	Scar Lane, Huddersfield Surface Water Network	
Date 17/10/2022 File Scar Lane - SW Network.MDX	Designed by paulg Checked by	
Innovyze	Network 2017.1.2	

STORM SEWER DESIGN by the Modified Rational Method

Design Criteria for Storm

Pipe Sizes STANDARD Manhole Sizes STANDARD

FSR Rainfall Model - England and Wales

Return Period (years)	2	PIMP (%)	100
M5-60 (mm)	19.000	Add Flow / Climate Change (%)	0
Ratio R	0.306	Minimum Backdrop Height (m)	0.200
Maximum Rainfall (mm/hr)	50	Maximum Backdrop Height (m)	1.500
Maximum Time of Concentration (mins)	30	Min Design Depth for Optimisation (m)	1.200
Foul Sewage (l/s/ha)	0.000	Min Vel for Auto Design only (m/s)	1.00
Volumetric Runoff Coeff.	0.750	Min Slope for Optimisation (1:X)	500

Designed with Level Soffits

Time Area Diagram for Storm

Time (mins)	Area (ha)	Time (mins)	Area (ha)
0-4	0.224	4-8	0.145

Total Area Contributing (ha) = 0.369

Total Pipe Volume (m³) = 9.609

Network Design Table for Storm

« - 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)	Section Type	Auto Design
1.000	17.000	0.200	85.0	0.008	4.00	0.0	0.600	o	100	Pipe/Conduit	
1.001	11.000	0.100	110.0	0.008	0.00	0.0	0.600	o	100	Pipe/Conduit	
1.002	29.000	0.200	145.0	0.054	0.00	0.0	0.600	o	150	Pipe/Conduit	
2.000	17.000	0.300	56.7	0.009	4.00	0.0	0.600	o	100	Pipe/Conduit	
2.001	13.000	0.400	32.5	0.000	0.00	0.0	0.600	o	100	Pipe/Conduit	
3.000	17.000	0.700	24.3	0.009	4.00	0.0	0.600	o	100	Pipe/Conduit	

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	4.34	119.150	0.008	0.0	0.0	0.0	0.83	6.6	1.1
1.001	50.00	4.59	118.950	0.016	0.0	0.0	0.0	0.73	5.8	2.2
1.002	50.00	5.17	118.800	0.070	0.0	0.0	0.0	0.83	14.7	9.5
2.000	50.00	4.28	120.150	0.009	0.0	0.0	0.0	1.03	8.1	1.2
2.001	50.00	4.44	119.850	0.009	0.0	0.0	0.0	1.36	10.7	1.2
3.000	50.00	4.18	120.150	0.009	0.0	0.0	0.0	1.57	12.4	1.2

Scar Lane, Huddersfield
Surface Water Network

Date 17/10/2022
File Scar Lane - SW Network.MDX

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Network Design Table for Storm

PN	Length (m)	Fall (m)	Slope (1:X)	I.Area (ha)	T.E. (mins)	Base Flow (l/s)	k (mm)	HYD SECT	DIA (mm)	Section Type	Auto Design
2.002	9.000	0.150	60.0	0.009	0.00	0.0	0.600	o	100	Pipe/Conduit	
1.003	36.000	3.750	9.6	0.009	0.00	0.0	0.600	o	225	Pipe/Conduit	
1.004	12.000	0.375	32.0	0.022	0.00	0.0	0.600	o	225	Pipe/Conduit	
1.005	5.000	0.020	250.0	0.004	0.00	0.0	0.600	o	300	Pipe/Conduit	
4.000	9.000	0.060	150.0	0.122	4.00	0.0	0.600	o	150	Pipe/Conduit	
5.000	21.000	0.300	70.0	0.015	4.00	0.0	0.600	o	100	Pipe/Conduit	
1.006	21.000	0.085	247.1	0.031	0.00	0.0	0.600	o	300	Pipe/Conduit	
6.000	34.000	0.755	45.0	0.009	4.00	0.0	0.600	o	100	Pipe/Conduit	
1.007	57.000	0.230	247.8	0.045	0.00	0.0	0.600	o	300	Pipe/Conduit	
1.008	4.000	0.355	11.3	0.015	0.00	0.0	0.600	o	150	Pipe/Conduit	

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)
2.002	50.00	4.59	119.450	0.027	0.0	0.0	0.0	1.00	7.8	3.7
1.003	50.00	5.31	118.525	0.106	0.0	0.0	0.0	4.25	168.9	14.4
1.004	50.00	5.40	114.775	0.128	0.0	0.0	0.0	2.32	92.3	17.3
1.005	50.00	5.48	114.100	0.132	0.0	0.0	0.0	0.99	70.0	17.9
4.000	50.00	4.18	114.500	0.122	0.0	0.0	0.0	0.82	14.5«	16.5
5.000	50.00	4.38	114.850	0.015	0.0	0.0	0.0	0.92	7.2	2.0
1.006	50.00	5.83	114.080	0.300	0.0	0.0	0.0	1.00	70.4	40.6
6.000	50.00	4.49	114.950	0.009	0.0	0.0	0.0	1.15	9.0	1.2
1.007	50.00	6.79	113.995	0.354	0.0	0.0	0.0	0.99	70.3	47.9
1.008	50.00	6.81	113.905	0.369	0.0	0.0	0.0	3.02	53.3	50.0

Scar Lane, Huddersfield
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PIPELINE SCHEDULES for Storm

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	100	RE	119.850	119.150	0.600	Open Manhole	150
1.001	o	100	SW01	119.850	118.950	0.800	Open Manhole	450
1.002	o	150	SW02	119.850	118.800	0.900	Open Manhole	450
2.000	o	100	RE	120.850	120.150	0.600	Open Manhole	150
2.001	o	100	SW03	120.850	119.850	0.900	Open Manhole	450
3.000	o	100	RE	120.850	120.150	0.600	Open Manhole	150
2.002	o	100	SW04	120.850	119.450	1.300	Open Manhole	450
1.003	o	225	SW05	120.600	118.525	1.850	Open Manhole	1200
1.004	o	225	SW06	116.200	114.775	1.200	Open Manhole	1200
1.005	o	300	TANK	115.850	114.100	1.450	Open Manhole	300
4.000	o	150	CHANNEL	115.800	114.500	1.150	Open Manhole	300
5.000	o	100	SW07	115.850	114.850	0.900	Open Manhole	450
1.006	o	300	SW08	115.850	114.080	1.470	Open Manhole	1200
6.000	o	100	RE	115.850	114.950	0.800	Open Manhole	450
1.007	o	300	SW09	115.600	113.995	1.305	Open Manhole	1200

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	17.000	85.0	SW01	119.850	118.950	0.800	Open Manhole	450
1.001	11.000	110.0	SW02	119.850	118.850	0.900	Open Manhole	450
1.002	29.000	145.0	SW05	120.600	118.600	1.850	Open Manhole	1200
2.000	17.000	56.7	SW03	120.850	119.850	0.900	Open Manhole	450
2.001	13.000	32.5	SW04	120.850	119.450	1.300	Open Manhole	450
3.000	17.000	24.3	SW04	120.850	119.450	1.300	Open Manhole	450
2.002	9.000	60.0	SW05	120.600	119.300	1.200	Open Manhole	1200
1.003	36.000	9.6	SW06	116.200	114.775	1.200	Open Manhole	1200
1.004	12.000	32.0	TANK	115.850	114.400	1.225	Open Manhole	300
1.005	5.000	250.0	SW08	115.850	114.080	1.470	Open Manhole	1200
4.000	9.000	150.0	SW08	115.850	114.440	1.260	Open Manhole	1200
5.000	21.000	70.0	SW08	115.850	114.550	1.200	Open Manhole	1200
1.006	21.000	247.1	SW09	115.600	113.995	1.305	Open Manhole	1200
6.000	34.000	45.0	SW09	115.600	114.195	1.305	Open Manhole	1200
1.007	57.000	247.8	SW10	115.050	113.765	0.985	Open Manhole	1500

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PIPELINE SCHEDULES for Storm

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)
1.008	o	150	SW10	115.050	113.905	0.995	Open Manhole	1500

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)
1.008	4.000	11.3	SEWER	114.600	113.550	0.900	Open Manhole	0

Free Flowing Outfall Details for Storm

Outfall Pipe Number	Outfall Name	C. Level (m)	I. Level (m)	Min I. Level (m)	D,L (mm)	W (mm)
1.008	SEWER	114.600	113.550	113.200	0	0

Simulation Criteria for Storm

Volumetric Runoff Coeff	0.750	Additional Flow - % of Total Flow	0.000
Areal Reduction Factor	1.000	MADD Factor * 10m³/ha Storage	2.000
Hot Start (mins)	0	Inlet Coeffiecient	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 Offline Controls 0 Number of Time/Area Diagrams 0
Number of Online Controls 1 Number of Storage Structures 1 Number of Real Time Controls 0

Synthetic Rainfall Details

Rainfall Model	FSR	Profile Type	Summer
Return Period (years)	2	Cv (Summer)	0.750
Region	England and Wales	Cv (Winter)	0.840
M5-60 (mm)	19.000	Storm Duration (mins)	30
Ratio R	0.306		

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Online Controls for Storm

Hydro-Brake® Optimum Manhole: SW10, DS/PN: 1.008, Volume (m³): 6.0

Unit Reference	MD-SHE-0087-3500-1100-3500
Design Head (m)	1.100
Design Flow (l/s)	3.5
Flush-Flo™	Calculated
Objective	Minimise upstream storage
Application	Surface
Sump Available	Yes
Diameter (mm)	87
Invert Level (m)	113.905
Minimum Outlet Pipe Diameter (mm)	100
Suggested Manhole Diameter (mm)	1200

Control Points	Head (m)	Flow (l/s)	Control Points	Head (m)	Flow (l/s)
Design Point (Calculated)	1.100	3.5	Kick-Flo®	0.684	2.8
Flush-Flo™	0.329	3.5	Mean Flow over Head Range	-	3.1

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	2.7	1.200	3.6	3.000	5.6	7.000	8.3
0.200	3.4	1.400	3.9	3.500	6.0	7.500	8.6
0.300	3.5	1.600	4.2	4.000	6.4	8.000	8.9
0.400	3.5	1.800	4.4	4.500	6.7	8.500	9.1
0.500	3.4	2.000	4.6	5.000	7.1	9.000	9.4
0.600	3.2	2.200	4.8	5.500	7.4	9.500	9.6
0.800	3.0	2.400	5.0	6.000	7.7		
1.000	3.3	2.600	5.2	6.500	8.0		

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Storage Structures for Storm

Cellular Storage Manhole: TANK, DS/PN: 1.005

Invert Level (m) 114.100 Safety Factor 2.0
Infiltration Coefficient Base (m/hr) 0.00000 Porosity 0.95
Infiltration Coefficient Side (m/hr) 0.00000

Depth (m)	Area (m²)	Inf. Area (m²)	Depth (m)	Area (m²)	Inf. Area (m²)
0.000	225.0	225.0	5.200	0.0	273.0
0.400	225.0	249.0	5.600	0.0	273.0
0.800	225.0	273.0	6.000	0.0	273.0
0.801	0.0	273.0	6.400	0.0	273.0
1.600	0.0	273.0	6.800	0.0	273.0
2.000	0.0	273.0	7.200	0.0	273.0
2.400	0.0	273.0	7.600	0.0	273.0
2.800	0.0	273.0	8.000	0.0	273.0
3.200	0.0	273.0	8.400	0.0	273.0
3.600	0.0	273.0	8.800	0.0	273.0
4.000	0.0	273.0	9.200	0.0	273.0
4.400	0.0	273.0	9.600	0.0	273.0
4.800	0.0	273.0	10.000	0.0	273.0

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1 year Return Period Summary of Critical Results by Maximum Level (Rank 1) for Storm

Simulation Criteria

Areal Reduction Factor	1.000	Additional Flow - % of Total Flow	0.000
Hot Start (mins)	0	MADD Factor * 10m³/ha Storage	2.000
Hot Start Level (mm)	0	Inlet Coeffiecient	0.800
Manhole Headloss Coeff (Global)	0.500	Flow per Person per Day (l/per/day)	0.000
Foul Sewage per hectare (l/s)	0.000		

Number of Input Hydrographs 0 Number of Offline Controls 0 Number of Time/Area Diagrams 0
Number of Online Controls 1 Number of Storage Structures 1 Number of Real Time Controls 0

Synthetic Rainfall Details

Rainfall Model		FSR M5-60 (mm) 19.000 Cv (Summer)	0.750
Region England and Wales		Ratio R 0.306 Cv (Winter)	0.840

Margin for Flood Risk Warning (mm)	300.0
Analysis Timestep 2.5 Second Increment	(Extended)
DTS Status	OFF
DVD Status	ON
Inertia Status	ON

Profile(s)	Summer and Winter
Duration(s) (mins)	15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440
Return Period(s) (years)	1, 30, 100
Climate Change (%)	0, 0, 20

PN	US/MH Name	Storm	Return Period	Climate Change	First (X) Surcharge	First (Y) Flood	First (Z) Overflow	Overflow Act.	Water Level (m)
1.000	RE	15 Winter	1	+0%	100/15 Summer				119.177
1.001	SW01	15 Winter	1	+0%	30/15 Summer				118.991
1.002	SW02	15 Winter	1	+0%	30/15 Summer				118.878
2.000	RE	15 Winter	1	+0%					120.176
2.001	SW03	15 Summer	1	+0%					119.872
3.000	RE	15 Winter	1	+0%					120.171
2.002	SW04	15 Winter	1	+0%	30/15 Summer				119.497
1.003	SW05	15 Winter	1	+0%					118.565
1.004	SW06	15 Winter	1	+0%					114.838
1.005	TANK	240 Winter	1	+0%	30/60 Winter				114.226
4.000	CHANNEL	15 Winter	1	+0%	1/15 Summer	100/15 Summer			114.677
5.000	SW07	15 Winter	1	+0%	100/15 Summer				114.886
1.006	SW08	30 Winter	1	+0%	30/15 Summer				114.379
6.000	RE	15 Winter	1	+0%	100/15 Summer				114.974
1.007	SW09	30 Summer	1	+0%	1/15 Summer				114.390
1.008	SW10	30 Summer	1	+0%	1/15 Summer				114.393

PN	US/MH Name	Surcharged Depth (m)	Flooded Volume (m³)	Flow / Cap.	Overflow (l/s)	Pipe Flow (l/s)	Status	Level Exceeded
1.000	RE	-0.073	0.000	0.16		1.0	OK	
1.001	SW01	-0.059	0.000	0.34		1.8	OK	
1.002	SW02	-0.072	0.000	0.53		7.4	OK	
2.000	RE	-0.074	0.000	0.15		1.2	OK	
2.001	SW03	-0.078	0.000	0.12		1.2	OK	

Scar Lane, Huddersfield
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1 year Return Period Summary of Critical Results by Maximum Level (Rank 1) for Storm

PN	US/MH Name	Surcharged Depth (m)	Flooded Volume (m^3)	Flow / Cap.	Overflow (l/s)	Pipe Flow (l/s)	Status	Level Exceeded
3.000	RE	-0.079	0.000	0.10		1.2	OK	
2.002	SW04	-0.053	0.000	0.45		3.2	OK	
1.003	SW05	-0.185	0.000	0.07		11.5	OK	
1.004	SW06	-0.162	0.000	0.17		13.7	OK	
1.005	TANK	-0.174	0.000	0.07		3.1	OK	
4.000	CHANNEL	0.027	0.000	1.24		15.8	SURCHARGED	1
5.000	SW07	-0.064	0.000	0.28		1.9	OK	
1.006	SW08	-0.001	0.000	0.21		13.2	OK	
6.000	RE	-0.076	0.000	0.13		1.2	OK	
1.007	SW09	0.095	0.000	0.22		14.8	SURCHARGED	
1.008	SW10	0.338	0.000	0.09		3.4	SURCHARGED	

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30 year Return Period Summary of Critical Results by Maximum Level (Rank 1) for Storm

Simulation Criteria

Areal Reduction Factor 1.000 Additional Flow - % of Total Flow 0.000
Hot Start (mins) 0 MADD Factor * 10m³/ha Storage 2.000
Hot Start Level (mm) 0 Inlet Coeffiecient 0.800
Manhole Headloss Coeff (Global) 0.500 Flow per Person per Day (l/per/day) 0.000
Foul Sewage per hectare (l/s) 0.000

Number of Input Hydrographs 0 Number of Offline Controls 0 Number of Time/Area Diagrams 0
Number of Online Controls 1 Number of Storage Structures 1 Number of Real Time Controls 0

Synthetic Rainfall Details

Rainfall Model FSR M5-60 (mm) 19.000 Cv (Summer) 0.750
Region England and Wales Ratio R 0.306 Cv (Winter) 0.840

Margin for Flood Risk Warning (mm) 300.0
Analysis Timestep 2.5 Second Increment (Extended)
DTS Status OFF
DVD Status ON
Inertia Status ON

Profile(s) Summer and Winter
Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440
Return Period(s) (years) 1, 30, 100
Climate Change (%) 0, 0, 20

PN	US/MH Name	Storm	Return Period	Climate Change	First (X) Surcharge	First (Y) Flood	First (Z) Overflow	Overflow Act.	Water Level (m)
1.000	RE	15 Winter	30	+0%	100/15 Summer				119.249
1.001	SW01	15 Winter	30	+0%	30/15 Summer				119.222
1.002	SW02	15 Winter	30	+0%	30/15 Summer				119.158
2.000	RE	15 Winter	30	+0%					120.192
2.001	SW03	15 Winter	30	+0%					119.886
3.000	RE	15 Winter	30	+0%					120.183
2.002	SW04	15 Winter	30	+0%	30/15 Summer				119.605
1.003	SW05	15 Winter	30	+0%					118.592
1.004	SW06	15 Winter	30	+0%					114.884
1.005	TANK	360 Winter	30	+0%	30/60 Winter				114.539
4.000	CHANNEL	15 Summer	30	+0%	1/15 Summer	100/15 Summer			115.128
5.000	SW07	15 Winter	30	+0%	100/15 Summer				114.911
1.006	SW08	15 Summer	30	+0%	30/15 Summer				114.613
6.000	RE	15 Winter	30	+0%	100/15 Summer				114.989
1.007	SW09	15 Summer	30	+0%	1/15 Summer				114.748
1.008	SW10	15 Summer	30	+0%	1/15 Summer				114.868

PN	US/MH Name	Surcharged Depth (m)	Flooded Volume (m³)	Flow / Cap.	Overflow (l/s)	Pipe Flow (l/s)	Status	Level Exceeded
1.000	RE	-0.001	0.000	0.38		2.4	OK	
1.001	SW01	0.172	0.000	0.92		5.0	SURCHARGED	
1.002	SW02	0.208	0.000	1.42		20.0	SURCHARGED	
2.000	RE	-0.058	0.000	0.37		2.8	OK	
2.001	SW03	-0.064	0.000	0.28		2.8	OK	

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30 year Return Period Summary of Critical Results by Maximum Level (Rank 1) for Storm

PN	US/MH Name	Surcharged Depth (m)	Flooded Volume (m^3)	Flow / Cap.	Overflow (l/s)	Pipe Flow (l/s)	Status	Level Exceeded
3.000	RE	-0.067	0.000	0.24		2.8	OK	
2.002	SW04	0.055	0.000	1.15		8.3	SURCHARGED	
1.003	SW05	-0.158	0.000	0.19		30.8	OK	
1.004	SW06	-0.116	0.000	0.47		36.9	OK	
1.005	TANK	0.139	0.000	0.46		21.4	SURCHARGED	
4.000	CHANNEL	0.478	0.000	2.87		36.5	SURCHARGED	1
5.000	SW07	-0.039	0.000	0.68		4.7	OK	
1.006	SW08	0.233	0.000	0.41		25.1	SURCHARGED	
6.000	RE	-0.061	0.000	0.32		2.8	OK	
1.007	SW09	0.453	0.000	0.35		23.5	SURCHARGED	
1.008	SW10	0.813	0.000	0.09		3.2	FLOOD RISK	

Scar Lane, Huddersfield
Surface Water Network

Date 17/10/2022
File Scar Lane - SW Network.MDX

Designed by paulg
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Network 2017.1.2

100 year Return Period Summary of Critical Results by Maximum Level (Rank 1) for Storm

Simulation Criteria

Areal Reduction Factor	1.000	Additional Flow - % of Total Flow	0.000
Hot Start (mins)	0	MADD Factor * 10m³/ha Storage	2.000
Hot Start Level (mm)	0	Inlet Coeffiecient	0.800
Manhole Headloss Coeff (Global)	0.500	Flow per Person per Day (l/per/day)	0.000
Foul Sewage per hectare (l/s)	0.000		

Number of Input Hydrographs 0 Number of Offline Controls 0 Number of Time/Area Diagrams 0
Number of Online Controls 1 Number of Storage Structures 1 Number of Real Time Controls 0

Synthetic Rainfall Details

Rainfall Model	FSR	M5-60 (mm)	19.000
Region	England and Wales	Ratio R	0.306
Cv (Summer)	0.750		
Cv (Winter)	0.840		

Margin for Flood Risk Warning (mm)	300.0
Analysis Timestep	2.5 Second Increment (Extended)
DTS Status	OFF
DVD Status	ON
Inertia Status	ON

Profile(s)	Summer and Winter
Duration(s) (mins)	15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440
Return Period(s) (years)	1, 30, 100
Climate Change (%)	0, 0, 20

PN	US/MH Name	Storm	Return Period	Climate Change	First (X) Surcharge	First (Y) Flood	First (Z) Overflow	Overflow Act.	Water Level (m)
1.000	RE	15 Winter	100	+20%	100/15 Summer				119.833
1.001	SW01	15 Winter	100	+20%	30/15 Summer				119.774
1.002	SW02	15 Winter	100	+20%	30/15 Summer				119.636
2.000	RE	15 Winter	100	+20%					120.204
2.001	SW03	15 Winter	100	+20%					119.944
3.000	RE	15 Winter	100	+20%					120.192
2.002	SW04	15 Winter	100	+20%	30/15 Summer				119.870
1.003	SW05	15 Winter	100	+20%					118.607
1.004	SW06	480 Winter	100	+20%					114.923
1.005	TANK	360 Winter	100	+20%	30/60 Winter				114.934
4.000	CHANNEL	15 Summer	100	+20%	1/15 Summer	100/15 Summer			115.800
5.000	SW07	15 Summer	100	+20%	100/15 Summer				115.015
1.006	SW08	360 Winter	100	+20%	30/15 Summer				114.930
6.000	RE	15 Summer	100	+20%	100/15 Summer				115.051
1.007	SW09	360 Winter	100	+20%	1/15 Summer				114.971
1.008	SW10	15 Summer	100	+20%	1/15 Summer				115.023

PN	US/MH Name	Surcharged Depth (m)	Flooded Volume (m³)	Flow / Cap.	Overflow (l/s)	Pipe Flow (l/s)	Status	Level Exceeded
1.000	RE	0.583	0.000	0.54		3.4	FLOOD RISK	
1.001	SW01	0.724	0.000	1.29		6.9	FLOOD RISK	
1.002	SW02	0.686	0.000	2.09		29.4	FLOOD RISK	
2.000	RE	-0.046	0.000	0.57		4.4	OK	

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PN	US/MH Name	Surcharged Depth (m)	Flooded Volume (m^3)	Flow / Cap.	Overflow (l/s)	Pipe Flow (l/s)	Status	Level Exceeded
2.001	SW03	-0.006	0.000	0.43		4.3	OK	
3.000	RE	-0.058	0.000	0.37		4.4	OK	
2.002	SW04	0.320	0.000	1.75		12.6	SURCHARGED	
1.003	SW05	-0.143	0.000	0.29		45.7	OK	
1.004	SW06	-0.077	0.000	0.10		8.1	OK	
1.005	TANK	0.534	0.000	0.45		21.0	SURCHARGED	
4.000	CHANNEL	1.150	0.024	4.40		56.0	FLOOD	1
5.000	SW07	0.065	0.000	1.05		7.4	SURCHARGED	
1.006	SW08	0.550	0.000	0.31		19.4	SURCHARGED	
6.000	RE	0.001	0.000	0.49		4.3	SURCHARGED	
1.007	SW09	0.676	0.000	0.15		9.8	SURCHARGED	
1.008	SW10	0.968	0.000	0.09		3.4	FLOOD RISK	