.0	0.0

RPS P&D		Page 37
20 Milton Park Abingdon Oxfordshire OX14 4SH	Land of Green Lane Chesterton	
Date 14/04/2016 File JNY8140 SW Network Desi...	Designed by HSS Checked by SF	
Causeway	Network 2014.1.1	

Flows and Levels for Pipe 1.005 US/MH 6 (JNY8140 SW NETWORK DESIGN 2015  
09 25.SWS)


360 minute 30 year Winter I+0%  
Average Rainfall Intensity 8.034 mm/hr

<b>Time (mins)</b>	<b>Upstream Level (m)</b>	<b>Downstream Level (m)</b>	<b>Surcharged Depth (m)</b>	<b>Total O/F (l/s)</b>	<b>Pipe Flow (l/s)</b>
546	74.949	74.943	-0.450	0.0	0.0
552	74.949	74.942	-0.450	0.0	0.0
558	74.949	74.941	-0.450	0.0	0.0
564	74.949	74.940	-0.450	0.0	0.0
570	74.949	74.939	-0.450	0.0	0.0
576	74.949	74.939	-0.450	0.0	0.0
582	74.949	74.938	-0.450	0.0	0.0
588	74.949	74.937	-0.450	0.0	0.0
594	74.949	74.937	-0.450	0.0	0.0
600	74.949	74.936	-0.450	0.0	0.0
606	74.949	74.936	-0.450	0.0	0.0
612	74.949	74.935	-0.450	0.0	0.0
618	74.949	74.935	-0.450	0.0	0.0
624	74.949	74.934	-0.450	0.0	0.0
630	74.949	74.934	-0.450	0.0	0.0
636	74.949	74.933	-0.450	0.0	0.0
642	74.949	74.933	-0.450	0.0	0.0
648	74.949	74.933	-0.450	0.0	0.0
654	74.949	74.932	-0.450	0.0	0.0
660	74.949	74.932	-0.450	0.0	0.0
666	74.949	74.932	-0.450	0.0	0.0
672	74.949	74.932	-0.450	0.0	0.0
678	74.949	74.931	-0.450	0.0	0.0
684	74.949	74.931	-0.450	0.0	0.0
690	74.949	74.931	-0.450	0.0	0.0
696	74.949	74.931	-0.450	0.0	0.0
702	74.949	74.931	-0.450	0.0	0.0
708	74.949	74.930	-0.450	0.0	0.0
714	74.949	74.930	-0.450	0.0	0.0
720	74.949	74.930	-0.450	0.0	0.0

RPS P&D		Page 38
20 Milton Park Abingdon Oxfordshire OX14 4SH	Land of Green Lane Chesterton	
Date 14/04/2016 File JNY8140 SW Network Desi...	Designed by HSS Checked by SF	
Causeway		Network 2014.1.1

Flows and Levels for Pipe 1.006 US/MH 8 (JNY8140 SW NETWORK DESIGN 2015  
09 25.SWS)  
360 minute 30 year Winter I+0%  
Average Rainfall Intensity 8.034 mm/hr


Time (mins)	Upstream Level (m)	Downstream Level (m)	Surcharged Depth (m)	Total O/F (l/s)	Pipe Flow (l/s)
6	74.929	74.914	-0.450	0.0	0.0
12	74.931	74.916	-0.448	0.0	0.0
18	74.933	74.922	-0.446	0.0	0.1
24	74.936	74.929	-0.443	0.0	0.2
30	74.940	74.935	-0.439	0.0	0.3
36	74.943	74.938	-0.436	0.0	0.4
42	74.946	74.942	-0.433	0.0	0.5
48	74.950	74.946	-0.429	0.0	0.6
54	74.953	74.949	-0.426	0.0	0.7
60	74.956	74.952	-0.423	0.0	0.7
66	74.959	74.955	-0.420	0.0	0.8
72	74.961	74.957	-0.418	0.0	0.9
78	74.964	74.959	-0.415	0.0	1.0
84	74.966	74.962	-0.413	0.0	1.1
90	74.969	74.964	-0.410	0.0	1.2
96	74.972	74.967	-0.407	0.0	1.3
102	74.975	74.971	-0.404	0.0	1.4
108	74.980	74.976	-0.399	0.0	1.7
114	74.984	74.981	-0.395	0.0	1.9
120	74.990	74.987	-0.389	0.0	2.1
126	74.996	74.994	-0.383	0.0	2.3
132	75.003	75.002	-0.376	0.0	2.6
138	75.012	75.010	-0.367	0.0	2.8
144	75.023	75.020	-0.356	0.0	3.2
150	75.033	75.029	-0.346	0.0	3.6
156	75.044	75.043	-0.335	0.0	3.3
162	75.058	75.056	-0.321	0.0	2.7
168	75.070	75.067	-0.309	0.0	3.3
174	75.083	75.080	-0.296	0.0	3.2
180	75.097	75.105	-0.282	0.0	2.7
186	75.109	75.121	-0.270	0.0	3.3
192	75.120	75.134	-0.259	0.0	3.2
198	75.131	75.147	-0.248	0.0	3.2
204	75.139	75.157	-0.240	0.0	3.2
210	75.146	75.174	-0.233	0.0	3.7
216	75.152	75.141	-0.227	0.0	3.9
222	75.155	75.203	-0.224	0.0	2.2
228	75.159	75.145	-0.220	0.0	3.9
234	75.159	75.209	-0.220	0.0	2.3
240	75.160	75.146	-0.219	0.0	3.9
246	75.158	75.208	-0.221	0.0	2.3
252	75.157	75.143	-0.222	0.0	3.8
258	75.153	75.199	-0.226	0.0	2.2
264	75.150	75.138	-0.229	0.0	3.5
270	75.145	75.185	-0.234	0.0	2.1

RPS P&D		Page 39
20 Milton Park Abingdon Oxfordshire OX14 4SH	Land of Green Lane Chesterton	
Date 14/04/2016 File JNY8140 SW Network Desi...	Designed by HSS Checked by SF	
Causeway	Network 2014.1.1	

Flows and Levels for Pipe 1.006 US/MH 8 (JNY8140 SW NETWORK DESIGN 2015  
09 25.SWS)  
360 minute 30 year Winter I+0%  
Average Rainfall Intensity 8.034 mm/hr

Time (mins)	Upstream Level (m)	Downstream Level (m)	Surcharged Depth (m)	Total O/F (l/s)	Pipe Flow (l/s)
276	75.141	75.131	-0.238	0.0	3.3
282	75.135	75.170	-0.244	0.0	2.0
288	75.131	75.123	-0.248	0.0	3.1
294	75.125	75.154	-0.254	0.0	2.1
300	75.120	75.113	-0.259	0.0	2.9
306	75.114	75.138	-0.265	0.0	2.2
312	75.109	75.103	-0.270	0.0	2.9
318	75.103	75.124	-0.276	0.0	2.3
324	75.099	75.094	-0.280	0.0	2.8
330	75.094	75.101	-0.285	0.0	1.9
336	75.089	75.134	-0.290	0.0	2.6
342	75.084	75.080	-0.295	0.0	3.8
348	75.079	75.080	-0.300	0.0	2.2
354	75.073	75.078	-0.306	0.0	2.8
360	75.066	75.063	-0.313	0.0	3.0
366	75.058	75.064	-0.321	0.0	2.7
372	75.050	75.053	-0.329	0.0	2.7
378	75.042	75.045	-0.337	0.0	2.7
384	75.035	75.038	-0.344	0.0	2.7
390	75.028	75.029	-0.351	0.0	2.7
396	75.020	75.021	-0.359	0.0	2.8
402	75.014	75.013	-0.365	0.0	2.7
408	75.007	75.006	-0.372	0.0	2.5
414	75.002	75.000	-0.377	0.0	2.3
420	74.996	74.997	-0.383	0.0	2.0
426	74.991	74.989	-0.388	0.0	2.0
432	74.987	74.985	-0.392	0.0	1.8
438	74.982	74.980	-0.397	0.0	1.6
444	74.978	74.976	-0.401	0.0	1.5
450	74.975	74.971	-0.404	0.0	1.3
456	74.971	74.968	-0.408	0.0	1.2
462	74.968	74.965	-0.411	0.0	1.1
468	74.966	74.962	-0.413	0.0	1.0
474	74.963	74.960	-0.416	0.0	0.9
480	74.960	74.957	-0.419	0.0	0.8
486	74.958	74.955	-0.421	0.0	0.7
492	74.956	74.953	-0.423	0.0	0.7
498	74.954	74.951	-0.425	0.0	0.6
504	74.952	74.950	-0.427	0.0	0.6
510	74.951	74.948	-0.428	0.0	0.5
516	74.949	74.946	-0.430	0.0	0.5
522	74.948	74.945	-0.431	0.0	0.4
528	74.947	74.944	-0.432	0.0	0.4
534	74.945	74.943	-0.434	0.0	0.4
540	74.944	74.942	-0.435	0.0	0.3




RPS P&D		Page 40
20 Milton Park Abingdon Oxfordshire OX14 4SH	Land of Green Lane Chesterton	
Date 14/04/2016 File JNY8140 SW Network Desi...	Designed by HSS Checked by SF	
Causeway		Network 2014.1.1

Flows and Levels for Pipe 1.006 US/MH 8 (JNY8140 SW NETWORK DESIGN 2015  
09 25.SWS)


360 minute 30 year Winter I+0%  
Average Rainfall Intensity 8.034 mm/hr

<b>Time (mins)</b>	<b>Upstream Level (m)</b>	<b>Downstream Level (m)</b>	<b>Surcharged Depth (m)</b>	<b>Total O/F (l/s)</b>	<b>Pipe Flow (l/s)</b>
546	74.943	74.941	-0.436	0.0	0.3
552	74.942	74.940	-0.437	0.0	0.3
558	74.941	74.939	-0.438	0.0	0.3
564	74.940	74.938	-0.439	0.0	0.3
570	74.939	74.937	-0.440	0.0	0.2
576	74.939	74.936	-0.440	0.0	0.2
582	74.938	74.935	-0.441	0.0	0.2
588	74.937	74.935	-0.442	0.0	0.2
594	74.937	74.934	-0.442	0.0	0.2
600	74.936	74.933	-0.443	0.0	0.2
606	74.936	74.933	-0.443	0.0	0.2
612	74.935	74.932	-0.444	0.0	0.2
618	74.935	74.932	-0.444	0.0	0.1
624	74.934	74.931	-0.445	0.0	0.1
630	74.934	74.931	-0.445	0.0	0.1
636	74.933	74.930	-0.446	0.0	0.1
642	74.933	74.929	-0.446	0.0	0.1
648	74.933	74.929	-0.446	0.0	0.1
654	74.932	74.928	-0.447	0.0	0.1
660	74.932	74.928	-0.447	0.0	0.1
666	74.932	74.928	-0.447	0.0	0.1
672	74.932	74.927	-0.447	0.0	0.1
678	74.931	74.927	-0.448	0.0	0.1
684	74.931	74.926	-0.448	0.0	0.1
690	74.931	74.926	-0.448	0.0	0.1
696	74.931	74.926	-0.448	0.0	0.1
702	74.931	74.925	-0.448	0.0	0.1
708	74.930	74.925	-0.449	0.0	0.1
714	74.930	74.924	-0.449	0.0	0.0
720	74.930	74.924	-0.449	0.0	0.0

RPS P&D		Page 41
20 Milton Park Abingdon Oxfordshire OX14 4SH	Land of Green Lane Chesterton	
Date 14/04/2016 File JNY8140 SW Network Desi...	Designed by HSS Checked by SF	
Causeway		Network 2014.1.1


Flows and Levels for Pipe 1.007 US/MH 9 (JNY8140 SW NETWORK DESIGN 2015  
09 25.SWS)  
360 minute 30 year Winter I+0%  
Average Rainfall Intensity 8.034 mm/hr

Time (mins)	Upstream Level (m)	Downstream Level (m)	Surcharged Depth (m)	Total O/F (l/s)	Pipe Flow (l/s)
6	74.914	74.715	-0.450	0.0	0.0
12	74.916	74.718	-0.448	0.0	0.0
18	74.922	74.720	-0.442	0.0	0.0
24	74.929	74.722	-0.435	0.0	0.1
30	74.935	74.724	-0.429	0.0	0.2
36	74.938	74.726	-0.426	0.0	0.3
42	74.942	74.727	-0.422	0.0	0.4
48	74.946	74.728	-0.418	0.0	0.5
54	74.949	74.729	-0.415	0.0	0.5
60	74.952	74.730	-0.412	0.0	0.6
66	74.955	74.732	-0.409	0.0	0.7
72	74.957	74.733	-0.407	0.0	0.8
78	74.959	74.734	-0.405	0.0	0.9
84	74.962	74.736	-0.402	0.0	1.0
90	74.964	74.738	-0.400	0.0	1.1
96	74.967	74.741	-0.397	0.0	1.2
102	74.971	74.744	-0.393	0.0	1.3
108	74.976	74.748	-0.388	0.0	1.5
114	74.981	74.753	-0.383	0.0	1.7
120	74.987	74.758	-0.377	0.0	1.9
126	74.994	74.761	-0.370	0.0	2.1
132	75.002	74.762	-0.362	0.0	2.3
138	75.010	74.764	-0.354	0.0	2.6
144	75.020	74.766	-0.344	0.0	2.8
150	75.029	74.767	-0.335	0.0	2.9
156	75.043	74.768	-0.321	0.0	2.9
162	75.056	74.769	-0.308	0.0	2.9
168	75.067	74.770	-0.297	0.0	2.9
174	75.080	74.771	-0.284	0.0	2.9
180	75.105	74.771	-0.259	0.0	2.9
186	75.121	74.771	-0.243	0.0	2.9
192	75.134	74.770	-0.230	0.0	2.9
198	75.147	74.770	-0.217	0.0	2.9
204	75.157	74.769	-0.207	0.0	2.9
210	75.174	74.768	-0.190	0.0	2.8
216	75.141	74.767	-0.223	0.0	2.8
222	75.203	74.766	-0.161	0.0	2.8
228	75.145	74.765	-0.219	0.0	2.8
234	75.209	74.764	-0.155	0.0	2.8
240	75.146	74.763	-0.218	0.0	2.8
246	75.208	74.762	-0.156	0.0	2.8
252	75.143	74.762	-0.221	0.0	2.8
258	75.199	74.761	-0.165	0.0	2.8
264	75.138	74.760	-0.226	0.0	2.8
270	75.185	74.760	-0.179	0.0	2.8

RPS P&D		Page 42
20 Milton Park Abingdon Oxfordshire OX14 4SH	Land of Green Lane Chesterton	
Date 14/04/2016 File JNY8140 SW Network Desi...	Designed by HSS Checked by SF	
Causeway	Network 2014.1.1	

Flows and Levels for Pipe 1.007 US/MH 9 (JNY8140 SW NETWORK DESIGN 2015  
09 25.SWS)  
360 minute 30 year Winter I+0%  
Average Rainfall Intensity 8.034 mm/hr


Time (mins)	Upstream Level (m)	Downstream Level (m)	Surcharged Depth (m)	Total O/F (l/s)	Pipe Flow (l/s)
276	75.131	74.759	-0.233	0.0	2.8
282	75.170	74.758	-0.194	0.0	2.8
288	75.123	74.758	-0.241	0.0	2.8
294	75.154	74.757	-0.210	0.0	2.8
300	75.113	74.757	-0.251	0.0	2.8
306	75.138	74.757	-0.226	0.0	2.9
312	75.103	74.757	-0.261	0.0	2.9
318	75.124	74.757	-0.240	0.0	2.9
324	75.094	74.757	-0.270	0.0	2.9
330	75.101	74.757	-0.263	0.0	2.9
336	75.134	74.757	-0.230	0.0	2.9
342	75.080	74.756	-0.284	0.0	2.9
348	75.080	74.755	-0.284	0.0	2.9
354	75.078	74.753	-0.286	0.0	2.9
360	75.063	74.750	-0.301	0.0	2.9
366	75.064	74.749	-0.300	0.0	2.9
372	75.053	74.749	-0.311	0.0	2.9
378	75.045	74.749	-0.319	0.0	2.9
384	75.038	74.749	-0.326	0.0	2.9
390	75.029	74.749	-0.335	0.0	2.9
396	75.021	74.749	-0.343	0.0	2.9
402	75.013	74.747	-0.351	0.0	2.8
408	75.006	74.745	-0.358	0.0	2.6
414	75.000	74.743	-0.364	0.0	2.5
420	74.997	74.741	-0.367	0.0	2.3
426	74.989	74.739	-0.375	0.0	2.1
432	74.985	74.737	-0.379	0.0	2.0
438	74.980	74.735	-0.384	0.0	1.8
444	74.976	74.733	-0.388	0.0	1.6
450	74.971	74.731	-0.393	0.0	1.4
456	74.968	74.729	-0.396	0.0	1.3
462	74.965	74.728	-0.399	0.0	1.2
468	74.962	74.727	-0.402	0.0	1.1
474	74.960	74.726	-0.404	0.0	1.0
480	74.957	74.725	-0.407	0.0	0.9
486	74.955	74.724	-0.409	0.0	0.8
492	74.953	74.723	-0.411	0.0	0.7
498	74.951	74.722	-0.413	0.0	0.7
504	74.950	74.721	-0.414	0.0	0.6
510	74.948	74.721	-0.416	0.0	0.6
516	74.946	74.720	-0.418	0.0	0.5
522	74.945	74.720	-0.419	0.0	0.5
528	74.944	74.720	-0.420	0.0	0.5
534	74.943	74.719	-0.421	0.0	0.4
540	74.942	74.719	-0.422	0.0	0.4

RPS P&D		Page 43
20 Milton Park Abingdon Oxfordshire OX14 4SH	Land of Green Lane Chesterton	
Date 14/04/2016 File JNY8140 SW Network Desi...	Designed by HSS Checked by SF	
Causeway		Network 2014.1.1

Flows and Levels for Pipe 1.007 US/MH 9 (JNY8140 SW NETWORK DESIGN 2015  
09 25.SWS)

360 minute 30 year Winter I+0%  
Average Rainfall Intensity 8.034 mm/hr


<b>Time (mins)</b>	<b>Upstream Level (m)</b>	<b>Downstream Level (m)</b>	<b>Surcharged Depth (m)</b>	<b>Total O/F (l/s)</b>	<b>Pipe Flow (l/s)</b>
546	74.941	74.718	-0.423	0.0	0.4
552	74.940	74.718	-0.424	0.0	0.3
558	74.939	74.718	-0.425	0.0	0.3
564	74.938	74.718	-0.426	0.0	0.3
570	74.937	74.717	-0.427	0.0	0.3
576	74.936	74.717	-0.428	0.0	0.3
582	74.935	74.717	-0.429	0.0	0.2
588	74.935	74.717	-0.429	0.0	0.2
594	74.934	74.717	-0.430	0.0	0.2
600	74.933	74.716	-0.431	0.0	0.2
606	74.933	74.716	-0.431	0.0	0.2
612	74.932	74.716	-0.432	0.0	0.2
618	74.932	74.716	-0.432	0.0	0.2
624	74.931	74.716	-0.433	0.0	0.2
630	74.931	74.716	-0.433	0.0	0.1
636	74.930	74.716	-0.434	0.0	0.1
642	74.929	74.716	-0.435	0.0	0.1
648	74.929	74.715	-0.435	0.0	0.1
654	74.928	74.715	-0.436	0.0	0.1
660	74.928	74.715	-0.436	0.0	0.1
666	74.928	74.715	-0.436	0.0	0.1
672	74.927	74.715	-0.437	0.0	0.1
678	74.927	74.715	-0.437	0.0	0.1
684	74.926	74.715	-0.438	0.0	0.1
690	74.926	74.715	-0.438	0.0	0.1
696	74.926	74.715	-0.438	0.0	0.1
702	74.925	74.715	-0.439	0.0	0.1
708	74.925	74.715	-0.439	0.0	0.1
714	74.924	74.715	-0.440	0.0	0.1
720	74.924	74.715	-0.440	0.0	0.1

RPS P&D		Page 44
20 Milton Park Abingdon Oxfordshire OX14 4SH	Land of Green Lane Chesterton	
Date 14/04/2016 File JNY8140 SW Network Desi...	Designed by HSS Checked by SF	
Causeway		Network 2014.1.1

Flows and Levels for Pipe 1.008 US/MH 10 (JNY8140 SW NETWORK DESIGN 2015  
09 25.SWS)

360 minute 30 year Winter I+0%  
Average Rainfall Intensity 8.034 mm/hr


Time (mins)	Upstream Level (m)	Downstream Level (m)	Surcharged Depth (m)	Total O/F (l/s)	Pipe Flow (l/s)
6	74.715	74.617	-0.449	0.0	0.1
12	74.718	74.624	-0.446	0.0	0.3
18	74.720	74.629	-0.444	0.0	0.5
24	74.722	74.633	-0.442	0.0	0.6
30	74.724	74.636	-0.440	0.0	0.8
36	74.726	74.637	-0.438	0.0	0.9
42	74.727	74.639	-0.437	0.0	1.0
48	74.728	74.640	-0.436	0.0	1.1
54	74.729	74.641	-0.435	0.0	1.2
60	74.730	74.642	-0.434	0.0	1.3
66	74.732	74.643	-0.432	0.0	1.4
72	74.733	74.644	-0.431	0.0	1.5
78	74.734	74.647	-0.430	0.0	1.7
84	74.736	74.649	-0.428	0.0	1.8
90	74.738	74.653	-0.426	0.0	2.0
96	74.741	74.658	-0.423	0.0	2.2
102	74.744	74.660	-0.420	0.0	2.4
108	74.748	74.662	-0.416	0.0	2.8
114	74.753	74.665	-0.411	0.0	3.2
120	74.758	74.668	-0.406	0.0	3.6
126	74.761	74.670	-0.403	0.0	4.0
132	74.762	74.674	-0.402	0.0	4.5
138	74.764	74.677	-0.400	0.0	5.0
144	74.766	74.680	-0.398	0.0	5.5
150	74.767	74.683	-0.397	0.0	5.9
156	74.768	74.685	-0.396	0.0	6.2
162	74.769	74.687	-0.395	0.0	6.4
168	74.770	74.689	-0.394	0.0	6.7
174	74.771	74.691	-0.393	0.0	6.8
180	74.771	74.692	-0.393	0.0	6.9
186	74.771	74.692	-0.393	0.0	6.9
192	74.770	74.691	-0.394	0.0	6.8
198	74.770	74.689	-0.394	0.0	6.6
204	74.769	74.687	-0.395	0.0	6.4
210	74.768	74.685	-0.396	0.0	6.2
216	74.767	74.683	-0.397	0.0	5.9
222	74.766	74.680	-0.398	0.0	5.6
228	74.765	74.678	-0.399	0.0	5.4
234	74.764	74.675	-0.400	0.0	5.1
240	74.763	74.673	-0.401	0.0	4.9
246	74.762	74.671	-0.402	0.0	4.6
252	74.762	74.669	-0.402	0.0	4.4
258	74.761	74.667	-0.403	0.0	4.2
264	74.760	74.665	-0.404	0.0	4.1
270	74.760	74.664	-0.404	0.0	3.9

RPS P&D		Page 45
20 Milton Park Abingdon Oxfordshire OX14 4SH	Land of Green Lane Chesterton	
Date 14/04/2016 File JNY8140 SW Network Desi...	Designed by HSS Checked by SF	
Causeway		Network 2014.1.1

Flows and Levels for Pipe 1.008 US/MH 10 (JNY8140 SW NETWORK DESIGN 2015  
09 25.SWS)

360 minute 30 year Winter I+0%  
Average Rainfall Intensity 8.034 mm/hr


Time (mins)	Upstream Level (m)	Downstream Level (m)	Surcharged Depth (m)	Total O/F (l/s)	Pipe Flow (l/s)
276	74.759	74.663	-0.405	0.0	3.8
282	74.758	74.662	-0.406	0.0	3.7
288	74.758	74.661	-0.406	0.0	3.6
294	74.757	74.661	-0.407	0.0	3.6
300	74.757	74.661	-0.407	0.0	3.6
306	74.757	74.661	-0.407	0.0	3.6
312	74.757	74.661	-0.407	0.0	3.6
318	74.757	74.661	-0.407	0.0	3.6
324	74.757	74.661	-0.407	0.0	3.6
330	74.757	74.661	-0.407	0.0	3.6
336	74.757	74.660	-0.407	0.0	3.5
342	74.756	74.660	-0.408	0.0	3.5
348	74.755	74.658	-0.409	0.0	3.4
354	74.753	74.653	-0.411	0.0	3.3
360	74.750	74.647	-0.414	0.0	3.1
366	74.749	74.644	-0.415	0.0	2.9
372	74.749	74.644	-0.415	0.0	2.9
378	74.749	74.644	-0.415	0.0	2.9
384	74.749	74.644	-0.415	0.0	2.9
390	74.749	74.644	-0.415	0.0	2.9
396	74.749	74.643	-0.415	0.0	2.9
402	74.747	74.642	-0.417	0.0	2.8
408	74.745	74.641	-0.419	0.0	2.7
414	74.743	74.639	-0.421	0.0	2.5
420	74.741	74.637	-0.423	0.0	2.3
426	74.739	74.636	-0.425	0.0	2.2
432	74.737	74.634	-0.427	0.0	2.0
438	74.735	74.632	-0.429	0.0	1.8
444	74.733	74.630	-0.431	0.0	1.7
450	74.731	74.629	-0.433	0.0	1.5
456	74.729	74.627	-0.435	0.0	1.3
462	74.728	74.626	-0.436	0.0	1.2
468	74.727	74.625	-0.437	0.0	1.1
474	74.726	74.624	-0.438	0.0	1.0
480	74.725	74.623	-0.439	0.0	0.9
486	74.724	74.622	-0.440	0.0	0.8
492	74.723	74.622	-0.441	0.0	0.8
498	74.722	74.621	-0.442	0.0	0.7
504	74.721	74.620	-0.443	0.0	0.6
510	74.721	74.620	-0.443	0.0	0.6
516	74.720	74.619	-0.444	0.0	0.5
522	74.720	74.619	-0.444	0.0	0.5
528	74.720	74.619	-0.444	0.0	0.5
534	74.719	74.619	-0.445	0.0	0.4
540	74.719	74.618	-0.445	0.0	0.4

RPS P&D		Page 46
20 Milton Park Abingdon Oxfordshire OX14 4SH	Land of Green Lane Chesterton	
Date 14/04/2016 File JNY8140 SW Network Desi...	Designed by HSS Checked by SF	
Causeway		Network 2014.1.1

Flows and Levels for Pipe 1.008 US/MH 10 (JNY8140 SW NETWORK DESIGN 2015  
09 25.SWS)

360 minute 30 year Winter I+0%  
Average Rainfall Intensity 8.034 mm/hr

<b>Time (mins)</b>	<b>Upstream Level (m)</b>	<b>Downstream Level (m)</b>	<b>Surcharged Depth (m)</b>	<b>Total O/F (l/s)</b>	<b>Pipe Flow (l/s)</b>
546	74.718	74.618	-0.446	0.0	0.4
552	74.718	74.618	-0.446	0.0	0.3
558	74.718	74.617	-0.446	0.0	0.3
564	74.718	74.617	-0.446	0.0	0.3
570	74.717	74.617	-0.447	0.0	0.3
576	74.717	74.617	-0.447	0.0	0.3
582	74.717	74.617	-0.447	0.0	0.2
588	74.717	74.616	-0.447	0.0	0.2
594	74.717	74.616	-0.447	0.0	0.2
600	74.716	74.616	-0.448	0.0	0.2
606	74.716	74.616	-0.448	0.0	0.2
612	74.716	74.616	-0.448	0.0	0.2
618	74.716	74.616	-0.448	0.0	0.2
624	74.716	74.616	-0.448	0.0	0.2
630	74.716	74.616	-0.448	0.0	0.1
636	74.716	74.615	-0.448	0.0	0.1
642	74.716	74.615	-0.448	0.0	0.1
648	74.715	74.615	-0.449	0.0	0.1
654	74.715	74.615	-0.449	0.0	0.1
660	74.715	74.615	-0.449	0.0	0.1
666	74.715	74.615	-0.449	0.0	0.1
672	74.715	74.615	-0.449	0.0	0.1
678	74.715	74.615	-0.449	0.0	0.1
684	74.715	74.615	-0.449	0.0	0.1
690	74.715	74.615	-0.449	0.0	0.1
696	74.715	74.615	-0.449	0.0	0.1
702	74.715	74.615	-0.449	0.0	0.1
708	74.715	74.615	-0.449	0.0	0.1
714	74.715	74.615	-0.449	0.0	0.1
720	74.715	74.615	-0.449	0.0	0.1


RPS P&D		Page 47
20 Milton Park Abingdon Oxfordshire OX14 4SH	Land of Green Lane Chesterton	
Date 14/04/2016 File JNY8140 SW Network Desi...	Designed by HSS Checked by SF	
Causeway		Network 2014.1.1

Flows and Levels for Pipe 1.009 US/MH 11 (JNY8140 SW NETWORK DESIGN 2015  
09 25.SWS)

360 minute 30 year Winter I+0%  
Average Rainfall Intensity 8.034 mm/hr

Time (mins)	Upstream Level (m)	Downstream Level (m)	Surcharged Depth (m)	Total O/F (l/s)	Pipe Flow (l/s)
6	74.617	74.203	-0.447	0.0	0.3
12	74.624	74.218	-0.440	0.0	0.8
18	74.629	74.229	-0.435	0.0	1.3
24	74.633	74.238	-0.431	0.0	1.7
30	74.636	74.241	-0.428	0.0	2.0
36	74.637	74.242	-0.427	0.0	2.2
42	74.639	74.243	-0.425	0.0	2.4
48	74.640	74.243	-0.424	0.0	2.5
54	74.641	74.244	-0.423	0.0	2.6
60	74.642	74.244	-0.422	0.0	2.7
66	74.643	74.245	-0.421	0.0	2.8
72	74.644	74.246	-0.420	0.0	2.9
78	74.647	74.247	-0.417	0.0	3.1
84	74.649	74.249	-0.415	0.0	3.4
90	74.653	74.251	-0.411	0.0	3.7
96	74.658	74.255	-0.406	0.0	4.2
102	74.660	74.258	-0.404	0.0	4.7
108	74.662	74.263	-0.402	0.0	5.3
114	74.665	74.268	-0.399	0.0	6.1
120	74.668	74.274	-0.396	0.0	6.9
126	74.670	74.280	-0.394	0.0	7.8
132	74.674	74.286	-0.390	0.0	8.8
138	74.677	74.290	-0.387	0.0	9.8
144	74.680	74.295	-0.384	0.0	10.8
150	74.683	74.299	-0.381	0.0	11.8
156	74.685	74.302	-0.379	0.0	12.5
162	74.687	74.305	-0.377	0.0	13.2
168	74.689	74.308	-0.375	0.0	13.9
174	74.691	74.310	-0.373	0.0	14.4
180	74.692	74.312	-0.372	0.0	14.7
186	74.692	74.312	-0.372	0.0	14.7
192	74.691	74.313	-0.373	0.0	14.4
198	74.689	74.316	-0.375	0.0	14.0
204	74.687	74.318	-0.377	0.0	13.4
210	74.685	74.321	-0.379	0.0	12.7
216	74.683	74.324	-0.381	0.0	12.0
222	74.680	74.327	-0.384	0.0	11.2
228	74.678	74.331	-0.386	0.0	10.4
234	74.675	74.334	-0.389	0.0	9.6
240	74.673	74.336	-0.391	0.0	8.9
246	74.671	74.339	-0.393	0.0	8.2
252	74.669	74.342	-0.395	0.0	7.6
258	74.667	74.344	-0.397	0.0	7.0
264	74.665	74.346	-0.399	0.0	6.5
270	74.664	74.348	-0.400	0.0	6.0




RPS P&D		Page 48
20 Milton Park Abingdon Oxfordshire OX14 4SH	Land of Green Lane Chesterton	
Date 14/04/2016 File JNY8140 SW Network Desi...	Designed by HSS Checked by SF	
Causeway		Network 2014.1.1

Flows and Levels for Pipe 1.009 US/MH 11 (JNY8140 SW NETWORK DESIGN 2015  
09 25.SWS)

360 minute 30 year Winter I+0%  
Average Rainfall Intensity 8.034 mm/hr


<b>Time (mins)</b>	<b>Upstream Level (m)</b>	<b>Downstream Level (m)</b>	<b>Surcharged Depth (m)</b>	<b>Total O/F (l/s)</b>	<b>Pipe Flow (l/s)</b>
276	74.663	74.349	-0.401	0.0	5.7
282	74.662	74.351	-0.402	0.0	5.4
288	74.661	74.352	-0.403	0.0	5.2
294	74.661	74.353	-0.403	0.0	5.1
300	74.661	74.354	-0.403	0.0	5.0
306	74.661	74.355	-0.403	0.0	5.0
312	74.661	74.356	-0.403	0.0	5.0
318	74.661	74.357	-0.403	0.0	5.0
324	74.661	74.358	-0.403	0.0	5.0
330	74.661	74.359	-0.403	0.0	4.9
336	74.660	74.360	-0.404	0.0	4.8
342	74.660	74.360	-0.404	0.0	4.7
348	74.658	74.361	-0.406	0.0	4.4
354	74.653	74.360	-0.411	0.0	4.0
360	74.647	74.359	-0.417	0.0	3.4
366	74.644	74.358	-0.420	0.0	3.0
372	74.644	74.356	-0.420	0.0	2.9
378	74.644	74.355	-0.420	0.0	2.9
384	74.644	74.354	-0.420	0.0	2.9
390	74.644	74.353	-0.420	0.0	2.9
396	74.643	74.351	-0.421	0.0	2.9
402	74.642	74.350	-0.422	0.0	2.9
408	74.641	74.349	-0.423	0.0	2.7
414	74.639	74.347	-0.425	0.0	2.6
420	74.637	74.345	-0.427	0.0	2.4
426	74.636	74.343	-0.428	0.0	2.2
432	74.634	74.342	-0.430	0.0	2.1
438	74.632	74.340	-0.432	0.0	1.9
444	74.630	74.338	-0.434	0.0	1.7
450	74.629	74.335	-0.435	0.0	1.5
456	74.627	74.333	-0.437	0.0	1.4
462	74.626	74.331	-0.438	0.0	1.2
468	74.625	74.328	-0.439	0.0	1.1
474	74.624	74.326	-0.440	0.0	1.0
480	74.623	74.323	-0.441	0.0	0.9
486	74.622	74.320	-0.442	0.0	0.9
492	74.622	74.317	-0.442	0.0	0.8
498	74.621	74.314	-0.443	0.0	0.7
504	74.620	74.312	-0.444	0.0	0.7
510	74.620	74.308	-0.444	0.0	0.6
516	74.619	74.306	-0.445	0.0	0.6
522	74.619	74.303	-0.445	0.0	0.5
528	74.619	74.301	-0.445	0.0	0.5
534	74.619	74.297	-0.445	0.0	0.5
540	74.618	74.295	-0.446	0.0	0.4

RPS P&D		Page 49
20 Milton Park Abingdon Oxfordshire OX14 4SH	Land of Green Lane Chesterton	
Date 14/04/2016 File JNY8140 SW Network Desi...	Designed by HSS Checked by SF	
Causeway		Network 2014.1.1

Flows and Levels for Pipe 1.009 US/MH 11 (JNY8140 SW NETWORK DESIGN 2015  
09 25.SWS)

360 minute 30 year Winter I+0%  
Average Rainfall Intensity 8.034 mm/hr


<b>Time (mins)</b>	<b>Upstream Level (m)</b>	<b>Downstream Level (m)</b>	<b>Surcharged Depth (m)</b>	<b>Total O/F (l/s)</b>	<b>Pipe Flow (l/s)</b>
546	74.618	74.291	-0.446	0.0	0.4
552	74.618	74.289	-0.446	0.0	0.4
558	74.617	74.286	-0.447	0.0	0.3
564	74.617	74.282	-0.447	0.0	0.3
570	74.617	74.279	-0.447	0.0	0.3
576	74.617	74.276	-0.447	0.0	0.3
582	74.617	74.273	-0.447	0.0	0.3
588	74.616	74.270	-0.448	0.0	0.2
594	74.616	74.267	-0.448	0.0	0.2
600	74.616	74.264	-0.448	0.0	0.2
606	74.616	74.261	-0.448	0.0	0.2
612	74.616	74.258	-0.448	0.0	0.2
618	74.616	74.255	-0.448	0.0	0.2
624	74.616	74.252	-0.448	0.0	0.2
630	74.616	74.249	-0.448	0.0	0.2
636	74.615	74.246	-0.449	0.0	0.1
642	74.615	74.243	-0.449	0.0	0.1
648	74.615	74.241	-0.449	0.0	0.1
654	74.615	74.238	-0.449	0.0	0.1
660	74.615	74.235	-0.449	0.0	0.1
666	74.615	74.232	-0.449	0.0	0.1
672	74.615	74.229	-0.449	0.0	0.1
678	74.615	74.226	-0.449	0.0	0.1
684	74.615	74.224	-0.449	0.0	0.1
690	74.615	74.221	-0.449	0.0	0.1
696	74.615	74.218	-0.449	0.0	0.1
702	74.615	74.216	-0.449	0.0	0.1
708	74.615	74.213	-0.449	0.0	0.1
714	74.615	74.210	-0.449	0.0	0.1
720	74.615	74.208	-0.449	0.0	0.1

RPS P&D		Page 50
20 Milton Park Abingdon Oxfordshire OX14 4SH	Land of Green Lane Chesterton	
Date 14/04/2016 File JNY8140 SW Network Desi...	Designed by HSS Checked by SF	
Causeway	Network 2014.1.1	

Flows and Levels for Pipe 3.000 US/MH 22 (JNY8140 SW NETWORK DESIGN 2015  
09 25.SWS)

360 minute 30 year Winter I+0%  
Average Rainfall Intensity 8.034 mm/hr


<b>Time (mins)</b>	<b>Upstream Level (m)</b>	<b>Downstream Level (m)</b>	<b>Surcharged Depth (m)</b>	<b>Total O/F (l/s)</b>	<b>Pipe Flow (l/s)</b>
6	74.951	74.522	-0.224	0.0	0.1
12	74.954	74.525	-0.221	0.0	0.2
18	74.956	74.527	-0.219	0.0	0.4
24	74.957	74.528	-0.218	0.0	0.4
30	74.958	74.529	-0.217	0.0	0.5
36	74.958	74.530	-0.217	0.0	0.5
42	74.958	74.530	-0.217	0.0	0.5
48	74.958	74.530	-0.217	0.0	0.5
54	74.958	74.530	-0.217	0.0	0.5
60	74.958	74.530	-0.217	0.0	0.5
66	74.958	74.530	-0.217	0.0	0.5
72	74.959	74.530	-0.216	0.0	0.6
78	74.959	74.531	-0.216	0.0	0.6
84	74.960	74.532	-0.215	0.0	0.6
90	74.961	74.533	-0.214	0.0	0.7
96	74.963	74.535	-0.212	0.0	0.8
102	74.964	74.537	-0.211	0.0	0.9
108	74.966	74.539	-0.209	0.0	1.0
114	74.968	74.542	-0.207	0.0	1.2
120	74.971	74.545	-0.204	0.0	1.3
126	74.973	74.548	-0.202	0.0	1.5
132	74.974	74.551	-0.201	0.0	1.7
138	74.975	74.552	-0.200	0.0	1.9
144	74.976	74.553	-0.199	0.0	2.0
150	74.977	74.554	-0.198	0.0	2.3
156	74.978	74.555	-0.197	0.0	2.4
162	74.978	74.556	-0.197	0.0	2.6
168	74.979	74.557	-0.196	0.0	2.8
174	74.980	74.558	-0.195	0.0	2.9
180	74.980	74.558	-0.195	0.0	3.0
186	74.980	74.558	-0.195	0.0	3.0
192	74.980	74.558	-0.195	0.0	2.9
198	74.979	74.557	-0.196	0.0	2.8
204	74.978	74.556	-0.197	0.0	2.6
210	74.978	74.555	-0.197	0.0	2.5
216	74.977	74.554	-0.198	0.0	2.3
222	74.976	74.553	-0.199	0.0	2.1
228	74.975	74.552	-0.200	0.0	1.9
234	74.974	74.551	-0.201	0.0	1.7
240	74.973	74.548	-0.202	0.0	1.5
246	74.971	74.545	-0.204	0.0	1.3
252	74.968	74.542	-0.207	0.0	1.2
258	74.966	74.539	-0.209	0.0	1.0
264	74.964	74.537	-0.211	0.0	0.9
270	74.963	74.535	-0.212	0.0	0.8

RPS P&D		Page 51
20 Milton Park Abingdon Oxfordshire OX14 4SH	Land of Green Lane Chesterton	
Date 14/04/2016 File JNY8140 SW Network Desi...	Designed by HSS Checked by SF	
Causeway		Network 2014.1.1

Flows and Levels for Pipe 3.000 US/MH 22 (JNY8140 SW NETWORK DESIGN 2015  
09 25.SWS)

360 minute 30 year Winter I+0%  
Average Rainfall Intensity 8.034 mm/hr


Time (mins)	Upstream Level (m)	Downstream Level (m)	Surcharged Depth (m)	Total O/F (l/s)	Pipe Flow (l/s)
276	74.961	74.533	-0.214	0.0	0.7
282	74.960	74.532	-0.215	0.0	0.6
288	74.959	74.531	-0.216	0.0	0.6
294	74.959	74.530	-0.216	0.0	0.6
300	74.958	74.530	-0.217	0.0	0.5
306	74.958	74.530	-0.217	0.0	0.5
312	74.958	74.530	-0.217	0.0	0.5
318	74.958	74.530	-0.217	0.0	0.5
324	74.958	74.530	-0.217	0.0	0.5
330	74.958	74.530	-0.217	0.0	0.5
336	74.958	74.529	-0.217	0.0	0.5
342	74.957	74.528	-0.218	0.0	0.4
348	74.956	74.527	-0.219	0.0	0.4
354	74.954	74.525	-0.221	0.0	0.2
360	74.951	74.522	-0.224	0.0	0.1
366	74.950	74.520	-0.225	0.0	0.0
372	74.950	74.520	-0.225	0.0	0.0
378	74.950	74.520	-0.225	0.0	0.0
384	74.950	74.520	-0.225	0.0	0.0
390	74.950	74.520	-0.225	0.0	0.0
396	74.950	74.520	-0.225	0.0	0.0
402	74.950	74.520	-0.225	0.0	0.0
408	74.950	74.520	-0.225	0.0	0.0
414	74.950	74.520	-0.225	0.0	0.0
420	74.950	74.520	-0.225	0.0	0.0
426	74.950	74.520	-0.225	0.0	0.0
432	74.950	74.520	-0.225	0.0	0.0
438	74.950	74.520	-0.225	0.0	0.0
444	74.950	74.520	-0.225	0.0	0.0
450	74.950	74.520	-0.225	0.0	0.0
456	74.950	74.520	-0.225	0.0	0.0
462	74.950	74.520	-0.225	0.0	0.0
468	74.950	74.520	-0.225	0.0	0.0
474	74.950	74.520	-0.225	0.0	0.0
480	74.950	74.520	-0.225	0.0	0.0
486	74.950	74.520	-0.225	0.0	0.0
492	74.950	74.520	-0.225	0.0	0.0
498	74.950	74.520	-0.225	0.0	0.0
504	74.950	74.520	-0.225	0.0	0.0
510	74.950	74.520	-0.225	0.0	0.0
516	74.950	74.520	-0.225	0.0	0.0
522	74.950	74.520	-0.225	0.0	0.0
528	74.950	74.520	-0.225	0.0	0.0
534	74.950	74.520	-0.225	0.0	0.0
540	74.950	74.520	-0.225	0.0	0.0

RPS P&D		Page 52
20 Milton Park Abingdon Oxfordshire OX14 4SH	Land of Green Lane Chesterton	
Date 14/04/2016 File JNY8140 SW Network Desi...	Designed by HSS Checked by SF	
Causeway		Network 2014.1.1

Flows and Levels for Pipe 3.000 US/MH 22 (JNY8140 SW NETWORK DESIGN 2015  
09 25.SWS)

360 minute 30 year Winter I+0%  
Average Rainfall Intensity 8.034 mm/hr


<b>Time (mins)</b>	<b>Upstream Level (m)</b>	<b>Downstream Level (m)</b>	<b>Surcharged Depth (m)</b>	<b>Total O/F (l/s)</b>	<b>Pipe Flow (l/s)</b>
546	74.950	74.520	-0.225	0.0	0.0
552	74.950	74.520	-0.225	0.0	0.0
558	74.950	74.520	-0.225	0.0	0.0
564	74.950	74.520	-0.225	0.0	0.0
570	74.950	74.520	-0.225	0.0	0.0
576	74.950	74.520	-0.225	0.0	0.0
582	74.950	74.520	-0.225	0.0	0.0
588	74.950	74.520	-0.225	0.0	0.0
594	74.950	74.520	-0.225	0.0	0.0
600	74.950	74.520	-0.225	0.0	0.0
606	74.950	74.520	-0.225	0.0	0.0
612	74.950	74.520	-0.225	0.0	0.0
618	74.950	74.520	-0.225	0.0	0.0
624	74.950	74.520	-0.225	0.0	0.0
630	74.950	74.520	-0.225	0.0	0.0
636	74.950	74.520	-0.225	0.0	0.0
642	74.950	74.520	-0.225	0.0	0.0
648	74.950	74.520	-0.225	0.0	0.0
654	74.950	74.520	-0.225	0.0	0.0
660	74.950	74.520	-0.225	0.0	0.0
666	74.950	74.520	-0.225	0.0	0.0
672	74.950	74.520	-0.225	0.0	0.0
678	74.950	74.520	-0.225	0.0	0.0
684	74.950	74.520	-0.225	0.0	0.0
690	74.950	74.520	-0.225	0.0	0.0
696	74.950	74.520	-0.225	0.0	0.0
702	74.950	74.520	-0.225	0.0	0.0
708	74.950	74.520	-0.225	0.0	0.0
714	74.950	74.520	-0.225	0.0	0.0
720	74.950	74.520	-0.225	0.0	0.0

RPS P&D		Page 53
20 Milton Park Abingdon Oxfordshire OX14 4SH	Land of Green Lane Chesterton	
Date 14/04/2016 File JNY8140 SW Network Desi...	Designed by HSS Checked by SF	
Causeway	Network 2014.1.1	

Flows and Levels for Pipe 3.001 US/MH 23 (JNY8140 SW NETWORK DESIGN 2015  
09 25.SWS)

360 minute 30 year Winter I+0%  
Average Rainfall Intensity 8.034 mm/hr


Time (mins)	Upstream Level (m)	Downstream Level (m)	Surcharged Depth (m)	Total O/F (l/s)	Pipe Flow (l/s)
6	74.522	74.203	-0.298	0.0	0.1
12	74.525	74.218	-0.295	0.0	0.3
18	74.527	74.229	-0.293	0.0	0.5
24	74.528	74.238	-0.292	0.0	0.6
30	74.529	74.241	-0.291	0.0	0.7
36	74.530	74.242	-0.290	0.0	0.7
42	74.530	74.243	-0.290	0.0	0.7
48	74.530	74.243	-0.290	0.0	0.7
54	74.530	74.244	-0.290	0.0	0.7
60	74.530	74.244	-0.290	0.0	0.7
66	74.530	74.245	-0.290	0.0	0.7
72	74.530	74.246	-0.290	0.0	0.8
78	74.531	74.247	-0.289	0.0	0.8
84	74.532	74.249	-0.288	0.0	0.9
90	74.533	74.251	-0.287	0.0	1.0
96	74.535	74.255	-0.285	0.0	1.1
102	74.537	74.258	-0.283	0.0	1.2
108	74.539	74.263	-0.281	0.0	1.4
114	74.542	74.268	-0.278	0.0	1.6
120	74.545	74.274	-0.275	0.0	1.8
126	74.548	74.280	-0.272	0.0	2.0
132	74.551	74.286	-0.269	0.0	2.3
138	74.552	74.290	-0.268	0.0	2.6
144	74.553	74.295	-0.267	0.0	2.8
150	74.554	74.299	-0.266	0.0	3.1
156	74.555	74.302	-0.265	0.0	3.4
162	74.556	74.305	-0.264	0.0	3.6
168	74.557	74.308	-0.263	0.0	3.9
174	74.558	74.310	-0.262	0.0	4.0
180	74.558	74.312	-0.262	0.0	4.1
186	74.558	74.312	-0.262	0.0	4.1
192	74.558	74.313	-0.262	0.0	4.0
198	74.557	74.316	-0.263	0.0	3.9
204	74.556	74.318	-0.264	0.0	3.7
210	74.555	74.321	-0.265	0.0	3.4
216	74.554	74.324	-0.266	0.0	3.2
222	74.553	74.327	-0.267	0.0	2.9
228	74.552	74.331	-0.268	0.0	2.6
234	74.551	74.334	-0.269	0.0	2.4
240	74.548	74.336	-0.272	0.0	2.1
246	74.545	74.339	-0.275	0.0	1.9
252	74.542	74.342	-0.278	0.0	1.7
258	74.539	74.344	-0.281	0.0	1.4
264	74.537	74.346	-0.283	0.0	1.3
270	74.535	74.348	-0.285	0.0	1.1

RPS P&D		Page 54
20 Milton Park Abingdon Oxfordshire OX14 4SH	Land of Green Lane Chesterton	
Date 14/04/2016 File JNY8140 SW Network Desi...	Designed by HSS Checked by SF	
Causeway		Network 2014.1.1

Flows and Levels for Pipe 3.001 US/MH 23 (JNY8140 SW NETWORK DESIGN 2015  
09 25.SWS)

360 minute 30 year Winter I+0%  
Average Rainfall Intensity 8.034 mm/hr

Time (mins)	Upstream Level (m)	Downstream Level (m)	Surcharged Depth (m)	Total O/F (l/s)	Pipe Flow (l/s)
276	74.533	74.349	-0.287	0.0	1.0
282	74.532	74.351	-0.288	0.0	0.9
288	74.531	74.352	-0.289	0.0	0.8
294	74.530	74.353	-0.290	0.0	0.8
300	74.530	74.354	-0.290	0.0	0.7
306	74.530	74.355	-0.290	0.0	0.7
312	74.530	74.356	-0.290	0.0	0.7
318	74.530	74.357	-0.290	0.0	0.7
324	74.530	74.358	-0.290	0.0	0.7
330	74.530	74.359	-0.290	0.0	0.7
336	74.529	74.360	-0.291	0.0	0.7
342	74.528	74.360	-0.292	0.0	0.6
348	74.527	74.361	-0.293	0.0	0.5
354	74.525	74.360	-0.295	0.0	0.3
360	74.522	74.359	-0.298	0.0	0.1
366	74.520	74.358	-0.300	0.0	0.0
372	74.520	74.356	-0.300	0.0	0.0
378	74.520	74.355	-0.300	0.0	0.0
384	74.520	74.354	-0.300	0.0	0.0
390	74.520	74.353	-0.300	0.0	0.0
396	74.520	74.351	-0.300	0.0	0.0
402	74.520	74.350	-0.300	0.0	0.0
408	74.520	74.349	-0.300	0.0	0.0
414	74.520	74.347	-0.300	0.0	0.0
420	74.520	74.345	-0.300	0.0	0.0
426	74.520	74.343	-0.300	0.0	0.0
432	74.520	74.342	-0.300	0.0	0.0
438	74.520	74.340	-0.300	0.0	0.0
444	74.520	74.338	-0.300	0.0	0.0
450	74.520	74.335	-0.300	0.0	0.0
456	74.520	74.333	-0.300	0.0	0.0
462	74.520	74.331	-0.300	0.0	0.0
468	74.520	74.328	-0.300	0.0	0.0
474	74.520	74.326	-0.300	0.0	0.0
480	74.520	74.323	-0.300	0.0	0.0
486	74.520	74.320	-0.300	0.0	0.0
492	74.520	74.317	-0.300	0.0	0.0
498	74.520	74.314	-0.300	0.0	0.0
504	74.520	74.312	-0.300	0.0	0.0
510	74.520	74.308	-0.300	0.0	0.0
516	74.520	74.306	-0.300	0.0	0.0
522	74.520	74.303	-0.300	0.0	0.0
528	74.520	74.301	-0.300	0.0	0.0
534	74.520	74.297	-0.300	0.0	0.0
540	74.520	74.295	-0.300	0.0	0.0


RPS P&D		Page 55
20 Milton Park Abingdon Oxfordshire OX14 4SH	Land of Green Lane Chesterton	
Date 14/04/2016 File JNY8140 SW Network Desi...	Designed by HSS Checked by SF	
Causeway	Network 2014.1.1	

Flows and Levels for Pipe 3.001 US/MH 23 (JNY8140 SW NETWORK DESIGN 2015  
09 25.SWS)

360 minute 30 year Winter I+0%  
Average Rainfall Intensity 8.034 mm/hr

<b>Time (mins)</b>	<b>Upstream Level (m)</b>	<b>Downstream Level (m)</b>	<b>Surcharged Depth (m)</b>	<b>Total O/F (l/s)</b>	<b>Pipe Flow (l/s)</b>
546	74.520	74.291	-0.300	0.0	0.0
552	74.520	74.289	-0.300	0.0	0.0
558	74.520	74.286	-0.300	0.0	0.0
564	74.520	74.282	-0.300	0.0	0.0
570	74.520	74.279	-0.300	0.0	0.0
576	74.520	74.276	-0.300	0.0	0.0
582	74.520	74.273	-0.300	0.0	0.0
588	74.520	74.270	-0.300	0.0	0.0
594	74.520	74.267	-0.300	0.0	0.0
600	74.520	74.264	-0.300	0.0	0.0
606	74.520	74.261	-0.300	0.0	0.0
612	74.520	74.258	-0.300	0.0	0.0
618	74.520	74.255	-0.300	0.0	0.0
624	74.520	74.252	-0.300	0.0	0.0
630	74.520	74.249	-0.300	0.0	0.0
636	74.520	74.246	-0.300	0.0	0.0
642	74.520	74.243	-0.300	0.0	0.0
648	74.520	74.241	-0.300	0.0	0.0
654	74.520	74.238	-0.300	0.0	0.0
660	74.520	74.235	-0.300	0.0	0.0
666	74.520	74.232	-0.300	0.0	0.0
672	74.520	74.229	-0.300	0.0	0.0
678	74.520	74.226	-0.300	0.0	0.0
684	74.520	74.224	-0.300	0.0	0.0
690	74.520	74.221	-0.300	0.0	0.0
696	74.520	74.218	-0.300	0.0	0.0
702	74.520	74.216	-0.300	0.0	0.0
708	74.520	74.213	-0.300	0.0	0.0
714	74.520	74.210	-0.300	0.0	0.0
720	74.520	74.208	-0.300	0.0	0.0




RPS P&D		Page 56
20 Milton Park Abingdon Oxfordshire OX14 4SH	Land of Green Lane Chesterton	
Date 14/04/2016 File JNY8140 SW Network Desi...	Designed by HSS Checked by SF	
Causeway		Network 2014.1.1

Flows and Levels for Pipe 1.010 US/MH 12 (JNY8140 SW NETWORK DESIGN 2015  
09 25.SWS)

360 minute 30 year Winter I+0%  
Average Rainfall Intensity 8.034 mm/hr


<b>Time (mins)</b>	<b>Upstream Level (m)</b>	<b>Downstream Level (m)</b>	<b>Surcharged Depth (m)</b>	<b>Total O/F (l/s)</b>	<b>Pipe Flow (l/s)</b>
6	74.203	74.151	-0.442	0.0	0.4
12	74.218	74.163	-0.427	0.0	1.1
18	74.229	74.171	-0.416	0.0	1.9
24	74.238	74.178	-0.407	0.0	2.6
30	74.241	74.183	-0.404	0.0	3.0
36	74.242	74.185	-0.403	0.0	3.3
42	74.243	74.187	-0.402	0.0	3.5
48	74.243	74.189	-0.402	0.0	3.6
54	74.244	74.190	-0.401	0.0	3.7
60	74.244	74.190	-0.401	0.0	3.8
66	74.245	74.191	-0.400	0.0	4.0
72	74.246	74.192	-0.399	0.0	4.1
78	74.247	74.193	-0.398	0.0	4.4
84	74.249	74.194	-0.396	0.0	4.7
90	74.251	74.196	-0.394	0.0	5.2
96	74.255	74.198	-0.390	0.0	5.8
102	74.258	74.201	-0.387	0.0	6.5
108	74.263	74.204	-0.382	0.0	7.4
114	74.268	74.209	-0.377	0.0	8.4
120	74.274	74.213	-0.371	0.0	9.6
126	74.280	74.218	-0.365	0.0	10.8
132	74.286	74.224	-0.359	0.0	12.3
138	74.290	74.229	-0.355	0.0	13.7
144	74.295	74.234	-0.350	0.0	15.1
150	74.299	74.238	-0.346	0.0	16.6
156	74.302	74.240	-0.343	0.0	17.8
162	74.305	74.243	-0.340	0.0	18.9
168	74.308	74.245	-0.337	0.0	19.9
174	74.310	74.247	-0.335	0.0	20.7
180	74.312	74.249	-0.333	0.0	21.2
186	74.312	74.257	-0.333	0.0	21.3
192	74.313	74.266	-0.332	0.0	20.9
198	74.316	74.275	-0.329	0.0	20.2
204	74.318	74.284	-0.327	0.0	19.2
210	74.321	74.292	-0.324	0.0	18.2
216	74.324	74.301	-0.321	0.0	17.1
222	74.327	74.309	-0.318	0.0	15.8
228	74.331	74.316	-0.314	0.0	14.6
234	74.334	74.323	-0.311	0.0	13.5
240	74.336	74.328	-0.309	0.0	12.3
246	74.339	74.333	-0.306	0.0	11.2
252	74.342	74.337	-0.303	0.0	10.2
258	74.344	74.340	-0.301	0.0	9.3
264	74.346	74.343	-0.299	0.0	8.5
270	74.348	74.345	-0.297	0.0	7.9

RPS P&D		Page 57
20 Milton Park Abingdon Oxfordshire OX14 4SH	Land of Green Lane Chesterton	
Date 14/04/2016 File JNY8140 SW Network Desi...	Designed by HSS Checked by SF	
Causeway		Network 2014.1.1

Flows and Levels for Pipe 1.010 US/MH 12 (JNY8140 SW NETWORK DESIGN 2015  
09 25.SWS)

360 minute 30 year Winter I+0%  
Average Rainfall Intensity 8.034 mm/hr


<b>Time (mins)</b>	<b>Upstream Level (m)</b>	<b>Downstream Level (m)</b>	<b>Surcharged Depth (m)</b>	<b>Total O/F (l/s)</b>	<b>Pipe Flow (l/s)</b>
276	74.349	74.347	-0.296	0.0	7.3
282	74.351	74.348	-0.294	0.0	6.8
288	74.352	74.350	-0.293	0.0	6.5
294	74.353	74.351	-0.292	0.0	6.3
300	74.354	74.352	-0.291	0.0	6.2
306	74.355	74.353	-0.290	0.0	6.1
312	74.356	74.354	-0.289	0.0	6.1
318	74.357	74.355	-0.288	0.0	6.1
324	74.358	74.356	-0.287	0.0	6.1
330	74.359	74.357	-0.286	0.0	6.1
336	74.360	74.358	-0.285	0.0	5.9
342	74.360	74.358	-0.285	0.0	5.7
348	74.361	74.359	-0.284	0.0	5.2
354	74.360	74.359	-0.285	0.0	4.6
360	74.359	74.358	-0.286	0.0	3.7
366	74.358	74.357	-0.287	0.0	3.1
372	74.356	74.355	-0.289	0.0	2.9
378	74.355	74.354	-0.290	0.0	2.9
384	74.354	74.353	-0.291	0.0	2.9
390	74.353	74.352	-0.292	0.0	2.9
396	74.351	74.350	-0.294	0.0	2.9
402	74.350	74.349	-0.295	0.0	2.9
408	74.349	74.348	-0.296	0.0	2.7
414	74.347	74.346	-0.298	0.0	2.6
420	74.345	74.345	-0.300	0.0	2.4
426	74.343	74.343	-0.302	0.0	2.2
432	74.342	74.341	-0.303	0.0	2.1
438	74.340	74.339	-0.305	0.0	1.9
444	74.338	74.337	-0.307	0.0	1.7
450	74.335	74.335	-0.310	0.0	1.6
456	74.333	74.332	-0.312	0.0	1.4
462	74.331	74.330	-0.314	0.0	1.3
468	74.328	74.328	-0.317	0.0	1.2
474	74.326	74.325	-0.319	0.0	1.1
480	74.323	74.323	-0.322	0.0	1.0
486	74.320	74.320	-0.325	0.0	0.9
492	74.317	74.317	-0.328	0.0	0.8
498	74.314	74.315	-0.331	0.0	0.7
504	74.312	74.312	-0.333	0.0	0.7
510	74.308	74.309	-0.337	0.0	0.6
516	74.306	74.306	-0.339	0.0	0.6
522	74.303	74.303	-0.342	0.0	0.5
528	74.301	74.301	-0.344	0.0	0.5
534	74.297	74.298	-0.348	0.0	0.5
540	74.295	74.295	-0.350	0.0	0.4

RPS P&D		Page 58
20 Milton Park Abingdon Oxfordshire OX14 4SH	Land of Green Lane Chesterton	
Date 14/04/2016 File JNY8140 SW Network Desi...	Designed by HSS Checked by SF	
Causeway	Network 2014.1.1	

Flows and Levels for Pipe 1.010 US/MH 12 (JNY8140 SW NETWORK DESIGN 2015  
09 25.SWS)

360 minute 30 year Winter I+0%  
Average Rainfall Intensity 8.034 mm/hr


<b>Time (mins)</b>	<b>Upstream Level (m)</b>	<b>Downstream Level (m)</b>	<b>Surcharged Depth (m)</b>	<b>Total O/F (l/s)</b>	<b>Pipe Flow (l/s)</b>
546	74.291	74.292	-0.354	0.0	0.5
552	74.289	74.289	-0.356	0.0	0.3
558	74.286	74.286	-0.359	0.0	0.4
564	74.282	74.282	-0.363	0.0	0.3
570	74.279	74.280	-0.366	0.0	0.3
576	74.276	74.276	-0.369	0.0	0.3
582	74.273	74.273	-0.372	0.0	0.3
588	74.270	74.270	-0.375	0.0	0.2
594	74.267	74.267	-0.378	0.0	0.3
600	74.264	74.264	-0.381	0.0	0.2
606	74.261	74.261	-0.384	0.0	0.2
612	74.258	74.258	-0.387	0.0	0.2
618	74.255	74.255	-0.390	0.0	0.2
624	74.252	74.252	-0.393	0.0	0.2
630	74.249	74.249	-0.396	0.0	0.2
636	74.246	74.246	-0.399	0.0	0.1
642	74.243	74.243	-0.402	0.0	0.2
648	74.241	74.241	-0.404	0.0	0.1
654	74.238	74.238	-0.407	0.0	0.2
660	74.235	74.235	-0.410	0.0	0.1
666	74.232	74.232	-0.413	0.0	0.1
672	74.229	74.229	-0.416	0.0	0.1
678	74.226	74.226	-0.419	0.0	0.1
684	74.224	74.223	-0.421	0.0	0.1
690	74.221	74.221	-0.424	0.0	0.1
696	74.218	74.218	-0.427	0.0	0.1
702	74.216	74.215	-0.429	0.0	0.1
708	74.213	74.213	-0.432	0.0	0.1
714	74.210	74.210	-0.435	0.0	0.1
720	74.208	74.207	-0.437	0.0	0.1

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20 Milton Park Abingdon Oxfordshire OX14 4SH	Land of Green Lane Chesterton	
Date 14/04/2016 File JNY8140 SW Network Desi...	Designed by HSS Checked by SF	
Causeway		Network 2014.1.1

Flows and Levels for Pipe 1.011 US/MH 13 (JNY8140 SW NETWORK DESIGN 2015  
09 25.SWS)

360 minute 30 year Winter I+0%  
Average Rainfall Intensity 8.034 mm/hr


Time (mins)	Upstream Level (m)	Downstream Level (m)	Surcharged Depth (m)	Total O/F (l/s)	Pipe Flow (l/s)
6	74.151	74.045	-0.444	0.0	0.3
12	74.163	74.046	-0.432	0.0	1.1
18	74.171	74.048	-0.424	0.0	1.9
24	74.178	74.050	-0.417	0.0	2.5
30	74.183	74.053	-0.412	0.0	3.0
36	74.185	74.055	-0.410	0.0	3.3
42	74.187	74.058	-0.408	0.0	3.5
48	74.189	74.061	-0.406	0.0	3.6
54	74.190	74.064	-0.405	0.0	3.7
60	74.190	74.067	-0.405	0.0	3.8
66	74.191	74.071	-0.404	0.0	3.9
72	74.192	74.074	-0.403	0.0	4.1
78	74.193	74.077	-0.402	0.0	4.3
84	74.194	74.081	-0.401	0.0	4.7
90	74.196	74.084	-0.399	0.0	5.1
96	74.198	74.088	-0.397	0.0	5.6
102	74.201	74.093	-0.394	0.0	6.4
108	74.204	74.098	-0.391	0.0	7.2
114	74.209	74.104	-0.386	0.0	8.2
120	74.213	74.110	-0.382	0.0	9.4
126	74.218	74.118	-0.377	0.0	10.6
132	74.224	74.126	-0.371	0.0	12.0
138	74.229	74.136	-0.366	0.0	13.4
144	74.234	74.148	-0.361	0.0	15.1
150	74.238	74.160	-0.357	0.0	16.6
156	74.240	74.172	-0.355	0.0	17.8
162	74.243	74.186	-0.352	0.0	18.9
168	74.245	74.200	-0.350	0.0	19.9
174	74.247	74.214	-0.348	0.0	20.7
180	74.249	74.228	-0.346	0.0	21.2
186	74.257	74.241	-0.338	0.0	21.2
192	74.266	74.254	-0.329	0.0	20.7
198	74.275	74.267	-0.320	0.0	20.0
204	74.284	74.278	-0.311	0.0	19.0
210	74.292	74.288	-0.303	0.0	18.0
216	74.301	74.298	-0.294	0.0	16.9
222	74.309	74.306	-0.286	0.0	15.6
228	74.316	74.314	-0.279	0.0	14.5
234	74.323	74.320	-0.272	0.0	13.3
240	74.328	74.326	-0.267	0.0	12.1
246	74.333	74.331	-0.262	0.0	11.1
252	74.337	74.335	-0.258	0.0	10.1
258	74.340	74.338	-0.255	0.0	9.2
264	74.343	74.341	-0.252	0.0	8.4
270	74.345	74.343	-0.250	0.0	7.8

RPS P&D		Page 60
20 Milton Park Abingdon Oxfordshire OX14 4SH	Land of Green Lane Chesterton	
Date 14/04/2016 File JNY8140 SW Network Desi...	Designed by HSS Checked by SF	
Causeway		Network 2014.1.1

Flows and Levels for Pipe 1.011 US/MH 13 (JNY8140 SW NETWORK DESIGN 2015  
09 25.SWS)

360 minute 30 year Winter I+0%  
Average Rainfall Intensity 8.034 mm/hr


<b>Time (mins)</b>	<b>Upstream Level (m)</b>	<b>Downstream Level (m)</b>	<b>Surcharged Depth (m)</b>	<b>Total O/F (l/s)</b>	<b>Pipe Flow (l/s)</b>
276	74.347	74.345	-0.248	0.0	7.2
282	74.348	74.347	-0.247	0.0	6.8
288	74.350	74.348	-0.245	0.0	6.5
294	74.351	74.349	-0.244	0.0	6.3
300	74.352	74.351	-0.243	0.0	6.2
306	74.353	74.352	-0.242	0.0	6.1
312	74.354	74.353	-0.241	0.0	6.1
318	74.355	74.354	-0.240	0.0	6.1
324	74.356	74.355	-0.239	0.0	6.1
330	74.357	74.356	-0.238	0.0	6.1
336	74.358	74.356	-0.237	0.0	5.9
342	74.358	74.357	-0.237	0.0	5.7
348	74.359	74.358	-0.236	0.0	5.2
354	74.359	74.358	-0.236	0.0	4.6
360	74.358	74.357	-0.237	0.0	3.7
366	74.357	74.356	-0.238	0.0	3.1
372	74.355	74.355	-0.240	0.0	3.0
378	74.354	74.353	-0.241	0.0	3.0
384	74.353	74.352	-0.242	0.0	3.0
390	74.352	74.351	-0.243	0.0	3.0
396	74.350	74.350	-0.245	0.0	2.9
402	74.349	74.348	-0.246	0.0	2.9
408	74.348	74.347	-0.247	0.0	2.8
414	74.346	74.346	-0.249	0.0	2.6
420	74.345	74.344	-0.250	0.0	2.4
426	74.343	74.342	-0.252	0.0	2.3
432	74.341	74.341	-0.254	0.0	2.1
438	74.339	74.339	-0.256	0.0	2.0
444	74.337	74.337	-0.258	0.0	1.8
450	74.335	74.334	-0.260	0.0	1.6
456	74.332	74.332	-0.263	0.0	1.4
462	74.330	74.330	-0.265	0.0	1.3
468	74.328	74.328	-0.267	0.0	1.2
474	74.325	74.325	-0.270	0.0	1.1
480	74.323	74.323	-0.272	0.0	1.0
486	74.320	74.320	-0.275	0.0	1.0
492	74.317	74.317	-0.278	0.0	0.9
498	74.315	74.314	-0.280	0.0	0.8
504	74.312	74.312	-0.283	0.0	0.8
510	74.309	74.309	-0.286	0.0	0.7
516	74.306	74.306	-0.289	0.0	0.6
522	74.303	74.303	-0.292	0.0	0.6
528	74.301	74.301	-0.294	0.0	0.5
534	74.298	74.298	-0.297	0.0	0.5
540	74.295	74.295	-0.300	0.0	0.5

RPS P&D		Page 61
20 Milton Park Abingdon Oxfordshire OX14 4SH	Land of Green Lane Chesterton	
Date 14/04/2016 File JNY8140 SW Network Desi...	Designed by HSS Checked by SF	
Causeway		Network 2014.1.1

Flows and Levels for Pipe 1.011 US/MH 13 (JNY8140 SW NETWORK DESIGN 2015  
09 25.SWS)

360 minute 30 year Winter I+0%  
Average Rainfall Intensity 8.034 mm/hr


<b>Time (mins)</b>	<b>Upstream Level (m)</b>	<b>Downstream Level (m)</b>	<b>Surcharged Depth (m)</b>	<b>Total O/F (l/s)</b>	<b>Pipe Flow (l/s)</b>
546	74.292	74.292	-0.303	0.0	0.5
552	74.289	74.289	-0.306	0.0	0.5
558	74.286	74.286	-0.309	0.0	0.4
564	74.282	74.283	-0.313	0.0	0.4
570	74.280	74.280	-0.315	0.0	0.3
576	74.276	74.277	-0.319	0.0	0.4
582	74.273	74.274	-0.322	0.0	0.3
588	74.270	74.270	-0.325	0.0	0.3
594	74.267	74.267	-0.328	0.0	0.3
600	74.264	74.264	-0.331	0.0	0.3
606	74.261	74.261	-0.334	0.0	0.3
612	74.258	74.258	-0.337	0.0	0.3
618	74.255	74.255	-0.340	0.0	0.3
624	74.252	74.252	-0.343	0.0	0.2
630	74.249	74.249	-0.346	0.0	0.2
636	74.246	74.246	-0.349	0.0	0.2
642	74.243	74.244	-0.352	0.0	0.2
648	74.241	74.241	-0.354	0.0	0.2
654	74.238	74.238	-0.357	0.0	0.2
660	74.235	74.235	-0.360	0.0	0.2
666	74.232	74.232	-0.363	0.0	0.2
672	74.229	74.229	-0.366	0.0	0.1
678	74.226	74.227	-0.369	0.0	0.2
684	74.223	74.224	-0.372	0.0	0.1
690	74.221	74.221	-0.374	0.0	0.1
696	74.218	74.218	-0.377	0.0	0.1
702	74.215	74.216	-0.380	0.0	0.1
708	74.213	74.213	-0.382	0.0	0.1
714	74.210	74.210	-0.385	0.0	0.1
720	74.207	74.208	-0.388	0.0	0.1

RPS P&D		Page 62
20 Milton Park Abingdon Oxfordshire OX14 4SH	Land of Green Lane Chesterton	
Date 14/04/2016 File JNY8140 SW Network Desi...	Designed by HSS Checked by SF	
Causeway		Network 2014.1.1

Flows and Levels for Pipe 1.012 US/MH 15 (JNY8140 SW NETWORK DESIGN 2015  
09 25.SWS)

360 minute 30 year Winter I+0%  
Average Rainfall Intensity 8.034 mm/hr

<b>Time (mins)</b>	<b>Upstream Level (m)</b>	<b>Downstream Level (m)</b>	<b>Surcharged Depth (m)</b>	<b>Total O/F (l/s)</b>	<b>Pipe Flow (l/s)</b>
6	74.045	74.025	-0.450	0.0	0.0
12	74.046	74.025	-0.449	0.0	0.0
18	74.048	74.025	-0.447	0.0	0.0
24	74.050	74.025	-0.445	0.0	0.0
30	74.053	74.026	-0.442	0.0	0.0
36	74.055	74.026	-0.440	0.0	0.0
42	74.058	74.027	-0.437	0.0	0.1
48	74.061	74.028	-0.434	0.0	0.1
54	74.064	74.029	-0.431	0.0	0.2
60	74.067	74.031	-0.428	0.0	0.2
66	74.071	74.033	-0.424	0.0	0.3
72	74.074	74.035	-0.421	0.0	0.4
78	74.077	74.037	-0.418	0.0	0.5
84	74.081	74.040	-0.414	0.0	0.6
90	74.084	74.043	-0.411	0.0	0.7
96	74.088	74.047	-0.407	0.0	0.9
102	74.093	74.050	-0.402	0.0	1.1
108	74.098	74.051	-0.397	0.0	1.2
114	74.104	74.052	-0.391	0.0	1.3
120	74.110	74.053	-0.385	0.0	1.5
126	74.118	74.054	-0.377	0.0	1.6
132	74.126	74.055	-0.369	0.0	1.8
138	74.136	74.057	-0.359	0.0	2.0
144	74.148	74.059	-0.347	0.0	2.2
150	74.160	74.061	-0.335	0.0	2.5
156	74.172	74.063	-0.323	0.0	2.7
162	74.186	74.065	-0.309	0.0	2.9
168	74.200	74.067	-0.295	0.0	3.1
174	74.214	74.069	-0.281	0.0	3.3
180	74.228	74.070	-0.267	0.0	3.5
186	74.241	74.072	-0.254	0.0	3.8
192	74.254	74.073	-0.241	0.0	4.0
198	74.267	74.074	-0.228	0.0	4.2
204	74.278	74.075	-0.217	0.0	4.4
210	74.288	74.075	-0.207	0.0	4.5
216	74.298	74.075	-0.197	0.0	4.5
222	74.306	74.075	-0.189	0.0	4.5
228	74.314	74.075	-0.181	0.0	4.5
234	74.320	74.076	-0.175	0.0	4.6
240	74.326	74.076	-0.169	0.0	4.6
246	74.331	74.076	-0.164	0.0	4.6
252	74.335	74.076	-0.160	0.0	4.6
258	74.338	74.076	-0.157	0.0	4.6
264	74.341	74.076	-0.154	0.0	4.6
270	74.343	74.076	-0.152	0.0	4.6


RPS P&D		Page 63
20 Milton Park Abingdon Oxfordshire OX14 4SH	Land of Green Lane Chesterton	
Date 14/04/2016 File JNY8140 SW Network Desi...	Designed by HSS Checked by SF	
Causeway		Network 2014.1.1

Flows and Levels for Pipe 1.012 US/MH 15 (JNY8140 SW NETWORK DESIGN 2015  
09 25.SWS)

360 minute 30 year Winter I+0%  
Average Rainfall Intensity 8.034 mm/hr

<b>Time (mins)</b>	<b>Upstream Level (m)</b>	<b>Downstream Level (m)</b>	<b>Surcharged Depth (m)</b>	<b>Total O/F (l/s)</b>	<b>Pipe Flow (l/s)</b>
276	74.345	74.076	-0.150	0.0	4.7
282	74.347	74.076	-0.148	0.0	4.7
288	74.348	74.076	-0.147	0.0	4.7
294	74.349	74.076	-0.146	0.0	4.7
300	74.351	74.076	-0.144	0.0	4.7
306	74.352	74.076	-0.143	0.0	4.7
312	74.353	74.076	-0.142	0.0	4.7
318	74.354	74.076	-0.141	0.0	4.7
324	74.355	74.076	-0.140	0.0	4.7
330	74.356	74.076	-0.139	0.0	4.7
336	74.356	74.076	-0.139	0.0	4.7
342	74.357	74.076	-0.138	0.0	4.7
348	74.358	74.076	-0.137	0.0	4.7
354	74.358	74.076	-0.137	0.0	4.7
360	74.357	74.076	-0.138	0.0	4.7
366	74.356	74.076	-0.139	0.0	4.7
372	74.355	74.076	-0.140	0.0	4.7
378	74.353	74.076	-0.142	0.0	4.7
384	74.352	74.076	-0.143	0.0	4.7
390	74.351	74.076	-0.144	0.0	4.7
396	74.350	74.076	-0.145	0.0	4.7
402	74.348	74.076	-0.147	0.0	4.7
408	74.347	74.076	-0.148	0.0	4.7
414	74.346	74.076	-0.149	0.0	4.7
420	74.344	74.076	-0.151	0.0	4.7
426	74.342	74.076	-0.153	0.0	4.6
432	74.341	74.076	-0.154	0.0	4.6
438	74.339	74.076	-0.156	0.0	4.6
444	74.337	74.076	-0.158	0.0	4.6
450	74.334	74.076	-0.161	0.0	4.6
456	74.332	74.076	-0.163	0.0	4.6
462	74.330	74.076	-0.165	0.0	4.6
468	74.328	74.076	-0.167	0.0	4.6
474	74.325	74.076	-0.170	0.0	4.6
480	74.323	74.076	-0.172	0.0	4.6
486	74.320	74.076	-0.175	0.0	4.6
492	74.317	74.076	-0.178	0.0	4.6
498	74.314	74.075	-0.181	0.0	4.6
504	74.312	74.075	-0.183	0.0	4.5
510	74.309	74.075	-0.186	0.0	4.5
516	74.306	74.075	-0.189	0.0	4.5
522	74.303	74.075	-0.192	0.0	4.5
528	74.301	74.075	-0.194	0.0	4.5
534	74.298	74.075	-0.197	0.0	4.5
540	74.295	74.075	-0.200	0.0	4.5




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20 Milton Park Abingdon Oxfordshire OX14 4SH	Land of Green Lane Chesterton	
Date 14/04/2016 File JNY8140 SW Network Desi...	Designed by HSS Checked by SF	
Causeway		Network 2014.1.1

Flows and Levels for Pipe 1.012 US/MH 15 (JNY8140 SW NETWORK DESIGN 2015  
09 25.SWS)

360 minute 30 year Winter I+0%  
Average Rainfall Intensity 8.034 mm/hr


Time (mins)	Upstream Level (m)	Downstream Level (m)	Surcharged Depth (m)	Total O/F (l/s)	Pipe Flow (l/s)
546	74.292	74.075	-0.203	0.0	4.5
552	74.289	74.075	-0.206	0.0	4.5
558	74.286	74.075	-0.209	0.0	4.5
564	74.283	74.075	-0.212	0.0	4.5
570	74.280	74.075	-0.215	0.0	4.4
576	74.277	74.075	-0.218	0.0	4.4
582	74.274	74.075	-0.221	0.0	4.4
588	74.270	74.075	-0.225	0.0	4.4
594	74.267	74.074	-0.228	0.0	4.3
600	74.264	74.074	-0.231	0.0	4.3
606	74.261	74.074	-0.234	0.0	4.2
612	74.258	74.073	-0.237	0.0	4.2
618	74.255	74.073	-0.240	0.0	4.1
624	74.252	74.073	-0.243	0.0	4.1
630	74.249	74.073	-0.246	0.0	4.0
636	74.246	74.072	-0.249	0.0	4.0
642	74.244	74.072	-0.251	0.0	3.9
648	74.241	74.072	-0.254	0.0	3.9
654	74.238	74.072	-0.257	0.0	3.8
660	74.235	74.071	-0.260	0.0	3.8
666	74.232	74.071	-0.263	0.0	3.7
672	74.229	74.071	-0.266	0.0	3.7
678	74.227	74.071	-0.268	0.0	3.6
684	74.224	74.070	-0.271	0.0	3.6
690	74.221	74.070	-0.274	0.0	3.6
696	74.218	74.070	-0.277	0.0	3.5
702	74.216	74.070	-0.279	0.0	3.5
708	74.213	74.069	-0.282	0.0	3.4
714	74.210	74.069	-0.285	0.0	3.4
720	74.208	74.069	-0.287	0.0	3.3

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20 Milton Park Abingdon Oxfordshire OX14 4SH	Land of Green Lane Chesterton	
Date 14/04/2016 File JNY8140 SW Network Desi...	Designed by HSS Checked by SF	
Causeway	Network 2014.1.1	

Flows and Levels for Pipe 1.013 US/MH 16 (JNY8140 SW NETWORK DESIGN 2015  
09 25.SWS)


360 minute 30 year Winter I+0%  
Average Rainfall Intensity 8.034 mm/hr

<b>Time (mins)</b>	<b>Upstream Level (m)</b>	<b>Downstream Level (m)</b>	<b>Surcharged Depth (m)</b>	<b>Total O/F (l/s)</b>	<b>Pipe Flow (l/s)</b>
6	74.025	73.673	-0.225	0.0	0.0
12	74.025	73.673	-0.225	0.0	0.0
18	74.025	73.673	-0.225	0.0	0.0
24	74.025	73.673	-0.225	0.0	0.0
30	74.026	73.673	-0.224	0.0	0.0
36	74.026	73.673	-0.224	0.0	0.0
42	74.027	73.673	-0.223	0.0	0.1
48	74.028	73.673	-0.222	0.0	0.1
54	74.029	73.673	-0.221	0.0	0.1
60	74.031	73.673	-0.219	0.0	0.2
66	74.033	73.673	-0.217	0.0	0.3
72	74.035	73.673	-0.215	0.0	0.3
78	74.037	73.673	-0.213	0.0	0.4
84	74.040	73.673	-0.210	0.0	0.5
90	74.043	73.673	-0.207	0.0	0.6
96	74.047	73.673	-0.203	0.0	0.7
102	74.050	73.673	-0.200	0.0	1.0
108	74.051	73.673	-0.199	0.0	1.1
114	74.052	73.673	-0.198	0.0	1.2
120	74.053	73.673	-0.197	0.0	1.4
126	74.054	73.673	-0.196	0.0	1.5
132	74.055	73.673	-0.195	0.0	1.7
138	74.057	73.673	-0.193	0.0	1.9
144	74.059	73.673	-0.191	0.0	2.1
150	74.061	73.673	-0.189	0.0	2.3
156	74.063	73.673	-0.187	0.0	2.6
162	74.065	73.673	-0.185	0.0	2.8
168	74.067	73.673	-0.183	0.0	3.0
174	74.069	73.673	-0.181	0.0	3.2
180	74.070	73.673	-0.180	0.0	3.4
186	74.072	73.673	-0.178	0.0	3.7
192	74.073	73.673	-0.177	0.0	3.9
198	74.074	73.673	-0.176	0.0	4.1
204	74.075	73.673	-0.175	0.0	4.3
210	74.075	73.673	-0.175	0.0	4.4
216	74.075	73.673	-0.175	0.0	4.5
222	74.075	73.673	-0.175	0.0	4.5
228	74.075	73.673	-0.175	0.0	4.5
234	74.076	73.673	-0.174	0.0	4.6
240	74.076	73.673	-0.174	0.0	4.6
246	74.076	73.673	-0.174	0.0	4.6
252	74.076	73.673	-0.174	0.0	4.6
258	74.076	73.673	-0.174	0.0	4.6
264	74.076	73.673	-0.174	0.0	4.6
270	74.076	73.673	-0.174	0.0	4.6

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20 Milton Park Abingdon Oxfordshire OX14 4SH	Land of Green Lane Chesterton	
Date 14/04/2016 File JNY8140 SW Network Desi...	Designed by HSS Checked by SF	
Causeway		Network 2014.1.1

Flows and Levels for Pipe 1.013 US/MH 16 (JNY8140 SW NETWORK DESIGN 2015  
09 25.SWS)  
360 minute 30 year Winter I+0%  
Average Rainfall Intensity 8.034 mm/hr

Time (mins)	Upstream Level (m)	Downstream Level (m)	Surcharged Depth (m)	Total O/F (l/s)	Pipe Flow (l/s)
276	74.076	73.673	-0.174	0.0	4.7
282	74.076	73.673	-0.174	0.0	4.7
288	74.076	73.673	-0.174	0.0	4.7
294	74.076	73.673	-0.174	0.0	4.7
300	74.076	73.673	-0.174	0.0	4.7
306	74.076	73.673	-0.174	0.0	4.7
312	74.076	73.673	-0.174	0.0	4.7
318	74.076	73.673	-0.174	0.0	4.7
324	74.076	73.673	-0.174	0.0	4.7
330	74.076	73.673	-0.174	0.0	4.7
336	74.076	73.673	-0.174	0.0	4.7
342	74.076	73.673	-0.174	0.0	4.7
348	74.076	73.673	-0.174	0.0	4.7
354	74.076	73.673	-0.174	0.0	4.7
360	74.076	73.673	-0.174	0.0	4.7
366	74.076	73.673	-0.174	0.0	4.7
372	74.076	73.673	-0.174	0.0	4.7
378	74.076	73.673	-0.174	0.0	4.7
384	74.076	73.673	-0.174	0.0	4.7
390	74.076	73.673	-0.174	0.0	4.7
396	74.076	73.673	-0.174	0.0	4.7
402	74.076	73.673	-0.174	0.0	4.7
408	74.076	73.673	-0.174	0.0	4.7
414	74.076	73.673	-0.174	0.0	4.7
420	74.076	73.673	-0.174	0.0	4.7
426	74.076	73.673	-0.174	0.0	4.7
432	74.076	73.673	-0.174	0.0	4.6
438	74.076	73.673	-0.174	0.0	4.6
444	74.076	73.673	-0.174	0.0	4.6
450	74.076	73.673	-0.174	0.0	4.6
456	74.076	73.673	-0.174	0.0	4.6
462	74.076	73.673	-0.174	0.0	4.6
468	74.076	73.673	-0.174	0.0	4.6
474	74.076	73.673	-0.174	0.0	4.6
480	74.076	73.673	-0.174	0.0	4.6
486	74.076	73.673	-0.174	0.0	4.6
492	74.076	73.673	-0.174	0.0	4.6
498	74.075	73.673	-0.175	0.0	4.6
504	74.075	73.673	-0.175	0.0	4.6
510	74.075	73.673	-0.175	0.0	4.5
516	74.075	73.673	-0.175	0.0	4.5
522	74.075	73.673	-0.175	0.0	4.5
528	74.075	73.673	-0.175	0.0	4.5
534	74.075	73.673	-0.175	0.0	4.5
540	74.075	73.673	-0.175	0.0	4.5

RPS P&D		Page 67
20 Milton Park Abingdon Oxfordshire OX14 4SH	Land of Green Lane Chesterton	
Date 14/04/2016 File JNY8140 SW Network Desi...	Designed by HSS Checked by SF	
Causeway		Network 2014.1.1

Flows and Levels for Pipe 1.013 US/MH 16 (JNY8140 SW NETWORK DESIGN 2015  
09 25.SWS)

360 minute 30 year Winter I+0%  
Average Rainfall Intensity 8.034 mm/hr

<b>Time (mins)</b>	<b>Upstream Level (m)</b>	<b>Downstream Level (m)</b>	<b>Surcharged Depth (m)</b>	<b>Total O/F (l/s)</b>	<b>Pipe Flow (l/s)</b>
546	74.075	73.673	-0.175	0.0	4.5
552	74.075	73.673	-0.175	0.0	4.5
558	74.075	73.673	-0.175	0.0	4.5
564	74.075	73.673	-0.175	0.0	4.5
570	74.075	73.673	-0.175	0.0	4.4
576	74.075	73.673	-0.175	0.0	4.4
582	74.075	73.673	-0.175	0.0	4.4
588	74.075	73.673	-0.175	0.0	4.4
594	74.074	73.673	-0.176	0.0	4.3
600	74.074	73.673	-0.176	0.0	4.3
606	74.074	73.673	-0.176	0.0	4.2
612	74.073	73.673	-0.177	0.0	4.2
618	74.073	73.673	-0.177	0.0	4.1
624	74.073	73.673	-0.177	0.0	4.1
630	74.073	73.673	-0.177	0.0	4.0
636	74.072	73.673	-0.178	0.0	4.0
642	74.072	73.673	-0.178	0.0	3.9
648	74.072	73.673	-0.178	0.0	3.9
654	74.072	73.673	-0.178	0.0	3.9
660	74.071	73.673	-0.179	0.0	3.8
666	74.071	73.673	-0.179	0.0	3.8
672	74.071	73.673	-0.179	0.0	3.7
678	74.071	73.673	-0.179	0.0	3.7
684	74.070	73.673	-0.180	0.0	3.6
690	74.070	73.673	-0.180	0.0	3.6
696	74.070	73.673	-0.180	0.0	3.5
702	74.070	73.673	-0.180	0.0	3.5
708	74.069	73.673	-0.181	0.0	3.4
714	74.069	73.673	-0.181	0.0	3.4
720	74.069	73.673	-0.181	0.0	3.4