


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 ³ /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 ²)	Depth (m)	Area (m ²)	Depth (m)	Area (m ²)	Depth (m)	Area (m ²)
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 ²)	Depth (m)	Area (m ²)	Depth (m)	Area (m ²)
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+0%
Average Rainfall Intensity 10.418 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	76.504	-0.224	0.0	0.1
12	76.903	76.512	-0.222	0.0	0.2
18	76.905	76.517	-0.220	0.0	0.3
24	76.906	76.522	-0.219	0.0	0.3
30	76.906	76.523	-0.219	0.0	0.4
36	76.907	76.523	-0.218	0.0	0.4
42	76.907	76.523	-0.218	0.0	0.4
48	76.907	76.524	-0.218	0.0	0.4
54	76.907	76.523	-0.218	0.0	0.4
60	76.907	76.524	-0.218	0.0	0.4
66	76.907	76.524	-0.218	0.0	0.4
72	76.907	76.524	-0.218	0.0	0.4
78	76.908	76.524	-0.217	0.0	0.4
84	76.908	76.525	-0.217	0.0	0.5
90	76.909	76.526	-0.216	0.0	0.5
96	76.910	76.528	-0.215	0.0	0.6
102	76.911	76.529	-0.214	0.0	0.6
108	76.913	76.531	-0.212	0.0	0.7
114	76.915	76.533	-0.210	0.0	0.8
120	76.917	76.536	-0.208	0.0	0.9
126	76.919	76.538	-0.206	0.0	1.1
132	76.922	76.541	-0.203	0.0	1.2
138	76.923	76.544	-0.202	0.0	1.3
144	76.924	76.546	-0.201	0.0	1.5
150	76.925	76.548	-0.200	0.0	1.6
156	76.925	76.550	-0.200	0.0	1.8
162	76.926	76.551	-0.199	0.0	1.9
168	76.927	76.553	-0.198	0.0	2.0
174	76.927	76.554	-0.198	0.0	2.1
180	76.927	76.555	-0.198	0.0	2.1
186	76.927	76.555	-0.198	0.0	2.1
192	76.927	76.554	-0.198	0.0	2.1
198	76.927	76.553	-0.198	0.0	2.0
204	76.926	76.551	-0.199	0.0	1.9
210	76.925	76.550	-0.200	0.0	1.8
216	76.925	76.548	-0.200	0.0	1.6
222	76.924	76.546	-0.201	0.0	1.5
228	76.923	76.544	-0.202	0.0	1.4
234	76.922	76.541	-0.203	0.0	1.2
240	76.919	76.538	-0.206	0.0	1.1
246	76.917	76.536	-0.208	0.0	1.0
252	76.915	76.533	-0.210	0.0	0.8
258	76.913	76.531	-0.212	0.0	0.7
264	76.911	76.529	-0.214	0.0	0.7
270	76.910	76.528	-0.215	0.0	0.6

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+0%
Average Rainfall Intensity 10.418 mm/hr

Time (mins)	Upstream Level (m)	Downstream Level (m)	Surcharged Depth (m)	Total O/F (l/s)	Pipe Flow (l/s)
276	76.909	76.526	-0.216	0.0	0.5
282	76.908	76.525	-0.217	0.0	0.5
288	76.908	76.524	-0.217	0.0	0.4
294	76.907	76.524	-0.218	0.0	0.4
300	76.907	76.524	-0.218	0.0	0.4
306	76.907	76.524	-0.218	0.0	0.4
312	76.907	76.523	-0.218	0.0	0.4
318	76.907	76.524	-0.218	0.0	0.4
324	76.907	76.523	-0.218	0.0	0.4
330	76.907	76.523	-0.218	0.0	0.4
336	76.906	76.523	-0.219	0.0	0.4
342	76.906	76.522	-0.219	0.0	0.3
348	76.905	76.517	-0.220	0.0	0.3
354	76.903	76.512	-0.222	0.0	0.2
360	76.901	76.504	-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+0%
Average Rainfall Intensity 10.418 mm/hr

Time (mins)	Upstream Level (m)	Downstream Level (m)	Surcharged Depth (m)	Total O/F (l/s)	Pipe Flow (l/s)
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+0%
Average Rainfall Intensity 10.418 mm/hr

Time (mins)	Upstream Level (m)	Downstream Level (m)	Surcharged Depth (m)	Total O/F (l/s)	Pipe Flow (l/s)
6	76.504	76.069	-0.221	0.0	0.1
12	76.512	76.076	-0.213	0.0	0.4
18	76.517	76.081	-0.208	0.0	0.6
24	76.522	76.085	-0.203	0.0	0.8
30	76.523	76.087	-0.202	0.0	1.0
36	76.523	76.088	-0.202	0.0	1.0
42	76.523	76.089	-0.202	0.0	1.1
48	76.524	76.089	-0.201	0.0	1.1
54	76.523	76.089	-0.202	0.0	1.1
60	76.524	76.089	-0.201	0.0	1.1
66	76.524	76.089	-0.201	0.0	1.1
72	76.524	76.090	-0.201	0.0	1.1
78	76.524	76.092	-0.201	0.0	1.2
84	76.525	76.094	-0.200	0.0	1.3
90	76.526	76.096	-0.199	0.0	1.4
96	76.528	76.097	-0.197	0.0	1.6
102	76.529	76.098	-0.196	0.0	1.8
108	76.531	76.100	-0.194	0.0	2.0
114	76.533	76.102	-0.192	0.0	2.3
120	76.536	76.104	-0.189	0.0	2.6
126	76.538	76.107	-0.187	0.0	2.9
132	76.541	76.110	-0.184	0.0	3.3
138	76.544	76.112	-0.181	0.0	3.7
144	76.546	76.115	-0.179	0.0	4.1
150	76.548	76.118	-0.177	0.0	4.5
156	76.550	76.121	-0.175	0.0	4.9
162	76.551	76.123	-0.174	0.0	5.2
168	76.553	76.125	-0.172	0.0	5.5
174	76.554	76.126	-0.171	0.0	5.8
180	76.555	76.127	-0.170	0.0	6.0
186	76.555	76.127	-0.170	0.0	6.0
192	76.554	76.126	-0.171	0.0	5.9
198	76.553	76.125	-0.172	0.0	5.6
204	76.551	76.123	-0.174	0.0	5.3
210	76.550	76.121	-0.175	0.0	5.0
216	76.548	76.118	-0.177	0.0	4.6
222	76.546	76.115	-0.179	0.0	4.2
228	76.544	76.112	-0.181	0.0	3.8
234	76.541	76.110	-0.184	0.0	3.5
240	76.538	76.107	-0.187	0.0	3.1
246	76.536	76.104	-0.189	0.0	2.7
252	76.533	76.102	-0.192	0.0	2.4
258	76.531	76.100	-0.194	0.0	2.1
264	76.529	76.098	-0.196	0.0	1.9
270	76.528	76.097	-0.197	0.0	1.6

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+0%
Average Rainfall Intensity 10.418 mm/hr

Time (mins)	Upstream Level (m)	Downstream Level (m)	Surcharged Depth (m)	Total O/F (l/s)	Pipe Flow (l/s)
276	76.526	76.096	-0.199	0.0	1.4
282	76.525	76.094	-0.200	0.0	1.3
288	76.524	76.092	-0.201	0.0	1.2
294	76.524	76.090	-0.201	0.0	1.1
300	76.524	76.089	-0.201	0.0	1.1
306	76.524	76.089	-0.201	0.0	1.1
312	76.523	76.089	-0.202	0.0	1.1
318	76.524	76.089	-0.201	0.0	1.1
324	76.523	76.089	-0.202	0.0	1.1
330	76.523	76.088	-0.202	0.0	1.0
336	76.523	76.087	-0.202	0.0	1.0
342	76.522	76.085	-0.203	0.0	0.9
348	76.517	76.081	-0.208	0.0	0.8
354	76.512	76.076	-0.213	0.0	0.6
360	76.504	76.069	-0.221	0.0	0.3
366	76.500	76.065	-0.225	0.0	0.0
372	76.500	76.065	-0.225	0.0	0.0
378	76.500	76.065	-0.225	0.0	0.0
384	76.500	76.065	-0.225	0.0	0.0
390	76.500	76.065	-0.225	0.0	0.0
396	76.500	76.065	-0.225	0.0	0.0
402	76.500	76.065	-0.225	0.0	0.0
408	76.500	76.065	-0.225	0.0	0.0
414	76.500	76.065	-0.225	0.0	0.0
420	76.500	76.065	-0.225	0.0	0.0
426	76.500	76.065	-0.225	0.0	0.0
432	76.500	76.065	-0.225	0.0	0.0
438	76.500	76.065	-0.225	0.0	0.0
444	76.500	76.065	-0.225	0.0	0.0
450	76.500	76.065	-0.225	0.0	0.0
456	76.500	76.065	-0.225	0.0	0.0
462	76.500	76.065	-0.225	0.0	0.0
468	76.500	76.065	-0.225	0.0	0.0
474	76.500	76.065	-0.225	0.0	0.0
480	76.500	76.065	-0.225	0.0	0.0
486	76.500	76.065	-0.225	0.0	0.0
492	76.500	76.065	-0.225	0.0	0.0
498	76.500	76.065	-0.225	0.0	0.0
504	76.500	76.065	-0.225	0.0	0.0
510	76.500	76.065	-0.225	0.0	0.0
516	76.500	76.065	-0.225	0.0	0.0
522	76.500	76.065	-0.225	0.0	0.0
528	76.500	76.065	-0.225	0.0	0.0
534	76.500	76.065	-0.225	0.0	0.0
540	76.500	76.065	-0.225	0.0	0.0

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


Flows and Levels for Pipe 1.001 US/MH 2 (JNY8140 SW NETWORK DESIGN 2015
09 25.SWS)
360 minute 100 year Winter I+0%
Average Rainfall Intensity 10.418 mm/hr

Time (mins)	Upstream Level (m)	Downstream Level (m)	Surcharged Depth (m)	Total O/F (l/s)	Pipe Flow (l/s)
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+0%
Average Rainfall Intensity 10.418 mm/hr

Time (mins)	Upstream Level (m)	Downstream Level (m)	Surcharged Depth (m)	Total O/F (l/s)	Pipe Flow (l/s)
6	76.069	75.869	-0.296	0.0	0.2
12	76.076	75.876	-0.289	0.0	0.6
18	76.081	75.881	-0.284	0.0	0.9
24	76.085	75.885	-0.280	0.0	1.1
30	76.087	75.887	-0.278	0.0	1.3
36	76.088	75.888	-0.277	0.0	1.4
42	76.089	75.889	-0.276	0.0	1.4
48	76.089	75.889	-0.276	0.0	1.4
54	76.089	75.889	-0.276	0.0	1.4
60	76.089	75.889	-0.276	0.0	1.4
66	76.089	75.889	-0.276	0.0	1.5
72	76.090	75.890	-0.275	0.0	1.5
78	76.092	75.891	-0.273	0.0	1.6
84	76.094	75.894	-0.271	0.0	1.7
90	76.096	75.895	-0.269	0.0	1.9
96	76.097	75.897	-0.268	0.0	2.1
102	76.098	75.898	-0.267	0.0	2.4
108	76.100	75.900	-0.265	0.0	2.7
114	76.102	75.902	-0.263	0.0	3.1
120	76.104	75.904	-0.261	0.0	3.5
126	76.107	75.907	-0.258	0.0	3.9
132	76.110	75.909	-0.255	0.0	4.5
138	76.112	75.912	-0.253	0.0	5.0
144	76.115	75.915	-0.250	0.0	5.5
150	76.118	75.918	-0.247	0.0	6.1
156	76.121	75.920	-0.244	0.0	6.6
162	76.123	75.923	-0.242	0.0	7.1
168	76.125	75.925	-0.240	0.0	7.5
174	76.126	75.926	-0.239	0.0	7.8
180	76.127	75.927	-0.238	0.0	8.1
186	76.127	75.927	-0.238	0.0	8.1
192	76.126	75.926	-0.239	0.0	7.9
198	76.125	75.925	-0.240	0.0	7.6
204	76.123	75.923	-0.242	0.0	7.2
210	76.121	75.920	-0.244	0.0	6.8
216	76.118	75.918	-0.247	0.0	6.3
222	76.115	75.915	-0.250	0.0	5.7
228	76.112	75.912	-0.253	0.0	5.2
234	76.110	75.909	-0.255	0.0	4.7
240	76.107	75.907	-0.258	0.0	4.2
246	76.104	75.904	-0.261	0.0	3.7
252	76.102	75.902	-0.263	0.0	3.3
258	76.100	75.900	-0.265	0.0	2.9
264	76.098	75.898	-0.267	0.0	2.5
270	76.097	75.897	-0.268	0.0	2.2

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+0%
Average Rainfall Intensity 10.418 mm/hr

Time (mins)	Upstream Level (m)	Downstream Level (m)	Surcharged Depth (m)	Total O/F (l/s)	Pipe Flow (l/s)
276	76.096	75.895	-0.269	0.0	2.0
282	76.094	75.894	-0.271	0.0	1.8
288	76.092	75.892	-0.273	0.0	1.6
294	76.090	75.890	-0.275	0.0	1.5
300	76.089	75.889	-0.276	0.0	1.5
306	76.089	75.889	-0.276	0.0	1.4
312	76.089	75.889	-0.276	0.0	1.4
318	76.089	75.889	-0.276	0.0	1.4
324	76.089	75.889	-0.276	0.0	1.4
330	76.088	75.888	-0.277	0.0	1.4
336	76.087	75.887	-0.278	0.0	1.4
342	76.085	75.885	-0.280	0.0	1.2
348	76.081	75.881	-0.284	0.0	1.1
354	76.076	75.876	-0.289	0.0	0.8
360	76.069	75.869	-0.296	0.0	0.4
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+0%
Average Rainfall Intensity 10.418 mm/hr

Time (mins)	Upstream Level (m)	Downstream Level (m)	Surcharged Depth (m)	Total O/F (l/s)	Pipe Flow (l/s)
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+0%
Average Rainfall Intensity 10.418 mm/hr

Time (mins)	Upstream Level (m)	Downstream Level (m)	Surcharged Depth (m)	Total O/F (l/s)	Pipe Flow (l/s)
6	75.869	75.616	-0.296	0.0	0.2
12	75.876	75.622	-0.289	0.0	0.5
18	75.881	75.627	-0.284	0.0	0.9
24	75.885	75.630	-0.280	0.0	1.2
30	75.887	75.632	-0.278	0.0	1.5
36	75.888	75.633	-0.277	0.0	1.6
42	75.889	75.634	-0.276	0.0	1.6
48	75.889	75.634	-0.276	0.0	1.6
54	75.889	75.634	-0.276	0.0	1.6
60	75.889	75.634	-0.276	0.0	1.6
66	75.889	75.634	-0.276	0.0	1.7
72	75.890	75.635	-0.275	0.0	1.7
78	75.891	75.636	-0.274	0.0	1.8
84	75.894	75.638	-0.271	0.0	1.9
90	75.895	75.641	-0.270	0.0	2.1
96	75.897	75.643	-0.268	0.0	2.4
102	75.898	75.644	-0.267	0.0	2.7
108	75.900	75.646	-0.265	0.0	3.0
114	75.902	75.648	-0.263	0.0	3.4
120	75.904	75.650	-0.261	0.0	3.9
126	75.907	75.652	-0.258	0.0	4.4
132	75.909	75.655	-0.256	0.0	5.0
138	75.912	75.657	-0.253	0.0	5.7
144	75.915	75.660	-0.250	0.0	6.3
150	75.918	75.662	-0.247	0.0	6.9
156	75.920	75.665	-0.245	0.0	7.5
162	75.923	75.667	-0.242	0.0	8.0
168	75.925	75.669	-0.240	0.0	8.5
174	75.926	75.670	-0.239	0.0	8.9
180	75.927	75.672	-0.238	0.0	9.2
186	75.927	75.672	-0.238	0.0	9.3
192	75.926	75.670	-0.239	0.0	9.1
198	75.925	75.669	-0.240	0.0	8.8
204	75.923	75.667	-0.242	0.0	8.3
210	75.920	75.665	-0.245	0.0	7.8
216	75.918	75.662	-0.247	0.0	7.2
222	75.915	75.660	-0.250	0.0	6.6
228	75.912	75.657	-0.253	0.0	6.0
234	75.909	75.655	-0.256	0.0	5.4
240	75.907	75.652	-0.258	0.0	4.8
246	75.904	75.650	-0.261	0.0	4.3
252	75.902	75.648	-0.263	0.0	3.8
258	75.900	75.646	-0.265	0.0	3.3
264	75.898	75.644	-0.267	0.0	2.9
270	75.897	75.643	-0.268	0.0	2.6

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+0%
Average Rainfall Intensity 10.418 mm/hr

Time (mins)	Upstream Level (m)	Downstream Level (m)	Surcharged Depth (m)	Total O/F (l/s)	Pipe Flow (l/s)
276	75.895	75.641	-0.270	0.0	2.3
282	75.894	75.638	-0.271	0.0	2.1
288	75.892	75.637	-0.273	0.0	1.9
294	75.890	75.635	-0.275	0.0	1.8
300	75.889	75.634	-0.276	0.0	1.7
306	75.889	75.634	-0.276	0.0	1.7
312	75.889	75.634	-0.276	0.0	1.6
318	75.889	75.634	-0.276	0.0	1.6
324	75.889	75.634	-0.276	0.0	1.6
330	75.888	75.633	-0.277	0.0	1.6
336	75.887	75.632	-0.278	0.0	1.6
342	75.885	75.631	-0.280	0.0	1.4
348	75.881	75.627	-0.284	0.0	1.3
354	75.876	75.622	-0.289	0.0	0.9
360	75.869	75.615	-0.296	0.0	0.5
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+0%
Average Rainfall Intensity 10.418 mm/hr

Time (mins)	Upstream Level (m)	Downstream Level (m)	Surcharged Depth (m)	Total O/F (l/s)	Pipe Flow (l/s)
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+0%
Average Rainfall Intensity 10.418 mm/hr

Time (mins)	Upstream Level (m)	Downstream Level (m)	Surcharged Depth (m)	Total O/F (l/s)	Pipe Flow (l/s)
6	75.616	74.963	-0.296	0.0	0.2
12	75.622	74.988	-0.290	0.0	0.8
18	75.627	74.999	-0.285	0.0	1.3
24	75.630	75.003	-0.282	0.0	1.7
30	75.632	75.006	-0.280	0.0	2.0
36	75.633	75.008	-0.279	0.0	2.1
42	75.634	75.008	-0.278	0.0	2.2
48	75.634	75.009	-0.278	0.0	2.2
54	75.634	75.008	-0.278	0.0	2.2
60	75.634	75.008	-0.278	0.0	2.2
66	75.634	75.009	-0.278	0.0	2.2
72	75.635	75.010	-0.277	0.0	2.3
78	75.636	75.011	-0.276	0.0	2.4
84	75.638	75.014	-0.274	0.0	2.6
90	75.641	75.017	-0.271	0.0	2.8
96	75.643	75.022	-0.269	0.0	3.2
102	75.644	75.027	-0.268	0.0	3.6
108	75.646	75.033	-0.266	0.0	4.0
114	75.648	75.041	-0.264	0.0	4.6
120	75.650	75.046	-0.262	0.0	5.3
126	75.652	75.051	-0.260	0.0	5.9
132	75.655	75.059	-0.257	0.0	6.9
138	75.657	75.065	-0.255	0.0	7.7
144	75.660	75.072	-0.252	0.0	8.5
150	75.662	75.084	-0.250	0.0	9.3
156	75.665	75.095	-0.247	0.0	10.1
162	75.667	75.108	-0.245	0.0	10.8
168	75.669	75.123	-0.243	0.0	11.5
174	75.670	75.137	-0.242	0.0	12.1
180	75.672	75.152	-0.240	0.0	12.4
186	75.672	75.166	-0.240	0.0	12.5
192	75.670	75.180	-0.242	0.0	12.3
198	75.669	75.191	-0.243	0.0	11.8
204	75.667	75.204	-0.245	0.0	11.2
210	75.665	75.212	-0.247	0.0	10.5
216	75.662	75.221	-0.250	0.0	9.7
222	75.660	75.224	-0.252	0.0	8.9
228	75.657	75.230	-0.255	0.0	8.1
234	75.655	75.231	-0.257	0.0	7.3
240	75.652	75.233	-0.260	0.0	6.5
246	75.650	75.231	-0.262	0.0	5.8
252	75.648	75.231	-0.264	0.0	5.1
258	75.646	75.226	-0.266	0.0	4.4
264	75.644	75.224	-0.268	0.0	3.9
270	75.643	75.217	-0.269	0.0	3.5

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+0%
Average Rainfall Intensity 10.418 mm/hr

Time (mins)	Upstream Level (m)	Downstream Level (m)	Surcharged Depth (m)	Total O/F (1/s)	Pipe Flow (1/s)
276	75.641	75.214	-0.271	0.0	3.1
282	75.638	75.207	-0.274	0.0	2.8
288	75.637	75.203	-0.275	0.0	2.6
294	75.635	75.195	-0.277	0.0	2.4
300	75.634	75.189	-0.278	0.0	2.3
306	75.634	75.184	-0.278	0.0	2.2
312	75.634	75.179	-0.278	0.0	2.2
318	75.634	75.173	-0.278	0.0	2.2
324	75.634	75.166	-0.278	0.0	2.2
330	75.633	75.161	-0.279	0.0	2.2
336	75.632	75.155	-0.280	0.0	2.1
342	75.631	75.149	-0.281	0.0	1.9
348	75.627	75.142	-0.285	0.0	1.7
354	75.622	75.136	-0.290	0.0	1.2
360	75.615	75.127	-0.297	0.0	0.6
366	75.612	75.118	-0.300	0.0	0.1
372	75.612	75.109	-0.300	0.0	0.0
378	75.612	75.100	-0.300	0.0	0.0
384	75.612	75.091	-0.300	0.0	0.0
390	75.612	75.083	-0.300	0.0	0.0
396	75.612	75.074	-0.300	0.0	0.0
402	75.612	75.066	-0.300	0.0	0.0
408	75.612	75.058	-0.300	0.0	0.0
414	75.612	75.050	-0.300	0.0	0.0
420	75.612	75.042	-0.300	0.0	0.0
426	75.612	75.035	-0.300	0.0	0.0
432	75.612	75.028	-0.300	0.0	0.0
438	75.612	75.020	-0.300	0.0	0.0
444	75.612	75.014	-0.300	0.0	0.0
450	75.612	75.007	-0.300	0.0	0.0
456	75.612	75.002	-0.300	0.0	0.0
462	75.612	74.996	-0.300	0.0	0.0
468	75.612	74.991	-0.300	0.0	0.0
474	75.612	74.987	-0.300	0.0	0.0
480	75.612	74.982	-0.300	0.0	0.0
486	75.612	74.978	-0.300	0.0	0.0
492	75.612	74.975	-0.300	0.0	0.0
498	75.612	74.971	-0.300	0.0	0.0
504	75.612	74.969	-0.300	0.0	0.0
510	75.612	74.966	-0.300	0.0	0.0
516	75.612	74.963	-0.300	0.0	0.0
522	75.612	74.960	-0.300	0.0	0.0
528	75.612	74.958	-0.300	0.0	0.0
534	75.612	74.956	-0.300	0.0	0.0
540	75.612	74.954	-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+0%
Average Rainfall Intensity 10.418 mm/hr

Time (mins)	Upstream Level (m)	Downstream Level (m)	Surcharged Depth (m)	Total O/F (l/s)	Pipe Flow (l/s)
546	75.612	74.952	-0.300	0.0	0.0
552	75.612	74.951	-0.300	0.0	0.0
558	75.612	74.950	-0.300	0.0	0.0
564	75.612	74.949	-0.300	0.0	0.0
570	75.612	74.949	-0.300	0.0	0.0
576	75.612	74.949	-0.300	0.0	0.0
582	75.612	74.949	-0.300	0.0	0.0
588	75.612	74.949	-0.300	0.0	0.0
594	75.612	74.949	-0.300	0.0	0.0
600	75.612	74.949	-0.300	0.0	0.0
606	75.612	74.949	-0.300	0.0	0.0
612	75.612	74.949	-0.300	0.0	0.0
618	75.612	74.949	-0.300	0.0	0.0
624	75.612	74.949	-0.300	0.0	0.0
630	75.612	74.949	-0.300	0.0	0.0
636	75.612	74.949	-0.300	0.0	0.0
642	75.612	74.949	-0.300	0.0	0.0
648	75.612	74.949	-0.300	0.0	0.0
654	75.612	74.949	-0.300	0.0	0.0
660	75.612	74.949	-0.300	0.0	0.0
666	75.612	74.949	-0.300	0.0	0.0
672	75.612	74.949	-0.300	0.0	0.0
678	75.612	74.949	-0.300	0.0	0.0
684	75.612	74.949	-0.300	0.0	0.0
690	75.612	74.949	-0.300	0.0	0.0
696	75.612	74.949	-0.300	0.0	0.0
702	75.612	74.949	-0.300	0.0	0.0
708	75.612	74.949	-0.300	0.0	0.0
714	75.612	74.949	-0.300	0.0	0.0
720	75.612	74.949	-0.300	0.0	0.0

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


Flows and Levels for Pipe 2.000 US/MH 18 (JNY8140 SW NETWORK DESIGN 2015
09 25.SWS)
360 minute 100 year Winter I+0%
Average Rainfall Intensity 10.418 mm/hr

Time (mins)	Upstream Level (m)	Downstream Level (m)	Surcharged Depth (m)	Total O/F (l/s)	Pipe Flow (l/s)
6	76.002	75.737	-0.223	0.0	0.1
12	76.006	75.742	-0.219	0.0	0.3
18	76.009	75.745	-0.216	0.0	0.4
24	76.011	75.748	-0.214	0.0	0.5
30	76.012	75.749	-0.213	0.0	0.5
36	76.012	75.750	-0.213	0.0	0.6
42	76.013	75.750	-0.212	0.0	0.6
48	76.013	75.750	-0.212	0.0	0.6
54	76.013	75.750	-0.212	0.0	0.6
60	76.013	75.750	-0.212	0.0	0.6
66	76.013	75.750	-0.212	0.0	0.6
72	76.013	75.751	-0.212	0.0	0.6
78	76.014	75.752	-0.211	0.0	0.6
84	76.015	75.753	-0.210	0.0	0.7
90	76.017	75.755	-0.208	0.0	0.8
96	76.019	75.757	-0.206	0.0	0.9
102	76.021	75.760	-0.204	0.0	1.0
108	76.023	75.764	-0.202	0.0	1.1
114	76.024	75.766	-0.201	0.0	1.3
120	76.025	75.767	-0.200	0.0	1.5
126	76.027	75.769	-0.198	0.0	1.6
132	76.028	75.771	-0.197	0.0	1.9
138	76.030	75.772	-0.195	0.0	2.1
144	76.031	75.774	-0.194	0.0	2.3
150	76.033	75.776	-0.192	0.0	2.5
156	76.034	75.777	-0.191	0.0	2.7
162	76.035	75.779	-0.190	0.0	2.9
168	76.036	75.780	-0.189	0.0	3.1
174	76.037	75.781	-0.188	0.0	3.2
180	76.038	75.782	-0.187	0.0	3.3
186	76.038	75.782	-0.187	0.0	3.3
192	76.037	75.781	-0.188	0.0	3.2
198	76.036	75.780	-0.189	0.0	3.1
204	76.035	75.779	-0.190	0.0	2.9
210	76.034	75.777	-0.191	0.0	2.7
216	76.033	75.776	-0.192	0.0	2.5
222	76.031	75.774	-0.194	0.0	2.3
228	76.030	75.772	-0.195	0.0	2.1
234	76.028	75.771	-0.197	0.0	1.9
240	76.027	75.769	-0.198	0.0	1.7
246	76.025	75.767	-0.200	0.0	1.5
252	76.024	75.766	-0.201	0.0	1.3
258	76.023	75.764	-0.202	0.0	1.1
264	76.021	75.760	-0.204	0.0	1.0
270	76.019	75.757	-0.206	0.0	0.9

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+0%
Average Rainfall Intensity 10.418 mm/hr

Time (mins)	Upstream Level (m)	Downstream Level (m)	Surcharged Depth (m)	Total O/F (l/s)	Pipe Flow (l/s)
276	76.017	75.755	-0.208	0.0	0.8
282	76.015	75.753	-0.210	0.0	0.7
288	76.014	75.752	-0.211	0.0	0.7
294	76.013	75.751	-0.212	0.0	0.6
300	76.013	75.750	-0.212	0.0	0.6
306	76.013	75.750	-0.212	0.0	0.6
312	76.013	75.750	-0.212	0.0	0.6
318	76.013	75.750	-0.212	0.0	0.6
324	76.013	75.750	-0.212	0.0	0.6
330	76.012	75.750	-0.213	0.0	0.6
336	76.012	75.749	-0.213	0.0	0.5
342	76.011	75.748	-0.214	0.0	0.5
348	76.009	75.745	-0.216	0.0	0.4
354	76.006	75.742	-0.219	0.0	0.3
360	76.002	75.737	-0.223	0.0	0.1
366	76.000	75.735	-0.225	0.0	0.0
372	76.000	75.735	-0.225	0.0	0.0
378	76.000	75.735	-0.225	0.0	0.0
384	76.000	75.735	-0.225	0.0	0.0
390	76.000	75.735	-0.225	0.0	0.0
396	76.000	75.735	-0.225	0.0	0.0
402	76.000	75.735	-0.225	0.0	0.0
408	76.000	75.735	-0.225	0.0	0.0
414	76.000	75.735	-0.225	0.0	0.0
420	76.000	75.735	-0.225	0.0	0.0
426	76.000	75.735	-0.225	0.0	0.0
432	76.000	75.735	-0.225	0.0	0.0
438	76.000	75.735	-0.225	0.0	0.0
444	76.000	75.735	-0.225	0.0	0.0
450	76.000	75.735	-0.225	0.0	0.0
456	76.000	75.735	-0.225	0.0	0.0
462	76.000	75.735	-0.225	0.0	0.0
468	76.000	75.735	-0.225	0.0	0.0
474	76.000	75.735	-0.225	0.0	0.0
480	76.000	75.735	-0.225	0.0	0.0
486	76.000	75.735	-0.225	0.0	0.0
492	76.000	75.735	-0.225	0.0	0.0
498	76.000	75.735	-0.225	0.0	0.0
504	76.000	75.735	-0.225	0.0	0.0
510	76.000	75.735	-0.225	0.0	0.0
516	76.000	75.735	-0.225	0.0	0.0
522	76.000	75.735	-0.225	0.0	0.0
528	76.000	75.735	-0.225	0.0	0.0
534	76.000	75.735	-0.225	0.0	0.0
540	76.000	75.735	-0.225	0.0	0.0

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


Flows and Levels for Pipe 2.000 US/MH 18 (JNY8140 SW NETWORK DESIGN 2015
09 25.SWS)
360 minute 100 year Winter I+0%
Average Rainfall Intensity 10.418 mm/hr

Time (mins)	Upstream Level (m)	Downstream Level (m)	Surcharged Depth (m)	Total O/F (l/s)	Pipe Flow (l/s)
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+0%
Average Rainfall Intensity 10.418 mm/hr

Time (mins)	Upstream Level (m)	Downstream Level (m)	Surcharged Depth (m)	Total O/F (l/s)	Pipe Flow (l/s)
6	75.737	75.440	-0.298	0.0	0.1
12	75.742	75.450	-0.293	0.0	0.4
18	75.745	75.457	-0.290	0.0	0.6
24	75.748	75.463	-0.287	0.0	0.8
30	75.749	75.465	-0.286	0.0	0.9
36	75.750	75.466	-0.285	0.0	1.0
42	75.750	75.466	-0.285	0.0	1.0
48	75.750	75.466	-0.285	0.0	1.0
54	75.750	75.466	-0.285	0.0	1.0
60	75.750	75.466	-0.285	0.0	1.0
66	75.750	75.466	-0.285	0.0	1.0
72	75.751	75.466	-0.284	0.0	1.0
78	75.752	75.467	-0.283	0.0	1.1
84	75.753	75.468	-0.282	0.0	1.2
90	75.755	75.469	-0.280	0.0	1.3
96	75.757	75.471	-0.278	0.0	1.5
102	75.760	75.473	-0.275	0.0	1.7
108	75.764	75.475	-0.271	0.0	1.9
114	75.766	75.478	-0.269	0.0	2.2
120	75.767	75.482	-0.268	0.0	2.5
126	75.769	75.485	-0.266	0.0	2.8
132	75.771	75.489	-0.264	0.0	3.1
138	75.772	75.492	-0.263	0.0	3.5
144	75.774	75.496	-0.261	0.0	3.9
150	75.776	75.498	-0.259	0.0	4.3
156	75.777	75.500	-0.258	0.0	4.6
162	75.779	75.502	-0.256	0.0	4.9
168	75.780	75.504	-0.255	0.0	5.3
174	75.781	75.506	-0.254	0.0	5.5
180	75.782	75.507	-0.253	0.0	5.7
186	75.782	75.507	-0.253	0.0	5.7
192	75.781	75.506	-0.254	0.0	5.6
198	75.780	75.504	-0.255	0.0	5.3
204	75.779	75.502	-0.256	0.0	5.0
210	75.777	75.500	-0.258	0.0	4.7
216	75.776	75.498	-0.259	0.0	4.4
222	75.774	75.496	-0.261	0.0	4.0
228	75.772	75.492	-0.263	0.0	3.6
234	75.771	75.489	-0.264	0.0	3.3
240	75.769	75.485	-0.266	0.0	2.9
246	75.767	75.482	-0.268	0.0	2.6
252	75.766	75.479	-0.269	0.0	2.3
258	75.764	75.475	-0.271	0.0	2.0
264	75.760	75.473	-0.275	0.0	1.8
270	75.757	75.471	-0.278	0.0	1.6

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+0%
Average Rainfall Intensity 10.418 mm/hr

Time (mins)	Upstream Level (m)	Downstream Level (m)	Surcharged Depth (m)	Total O/F (l/s)	Pipe Flow (l/s)
276	75.755	75.469	-0.280	0.0	1.4
282	75.753	75.468	-0.282	0.0	1.2
288	75.752	75.467	-0.283	0.0	1.1
294	75.751	75.466	-0.284	0.0	1.1
300	75.750	75.466	-0.285	0.0	1.0
306	75.750	75.466	-0.285	0.0	1.0
312	75.750	75.466	-0.285	0.0	1.0
318	75.750	75.466	-0.285	0.0	1.0
324	75.750	75.466	-0.285	0.0	1.0
330	75.750	75.466	-0.285	0.0	1.0
336	75.749	75.465	-0.286	0.0	0.9
342	75.748	75.463	-0.287	0.0	0.9
348	75.745	75.457	-0.290	0.0	0.7
354	75.742	75.450	-0.293	0.0	0.5
360	75.737	75.440	-0.298	0.0	0.2
366	75.735	75.435	-0.300	0.0	0.0
372	75.735	75.435	-0.300	0.0	0.0
378	75.735	75.435	-0.300	0.0	0.0
384	75.735	75.435	-0.300	0.0	0.0
390	75.735	75.435	-0.300	0.0	0.0
396	75.735	75.435	-0.300	0.0	0.0
402	75.735	75.435	-0.300	0.0	0.0
408	75.735	75.435	-0.300	0.0	0.0
414	75.735	75.435	-0.300	0.0	0.0
420	75.735	75.435	-0.300	0.0	0.0
426	75.735	75.435	-0.300	0.0	0.0
432	75.735	75.435	-0.300	0.0	0.0
438	75.735	75.435	-0.300	0.0	0.0
444	75.735	75.435	-0.300	0.0	0.0
450	75.735	75.435	-0.300	0.0	0.0
456	75.735	75.435	-0.300	0.0	0.0
462	75.735	75.435	-0.300	0.0	0.0
468	75.735	75.435	-0.300	0.0	0.0
474	75.735	75.435	-0.300	0.0	0.0
480	75.735	75.435	-0.300	0.0	0.0
486	75.735	75.435	-0.300	0.0	0.0
492	75.735	75.435	-0.300	0.0	0.0
498	75.735	75.435	-0.300	0.0	0.0
504	75.735	75.435	-0.300	0.0	0.0
510	75.735	75.435	-0.300	0.0	0.0
516	75.735	75.435	-0.300	0.0	0.0
522	75.735	75.435	-0.300	0.0	0.0
528	75.735	75.435	-0.300	0.0	0.0
534	75.735	75.435	-0.300	0.0	0.0
540	75.735	75.435	-0.300	0.0	0.0

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


Flows and Levels for Pipe 2.001 US/MH 19 (JNY8140 SW NETWORK DESIGN 2015
09 25.SWS)
360 minute 100 year Winter I+0%
Average Rainfall Intensity 10.418 mm/hr

Time (mins)	Upstream Level (m)	Downstream Level (m)	Surcharged Depth (m)	Total O/F (l/s)	Pipe Flow (l/s)
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+0%
Average Rainfall Intensity 10.418 mm/hr

Time (mins)	Upstream Level (m)	Downstream Level (m)	Surcharged Depth (m)	Total O/F (l/s)	Pipe Flow (l/s)
6	75.440	75.152	-0.295	0.0	0.2
12	75.450	75.159	-0.285	0.0	0.7
18	75.457	75.164	-0.278	0.0	1.1
24	75.463	75.167	-0.272	0.0	1.4
30	75.465	75.169	-0.270	0.0	1.7
36	75.466	75.170	-0.269	0.0	1.8
42	75.466	75.171	-0.269	0.0	1.8
48	75.466	75.171	-0.269	0.0	1.8
54	75.466	75.171	-0.269	0.0	1.8
60	75.466	75.171	-0.269	0.0	1.8
66	75.466	75.171	-0.269	0.0	1.9
72	75.466	75.172	-0.269	0.0	1.9
78	75.467	75.173	-0.268	0.0	2.0
84	75.468	75.175	-0.267	0.0	2.2
90	75.469	75.177	-0.266	0.0	2.4
96	75.471	75.181	-0.264	0.0	2.7
102	75.473	75.185	-0.262	0.0	3.0
108	75.475	75.190	-0.260	0.0	3.4
114	75.478	75.195	-0.257	0.0	3.9
120	75.482	75.197	-0.253	0.0	4.5
126	75.485	75.199	-0.250	0.0	5.1
132	75.489	75.202	-0.246	0.0	5.8
138	75.492	75.204	-0.243	0.0	6.4
144	75.496	75.206	-0.239	0.0	7.1
150	75.498	75.209	-0.237	0.0	7.8
156	75.500	75.211	-0.235	0.0	8.5
162	75.502	75.214	-0.233	0.0	9.0
168	75.504	75.216	-0.231	0.0	9.6
174	75.506	75.219	-0.229	0.0	10.0
180	75.507	75.223	-0.228	0.0	10.4
186	75.507	75.226	-0.228	0.0	10.4
192	75.506	75.230	-0.229	0.0	10.1
198	75.504	75.232	-0.231	0.0	9.8
204	75.502	75.236	-0.233	0.0	9.2
210	75.500	75.238	-0.235	0.0	8.6
216	75.498	75.241	-0.237	0.0	8.0
222	75.496	75.241	-0.239	0.0	7.3
228	75.492	75.243	-0.243	0.0	6.6
234	75.489	75.241	-0.246	0.0	6.0
240	75.485	75.242	-0.250	0.0	5.3
246	75.482	75.238	-0.253	0.0	4.7
252	75.479	75.237	-0.256	0.0	4.2
258	75.475	75.231	-0.260	0.0	3.6
264	75.473	75.229	-0.262	0.0	3.2
270	75.471	75.222	-0.264	0.0	2.8

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+0%
Average Rainfall Intensity 10.418 mm/hr

Time (mins)	Upstream Level (m)	Downstream Level (m)	Surcharged Depth (m)	Total O/F (l/s)	Pipe Flow (l/s)
276	75.469	75.219	-0.266	0.0	2.5
282	75.468	75.212	-0.267	0.0	2.3
288	75.467	75.209	-0.268	0.0	2.1
294	75.466	75.203	-0.269	0.0	2.0
300	75.466	75.200	-0.269	0.0	1.9
306	75.466	75.197	-0.269	0.0	1.8
312	75.466	75.195	-0.269	0.0	1.8
318	75.466	75.194	-0.269	0.0	1.8
324	75.466	75.191	-0.269	0.0	1.8
330	75.466	75.188	-0.269	0.0	1.8
336	75.465	75.184	-0.270	0.0	1.7
342	75.463	75.180	-0.272	0.0	1.6
348	75.457	75.174	-0.278	0.0	1.3
354	75.450	75.166	-0.285	0.0	1.0
360	75.440	75.155	-0.295	0.0	0.4
366	75.435	75.149	-0.300	0.0	0.1
372	75.435	75.149	-0.300	0.0	0.0
378	75.435	75.149	-0.300	0.0	0.0
384	75.435	75.149	-0.300	0.0	0.0
390	75.435	75.149	-0.300	0.0	0.0
396	75.435	75.149	-0.300	0.0	0.0
402	75.435	75.149	-0.300	0.0	0.0
408	75.435	75.149	-0.300	0.0	0.0
414	75.435	75.149	-0.300	0.0	0.0
420	75.435	75.149	-0.300	0.0	0.0
426	75.435	75.149	-0.300	0.0	0.0
432	75.435	75.149	-0.300	0.0	0.0
438	75.435	75.149	-0.300	0.0	0.0
444	75.435	75.149	-0.300	0.0	0.0
450	75.435	75.149	-0.300	0.0	0.0
456	75.435	75.149	-0.300	0.0	0.0
462	75.435	75.149	-0.300	0.0	0.0
468	75.435	75.149	-0.300	0.0	0.0
474	75.435	75.149	-0.300	0.0	0.0
480	75.435	75.149	-0.300	0.0	0.0
486	75.435	75.149	-0.300	0.0	0.0
492	75.435	75.149	-0.300	0.0	0.0
498	75.435	75.149	-0.300	0.0	0.0
504	75.435	75.149	-0.300	0.0	0.0
510	75.435	75.149	-0.300	0.0	0.0
516	75.435	75.149	-0.300	0.0	0.0
522	75.435	75.149	-0.300	0.0	0.0
528	75.435	75.149	-0.300	0.0	0.0
534	75.435	75.149	-0.300	0.0	0.0
540	75.435	75.149	-0.300	0.0	0.0

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


Flows and Levels for Pipe 2.002 US/MH 20 (JNY8140 SW NETWORK DESIGN 2015
09 25.SWS)
360 minute 100 year Winter I+0%
Average Rainfall Intensity 10.418 mm/hr

Time (mins)	Upstream Level (m)	Downstream Level (m)	Surcharged Depth (m)	Total O/F (l/s)	Pipe Flow (l/s)
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+0%
Average Rainfall Intensity 10.418 mm/hr

Time (mins)	Upstream Level (m)	Downstream Level (m)	Surcharged Depth (m)	Total O/F (l/s)	Pipe Flow (l/s)
6	75.152	74.963	-0.447	0.0	0.3
12	75.159	74.988	-0.440	0.0	0.9
18	75.164	74.999	-0.435	0.0	1.5
24	75.167	75.003	-0.432	0.0	1.9
30	75.169	75.006	-0.430	0.0	2.2
36	75.170	75.008	-0.429	0.0	2.3
42	75.171	75.008	-0.428	0.0	2.4
48	75.171	75.009	-0.428	0.0	2.4
54	75.171	75.008	-0.428	0.0	2.4
60	75.171	75.008	-0.428	0.0	2.4
66	75.171	75.009	-0.428	0.0	2.4
72	75.172	75.010	-0.427	0.0	2.5
78	75.173	75.011	-0.426	0.0	2.6
84	75.175	75.014	-0.424	0.0	2.8
90	75.177	75.017	-0.422	0.0	3.1
96	75.181	75.022	-0.418	0.0	3.4
102	75.185	75.027	-0.414	0.0	3.9
108	75.190	75.033	-0.409	0.0	4.4
114	75.195	75.041	-0.404	0.0	5.1
120	75.197	75.046	-0.402	0.0	5.8
126	75.199	75.051	-0.400	0.0	6.6
132	75.202	75.059	-0.397	0.0	7.5
138	75.204	75.065	-0.395	0.0	8.4
144	75.206	75.072	-0.393	0.0	9.3
150	75.209	75.084	-0.390	0.0	10.2
156	75.211	75.095	-0.388	0.0	11.1
162	75.214	75.108	-0.385	0.0	11.8
168	75.216	75.123	-0.383	0.0	12.6
174	75.219	75.137	-0.380	0.0	13.1
180	75.223	75.152	-0.376	0.0	13.5
186	75.226	75.166	-0.373	0.0	13.6
192	75.230	75.180	-0.369	0.0	13.3
198	75.232	75.191	-0.367	0.0	12.8
204	75.236	75.204	-0.363	0.0	12.1
210	75.238	75.212	-0.361	0.0	11.3
216	75.241	75.221	-0.358	0.0	10.5
222	75.241	75.224	-0.358	0.0	9.6
228	75.243	75.230	-0.356	0.0	8.7
234	75.241	75.231	-0.358	0.0	7.9
240	75.242	75.233	-0.357	0.0	7.0
246	75.238	75.231	-0.361	0.0	6.2
252	75.237	75.231	-0.362	0.0	5.5
258	75.231	75.226	-0.368	0.0	4.8
264	75.229	75.224	-0.370	0.0	4.2
270	75.222	75.217	-0.377	0.0	3.8

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+0%
Average Rainfall Intensity 10.418 mm/hr

Time (mins)	Upstream Level (m)	Downstream Level (m)	Surcharged Depth (m)	Total O/F (l/s)	Pipe Flow (l/s)
276	75.219	75.214	-0.380	0.0	3.3
282	75.212	75.207	-0.387	0.0	3.0
288	75.209	75.203	-0.390	0.0	2.8
294	75.203	75.195	-0.396	0.0	2.6
300	75.200	75.189	-0.399	0.0	2.5
306	75.197	75.184	-0.402	0.0	2.4
312	75.195	75.179	-0.404	0.0	2.4
318	75.194	75.173	-0.405	0.0	2.4
324	75.191	75.166	-0.408	0.0	2.4
330	75.188	75.161	-0.411	0.0	2.4
336	75.184	75.155	-0.415	0.0	2.3
342	75.180	75.149	-0.419	0.0	2.1
348	75.174	75.142	-0.425	0.0	1.8
354	75.166	75.136	-0.433	0.0	1.3
360	75.155	75.127	-0.444	0.0	0.6
366	75.149	75.118	-0.450	0.0	0.1
372	75.149	75.109	-0.450	0.0	0.0
378	75.149	75.100	-0.450	0.0	0.0
384	75.149	75.091	-0.450	0.0	0.0
390	75.149	75.083	-0.450	0.0	0.0
396	75.149	75.074	-0.450	0.0	0.0
402	75.149	75.066	-0.450	0.0	0.0
408	75.149	75.058	-0.450	0.0	0.0
414	75.149	75.050	-0.450	0.0	0.0
420	75.149	75.042	-0.450	0.0	0.0
426	75.149	75.035	-0.450	0.0	0.0
432	75.149	75.028	-0.450	0.0	0.0
438	75.149	75.020	-0.450	0.0	0.0
444	75.149	75.014	-0.450	0.0	0.0
450	75.149	75.007	-0.450	0.0	0.0
456	75.149	75.002	-0.450	0.0	0.0
462	75.149	74.996	-0.450	0.0	0.0
468	75.149	74.991	-0.450	0.0	0.0
474	75.149	74.987	-0.450	0.0	0.0
480	75.149	74.982	-0.450	0.0	0.0
486	75.149	74.978	-0.450	0.0	0.0
492	75.149	74.975	-0.450	0.0	0.0
498	75.149	74.971	-0.450	0.0	0.0
504	75.149	74.969	-0.450	0.0	0.0
510	75.149	74.966	-0.450	0.0	0.0
516	75.149	74.963	-0.450	0.0	0.0
522	75.149	74.960	-0.450	0.0	0.0
528	75.149	74.958	-0.450	0.0	0.0
534	75.149	74.956	-0.450	0.0	0.0
540	75.149	74.954	-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+0%
Average Rainfall Intensity 10.418 mm/hr

Time (mins)	Upstream Level (m)	Downstream Level (m)	Surcharged Depth (m)	Total O/F (l/s)	Pipe Flow (l/s)
546	75.149	74.952	-0.450	0.0	0.0
552	75.149	74.951	-0.450	0.0	0.0
558	75.149	74.950	-0.450	0.0	0.0
564	75.149	74.949	-0.450	0.0	0.0
570	75.149	74.949	-0.450	0.0	0.0
576	75.149	74.949	-0.450	0.0	0.0
582	75.149	74.949	-0.450	0.0	0.0
588	75.149	74.949	-0.450	0.0	0.0
594	75.149	74.949	-0.450	0.0	0.0
600	75.149	74.949	-0.450	0.0	0.0
606	75.149	74.949	-0.450	0.0	0.0
612	75.149	74.949	-0.450	0.0	0.0
618	75.149	74.949	-0.450	0.0	0.0
624	75.149	74.949	-0.450	0.0	0.0
630	75.149	74.949	-0.450	0.0	0.0
636	75.149	74.949	-0.450	0.0	0.0
642	75.149	74.949	-0.450	0.0	0.0
648	75.149	74.949	-0.450	0.0	0.0
654	75.149	74.949	-0.450	0.0	0.0
660	75.149	74.949	-0.450	0.0	0.0
666	75.149	74.949	-0.450	0.0	0.0
672	75.149	74.949	-0.450	0.0	0.0
678	75.149	74.949	-0.450	0.0	0.0
684	75.149	74.949	-0.450	0.0	0.0
690	75.149	74.949	-0.450	0.0	0.0
696	75.149	74.949	-0.450	0.0	0.0
702	75.149	74.949	-0.450	0.0	0.0
708	75.149	74.949	-0.450	0.0	0.0
714	75.149	74.949	-0.450	0.0	0.0
720	75.149	74.949	-0.450	0.0	0.0

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


Flows and Levels for Pipe 1.005 US/MH 6 (JNY8140 SW NETWORK DESIGN 2015
09 25.SWS)
360 minute 100 year Winter I+0%
Average Rainfall Intensity 10.418 mm/hr

Time (mins)	Upstream Level (m)	Downstream Level (m)	Surcharged Depth (m)	Total O/F (l/s)	Pipe Flow (l/s)
6	74.963	74.929	-0.436	0.0	0.4
12	74.988	74.931	-0.411	0.0	1.4
18	74.999	74.934	-0.400	0.0	2.6
24	75.003	74.938	-0.396	0.0	3.5
30	75.006	74.943	-0.393	0.0	4.1
36	75.008	74.948	-0.391	0.0	4.4
42	75.008	74.952	-0.391	0.0	4.6
48	75.009	74.957	-0.390	0.0	4.6
54	75.008	74.960	-0.391	0.0	4.6
60	75.008	74.964	-0.391	0.0	4.6
66	75.009	74.967	-0.390	0.0	4.7
72	75.010	74.970	-0.389	0.0	4.8
78	75.011	74.973	-0.388	0.0	5.0
84	75.014	74.976	-0.385	0.0	5.3
90	75.017	74.980	-0.382	0.0	5.8
96	75.022	74.984	-0.377	0.0	6.4
102	75.027	74.988	-0.372	0.0	7.3
108	75.033	74.993	-0.366	0.0	8.2
114	75.041	74.999	-0.358	0.0	9.4
120	75.046	75.006	-0.353	0.0	10.8
126	75.051	75.015	-0.348	0.0	12.2
132	75.059	75.026	-0.340	0.0	14.2
138	75.065	75.039	-0.334	0.0	15.9
144	75.072	75.052	-0.327	0.0	17.6
150	75.084	75.065	-0.315	0.0	19.3
156	75.095	75.080	-0.304	0.0	20.9
162	75.108	75.096	-0.291	0.0	22.4
168	75.123	75.112	-0.276	0.0	23.8
174	75.137	75.129	-0.262	0.0	24.9
180	75.152	75.146	-0.247	0.0	25.7
186	75.166	75.161	-0.233	0.0	25.7
192	75.180	75.175	-0.219	0.0	25.1
198	75.191	75.187	-0.208	0.0	24.2
204	75.204	75.200	-0.195	0.0	22.9
210	75.212	75.208	-0.187	0.0	21.5
216	75.221	75.217	-0.178	0.0	20.0
222	75.224	75.221	-0.175	0.0	18.3
228	75.230	75.227	-0.169	0.0	16.7
234	75.231	75.228	-0.168	0.0	15.1
240	75.233	75.231	-0.166	0.0	13.5
246	75.231	75.229	-0.168	0.0	12.0
252	75.231	75.228	-0.168	0.0	10.6
258	75.226	75.224	-0.173	0.0	9.4
264	75.224	75.222	-0.175	0.0	8.3
270	75.217	75.216	-0.182	0.0	7.4

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+0%
Average Rainfall Intensity 10.418 mm/hr

Time (mins)	Upstream Level (m)	Downstream Level (m)	Surcharged Depth (m)	Total O/F (l/s)	Pipe Flow (l/s)
276	75.214	75.213	-0.185	0.0	6.6
282	75.207	75.206	-0.192	0.0	6.0
288	75.203	75.201	-0.196	0.0	5.5
294	75.195	75.194	-0.204	0.0	5.2
300	75.189	75.188	-0.210	0.0	5.0
306	75.184	75.183	-0.215	0.0	4.8
312	75.179	75.178	-0.220	0.0	4.8
318	75.173	75.172	-0.226	0.0	4.9
324	75.166	75.165	-0.233	0.0	4.8
330	75.161	75.160	-0.238	0.0	4.8
336	75.155	75.154	-0.244	0.0	4.6
342	75.149	75.149	-0.250	0.0	4.2
348	75.142	75.142	-0.257	0.0	3.6
354	75.136	75.135	-0.263	0.0	2.7
360	75.127	75.127	-0.272	0.0	1.4
366	75.118	75.118	-0.281	0.0	0.4
372	75.109	75.109	-0.290	0.0	0.2
378	75.100	75.100	-0.299	0.0	0.2
384	75.091	75.091	-0.308	0.0	0.2
390	75.083	75.083	-0.316	0.0	0.2
396	75.074	75.074	-0.325	0.0	0.2
402	75.066	75.066	-0.333	0.0	0.2
408	75.058	75.058	-0.341	0.0	0.1
414	75.050	75.050	-0.349	0.0	0.1
420	75.042	75.042	-0.357	0.0	0.1
426	75.035	75.035	-0.364	0.0	0.1
432	75.028	75.028	-0.371	0.0	0.1
438	75.020	75.020	-0.379	0.0	0.1
444	75.014	75.014	-0.385	0.0	0.1
450	75.007	75.007	-0.392	0.0	0.0
456	75.002	75.002	-0.397	0.0	0.0
462	74.996	74.996	-0.403	0.0	0.0
468	74.991	74.991	-0.408	0.0	0.0
474	74.987	74.987	-0.412	0.0	0.0
480	74.982	74.982	-0.417	0.0	0.0
486	74.978	74.978	-0.421	0.0	0.0
492	74.975	74.975	-0.424	0.0	0.0
498	74.971	74.971	-0.428	0.0	0.0
504	74.969	74.968	-0.430	0.0	0.0
510	74.966	74.966	-0.433	0.0	0.0
516	74.963	74.963	-0.436	0.0	0.0
522	74.960	74.960	-0.439	0.0	0.0
528	74.958	74.958	-0.441	0.0	0.0
534	74.956	74.956	-0.443	0.0	0.0
540	74.954	74.954	-0.445	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+0%
Average Rainfall Intensity 10.418 mm/hr

Time (mins)	Upstream Level (m)	Downstream Level (m)	Surcharged Depth (m)	Total O/F (l/s)	Pipe Flow (l/s)
546	74.952	74.952	-0.447	0.0	0.0
552	74.951	74.951	-0.448	0.0	0.0
558	74.950	74.949	-0.449	0.0	0.0
564	74.949	74.948	-0.450	0.0	0.0
570	74.949	74.946	-0.450	0.0	0.0
576	74.949	74.945	-0.450	0.0	0.0
582	74.949	74.944	-0.450	0.0	0.0
588	74.949	74.943	-0.450	0.0	0.0
594	74.949	74.942	-0.450	0.0	0.0
600	74.949	74.941	-0.450	0.0	0.0
606	74.949	74.940	-0.450	0.0	0.0
612	74.949	74.939	-0.450	0.0	0.0
618	74.949	74.938	-0.450	0.0	0.0
624	74.949	74.938	-0.450	0.0	0.0
630	74.949	74.937	-0.450	0.0	0.0
636	74.949	74.936	-0.450	0.0	0.0
642	74.949	74.936	-0.450	0.0	0.0
648	74.949	74.935	-0.450	0.0	0.0
654	74.949	74.935	-0.450	0.0	0.0
660	74.949	74.934	-0.450	0.0	0.0
666	74.949	74.934	-0.450	0.0	0.0
672	74.949	74.934	-0.450	0.0	0.0
678	74.949	74.933	-0.450	0.0	0.0
684	74.949	74.933	-0.450	0.0	0.0
690	74.949	74.933	-0.450	0.0	0.0
696	74.949	74.932	-0.450	0.0	0.0
702	74.949	74.932	-0.450	0.0	0.0
708	74.949	74.932	-0.450	0.0	0.0
714	74.949	74.932	-0.450	0.0	0.0
720	74.949	74.931	-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+0%
Average Rainfall Intensity 10.418 mm/hr

Time (mins)	Upstream Level (m)	Downstream Level (m)	Surcharged Depth (m)	Total O/F (l/s)	Pipe Flow (l/s)
6	74.929	74.914	-0.450	0.0	0.0
12	74.931	74.917	-0.448	0.0	0.1
18	74.934	74.924	-0.445	0.0	0.2
24	74.938	74.932	-0.441	0.0	0.3
30	74.943	74.938	-0.436	0.0	0.4
36	74.948	74.943	-0.431	0.0	0.5
42	74.952	74.948	-0.427	0.0	0.7
48	74.957	74.953	-0.422	0.0	0.8
54	74.960	74.956	-0.419	0.0	0.9
60	74.964	74.959	-0.415	0.0	1.0
66	74.967	74.963	-0.412	0.0	1.1
72	74.970	74.966	-0.409	0.0	1.2
78	74.973	74.969	-0.406	0.0	1.3
84	74.976	74.972	-0.403	0.0	1.5
90	74.980	74.976	-0.399	0.0	1.7
96	74.984	74.981	-0.395	0.0	1.8
102	74.988	74.985	-0.391	0.0	2.0
108	74.993	74.991	-0.386	0.0	2.2
114	74.999	74.997	-0.380	0.0	2.4
120	75.006	75.005	-0.373	0.0	2.7
126	75.015	75.013	-0.364	0.0	3.0
132	75.026	75.032	-0.353	0.0	3.1
138	75.039	75.038	-0.340	0.0	3.2
144	75.052	75.055	-0.327	0.0	3.5
150	75.065	75.069	-0.314	0.0	3.4
156	75.080	75.086	-0.299	0.0	3.3
162	75.096	75.105	-0.283	0.0	3.4
168	75.112	75.125	-0.267	0.0	3.4
174	75.129	75.146	-0.250	0.0	3.4
180	75.146	75.165	-0.233	0.0	3.4
186	75.161	75.191	-0.218	0.0	3.7
192	75.175	75.159	-0.204	0.0	4.6
198	75.187	75.260	-0.192	0.0	2.2
204	75.200	75.177	-0.179	0.0	3.9
210	75.208	75.293	-0.171	0.0	1.4
216	75.217	75.189	-0.162	0.0	3.8
222	75.221	75.309	-0.158	0.0	1.1
228	75.227	75.196	-0.152	0.0	3.9
234	75.228	75.319	-0.151	0.0	0.8
240	75.231	75.198	-0.148	0.0	3.8
246	75.229	75.320	-0.150	0.0	0.7
252	75.228	75.197	-0.151	0.0	3.7
258	75.224	75.314	-0.155	0.0	0.7
264	75.222	75.193	-0.157	0.0	3.6
270	75.216	75.304	-0.163	0.0	0.7

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+0%
Average Rainfall Intensity 10.418 mm/hr

Time (mins)	Upstream Level (m)	Downstream Level (m)	Surcharged Depth (m)	Total O/F (l/s)	Pipe Flow (l/s)
276	75.213	75.187	-0.166	0.0	3.5
282	75.206	75.292	-0.173	0.0	0.8
288	75.201	75.180	-0.178	0.0	3.3
294	75.194	75.275	-0.185	0.0	0.9
300	75.188	75.186	-0.191	0.0	4.3
306	75.183	75.194	-0.196	0.0	0.5
312	75.178	75.217	-0.201	0.0	0.5
318	75.172	75.157	-0.207	0.0	4.2
324	75.165	75.219	-0.214	0.0	1.5
330	75.160	75.146	-0.219	0.0	3.7
336	75.154	75.200	-0.225	0.0	2.1
342	75.149	75.137	-0.230	0.0	3.4
348	75.142	75.179	-0.237	0.0	2.0
354	75.135	75.126	-0.244	0.0	3.1
360	75.127	75.157	-0.252	0.0	2.0
366	75.118	75.112	-0.261	0.0	2.8
372	75.109	75.131	-0.270	0.0	2.1
378	75.100	75.095	-0.279	0.0	2.7
384	75.091	75.098	-0.288	0.0	2.5
390	75.083	75.083	-0.296	0.0	2.0
396	75.074	75.080	-0.305	0.0	2.7
402	75.066	75.063	-0.313	0.0	2.9
408	75.058	75.064	-0.321	0.0	2.7
414	75.050	75.053	-0.329	0.0	2.9
420	75.042	75.045	-0.337	0.0	2.8
426	75.035	75.034	-0.344	0.0	2.9
432	75.028	75.025	-0.351	0.0	2.9
438	75.020	75.020	-0.359	0.0	2.8
444	75.014	75.013	-0.365	0.0	2.7
450	75.007	75.006	-0.372	0.0	2.5
456	75.002	75.000	-0.377	0.0	2.3
462	74.996	74.997	-0.383	0.0	2.0
468	74.991	74.989	-0.388	0.0	2.0
474	74.987	74.985	-0.392	0.0	1.8
480	74.982	74.980	-0.397	0.0	1.6
486	74.978	74.976	-0.401	0.0	1.5
492	74.975	74.971	-0.404	0.0	1.3
498	74.971	74.968	-0.408	0.0	1.2
504	74.968	74.965	-0.411	0.0	1.1
510	74.966	74.962	-0.413	0.0	1.0
516	74.963	74.960	-0.416	0.0	0.9
522	74.960	74.957	-0.419	0.0	0.8
528	74.958	74.955	-0.421	0.0	0.7
534	74.956	74.953	-0.423	0.0	0.7
540	74.954	74.951	-0.425	0.0	0.6

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+0%
Average Rainfall Intensity 10.418 mm/hr

Time (mins)	Upstream Level (m)	Downstream Level (m)	Surcharged Depth (m)	Total O/F (l/s)	Pipe Flow (l/s)
546	74.952	74.950	-0.427	0.0	0.6
552	74.951	74.948	-0.428	0.0	0.5
558	74.949	74.946	-0.430	0.0	0.5
564	74.948	74.945	-0.431	0.0	0.4
570	74.946	74.944	-0.433	0.0	0.4
576	74.945	74.943	-0.434	0.0	0.4
582	74.944	74.941	-0.435	0.0	0.3
588	74.943	74.940	-0.436	0.0	0.3
594	74.942	74.939	-0.437	0.0	0.3
600	74.941	74.938	-0.438	0.0	0.3
606	74.940	74.938	-0.439	0.0	0.3
612	74.939	74.937	-0.440	0.0	0.2
618	74.938	74.936	-0.441	0.0	0.2
624	74.938	74.935	-0.441	0.0	0.2
630	74.937	74.934	-0.442	0.0	0.2
636	74.936	74.934	-0.443	0.0	0.2
642	74.936	74.933	-0.443	0.0	0.2
648	74.935	74.933	-0.444	0.0	0.2
654	74.935	74.932	-0.444	0.0	0.2
660	74.934	74.931	-0.445	0.0	0.1
666	74.934	74.931	-0.445	0.0	0.1
672	74.934	74.930	-0.445	0.0	0.1
678	74.933	74.930	-0.446	0.0	0.1
684	74.933	74.929	-0.446	0.0	0.1
690	74.933	74.929	-0.446	0.0	0.1
696	74.932	74.928	-0.447	0.0	0.1
702	74.932	74.928	-0.447	0.0	0.1
708	74.932	74.927	-0.447	0.0	0.1
714	74.932	74.927	-0.447	0.0	0.1
720	74.931	74.927	-0.448	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+0%
Average Rainfall Intensity 10.418 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	74.719	-0.447	0.0	0.0
18	74.924	74.722	-0.440	0.0	0.0
24	74.932	74.725	-0.432	0.0	0.1
30	74.938	74.727	-0.426	0.0	0.2
36	74.943	74.730	-0.421	0.0	0.4
42	74.948	74.731	-0.416	0.0	0.5
48	74.953	74.733	-0.411	0.0	0.6
54	74.956	74.734	-0.408	0.0	0.8
60	74.959	74.736	-0.405	0.0	0.9
66	74.963	74.737	-0.401	0.0	1.0
72	74.966	74.739	-0.398	0.0	1.1
78	74.969	74.741	-0.395	0.0	1.2
84	74.972	74.744	-0.392	0.0	1.4
90	74.976	74.747	-0.388	0.0	1.5
96	74.981	74.751	-0.383	0.0	1.7
102	74.985	74.755	-0.379	0.0	1.8
108	74.991	74.759	-0.373	0.0	2.0
114	74.997	74.761	-0.367	0.0	2.2
120	75.005	74.763	-0.359	0.0	2.4
126	75.013	74.765	-0.351	0.0	2.6
132	75.032	74.767	-0.332	0.0	2.8
138	75.038	74.768	-0.326	0.0	2.9
144	75.055	74.770	-0.309	0.0	2.9
150	75.069	74.771	-0.295	0.0	2.9
156	75.086	74.772	-0.278	0.0	2.9
162	75.105	74.773	-0.259	0.0	2.9
168	75.125	74.774	-0.239	0.0	2.9
174	75.146	74.775	-0.218	0.0	2.9
180	75.165	74.776	-0.199	0.0	2.9
186	75.191	74.776	-0.173	0.0	2.8
192	75.159	74.775	-0.205	0.0	2.8
198	75.260	74.774	-0.104	0.0	2.8
204	75.177	74.772	-0.187	0.0	2.7
210	75.293	74.772	-0.071	0.0	2.7
216	75.189	74.770	-0.175	0.0	2.7
222	75.309	74.769	-0.055	0.0	2.7
228	75.196	74.767	-0.168	0.0	2.7
234	75.319	74.766	-0.045	0.0	2.7
240	75.198	74.765	-0.166	0.0	2.7
246	75.320	74.764	-0.044	0.0	2.7
252	75.197	74.763	-0.167	0.0	2.7
258	75.314	74.762	-0.050	0.0	2.7
264	75.193	74.761	-0.171	0.0	2.7
270	75.304	74.761	-0.060	0.0	2.7

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+0%
Average Rainfall Intensity 10.418 mm/hr

Time (mins)	Upstream Level (m)	Downstream Level (m)	Surcharged Depth (m)	Total O/F (l/s)	Pipe Flow (l/s)
276	75.187	74.759	-0.177	0.0	2.7
282	75.292	74.760	-0.072	0.0	2.7
288	75.180	74.758	-0.184	0.0	2.7
294	75.275	74.759	-0.089	0.0	2.7
300	75.186	74.759	-0.178	0.0	2.8
306	75.194	74.758	-0.170	0.0	2.8
312	75.217	74.759	-0.147	0.0	2.8
318	75.157	74.759	-0.207	0.0	2.8
324	75.219	74.759	-0.145	0.0	2.8
330	75.146	74.759	-0.218	0.0	2.8
336	75.200	74.758	-0.164	0.0	2.8
342	75.137	74.757	-0.227	0.0	2.8
348	75.179	74.756	-0.185	0.0	2.8
354	75.126	74.753	-0.238	0.0	2.8
360	75.157	74.750	-0.207	0.0	2.8
366	75.112	74.748	-0.252	0.0	2.8
372	75.131	74.748	-0.233	0.0	2.8
378	75.095	74.748	-0.269	0.0	2.9
384	75.098	74.749	-0.266	0.0	2.9
390	75.083	74.749	-0.281	0.0	2.9
396	75.080	74.749	-0.284	0.0	2.9
402	75.063	74.749	-0.301	0.0	2.9
408	75.064	74.749	-0.300	0.0	2.9
414	75.053	74.749	-0.311	0.0	2.9
420	75.045	74.749	-0.319	0.0	2.9
426	75.034	74.749	-0.330	0.0	2.9
432	75.025	74.749	-0.339	0.0	2.9
438	75.020	74.749	-0.344	0.0	2.9
444	75.013	74.747	-0.351	0.0	2.8
450	75.006	74.745	-0.358	0.0	2.6
456	75.000	74.743	-0.364	0.0	2.5
462	74.997	74.741	-0.367	0.0	2.3
468	74.989	74.739	-0.375	0.0	2.1
474	74.985	74.737	-0.379	0.0	2.0
480	74.980	74.735	-0.384	0.0	1.8
486	74.976	74.733	-0.388	0.0	1.6
492	74.971	74.731	-0.393	0.0	1.4
498	74.968	74.729	-0.396	0.0	1.3
504	74.965	74.728	-0.399	0.0	1.2
510	74.962	74.727	-0.402	0.0	1.1
516	74.960	74.726	-0.404	0.0	1.0
522	74.957	74.725	-0.407	0.0	0.9
528	74.955	74.724	-0.409	0.0	0.8
534	74.953	74.723	-0.411	0.0	0.7
540	74.951	74.722	-0.413	0.0	0.7

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+0%
Average Rainfall Intensity 10.418 mm/hr

Time (mins)	Upstream Level (m)	Downstream Level (m)	Surcharged Depth (m)	Total O/F (l/s)	Pipe Flow (l/s)
546	74.950	74.721	-0.414	0.0	0.6
552	74.948	74.721	-0.416	0.0	0.6
558	74.946	74.720	-0.418	0.0	0.5
564	74.945	74.720	-0.419	0.0	0.5
570	74.944	74.719	-0.420	0.0	0.4
576	74.943	74.719	-0.421	0.0	0.4
582	74.941	74.719	-0.423	0.0	0.4
588	74.940	74.718	-0.424	0.0	0.4
594	74.939	74.718	-0.425	0.0	0.3
600	74.938	74.718	-0.426	0.0	0.3
606	74.938	74.717	-0.426	0.0	0.3
612	74.937	74.717	-0.427	0.0	0.3
618	74.936	74.717	-0.428	0.0	0.2
624	74.935	74.717	-0.429	0.0	0.2
630	74.934	74.717	-0.430	0.0	0.2
636	74.934	74.716	-0.430	0.0	0.2
642	74.933	74.716	-0.431	0.0	0.2
648	74.933	74.716	-0.431	0.0	0.2
654	74.932	74.716	-0.432	0.0	0.2
660	74.931	74.716	-0.433	0.0	0.2
666	74.931	74.716	-0.433	0.0	0.2
672	74.930	74.716	-0.434	0.0	0.1
678	74.930	74.716	-0.434	0.0	0.1
684	74.929	74.715	-0.435	0.0	0.1
690	74.929	74.715	-0.435	0.0	0.1
696	74.928	74.715	-0.436	0.0	0.1
702	74.928	74.715	-0.436	0.0	0.1
708	74.927	74.715	-0.437	0.0	0.1
714	74.927	74.715	-0.437	0.0	0.1
720	74.927	74.715	-0.437	0.0	0.1

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


Flows and Levels for Pipe 1.008 US/MH 10 (JNY8140 SW NETWORK DESIGN 2015
09 25.SWS)
360 minute 100 year Winter I+0%
Average Rainfall Intensity 10.418 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	74.618	-0.448	0.0	0.1
12	74.719	74.627	-0.445	0.0	0.4
18	74.722	74.633	-0.442	0.0	0.6
24	74.725	74.638	-0.439	0.0	0.8
30	74.727	74.642	-0.437	0.0	1.0
36	74.730	74.645	-0.434	0.0	1.2
42	74.731	74.647	-0.433	0.0	1.4
48	74.733	74.648	-0.431	0.0	1.5
54	74.734	74.649	-0.430	0.0	1.6
60	74.736	74.650	-0.428	0.0	1.8
66	74.737	74.652	-0.427	0.0	1.9
72	74.739	74.654	-0.425	0.0	2.0
78	74.741	74.657	-0.423	0.0	2.2
84	74.744	74.660	-0.420	0.0	2.4
90	74.747	74.661	-0.417	0.0	2.7
96	74.751	74.663	-0.413	0.0	3.0
102	74.755	74.665	-0.409	0.0	3.3
108	74.759	74.668	-0.405	0.0	3.7
114	74.761	74.671	-0.403	0.0	4.2
120	74.763	74.674	-0.401	0.0	4.7
126	74.765	74.678	-0.399	0.0	5.2
132	74.767	74.682	-0.397	0.0	5.7
138	74.768	74.685	-0.396	0.0	6.1
144	74.770	74.688	-0.394	0.0	6.5
150	74.771	74.692	-0.393	0.0	6.9
156	74.772	74.694	-0.392	0.0	7.2
162	74.773	74.697	-0.391	0.0	7.4
168	74.774	74.700	-0.390	0.0	7.7
174	74.775	74.702	-0.389	0.0	7.9
180	74.776	74.703	-0.388	0.0	8.0
186	74.776	74.703	-0.388	0.0	8.0
192	74.775	74.701	-0.389	0.0	7.9
198	74.774	74.699	-0.390	0.0	7.6
204	74.772	74.697	-0.392	0.0	7.3
210	74.772	74.694	-0.392	0.0	7.0
216	74.770	74.691	-0.394	0.0	6.7
222	74.769	74.687	-0.395	0.0	6.3
228	74.767	74.684	-0.397	0.0	6.0
234	74.766	74.681	-0.398	0.0	5.7
240	74.765	74.678	-0.399	0.0	5.3
246	74.764	74.675	-0.400	0.0	5.0
252	74.763	74.673	-0.401	0.0	4.8
258	74.762	74.670	-0.402	0.0	4.5
264	74.761	74.668	-0.403	0.0	4.3
270	74.761	74.666	-0.403	0.0	4.1

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+0%
Average Rainfall Intensity 10.418 mm/hr

Time (mins)	Upstream Level (m)	Downstream Level (m)	Surcharged Depth (m)	Total O/F (l/s)	Pipe Flow (l/s)
276	74.759	74.665	-0.405	0.0	3.9
282	74.760	74.664	-0.404	0.0	3.8
288	74.758	74.663	-0.406	0.0	3.8
294	74.759	74.663	-0.405	0.0	3.7
300	74.759	74.663	-0.405	0.0	3.7
306	74.758	74.662	-0.406	0.0	3.7
312	74.759	74.663	-0.405	0.0	3.7
318	74.759	74.663	-0.405	0.0	3.7
324	74.759	74.663	-0.405	0.0	3.7
330	74.759	74.662	-0.405	0.0	3.7
336	74.758	74.662	-0.406	0.0	3.7
342	74.757	74.661	-0.407	0.0	3.6
348	74.756	74.660	-0.408	0.0	3.5
354	74.753	74.655	-0.411	0.0	3.3
360	74.750	74.647	-0.414	0.0	3.0
366	74.748	74.643	-0.416	0.0	2.9
372	74.748	74.643	-0.416	0.0	2.8
378	74.748	74.643	-0.416	0.0	2.9
384	74.749	74.643	-0.415	0.0	2.9
390	74.749	74.643	-0.415	0.0	2.9
396	74.749	74.643	-0.415	0.0	2.9
402	74.749	74.644	-0.415	0.0	2.9
408	74.749	74.644	-0.415	0.0	2.9
414	74.749	74.644	-0.415	0.0	2.9
420	74.749	74.644	-0.415	0.0	2.9
426	74.749	74.644	-0.415	0.0	2.9
432	74.749	74.644	-0.415	0.0	2.9
438	74.749	74.643	-0.415	0.0	2.9
444	74.747	74.642	-0.417	0.0	2.8
450	74.745	74.641	-0.419	0.0	2.7
456	74.743	74.639	-0.421	0.0	2.5
462	74.741	74.637	-0.423	0.0	2.3
468	74.739	74.636	-0.425	0.0	2.2
474	74.737	74.634	-0.427	0.0	2.0
480	74.735	74.632	-0.429	0.0	1.8
486	74.733	74.630	-0.431	0.0	1.7
492	74.731	74.629	-0.433	0.0	1.5
498	74.729	74.627	-0.435	0.0	1.3
504	74.728	74.626	-0.436	0.0	1.2
510	74.727	74.625	-0.437	0.0	1.1
516	74.726	74.624	-0.438	0.0	1.0
522	74.725	74.623	-0.439	0.0	0.9
528	74.724	74.622	-0.440	0.0	0.8
534	74.723	74.622	-0.441	0.0	0.8
540	74.722	74.621	-0.442	0.0	0.7

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+0%
Average Rainfall Intensity 10.418 mm/hr

Time (mins)	Upstream Level (m)	Downstream Level (m)	Surcharged Depth (m)	Total O/F (l/s)	Pipe Flow (l/s)
546	74.721	74.620	-0.443	0.0	0.6
552	74.721	74.620	-0.443	0.0	0.6
558	74.720	74.619	-0.444	0.0	0.5
564	74.720	74.619	-0.444	0.0	0.5
570	74.719	74.619	-0.445	0.0	0.5
576	74.719	74.618	-0.445	0.0	0.4
582	74.719	74.618	-0.445	0.0	0.4
588	74.718	74.618	-0.446	0.0	0.4
594	74.718	74.617	-0.446	0.0	0.3
600	74.718	74.617	-0.446	0.0	0.3
606	74.717	74.617	-0.447	0.0	0.3
612	74.717	74.617	-0.447	0.0	0.3
618	74.717	74.617	-0.447	0.0	0.3
624	74.717	74.616	-0.447	0.0	0.2
630	74.717	74.616	-0.447	0.0	0.2
636	74.716	74.616	-0.448	0.0	0.2
642	74.716	74.616	-0.448	0.0	0.2
648	74.716	74.616	-0.448	0.0	0.2
654	74.716	74.616	-0.448	0.0	0.2
660	74.716	74.616	-0.448	0.0	0.2
666	74.716	74.616	-0.448	0.0	0.2
672	74.716	74.615	-0.448	0.0	0.1
678	74.716	74.615	-0.448	0.0	0.1
684	74.715	74.615	-0.449	0.0	0.1
690	74.715	74.615	-0.449	0.0	0.1
696	74.715	74.615	-0.449	0.0	0.1
702	74.715	74.615	-0.449	0.0	0.1
708	74.715	74.615	-0.449	0.0	0.1
714	74.715	74.615	-0.449	0.0	0.1
720	74.715	74.615	-0.449	0.0	0.1

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


Flows and Levels for Pipe 1.009 US/MH 11 (JNY8140 SW NETWORK DESIGN 2015
09 25.SWS)
360 minute 100 year Winter I+0%
Average Rainfall Intensity 10.418 mm/hr

Time (mins)	Upstream Level (m)	Downstream Level (m)	Surcharged Depth (m)	Total O/F (l/s)	Pipe Flow (l/s)
6	74.618	74.205	-0.446	0.0	0.3
12	74.627	74.224	-0.437	0.0	1.0
18	74.633	74.239	-0.431	0.0	1.7
24	74.638	74.243	-0.426	0.0	2.2
30	74.642	74.246	-0.422	0.0	2.6
36	74.645	74.247	-0.419	0.0	2.9
42	74.647	74.248	-0.417	0.0	3.1
48	74.648	74.249	-0.416	0.0	3.3
54	74.649	74.249	-0.415	0.0	3.4
60	74.650	74.250	-0.414	0.0	3.5
66	74.652	74.251	-0.412	0.0	3.7
72	74.654	74.252	-0.410	0.0	3.9
78	74.657	74.254	-0.407	0.0	4.1
84	74.660	74.256	-0.404	0.0	4.5
90	74.661	74.260	-0.403	0.0	5.0
96	74.663	74.264	-0.401	0.0	5.6
102	74.665	74.269	-0.399	0.0	6.3
108	74.668	74.274	-0.396	0.0	7.0
114	74.671	74.281	-0.393	0.0	8.0
120	74.674	74.287	-0.390	0.0	9.0
126	74.678	74.291	-0.386	0.0	10.1
132	74.682	74.297	-0.382	0.0	11.3
138	74.685	74.302	-0.379	0.0	12.4
144	74.688	74.306	-0.376	0.0	13.4
150	74.692	74.311	-0.372	0.0	14.5
156	74.694	74.315	-0.370	0.0	15.4
162	74.697	74.319	-0.367	0.0	16.3
168	74.700	74.323	-0.364	0.0	17.1
174	74.702	74.326	-0.362	0.0	17.7
180	74.703	74.332	-0.361	0.0	18.1
186	74.703	74.338	-0.361	0.0	18.2
192	74.701	74.344	-0.363	0.0	17.8
198	74.699	74.351	-0.365	0.0	17.2
204	74.697	74.359	-0.367	0.0	16.4
210	74.694	74.367	-0.370	0.0	15.5
216	74.691	74.376	-0.373	0.0	14.5
222	74.687	74.383	-0.377	0.0	13.5
228	74.684	74.391	-0.380	0.0	12.5
234	74.681	74.398	-0.383	0.0	11.6
240	74.678	74.404	-0.386	0.0	10.5
246	74.675	74.410	-0.389	0.0	9.7
252	74.673	74.414	-0.391	0.0	8.8
258	74.670	74.418	-0.394	0.0	8.1
264	74.668	74.421	-0.396	0.0	7.4
270	74.666	74.424	-0.398	0.0	6.9

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+0%
Average Rainfall Intensity 10.418 mm/hr

Time (mins)	Upstream Level (m)	Downstream Level (m)	Surcharged Depth (m)	Total O/F (l/s)	Pipe Flow (l/s)
276	74.665	74.426	-0.399	0.0	6.4
282	74.664	74.428	-0.400	0.0	6.0
288	74.663	74.429	-0.401	0.0	5.8
294	74.663	74.431	-0.401	0.0	5.6
300	74.663	74.432	-0.401	0.0	5.5
306	74.662	74.434	-0.402	0.0	5.5
312	74.663	74.435	-0.401	0.0	5.5
318	74.663	74.437	-0.401	0.0	5.5
324	74.663	74.438	-0.401	0.0	5.5
330	74.662	74.439	-0.402	0.0	5.5
336	74.662	74.441	-0.402	0.0	5.4
342	74.661	74.442	-0.403	0.0	5.2
348	74.660	74.442	-0.404	0.0	4.8
354	74.655	74.442	-0.409	0.0	4.2
360	74.647	74.440	-0.417	0.0	3.5
366	74.643	74.439	-0.421	0.0	3.0
372	74.643	74.438	-0.421	0.0	2.8
378	74.643	74.436	-0.421	0.0	2.9
384	74.643	74.435	-0.421	0.0	2.9
390	74.643	74.434	-0.421	0.0	2.9
396	74.643	74.432	-0.421	0.0	2.9
402	74.644	74.431	-0.420	0.0	2.9
408	74.644	74.430	-0.420	0.0	2.9
414	74.644	74.429	-0.420	0.0	2.9
420	74.644	74.427	-0.420	0.0	2.9
426	74.644	74.426	-0.420	0.0	2.9
432	74.644	74.425	-0.420	0.0	2.9
438	74.643	74.424	-0.421	0.0	2.9
444	74.642	74.422	-0.422	0.0	2.9
450	74.641	74.421	-0.423	0.0	2.7
456	74.639	74.419	-0.425	0.0	2.6
462	74.637	74.418	-0.427	0.0	2.4
468	74.636	74.416	-0.428	0.0	2.2
474	74.634	74.414	-0.430	0.0	2.1
480	74.632	74.412	-0.432	0.0	1.9
486	74.630	74.410	-0.434	0.0	1.7
492	74.629	74.407	-0.435	0.0	1.5
498	74.627	74.405	-0.437	0.0	1.4
504	74.626	74.403	-0.438	0.0	1.2
510	74.625	74.401	-0.439	0.0	1.1
516	74.624	74.398	-0.440	0.0	1.0
522	74.623	74.395	-0.441	0.0	0.9
528	74.622	74.392	-0.442	0.0	0.9
534	74.622	74.389	-0.442	0.0	0.8
540	74.621	74.387	-0.443	0.0	0.7

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+0%
Average Rainfall Intensity 10.418 mm/hr

Time (mins)	Upstream Level (m)	Downstream Level (m)	Surcharged Depth (m)	Total O/F (l/s)	Pipe Flow (l/s)
546	74.620	74.384	-0.444	0.0	0.7
552	74.620	74.380	-0.444	0.0	0.6
558	74.619	74.378	-0.445	0.0	0.6
564	74.619	74.375	-0.445	0.0	0.5
570	74.619	74.372	-0.445	0.0	0.5
576	74.618	74.369	-0.446	0.0	0.4
582	74.618	74.366	-0.446	0.0	0.4
588	74.618	74.363	-0.446	0.0	0.4
594	74.617	74.359	-0.447	0.0	0.3
600	74.617	74.357	-0.447	0.0	0.3
606	74.617	74.353	-0.447	0.0	0.3
612	74.617	74.351	-0.447	0.0	0.3
618	74.617	74.347	-0.447	0.0	0.3
624	74.616	74.344	-0.448	0.0	0.2
630	74.616	74.341	-0.448	0.0	0.2
636	74.616	74.338	-0.448	0.0	0.2
642	74.616	74.334	-0.448	0.0	0.2
648	74.616	74.331	-0.448	0.0	0.2
654	74.616	74.328	-0.448	0.0	0.2
660	74.616	74.325	-0.448	0.0	0.2
666	74.616	74.322	-0.448	0.0	0.2
672	74.615	74.319	-0.449	0.0	0.1
678	74.615	74.315	-0.449	0.0	0.1
684	74.615	74.312	-0.449	0.0	0.1
690	74.615	74.309	-0.449	0.0	0.1
696	74.615	74.305	-0.449	0.0	0.1
702	74.615	74.302	-0.449	0.0	0.1
708	74.615	74.299	-0.449	0.0	0.1
714	74.615	74.296	-0.449	0.0	0.1
720	74.615	74.293	-0.449	0.0	0.1

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


Flows and Levels for Pipe 3.000 US/MH 22 (JNY8140 SW NETWORK DESIGN 2015
09 25.SWS)
360 minute 100 year Winter I+0%
Average Rainfall Intensity 10.418 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	74.522	-0.223	0.0	0.1
12	74.955	74.526	-0.220	0.0	0.3
18	74.957	74.529	-0.218	0.0	0.5
24	74.959	74.531	-0.216	0.0	0.6
30	74.960	74.532	-0.215	0.0	0.6
36	74.961	74.533	-0.214	0.0	0.7
42	74.961	74.533	-0.214	0.0	0.7
48	74.961	74.533	-0.214	0.0	0.7
54	74.961	74.533	-0.214	0.0	0.7
60	74.961	74.533	-0.214	0.0	0.7
66	74.961	74.533	-0.214	0.0	0.7
72	74.961	74.534	-0.214	0.0	0.7
78	74.962	74.534	-0.213	0.0	0.8
84	74.963	74.536	-0.212	0.0	0.8
90	74.964	74.537	-0.211	0.0	0.9
96	74.966	74.539	-0.209	0.0	1.0
102	74.968	74.542	-0.207	0.0	1.1
108	74.971	74.545	-0.204	0.0	1.3
114	74.973	74.549	-0.202	0.0	1.5
120	74.974	74.551	-0.201	0.0	1.7
126	74.975	74.552	-0.200	0.0	1.9
132	74.976	74.554	-0.199	0.0	2.2
138	74.978	74.555	-0.197	0.0	2.4
144	74.979	74.556	-0.196	0.0	2.7
150	74.980	74.558	-0.195	0.0	2.9
156	74.981	74.559	-0.194	0.0	3.2
162	74.982	74.561	-0.193	0.0	3.4
168	74.983	74.562	-0.192	0.0	3.6
174	74.984	74.563	-0.191	0.0	3.7
180	74.985	74.563	-0.190	0.0	3.8
186	74.985	74.563	-0.190	0.0	3.9
192	74.984	74.563	-0.191	0.0	3.7
198	74.983	74.562	-0.192	0.0	3.6
204	74.982	74.561	-0.193	0.0	3.4
210	74.981	74.559	-0.194	0.0	3.2
216	74.980	74.558	-0.195	0.0	2.9
222	74.979	74.556	-0.196	0.0	2.7
228	74.978	74.555	-0.197	0.0	2.4
234	74.976	74.554	-0.199	0.0	2.2
240	74.975	74.552	-0.200	0.0	1.9
246	74.974	74.551	-0.201	0.0	1.7
252	74.973	74.549	-0.202	0.0	1.5
258	74.971	74.545	-0.204	0.0	1.3
264	74.968	74.542	-0.207	0.0	1.2
270	74.966	74.539	-0.209	0.0	1.0

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+0%
Average Rainfall Intensity 10.418 mm/hr

Time (mins)	Upstream Level (m)	Downstream Level (m)	Surcharged Depth (m)	Total O/F (l/s)	Pipe Flow (l/s)
276	74.964	74.537	-0.211	0.0	0.9
282	74.963	74.536	-0.212	0.0	0.8
288	74.962	74.534	-0.213	0.0	0.8
294	74.961	74.534	-0.214	0.0	0.7
300	74.961	74.533	-0.214	0.0	0.7
306	74.961	74.533	-0.214	0.0	0.7
312	74.961	74.533	-0.214	0.0	0.7
318	74.961	74.533	-0.214	0.0	0.7
324	74.961	74.533	-0.214	0.0	0.7
330	74.961	74.533	-0.214	0.0	0.7
336	74.960	74.532	-0.215	0.0	0.6
342	74.959	74.531	-0.216	0.0	0.6
348	74.957	74.529	-0.218	0.0	0.5
354	74.955	74.526	-0.220	0.0	0.3
360	74.952	74.522	-0.223	0.0	0.1
366	74.950	74.520	-0.225	0.0	0.0
372	74.950	74.520	-0.225	0.0	0.0
378	74.950	74.520	-0.225	0.0	0.0
384	74.950	74.520	-0.225	0.0	0.0
390	74.950	74.520	-0.225	0.0	0.0
396	74.950	74.520	-0.225	0.0	0.0
402	74.950	74.520	-0.225	0.0	0.0
408	74.950	74.520	-0.225	0.0	0.0
414	74.950	74.520	-0.225	0.0	0.0
420	74.950	74.520	-0.225	0.0	0.0
426	74.950	74.520	-0.225	0.0	0.0
432	74.950	74.520	-0.225	0.0	0.0
438	74.950	74.520	-0.225	0.0	0.0
444	74.950	74.520	-0.225	0.0	0.0
450	74.950	74.520	-0.225	0.0	0.0
456	74.950	74.520	-0.225	0.0	0.0
462	74.950	74.520	-0.225	0.0	0.0
468	74.950	74.520	-0.225	0.0	0.0
474	74.950	74.520	-0.225	0.0	0.0
480	74.950	74.520	-0.225	0.0	0.0
486	74.950	74.520	-0.225	0.0	0.0
492	74.950	74.520	-0.225	0.0	0.0
498	74.950	74.520	-0.225	0.0	0.0
504	74.950	74.520	-0.225	0.0	0.0
510	74.950	74.520	-0.225	0.0	0.0
516	74.950	74.520	-0.225	0.0	0.0
522	74.950	74.520	-0.225	0.0	0.0
528	74.950	74.520	-0.225	0.0	0.0
534	74.950	74.520	-0.225	0.0	0.0
540	74.950	74.520	-0.225	0.0	0.0

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


Flows and Levels for Pipe 3.000 US/MH 22 (JNY8140 SW NETWORK DESIGN 2015
09 25.SWS)
360 minute 100 year Winter I+0%
Average Rainfall Intensity 10.418 mm/hr

Time (mins)	Upstream Level (m)	Downstream Level (m)	Surcharged Depth (m)	Total O/F (l/s)	Pipe Flow (l/s)
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+0%
Average Rainfall Intensity 10.418 mm/hr

Time (mins)	Upstream Level (m)	Downstream Level (m)	Surcharged Depth (m)	Total O/F (l/s)	Pipe Flow (l/s)
6	74.522	74.205	-0.298	0.0	0.1
12	74.526	74.224	-0.294	0.0	0.4
18	74.529	74.239	-0.291	0.0	0.6
24	74.531	74.243	-0.289	0.0	0.8
30	74.532	74.246	-0.288	0.0	0.9
36	74.533	74.247	-0.287	0.0	0.9
42	74.533	74.248	-0.287	0.0	0.9
48	74.533	74.249	-0.287	0.0	1.0
54	74.533	74.249	-0.287	0.0	1.0
60	74.533	74.250	-0.287	0.0	1.0
66	74.533	74.251	-0.287	0.0	1.0
72	74.534	74.252	-0.286	0.0	1.0
78	74.534	74.254	-0.286	0.0	1.0
84	74.536	74.256	-0.284	0.0	1.1
90	74.537	74.260	-0.283	0.0	1.2
96	74.539	74.264	-0.281	0.0	1.4
102	74.542	74.269	-0.278	0.0	1.6
108	74.545	74.274	-0.275	0.0	1.8
114	74.549	74.281	-0.271	0.0	2.1
120	74.551	74.287	-0.269	0.0	2.3
126	74.552	74.291	-0.268	0.0	2.6
132	74.554	74.297	-0.266	0.0	3.0
138	74.555	74.302	-0.265	0.0	3.4
144	74.556	74.306	-0.264	0.0	3.7
150	74.558	74.311	-0.262	0.0	4.1
156	74.559	74.315	-0.261	0.0	4.4
162	74.561	74.319	-0.259	0.0	4.7
168	74.562	74.323	-0.258	0.0	5.0
174	74.563	74.326	-0.257	0.0	5.2
180	74.563	74.332	-0.257	0.0	5.4
186	74.563	74.338	-0.257	0.0	5.4
192	74.563	74.344	-0.257	0.0	5.2
198	74.562	74.351	-0.258	0.0	5.0
204	74.561	74.359	-0.259	0.0	4.7
210	74.559	74.367	-0.261	0.0	4.4
216	74.558	74.376	-0.262	0.0	4.1
222	74.556	74.383	-0.264	0.0	3.7
228	74.555	74.391	-0.265	0.0	3.4
234	74.554	74.398	-0.266	0.0	3.1
240	74.552	74.404	-0.268	0.0	2.7
246	74.551	74.410	-0.269	0.0	2.4
252	74.549	74.414	-0.271	0.0	2.1
258	74.545	74.418	-0.275	0.0	1.9
264	74.542	74.421	-0.278	0.0	1.6
270	74.539	74.424	-0.281	0.0	1.5

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+0%
Average Rainfall Intensity 10.418 mm/hr

Time (mins)	Upstream Level (m)	Downstream Level (m)	Surcharged Depth (m)	Total O/F (l/s)	Pipe Flow (l/s)
276	74.537	74.426	-0.283	0.0	1.3
282	74.536	74.428	-0.284	0.0	1.2
288	74.534	74.429	-0.286	0.0	1.1
294	74.534	74.431	-0.286	0.0	1.0
300	74.533	74.432	-0.287	0.0	1.0
306	74.533	74.434	-0.287	0.0	1.0
312	74.533	74.435	-0.287	0.0	1.0
318	74.533	74.437	-0.287	0.0	1.0
324	74.533	74.438	-0.287	0.0	1.0
330	74.533	74.439	-0.287	0.0	0.9
336	74.532	74.441	-0.288	0.0	0.9
342	74.531	74.442	-0.289	0.0	0.8
348	74.529	74.442	-0.291	0.0	0.7
354	74.526	74.442	-0.294	0.0	0.5
360	74.522	74.440	-0.298	0.0	0.2
366	74.520	74.439	-0.300	0.0	0.0
372	74.520	74.438	-0.300	0.0	0.0
378	74.520	74.436	-0.300	0.0	0.0
384	74.520	74.435	-0.300	0.0	0.0
390	74.520	74.434	-0.300	0.0	0.0
396	74.520	74.432	-0.300	0.0	0.0
402	74.520	74.431	-0.300	0.0	0.0
408	74.520	74.430	-0.300	0.0	0.0
414	74.520	74.429	-0.300	0.0	0.0
420	74.520	74.427	-0.300	0.0	0.0
426	74.520	74.426	-0.300	0.0	0.0
432	74.520	74.425	-0.300	0.0	0.0
438	74.520	74.424	-0.300	0.0	0.0
444	74.520	74.422	-0.300	0.0	0.0
450	74.520	74.421	-0.300	0.0	0.0
456	74.520	74.419	-0.300	0.0	0.0
462	74.520	74.418	-0.300	0.0	0.0
468	74.520	74.416	-0.300	0.0	0.0
474	74.520	74.414	-0.300	0.0	0.0
480	74.520	74.412	-0.300	0.0	0.0
486	74.520	74.410	-0.300	0.0	0.0
492	74.520	74.407	-0.300	0.0	0.0
498	74.520	74.405	-0.300	0.0	0.0
504	74.520	74.403	-0.300	0.0	0.0
510	74.520	74.401	-0.300	0.0	0.0
516	74.520	74.398	-0.300	0.0	0.0
522	74.520	74.395	-0.300	0.0	0.0
528	74.520	74.392	-0.300	0.0	0.0
534	74.520	74.389	-0.300	0.0	0.0
540	74.520	74.387	-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+0%
Average Rainfall Intensity 10.418 mm/hr

Time (mins)	Upstream Level (m)	Downstream Level (m)	Surcharged Depth (m)	Total O/F (l/s)	Pipe Flow (l/s)
546	74.520	74.384	-0.300	0.0	0.0
552	74.520	74.380	-0.300	0.0	0.0
558	74.520	74.378	-0.300	0.0	0.0
564	74.520	74.375	-0.300	0.0	0.0
570	74.520	74.372	-0.300	0.0	0.0
576	74.520	74.369	-0.300	0.0	0.0
582	74.520	74.366	-0.300	0.0	0.0
588	74.520	74.363	-0.300	0.0	0.0
594	74.520	74.359	-0.300	0.0	0.0
600	74.520	74.357	-0.300	0.0	0.0
606	74.520	74.353	-0.300	0.0	0.0
612	74.520	74.351	-0.300	0.0	0.0
618	74.520	74.347	-0.300	0.0	0.0
624	74.520	74.344	-0.300	0.0	0.0
630	74.520	74.341	-0.300	0.0	0.0
636	74.520	74.338	-0.300	0.0	0.0
642	74.520	74.334	-0.300	0.0	0.0
648	74.520	74.331	-0.300	0.0	0.0
654	74.520	74.328	-0.300	0.0	0.0
660	74.520	74.325	-0.300	0.0	0.0
666	74.520	74.322	-0.300	0.0	0.0
672	74.520	74.319	-0.300	0.0	0.0
678	74.520	74.315	-0.300	0.0	0.0
684	74.520	74.312	-0.300	0.0	0.0
690	74.520	74.309	-0.300	0.0	0.0
696	74.520	74.305	-0.300	0.0	0.0
702	74.520	74.302	-0.300	0.0	0.0
708	74.520	74.299	-0.300	0.0	0.0
714	74.520	74.296	-0.300	0.0	0.0
720	74.520	74.293	-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+0%
Average Rainfall Intensity 10.418 mm/hr

Time (mins)	Upstream Level (m)	Downstream Level (m)	Surcharged Depth (m)	Total O/F (l/s)	Pipe Flow (l/s)
6	74.205	74.153	-0.440	0.0	0.5
12	74.224	74.168	-0.421	0.0	1.5
18	74.239	74.179	-0.406	0.0	2.5
24	74.243	74.188	-0.402	0.0	3.4
30	74.246	74.191	-0.399	0.0	3.9
36	74.247	74.193	-0.398	0.0	4.3
42	74.248	74.193	-0.397	0.0	4.6
48	74.249	74.194	-0.396	0.0	4.8
54	74.249	74.194	-0.396	0.0	4.9
60	74.250	74.195	-0.395	0.0	5.0
66	74.251	74.195	-0.394	0.0	5.2
72	74.252	74.196	-0.393	0.0	5.4
78	74.254	74.198	-0.391	0.0	5.7
84	74.256	74.200	-0.389	0.0	6.2
90	74.260	74.202	-0.385	0.0	6.8
96	74.264	74.206	-0.381	0.0	7.7
102	74.269	74.209	-0.376	0.0	8.6
108	74.274	74.213	-0.371	0.0	9.7
114	74.281	74.219	-0.364	0.0	11.1
120	74.287	74.224	-0.358	0.0	12.5
126	74.291	74.230	-0.354	0.0	14.1
132	74.297	74.236	-0.348	0.0	15.9
138	74.302	74.240	-0.343	0.0	17.6
144	74.306	74.244	-0.339	0.0	19.1
150	74.311	74.248	-0.334	0.0	20.8
156	74.315	74.251	-0.330	0.0	22.3
162	74.319	74.254	-0.326	0.0	23.6
168	74.323	74.261	-0.322	0.0	24.9
174	74.326	74.273	-0.319	0.0	25.9
180	74.332	74.286	-0.313	0.0	26.6
186	74.338	74.299	-0.307	0.0	26.7
192	74.344	74.313	-0.301	0.0	26.2
198	74.351	74.327	-0.294	0.0	25.2
204	74.359	74.341	-0.286	0.0	23.9
210	74.367	74.354	-0.278	0.0	22.6
216	74.376	74.365	-0.269	0.0	21.1
222	74.383	74.376	-0.262	0.0	19.5
228	74.391	74.385	-0.254	0.0	18.0
234	74.398	74.392	-0.247	0.0	16.4
240	74.404	74.399	-0.241	0.0	14.9
246	74.410	74.405	-0.235	0.0	13.5
252	74.414	74.410	-0.231	0.0	12.2
258	74.418	74.414	-0.227	0.0	11.0
264	74.421	74.418	-0.224	0.0	10.0
270	74.424	74.420	-0.221	0.0	9.2

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+0%
Average Rainfall Intensity 10.418 mm/hr

Time (mins)	Upstream Level (m)	Downstream Level (m)	Surcharged Depth (m)	Total O/F (l/s)	Pipe Flow (l/s)
276	74.426	74.423	-0.219	0.0	8.4
282	74.428	74.425	-0.217	0.0	7.9
288	74.429	74.427	-0.216	0.0	7.5
294	74.431	74.428	-0.214	0.0	7.2
300	74.432	74.430	-0.213	0.0	7.0
306	74.434	74.431	-0.211	0.0	7.0
312	74.435	74.433	-0.210	0.0	7.0
318	74.437	74.434	-0.208	0.0	7.0
324	74.438	74.435	-0.207	0.0	7.0
330	74.439	74.437	-0.206	0.0	6.9
336	74.441	74.438	-0.204	0.0	6.8
342	74.442	74.439	-0.203	0.0	6.5
348	74.442	74.440	-0.203	0.0	5.9
354	74.442	74.440	-0.203	0.0	5.0
360	74.440	74.439	-0.205	0.0	3.9
366	74.439	74.438	-0.206	0.0	3.1
372	74.438	74.437	-0.207	0.0	2.9
378	74.436	74.435	-0.209	0.0	2.9
384	74.435	74.434	-0.210	0.0	2.9
390	74.434	74.433	-0.211	0.0	2.9
396	74.432	74.431	-0.213	0.0	2.9
402	74.431	74.430	-0.214	0.0	2.9
408	74.430	74.429	-0.215	0.0	2.9
414	74.429	74.428	-0.216	0.0	3.0
420	74.427	74.426	-0.218	0.0	3.0
426	74.426	74.425	-0.219	0.0	3.0
432	74.425	74.424	-0.220	0.0	3.0
438	74.424	74.423	-0.221	0.0	2.9
444	74.422	74.421	-0.223	0.0	2.9
450	74.421	74.420	-0.224	0.0	2.8
456	74.419	74.418	-0.226	0.0	2.6
462	74.418	74.417	-0.227	0.0	2.4
468	74.416	74.415	-0.229	0.0	2.3
474	74.414	74.413	-0.231	0.0	2.1
480	74.412	74.411	-0.233	0.0	1.9
486	74.410	74.409	-0.235	0.0	1.8
492	74.407	74.407	-0.238	0.0	1.6
498	74.405	74.405	-0.240	0.0	1.4
504	74.403	74.403	-0.242	0.0	1.3
510	74.401	74.400	-0.244	0.0	1.2
516	74.398	74.398	-0.247	0.0	1.1
522	74.395	74.395	-0.250	0.0	1.0
528	74.392	74.392	-0.253	0.0	0.9
534	74.389	74.390	-0.256	0.0	0.8
540	74.387	74.387	-0.258	0.0	0.7

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+0%
Average Rainfall Intensity 10.418 mm/hr

Time (mins)	Upstream Level (m)	Downstream Level (m)	Surcharged Depth (m)	Total O/F (l/s)	Pipe Flow (l/s)
546	74.384	74.384	-0.261	0.0	0.7
552	74.380	74.381	-0.265	0.0	0.6
558	74.378	74.378	-0.267	0.0	0.6
564	74.375	74.375	-0.270	0.0	0.6
570	74.372	74.372	-0.273	0.0	0.5
576	74.369	74.369	-0.276	0.0	0.5
582	74.366	74.366	-0.279	0.0	0.4
588	74.363	74.363	-0.282	0.0	0.4
594	74.359	74.360	-0.286	0.0	0.4
600	74.357	74.357	-0.288	0.0	0.3
606	74.353	74.354	-0.292	0.0	0.3
612	74.351	74.351	-0.294	0.0	0.3
618	74.347	74.347	-0.298	0.0	0.3
624	74.344	74.344	-0.301	0.0	0.3
630	74.341	74.341	-0.304	0.0	0.2
636	74.338	74.338	-0.307	0.0	0.2
642	74.334	74.335	-0.311	0.0	0.2
648	74.331	74.332	-0.314	0.0	0.2
654	74.328	74.328	-0.317	0.0	0.2
660	74.325	74.325	-0.320	0.0	0.2
666	74.322	74.322	-0.323	0.0	0.2
672	74.319	74.319	-0.326	0.0	0.2
678	74.315	74.316	-0.330	0.0	0.2
684	74.312	74.312	-0.333	0.0	0.2
690	74.309	74.309	-0.336	0.0	0.1
696	74.305	74.306	-0.340	0.0	0.1
702	74.302	74.303	-0.343	0.0	0.1
708	74.299	74.300	-0.346	0.0	0.1
714	74.296	74.296	-0.349	0.0	0.1
720	74.293	74.293	-0.352	0.0	0.1

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+0%
Average Rainfall Intensity 10.418 mm/hr

Time (mins)	Upstream Level (m)	Downstream Level (m)	Surcharged Depth (m)	Total O/F (l/s)	Pipe Flow (l/s)
6	74.153	74.045	-0.442	0.0	0.4
12	74.168	74.046	-0.427	0.0	1.3
18	74.179	74.048	-0.416	0.0	2.4
24	74.188	74.051	-0.407	0.0	3.3
30	74.191	74.055	-0.404	0.0	3.9
36	74.193	74.059	-0.402	0.0	4.3
42	74.193	74.063	-0.402	0.0	4.6
48	74.194	74.067	-0.401	0.0	4.8
54	74.194	74.070	-0.401	0.0	4.9
60	74.195	74.074	-0.400	0.0	5.0
66	74.195	74.078	-0.400	0.0	5.1
72	74.196	74.082	-0.399	0.0	5.4
78	74.198	74.086	-0.397	0.0	5.7
84	74.200	74.091	-0.395	0.0	6.1
90	74.202	74.096	-0.393	0.0	6.7
96	74.206	74.101	-0.389	0.0	7.5
102	74.209	74.107	-0.386	0.0	8.4
108	74.213	74.113	-0.382	0.0	9.5
114	74.219	74.121	-0.376	0.0	10.8
120	74.224	74.129	-0.371	0.0	12.2
126	74.230	74.139	-0.365	0.0	13.8
132	74.236	74.152	-0.359	0.0	15.8
138	74.240	74.165	-0.355	0.0	17.6
144	74.244	74.179	-0.351	0.0	19.1
150	74.248	74.193	-0.347	0.0	20.8
156	74.251	74.208	-0.344	0.0	22.3
162	74.254	74.224	-0.341	0.0	23.6
168	74.261	74.241	-0.334	0.0	24.8
174	74.273	74.258	-0.322	0.0	25.7
180	74.286	74.274	-0.309	0.0	26.4
186	74.299	74.291	-0.296	0.0	26.5
192	74.313	74.307	-0.282	0.0	25.9
198	74.327	74.322	-0.268	0.0	24.9
204	74.341	74.337	-0.254	0.0	23.7
210	74.354	74.349	-0.241	0.0	22.3
216	74.365	74.361	-0.230	0.0	20.9
222	74.376	74.372	-0.219	0.0	19.3
228	74.385	74.381	-0.210	0.0	17.7
234	74.392	74.389	-0.203	0.0	16.2
240	74.399	74.396	-0.196	0.0	14.7
246	74.405	74.402	-0.190	0.0	13.3
252	74.410	74.408	-0.185	0.0	12.1
258	74.414	74.412	-0.181	0.0	10.9
264	74.418	74.416	-0.177	0.0	9.9
270	74.420	74.419	-0.175	0.0	9.1

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+0%
Average Rainfall Intensity 10.418 mm/hr

Time (mins)	Upstream Level (m)	Downstream Level (m)	Surcharged Depth (m)	Total O/F (l/s)	Pipe Flow (l/s)
276	74.423	74.421	-0.172	0.0	8.3
282	74.425	74.423	-0.170	0.0	7.8
288	74.427	74.425	-0.168	0.0	7.4
294	74.428	74.427	-0.167	0.0	7.2
300	74.430	74.428	-0.165	0.0	7.0
306	74.431	74.430	-0.164	0.0	7.0
312	74.433	74.431	-0.162	0.0	6.9
318	74.434	74.433	-0.161	0.0	7.0
324	74.435	74.434	-0.160	0.0	7.0
330	74.437	74.436	-0.158	0.0	6.9
336	74.438	74.437	-0.157	0.0	6.7
342	74.439	74.438	-0.156	0.0	6.4
348	74.440	74.439	-0.155	0.0	5.8
354	74.440	74.439	-0.155	0.0	5.0
360	74.439	74.438	-0.156	0.0	3.9
366	74.438	74.437	-0.157	0.0	3.1
372	74.437	74.436	-0.158	0.0	2.9
378	74.435	74.435	-0.160	0.0	2.9
384	74.434	74.433	-0.161	0.0	2.9
390	74.433	74.432	-0.162	0.0	2.9
396	74.431	74.431	-0.164	0.0	2.9
402	74.430	74.429	-0.165	0.0	3.0
408	74.429	74.428	-0.166	0.0	3.0
414	74.428	74.427	-0.167	0.0	3.0
420	74.426	74.426	-0.169	0.0	3.0
426	74.425	74.424	-0.170	0.0	3.0
432	74.424	74.423	-0.171	0.0	3.0
438	74.423	74.422	-0.172	0.0	3.0
444	74.421	74.421	-0.174	0.0	2.9
450	74.420	74.419	-0.175	0.0	2.8
456	74.418	74.418	-0.177	0.0	2.6
462	74.417	74.416	-0.178	0.0	2.5
468	74.415	74.414	-0.180	0.0	2.3
474	74.413	74.413	-0.182	0.0	2.2
480	74.411	74.411	-0.184	0.0	2.0
486	74.409	74.409	-0.186	0.0	1.8
492	74.407	74.407	-0.188	0.0	1.7
498	74.405	74.404	-0.190	0.0	1.5
504	74.403	74.402	-0.192	0.0	1.4
510	74.400	74.400	-0.195	0.0	1.3
516	74.398	74.397	-0.197	0.0	1.2
522	74.395	74.395	-0.200	0.0	1.1
528	74.392	74.392	-0.203	0.0	1.0
534	74.390	74.389	-0.205	0.0	0.9
540	74.387	74.387	-0.208	0.0	0.8

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+0%
Average Rainfall Intensity 10.418 mm/hr

Time (mins)	Upstream Level (m)	Downstream Level (m)	Surcharged Depth (m)	Total O/F (l/s)	Pipe Flow (l/s)
546	74.384	74.384	-0.211	0.0	0.8
552	74.381	74.381	-0.214	0.0	0.7
558	74.378	74.378	-0.217	0.0	0.6
564	74.375	74.375	-0.220	0.0	0.6
570	74.372	74.372	-0.223	0.0	0.6
576	74.369	74.369	-0.226	0.0	0.5
582	74.366	74.366	-0.229	0.0	0.5
588	74.363	74.363	-0.232	0.0	0.5
594	74.360	74.360	-0.235	0.0	0.4
600	74.357	74.357	-0.238	0.0	0.4
606	74.354	74.354	-0.241	0.0	0.4
612	74.351	74.351	-0.244	0.0	0.4
618	74.347	74.348	-0.248	0.0	0.4
624	74.344	74.344	-0.251	0.0	0.3
630	74.341	74.341	-0.254	0.0	0.3
636	74.338	74.338	-0.257	0.0	0.3
642	74.335	74.335	-0.260	0.0	0.3
648	74.332	74.332	-0.263	0.0	0.3
654	74.328	74.329	-0.267	0.0	0.3
660	74.325	74.325	-0.270	0.0	0.3
666	74.322	74.322	-0.273	0.0	0.2
672	74.319	74.319	-0.276	0.0	0.2
678	74.316	74.316	-0.279	0.0	0.2
684	74.312	74.313	-0.283	0.0	0.2
690	74.309	74.309	-0.286	0.0	0.2
696	74.306	74.306	-0.289	0.0	0.2
702	74.303	74.303	-0.292	0.0	0.2
708	74.300	74.300	-0.295	0.0	0.2
714	74.296	74.296	-0.299	0.0	0.2
720	74.293	74.293	-0.302	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+0%
Average Rainfall Intensity 10.418 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	74.046	74.025	-0.449	0.0	0.0
18	74.048	74.025	-0.447	0.0	0.0
24	74.051	74.025	-0.444	0.0	0.0
30	74.055	74.026	-0.440	0.0	0.0
36	74.059	74.027	-0.436	0.0	0.1
42	74.063	74.029	-0.432	0.0	0.1
48	74.067	74.031	-0.428	0.0	0.2
54	74.070	74.032	-0.425	0.0	0.3
60	74.074	74.035	-0.421	0.0	0.4
66	74.078	74.037	-0.417	0.0	0.5
72	74.082	74.040	-0.413	0.0	0.6
78	74.086	74.044	-0.409	0.0	0.8
84	74.091	74.049	-0.404	0.0	1.1
90	74.096	74.050	-0.399	0.0	1.1
96	74.101	74.051	-0.394	0.0	1.3
102	74.107	74.052	-0.388	0.0	1.4
108	74.113	74.053	-0.382	0.0	1.5
114	74.121	74.054	-0.374	0.0	1.7
120	74.129	74.056	-0.366	0.0	1.8
126	74.139	74.058	-0.356	0.0	2.0
132	74.152	74.060	-0.343	0.0	2.3
138	74.165	74.062	-0.330	0.0	2.6
144	74.179	74.064	-0.316	0.0	2.8
150	74.193	74.066	-0.302	0.0	3.0
156	74.208	74.068	-0.287	0.0	3.2
162	74.224	74.070	-0.271	0.0	3.5
168	74.241	74.072	-0.254	0.0	3.7
174	74.258	74.073	-0.237	0.0	4.0
180	74.274	74.074	-0.221	0.0	4.3
186	74.291	74.075	-0.204	0.0	4.4
192	74.307	74.075	-0.188	0.0	4.5
198	74.322	74.076	-0.173	0.0	4.6
204	74.337	74.076	-0.158	0.0	4.6
210	74.349	74.076	-0.146	0.0	4.6
216	74.361	74.076	-0.134	0.0	4.7
222	74.372	74.076	-0.123	0.0	4.7
228	74.381	74.077	-0.114	0.0	4.8
234	74.389	74.077	-0.106	0.0	4.8
240	74.396	74.077	-0.099	0.0	4.8
246	74.402	74.077	-0.093	0.0	4.8
252	74.408	74.077	-0.087	0.0	4.8
258	74.412	74.077	-0.083	0.0	4.8
264	74.416	74.077	-0.079	0.0	4.8
270	74.419	74.077	-0.076	0.0	4.8

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+0%
Average Rainfall Intensity 10.418 mm/hr

Time (mins)	Upstream Level (m)	Downstream Level (m)	Surcharged Depth (m)	Total O/F (l/s)	Pipe Flow (l/s)
276	74.421	74.077	-0.074	0.0	4.8
282	74.423	74.077	-0.072	0.0	4.8
288	74.425	74.077	-0.070	0.0	4.8
294	74.427	74.077	-0.068	0.0	4.8
300	74.428	74.077	-0.067	0.0	4.8
306	74.430	74.077	-0.065	0.0	4.8
312	74.431	74.077	-0.064	0.0	4.8
318	74.433	74.077	-0.062	0.0	4.8
324	74.434	74.077	-0.061	0.0	4.8
330	74.436	74.077	-0.059	0.0	4.8
336	74.437	74.077	-0.058	0.0	4.8
342	74.438	74.077	-0.057	0.0	4.8
348	74.439	74.077	-0.056	0.0	4.8
354	74.439	74.077	-0.056	0.0	4.8
360	74.438	74.077	-0.057	0.0	4.8
366	74.437	74.077	-0.058	0.0	4.8
372	74.436	74.077	-0.059	0.0	4.8
378	74.435	74.077	-0.060	0.0	4.8
384	74.433	74.077	-0.062	0.0	4.8
390	74.432	74.077	-0.063	0.0	4.8
396	74.431	74.077	-0.064	0.0	4.8
402	74.429	74.077	-0.066	0.0	4.8
408	74.428	74.077	-0.067	0.0	4.8
414	74.427	74.077	-0.068	0.0	4.8
420	74.426	74.077	-0.069	0.0	4.8
426	74.424	74.077	-0.071	0.0	4.8
432	74.423	74.077	-0.072	0.0	4.8
438	74.422	74.077	-0.073	0.0	4.8
444	74.421	74.077	-0.074	0.0	4.8
450	74.419	74.077	-0.076	0.0	4.8
456	74.418	74.077	-0.077	0.0	4.8
462	74.416	74.077	-0.079	0.0	4.8
468	74.414	74.077	-0.081	0.0	4.8
474	74.413	74.077	-0.082	0.0	4.8
480	74.411	74.077	-0.084	0.0	4.8
486	74.409	74.077	-0.086	0.0	4.8
492	74.407	74.077	-0.088	0.0	4.8
498	74.404	74.077	-0.091	0.0	4.8
504	74.402	74.077	-0.093	0.0	4.8
510	74.400	74.077	-0.095	0.0	4.8
516	74.397	74.077	-0.098	0.0	4.8
522	74.395	74.077	-0.100	0.0	4.8
528	74.392	74.077	-0.103	0.0	4.8
534	74.389	74.077	-0.106	0.0	4.8
540	74.387	74.077	-0.108	0.0	4.8

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+0%
Average Rainfall Intensity 10.418 mm/hr

Time (mins)	Upstream Level (m)	Downstream Level (m)	Surcharged Depth (m)	Total O/F (l/s)	Pipe Flow (l/s)
546	74.384	74.077	-0.111	0.0	4.8
552	74.381	74.077	-0.114	0.0	4.8
558	74.378	74.077	-0.117	0.0	4.8
564	74.375	74.077	-0.120	0.0	4.8
570	74.372	74.076	-0.123	0.0	4.7
576	74.369	74.076	-0.126	0.0	4.7
582	74.366	74.076	-0.129	0.0	4.7
588	74.363	74.076	-0.132	0.0	4.7
594	74.360	74.076	-0.135	0.0	4.7
600	74.357	74.076	-0.138	0.0	4.7
606	74.354	74.076	-0.141	0.0	4.7
612	74.351	74.076	-0.144	0.0	4.7
618	74.348	74.076	-0.147	0.0	4.7
624	74.344	74.076	-0.151	0.0	4.7
630	74.341	74.076	-0.154	0.0	4.6
636	74.338	74.076	-0.157	0.0	4.6
642	74.335	74.076	-0.160	0.0	4.6
648	74.332	74.076	-0.163	0.0	4.6
654	74.329	74.076	-0.166	0.0	4.6
660	74.325	74.076	-0.170	0.0	4.6
666	74.322	74.076	-0.173	0.0	4.6
672	74.319	74.076	-0.176	0.0	4.6
678	74.316	74.075	-0.179	0.0	4.6
684	74.313	74.075	-0.182	0.0	4.6
690	74.309	74.075	-0.186	0.0	4.5
696	74.306	74.075	-0.189	0.0	4.5
702	74.303	74.075	-0.192	0.0	4.5
708	74.300	74.075	-0.195	0.0	4.5
714	74.296	74.075	-0.199	0.0	4.5
720	74.293	74.075	-0.202	0.0	4.5

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+0%
Average Rainfall Intensity 10.418 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	74.025	73.673	-0.225	0.0	0.0
30	74.026	73.673	-0.224	0.0	0.0
36	74.027	73.673	-0.223	0.0	0.0
42	74.029	73.673	-0.221	0.0	0.1
48	74.031	73.673	-0.219	0.0	0.2
54	74.032	73.673	-0.218	0.0	0.2
60	74.035	73.673	-0.215	0.0	0.3
66	74.037	73.673	-0.213	0.0	0.4
72	74.040	73.673	-0.210	0.0	0.5
78	74.044	73.673	-0.206	0.0	0.6
84	74.049	73.673	-0.201	0.0	0.8
90	74.050	73.673	-0.200	0.0	1.1
96	74.051	73.673	-0.199	0.0	1.2
102	74.052	73.673	-0.198	0.0	1.3
108	74.053	73.673	-0.197	0.0	1.4
114	74.054	73.673	-0.196	0.0	1.6
120	74.056	73.673	-0.194	0.0	1.7
126	74.058	73.673	-0.192	0.0	1.9
132	74.060	73.673	-0.190	0.0	2.2
138	74.062	73.673	-0.188	0.0	2.4
144	74.064	73.673	-0.186	0.0	2.7
150	74.066	73.673	-0.184	0.0	2.9
156	74.068	73.673	-0.182	0.0	3.1
162	74.070	73.673	-0.180	0.0	3.4
168	74.072	73.673	-0.178	0.0	3.6
174	74.073	73.673	-0.177	0.0	3.9
180	74.074	73.673	-0.176	0.0	4.2
186	74.075	73.673	-0.175	0.0	4.4
192	74.075	73.673	-0.175	0.0	4.5
198	74.076	73.673	-0.174	0.0	4.5
204	74.076	73.673	-0.174	0.0	4.6
210	74.076	73.673	-0.174	0.0	4.6
216	74.076	73.673	-0.174	0.0	4.7
222	74.076	73.673	-0.174	0.0	4.7
228	74.077	73.673	-0.173	0.0	4.7
234	74.077	73.673	-0.173	0.0	4.8
240	74.077	73.673	-0.173	0.0	4.8
246	74.077	73.673	-0.173	0.0	4.8
252	74.077	73.673	-0.173	0.0	4.8
258	74.077	73.673	-0.173	0.0	4.8
264	74.077	73.673	-0.173	0.0	4.8
270	74.077	73.673	-0.173	0.0	4.8

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
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Average Rainfall Intensity 10.418 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	4.8
282	74.077	73.673	-0.173	0.0	4.8
288	74.077	73.673	-0.173	0.0	4.8
294	74.077	73.673	-0.173	0.0	4.8
300	74.077	73.673	-0.173	0.0	4.8
306	74.077	73.673	-0.173	0.0	4.8
312	74.077	73.673	-0.173	0.0	4.8
318	74.077	73.673	-0.173	0.0	4.8
324	74.077	73.673	-0.173	0.0	4.8
330	74.077	73.673	-0.173	0.0	4.8
336	74.077	73.673	-0.173	0.0	4.8
342	74.077	73.673	-0.173	0.0	4.8
348	74.077	73.673	-0.173	0.0	4.8
354	74.077	73.673	-0.173	0.0	4.8
360	74.077	73.673	-0.173	0.0	4.8
366	74.077	73.673	-0.173	0.0	4.8
372	74.077	73.673	-0.173	0.0	4.8
378	74.077	73.673	-0.173	0.0	4.8
384	74.077	73.673	-0.173	0.0	4.8
390	74.077	73.673	-0.173	0.0	4.8
396	74.077	73.673	-0.173	0.0	4.8
402	74.077	73.673	-0.173	0.0	4.8
408	74.077	73.673	-0.173	0.0	4.8
414	74.077	73.673	-0.173	0.0	4.8
420	74.077	73.673	-0.173	0.0	4.8
426	74.077	73.673	-0.173	0.0	4.8
432	74.077	73.673	-0.173	0.0	4.8
438	74.077	73.673	-0.173	0.0	4.8
444	74.077	73.673	-0.173	0.0	4.8
450	74.077	73.673	-0.173	0.0	4.8
456	74.077	73.673	-0.173	0.0	4.8
462	74.077	73.673	-0.173	0.0	4.8
468	74.077	73.673	-0.173	0.0	4.8
474	74.077	73.673	-0.173	0.0	4.8
480	74.077	73.673	-0.173	0.0	4.8
486	74.077	73.673	-0.173	0.0	4.8
492	74.077	73.673	-0.173	0.0	4.8
498	74.077	73.673	-0.173	0.0	4.8
504	74.077	73.673	-0.173	0.0	4.8
510	74.077	73.673	-0.173	0.0	4.8
516	74.077	73.673	-0.173	0.0	4.8
522	74.077	73.673	-0.173	0.0	4.8
528	74.077	73.673	-0.173	0.0	4.8
534	74.077	73.673	-0.173	0.0	4.8
540	74.077	73.673	-0.173	0.0	4.8

RPS P&D		Page 67
20 Milton Park Abingdon Oxfordshire OX14 4SH	Land of Green Lane Chesterton	
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360 minute 100 year Winter I+0%
Average Rainfall Intensity 10.418 mm/hr

Time (mins)	Upstream Level (m)	Downstream Level (m)	Surcharged Depth (m)	Total O/F (l/s)	Pipe Flow (l/s)
546	74.077	73.673	-0.173	0.0	4.8
552	74.077	73.673	-0.173	0.0	4.8
558	74.077	73.673	-0.173	0.0	4.8
564	74.077	73.673	-0.173	0.0	4.8
570	74.076	73.673	-0.174	0.0	4.8
576	74.076	73.673	-0.174	0.0	4.7
582	74.076	73.673	-0.174	0.0	4.7
588	74.076	73.673	-0.174	0.0	4.7
594	74.076	73.673	-0.174	0.0	4.7
600	74.076	73.673	-0.174	0.0	4.7
606	74.076	73.673	-0.174	0.0	4.7
612	74.076	73.673	-0.174	0.0	4.7
618	74.076	73.673	-0.174	0.0	4.7
624	74.076	73.673	-0.174	0.0	4.7
630	74.076	73.673	-0.174	0.0	4.7
636	74.076	73.673	-0.174	0.0	4.6
642	74.076	73.673	-0.174	0.0	4.6
648	74.076	73.673	-0.174	0.0	4.6
654	74.076	73.673	-0.174	0.0	4.6
660	74.076	73.673	-0.174	0.0	4.6
666	74.076	73.673	-0.174	0.0	4.6
672	74.076	73.673	-0.174	0.0	4.6
678	74.075	73.673	-0.175	0.0	4.6
684	74.075	73.673	-0.175	0.0	4.6
690	74.075	73.673	-0.175	0.0	4.5
696	74.075	73.673	-0.175	0.0	4.5
702	74.075	73.673	-0.175	0.0	4.5
708	74.075	73.673	-0.175	0.0	4.5
714	74.075	73.673	-0.175	0.0	4.5
720	74.075	73.673	-0.175	0.0	4.5