


RPS P&D		Page 0
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 (m³) = 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

RPS P&D		Page 1
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

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


RPS P&D		Page 2
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



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

150

RPS P&D		Page 3
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

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

RPS P&D		Page 4
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



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		

RPS P&D		Page 5
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

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


RPS P&D		Page 6
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

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		

RPS P&D		Page 7
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	

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



RPS P&D		Page 8
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 100 year Winter I+30%  
Average Rainfall Intensity 13.543 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	76.505	-0.224	0.0	0.1
12	76.904	76.515	-0.221	0.0	0.2
18	76.906	76.523	-0.219	0.0	0.3
24	76.907	76.524	-0.218	0.0	0.4
30	76.908	76.525	-0.217	0.0	0.5
36	76.909	76.526	-0.216	0.0	0.5
42	76.909	76.526	-0.216	0.0	0.5
48	76.909	76.526	-0.216	0.0	0.5
54	76.909	76.526	-0.216	0.0	0.5
60	76.909	76.526	-0.216	0.0	0.5
66	76.909	76.526	-0.216	0.0	0.5
72	76.909	76.526	-0.216	0.0	0.5
78	76.910	76.527	-0.215	0.0	0.5
84	76.911	76.528	-0.214	0.0	0.6
90	76.912	76.529	-0.213	0.0	0.6
96	76.913	76.531	-0.212	0.0	0.7
102	76.915	76.533	-0.210	0.0	0.8
108	76.917	76.536	-0.208	0.0	0.9
114	76.919	76.539	-0.206	0.0	1.1
120	76.922	76.542	-0.203	0.0	1.2
126	76.923	76.545	-0.202	0.0	1.4
132	76.924	76.547	-0.201	0.0	1.6
138	76.925	76.550	-0.200	0.0	1.7
144	76.926	76.552	-0.199	0.0	1.9
150	76.927	76.555	-0.198	0.0	2.1
156	76.928	76.557	-0.197	0.0	2.3
162	76.929	76.559	-0.196	0.0	2.4
168	76.930	76.561	-0.195	0.0	2.6
174	76.931	76.562	-0.194	0.0	2.7
180	76.931	76.563	-0.194	0.0	2.8
186	76.931	76.563	-0.194	0.0	2.8
192	76.931	76.562	-0.194	0.0	2.7
198	76.930	76.561	-0.195	0.0	2.6
204	76.929	76.559	-0.196	0.0	2.5
210	76.928	76.557	-0.197	0.0	2.3
216	76.927	76.555	-0.198	0.0	2.1
222	76.926	76.552	-0.199	0.0	1.9
228	76.925	76.550	-0.200	0.0	1.8
234	76.924	76.547	-0.201	0.0	1.6
240	76.923	76.545	-0.202	0.0	1.4
246	76.922	76.542	-0.203	0.0	1.2
252	76.919	76.539	-0.206	0.0	1.1
258	76.917	76.536	-0.208	0.0	1.0
264	76.915	76.533	-0.210	0.0	0.8
270	76.913	76.531	-0.212	0.0	0.7

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 100 year Winter I+30%  
Average Rainfall Intensity 13.543 mm/hr

Time (mins)	Upstream Level (m)	Downstream Level (m)	Surcharged Depth (m)	Total O/F (l/s)	Pipe Flow (l/s)
276	76.912	76.529	-0.213	0.0	0.7
282	76.911	76.528	-0.214	0.0	0.6
288	76.910	76.527	-0.215	0.0	0.6
294	76.909	76.526	-0.216	0.0	0.5
300	76.909	76.526	-0.216	0.0	0.5
306	76.909	76.526	-0.216	0.0	0.5
312	76.909	76.526	-0.216	0.0	0.5
318	76.909	76.526	-0.216	0.0	0.5
324	76.909	76.526	-0.216	0.0	0.5
330	76.909	76.526	-0.216	0.0	0.5
336	76.908	76.525	-0.217	0.0	0.5
342	76.907	76.524	-0.218	0.0	0.4
348	76.906	76.523	-0.219	0.0	0.3
354	76.904	76.515	-0.221	0.0	0.2
360	76.901	76.505	-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 100 year Winter I+30%  
Average Rainfall Intensity 13.543 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 100 year Winter I+30%  
Average Rainfall Intensity 13.543 mm/hr

Time (mins)	Upstream Level (m)	Downstream Level (m)	Surcharged Depth (m)	Total O/F (l/s)	Pipe Flow (l/s)
6	76.505	76.070	-0.220	0.0	0.2
12	76.515	76.079	-0.210	0.0	0.5
18	76.523	76.086	-0.202	0.0	0.8
24	76.524	76.091	-0.201	0.0	1.1
30	76.525	76.094	-0.200	0.0	1.3
36	76.526	76.095	-0.199	0.0	1.3
42	76.526	76.095	-0.199	0.0	1.4
48	76.526	76.095	-0.199	0.0	1.4
54	76.526	76.095	-0.199	0.0	1.4
60	76.526	76.095	-0.199	0.0	1.4
66	76.526	76.096	-0.199	0.0	1.4
72	76.526	76.096	-0.199	0.0	1.4
78	76.527	76.097	-0.198	0.0	1.5
84	76.528	76.097	-0.197	0.0	1.6
90	76.529	76.099	-0.196	0.0	1.8
96	76.531	76.100	-0.194	0.0	2.0
102	76.533	76.102	-0.192	0.0	2.3
108	76.536	76.104	-0.189	0.0	2.6
114	76.539	76.107	-0.186	0.0	3.0
120	76.542	76.110	-0.183	0.0	3.4
126	76.545	76.113	-0.180	0.0	3.8
132	76.547	76.117	-0.178	0.0	4.3
138	76.550	76.120	-0.175	0.0	4.8
144	76.552	76.124	-0.173	0.0	5.3
150	76.555	76.127	-0.170	0.0	5.8
156	76.557	76.129	-0.168	0.0	6.3
162	76.559	76.131	-0.166	0.0	6.8
168	76.561	76.133	-0.164	0.0	7.2
174	76.562	76.134	-0.163	0.0	7.5
180	76.563	76.135	-0.162	0.0	7.8
186	76.563	76.135	-0.162	0.0	7.8
192	76.562	76.134	-0.163	0.0	7.6
198	76.561	76.133	-0.164	0.0	7.3
204	76.559	76.131	-0.166	0.0	6.9
210	76.557	76.129	-0.168	0.0	6.5
216	76.555	76.127	-0.170	0.0	6.0
222	76.552	76.124	-0.173	0.0	5.5
228	76.550	76.120	-0.175	0.0	5.0
234	76.547	76.117	-0.178	0.0	4.5
240	76.545	76.113	-0.180	0.0	4.0
246	76.542	76.110	-0.183	0.0	3.5
252	76.539	76.107	-0.186	0.0	3.1
258	76.536	76.104	-0.189	0.0	2.7
264	76.533	76.102	-0.192	0.0	2.4
270	76.531	76.100	-0.194	0.0	2.1

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 100 year Winter I+30%  
Average Rainfall Intensity 13.543 mm/hr

Time (mins)	Upstream Level (m)	Downstream Level (m)	Surcharged Depth (m)	Total O/F (l/s)	Pipe Flow (l/s)
276	76.529	76.099	-0.196	0.0	1.9
282	76.528	76.097	-0.197	0.0	1.7
288	76.527	76.097	-0.198	0.0	1.6
294	76.526	76.096	-0.199	0.0	1.5
300	76.526	76.096	-0.199	0.0	1.4
306	76.526	76.095	-0.199	0.0	1.4
312	76.526	76.095	-0.199	0.0	1.4
318	76.526	76.095	-0.199	0.0	1.4
324	76.526	76.095	-0.199	0.0	1.4
330	76.526	76.095	-0.199	0.0	1.4
336	76.525	76.094	-0.200	0.0	1.3
342	76.524	76.091	-0.201	0.0	1.2
348	76.523	76.086	-0.202	0.0	1.0
354	76.515	76.079	-0.210	0.0	0.7
360	76.505	76.070	-0.220	0.0	0.3
366	76.500	76.065	-0.225	0.0	0.1
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 100 year Winter I+30%  
Average Rainfall Intensity 13.543 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 100 year Winter I+30%  
Average Rainfall Intensity 13.543 mm/hr


Time (mins)	Upstream Level (m)	Downstream Level (m)	Surcharged Depth (m)	Total O/F (l/s)	Pipe Flow (l/s)
6	76.070	75.870	-0.295	0.0	0.2
12	76.079	75.879	-0.286	0.0	0.7
18	76.086	75.886	-0.279	0.0	1.1
24	76.091	75.891	-0.274	0.0	1.5
30	76.094	75.894	-0.271	0.0	1.7
36	76.095	75.895	-0.270	0.0	1.8
42	76.095	75.895	-0.270	0.0	1.9
48	76.095	75.895	-0.270	0.0	1.9
54	76.095	75.895	-0.270	0.0	1.9
60	76.095	75.895	-0.270	0.0	1.9
66	76.096	75.895	-0.269	0.0	1.9
72	76.096	75.896	-0.269	0.0	2.0
78	76.097	75.896	-0.268	0.0	2.1
84	76.097	75.897	-0.268	0.0	2.2
90	76.099	75.898	-0.266	0.0	2.4
96	76.100	75.900	-0.265	0.0	2.7
102	76.102	75.902	-0.263	0.0	3.1
108	76.104	75.904	-0.261	0.0	3.5
114	76.107	75.907	-0.258	0.0	4.0
120	76.110	75.910	-0.255	0.0	4.6
126	76.113	75.913	-0.252	0.0	5.2
132	76.117	75.917	-0.248	0.0	5.9
138	76.120	75.920	-0.245	0.0	6.5
144	76.124	75.924	-0.241	0.0	7.2
150	76.127	75.926	-0.238	0.0	7.9
156	76.129	75.929	-0.236	0.0	8.6
162	76.131	75.930	-0.234	0.0	9.2
168	76.133	75.932	-0.232	0.0	9.8
174	76.134	75.934	-0.231	0.0	10.2
180	76.135	75.935	-0.230	0.0	10.5
186	76.135	75.935	-0.230	0.0	10.6
192	76.134	75.934	-0.231	0.0	10.3
198	76.133	75.932	-0.232	0.0	9.9
204	76.131	75.930	-0.234	0.0	9.4
210	76.129	75.929	-0.236	0.0	8.8
216	76.127	75.926	-0.238	0.0	8.2
222	76.124	75.924	-0.241	0.0	7.4
228	76.120	75.920	-0.245	0.0	6.8
234	76.117	75.917	-0.248	0.0	6.1
240	76.113	75.913	-0.252	0.0	5.4
246	76.110	75.910	-0.255	0.0	4.8
252	76.107	75.907	-0.258	0.0	4.3
258	76.104	75.904	-0.261	0.0	3.7
264	76.102	75.902	-0.263	0.0	3.3
270	76.100	75.900	-0.265	0.0	2.9

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 100 year Winter I+30%  
Average Rainfall Intensity 13.543 mm/hr


Time (mins)	Upstream Level (m)	Downstream Level (m)	Surcharged Depth (m)	Total O/F (l/s)	Pipe Flow (l/s)
276	76.099	75.898	-0.266	0.0	2.5
282	76.097	75.897	-0.268	0.0	2.3
288	76.097	75.896	-0.268	0.0	2.1
294	76.096	75.896	-0.269	0.0	2.0
300	76.096	75.895	-0.269	0.0	1.9
306	76.095	75.895	-0.270	0.0	1.9
312	76.095	75.895	-0.270	0.0	1.9
318	76.095	75.895	-0.270	0.0	1.9
324	76.095	75.895	-0.270	0.0	1.9
330	76.095	75.895	-0.270	0.0	1.8
336	76.094	75.894	-0.271	0.0	1.8
342	76.091	75.891	-0.274	0.0	1.6
348	76.086	75.886	-0.279	0.0	1.3
354	76.079	75.879	-0.286	0.0	1.0
360	76.070	75.870	-0.295	0.0	0.5
366	76.065	75.865	-0.300	0.0	0.1
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 100 year Winter I+30%  
Average Rainfall Intensity 13.543 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 100 year Winter I+30%  
Average Rainfall Intensity 13.543 mm/hr

Time (mins)	Upstream Level (m)	Downstream Level (m)	Surcharged Depth (m)	Total O/F (l/s)	Pipe Flow (l/s)
6	75.870	75.617	-0.295	0.0	0.2
12	75.879	75.625	-0.286	0.0	0.7
18	75.886	75.631	-0.279	0.0	1.2
24	75.891	75.636	-0.274	0.0	1.6
30	75.894	75.638	-0.271	0.0	1.9
36	75.895	75.640	-0.270	0.0	2.0
42	75.895	75.641	-0.270	0.0	2.1
48	75.895	75.641	-0.270	0.0	2.1
54	75.895	75.641	-0.270	0.0	2.1
60	75.895	75.641	-0.270	0.0	2.1
66	75.895	75.641	-0.270	0.0	2.2
72	75.896	75.642	-0.269	0.0	2.2
78	75.896	75.643	-0.269	0.0	2.3
84	75.897	75.643	-0.268	0.0	2.5
90	75.898	75.644	-0.267	0.0	2.7
96	75.900	75.646	-0.265	0.0	3.1
102	75.902	75.648	-0.263	0.0	3.5
108	75.904	75.650	-0.261	0.0	3.9
114	75.907	75.652	-0.258	0.0	4.5
120	75.910	75.655	-0.255	0.0	5.1
126	75.913	75.658	-0.252	0.0	5.8
132	75.917	75.661	-0.248	0.0	6.6
138	75.920	75.664	-0.245	0.0	7.4
144	75.924	75.668	-0.241	0.0	8.1
150	75.926	75.671	-0.239	0.0	9.0
156	75.929	75.673	-0.236	0.0	9.7
162	75.930	75.675	-0.235	0.0	10.4
168	75.932	75.677	-0.233	0.0	11.1
174	75.934	75.678	-0.231	0.0	11.6
180	75.935	75.679	-0.230	0.0	12.0
186	75.935	75.679	-0.230	0.0	12.1
192	75.934	75.678	-0.231	0.0	11.8
198	75.932	75.677	-0.233	0.0	11.4
204	75.930	75.675	-0.235	0.0	10.8
210	75.929	75.673	-0.236	0.0	10.1
216	75.926	75.671	-0.239	0.0	9.4
222	75.924	75.668	-0.241	0.0	8.6
228	75.920	75.664	-0.245	0.0	7.8
234	75.917	75.661	-0.248	0.0	7.1
240	75.913	75.658	-0.252	0.0	6.3
246	75.910	75.655	-0.255	0.0	5.6
252	75.907	75.652	-0.258	0.0	4.9
258	75.904	75.650	-0.261	0.0	4.3
264	75.902	75.648	-0.263	0.0	3.8
270	75.900	75.646	-0.265	0.0	3.3

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 100 year Winter I+30%  
Average Rainfall Intensity 13.543 mm/hr

Time (mins)	Upstream Level (m)	Downstream Level (m)	Surcharged Depth (m)	Total O/F (l/s)	Pipe Flow (l/s)
276	75.898	75.644	-0.267	0.0	3.0
282	75.897	75.643	-0.268	0.0	2.7
288	75.896	75.643	-0.269	0.0	2.4
294	75.896	75.642	-0.269	0.0	2.3
300	75.895	75.641	-0.270	0.0	2.2
306	75.895	75.641	-0.270	0.0	2.2
312	75.895	75.641	-0.270	0.0	2.1
318	75.895	75.641	-0.270	0.0	2.1
324	75.895	75.641	-0.270	0.0	2.1
330	75.895	75.640	-0.270	0.0	2.1
336	75.894	75.639	-0.271	0.0	2.0
342	75.891	75.636	-0.274	0.0	1.9
348	75.886	75.631	-0.279	0.0	1.6
354	75.879	75.625	-0.286	0.0	1.2
360	75.870	75.616	-0.295	0.0	0.6
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 100 year Winter I+30%  
Average Rainfall Intensity 13.543 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 100 year Winter I+30%  
Average Rainfall Intensity 13.543 mm/hr

Time (mins)	Upstream Level (m)	Downstream Level (m)	Surcharged Depth (m)	Total O/F (l/s)	Pipe Flow (l/s)
6	75.617	74.968	-0.295	0.0	0.3
12	75.625	74.996	-0.287	0.0	1.0
18	75.631	75.004	-0.281	0.0	1.7
24	75.636	75.011	-0.276	0.0	2.2
30	75.638	75.014	-0.274	0.0	2.6
36	75.640	75.016	-0.272	0.0	2.8
42	75.641	75.017	-0.271	0.0	2.9
48	75.641	75.017	-0.271	0.0	2.9
54	75.641	75.017	-0.271	0.0	2.9
60	75.641	75.017	-0.271	0.0	2.9
66	75.641	75.018	-0.271	0.0	2.9
72	75.642	75.019	-0.270	0.0	3.0
78	75.643	75.021	-0.269	0.0	3.2
84	75.643	75.025	-0.269	0.0	3.4
90	75.644	75.029	-0.268	0.0	3.7
96	75.646	75.036	-0.266	0.0	4.2
102	75.648	75.041	-0.264	0.0	4.7
108	75.650	75.047	-0.262	0.0	5.4
114	75.652	75.053	-0.260	0.0	6.1
120	75.655	75.060	-0.257	0.0	7.0
126	75.658	75.067	-0.254	0.0	7.9
132	75.661	75.077	-0.251	0.0	8.9
138	75.664	75.090	-0.248	0.0	10.0
144	75.668	75.103	-0.244	0.0	11.0
150	75.671	75.119	-0.241	0.0	12.1
156	75.673	75.136	-0.239	0.0	13.2
162	75.675	75.154	-0.237	0.0	14.1
168	75.677	75.173	-0.235	0.0	15.0
174	75.678	75.192	-0.234	0.0	15.7
180	75.679	75.214	-0.233	0.0	16.2
186	75.679	75.232	-0.233	0.0	16.3
192	75.678	75.251	-0.234	0.0	15.9
198	75.677	75.268	-0.235	0.0	15.4
204	75.675	75.283	-0.237	0.0	14.5
210	75.673	75.296	-0.239	0.0	13.6
216	75.671	75.306	-0.241	0.0	12.7
222	75.668	75.316	-0.244	0.0	11.6
228	75.664	75.321	-0.248	0.0	10.5
234	75.661	75.327	-0.251	0.0	9.5
240	75.658	75.329	-0.254	0.0	8.4
246	75.655	75.330	-0.257	0.0	7.5
252	75.652	75.329	-0.260	0.0	6.6
258	75.650	75.327	-0.262	0.0	5.8
264	75.648	75.324	-0.264	0.0	5.1
270	75.646	75.320	-0.266	0.0	4.5

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 100 year Winter I+30%  
Average Rainfall Intensity 13.543 mm/hr

Time (mins)	Upstream Level (m)	Downstream Level (m)	Surcharged Depth (m)	Total O/F (l/s)	Pipe Flow (l/s)
276	75.644	75.316	-0.268	0.0	4.0
282	75.643	75.311	-0.269	0.0	3.6
288	75.643	75.305	-0.269	0.0	3.3
294	75.642	75.299	-0.270	0.0	3.1
300	75.641	75.292	-0.271	0.0	3.0
306	75.641	75.287	-0.271	0.0	2.9
312	75.641	75.280	-0.271	0.0	2.9
318	75.641	75.273	-0.271	0.0	2.9
324	75.641	75.266	-0.271	0.0	2.9
330	75.640	75.259	-0.272	0.0	2.8
336	75.639	75.252	-0.273	0.0	2.7
342	75.636	75.245	-0.276	0.0	2.5
348	75.631	75.236	-0.281	0.0	2.2
354	75.625	75.229	-0.287	0.0	1.6
360	75.616	75.218	-0.296	0.0	0.8
366	75.612	75.209	-0.300	0.0	0.2
372	75.612	75.196	-0.300	0.0	0.0
378	75.612	75.186	-0.300	0.0	0.0
384	75.612	75.177	-0.300	0.0	0.0
390	75.612	75.166	-0.300	0.0	0.0
396	75.612	75.158	-0.300	0.0	0.0
402	75.612	75.147	-0.300	0.0	0.0
408	75.612	75.138	-0.300	0.0	0.0
414	75.612	75.128	-0.300	0.0	0.0
420	75.612	75.120	-0.300	0.0	0.0
426	75.612	75.110	-0.300	0.0	0.0
432	75.612	75.102	-0.300	0.0	0.0
438	75.612	75.093	-0.300	0.0	0.0
444	75.612	75.085	-0.300	0.0	0.0
450	75.612	75.076	-0.300	0.0	0.0
456	75.612	75.068	-0.300	0.0	0.0
462	75.612	75.060	-0.300	0.0	0.0
468	75.612	75.052	-0.300	0.0	0.0
474	75.612	75.044	-0.300	0.0	0.0
480	75.612	75.036	-0.300	0.0	0.0
486	75.612	75.029	-0.300	0.0	0.0
492	75.612	75.022	-0.300	0.0	0.0
498	75.612	75.015	-0.300	0.0	0.0
504	75.612	75.009	-0.300	0.0	0.0
510	75.612	75.003	-0.300	0.0	0.0
516	75.612	74.997	-0.300	0.0	0.0
522	75.612	74.992	-0.300	0.0	0.0
528	75.612	74.987	-0.300	0.0	0.0
534	75.612	74.983	-0.300	0.0	0.0
540	75.612	74.979	-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 100 year Winter I+30%  
Average Rainfall Intensity 13.543 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	75.612	74.975	-0.300	0.0	0.0
552	75.612	74.972	-0.300	0.0	0.0
558	75.612	74.969	-0.300	0.0	0.0
564	75.612	74.966	-0.300	0.0	0.0
570	75.612	74.963	-0.300	0.0	0.0
576	75.612	74.961	-0.300	0.0	0.0
582	75.612	74.958	-0.300	0.0	0.0
588	75.612	74.956	-0.300	0.0	0.0
594	75.612	74.954	-0.300	0.0	0.0
600	75.612	74.953	-0.300	0.0	0.0
606	75.612	74.951	-0.300	0.0	0.0
612	75.612	74.950	-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 100 year Winter I+30%  
Average Rainfall Intensity 13.543 mm/hr


Time (mins)	Upstream Level (m)	Downstream Level (m)	Surcharged Depth (m)	Total O/F (l/s)	Pipe Flow (l/s)
6	76.003	75.738	-0.222	0.0	0.1
12	76.008	75.744	-0.217	0.0	0.3
18	76.011	75.748	-0.214	0.0	0.5
24	76.014	75.751	-0.211	0.0	0.6
30	76.015	75.753	-0.210	0.0	0.7
36	76.016	75.754	-0.209	0.0	0.7
42	76.016	75.754	-0.209	0.0	0.8
48	76.016	75.754	-0.209	0.0	0.8
54	76.016	75.754	-0.209	0.0	0.8
60	76.016	75.754	-0.209	0.0	0.8
66	76.017	75.755	-0.208	0.0	0.8
72	76.017	75.755	-0.208	0.0	0.8
78	76.018	75.757	-0.207	0.0	0.8
84	76.020	75.758	-0.205	0.0	0.9
90	76.022	75.761	-0.203	0.0	1.0
96	76.023	75.764	-0.202	0.0	1.1
102	76.024	75.766	-0.201	0.0	1.3
108	76.025	75.767	-0.200	0.0	1.5
114	76.027	75.769	-0.198	0.0	1.7
120	76.028	75.771	-0.197	0.0	1.9
126	76.030	75.773	-0.195	0.0	2.1
132	76.032	75.775	-0.193	0.0	2.4
138	76.034	75.777	-0.191	0.0	2.7
144	76.036	75.779	-0.189	0.0	2.9
150	76.038	75.782	-0.187	0.0	3.2
156	76.039	75.784	-0.186	0.0	3.5
162	76.041	75.786	-0.184	0.0	3.8
168	76.043	75.788	-0.182	0.0	4.0
174	76.044	75.789	-0.181	0.0	4.2
180	76.045	75.790	-0.180	0.0	4.3
186	76.045	75.790	-0.180	0.0	4.3
192	76.044	75.789	-0.181	0.0	4.2
198	76.043	75.788	-0.182	0.0	4.0
204	76.041	75.786	-0.184	0.0	3.8
210	76.039	75.784	-0.186	0.0	3.5
216	76.038	75.782	-0.187	0.0	3.3
222	76.036	75.779	-0.189	0.0	3.0
228	76.034	75.777	-0.191	0.0	2.7
234	76.032	75.775	-0.193	0.0	2.4
240	76.030	75.773	-0.195	0.0	2.2
246	76.028	75.771	-0.197	0.0	1.9
252	76.027	75.769	-0.198	0.0	1.7
258	76.025	75.767	-0.200	0.0	1.5
264	76.024	75.766	-0.201	0.0	1.3
270	76.023	75.764	-0.202	0.0	1.2



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 100 year Winter I+30%  
Average Rainfall Intensity 13.543 mm/hr

Time (mins)	Upstream Level (m)	Downstream Level (m)	Surcharged Depth (m)	Total O/F (l/s)	Pipe Flow (l/s)
276	76.022	75.761	-0.203	0.0	1.0
282	76.020	75.758	-0.205	0.0	0.9
288	76.018	75.757	-0.207	0.0	0.9
294	76.017	75.755	-0.208	0.0	0.8
300	76.017	75.755	-0.208	0.0	0.8
306	76.016	75.754	-0.209	0.0	0.8
312	76.016	75.754	-0.209	0.0	0.8
318	76.016	75.754	-0.209	0.0	0.8
324	76.016	75.754	-0.209	0.0	0.8
330	76.016	75.754	-0.209	0.0	0.7
336	76.015	75.753	-0.210	0.0	0.7
342	76.014	75.751	-0.211	0.0	0.6
348	76.011	75.748	-0.214	0.0	0.5
354	76.008	75.744	-0.217	0.0	0.4
360	76.003	75.738	-0.222	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 100 year Winter I+30%  
Average Rainfall Intensity 13.543 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 100 year Winter I+30%  
Average Rainfall Intensity 13.543 mm/hr

Time (mins)	Upstream Level (m)	Downstream Level (m)	Surcharged Depth (m)	Total O/F (l/s)	Pipe Flow (l/s)
6	75.738	75.442	-0.297	0.0	0.2
12	75.744	75.455	-0.291	0.0	0.5
18	75.748	75.464	-0.287	0.0	0.8
24	75.751	75.467	-0.284	0.0	1.0
30	75.753	75.468	-0.282	0.0	1.2
36	75.754	75.469	-0.281	0.0	1.3
42	75.754	75.469	-0.281	0.0	1.3
48	75.754	75.469	-0.281	0.0	1.3
54	75.754	75.469	-0.281	0.0	1.3
60	75.754	75.469	-0.281	0.0	1.3
66	75.755	75.469	-0.280	0.0	1.3
72	75.755	75.470	-0.280	0.0	1.4
78	75.757	75.471	-0.278	0.0	1.4
84	75.758	75.472	-0.277	0.0	1.5
90	75.761	75.473	-0.274	0.0	1.7
96	75.764	75.476	-0.271	0.0	1.9
102	75.766	75.478	-0.269	0.0	2.2
108	75.767	75.481	-0.268	0.0	2.5
114	75.769	75.485	-0.266	0.0	2.8
120	75.771	75.489	-0.264	0.0	3.2
126	75.773	75.494	-0.262	0.0	3.6
132	75.775	75.497	-0.260	0.0	4.1
138	75.777	75.500	-0.258	0.0	4.6
144	75.779	75.503	-0.256	0.0	5.0
150	75.782	75.507	-0.253	0.0	5.6
156	75.784	75.509	-0.251	0.0	6.0
162	75.786	75.512	-0.249	0.0	6.4
168	75.788	75.515	-0.247	0.0	6.8
174	75.789	75.516	-0.246	0.0	7.1
180	75.790	75.518	-0.245	0.0	7.4
186	75.790	75.518	-0.245	0.0	7.4
192	75.789	75.516	-0.246	0.0	7.2
198	75.788	75.515	-0.247	0.0	6.9
204	75.786	75.512	-0.249	0.0	6.6
210	75.784	75.509	-0.251	0.0	6.1
216	75.782	75.507	-0.253	0.0	5.7
222	75.779	75.503	-0.256	0.0	5.2
228	75.777	75.500	-0.258	0.0	4.7
234	75.775	75.497	-0.260	0.0	4.3
240	75.773	75.494	-0.262	0.0	3.8
246	75.771	75.489	-0.264	0.0	3.3
252	75.769	75.485	-0.266	0.0	3.0
258	75.767	75.481	-0.268	0.0	2.6
264	75.766	75.478	-0.269	0.0	2.3
270	75.764	75.476	-0.271	0.0	2.0

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 100 year Winter I+30%  
Average Rainfall Intensity 13.543 mm/hr

Time (mins)	Upstream Level (m)	Downstream Level (m)	Surcharged Depth (m)	Total O/F (l/s)	Pipe Flow (l/s)
276	75.761	75.473	-0.274	0.0	1.8
282	75.758	75.472	-0.277	0.0	1.6
288	75.757	75.471	-0.278	0.0	1.5
294	75.755	75.470	-0.280	0.0	1.4
300	75.755	75.469	-0.280	0.0	1.3
306	75.754	75.469	-0.281	0.0	1.3
312	75.754	75.469	-0.281	0.0	1.3
318	75.754	75.469	-0.281	0.0	1.3
324	75.754	75.469	-0.281	0.0	1.3
330	75.754	75.469	-0.281	0.0	1.3
336	75.753	75.468	-0.282	0.0	1.2
342	75.751	75.467	-0.284	0.0	1.1
348	75.748	75.464	-0.287	0.0	0.9
354	75.744	75.455	-0.291	0.0	0.7
360	75.738	75.442	-0.297	0.0	0.3
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 100 year Winter I+30%  
Average Rainfall Intensity 13.543 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 100 year Winter I+30%  
Average Rainfall Intensity 13.543 mm/hr

Time (mins)	Upstream Level (m)	Downstream Level (m)	Surcharged Depth (m)	Total O/F (l/s)	Pipe Flow (l/s)
6	75.442	75.153	-0.293	0.0	0.3
12	75.455	75.162	-0.280	0.0	0.9
18	75.464	75.168	-0.271	0.0	1.5
24	75.467	75.173	-0.268	0.0	1.9
30	75.468	75.175	-0.267	0.0	2.2
36	75.469	75.176	-0.266	0.0	2.3
42	75.469	75.177	-0.266	0.0	2.4
48	75.469	75.177	-0.266	0.0	2.4
54	75.469	75.177	-0.266	0.0	2.4
60	75.469	75.177	-0.266	0.0	2.4
66	75.469	75.178	-0.266	0.0	2.4
72	75.470	75.178	-0.265	0.0	2.5
78	75.471	75.180	-0.264	0.0	2.6
84	75.472	75.183	-0.263	0.0	2.8
90	75.473	75.186	-0.262	0.0	3.1
96	75.476	75.191	-0.259	0.0	3.5
102	75.478	75.195	-0.257	0.0	4.0
108	75.481	75.197	-0.254	0.0	4.5
114	75.485	75.199	-0.250	0.0	5.2
120	75.489	75.202	-0.246	0.0	5.9
126	75.494	75.205	-0.241	0.0	6.6
132	75.497	75.208	-0.238	0.0	7.5
138	75.500	75.211	-0.235	0.0	8.4
144	75.503	75.214	-0.232	0.0	9.2
150	75.507	75.218	-0.228	0.0	10.2
156	75.509	75.221	-0.226	0.0	11.0
162	75.512	75.228	-0.223	0.0	11.8
168	75.515	75.235	-0.220	0.0	12.5
174	75.516	75.242	-0.219	0.0	13.1
180	75.518	75.250	-0.217	0.0	13.5
186	75.518	75.258	-0.217	0.0	13.5
192	75.516	75.269	-0.219	0.0	13.2
198	75.515	75.280	-0.220	0.0	12.7
204	75.512	75.291	-0.223	0.0	12.0
210	75.509	75.302	-0.226	0.0	11.2
216	75.507	75.312	-0.228	0.0	10.4
222	75.503	75.322	-0.232	0.0	9.5
228	75.500	75.326	-0.235	0.0	8.6
234	75.497	75.331	-0.238	0.0	7.8
240	75.494	75.333	-0.241	0.0	6.9
246	75.489	75.333	-0.246	0.0	6.1
252	75.485	75.332	-0.250	0.0	5.4
258	75.481	75.330	-0.254	0.0	4.7
264	75.478	75.327	-0.257	0.0	4.1
270	75.476	75.323	-0.259	0.0	3.7

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 100 year Winter I+30%  
Average Rainfall Intensity 13.543 mm/hr


Time (mins)	Upstream Level (m)	Downstream Level (m)	Surcharged Depth (m)	Total O/F (l/s)	Pipe Flow (l/s)
276	75.473	75.318	-0.262	0.0	3.3
282	75.472	75.312	-0.263	0.0	2.9
288	75.471	75.307	-0.264	0.0	2.7
294	75.470	75.300	-0.265	0.0	2.5
300	75.469	75.294	-0.266	0.0	2.4
306	75.469	75.289	-0.266	0.0	2.4
312	75.469	75.281	-0.266	0.0	2.4
318	75.469	75.274	-0.266	0.0	2.4
324	75.469	75.267	-0.266	0.0	2.4
330	75.469	75.260	-0.266	0.0	2.3
336	75.468	75.253	-0.267	0.0	2.2
342	75.467	75.246	-0.268	0.0	2.1
348	75.464	75.237	-0.271	0.0	1.7
354	75.455	75.230	-0.280	0.0	1.3
360	75.442	75.218	-0.293	0.0	0.6
366	75.435	75.209	-0.300	0.0	0.1
372	75.435	75.196	-0.300	0.0	0.0
378	75.435	75.187	-0.300	0.0	0.0
384	75.435	75.176	-0.300	0.0	0.0
390	75.435	75.167	-0.300	0.0	0.0
396	75.435	75.157	-0.300	0.0	0.0
402	75.435	75.150	-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 100 year Winter I+30%  
Average Rainfall Intensity 13.543 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 100 year Winter I+30%  
Average Rainfall Intensity 13.543 mm/hr

Time (mins)	Upstream Level (m)	Downstream Level (m)	Surcharged Depth (m)	Total O/F (l/s)	Pipe Flow (l/s)
6	75.153	74.968	-0.446	0.0	0.4
12	75.162	74.996	-0.437	0.0	1.1
18	75.168	75.004	-0.431	0.0	1.9
24	75.173	75.011	-0.426	0.0	2.5
30	75.175	75.014	-0.424	0.0	2.8
36	75.176	75.016	-0.423	0.0	3.0
42	75.177	75.017	-0.422	0.0	3.1
48	75.177	75.017	-0.422	0.0	3.1
54	75.177	75.017	-0.422	0.0	3.1
60	75.177	75.017	-0.422	0.0	3.1
66	75.178	75.018	-0.421	0.0	3.2
72	75.178	75.019	-0.421	0.0	3.3
78	75.180	75.021	-0.419	0.0	3.4
84	75.183	75.025	-0.416	0.0	3.7
90	75.186	75.029	-0.413	0.0	4.0
96	75.191	75.036	-0.408	0.0	4.6
102	75.195	75.041	-0.404	0.0	5.2
108	75.197	75.047	-0.402	0.0	5.9
114	75.199	75.053	-0.400	0.0	6.8
120	75.202	75.060	-0.397	0.0	7.7
126	75.205	75.067	-0.394	0.0	8.7
132	75.208	75.077	-0.391	0.0	9.8
138	75.211	75.090	-0.388	0.0	10.9
144	75.214	75.103	-0.385	0.0	12.1
150	75.218	75.119	-0.381	0.0	13.3
156	75.221	75.136	-0.378	0.0	14.4
162	75.228	75.154	-0.371	0.0	15.4
168	75.235	75.173	-0.364	0.0	16.3
174	75.242	75.192	-0.357	0.0	17.1
180	75.250	75.214	-0.349	0.0	17.6
186	75.258	75.232	-0.341	0.0	17.7
192	75.269	75.251	-0.330	0.0	17.2
198	75.280	75.268	-0.319	0.0	16.6
204	75.291	75.283	-0.308	0.0	15.6
210	75.302	75.296	-0.297	0.0	14.6
216	75.312	75.306	-0.287	0.0	13.6
222	75.322	75.316	-0.277	0.0	12.4
228	75.326	75.321	-0.273	0.0	11.3
234	75.331	75.327	-0.268	0.0	10.2
240	75.333	75.329	-0.266	0.0	9.0
246	75.333	75.330	-0.266	0.0	8.0
252	75.332	75.329	-0.267	0.0	7.1
258	75.330	75.327	-0.269	0.0	6.2
264	75.327	75.324	-0.272	0.0	5.4
270	75.323	75.320	-0.276	0.0	4.8

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 100 year Winter I+30%  
Average Rainfall Intensity 13.543 mm/hr

Time (mins)	Upstream Level (m)	Downstream Level (m)	Surcharged Depth (m)	Total O/F (l/s)	Pipe Flow (l/s)
276	75.318	75.316	-0.281	0.0	4.3
282	75.312	75.311	-0.287	0.0	3.9
288	75.307	75.305	-0.292	0.0	3.6
294	75.300	75.299	-0.299	0.0	3.4
300	75.294	75.292	-0.305	0.0	3.2
306	75.289	75.287	-0.310	0.0	3.2
312	75.281	75.280	-0.318	0.0	3.2
318	75.274	75.273	-0.325	0.0	3.2
324	75.267	75.266	-0.332	0.0	3.2
330	75.260	75.259	-0.339	0.0	3.1
336	75.253	75.252	-0.346	0.0	3.0
342	75.246	75.245	-0.353	0.0	2.7
348	75.237	75.236	-0.362	0.0	2.3
354	75.230	75.229	-0.369	0.0	1.7
360	75.218	75.218	-0.381	0.0	0.8
366	75.209	75.209	-0.390	0.0	0.2
372	75.196	75.196	-0.403	0.0	0.1
378	75.187	75.186	-0.412	0.0	0.1
384	75.176	75.177	-0.423	0.0	0.1
390	75.167	75.166	-0.432	0.0	0.1
396	75.157	75.158	-0.442	0.0	0.0
402	75.150	75.147	-0.449	0.0	0.0
408	75.149	75.138	-0.450	0.0	0.0
414	75.149	75.128	-0.450	0.0	0.0
420	75.149	75.120	-0.450	0.0	0.0
426	75.149	75.110	-0.450	0.0	0.0
432	75.149	75.102	-0.450	0.0	0.0
438	75.149	75.093	-0.450	0.0	0.0
444	75.149	75.085	-0.450	0.0	0.0
450	75.149	75.076	-0.450	0.0	0.0
456	75.149	75.068	-0.450	0.0	0.0
462	75.149	75.060	-0.450	0.0	0.0
468	75.149	75.052	-0.450	0.0	0.0
474	75.149	75.044	-0.450	0.0	0.0
480	75.149	75.036	-0.450	0.0	0.0
486	75.149	75.029	-0.450	0.0	0.0
492	75.149	75.022	-0.450	0.0	0.0
498	75.149	75.015	-0.450	0.0	0.0
504	75.149	75.009	-0.450	0.0	0.0
510	75.149	75.003	-0.450	0.0	0.0
516	75.149	74.997	-0.450	0.0	0.0
522	75.149	74.992	-0.450	0.0	0.0
528	75.149	74.987	-0.450	0.0	0.0
534	75.149	74.983	-0.450	0.0	0.0
540	75.149	74.979	-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 100 year Winter I+30%  
Average Rainfall Intensity 13.543 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	74.975	-0.450	0.0	0.0
552	75.149	74.972	-0.450	0.0	0.0
558	75.149	74.969	-0.450	0.0	0.0
564	75.149	74.966	-0.450	0.0	0.0
570	75.149	74.963	-0.450	0.0	0.0
576	75.149	74.961	-0.450	0.0	0.0
582	75.149	74.958	-0.450	0.0	0.0
588	75.149	74.956	-0.450	0.0	0.0
594	75.149	74.954	-0.450	0.0	0.0
600	75.149	74.953	-0.450	0.0	0.0
606	75.149	74.951	-0.450	0.0	0.0
612	75.149	74.950	-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 100 year Winter I+30%  
Average Rainfall Intensity 13.543 mm/hr

Time (mins)	Upstream Level (m)	Downstream Level (m)	Surcharged Depth (m)	Total O/F (l/s)	Pipe Flow (l/s)
6	74.968	74.930	-0.431	0.0	0.5
12	74.996	74.932	-0.403	0.0	1.8
18	75.004	74.936	-0.395	0.0	3.4
24	75.011	74.941	-0.388	0.0	4.6
30	75.014	74.947	-0.385	0.0	5.3
36	75.016	74.953	-0.383	0.0	5.7
42	75.017	74.959	-0.382	0.0	6.0
48	75.017	74.965	-0.382	0.0	6.0
54	75.017	74.970	-0.382	0.0	6.0
60	75.017	74.974	-0.382	0.0	6.0
66	75.018	74.979	-0.381	0.0	6.1
72	75.019	74.982	-0.380	0.0	6.2
78	75.021	74.986	-0.378	0.0	6.6
84	75.025	74.990	-0.374	0.0	7.0
90	75.029	74.995	-0.370	0.0	7.7
96	75.036	75.000	-0.363	0.0	8.6
102	75.041	75.006	-0.358	0.0	9.8
108	75.047	75.013	-0.352	0.0	11.1
114	75.053	75.022	-0.346	0.0	12.7
120	75.060	75.031	-0.339	0.0	14.4
126	75.067	75.044	-0.332	0.0	16.4
132	75.077	75.058	-0.322	0.0	18.5
138	75.090	75.072	-0.309	0.0	20.6
144	75.103	75.089	-0.296	0.0	22.7
150	75.119	75.107	-0.280	0.0	25.1
156	75.136	75.126	-0.263	0.0	27.2
162	75.154	75.146	-0.245	0.0	29.0
168	75.173	75.166	-0.226	0.0	30.7
174	75.192	75.186	-0.207	0.0	32.1
180	75.214	75.207	-0.185	0.0	33.1
186	75.232	75.226	-0.167	0.0	33.3
192	75.251	75.245	-0.148	0.0	32.6
198	75.268	75.263	-0.131	0.0	31.2
204	75.283	75.278	-0.116	0.0	29.6
210	75.296	75.291	-0.103	0.0	27.7
216	75.306	75.302	-0.093	0.0	25.8
222	75.316	75.312	-0.083	0.0	23.6
228	75.321	75.317	-0.078	0.0	21.6
234	75.327	75.323	-0.072	0.0	19.4
240	75.329	75.326	-0.070	0.0	17.3
246	75.330	75.327	-0.069	0.0	15.4
252	75.329	75.327	-0.070	0.0	13.7
258	75.327	75.325	-0.072	0.0	12.0
264	75.324	75.322	-0.075	0.0	10.6
270	75.320	75.318	-0.079	0.0	9.4

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 100 year Winter I+30%  
Average Rainfall Intensity 13.543 mm/hr

Time (mins)	Upstream Level (m)	Downstream Level (m)	Surcharged Depth (m)	Total O/F (l/s)	Pipe Flow (l/s)
276	75.316	75.314	-0.083	0.0	8.4
282	75.311	75.309	-0.088	0.0	7.6
288	75.305	75.304	-0.094	0.0	7.0
294	75.299	75.297	-0.100	0.0	6.7
300	75.292	75.292	-0.107	0.0	6.4
306	75.287	75.285	-0.112	0.0	6.3
312	75.280	75.279	-0.119	0.0	6.2
318	75.273	75.272	-0.126	0.0	6.4
324	75.266	75.265	-0.133	0.0	6.4
330	75.259	75.258	-0.140	0.0	6.2
336	75.252	75.252	-0.147	0.0	6.0
342	75.245	75.244	-0.154	0.0	5.6
348	75.236	75.236	-0.163	0.0	4.8
354	75.229	75.228	-0.170	0.0	3.6
360	75.218	75.218	-0.181	0.0	2.0
366	75.209	75.208	-0.190	0.0	0.7
372	75.196	75.197	-0.203	0.0	0.4
378	75.186	75.186	-0.213	0.0	0.5
384	75.177	75.177	-0.222	0.0	0.4
390	75.166	75.166	-0.233	0.0	0.4
396	75.158	75.158	-0.241	0.0	0.3
402	75.147	75.147	-0.252	0.0	0.3
408	75.138	75.138	-0.261	0.0	0.2
414	75.128	75.128	-0.271	0.0	0.2
420	75.120	75.120	-0.279	0.0	0.2
426	75.110	75.110	-0.289	0.0	0.2
432	75.102	75.102	-0.297	0.0	0.2
438	75.093	75.093	-0.306	0.0	0.2
444	75.085	75.085	-0.314	0.0	0.2
450	75.076	75.076	-0.323	0.0	0.2
456	75.068	75.068	-0.331	0.0	0.2
462	75.060	75.060	-0.339	0.0	0.1
468	75.052	75.052	-0.347	0.0	0.1
474	75.044	75.044	-0.355	0.0	0.1
480	75.036	75.036	-0.363	0.0	0.1
486	75.029	75.029	-0.370	0.0	0.1
492	75.022	75.022	-0.377	0.0	0.1
498	75.015	75.015	-0.384	0.0	0.1
504	75.009	75.009	-0.390	0.0	0.0
510	75.003	75.003	-0.396	0.0	0.0
516	74.997	74.997	-0.402	0.0	0.0
522	74.992	74.992	-0.407	0.0	0.0
528	74.987	74.987	-0.412	0.0	0.0
534	74.983	74.983	-0.416	0.0	0.0
540	74.979	74.979	-0.420	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 100 year Winter I+30%  
Average Rainfall Intensity 13.543 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	74.975	74.975	-0.424	0.0	0.0
552	74.972	74.972	-0.427	0.0	0.0
558	74.969	74.969	-0.430	0.0	0.0
564	74.966	74.966	-0.433	0.0	0.0
570	74.963	74.963	-0.436	0.0	0.0
576	74.961	74.961	-0.438	0.0	0.0
582	74.958	74.958	-0.441	0.0	0.0
588	74.956	74.956	-0.443	0.0	0.0
594	74.954	74.954	-0.445	0.0	0.0
600	74.953	74.953	-0.446	0.0	0.0
606	74.951	74.951	-0.448	0.0	0.0
612	74.950	74.949	-0.449	0.0	0.0
618	74.949	74.948	-0.450	0.0	0.0
624	74.949	74.946	-0.450	0.0	0.0
630	74.949	74.946	-0.450	0.0	0.0
636	74.949	74.944	-0.450	0.0	0.0
642	74.949	74.943	-0.450	0.0	0.0
648	74.949	74.942	-0.450	0.0	0.0
654	74.949	74.941	-0.450	0.0	0.0
660	74.949	74.940	-0.450	0.0	0.0
666	74.949	74.940	-0.450	0.0	0.0
672	74.949	74.939	-0.450	0.0	0.0
678	74.949	74.938	-0.450	0.0	0.0
684	74.949	74.937	-0.450	0.0	0.0
690	74.949	74.937	-0.450	0.0	0.0
696	74.949	74.936	-0.450	0.0	0.0
702	74.949	74.936	-0.450	0.0	0.0
708	74.949	74.935	-0.450	0.0	0.0
714	74.949	74.935	-0.450	0.0	0.0
720	74.949	74.934	-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 100 year Winter I+30%  
Average Rainfall Intensity 13.543 mm/hr


Time (mins)	Upstream Level (m)	Downstream Level (m)	Surcharged Depth (m)	Total O/F (l/s)	Pipe Flow (l/s)
6	74.930	74.914	-0.449	0.0	0.0
12	74.932	74.917	-0.447	0.0	0.1
18	74.936	74.926	-0.443	0.0	0.2
24	74.941	74.935	-0.438	0.0	0.4
30	74.947	74.942	-0.432	0.0	0.5
36	74.953	74.949	-0.426	0.0	0.7
42	74.959	74.955	-0.420	0.0	0.9
48	74.965	74.960	-0.414	0.0	1.0
54	74.970	74.965	-0.409	0.0	1.2
60	74.974	74.970	-0.405	0.0	1.4
66	74.979	74.975	-0.400	0.0	1.6
72	74.982	74.979	-0.397	0.0	1.8
78	74.986	74.984	-0.393	0.0	1.9
84	74.990	74.988	-0.389	0.0	2.1
90	74.995	74.993	-0.384	0.0	2.2
96	75.000	74.998	-0.379	0.0	2.4
102	75.006	75.005	-0.373	0.0	2.6
108	75.013	75.012	-0.366	0.0	2.9
114	75.022	75.021	-0.357	0.0	3.1
120	75.031	75.028	-0.348	0.0	3.7
126	75.044	75.040	-0.335	0.0	3.0
132	75.058	75.054	-0.321	0.0	3.5
138	75.072	75.078	-0.307	0.0	3.3
144	75.089	75.099	-0.290	0.0	3.4
150	75.107	75.119	-0.272	0.0	3.5
156	75.126	75.142	-0.253	0.0	3.5
162	75.146	75.167	-0.233	0.0	3.5
168	75.166	75.191	-0.213	0.0	3.6
174	75.186	75.228	-0.193	0.0	4.2
180	75.207	75.183	-0.172	0.0	4.6
186	75.226	75.315	-0.153	0.0	1.6
192	75.245	75.209	-0.134	0.0	5.0
198	75.263	75.298	-0.116	0.0	-3.1
204	75.278	75.268	-0.101	0.0	2.1
210	75.291	75.329	-0.088	0.0	-2.9
216	75.302	75.334	-0.077	0.0	-0.9
222	75.312	75.271	-0.067	0.0	-0.9
228	75.317	75.257	-0.062	0.0	1.7
234	75.323	75.242	-0.056	0.0	-2.9
240	75.326	75.280	-0.053	0.0	-1.8
246	75.327	75.267	-0.052	0.0	-1.1
252	75.327	75.276	-0.052	0.0	-1.7
258	75.325	75.269	-0.054	0.0	-1.3
264	75.322	75.277	-0.057	0.0	-1.7
270	75.318	75.274	-0.061	0.0	-1.5

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 100 year Winter I+30%  
Average Rainfall Intensity 13.543 mm/hr


Time (mins)	Upstream Level (m)	Downstream Level (m)	Surcharged Depth (m)	Total O/F (l/s)	Pipe Flow (l/s)
276	75.314	75.284	-0.065	0.0	-1.7
282	75.309	75.277	-0.070	0.0	-1.5
288	75.304	75.277	-0.075	0.0	-1.4
294	75.297	75.283	-0.082	0.0	-0.5
300	75.292	75.341	-0.087	0.0	-4.1
306	75.285	75.247	-0.094	0.0	2.2
312	75.279	75.381	-0.100	0.0	-4.0
318	75.272	75.347	-0.107	0.0	2.9
324	75.265	75.336	-0.114	0.0	2.5
330	75.258	75.322	-0.121	0.0	2.6
336	75.252	75.308	-0.127	0.0	2.6
342	75.244	75.295	-0.135	0.0	2.7
348	75.236	75.312	-0.143	0.0	3.9
354	75.228	75.197	-0.151	0.0	3.8
360	75.218	75.306	-0.161	0.0	0.5
366	75.208	75.185	-0.171	0.0	3.3
372	75.197	75.281	-0.182	0.0	0.7
378	75.186	75.183	-0.193	0.0	4.2
384	75.177	75.187	-0.202	0.0	0.5
390	75.166	75.195	-0.213	0.0	2.6
396	75.158	75.163	-0.221	0.0	0.7
402	75.147	75.168	-0.232	0.0	2.5
408	75.138	75.143	-0.241	0.0	1.2
414	75.128	75.144	-0.251	0.0	2.6
420	75.120	75.123	-0.259	0.0	1.5
426	75.110	75.122	-0.269	0.0	2.6
432	75.102	75.105	-0.277	0.0	1.8
438	75.093	75.101	-0.286	0.0	2.7
444	75.085	75.086	-0.294	0.0	2.0
450	75.076	75.082	-0.303	0.0	2.7
456	75.068	75.065	-0.311	0.0	3.0
462	75.060	75.060	-0.319	0.0	2.8
468	75.052	75.057	-0.327	0.0	2.7
474	75.044	75.047	-0.335	0.0	2.8
480	75.036	75.035	-0.343	0.0	2.9
486	75.029	75.027	-0.350	0.0	2.9
492	75.022	75.021	-0.357	0.0	2.8
498	75.015	75.015	-0.364	0.0	2.7
504	75.009	75.007	-0.370	0.0	2.6
510	75.003	75.002	-0.376	0.0	2.4
516	74.997	74.996	-0.382	0.0	2.1
522	74.992	74.991	-0.387	0.0	2.0
528	74.987	74.986	-0.392	0.0	1.8
534	74.983	74.981	-0.396	0.0	1.7
540	74.979	74.976	-0.400	0.0	1.5



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 100 year Winter I+30%  
Average Rainfall Intensity 13.543 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	74.975	74.972	-0.404	0.0	1.3
552	74.972	74.968	-0.407	0.0	1.2
558	74.969	74.966	-0.410	0.0	1.1
564	74.966	74.963	-0.413	0.0	1.0
570	74.963	74.960	-0.416	0.0	0.9
576	74.961	74.958	-0.418	0.0	0.8
582	74.958	74.956	-0.421	0.0	0.8
588	74.956	74.954	-0.423	0.0	0.7
594	74.954	74.952	-0.425	0.0	0.6
600	74.953	74.950	-0.426	0.0	0.6
606	74.951	74.948	-0.428	0.0	0.5
612	74.949	74.947	-0.430	0.0	0.5
618	74.948	74.945	-0.431	0.0	0.4
624	74.946	74.944	-0.433	0.0	0.4
630	74.946	74.943	-0.433	0.0	0.4
636	74.944	74.942	-0.435	0.0	0.4
642	74.943	74.941	-0.436	0.0	0.3
648	74.942	74.940	-0.437	0.0	0.3
654	74.941	74.939	-0.438	0.0	0.3
660	74.940	74.938	-0.439	0.0	0.3
666	74.940	74.937	-0.439	0.0	0.2
672	74.939	74.936	-0.440	0.0	0.2
678	74.938	74.936	-0.441	0.0	0.2
684	74.937	74.935	-0.442	0.0	0.2
690	74.937	74.934	-0.442	0.0	0.2
696	74.936	74.934	-0.443	0.0	0.2
702	74.936	74.933	-0.443	0.0	0.2
708	74.935	74.932	-0.444	0.0	0.2
714	74.935	74.932	-0.444	0.0	0.1
720	74.934	74.931	-0.445	0.0	0.1

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 100 year Winter I+30%  
Average Rainfall Intensity 13.543 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	74.716	-0.450	0.0	0.0
12	74.917	74.721	-0.447	0.0	0.0
18	74.926	74.724	-0.438	0.0	0.0
24	74.935	74.728	-0.429	0.0	0.2
30	74.942	74.732	-0.422	0.0	0.3
36	74.949	74.735	-0.415	0.0	0.5
42	74.955	74.737	-0.409	0.0	0.7
48	74.960	74.739	-0.404	0.0	0.9
54	74.965	74.742	-0.399	0.0	1.1
60	74.970	74.744	-0.394	0.0	1.2
66	74.975	74.746	-0.389	0.0	1.4
72	74.979	74.749	-0.385	0.0	1.6
78	74.984	74.752	-0.380	0.0	1.8
84	74.988	74.755	-0.376	0.0	1.9
90	74.993	74.759	-0.371	0.0	2.1
96	74.998	74.760	-0.366	0.0	2.2
102	75.005	74.762	-0.359	0.0	2.4
108	75.012	74.764	-0.352	0.0	2.6
114	75.021	74.766	-0.343	0.0	2.8
120	75.028	74.767	-0.336	0.0	2.9
126	75.040	74.769	-0.324	0.0	2.9
132	75.054	74.770	-0.310	0.0	2.9
138	75.078	74.772	-0.286	0.0	2.9
144	75.099	74.774	-0.265	0.0	2.9
150	75.119	74.776	-0.245	0.0	2.9
156	75.142	74.777	-0.222	0.0	2.9
162	75.167	74.779	-0.197	0.0	2.9
168	75.191	74.781	-0.173	0.0	2.8
174	75.228	74.782	-0.136	0.0	2.8
180	75.183	74.782	-0.181	0.0	2.7
186	75.315	74.782	-0.049	0.0	2.7
192	75.209	74.781	-0.155	0.0	2.7
198	75.298	74.780	-0.066	0.0	2.7
204	75.268	74.779	-0.096	0.0	2.7
210	75.329	74.777	-0.035	0.0	2.8
216	75.334	74.775	-0.030	0.0	2.7
222	75.271	74.773	-0.093	0.0	2.8
228	75.257	74.772	-0.107	0.0	2.8
234	75.242	74.770	-0.122	0.0	2.8
240	75.280	74.768	-0.084	0.0	2.8
246	75.267	74.767	-0.097	0.0	2.8
252	75.276	74.766	-0.088	0.0	2.8
258	75.269	74.764	-0.095	0.0	2.8
264	75.277	74.763	-0.087	0.0	2.8
270	75.274	74.762	-0.090	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 100 year Winter I+30%  
Average Rainfall Intensity 13.543 mm/hr

Time (mins)	Upstream Level (m)	Downstream Level (m)	Surcharged Depth (m)	Total O/F (l/s)	Pipe Flow (l/s)
276	75.284	74.762	-0.080	0.0	2.8
282	75.277	74.761	-0.087	0.0	2.8
288	75.277	74.761	-0.087	0.0	2.8
294	75.283	74.760	-0.081	0.0	2.8
300	75.341	74.760	-0.023	0.0	2.8
306	75.247	74.760	-0.117	0.0	2.7
312	75.381	74.760	0.017	0.0	2.8
318	75.347	74.759	-0.017	0.0	2.7
324	75.336	74.759	-0.028	0.0	2.7
330	75.322	74.759	-0.042	0.0	2.7
336	75.308	74.759	-0.056	0.0	2.6
342	75.295	74.758	-0.069	0.0	2.6
348	75.312	74.756	-0.052	0.0	2.7
354	75.197	74.753	-0.167	0.0	2.7
360	75.306	74.749	-0.058	0.0	2.7
366	75.185	74.746	-0.179	0.0	2.7
372	75.281	74.747	-0.083	0.0	2.7
378	75.183	74.748	-0.181	0.0	2.8
384	75.187	74.747	-0.177	0.0	2.8
390	75.195	74.748	-0.169	0.0	2.8
396	75.163	74.748	-0.201	0.0	2.8
402	75.168	74.748	-0.196	0.0	2.8
408	75.143	74.748	-0.221	0.0	2.8
414	75.144	74.748	-0.220	0.0	2.8
420	75.123	74.748	-0.241	0.0	2.8
426	75.122	74.748	-0.242	0.0	2.8
432	75.105	74.748	-0.259	0.0	2.9
438	75.101	74.749	-0.263	0.0	2.9
444	75.086	74.749	-0.278	0.0	2.9
450	75.082	74.749	-0.282	0.0	2.9
456	75.065	74.749	-0.299	0.0	2.9
462	75.060	74.749	-0.304	0.0	2.9
468	75.057	74.749	-0.307	0.0	2.9
474	75.047	74.749	-0.317	0.0	2.9
480	75.035	74.749	-0.329	0.0	2.9
486	75.027	74.749	-0.337	0.0	2.9
492	75.021	74.749	-0.343	0.0	2.9
498	75.015	74.747	-0.349	0.0	2.8
504	75.007	74.745	-0.357	0.0	2.7
510	75.002	74.743	-0.362	0.0	2.5
516	74.996	74.741	-0.368	0.0	2.3
522	74.991	74.740	-0.373	0.0	2.2
528	74.986	74.738	-0.378	0.0	2.0
534	74.981	74.735	-0.383	0.0	1.8
540	74.976	74.733	-0.388	0.0	1.6

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 100 year Winter I+30%  
Average Rainfall Intensity 13.543 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	74.972	74.731	-0.392	0.0	1.5
552	74.968	74.729	-0.396	0.0	1.3
558	74.966	74.728	-0.398	0.0	1.2
564	74.963	74.727	-0.401	0.0	1.1
570	74.960	74.726	-0.404	0.0	1.0
576	74.958	74.725	-0.406	0.0	0.9
582	74.956	74.724	-0.408	0.0	0.8
588	74.954	74.723	-0.410	0.0	0.8
594	74.952	74.722	-0.412	0.0	0.7
600	74.950	74.722	-0.414	0.0	0.6
606	74.948	74.721	-0.416	0.0	0.6
612	74.947	74.720	-0.417	0.0	0.5
618	74.945	74.720	-0.419	0.0	0.5
624	74.944	74.719	-0.420	0.0	0.5
630	74.943	74.719	-0.421	0.0	0.4
636	74.942	74.719	-0.422	0.0	0.4
642	74.941	74.718	-0.423	0.0	0.4
648	74.940	74.718	-0.424	0.0	0.3
654	74.939	74.718	-0.425	0.0	0.3
660	74.938	74.718	-0.426	0.0	0.3
666	74.937	74.717	-0.427	0.0	0.3
672	74.936	74.717	-0.428	0.0	0.3
678	74.936	74.717	-0.428	0.0	0.2
684	74.935	74.717	-0.429	0.0	0.2
690	74.934	74.717	-0.430	0.0	0.2
696	74.934	74.716	-0.430	0.0	0.2
702	74.933	74.716	-0.431	0.0	0.2
708	74.932	74.716	-0.432	0.0	0.2
714	74.932	74.716	-0.432	0.0	0.2
720	74.931	74.716	-0.433	0.0	0.2

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 100 year Winter I+30%  
Average Rainfall Intensity 13.543 mm/hr

Time (mins)	Upstream Level (m)	Downstream Level (m)	Surcharged Depth (m)	Total O/F (l/s)	Pipe Flow (l/s)
6	74.716	74.620	-0.448	0.0	0.2
12	74.721	74.630	-0.443	0.0	0.5
18	74.724	74.639	-0.440	0.0	0.8
24	74.728	74.646	-0.436	0.0	1.1
30	74.732	74.650	-0.432	0.0	1.4
36	74.735	74.654	-0.429	0.0	1.6
42	74.737	74.657	-0.427	0.0	1.8
48	74.739	74.659	-0.425	0.0	2.0
54	74.742	74.660	-0.422	0.0	2.2
60	74.744	74.660	-0.420	0.0	2.4
66	74.746	74.661	-0.418	0.0	2.6
72	74.749	74.662	-0.415	0.0	2.8
78	74.752	74.663	-0.412	0.0	3.0
84	74.755	74.665	-0.409	0.0	3.3
90	74.759	74.667	-0.405	0.0	3.6
96	74.760	74.669	-0.404	0.0	4.0
102	74.762	74.672	-0.402	0.0	4.4
108	74.764	74.675	-0.400	0.0	4.8
114	74.766	74.679	-0.398	0.0	5.4
120	74.767	74.682	-0.397	0.0	5.8
126	74.769	74.686	-0.395	0.0	6.3
132	74.770	74.690	-0.394	0.0	6.7
138	74.772	74.694	-0.392	0.0	7.1
144	74.774	74.698	-0.390	0.0	7.6
150	74.776	74.703	-0.388	0.0	8.0
156	74.777	74.705	-0.387	0.0	8.4
162	74.779	74.708	-0.385	0.0	8.8
168	74.781	74.710	-0.383	0.0	9.1
174	74.782	74.711	-0.382	0.0	9.4
180	74.782	74.712	-0.382	0.0	9.5
186	74.782	74.712	-0.382	0.0	9.5
192	74.781	74.711	-0.383	0.0	9.3
198	74.780	74.709	-0.384	0.0	9.1
204	74.779	74.707	-0.385	0.0	8.6
210	74.777	74.705	-0.387	0.0	8.4
216	74.775	74.702	-0.389	0.0	7.9
222	74.773	74.698	-0.391	0.0	7.5
228	74.772	74.694	-0.392	0.0	7.1
234	74.770	74.690	-0.394	0.0	6.6
240	74.768	74.685	-0.396	0.0	6.2
246	74.767	74.682	-0.397	0.0	5.8
252	74.766	74.679	-0.398	0.0	5.5
258	74.764	74.675	-0.400	0.0	5.1
264	74.763	74.673	-0.401	0.0	4.9
270	74.762	74.671	-0.402	0.0	4.6

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 100 year Winter I+30%  
Average Rainfall Intensity 13.543 mm/hr

Time (mins)	Upstream Level (m)	Downstream Level (m)	Surcharged Depth (m)	Total O/F (l/s)	Pipe Flow (l/s)
276	74.762	74.669	-0.402	0.0	4.4
282	74.761	74.667	-0.403	0.0	4.2
288	74.761	74.666	-0.403	0.0	4.1
294	74.760	74.665	-0.404	0.0	4.0
300	74.760	74.665	-0.404	0.0	4.0
306	74.760	74.665	-0.404	0.0	3.9
312	74.760	74.665	-0.404	0.0	4.0
318	74.759	74.665	-0.405	0.0	3.9
324	74.759	74.665	-0.405	0.0	3.9
330	74.759	74.664	-0.405	0.0	3.8
336	74.759	74.664	-0.405	0.0	3.8
342	74.758	74.663	-0.406	0.0	3.7
348	74.756	74.661	-0.408	0.0	3.5
354	74.753	74.658	-0.411	0.0	3.3
360	74.749	74.648	-0.415	0.0	3.0
366	74.746	74.642	-0.418	0.0	2.7
372	74.747	74.642	-0.417	0.0	2.7
378	74.748	74.643	-0.416	0.0	2.8
384	74.747	74.643	-0.417	0.0	2.8
390	74.748	74.643	-0.416	0.0	2.8
396	74.748	74.643	-0.416	0.0	2.8
402	74.748	74.643	-0.416	0.0	2.8
408	74.748	74.643	-0.416	0.0	2.8
414	74.748	74.643	-0.416	0.0	2.8
420	74.748	74.643	-0.416	0.0	2.8
426	74.748	74.643	-0.416	0.0	2.8
432	74.748	74.643	-0.416	0.0	2.9
438	74.749	74.643	-0.415	0.0	2.9
444	74.749	74.643	-0.415	0.0	2.9
450	74.749	74.643	-0.415	0.0	2.9
456	74.749	74.644	-0.415	0.0	2.9
462	74.749	74.644	-0.415	0.0	2.9
468	74.749	74.644	-0.415	0.0	2.9
474	74.749	74.644	-0.415	0.0	2.9
480	74.749	74.644	-0.415	0.0	2.9
486	74.749	74.644	-0.415	0.0	2.9
492	74.749	74.643	-0.415	0.0	2.9
498	74.747	74.643	-0.417	0.0	2.9
504	74.745	74.641	-0.419	0.0	2.7
510	74.743	74.639	-0.421	0.0	2.6
516	74.741	74.638	-0.423	0.0	2.4
522	74.740	74.636	-0.424	0.0	2.2
528	74.738	74.634	-0.426	0.0	2.0
534	74.735	74.633	-0.429	0.0	1.9
540	74.733	74.631	-0.431	0.0	1.7

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 100 year Winter I+30%  
Average Rainfall Intensity 13.543 mm/hr


Time (mins)	Upstream Level (m)	Downstream Level (m)	Surcharged Depth (m)	Total O/F (l/s)	Pipe Flow (l/s)
546	74.731	74.629	-0.433	0.0	1.5
552	74.729	74.627	-0.435	0.0	1.4
558	74.728	74.626	-0.436	0.0	1.2
564	74.727	74.625	-0.437	0.0	1.1
570	74.726	74.624	-0.438	0.0	1.0
576	74.725	74.623	-0.439	0.0	0.9
582	74.724	74.623	-0.440	0.0	0.9
588	74.723	74.622	-0.441	0.0	0.8
594	74.722	74.621	-0.442	0.0	0.7
600	74.722	74.621	-0.442	0.0	0.6
606	74.721	74.620	-0.443	0.0	0.6
612	74.720	74.620	-0.444	0.0	0.5
618	74.720	74.619	-0.444	0.0	0.5
624	74.719	74.619	-0.445	0.0	0.5
630	74.719	74.618	-0.445	0.0	0.4
636	74.719	74.618	-0.445	0.0	0.4
642	74.718	74.618	-0.446	0.0	0.4
648	74.718	74.618	-0.446	0.0	0.4
654	74.718	74.617	-0.446	0.0	0.3
660	74.718	74.617	-0.446	0.0	0.3
666	74.717	74.617	-0.447	0.0	0.3
672	74.717	74.617	-0.447	0.0	0.3
678	74.717	74.617	-0.447	0.0	0.2
684	74.717	74.616	-0.447	0.0	0.2
690	74.717	74.616	-0.447	0.0	0.2
696	74.716	74.616	-0.448	0.0	0.2
702	74.716	74.616	-0.448	0.0	0.2
708	74.716	74.616	-0.448	0.0	0.2
714	74.716	74.616	-0.448	0.0	0.2
720	74.716	74.616	-0.448	0.0	0.2

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 100 year Winter I+30%  
Average Rainfall Intensity 13.543 mm/hr


Time (mins)	Upstream Level (m)	Downstream Level (m)	Surcharged Depth (m)	Total O/F (l/s)	Pipe Flow (l/s)
6	74.620	74.208	-0.444	0.0	0.4
12	74.630	74.233	-0.434	0.0	1.3
18	74.639	74.244	-0.425	0.0	2.2
24	74.646	74.249	-0.418	0.0	2.9
30	74.650	74.252	-0.414	0.0	3.4
36	74.654	74.254	-0.410	0.0	3.8
42	74.657	74.255	-0.407	0.0	4.1
48	74.659	74.256	-0.405	0.0	4.3
54	74.660	74.257	-0.404	0.0	4.5
60	74.660	74.258	-0.404	0.0	4.7
66	74.661	74.259	-0.403	0.0	4.9
72	74.662	74.261	-0.402	0.0	5.2
78	74.663	74.264	-0.401	0.0	5.6
84	74.665	74.267	-0.399	0.0	6.1
90	74.667	74.271	-0.397	0.0	6.6
96	74.669	74.276	-0.395	0.0	7.4
102	74.672	74.282	-0.392	0.0	8.2
108	74.675	74.287	-0.389	0.0	9.2
114	74.679	74.293	-0.385	0.0	10.4
120	74.682	74.298	-0.382	0.0	11.5
126	74.686	74.303	-0.378	0.0	12.7
132	74.690	74.309	-0.374	0.0	14.0
138	74.694	74.315	-0.370	0.0	15.3
144	74.698	74.321	-0.366	0.0	16.5
150	74.703	74.327	-0.361	0.0	17.9
156	74.705	74.332	-0.359	0.0	19.1
162	74.708	74.337	-0.356	0.0	20.2
168	74.710	74.347	-0.354	0.0	21.3
174	74.711	74.357	-0.353	0.0	22.1
180	74.712	74.370	-0.352	0.0	22.6
186	74.712	74.384	-0.352	0.0	22.7
192	74.711	74.398	-0.353	0.0	22.2
198	74.709	74.412	-0.355	0.0	21.4
204	74.707	74.428	-0.357	0.0	20.3
210	74.705	74.443	-0.359	0.0	19.3
216	74.702	74.457	-0.362	0.0	18.1
222	74.698	74.469	-0.366	0.0	16.8
228	74.694	74.479	-0.370	0.0	15.5
234	74.690	74.489	-0.374	0.0	14.3
240	74.685	74.497	-0.379	0.0	13.0
246	74.682	74.503	-0.382	0.0	11.8
252	74.679	74.509	-0.385	0.0	10.8
258	74.675	74.514	-0.389	0.0	9.7
264	74.673	74.518	-0.391	0.0	8.9
270	74.671	74.522	-0.393	0.0	8.2



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 100 year Winter I+30%  
Average Rainfall Intensity 13.543 mm/hr

Time (mins)	Upstream Level (m)	Downstream Level (m)	Surcharged Depth (m)	Total O/F (l/s)	Pipe Flow (l/s)
276	74.669	74.525	-0.395	0.0	7.6
282	74.667	74.527	-0.397	0.0	7.1
288	74.666	74.530	-0.398	0.0	6.8
294	74.665	74.532	-0.399	0.0	6.5
300	74.665	74.534	-0.399	0.0	6.4
306	74.665	74.536	-0.399	0.0	6.2
312	74.665	74.538	-0.399	0.0	6.3
318	74.665	74.540	-0.399	0.0	6.2
324	74.665	74.542	-0.399	0.0	6.2
330	74.664	74.544	-0.400	0.0	6.1
336	74.664	74.546	-0.400	0.0	5.9
342	74.663	74.547	-0.401	0.0	5.7
348	74.661	74.547	-0.403	0.0	5.2
354	74.658	74.547	-0.406	0.0	4.5
360	74.648	74.546	-0.416	0.0	3.6
366	74.642	74.544	-0.422	0.0	2.9
372	74.642	74.543	-0.422	0.0	2.7
378	74.643	74.542	-0.421	0.0	2.7
384	74.643	74.541	-0.421	0.0	2.8
390	74.643	74.539	-0.421	0.0	2.8
396	74.643	74.538	-0.421	0.0	2.8
402	74.643	74.537	-0.421	0.0	2.8
408	74.643	74.536	-0.421	0.0	2.8
414	74.643	74.534	-0.421	0.0	2.8
420	74.643	74.533	-0.421	0.0	2.8
426	74.643	74.532	-0.421	0.0	2.8
432	74.643	74.531	-0.421	0.0	2.9
438	74.643	74.529	-0.421	0.0	2.9
444	74.643	74.528	-0.421	0.0	2.9
450	74.643	74.527	-0.421	0.0	2.9
456	74.644	74.526	-0.420	0.0	2.9
462	74.644	74.525	-0.420	0.0	2.9
468	74.644	74.523	-0.420	0.0	2.9
474	74.644	74.522	-0.420	0.0	2.9
480	74.644	74.521	-0.420	0.0	2.9
486	74.644	74.520	-0.420	0.0	2.9
492	74.643	74.519	-0.421	0.0	2.9
498	74.643	74.517	-0.421	0.0	2.9
504	74.641	74.516	-0.423	0.0	2.7
510	74.639	74.515	-0.425	0.0	2.6
516	74.638	74.513	-0.426	0.0	2.4
522	74.636	74.511	-0.428	0.0	2.3
528	74.634	74.509	-0.430	0.0	2.1
534	74.633	74.508	-0.431	0.0	1.9
540	74.631	74.506	-0.433	0.0	1.7

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 100 year Winter I+30%  
Average Rainfall Intensity 13.543 mm/hr

Time (mins)	Upstream Level (m)	Downstream Level (m)	Surcharged Depth (m)	Total O/F (l/s)	Pipe Flow (l/s)
546	74.629	74.503	-0.435	0.0	1.6
552	74.627	74.501	-0.437	0.0	1.4
558	74.626	74.499	-0.438	0.0	1.3
564	74.625	74.497	-0.439	0.0	1.2
570	74.624	74.494	-0.440	0.0	1.1
576	74.623	74.492	-0.441	0.0	1.0
582	74.623	74.489	-0.441	0.0	0.9
588	74.622	74.486	-0.442	0.0	0.8
594	74.621	74.484	-0.443	0.0	0.7
600	74.621	74.481	-0.443	0.0	0.7
606	74.620	74.478	-0.444	0.0	0.6
612	74.620	74.475	-0.444	0.0	0.6
618	74.619	74.473	-0.445	0.0	0.5
624	74.619	74.470	-0.445	0.0	0.5
630	74.618	74.468	-0.446	0.0	0.4
636	74.618	74.465	-0.446	0.0	0.4
642	74.618	74.462	-0.446	0.0	0.4
648	74.618	74.459	-0.446	0.0	0.4
654	74.617	74.456	-0.447	0.0	0.3
660	74.617	74.453	-0.447	0.0	0.3
666	74.617	74.450	-0.447	0.0	0.3
672	74.617	74.447	-0.447	0.0	0.3
678	74.617	74.444	-0.447	0.0	0.3
684	74.616	74.441	-0.448	0.0	0.2
690	74.616	74.438	-0.448	0.0	0.2
696	74.616	74.435	-0.448	0.0	0.2
702	74.616	74.432	-0.448	0.0	0.2
708	74.616	74.429	-0.448	0.0	0.2
714	74.616	74.425	-0.448	0.0	0.2
720	74.616	74.423	-0.448	0.0	0.2

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 100 year Winter I+30%  
Average Rainfall Intensity 13.543 mm/hr

Time (mins)	Upstream Level (m)	Downstream Level (m)	Surcharged Depth (m)	Total O/F (l/s)	Pipe Flow (l/s)
6	74.952	74.523	-0.223	0.0	0.1
12	74.956	74.528	-0.219	0.0	0.4
18	74.960	74.531	-0.215	0.0	0.6
24	74.962	74.534	-0.213	0.0	0.7
30	74.963	74.536	-0.212	0.0	0.8
36	74.964	74.536	-0.211	0.0	0.9
42	74.964	74.537	-0.211	0.0	0.9
48	74.964	74.537	-0.211	0.0	0.9
54	74.964	74.537	-0.211	0.0	0.9
60	74.964	74.537	-0.211	0.0	0.9
66	74.964	74.537	-0.211	0.0	0.9
72	74.965	74.538	-0.210	0.0	0.9
78	74.966	74.539	-0.209	0.0	1.0
84	74.967	74.540	-0.208	0.0	1.1
90	74.969	74.542	-0.206	0.0	1.2
96	74.971	74.545	-0.204	0.0	1.3
102	74.973	74.548	-0.202	0.0	1.5
108	74.974	74.551	-0.201	0.0	1.7
114	74.975	74.552	-0.200	0.0	2.0
120	74.977	74.554	-0.198	0.0	2.2
126	74.978	74.555	-0.197	0.0	2.5
132	74.980	74.557	-0.195	0.0	2.8
138	74.981	74.559	-0.194	0.0	3.1
144	74.983	74.561	-0.192	0.0	3.4
150	74.984	74.563	-0.191	0.0	3.8
156	74.986	74.565	-0.189	0.0	4.1
162	74.987	74.567	-0.188	0.0	4.4
168	74.989	74.568	-0.186	0.0	4.7
174	74.990	74.569	-0.185	0.0	4.9
180	74.990	74.570	-0.185	0.0	5.0
186	74.990	74.570	-0.185	0.0	5.0
192	74.990	74.569	-0.185	0.0	4.9
198	74.989	74.568	-0.186	0.0	4.7
204	74.987	74.567	-0.188	0.0	4.4
210	74.986	74.565	-0.189	0.0	4.1
216	74.984	74.563	-0.191	0.0	3.8
222	74.983	74.561	-0.192	0.0	3.5
228	74.981	74.559	-0.194	0.0	3.2
234	74.980	74.557	-0.195	0.0	2.9
240	74.978	74.555	-0.197	0.0	2.5
246	74.977	74.554	-0.198	0.0	2.2
252	74.975	74.552	-0.200	0.0	2.0
258	74.974	74.551	-0.201	0.0	1.7
264	74.973	74.548	-0.202	0.0	1.5
270	74.971	74.545	-0.204	0.0	1.3

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 100 year Winter I+30%  
Average Rainfall Intensity 13.543 mm/hr

Time (mins)	Upstream Level (m)	Downstream Level (m)	Surcharged Depth (m)	Total O/F (l/s)	Pipe Flow (l/s)
276	74.969	74.542	-0.206	0.0	1.2
282	74.967	74.542	-0.208	0.0	1.1
288	74.966	74.542	-0.209	0.0	1.0
294	74.965	74.542	-0.210	0.0	0.9
300	74.964	74.543	-0.211	0.0	0.9
306	74.964	74.544	-0.211	0.0	0.9
312	74.964	74.545	-0.211	0.0	0.9
318	74.964	74.547	-0.211	0.0	0.9
324	74.964	74.548	-0.211	0.0	0.9
330	74.964	74.549	-0.211	0.0	0.9
336	74.963	74.550	-0.212	0.0	0.8
342	74.962	74.550	-0.213	0.0	0.8
348	74.960	74.550	-0.215	0.0	0.6
354	74.956	74.549	-0.219	0.0	0.4
360	74.952	74.546	-0.223	0.0	0.2
366	74.950	74.544	-0.225	0.0	0.0
372	74.950	74.543	-0.225	0.0	0.0
378	74.950	74.542	-0.225	0.0	0.0
384	74.950	74.541	-0.225	0.0	0.0
390	74.950	74.539	-0.225	0.0	0.0
396	74.950	74.538	-0.225	0.0	0.0
402	74.950	74.537	-0.225	0.0	0.0
408	74.950	74.536	-0.225	0.0	0.0
414	74.950	74.534	-0.225	0.0	0.0
420	74.950	74.533	-0.225	0.0	0.0
426	74.950	74.532	-0.225	0.0	0.0
432	74.950	74.531	-0.225	0.0	0.0
438	74.950	74.529	-0.225	0.0	0.0
444	74.950	74.528	-0.225	0.0	0.0
450	74.950	74.527	-0.225	0.0	0.0
456	74.950	74.526	-0.225	0.0	0.0
462	74.950	74.525	-0.225	0.0	0.0
468	74.950	74.523	-0.225	0.0	0.0
474	74.950	74.522	-0.225	0.0	0.0
480	74.950	74.521	-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 100 year Winter I+30%  
Average Rainfall Intensity 13.543 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 100 year Winter I+30%  
Average Rainfall Intensity 13.543 mm/hr

Time (mins)	Upstream Level (m)	Downstream Level (m)	Surcharged Depth (m)	Total O/F (l/s)	Pipe Flow (l/s)
6	74.523	74.208	-0.297	0.0	0.2
12	74.528	74.233	-0.292	0.0	0.5
18	74.531	74.244	-0.289	0.0	0.8
24	74.534	74.249	-0.286	0.0	1.0
30	74.536	74.252	-0.284	0.0	1.1
36	74.536	74.254	-0.284	0.0	1.2
42	74.537	74.255	-0.283	0.0	1.2
48	74.537	74.256	-0.283	0.0	1.2
54	74.537	74.257	-0.283	0.0	1.2
60	74.537	74.258	-0.283	0.0	1.2
66	74.537	74.259	-0.283	0.0	1.3
72	74.538	74.261	-0.282	0.0	1.3
78	74.539	74.264	-0.281	0.0	1.4
84	74.540	74.267	-0.280	0.0	1.5
90	74.542	74.271	-0.278	0.0	1.6
96	74.545	74.276	-0.275	0.0	1.8
102	74.548	74.282	-0.272	0.0	2.1
108	74.551	74.287	-0.269	0.0	2.3
114	74.552	74.293	-0.268	0.0	2.7
120	74.554	74.298	-0.266	0.0	3.1
126	74.555	74.303	-0.265	0.0	3.5
132	74.557	74.309	-0.263	0.0	3.9
138	74.559	74.315	-0.261	0.0	4.4
144	74.561	74.321	-0.259	0.0	4.8
150	74.563	74.327	-0.257	0.0	5.3
156	74.565	74.332	-0.255	0.0	5.7
162	74.567	74.337	-0.253	0.0	6.1
168	74.568	74.347	-0.252	0.0	6.5
174	74.569	74.357	-0.251	0.0	6.8
180	74.570	74.370	-0.250	0.0	7.0
186	74.570	74.384	-0.250	0.0	7.0
192	74.569	74.398	-0.251	0.0	6.8
198	74.568	74.412	-0.252	0.0	6.5
204	74.567	74.428	-0.253	0.0	6.2
210	74.565	74.443	-0.255	0.0	5.8
216	74.563	74.457	-0.257	0.0	5.4
222	74.561	74.469	-0.259	0.0	4.9
228	74.559	74.479	-0.261	0.0	4.4
234	74.557	74.489	-0.263	0.0	4.0
240	74.555	74.497	-0.265	0.0	3.5
246	74.554	74.503	-0.266	0.0	3.1
252	74.552	74.509	-0.268	0.0	2.8
258	74.551	74.514	-0.269	0.0	2.4
264	74.548	74.518	-0.272	0.0	2.1
270	74.545	74.522	-0.275	0.0	1.9

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 100 year Winter I+30%  
Average Rainfall Intensity 13.543 mm/hr


Time (mins)	Upstream Level (m)	Downstream Level (m)	Surcharged Depth (m)	Total O/F (l/s)	Pipe Flow (l/s)
276	74.542	74.525	-0.278	0.0	1.7
282	74.542	74.527	-0.278	0.0	1.5
288	74.542	74.530	-0.278	0.0	1.4
294	74.542	74.532	-0.278	0.0	1.3
300	74.543	74.534	-0.277	0.0	1.3
306	74.544	74.536	-0.276	0.0	1.2
312	74.545	74.538	-0.275	0.0	1.2
318	74.547	74.540	-0.273	0.0	1.2
324	74.548	74.542	-0.272	0.0	1.2
330	74.549	74.544	-0.271	0.0	1.2
336	74.550	74.546	-0.270	0.0	1.2
342	74.550	74.547	-0.270	0.0	1.0
348	74.550	74.547	-0.270	0.0	0.9
354	74.549	74.547	-0.271	0.0	0.6
360	74.546	74.546	-0.274	0.0	0.2
366	74.544	74.544	-0.276	0.0	0.0
372	74.543	74.543	-0.277	0.0	0.0
378	74.542	74.542	-0.278	0.0	0.0
384	74.541	74.541	-0.279	0.0	0.0
390	74.539	74.539	-0.281	0.0	0.0
396	74.538	74.538	-0.282	0.0	0.0
402	74.537	74.537	-0.283	0.0	0.0
408	74.536	74.536	-0.284	0.0	0.0
414	74.534	74.534	-0.286	0.0	0.0
420	74.533	74.533	-0.287	0.0	0.0
426	74.532	74.532	-0.288	0.0	0.0
432	74.531	74.531	-0.289	0.0	0.0
438	74.529	74.529	-0.291	0.0	0.0
444	74.528	74.528	-0.292	0.0	0.0
450	74.527	74.527	-0.293	0.0	0.0
456	74.526	74.526	-0.294	0.0	0.0
462	74.525	74.525	-0.295	0.0	0.0
468	74.523	74.523	-0.297	0.0	0.0
474	74.522	74.522	-0.298	0.0	0.0
480	74.521	74.521	-0.299	0.0	0.0
486	74.520	74.520	-0.300	0.0	0.0
492	74.520	74.519	-0.300	0.0	0.0
498	74.520	74.517	-0.300	0.0	0.0
504	74.520	74.516	-0.300	0.0	0.0
510	74.520	74.515	-0.300	0.0	0.0
516	74.520	74.513	-0.300	0.0	0.0
522	74.520	74.511	-0.300	0.0	0.0
528	74.520	74.509	-0.300	0.0	0.0
534	74.520	74.508	-0.300	0.0	0.0
540	74.520	74.506	-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 100 year Winter I+30%  
Average Rainfall Intensity 13.543 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	74.503	-0.300	0.0	0.0
552	74.520	74.501	-0.300	0.0	0.0
558	74.520	74.499	-0.300	0.0	0.0
564	74.520	74.497	-0.300	0.0	0.0
570	74.520	74.494	-0.300	0.0	0.0
576	74.520	74.492	-0.300	0.0	0.0
582	74.520	74.489	-0.300	0.0	0.0
588	74.520	74.486	-0.300	0.0	0.0
594	74.520	74.484	-0.300	0.0	0.0
600	74.520	74.481	-0.300	0.0	0.0
606	74.520	74.478	-0.300	0.0	0.0
612	74.520	74.475	-0.300	0.0	0.0
618	74.520	74.473	-0.300	0.0	0.0
624	74.520	74.470	-0.300	0.0	0.0
630	74.520	74.468	-0.300	0.0	0.0
636	74.520	74.465	-0.300	0.0	0.0
642	74.520	74.462	-0.300	0.0	0.0
648	74.520	74.459	-0.300	0.0	0.0
654	74.520	74.456	-0.300	0.0	0.0
660	74.520	74.453	-0.300	0.0	0.0
666	74.520	74.450	-0.300	0.0	0.0
672	74.520	74.447	-0.300	0.0	0.0
678	74.520	74.444	-0.300	0.0	0.0
684	74.520	74.441	-0.300	0.0	0.0
690	74.520	74.438	-0.300	0.0	0.0
696	74.520	74.435	-0.300	0.0	0.0
702	74.520	74.432	-0.300	0.0	0.0
708	74.520	74.429	-0.300	0.0	0.0
714	74.520	74.425	-0.300	0.0	0.0
720	74.520	74.423	-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 100 year Winter I+30%  
Average Rainfall Intensity 13.543 mm/hr

Time (mins)	Upstream Level (m)	Downstream Level (m)	Surcharged Depth (m)	Total O/F (l/s)	Pipe Flow (l/s)
6	74.208	74.156	-0.437	0.0	0.6
12	74.233	74.174	-0.412	0.0	1.9
18	74.244	74.189	-0.401	0.0	3.3
24	74.249	74.194	-0.396	0.0	4.4
30	74.252	74.196	-0.393	0.0	5.1
36	74.254	74.198	-0.391	0.0	5.6
42	74.255	74.199	-0.390	0.0	6.0
48	74.256	74.200	-0.389	0.0	6.2
54	74.257	74.200	-0.388	0.0	6.4
60	74.258	74.201	-0.387	0.0	6.6
66	74.259	74.202	-0.386	0.0	6.9
72	74.261	74.203	-0.384	0.0	7.2
78	74.264	74.205	-0.381	0.0	7.7
84	74.267	74.208	-0.378	0.0	8.3
90	74.271	74.211	-0.374	0.0	9.1
96	74.276	74.215	-0.369	0.0	10.1
102	74.282	74.220	-0.363	0.0	11.4
108	74.287	74.225	-0.358	0.0	12.8
114	74.293	74.232	-0.352	0.0	14.5
120	74.298	74.237	-0.347	0.0	16.2
126	74.303	74.241	-0.342	0.0	18.1
132	74.309	74.246	-0.336	0.0	20.1
138	74.315	74.251	-0.330	0.0	22.0
144	74.321	74.255	-0.324	0.0	24.0
150	74.327	74.260	-0.318	0.0	26.1
156	74.332	74.272	-0.313	0.0	28.1
162	74.337	74.286	-0.308	0.0	29.8
168	74.347	74.303	-0.298	0.0	31.5
174	74.357	74.321	-0.288	0.0	32.7
180	74.370	74.341	-0.275	0.0	33.6
186	74.384	74.362	-0.261	0.0	33.7
192	74.398	74.382	-0.247	0.0	32.9
198	74.412	74.400	-0.233	0.0	31.7
204	74.428	74.417	-0.217	0.0	29.9
210	74.443	74.433	-0.202	0.0	28.3
216	74.457	74.447	-0.188	0.0	26.4
222	74.469	74.460	-0.176	0.0	24.4
228	74.479	74.471	-0.166	0.0	22.5
234	74.489	74.482	-0.156	0.0	20.5
240	74.497	74.490	-0.148	0.0	18.5
246	74.503	74.498	-0.142	0.0	16.6
252	74.509	74.504	-0.136	0.0	15.1
258	74.514	74.509	-0.131	0.0	13.5
264	74.518	74.514	-0.127	0.0	12.2
270	74.522	74.518	-0.123	0.0	11.1

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 100 year Winter I+30%  
Average Rainfall Intensity 13.543 mm/hr

Time (mins)	Upstream Level (m)	Downstream Level (m)	Surcharged Depth (m)	Total O/F (l/s)	Pipe Flow (l/s)
276	74.525	74.521	-0.120	0.0	10.1
282	74.527	74.524	-0.118	0.0	9.4
288	74.530	74.526	-0.115	0.0	8.9
294	74.532	74.529	-0.113	0.0	8.5
300	74.534	74.531	-0.111	0.0	8.3
306	74.536	74.533	-0.109	0.0	8.1
312	74.538	74.535	-0.107	0.0	8.2
318	74.540	74.537	-0.105	0.0	8.1
324	74.542	74.539	-0.103	0.0	8.1
330	74.544	74.541	-0.101	0.0	8.0
336	74.546	74.543	-0.099	0.0	7.7
342	74.547	74.544	-0.098	0.0	7.3
348	74.547	74.545	-0.098	0.0	6.5
354	74.547	74.545	-0.098	0.0	5.5
360	74.546	74.545	-0.099	0.0	4.1
366	74.544	74.543	-0.101	0.0	3.0
372	74.543	74.542	-0.102	0.0	2.8
378	74.542	74.541	-0.103	0.0	2.8
384	74.541	74.540	-0.104	0.0	2.9
390	74.539	74.538	-0.106	0.0	2.8
396	74.538	74.537	-0.107	0.0	2.9
402	74.537	74.536	-0.108	0.0	2.9
408	74.536	74.535	-0.109	0.0	2.9
414	74.534	74.533	-0.111	0.0	2.9
420	74.533	74.532	-0.112	0.0	2.9
426	74.532	74.531	-0.113	0.0	2.9
432	74.531	74.530	-0.114	0.0	2.9
438	74.529	74.528	-0.116	0.0	2.9
444	74.528	74.527	-0.117	0.0	2.9
450	74.527	74.526	-0.118	0.0	2.9
456	74.526	74.525	-0.119	0.0	3.0
462	74.525	74.524	-0.120	0.0	3.0
468	74.523	74.522	-0.122	0.0	3.0
474	74.522	74.521	-0.123	0.0	3.0
480	74.521	74.520	-0.124	0.0	3.0
486	74.520	74.519	-0.125	0.0	3.0
492	74.519	74.518	-0.126	0.0	3.0
498	74.517	74.516	-0.128	0.0	2.9
504	74.516	74.515	-0.129	0.0	2.8
510	74.515	74.514	-0.130	0.0	2.7
516	74.513	74.512	-0.132	0.0	2.5
522	74.511	74.510	-0.134	0.0	2.4
528	74.509	74.509	-0.136	0.0	2.2
534	74.508	74.507	-0.137	0.0	2.0
540	74.506	74.505	-0.139	0.0	1.8

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 100 year Winter I+30%  
Average Rainfall Intensity 13.543 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	74.503	74.503	-0.142	0.0	1.7
552	74.501	74.501	-0.144	0.0	1.5
558	74.499	74.499	-0.146	0.0	1.4
564	74.497	74.496	-0.148	0.0	1.3
570	74.494	74.494	-0.151	0.0	1.1
576	74.492	74.492	-0.153	0.0	1.0
582	74.489	74.489	-0.156	0.0	0.9
588	74.486	74.486	-0.159	0.0	0.9
594	74.484	74.484	-0.161	0.0	0.8
600	74.481	74.481	-0.164	0.0	0.7
606	74.478	74.478	-0.167	0.0	0.7
612	74.475	74.475	-0.170	0.0	0.6
618	74.473	74.472	-0.172	0.0	0.6
624	74.470	74.470	-0.175	0.0	0.5
630	74.468	74.468	-0.177	0.0	0.5
636	74.465	74.465	-0.180	0.0	0.6
642	74.462	74.462	-0.183	0.0	0.4
648	74.459	74.459	-0.186	0.0	0.5
654	74.456	74.456	-0.189	0.0	0.3
660	74.453	74.453	-0.192	0.0	0.4
666	74.450	74.450	-0.195	0.0	0.3
672	74.447	74.447	-0.198	0.0	0.4
678	74.444	74.444	-0.201	0.0	0.2
684	74.441	74.441	-0.204	0.0	0.4
690	74.438	74.438	-0.207	0.0	0.2
696	74.435	74.435	-0.210	0.0	0.4
702	74.432	74.432	-0.213	0.0	0.1
708	74.429	74.429	-0.216	0.0	0.4
714	74.425	74.426	-0.220	0.0	0.2
720	74.423	74.423	-0.222	0.0	0.3

RPS P&D		Page 59
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 100 year Winter I+30%  
Average Rainfall Intensity 13.543 mm/hr

Time (mins)	Upstream Level (m)	Downstream Level (m)	Surcharged Depth (m)	Total O/F (l/s)	Pipe Flow (l/s)
6	74.156	74.045	-0.439	0.0	0.6
12	74.174	74.047	-0.421	0.0	1.7
18	74.189	74.049	-0.406	0.0	3.1
24	74.194	74.053	-0.401	0.0	4.3
30	74.196	74.058	-0.399	0.0	5.1
36	74.198	74.063	-0.397	0.0	5.6
42	74.199	74.068	-0.396	0.0	6.0
48	74.200	74.073	-0.395	0.0	6.2
54	74.200	74.078	-0.395	0.0	6.4
60	74.201	74.084	-0.394	0.0	6.6
66	74.202	74.089	-0.393	0.0	6.9
72	74.203	74.094	-0.392	0.0	7.2
78	74.205	74.100	-0.390	0.0	7.7
84	74.208	74.106	-0.387	0.0	8.3
90	74.211	74.112	-0.384	0.0	9.1
96	74.215	74.119	-0.380	0.0	10.1
102	74.220	74.127	-0.375	0.0	11.3
108	74.225	74.136	-0.370	0.0	12.7
114	74.232	74.146	-0.363	0.0	14.4
120	74.237	74.158	-0.358	0.0	16.2
126	74.241	74.171	-0.354	0.0	18.1
132	74.246	74.185	-0.349	0.0	20.1
138	74.251	74.200	-0.344	0.0	22.0
144	74.255	74.217	-0.340	0.0	24.0
150	74.260	74.234	-0.335	0.0	26.1
156	74.272	74.253	-0.323	0.0	27.9
162	74.286	74.272	-0.309	0.0	29.6
168	74.303	74.293	-0.292	0.0	31.2
174	74.321	74.313	-0.274	0.0	32.4
180	74.341	74.334	-0.254	0.0	33.2
186	74.362	74.355	-0.233	0.0	33.3
192	74.382	74.375	-0.213	0.0	32.5
198	74.400	74.394	-0.195	0.0	31.3
204	74.417	74.411	-0.178	0.0	29.5
210	74.433	74.427	-0.162	0.0	27.9
216	74.447	74.442	-0.148	0.0	26.1
222	74.460	74.455	-0.135	0.0	24.1
228	74.471	74.467	-0.124	0.0	22.2
234	74.482	74.478	-0.113	0.0	20.3
240	74.490	74.487	-0.105	0.0	18.3
246	74.498	74.494	-0.097	0.0	16.5
252	74.504	74.501	-0.091	0.0	14.9
258	74.509	74.507	-0.086	0.0	13.3
264	74.514	74.512	-0.081	0.0	12.1
270	74.518	74.516	-0.077	0.0	11.0

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 100 year Winter I+30%  
Average Rainfall Intensity 13.543 mm/hr

Time (mins)	Upstream Level (m)	Downstream Level (m)	Surcharged Depth (m)	Total O/F (l/s)	Pipe Flow (l/s)
276	74.521	74.519	-0.074	0.0	10.1
282	74.524	74.522	-0.071	0.0	9.4
288	74.526	74.525	-0.069	0.0	8.9
294	74.529	74.527	-0.066	0.0	8.5
300	74.531	74.529	-0.064	0.0	8.3
306	74.533	74.531	-0.062	0.0	8.1
312	74.535	74.533	-0.060	0.0	8.1
318	74.537	74.535	-0.058	0.0	8.1
324	74.539	74.538	-0.056	0.0	8.0
330	74.541	74.539	-0.054	0.0	7.9
336	74.543	74.541	-0.052	0.0	7.7
342	74.544	74.543	-0.051	0.0	7.3
348	74.545	74.544	-0.050	0.0	6.5
354	74.545	74.544	-0.050	0.0	5.5
360	74.545	74.544	-0.050	0.0	4.1
366	74.543	74.543	-0.052	0.0	3.0
372	74.542	74.542	-0.053	0.0	2.8
378	74.541	74.540	-0.054	0.0	2.8
384	74.540	74.539	-0.055	0.0	2.9
390	74.538	74.538	-0.057	0.0	2.9
396	74.537	74.537	-0.058	0.0	2.9
402	74.536	74.535	-0.059	0.0	2.9
408	74.535	74.534	-0.060	0.0	2.9
414	74.533	74.533	-0.062	0.0	2.9
420	74.532	74.532	-0.063	0.0	2.9
426	74.531	74.530	-0.064	0.0	2.9
432	74.530	74.529	-0.065	0.0	2.9
438	74.528	74.528	-0.067	0.0	2.9
444	74.527	74.527	-0.068	0.0	3.0
450	74.526	74.525	-0.069	0.0	3.0
456	74.525	74.524	-0.070	0.0	3.0
462	74.524	74.523	-0.071	0.0	3.0
468	74.522	74.522	-0.073	0.0	3.0
474	74.521	74.521	-0.074	0.0	3.0
480	74.520	74.519	-0.075	0.0	3.0
486	74.519	74.518	-0.076	0.0	3.0
492	74.518	74.517	-0.077	0.0	3.0
498	74.516	74.516	-0.079	0.0	3.0
504	74.515	74.514	-0.080	0.0	2.8
510	74.514	74.513	-0.081	0.0	2.7
516	74.512	74.511	-0.083	0.0	2.5
522	74.510	74.510	-0.085	0.0	2.4
528	74.509	74.508	-0.086	0.0	2.2
534	74.507	74.506	-0.088	0.0	2.0
540	74.505	74.505	-0.090	0.0	1.9

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 100 year Winter I+30%  
Average Rainfall Intensity 13.543 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	74.503	74.502	-0.092	0.0	1.7
552	74.501	74.500	-0.094	0.0	1.5
558	74.499	74.498	-0.096	0.0	1.4
564	74.496	74.496	-0.099	0.0	1.3
570	74.494	74.494	-0.101	0.0	1.2
576	74.492	74.491	-0.103	0.0	1.1
582	74.489	74.489	-0.106	0.0	1.0
588	74.486	74.486	-0.109	0.0	1.0
594	74.484	74.484	-0.111	0.0	0.9
600	74.481	74.481	-0.114	0.0	0.8
606	74.478	74.478	-0.117	0.0	0.7
612	74.475	74.475	-0.120	0.0	0.7
618	74.472	74.473	-0.123	0.0	0.7
624	74.470	74.470	-0.125	0.0	0.6
630	74.468	74.468	-0.127	0.0	0.6
636	74.465	74.465	-0.130	0.0	0.5
642	74.462	74.462	-0.133	0.0	0.6
648	74.459	74.459	-0.136	0.0	0.5
654	74.456	74.456	-0.139	0.0	0.5
660	74.453	74.453	-0.142	0.0	0.5
666	74.450	74.450	-0.145	0.0	0.4
672	74.447	74.447	-0.148	0.0	0.4
678	74.444	74.444	-0.151	0.0	0.4
684	74.441	74.441	-0.154	0.0	0.3
690	74.438	74.438	-0.157	0.0	0.4
696	74.435	74.435	-0.160	0.0	0.3
702	74.432	74.432	-0.163	0.0	0.4
708	74.429	74.429	-0.166	0.0	0.3
714	74.426	74.426	-0.169	0.0	0.4
720	74.423	74.423	-0.172	0.0	0.2

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 100 year Winter I+30%  
Average Rainfall Intensity 13.543 mm/hr


Time (mins)	Upstream Level (m)	Downstream Level (m)	Surcharged Depth (m)	Total O/F (l/s)	Pipe Flow (l/s)
6	74.045	74.025	-0.450	0.0	0.0
12	74.047	74.025	-0.448	0.0	0.0
18	74.049	74.025	-0.446	0.0	0.0
24	74.053	74.026	-0.442	0.0	0.0
30	74.058	74.027	-0.437	0.0	0.1
36	74.063	74.028	-0.432	0.0	0.1
42	74.068	74.031	-0.427	0.0	0.2
48	74.073	74.034	-0.422	0.0	0.3
54	74.078	74.037	-0.417	0.0	0.5
60	74.084	74.041	-0.411	0.0	0.7
66	74.089	74.046	-0.406	0.0	0.9
72	74.094	74.050	-0.401	0.0	1.1
78	74.100	74.051	-0.395	0.0	1.2
84	74.106	74.052	-0.389	0.0	1.4
90	74.112	74.053	-0.383	0.0	1.5
96	74.119	74.054	-0.376	0.0	1.6
102	74.127	74.056	-0.368	0.0	1.8
108	74.136	74.057	-0.359	0.0	2.0
114	74.146	74.059	-0.349	0.0	2.2
120	74.158	74.061	-0.337	0.0	2.4
126	74.171	74.063	-0.324	0.0	2.7
132	74.185	74.065	-0.310	0.0	2.9
138	74.200	74.067	-0.295	0.0	3.1
144	74.217	74.069	-0.278	0.0	3.3
150	74.234	74.071	-0.261	0.0	3.6
156	74.253	74.073	-0.242	0.0	3.9
162	74.272	74.074	-0.223	0.0	4.2
168	74.293	74.075	-0.202	0.0	4.4
174	74.313	74.075	-0.182	0.0	4.5
180	74.334	74.076	-0.161	0.0	4.6
186	74.355	74.076	-0.140	0.0	4.7
192	74.375	74.076	-0.120	0.0	4.7
198	74.394	74.077	-0.101	0.0	4.8
204	74.411	74.077	-0.084	0.0	4.8
210	74.427	74.077	-0.068	0.0	4.8
216	74.442	74.077	-0.053	0.0	4.8
222	74.455	74.077	-0.040	0.0	4.8
228	74.467	74.077	-0.028	0.0	4.8
234	74.478	74.077	-0.017	0.0	4.9
240	74.487	74.077	-0.008	0.0	4.9
246	74.494	74.077	-0.001	0.0	4.9
252	74.501	74.077	0.006	0.0	4.9
258	74.507	74.077	0.012	0.0	4.9
264	74.512	74.077	0.017	0.0	4.9
270	74.516	74.077	0.021	0.0	4.9

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 100 year Winter I+30%  
Average Rainfall Intensity 13.543 mm/hr


Time (mins)	Upstream Level (m)	Downstream Level (m)	Surcharged Depth (m)	Total O/F (l/s)	Pipe Flow (l/s)
276	74.519	74.077	0.024	0.0	4.9
282	74.522	74.077	0.027	0.0	4.9
288	74.525	74.077	0.030	0.0	4.9
294	74.527	74.077	0.032	0.0	4.9
300	74.529	74.077	0.034	0.0	4.9
306	74.531	74.077	0.036	0.0	4.9
312	74.533	74.077	0.038	0.0	4.9
318	74.535	74.077	0.040	0.0	4.9
324	74.538	74.077	0.043	0.0	4.9
330	74.539	74.077	0.044	0.0	4.9
336	74.541	74.077	0.046	0.0	4.9
342	74.543	74.077	0.048	0.0	4.9
348	74.544	74.077	0.049	0.0	4.9
354	74.544	74.077	0.049	0.0	4.9
360	74.544	74.077	0.049	0.0	4.9
366	74.543	74.077	0.048	0.0	4.9
372	74.542	74.077	0.047	0.0	4.9
378	74.540	74.077	0.045	0.0	4.9
384	74.539	74.077	0.044	0.0	4.9
390	74.538	74.077	0.043	0.0	4.9
396	74.537	74.077	0.042	0.0	4.9
402	74.535	74.077	0.040	0.0	4.9
408	74.534	74.077	0.039	0.0	4.9
414	74.533	74.077	0.038	0.0	4.9
420	74.532	74.077	0.037	0.0	4.9
426	74.530	74.077	0.035	0.0	4.9
432	74.529	74.077	0.034	0.0	4.9
438	74.528	74.077	0.033	0.0	4.9
444	74.527	74.077	0.032	0.0	4.9
450	74.525	74.077	0.030	0.0	4.9
456	74.524	74.077	0.029	0.0	4.9
462	74.523	74.077	0.028	0.0	4.9
468	74.522	74.077	0.027	0.0	4.9
474	74.521	74.077	0.026	0.0	4.9
480	74.519	74.077	0.024	0.0	4.9
486	74.518	74.077	0.023	0.0	4.9
492	74.517	74.077	0.022	0.0	4.9
498	74.516	74.077	0.021	0.0	4.9
504	74.514	74.077	0.019	0.0	4.9
510	74.513	74.077	0.018	0.0	4.9
516	74.511	74.077	0.016	0.0	4.9
522	74.510	74.077	0.015	0.0	4.9
528	74.508	74.077	0.013	0.0	4.9
534	74.506	74.077	0.011	0.0	4.9
540	74.505	74.077	0.010	0.0	4.9



RPS P&D		Page 64
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 100 year Winter I+30%  
Average Rainfall Intensity 13.543 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	74.502	74.077	0.007	0.0	4.9
552	74.500	74.077	0.005	0.0	4.9
558	74.498	74.077	0.003	0.0	4.9
564	74.496	74.077	0.001	0.0	4.9
570	74.494	74.077	-0.001	0.0	4.9
576	74.491	74.077	-0.004	0.0	4.9
582	74.489	74.077	-0.006	0.0	4.9
588	74.486	74.077	-0.009	0.0	4.9
594	74.484	74.077	-0.011	0.0	4.9
600	74.481	74.077	-0.014	0.0	4.9
606	74.478	74.077	-0.017	0.0	4.9
612	74.475	74.077	-0.020	0.0	4.9
618	74.473	74.077	-0.022	0.0	4.9
624	74.470	74.077	-0.025	0.0	4.9
630	74.468	74.077	-0.027	0.0	4.9
636	74.465	74.077	-0.030	0.0	4.9
642	74.462	74.077	-0.033	0.0	4.8
648	74.459	74.077	-0.036	0.0	4.8
654	74.456	74.077	-0.039	0.0	4.8
660	74.453	74.077	-0.042	0.0	4.8
666	74.450	74.077	-0.045	0.0	4.8
672	74.447	74.077	-0.048	0.0	4.8
678	74.444	74.077	-0.051	0.0	4.8
684	74.441	74.077	-0.054	0.0	4.8
690	74.438	74.077	-0.057	0.0	4.8
696	74.435	74.077	-0.060	0.0	4.8
702	74.432	74.077	-0.063	0.0	4.8
708	74.429	74.077	-0.066	0.0	4.8
714	74.426	74.077	-0.069	0.0	4.8
720	74.423	74.077	-0.072	0.0	4.8

RPS P&D		Page 65
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 100 year Winter I+30%  
Average Rainfall Intensity 13.543 mm/hr

Time (mins)	Upstream Level (m)	Downstream Level (m)	Surcharged Depth (m)	Total O/F (l/s)	Pipe Flow (l/s)
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	74.026	73.673	-0.224	0.0	0.0
30	74.027	73.673	-0.223	0.0	0.0
36	74.028	73.673	-0.222	0.0	0.1
42	74.031	73.673	-0.219	0.0	0.2
48	74.034	73.673	-0.216	0.0	0.3
54	74.037	73.673	-0.213	0.0	0.4
60	74.041	73.673	-0.209	0.0	0.5
66	74.046	73.673	-0.204	0.0	0.7
72	74.050	73.673	-0.200	0.0	1.0
78	74.051	73.673	-0.199	0.0	1.2
84	74.052	73.673	-0.198	0.0	1.3
90	74.053	73.673	-0.197	0.0	1.4
96	74.054	73.673	-0.196	0.0	1.6
102	74.056	73.673	-0.194	0.0	1.7
108	74.057	73.673	-0.193	0.0	1.9
114	74.059	73.673	-0.191	0.0	2.1
120	74.061	73.673	-0.189	0.0	2.3
126	74.063	73.673	-0.187	0.0	2.6
132	74.065	73.673	-0.185	0.0	2.8
138	74.067	73.673	-0.183	0.0	3.0
144	74.069	73.673	-0.181	0.0	3.2
150	74.071	73.673	-0.179	0.0	3.5
156	74.073	73.673	-0.177	0.0	3.8
162	74.074	73.673	-0.176	0.0	4.1
168	74.075	73.673	-0.175	0.0	4.4
174	74.075	73.673	-0.175	0.0	4.5
180	74.076	73.673	-0.174	0.0	4.6
186	74.076	73.673	-0.174	0.0	4.6
192	74.076	73.673	-0.174	0.0	4.7
198	74.077	73.673	-0.173	0.0	4.8
204	74.077	73.673	-0.173	0.0	4.8
210	74.077	73.673	-0.173	0.0	4.8
216	74.077	73.673	-0.173	0.0	4.8
222	74.077	73.673	-0.173	0.0	4.8
228	74.077	73.673	-0.173	0.0	4.8
234	74.077	73.673	-0.173	0.0	4.9
240	74.077	73.673	-0.173	0.0	4.9
246	74.077	73.673	-0.173	0.0	4.9
252	74.077	73.673	-0.173	0.0	4.9
258	74.077	73.673	-0.173	0.0	4.9
264	74.077	73.673	-0.173	0.0	4.9
270	74.077	73.673	-0.173	0.0	4.9

RPS P&D		Page 66
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 100 year Winter I+30%  
Average Rainfall Intensity 13.543 mm/hr

Time (mins)	Upstream Level (m)	Downstream Level (m)	Surcharged Depth (m)	Total O/F (l/s)	Pipe Flow (l/s)
276	74.077	73.673	-0.173	0.0	4.9
282	74.077	73.673	-0.173	0.0	4.9
288	74.077	73.673	-0.173	0.0	4.9
294	74.077	73.673	-0.173	0.0	4.9
300	74.077	73.673	-0.173	0.0	4.9
306	74.077	73.673	-0.173	0.0	4.9
312	74.077	73.673	-0.173	0.0	4.9
318	74.077	73.673	-0.173	0.0	4.9
324	74.077	73.673	-0.173	0.0	4.9
330	74.077	73.673	-0.173	0.0	4.9
336	74.077	73.673	-0.173	0.0	4.9
342	74.077	73.673	-0.173	0.0	4.9
348	74.077	73.673	-0.173	0.0	4.9
354	74.077	73.673	-0.173	0.0	4.9
360	74.077	73.673	-0.173	0.0	4.9
366	74.077	73.673	-0.173	0.0	4.9
372	74.077	73.673	-0.173	0.0	4.9
378	74.077	73.673	-0.173	0.0	4.9
384	74.077	73.673	-0.173	0.0	4.9
390	74.077	73.673	-0.173	0.0	4.9
396	74.077	73.673	-0.173	0.0	4.9
402	74.077	73.673	-0.173	0.0	4.9
408	74.077	73.673	-0.173	0.0	4.9
414	74.077	73.673	-0.173	0.0	4.9
420	74.077	73.673	-0.173	0.0	4.9
426	74.077	73.673	-0.173	0.0	4.9
432	74.077	73.673	-0.173	0.0	4.9
438	74.077	73.673	-0.173	0.0	4.9
444	74.077	73.673	-0.173	0.0	4.9
450	74.077	73.673	-0.173	0.0	4.9
456	74.077	73.673	-0.173	0.0	4.9
462	74.077	73.673	-0.173	0.0	4.9
468	74.077	73.673	-0.173	0.0	4.9
474	74.077	73.673	-0.173	0.0	4.9
480	74.077	73.673	-0.173	0.0	4.9
486	74.077	73.673	-0.173	0.0	4.9
492	74.077	73.673	-0.173	0.0	4.9
498	74.077	73.673	-0.173	0.0	4.9
504	74.077	73.673	-0.173	0.0	4.9
510	74.077	73.673	-0.173	0.0	4.9
516	74.077	73.673	-0.173	0.0	4.9
522	74.077	73.673	-0.173	0.0	4.9
528	74.077	73.673	-0.173	0.0	4.9
534	74.077	73.673	-0.173	0.0	4.9
540	74.077	73.673	-0.173	0.0	4.9

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 100 year Winter I+30%  
Average Rainfall Intensity 13.543 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	74.077	73.673	-0.173	0.0	4.9
552	74.077	73.673	-0.173	0.0	4.9
558	74.077	73.673	-0.173	0.0	4.9
564	74.077	73.673	-0.173	0.0	4.9
570	74.077	73.673	-0.173	0.0	4.9
576	74.077	73.673	-0.173	0.0	4.9
582	74.077	73.673	-0.173	0.0	4.9
588	74.077	73.673	-0.173	0.0	4.9
594	74.077	73.673	-0.173	0.0	4.9
600	74.077	73.673	-0.173	0.0	4.9
606	74.077	73.673	-0.173	0.0	4.9
612	74.077	73.673	-0.173	0.0	4.9
618	74.077	73.673	-0.173	0.0	4.9
624	74.077	73.673	-0.173	0.0	4.9
630	74.077	73.673	-0.173	0.0	4.9
636	74.077	73.673	-0.173	0.0	4.9
642	74.077	73.673	-0.173	0.0	4.8
648	74.077	73.673	-0.173	0.0	4.8
654	74.077	73.673	-0.173	0.0	4.8
660	74.077	73.673	-0.173	0.0	4.8
666	74.077	73.673	-0.173	0.0	4.8
672	74.077	73.673	-0.173	0.0	4.8
678	74.077	73.673	-0.173	0.0	4.8
684	74.077	73.673	-0.173	0.0	4.8
690	74.077	73.673	-0.173	0.0	4.8
696	74.077	73.673	-0.173	0.0	4.8
702	74.077	73.673	-0.173	0.0	4.8
708	74.077	73.673	-0.173	0.0	4.8
714	74.077	73.673	-0.173	0.0	4.8
720	74.077	73.673	-0.173	0.0	4.8