

Renaissance Assoc.		Page 1
Carvers Warehouse 77 Dale Street Manchester M1 2HG		
Date 15/06/2022 14:43 File MC VICTORIA HOUSE.MDX	Designed by HenryWilkinson Checked by	
Innovyze	Network 2020.1.3	

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)	100	PIMP (%)	100
M5-60 (mm)	18.000	Add Flow / Climate Change (%)	0
Ratio R	0.359	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	0.102	4-8	0.031

Total Area Contributing (ha) = 0.133

Total Pipe Volume (m³) = 2.409

Network Design Table for Storm

- Indicates pipe length does not match coordinates

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
S1.000	2.015	0.025	80.0	0.082	5.00	0.0	0.600	o	225	Pipe/Conduit	
S2.000	5.877	0.073	80.0	0.000	5.00	0.0	0.600	o	150	Pipe/Conduit	
S1.001	20.443	0.300	68.1	0.003	0.00	0.0	0.600	o	225	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)
S1.000	50.00	5.02	47.625	0.082	0.0	0.0	0.0	1.46	58.2	11.1
S2.000	50.00	5.09	47.748	0.000	0.0	0.0	0.0	1.12	19.9	0.0
S1.001	50.00	5.30	47.600	0.085	0.0	0.0	0.0	1.59	63.1	11.5

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Area Summary for Storm

Pipe Number	PIMP Type	PIMP Name	PIMP (%)	Gross Area (ha)	Imp. Area (ha)	Pipe Total (ha)
1.000	-	-	100	0.082	0.082	0.082
2.000	-	-	100	0.000	0.000	0.000
1.001	-	-	100	0.003	0.003	0.003
3.000	-	-	100	0.005	0.005	0.005
4.000	-	-	100	0.007	0.007	0.007
1.002	-	-	100	0.004	0.004	0.004
5.000	-	-	100	0.007	0.007	0.007
1.003	-	-	100	0.000	0.000	0.000
1.004	-	-	100	0.000	0.000	0.000
1.005	-	-	100	0.007	0.007	0.007
6.000	-	-	100	0.002	0.002	0.002
6.001	-	-	100	0.016	0.016	0.016
1.006	-	-	100	0.000	0.000	0.000
				Total	Total	Total
				0.133	0.133	0.133

Simulation Criteria for Storm

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 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 Storage Structures 1	
Number of Online Controls 1		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)	100	Cv (Summer)	0.750
Region	England and Wales	Cv (Winter)	0.840
M5-60 (mm)	18.000	Storm Duration (mins)	30
Ratio R	0.359		

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Online Controls for Storm

Hydro-Brake® Optimum Manhole: S1.06, DS/PN: S1.006, Volume (m³): 1.9

Unit Reference	MD-SFP-0142-1100-1390-1100
Design Head (m)	1.390
Design Flow (l/s)	11.0
Flush-Flo™	Calculated
Objective	Future Proof
Application	Surface
Sump Available	Yes
Diameter (mm)	142
Invert Level (m)	46.395
Minimum Outlet Pipe Diameter (mm)	225
Suggested Manhole Diameter (mm)	1200

Control Points	Head (m)	Flow (l/s)
Design Point (Calculated)	1.390	11.0
Flush-Flo™	0.350	11.0
Kick-Flo®	0.813	8.6
Mean Flow over Head Range	-	9.4

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	5.4	1.200	10.3	3.000	15.8	7.000	23.7
0.200	10.4	1.400	11.0	3.500	17.0	7.500	24.5
0.300	10.9	1.600	11.8	4.000	18.1	8.000	25.3
0.400	10.9	1.800	12.4	4.500	19.2	8.500	26.0
0.500	10.7	2.000	13.1	5.000	20.2	9.000	26.8
0.600	10.4	2.200	13.7	5.500	21.1	9.500	27.5
0.800	8.8	2.400	14.2	6.000	22.0		
1.000	9.4	2.600	14.8	6.500	22.9		

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Summary Wizard of 15 minute 1 year Summer I+0% for Storm

Simulation Criteria

Areal Reduction Factor	1.000	Additional Flow - % of Total Flow	0.000
Hot Start (mins)	0	MADD Factor * 10m ³ /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 Storage Structures	1
Number of Online Controls	1	Number of Time/Area Diagrams	0
Number of Offline Controls	0	Number of Real Time Controls	0

Synthetic Rainfall Details

Rainfall Model	FSR	Ratio R	0.357
Region England and Wales Cv (Summer)	0.750		
M5-60 (mm)	18.000	Cv (Winter)	0.840

Margin for Flood Risk Warning (mm)	400.0
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
Return Period(s) (years)	1, 2, 30, 100
Climate Change (%)	0, 0, 0, 40

PN	US/MH Name	Storm Rank	Water Surcharged Flooded			Half Drain Pipe			Status
			Level (m)	Depth (m)	Volume (m ³)	Flow / Overflow Cap. (l/s)	Time (mins)	Flow (l/s)	
S1.000	S1.00	24	47.712	-0.138	0.000	0.31		9.4	OK
S2.000	S13	3	47.748	-0.150	0.000	0.00		0.0	OK
S1.001	S1.01	25	47.662	-0.163	0.000	0.17		9.6	OK
S3.000	S2.00	24	47.542	-0.133	0.000	0.03		0.6	OK
S4.000	S3.00	24	47.528	-0.132	0.000	0.03		0.8	OK
S1.002	S1.02	25	47.376	-0.149	0.000	0.25		11.4	OK
S5.000	S4.00	24	47.336	-0.126	0.000	0.06		0.8	OK
S1.003	S1.03	24	46.633	-0.124	0.000	0.41		12.3	OK
S1.004	S1.04	19	46.591	-0.134	0.000	0.31	7	9.5	OK*
S1.005	S1.05	28	46.581	-0.096	0.000	0.27		9.2	OK
S6.000	S5.00	22	46.575	-0.096	0.000	0.02		0.2	OK
S6.001	S5.01	26	46.575	-0.069	0.000	0.16		1.8	OK
S1.006	S1.06	31	46.574	-0.047	0.000	0.15		10.2	OK

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Summary Wizard of 30 minute 1 year Summer I+0% for Storm

Simulation Criteria

Areal Reduction Factor	1.000	Additional Flow - % of Total Flow	0.000
Hot Start (mins)	0	MADD Factor * 10m ³ /ha Storage	2.000
Hot Start Level (mm)	0	Inlet Coefficient	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 Storage Structures	1
Number of Online Controls	1	Number of Time/Area Diagrams	0
Number of Offline Controls	0	Number of Real Time Controls	0

Synthetic Rainfall Details

Rainfall Model	FSR	Ratio R	0.357
Region England and Wales Cv (Summer)	0.750		
M5-60 (mm)	18.000	Cv (Winter)	0.840

Margin for Flood Risk Warning (mm)	400.0
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
Return Period(s) (years)	1, 2, 30, 100
Climate Change (%)	0, 0, 0, 40

PN	US/MH Name	Storm Rank	Water Surcharged Flooded			Half Drain Pipe			Status
			Level (m)	Depth (m)	Volume (m ³)	Flow / Overflow Cap. (l/s)	Time (mins)	Flow (l/s)	
S1.000	S1.00	27	47.707	-0.143	0.000	0.29		8.6	OK
S2.000	S13	31	47.748	-0.150	0.000	0.00		0.0	OK
S1.001	S1.01	27	47.659	-0.166	0.000	0.16		8.9	OK
S3.000	S2.00	27	47.542	-0.133	0.000	0.03		0.5	OK
S4.000	S3.00	27	47.527	-0.133	0.000	0.03		0.7	OK
S1.002	S1.02	27	47.373	-0.152	0.000	0.23		10.5	OK
S5.000	S4.00	27	47.335	-0.127	0.000	0.06		0.7	OK
S1.003	S1.03	27	46.627	-0.130	0.000	0.38		11.2	OK
S1.004	S1.04	26	46.591	-0.134	0.000	0.29	10	9.1	OK*
S1.005	S1.05	30	46.581	-0.097	0.000	0.27		9.0	OK
S6.000	S5.00	26	46.575	-0.096	0.000	0.02		0.2	OK
S6.001	S5.01	29	46.575	-0.069	0.000	0.15		1.6	OK
S1.006	S1.06	30	46.573	-0.047	0.000	0.15		10.2	OK

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Summary Wizard of 60 minute 1 year Summer I+0% 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 Coefficient	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 Storage Structures	1
Number of Online Controls	1	Number of Time/Area Diagrams	0
Number of Offline Controls	0	Number of Real Time Controls	0

Synthetic Rainfall Details

Rainfall Model	FSR	Ratio R	0.357
Region England and Wales Cv (Summer)	0.750		
M5-60 (mm)	18.000	Cv (Winter)	0.840

Margin for Flood Risk Warning (mm)	400.0
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
Return Period(s) (years)	1, 2, 30, 100
Climate Change (%)	0, 0, 0, 40

PN	US/MH Name	Storm Rank	Water Surcharged Flooded			Half Drain Pipe			Status
			Level (m)	Depth (m)	Volume (m³)	Flow / Overflow Cap. (l/s)	Time (mins)	Flow (l/s)	
S1.000	S1.00	35	47.696	-0.154	0.000	0.22		6.6	OK
S2.000	S13	32	47.748	-0.150	0.000	0.00		0.0	OK
S1.001	S1.01	35	47.651	-0.174	0.000	0.12		6.8	OK
S3.000	S2.00	35	47.540	-0.135	0.000	0.02		0.4	OK
S4.000	S3.00	35	47.526	-0.134	0.000	0.02		0.6	OK
S1.002	S1.02	35	47.363	-0.162	0.000	0.17		8.1	OK
S5.000	S4.00	35	47.332	-0.130	0.000	0.04		0.6	OK
S1.003	S1.03	35	46.614	-0.143	0.000	0.29		8.6	OK
S1.004	S1.04	35	46.578	-0.147	0.000	0.26	14	8.0	OK*
S1.005	S1.05	36	46.562	-0.116	0.000	0.25		8.3	OK
S6.000	S5.00	33	46.556	-0.115	0.000	0.01		0.2	OK
S6.001	S5.01	36	46.556	-0.088	0.000	0.12		1.3	OK
S1.006	S1.06	36	46.555	-0.065	0.000	0.14		9.4	OK

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<u>Summary Wizard of 120 minute 1 year Summer I+0% for Storm</u>									
<u>Simulation Criteria</u>									
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 Storage Structures		1			
Number of Online Controls		1		Number of Time/Area Diagrams		0			
Number of Offline Controls		0		Number of Real Time Controls		0			
<u>Synthetic Rainfall Details</u>									
Rainfall Model		FSR		Ratio R		0.357			
Region England and Wales Cv (Summer)		0.750							
M5-60 (mm)		18.000		Cv (Winter)		0.840			
Margin for Flood Risk Warning (mm)						400.0			
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							
Return Period(s) (years)		1, 2, 30, 100							
Climate Change (%)		0, 0, 0, 40							

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Summary Wizard of 240 minute 1 year Summer I+0% 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 Storage Structures	1
Number of Online Controls	1	Number of Time/Area Diagrams	0
Number of Offline Controls	0	Number of Real Time Controls	0

Synthetic Rainfall Details

Rainfall Model	FSR	Ratio R	0.357
Region England and Wales Cv (Summer)	0.750		
M5-60 (mm)	18.000	Cv (Winter)	0.840

Margin for Flood Risk Warning (mm)	400.0
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
Return Period(s) (years)	1, 2, 30, 100
Climate Change (%)	0, 0, 0, 40

PN	US/MH Name	Storm Rank	Water Surcharged Flooded			Half Drain Pipe			Status
			Level (m)	Depth (m)	Volume (m³)	Flow / Overflow Cap. (l/s)	Time (mins)	Flow (l/s)	
S1.000	S1.00	49	47.672	-0.178	0.000	0.10		3.0	OK
S2.000	S13	35	47.748	-0.150	0.000	0.00		0.0	OK
S1.001	S1.01	49	47.634	-0.191	0.000	0.05		3.1	OK
S3.000	S2.00	49	47.532	-0.143	0.000	0.01		0.2	OK
S4.000	S3.00	49	47.518	-0.142	0.000	0.01		0.3	OK
S1.002	S1.02	49	47.342	-0.183	0.000	0.08		3.7	OK
S5.000	S4.00	49	47.326	-0.136	0.000	0.02		0.3	OK
S1.003	S1.03	49	46.586	-0.171	0.000	0.13		3.9	OK
S1.004	S1.04	49	46.553	-0.173	0.000	0.12	40	3.8	OK*
S1.005	S1.05	49	46.505	-0.173	0.000	0.12		4.1	OK
S6.000	S5.00	49	46.526	-0.145	0.000	0.01		0.1	OK
S6.001	S5.01	49	46.517	-0.126	0.000	0.06		0.6	OK
S1.006	S1.06	49	46.487	-0.134	0.000	0.07		4.7	OK

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Summary Wizard of 60 minute 2 year Summer I+0% for Storm

Simulation Criteria

Areal Reduction Factor	1.000	Additional Flow - % of Total Flow	0.000
Hot Start (mins)	0	MADD Factor * 10m ³ /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 Storage Structures	1
Number of Online Controls	1	Number of Time/Area Diagrams	0
Number of Offline Controls	0	Number of Real Time Controls	0

Synthetic Rainfall Details

Rainfall Model	FSR	Ratio R	0.357
Region England and Wales Cv (Summer)	0.750		
M5-60 (mm)	18.000	Cv (Winter)	0.840

Margin for Flood Risk Warning (mm)	400.0
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
Return Period(s) (years)	1, 2, 30, 100
Climate Change (%)	0, 0, 0, 40

PN	US/MH Name	Storm Rank	Water Surcharged Flooded			Half Drain Pipe			Status
			Level (m)	Depth (m)	Volume (m ³)	Flow / Overflow Cap. (l/s)	Time (mins)	Flow (l/s)	
S1.000	S1.00	28	47.706	-0.144	0.000	0.28		8.4	OK
S2.000	S13	39	47.748	-0.150	0.000	0.00		0.0	OK
S1.001	S1.01	28	47.658	-0.167	0.000	0.15		8.7	OK
S3.000	S2.00	28	47.542	-0.133	0.000	0.03		0.5	OK
S4.000	S3.00	28	47.527	-0.133	0.000	0.03		0.7	OK
S1.002	S1.02	28	47.372	-0.153	0.000	0.22		10.3	OK
S5.000	S4.00	28	47.334	-0.128	0.000	0.05		0.7	OK
S1.003	S1.03	28	46.626	-0.131	0.000	0.37		11.0	OK
S1.004	S1.04	30	46.602	-0.124	0.000	0.28	10	8.7	OK*
S1.005	S1.05	31	46.595	-0.082	0.000	0.27		9.0	OK
S6.000	S5.00	28	46.589	-0.082	0.000	0.02		0.2	OK
S6.001	S5.01	30	46.589	-0.055	0.000	0.15		1.6	OK
S1.006	S1.06	28	46.588	-0.033	0.000	0.16		10.3	OK

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Summary Wizard of 120 minute 2 year Summer I+0% 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 Coefficient	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 Storage Structures	1
Number of Online Controls	1	Number of Time/Area Diagrams	0
Number of Offline Controls	0	Number of Real Time Controls	0

Synthetic Rainfall Details

Rainfall Model	FSR	Ratio R	0.357
Region England and Wales Cv (Summer)	0.750		
M5-60 (mm)	18.000	Cv (Winter)	0.840

Margin for Flood Risk Warning (mm)	400.0
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
Return Period(s) (years)	1, 2, 30, 100
Climate Change (%)	0, 0, 0, 40

PN	US/MH Name	Storm Rank	Water Surcharged Flooded			Half Drain Pipe			Status
			Level (m)	Depth (m)	Volume (m³)	Flow / Overflow Cap. (l/s)	Time (mins)	Flow (l/s)	
S1.000	S1.00	37	47.691	-0.159	0.000	0.19		5.7	OK
S2.000	S13	40	47.748	-0.150	0.000	0.00		0.0	OK
S1.001	S1.01	37	47.648	-0.177	0.000	0.10		5.9	OK
S3.000	S2.00	37	47.539	-0.136	0.000	0.02		0.3	OK
S4.000	S3.00	37	47.525	-0.135	0.000	0.02		0.5	OK
S1.002	S1.02	37	47.358	-0.167	0.000	0.15		7.0	OK
S5.000	S4.00	37	47.330	-0.132	0.000	0.04		0.5	OK
S1.003	S1.03	37	46.608	-0.149	0.000	0.25		7.5	OK
S1.004	S1.04	37	46.574	-0.151	0.000	0.23	22	7.2	OK*
S1.005	S1.05	37	46.549	-0.128	0.000	0.23		7.6	OK
S6.000	S5.00	37	46.544	-0.127	0.000	0.01		0.1	OK
S6.001	S5.01	37	46.544	-0.100	0.000	0.11		1.2	OK
S1.006	S1.06	37	46.543	-0.077	0.000	0.13		8.7	OK

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Carvers Warehouse 77 Dale Street Manchester M1 2HG																																																																																																																																						
Date 15/06/2022 14:43 File MC VICTORIA HOUSE.MDX	Designed by HenryWilkinson Checked by																																																																																																																																					
Innovyze	Network 2020.1.3																																																																																																																																					
<u>Summary Wizard of 15 minute 30 year Summer I+0% for Storm</u> <u>Simulation Criteria</u> 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 Storage Structures 1 Number of Online Controls 1 Number of Time/Area Diagrams 0 Number of Offline Controls 0 Number of Real Time Controls 0 <u>Synthetic Rainfall Details</u> Rainfall Model FSR Ratio R 0.357 Region England and Wales Cv (Summer) 0.750 M5-60 (mm) 18.000 Cv (Winter) 0.840 Margin for Flood Risk Warning (mm) 400.0 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 Return Period(s) (years) 1, 2, 30, 100 Climate Change (%) 0, 0, 0, 40 <table border="1"> <thead> <tr> <th rowspan="2">PN</th> <th rowspan="2">US/MH Name</th> <th rowspan="2">Storm Rank</th> <th colspan="3">Water Surcharged Flooded</th> <th colspan="2">Half Drain Pipe</th> <th rowspan="2">Status</th> </tr> <tr> <th>Level (m)</th> <th>Depth (m)</th> <th>Volume (m³)</th> <th>Flow / Overflow Cap. (l/s)</th> <th>Time (mins)</th> <th>Flow (l/s)</th> </tr> </thead> <tbody> <tr><td>S1.000</td><td>S1.00</td><td>8</td><td>47.775</td><td>-0.075</td><td>0.000</td><td>0.77</td><td>22.9</td><td>OK</td></tr> <tr><td>S2.000</td><td>S13</td><td>44</td><td>47.748</td><td>-0.150</td><td>0.000</td><td>0.00</td><td>0.0</td><td>OK</td></tr> <tr><td>S1.001</td><td>S1.01</td><td>8</td><td>47.702</td><td>-0.123</td><td>0.000</td><td>0.41</td><td>23.7</td><td>OK</td></tr> <tr><td>S3.000</td><td>S2.00</td><td>8</td><td>47.553</td><td>-0.122</td><td>0.000</td><td>0.08</td><td>1.4</td><td>OK</td></tr> <tr><td>S4.000</td><td>S3.00</td><td>8</td><td>47.539</td><td>-0.121</td><td>0.000</td><td>0.09</td><td>2.0</td><td>OK</td></tr> <tr><td>S1.002</td><td>S1.02</td><td>8</td><td>47.429</td><td>-0.096</td><td>0.000</td><td>0.61</td><td>28.3</td><td>OK</td></tr> <tr><td>S5.000</td><td>S4.00</td><td>8</td><td>47.350</td><td>-0.112</td><td>0.000</td><td>0.15</td><td>2.0</td><td>OK</td></tr> <tr><td>S1.003</td><td>S1.03</td><td>8</td><td>46.849</td><td>0.092</td><td>0.000</td><td>0.98</td><td>29.3</td><td>SURCHARGED</td></tr> <tr><td>S1.004</td><td>S1.04</td><td>2</td><td>46.839</td><td>0.113</td><td>0.000</td><td>0.33</td><td>11</td><td>10.2 SURCHARGED*</td></tr> <tr><td>S1.005</td><td>S1.05</td><td>1</td><td>46.832</td><td>0.154</td><td>0.000</td><td>0.31</td><td>10.4</td><td>SURCHARGED</td></tr> <tr><td>S6.000</td><td>S5.00</td><td>7</td><td>46.822</td><td>0.151</td><td>0.000</td><td>0.04</td><td>0.4</td><td>SURCHARGED</td></tr> <tr><td>S6.001</td><td>S5.01</td><td>6</td><td>46.822</td><td>0.178</td><td>0.000</td><td>0.46</td><td>5.0</td><td>SURCHARGED</td></tr> <tr><td>S1.006</td><td>S1.06</td><td>17</td><td>46.821</td><td>0.201</td><td>0.000</td><td>0.17</td><td>10.9</td><td>SURCHARGED</td></tr> </tbody> </table>			PN	US/MH Name	Storm Rank	Water Surcharged Flooded			Half Drain Pipe		Status	Level (m)	Depth (m)	Volume (m³)	Flow / Overflow Cap. (l/s)	Time (mins)	Flow (l/s)	S1.000	S1.00	8	47.775	-0.075	0.000	0.77	22.9	OK	S2.000	S13	44	47.748	-0.150	0.000	0.00	0.0	OK	S1.001	S1.01	8	47.702	-0.123	0.000	0.41	23.7	OK	S3.000	S2.00	8	47.553	-0.122	0.000	0.08	1.4	OK	S4.000	S3.00	8	47.539	-0.121	0.000	0.09	2.0	OK	S1.002	S1.02	8	47.429	-0.096	0.000	0.61	28.3	OK	S5.000	S4.00	8	47.350	-0.112	0.000	0.15	2.0	OK	S1.003	S1.03	8	46.849	0.092	0.000	0.98	29.3	SURCHARGED	S1.004	S1.04	2	46.839	0.113	0.000	0.33	11	10.2 SURCHARGED*	S1.005	S1.05	1	46.832	0.154	0.000	0.31	10.4	SURCHARGED	S6.000	S5.00	7	46.822	0.151	0.000	0.04	0.4	SURCHARGED	S6.001	S5.01	6	46.822	0.178	0.000	0.46	5.0	SURCHARGED	S1.006	S1.06	17	46.821	0.201	0.000	0.17	10.9	SURCHARGED
PN	US/MH Name	Storm Rank				Water Surcharged Flooded			Half Drain Pipe			Status																																																																																																																										
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Summary Wizard of 30 minute 30 year Summer I+0% 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 Coefficient	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 Storage Structures	1
Number of Online Controls	1	Number of Time/Area Diagrams	0
Number of Offline Controls	0	Number of Real Time Controls	0

Synthetic Rainfall Details

Rainfall Model	FSR	Ratio R	0.357
Region England and Wales Cv (Summer)	0.750		
M5-60 (mm)	18.000	Cv (Winter)	0.840

Margin for Flood Risk Warning (mm)	400.0
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
Return Period(s) (years)	1, 2, 30, 100
Climate Change (%)	0, 0, 0, 40

PN	US/MH Name	Storm Rank	Water Surcharged Flooded			Half Drain Pipe		Status
			Level (m)	Depth (m)	Volume (m³)	Flow / Overflow Cap. (l/s)	Time (mins)	
S1.000	S1.00	9	47.765	-0.085	0.000	0.71	21.2	OK
S2.000	S13	45	47.748	-0.150	0.000	0.00	0.0	OK
S1.001	S1.01	9	47.697	-0.128	0.000	0.38	22.0	OK
S3.000	S2.00	9	47.551	-0.124	0.000	0.07	1.3	OK
S4.000	S3.00	9	47.538	-0.122	0.000	0.08	1.8	OK
S1.002	S1.02	9	47.422	-0.103	0.000	0.56	26.2	OK
S5.000	S4.00	9	47.348	-0.114	0.000	0.14	1.8	OK
S1.003	S1.03	9	46.873	0.116	0.000	0.89	26.5	SURCHARGED
S1.004	S1.04	8	46.870	0.144	0.000	0.32	14	9.9 SURCHARGED*
S1.005	S1.05	9	46.866	0.189	0.000	0.30	10.2	SURCHARGED
S6.000	S5.00	9	46.861	0.190	0.000	0.03	0.4	SURCHARGED
S6.001	S5.01	9	46.861	0.217	0.000	0.40	4.4	SURCHARGED
S1.006	S1.06	10	46.860	0.240	0.000	0.17	10.9	SURCHARGED

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Summary Wizard of 60 minute 30 year Summer I+0% 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 Coefficient	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 Storage Structures	1
Number of Online Controls	1	Number of Time/Area Diagrams	0
Number of Offline Controls	0	Number of Real Time Controls	0

Synthetic Rainfall Details

Rainfall Model	FSR	Ratio R	0.357
Region England and Wales Cv (Summer)	0.750		
M5-60 (mm)	18.000	Cv (Winter)	0.840

Margin for Flood Risk Warning (mm)	400.0
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
Return Period(s) (years)	1, 2, 30, 100
Climate Change (%)	0, 0, 0, 40

PN	US/MH Name	Storm Rank	Water Surcharged Flooded			Half Drain Pipe		Status
			Level (m)	Depth (m)	Volume (m³)	Flow / Overflow Cap. (l/s)	Time (mins)	
S1.000	S1.00	12	47.742	-0.108	0.000	0.54	16.0	OK
S2.000	S13	46	47.748	-0.150	0.000	0.00	0.0	OK
S1.001	S1.01	12	47.683	-0.142	0.000	0.29	16.6	OK
S3.000	S2.00	12	47.547	-0.128	0.000	0.05	1.0	OK
S4.000	S3.00	12	47.534	-0.126	0.000	0.06	1.4	OK
S1.002	S1.02	12	47.403	-0.122	0.000	0.43	19.8	OK
S5.000	S4.00	12	47.344	-0.118	0.000	0.10	1.4	OK
S1.003	S1.03	12	46.832	0.075	0.000	0.68	20.5	SURCHARGED
S1.004	S1.04	17	46.828	0.102	0.000	0.31	15 9.6	SURCHARGED*
S1.005	S1.05	16	46.821	0.143	0.000	0.30	10.0	SURCHARGED
S6.000	S5.00	12	46.818	0.147	0.000	0.03	0.3	SURCHARGED
S6.001	S5.01	12	46.817	0.173	0.000	0.30	3.3	SURCHARGED
S1.006	S1.06	8	46.814	0.194	0.000	0.17	10.9	SURCHARGED

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Summary Wizard of 180 minute 30 year Summer I+0% 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 Coefficient	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 Storage Structures	1
Number of Online Controls	1	Number of Time/Area Diagrams	0
Number of Offline Controls	0	Number of Real Time Controls	0

Synthetic Rainfall Details

Rainfall Model	FSR	Ratio R	0.357
Region England and Wales Cv (Summer)	0.750		
M5-60 (mm)	18.000	Cv (Winter)	0.840

Margin for Flood Risk Warning (mm)	400.0
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
Return Period(s) (years)	1, 2, 30, 100
Climate Change (%)	0, 0, 0, 40

PN	US/MH Name	Storm Rank	Water Surcharged Flooded			Half Drain Pipe			Status
			Level (m)	Depth (m)	Volume (m³)	Flow / Overflow Cap. (l/s)	Time (mins)	Flow (l/s)	
S1.000	S1.00	29	47.706	-0.144	0.000	0.28		8.4	OK
S2.000	S13	48	47.748	-0.150	0.000	0.00		0.0	OK
S1.001	S1.01	29	47.658	-0.167	0.000	0.15		8.7	OK
S3.000	S2.00	29	47.542	-0.133	0.000	0.03		0.5	OK
S4.000	S3.00	29	47.527	-0.133	0.000	0.03		0.7	OK
S1.002	S1.02	29	47.372	-0.153	0.000	0.22		10.3	OK
S5.000	S4.00	29	47.334	-0.128	0.000	0.05		0.7	OK
S1.003	S1.03	29	46.635	-0.122	0.000	0.37		11.0	OK
S1.004	S1.04	29	46.631	-0.094	0.000	0.28	15	8.7	OK*
S1.005	S1.05	26	46.626	-0.051	0.000	0.27		9.3	OK
S6.000	S5.00	31	46.620	-0.051	0.000	0.02		0.2	OK
S6.001	S5.01	27	46.620	-0.024	0.000	0.16		1.8	OK
S1.006	S1.06	24	46.619	-0.001	0.000	0.16		10.6	OK

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<u>Summary Wizard of 30 minute 100 year Summer I+40% for Storm</u> <u>Simulation Criteria</u> 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 Coefficient 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 Storage Structures 1 Number of Online Controls 1 Number of Time/Area Diagrams 0 Number of Offline Controls 0 Number of Real Time Controls 0 <u>Synthetic Rainfall Details</u> Rainfall Model FSR Ratio R 0.357 Region England and Wales Cv (Summer) 0.750 M5-60 (mm) 18.000 Cv (Winter) 0.840 Margin for Flood Risk Warning (mm) 400.0 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 Return Period(s) (years) 1, 2, 30, 100 Climate Change (%) 0, 0, 0, 40 <table border="1"> <thead> <tr> <th colspan="7">Water Surcharged Flooded</th> <th>Half Drain</th> <th>Pipe</th> <th></th> </tr> <tr> <th>PN</th> <th>US/MH Name</th> <th>Storm Rank</th> <th>Level (m)</th> <th>Depth (m)</th> <th>Volume (m³)</th> <th>Flow / Overflow Cap. (l/s)</th> <th>Time (mins)</th> <th>Flow (l/s)</th> <th>Status</th> </tr> </thead> <tbody> <tr> <td>S1.000</td> <td>S1.00</td> <td>3</td> <td>47.893</td> <td>0.043</td> <td>0.000</td> <td>1.29</td> <td></td> <td>38.6</td> <td>SURCHARGED</td> </tr> <tr> <td>S2.000</td> <td>S13</td> <td>51</td> <td>47.748</td> <td>-0.150</td> <td>0.000</td> <td>0.00</td> <td></td> <td>0.0</td> <td>OK</td> </tr> <tr> <td>S1.001</td> <td>S1.01</td> <td>3</td> <td>47.739</td> <td>-0.086</td> <td>0.000</td> <td>0.70</td> <td></td> <td>40.1</td> <td>OK</td> </tr> <tr> <td>S3.000</td> <td>S2.00</td> <td>3</td> <td>47.561</td> <td>-0.114</td> <td>0.000</td> <td>0.13</td> <td></td> <td>2.4</td> <td>OK</td> </tr> <tr> <td>S4.000</td> <td>S3.00</td> <td>3</td> <td>47.548</td> <td>-0.112</td> <td>0.000</td> <td>0.14</td> <td></td> <td>3.3</td> <td>OK</td> </tr> <tr> <td>S1.002</td> <td>S1.02</td> <td>3</td> <td>47.522</td> <td>-0.003</td> <td>0.000</td> <td>1.00</td> <td></td> <td>46.4</td> <td>OK</td> </tr> <tr> <td>S5.000</td> <td>S4.00</td> <td>3</td> <td>47.421</td> <td>-0.041</td> <td>0.000</td> <td>0.25</td> <td></td> <td>3.3</td> <td>OK</td> </tr> <tr> <td>S1.003</td> <td>S1.03</td> <td>3</td> <td>47.420</td> <td>0.663</td> <td>0.000</td> <td>1.59</td> <td></td> <td>47.4</td> <td>SURCHARGED</td> </tr> <tr> <td>S1.004</td> <td>S1.04</td> <td>16</td> <td>47.417</td> <td>0.691</td> <td>0.000</td> <td>0.31</td> <td>28</td> <td>9.6</td> <td>SURCHARGED*</td> </tr> <tr> <td>S1.005</td> <td>S1.05</td> <td>17</td> <td>47.413</td> <td>0.736</td> <td>0.000</td> <td>0.30</td> <td></td> <td>10.0</td> <td>SURCHARGED</td> </tr> <tr> <td>S6.000</td> <td>S5.00</td> <td>3</td> <td>47.408</td> <td>0.737</td> <td>0.000</td> <td>0.05</td> <td></td> <td>0.6</td> <td>SURCHARGED</td> </tr> <tr> <td>S6.001</td> <td>S5.01</td> <td>3</td> <td>47.408</td> <td>0.764</td> <td>0.000</td> <td>0.73</td> <td></td> <td>7.9</td> <td>SURCHARGED</td> </tr> <tr> <td>S1.006</td> <td>S1.06</td> <td>19</td> <td>47.407</td> <td>0.786</td> <td>0.000</td> <td>0.17</td> <td></td> <td>10.9</td> <td>SURCHARGED</td> </tr> </tbody> </table>			Water Surcharged Flooded							Half Drain	Pipe		PN	US/MH Name	Storm Rank	Level (m)	Depth (m)	Volume (m³)	Flow / Overflow Cap. (l/s)	Time (mins)	Flow (l/s)	Status	S1.000	S1.00	3	47.893	0.043	0.000	1.29		38.6	SURCHARGED	S2.000	S13	51	47.748	-0.150	0.000	0.00		0.0	OK	S1.001	S1.01	3	47.739	-0.086	0.000	0.70		40.1	OK	S3.000	S2.00	3	47.561	-0.114	0.000	0.13		2.4	OK	S4.000	S3.00	3	47.548	-0.112	0.000	0.14		3.3	OK	S1.002	S1.02	3	47.522	-0.003	0.000	1.00		46.4	OK	S5.000	S4.00	3	47.421	-0.041	0.000	0.25		3.3	OK	S1.003	S1.03	3	47.420	0.663	0.000	1.59		47.4	SURCHARGED	S1.004	S1.04	16	47.417	0.691	0.000	0.31	28	9.6	SURCHARGED*	S1.005	S1.05	17	47.413	0.736	0.000	0.30		10.0	SURCHARGED	S6.000	S5.00	3	47.408	0.737	0.000	0.05		0.6	SURCHARGED	S6.001	S5.01	3	47.408	0.764	0.000	0.73		7.9	SURCHARGED	S1.006	S1.06	19	47.407	0.786	0.000	0.17		10.9	SURCHARGED
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Innovyze Network 2020.1.3		

Summary Wizard of 120 minute 100 year Summer I+40% 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 Coefficient	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 Storage Structures	1
Number of Online Controls	1	Number of Time/Area Diagrams	0
Number of Offline Controls	0	Number of Real Time Controls	0

Synthetic Rainfall Details

Rainfall Model	FSR	Ratio R	0.357
Region England and Wales Cv (Summer)	0.750		
M5-60 (mm)	18.000	Cv (Winter)	0.840

Margin for Flood Risk Warning (mm)	400.0
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
Return Period(s) (years)	1, 2, 30, 100
Climate Change (%)	0, 0, 0, 40

Water Surcharged Flooded							Half Drain Pipe		
PN	US/MH Name	Storm Rank	Level (m)	Depth (m)	Volume (m³)	Flow / Overflow Cap. (l/s)	Time (mins)	Flow (l/s)	Status
S1.000	S1.00	10	47.760	-0.090	0.000	0.67		20.0	OK
S2.000	S13	53	47.748	-0.150	0.000	0.00		0.0	OK
S1.001	S1.01	10	47.693	-0.132	0.000	0.36		20.7	OK
S3.000	S2.00	10	47.550	-0.125	0.000	0.07		1.2	OK
S4.000	S3.00	10	47.537	-0.123	0.000	0.07		1.7	OK
S1.002	S1.02	10	47.417	-0.108	0.000	0.53		24.6	OK
S5.000	S4.00	10	47.350	-0.112	0.000	0.13		1.7	OK
S1.003	S1.03	10	47.349	0.592	0.000	0.85		25.3	SURCHARGED
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S1.005	S1.05	5	47.340	0.663	0.000	0.31		10.3	SURCHARGED
S6.000	S5.00	10	47.335	0.664	0.000	0.03		0.3	SURCHARGED
S6.001	S5.01	10	47.335	0.691	0.000	0.37		4.0	SURCHARGED
S1.006	S1.06	11	47.333	0.713	0.000	0.17		10.9	SURCHARGED

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Summary Wizard of 180 minute 100 year Summer I+40% 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 Coefficient	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 Storage Structures	1
Number of Online Controls	1	Number of Time/Area Diagrams	0
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Synthetic Rainfall Details

Rainfall Model	FSR	Ratio R	0.357
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Duration(s) (mins)	15, 30, 60, 120, 180, 240, 360
Return Period(s) (years)	1, 2, 30, 100
Climate Change (%)	0, 0, 0, 40

Water Surcharged Flooded							Half Drain Pipe		Status
PN	US/MH Name	Storm Rank	Level (m)	Depth (m)	Volume (m³)	Flow / Overflow Cap. (l/s)	Time (mins)	Flow (l/s)	
S1.000	S1.00	13	47.739	-0.111	0.000	0.51		15.4	OK
S2.000	S13	54	47.748	-0.150	0.000	0.00		0.0	OK
S1.001	S1.01	13	47.681	-0.144	0.000	0.28		15.9	OK
S3.000	S2.00	13	47.547	-0.128	0.000	0.05		0.9	OK
S4.000	S3.00	13	47.533	-0.127	0.000	0.06		1.3	OK
S1.002	S1.02	13	47.400	-0.125	0.000	0.41		18.9	OK
S5.000	S4.00	13	47.343	-0.119	0.000	0.10		1.3	OK
S1.003	S1.03	13	47.192	0.435	0.000	0.65		19.5	SURCHARGED
S1.004	S1.04	11	47.188	0.463	0.000	0.32	34	9.8	SURCHARGED*
S1.005	S1.05	11	47.186	0.508	0.000	0.30		10.1	SURCHARGED
S6.000	S5.00	13	47.182	0.511	0.000	0.03		0.3	SURCHARGED
S6.001	S5.01	13	47.181	0.537	0.000	0.28		3.1	SURCHARGED
S1.006	S1.06	5	47.180	0.560	0.000	0.17		10.9	SURCHARGED

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Summary Wizard of 240 minute 100 year Summer I+40% 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 Coefficient	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 Storage Structures	1
Number of Online Controls	1	Number of Time/Area Diagrams	0
Number of Offline Controls	0	Number of Real Time Controls	0

Synthetic Rainfall Details

Rainfall Model	FSR	Ratio R	0.357
Region England and Wales Cv (Summer)	0.750		
M5-60 (mm)	18.000	Cv (Winter)	0.840

Margin for Flood Risk Warning (mm)	400.0
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
Return Period(s) (years)	1, 2, 30, 100
Climate Change (%)	0, 0, 0, 40

PN	US/MH Name	Storm Rank	Water Surcharged Flooded			Half Drain Pipe		Status
			Level (m)	Depth (m)	Volume (m³)	Flow / Overflow Cap. (l/s)	Time (mins)	
S1.000	S1.00	17	47.727	-0.123	0.000	0.42	12.6	OK
S2.000	S13	30	47.748	-0.150	0.000	0.00	0.0	OK
S1.001	S1.01	16	47.672	-0.153	0.000	0.23	13.0	OK
S3.000	S2.00	17	47.545	-0.130	0.000	0.04	0.8	OK
S4.000	S3.00	17	47.531	-0.129	0.000	0.05	1.1	OK
S1.002	S1.02	16	47.390	-0.135	0.000	0.33	15.5	OK
S5.000	S4.00	17	47.340	-0.122	0.000	0.08	1.1	OK
S1.003	S1.03	17	47.025	0.268	0.000	0.54	16.2	SURCHARGED
S1.004	S1.04	18	47.021	0.296	0.000	0.31	27 9.5	SURCHARGED*
S1.005	S1.05	14	47.019	0.341	0.000	0.30	10.0	SURCHARGED
S6.000	S5.00	17	47.016	0.345	0.000	0.02	0.3	SURCHARGED
S6.001	S5.01	16	47.015	0.372	0.000	0.23	2.5	SURCHARGED
S1.006	S1.06	7	47.014	0.394	0.000	0.17	10.9	SURCHARGED

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Summary Wizard of 360 minute 100 year Summer I+40% 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 Coefficient	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 Storage Structures	1
Number of Online Controls	1	Number of Time/Area Diagrams	0
Number of Offline Controls	0	Number of Real Time Controls	0

Synthetic Rainfall Details

Rainfall Model	FSR	Ratio R	0.357
Region England and Wales Cv (Summer)	0.750		
M5-60 (mm)	18.000	Cv (Winter)	0.840

Margin for Flood Risk Warning (mm)	400.0
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
Return Period(s) (years)	1, 2, 30, 100
Climate Change (%)	0, 0, 0, 40

Water Surcharged Flooded							Half Drain Pipe		Status
PN	US/MH Name	Storm Rank	Level (m)	Depth (m)	Volume (m³)	Flow / Overflow Cap. (l/s)	Time (mins)	Flow (l/s)	
S1.000	S1.00	25	47.711	-0.139	0.000	0.31		9.3	OK
S2.000	S13	29	47.748	-0.150	0.000	0.00		0.0	OK
S1.001	S1.01	24	47.662	-0.163	0.000	0.17		9.7	OK
S3.000	S2.00	25	47.542	-0.133	0.000	0.03		0.6	OK
S4.000	S3.00	25	47.528	-0.132	0.000	0.03		0.8	OK
S1.002	S1.02	24	47.376	-0.149	0.000	0.25		11.5	OK
S5.000	S4.00	25	47.336	-0.126	0.000	0.06		0.8	OK
S1.003	S1.03	25	46.753	-0.004	0.000	0.40		12.1	OK
S1.004	S1.04	25	46.744	0.019	0.000	0.30	23	9.2	SURCHARGED*
S1.005	S1.05	20	46.740	0.063	0.000	0.29		9.7	SURCHARGED
S6.000	S5.00	24	46.735	0.064	0.000	0.02		0.2	SURCHARGED
S6.001	S5.01	21	46.734	0.091	0.000	0.18		2.0	SURCHARGED
S1.006	S1.06	2	46.733	0.113	0.000	0.17		10.9	SURCHARGED

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Summary Wizard of 60 minute 1 year Winter I+0% 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 Coefficient	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 Storage Structures	1
Number of Online Controls	1	Number of Time/Area Diagrams	0
Number of Offline Controls	0	Number of Real Time Controls	0

Synthetic Rainfall Details

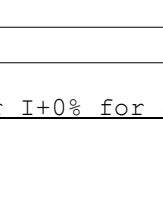
Rainfall Model	FSR	Ratio R	0.357
Region England and Wales Cv (Summer)	0.750		
M5-60 (mm)	18.000	Cv (Winter)	0.840

Margin for Flood Risk Warning (mm)	400.0
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
Return Period(s) (years)	1, 2, 30, 100
Climate Change (%)	0, 0, 0, 40

PN	US/MH Name	Storm Rank	Water Surcharged Flooded			Half Drain Pipe			Status
			Level (m)	Depth (m)	Volume (m³)	Flow / Overflow Cap. (l/s)	Time (mins)	Flow (l/s)	
S1.000	S1.00	38	47.689	-0.161	0.000	0.18		5.3	OK
S2.000	S13	4	47.748	-0.150	0.000	0.00		0.0	OK
S1.001	S1.01	38	47.647	-0.178	0.000	0.10		5.5	OK
S3.000	S2.00	38	47.538	-0.137	0.000	0.02		0.3	OK
S4.000	S3.00	38	47.524	-0.136	0.000	0.02		0.5	OK
S1.002	S1.02	38	47.356	-0.169	0.000	0.14		6.6	OK
S5.000	S4.00	38	47.330	-0.132	0.000	0.03		0.5	OK
S1.003	S1.03	38	46.606	-0.151	0.000	0.23		7.0	OK
S1.004	S1.04	38	46.572	-0.154	0.000	0.22	19	6.8	OK*
S1.005	S1.05	38	46.542	-0.135	0.000	0.21		7.2	OK
S6.000	S5.00	38	46.538	-0.133	0.000	0.01		0.1	OK
S6.001	S5.01	38	46.536	-0.107	0.000	0.10		1.1	OK
S1.006	S1.06	38	46.535	-0.086	0.000	0.13		8.2	OK

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Summary Wizard of 180 minute 1 year Winter I+0% 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 Storage Structures	1
Number of Online Controls	1	Number of Time/Area Diagrams	0
Number of Offline Controls	0	Number of Real Time Controls	0

Synthetic Rainfall Details

Rainfall Model	FSR	Ratio R	0.357
Region	England and Wales	Cv (Summer)	0.750
M5-60 (mm)	18.000	Cv (Winter)	0.840

Margin for Flood Risk Warning (mm)	400.0
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
Return Period(s) (years)	1, 2, 30, 100
Climate Change (%)	0, 0, 0, 40

PN	US/MH Name	Storm Rank	Water	Surcharged	Flooded	Flow / Overflow Cap.	Half Drain Time (mins)	Pipe	Status
			Level (m)	Depth (m)	Volume (m³)			Flow (l/s)	
S1.000	S1.00	52	47.670	-0.180	0.000	0.09		2.6	OK
S2.000	S13	6	47.748	-0.150	0.000	0.00		0.0	OK
S1.001	S1.01	52	47.631	-0.194	0.000	0.05		2.7	OK
S3.000	S2.00	52	47.531	-0.144	0.000	0.01		0.2	OK
S4.000	S3.00	52	47.517	-0.143	0.000	0.01		0.2	OK
S1.002	S1.02	52	47.339	-0.186	0.000	0.07		3.3	OK
S5.000	S4.00	52	47.324	-0.138	0.000	0.02		0.2	OK
S1.003	S1.03	52	46.583	-0.174	0.000	0.12		3.5	OK
S1.004	S1.04	52	46.550	-0.175	0.000	0.11	50	3.5	OK*
S1.005	S1.05	52	46.502	-0.176	0.000	0.11		3.7	OK
S6.000	S5.00	52	46.525	-0.146	0.000	0.01		0.1	OK
S6.001	S5.01	52	46.516	-0.128	0.000	0.05		0.6	OK
S1.006	S1.06	52	46.481	-0.139	0.000	0.06		4.2	OK

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Summary Wizard of 15 minute 2 year Winter I+0% 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 Coefficient	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 Storage Structures	1
Number of Online Controls	1	Number of Time/Area Diagrams	0
Number of Offline Controls	0	Number of Real Time Controls	0

Synthetic Rainfall Details

Rainfall Model	FSR	Ratio R	0.357
Region England and Wales Cv (Summer)	0.750		
M5-60 (mm)	18.000	Cv (Winter)	0.840

Margin for Flood Risk Warning (mm)	400.0
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
Return Period(s) (years)	1, 2, 30, 100
Climate Change (%)	0, 0, 0, 40

PN	US/MH Name	Storm Rank	Water Surcharged Flooded			Half Drain		Pipe	Status
			Level (m)	Depth (m)	Volume (m³)	Flow / Overflow Cap. (l/s)	Time (mins)	Flow (l/s)	
S1.000	S1.00	16	47.728	-0.122	0.000	0.43		12.7	OK
S2.000	S13	9	47.748	-0.150	0.000	0.00		0.0	OK
S1.001	S1.01	17	47.673	-0.152	0.000	0.23		13.0	OK
S3.000	S2.00	16	47.545	-0.130	0.000	0.04		0.8	OK
S4.000	S3.00	16	47.531	-0.129	0.000	0.05		1.1	OK
S1.002	S1.02	17	47.390	-0.135	0.000	0.33		15.4	OK
S5.000	S4.00	16	47.341	-0.121	0.000	0.08		1.1	OK
S1.003	S1.03	16	46.653	-0.104	0.000	0.56		16.6	OK
S1.004	S1.04	21	46.644	-0.082	0.000	0.30		7 9.3	OK*
S1.005	S1.05	21	46.640	-0.038	0.000	0.28		9.5	OK
S6.000	S5.00	15	46.634	-0.037	0.000	0.03		0.3	OK
S6.001	S5.01	20	46.634	-0.010	0.000	0.20		2.2	OK
S1.006	S1.06	22	46.633	0.013	0.000	0.16		10.7	SURCHARGED

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Summary Wizard of 30 minute 2 year Winter I+0% 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 Coefficient	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 Storage Structures	1
Number of Online Controls	1	Number of Time/Area Diagrams	0
Number of Offline Controls	0	Number of Real Time Controls	0

Synthetic Rainfall Details

Rainfall Model	FSR	Ratio R	0.357
Region England and Wales Cv (Summer)	0.750		
M5-60 (mm)	18.000	Cv (Winter)	0.840

Margin for Flood Risk Warning (mm)	400.0
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
Return Period(s) (years)	1, 2, 30, 100
Climate Change (%)	0, 0, 0, 40

PN	US/MH Name	Storm Rank	Water Surcharged Flooded			Half Drain		Pipe	Status
			Level (m)	Depth (m)	Volume (m³)	Flow / Overflow Cap. (l/s)	Time (mins)	Flow (l/s)	
S1.000	S1.00	22	47.715	-0.135	0.000	0.34		10.1	OK
S2.000	S13	10	47.748	-0.150	0.000	0.00		0.0	OK
S1.001	S1.01	22	47.664	-0.161	0.000	0.18		10.4	OK
S3.000	S2.00	22	47.543	-0.132	0.000	0.03		0.6	OK
S4.000	S3.00	22	47.529	-0.131	0.000	0.04		0.9	OK
S1.002	S1.02	22	47.379	-0.146	0.000	0.27		12.3	OK
S5.000	S4.00	22	47.337	-0.125	0.000	0.06		0.9	OK
S1.003	S1.03	22	46.636	-0.121	0.000	0.44		13.2	OK
S1.004	S1.04	27	46.632	-0.093	0.000	0.29		9 9.0	OK*
S1.005	S1.05	27	46.628	-0.049	0.000	0.27		9.3	OK
S6.000	S5.00	27	46.623	-0.048	0.000	0.02		0.2	OK
S6.001	S5.01	25	46.622	-0.021	0.000	0.17		1.9	OK
S1.006	S1.06	23	46.621	0.001	0.000	0.16		10.6	SURCHARGED

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Summary Wizard of 60 minute 2 year Winter I+0% 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 Coefficient	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 Storage Structures	1
Number of Online Controls	1	Number of Time/Area Diagrams	0
Number of Offline Controls	0	Number of Real Time Controls	0

Synthetic Rainfall Details

Rainfall Model	FSR	Ratio R	0.357
Region England and Wales Cv (Summer)	0.750		
M5-60 (mm)	18.000	Cv (Winter)	0.840

Margin for Flood Risk Warning (mm)	400.0
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
Return Period(s) (years)	1, 2, 30, 100
Climate Change (%)	0, 0, 0, 40

PN	US/MH Name	Storm Rank	Water Surcharged Flooded			Half Drain		Pipe	Status
			Level (m)	Depth (m)	Volume (m³)	Flow / Overflow Cap. (l/s)	Time (mins)	Flow (l/s)	
S1.000	S1.00	33	47.697	-0.153	0.000	0.23		6.8	OK
S2.000	S13	11	47.748	-0.150	0.000	0.00		0.0	OK
S1.001	S1.01	33	47.652	-0.173	0.000	0.12		7.1	OK
S3.000	S2.00	33	47.540	-0.135	0.000	0.02		0.4	OK
S4.000	S3.00	33	47.526	-0.134	0.000	0.03		0.6	OK
S1.002	S1.02	33	47.364	-0.161	0.000	0.18		8.4	OK
S5.000	S4.00	33	47.332	-0.130	0.000	0.04		0.6	OK
S1.003	S1.03	33	46.616	-0.141	0.000	0.30		8.9	OK
S1.004	S1.04	34	46.586	-0.140	0.000	0.27	17	8.2	OK*
S1.005	S1.05	34	46.574	-0.104	0.000	0.26		8.7	OK
S6.000	S5.00	35	46.568	-0.103	0.000	0.01		0.2	OK
S6.001	S5.01	34	46.568	-0.076	0.000	0.13		1.4	OK
S1.006	S1.06	34	46.567	-0.054	0.000	0.15		10.0	OK

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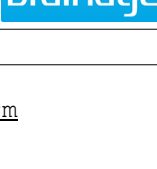
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Summary Wizard of 240 minute 2 year Winter I+0% for Storm

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 Coefficient 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 Storage Structures 1

Number of Online Controls 1

Number of Time/Area Diagrams 0

Number of Offline Controls 0

Number of Real Time Controls 0

Synthetic Rainfall Details

Rainfall Model FSR

Ratio R 0.357

Region England and Wales Cv (Summer) 0.750

M5-60 (mm) 18.000 Cv (Winter) 0.840

Margin for Flood Risk Warning (mm) 400.0

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

Return Period(s) (years) 1, 2, 30, 100

Climate Change (%) 0, 0, 0, 40

PN	US/MH Name	Storm Rank	Water Level (m)	Surcharged Depth (m)	Flooded Volume (m³)	Flow / Overflow Cap. (l/s)	Half Drain Time (mins)	Pipe Flow (l/s)	Status
S1.000	S1.00	51	47.670	-0.180	0.000	0.09		2.7	OK
S2.000	S13	14	47.748	-0.150	0.000	0.00		0.0	OK
S1.001	S1.01	51	47.632	-0.193	0.000	0.05		2.8	OK
S3.000	S2.00	51	47.531	-0.144	0.000	0.01		0.2	OK
S4.000	S3.00	51	47.517	-0.143	0.000	0.01		0.2	OK
S1.002	S1.02	51	47.339	-0.186	0.000	0.07		3.3	OK
S5.000	S4.00	51	47.324	-0.138	0.000	0.02		0.2	OK
S1.003	S1.03	51	46.583	-0.174	0.000	0.12		3.5	OK
S1.004	S1.04	51	46.551	-0.175	0.000	0.11	64	3.5	OK*
S1.005	S1.05	51	46.502	-0.175	0.000	0.11		3.8	OK
S6.000	S5.00	51	46.525	-0.146	0.000	0.01		0.1	OK
S6.001	S5.01	51	46.516	-0.128	0.000	0.05		0.6	OK
S1.006	S1.06	51	46.482	-0.138	0.000	0.07		4.3	OK

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Summary Wizard of 30 minute 30 year Winter I+0% 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 Coefficient	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 Storage Structures	1
Number of Online Controls	1	Number of Time/Area Diagrams	0
Number of Offline Controls	0	Number of Real Time Controls	0

Synthetic Rainfall Details

Rainfall Model	FSR	Ratio R	0.357
Region England and Wales Cv (Summer)	0.750		
M5-60 (mm)	18.000	Cv (Winter)	0.840

Margin for Flood Risk Warning (mm)	400.0
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
Return Period(s) (years)	1, 2, 30, 100
Climate Change (%)	0, 0, 0, 40

Water Surcharged Flooded							Half Drain Pipe		Status
PN	US/MH Name	Storm Rank	Level (m)	Depth (m)	Volume (m³)	Flow / Overflow Cap. (l/s)	Time (mins)	Flow (l/s)	
S1.000	S1.00	11	47.756	-0.094	0.000	0.64		19.1	OK
S2.000	S13	17	47.748	-0.150	0.000	0.00		0.0	OK
S1.001	S1.01	11	47.691	-0.134	0.000	0.35		19.8	OK
S3.000	S2.00	11	47.550	-0.125	0.000	0.06		1.2	OK
S4.000	S3.00	11	47.536	-0.124	0.000	0.07		1.6	OK
S1.002	S1.02	11	47.414	-0.111	0.000	0.51		23.6	OK
S5.000	S4.00	11	47.347	-0.115	0.000	0.12		1.6	OK
S1.003	S1.03	11	46.925	0.168	0.000	0.80		24.1	SURCHARGED
S1.004	S1.04	5	46.922	0.196	0.000	0.33	15	10.0	SURCHARGED*
S1.005	S1.05	3	46.920	0.242	0.000	0.31		10.4	SURCHARGED
S6.000	S5.00	11	46.913	0.242	0.000	0.03		0.3	SURCHARGED
S6.001	S5.01	11	46.913	0.269	0.000	0.35		3.8	SURCHARGED
S1.006	S1.06	16	46.913	0.292	0.000	0.17		10.9	SURCHARGED

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Summary Wizard of 60 minute 30 year Winter I+0% 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 Coefficient	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 Storage Structures	1
Number of Online Controls	1	Number of Time/Area Diagrams	0
Number of Offline Controls	0	Number of Real Time Controls	0

Synthetic Rainfall Details

Rainfall Model	FSR	Ratio R	0.357
Region England and Wales Cv (Summer)	0.750		
M5-60 (mm)	18.000	Cv (Winter)	0.840

Margin for Flood Risk Warning (mm)	400.0
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
Return Period(s) (years)	1, 2, 30, 100
Climate Change (%)	0, 0, 0, 40

PN	US/MH Name	Storm Rank	Water Surcharged Flooded			Half Drain Pipe		Status
			Level (m)	Depth (m)	Volume (m³)	Flow / Overflow Cap. (l/s)	Time (mins)	
S1.000	S1.00	15	47.728	-0.122	0.000	0.43	13.0	OK
S2.000	S13	18	47.748	-0.150	0.000	0.00	0.0	OK
S1.001	S1.01	15	47.674	-0.151	0.000	0.24	13.5	OK
S3.000	S2.00	15	47.545	-0.130	0.000	0.04	0.8	OK
S4.000	S3.00	15	47.531	-0.129	0.000	0.05	1.1	OK
S1.002	S1.02	15	47.391	-0.134	0.000	0.34	16.0	OK
S5.000	S4.00	15	47.341	-0.121	0.000	0.08	1.1	OK
S1.003	S1.03	15	46.838	0.081	0.000	0.56	16.7	SURCHARGED
S1.004	S1.04	13	46.834	0.108	0.000	0.32	16	9.7 SURCHARGED*
S1.005	S1.05	12	46.831	0.154	0.000	0.30	10.0	SURCHARGED
S6.000	S5.00	18	46.827	0.156	0.000	0.02	0.2	SURCHARGED
S6.001	S5.01	15	46.826	0.182	0.000	0.24	2.6	SURCHARGED
S1.006	S1.06	4	46.825	0.204	0.000	0.17	10.9	SURCHARGED

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<u>Summary Wizard of 120 minute 30 year Winter I+0% for Storm</u> <u>Simulation Criteria</u> 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 Coefficient 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 Storage Structures 1 Number of Online Controls 1 Number of Time/Area Diagrams 0 Number of Offline Controls 0 Number of Real Time Controls 0 <u>Synthetic Rainfall Details</u> Rainfall Model FSR Ratio R 0.357 Region England and Wales Cv (Summer) 0.750 M5-60 (mm) 18.000 Cv (Winter) 0.840 Margin for Flood Risk Warning (mm) 400.0 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 Return Period(s) (years) 1, 2, 30, 100 Climate Change (%) 0, 0, 0, 40 <table border="1"> <thead> <tr> <th rowspan="2">PN</th> <th rowspan="2">US/MH Name</th> <th rowspan="2">Storm Rank</th> <th colspan="3">Water Surcharged Flooded</th> <th colspan="2">Half Drain</th> <th>Pipe</th> <th rowspan="2">Status</th> </tr> <tr> <th>Level (m)</th> <th>Depth (m)</th> <th>Volume (m³)</th> <th>Flow / Overflow Cap. (l/s)</th> <th>Time (mins)</th> <th>Flow (l/s)</th> </tr> </thead> <tbody> <tr><td>S1.000</td><td>S1.00</td><td>30</td><td>47.705</td><td>-0.145</td><td>0.000</td><td>0.27</td><td></td><td>8.2</td><td>OK</td></tr> <tr><td>S2.000</td><td>S13</td><td>19</td><td>47.748</td><td>-0.150</td><td>0.000</td><td>0.00</td><td></td><td>0.0</td><td>OK</td></tr> <tr><td>S1.001</td><td>S1.01</td><td>30</td><td>47.657</td><td>-0.168</td><td>0.000</td><td>0.15</td><td></td><td>8.5</td><td>OK</td></tr> <tr><td>S3.000</td><td>S2.00</td><td>30</td><td>47.541</td><td>-0.134</td><td>0.000</td><td>0.03</td><td></td><td>0.5</td><td>OK</td></tr> <tr><td>S4.000</td><td>S3.00</td><td>30</td><td>47.527</td><td>-0.133</td><td>0.000</td><td>0.03</td><td></td><td>0.7</td><td>OK</td></tr> <tr><td>S1.002</td><td>S1.02</td><td>30</td><td>47.371</td><td>-0.154</td><td>0.000</td><td>0.22</td><td></td><td>10.1</td><td>OK</td></tr> <tr><td>S5.000</td><td>S4.00</td><td>30</td><td>47.334</td><td>-0.128</td><td>0.000</td><td>0.05</td><td></td><td>0.7</td><td>OK</td></tr> <tr><td>S1.003</td><td>S1.03</td><td>30</td><td>46.659</td><td>-0.098</td><td>0.000</td><td>0.36</td><td></td><td>10.7</td><td>OK</td></tr> <tr><td>S1.004</td><td>S1.04</td><td>28</td><td>46.654</td><td>-0.071</td><td>0.000</td><td>0.29</td><td>15</td><td>8.8</td><td>OK*</td></tr> <tr><td>S1.005</td><td>S1.05</td><td>24</td><td>46.650</td><td>-0.028</td><td>0.000</td><td>0.28</td><td></td><td>9.4</td><td>OK</td></tr> <tr><td>S6.000</td><td>S5.00</td><td>30</td><td>46.644</td><td>-0.027</td><td>0.000</td><td>0.02</td><td></td><td>0.2</td><td>OK</td></tr> <tr><td>S6.001</td><td>S5.01</td><td>28</td><td>46.644</td><td>0.000</td><td>0.000</td><td>0.16</td><td></td><td>1.7</td><td>OK</td></tr> <tr><td>S1.006</td><td>S1.06</td><td>21</td><td>46.642</td><td>0.022</td><td>0.000</td><td>0.16</td><td></td><td>10.7</td><td>SURCHARGED</td></tr> </tbody> </table>			PN	US/MH Name	Storm Rank	Water Surcharged Flooded			Half Drain		Pipe	Status	Level (m)	Depth (m)	Volume (m³)	Flow / Overflow Cap. (l/s)	Time (mins)	Flow (l/s)	S1.000	S1.00	30	47.705	-0.145	0.000	0.27		8.2	OK	S2.000	S13	19	47.748	-0.150	0.000	0.00		0.0	OK	S1.001	S1.01	30	47.657	-0.168	0.000	0.15		8.5	OK	S3.000	S2.00	30	47.541	-0.134	0.000	0.03		0.5	OK	S4.000	S3.00	30	47.527	-0.133	0.000	0.03		0.7	OK	S1.002	S1.02	30	47.371	-0.154	0.000	0.22		10.1	OK	S5.000	S4.00	30	47.334	-0.128	0.000	0.05		0.7	OK	S1.003	S1.03	30	46.659	-0.098	0.000	0.36		10.7	OK	S1.004	S1.04	28	46.654	-0.071	0.000	0.29	15	8.8	OK*	S1.005	S1.05	24	46.650	-0.028	0.000	0.28		9.4	OK	S6.000	S5.00	30	46.644	-0.027	0.000	0.02		0.2	OK	S6.001	S5.01	28	46.644	0.000	0.000	0.16		1.7	OK	S1.006	S1.06	21	46.642	0.022	0.000	0.16		10.7	SURCHARGED
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Summary Wizard of 15 minute 100 year Winter I+40% 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 Coefficient	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 Storage Structures	1
Number of Online Controls	1	Number of Time/Area Diagrams	0
Number of Offline Controls	0	Number of Real Time Controls	0

Synthetic Rainfall Details

Rainfall Model	FSR	Ratio R	0.357
Region England and Wales Cv (Summer)	0.750		
M5-60 (mm)	18.000	Cv (Winter)	0.840

Margin for Flood Risk Warning (mm)	400.0
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
Return Period(s) (years)	1, 2, 30, 100
Climate Change (%)	0, 0, 0, 40

PN	US/MH Name	Storm Rank	Water Surcharged Flooded			Half Drain Pipe		Status
			Level (m)	Depth (m)	Volume (m³)	Flow / Overflow Cap. (l/s)	Time (mins)	
S1.000	S1.00	1	47.912	0.062	0.000	1.45	43.4	SURCHARGED
S2.000	S13	1	47.749	-0.149	0.000	0.00	0.0	OK
S1.001	S1.01	1	47.754	-0.071	0.000	0.78	44.7	OK
S3.000	S2.00	1	47.571	-0.104	0.000	0.14	2.6	OK
S4.000	S3.00	1	47.562	-0.098	0.000	0.16	3.7	OK
S1.002	S1.02	1	47.556	0.031	0.000	1.16	53.9	SURCHARGED
S5.000	S4.00	1	47.420	-0.042	0.000	0.28	3.7	OK
S1.003	S1.03	1	47.417	0.660	0.000	1.83	54.8	SURCHARGED
S1.004	S1.04	10	47.413	0.687	0.000	0.32	25	9.8 SURCHARGED*
S1.005	S1.05	7	47.407	0.730	0.000	0.31	10.3	SURCHARGED
S6.000	S5.00	1	47.407	0.736	0.000	0.06	0.6	SURCHARGED
S6.001	S5.01	2	47.406	0.762	0.000	0.82	8.9	SURCHARGED
S1.006	S1.06	18	47.403	0.783	0.000	0.17	10.9	SURCHARGED

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Summary Wizard of 30 minute 100 year Winter I+40% 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 Storage Structures	1
Number of Online Controls	1	Number of Time/Area Diagrams	0
Number of Offline Controls	0	Number of Real Time Controls	0

Synthetic Rainfall Details

Rainfall Model	FSR	Ratio R	0.357
Region England and Wales Cv (Summer)	0.750		
M5-60 (mm)	18.000	Cv (Winter)	0.840

Margin for Flood Risk Warning (mm)	400.0
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
Return Period(s) (years)	1, 2, 30, 100
Climate Change (%)	0, 0, 0, 40

PN	US/MH Name	Storm Rank	Water Surcharged Flooded			Half Drain Pipe		Status
			Level (m)	Depth (m)	Volume (m³)	Flow / Overflow Cap. (l/s)	Time (mins)	
S1.000	S1.00	4	47.896	0.046	0.000	1.17	34.9	SURCHARGED
S2.000	S13	23	47.748	-0.150	0.000	0.00	0.0	OK
S1.001	S1.01	4	47.730	-0.095	0.000	0.63	36.2	OK
S3.000	S2.00	4	47.575	-0.100	0.000	0.12	2.1	OK
S4.000	S3.00	4	47.573	-0.087	0.000	0.13	3.0	OK
S1.002	S1.02	4	47.571	0.046	0.000	0.93	43.3	SURCHARGED
S5.000	S4.00	4	47.555	0.093	0.000	0.22	3.0	SURCHARGED
S1.003	S1.03	4	47.554	0.797	0.000	1.48	44.4	SURCHARGED
S1.004	S1.04	24	47.550	0.825	0.000	0.30	31	9.2 SURCHARGED*
S1.005	S1.05	23	47.544	0.867	0.000	0.28		9.4 SURCHARGED
S6.000	S5.00	4	47.540	0.869	0.000	0.05		0.5 SURCHARGED
S6.001	S5.01	4	47.539	0.896	0.000	0.63		6.8 SURCHARGED
S1.006	S1.06	20	47.538	0.917	0.000	0.17		10.9 FLOOD RISK

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Date 15/06/2022 14:43 File MC VICTORIA HOUSE.MDX	Designed by HenryWilkinson Checked by																																																																																																																																					
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<u>Summary Wizard of 60 minute 100 year Winter I+40% for Storm</u> <u>Simulation Criteria</u> 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 Coefficient 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 Storage Structures 1 Number of Online Controls 1 Number of Time/Area Diagrams 0 Number of Offline Controls 0 Number of Real Time Controls 0 <u>Synthetic Rainfall Details</u> Rainfall Model FSR Ratio R 0.357 Region England and Wales Cv (Summer) 0.750 M5-60 (mm) 18.000 Cv (Winter) 0.840 Margin for Flood Risk Warning (mm) 400.0 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 Return Period(s) (years) 1, 2, 30, 100 Climate Change (%) 0, 0, 0, 40 <table border="1"> <thead> <tr> <th rowspan="2">PN</th> <th rowspan="2">US/MH Name</th> <th rowspan="2">Storm Rank</th> <th colspan="3">Water Surcharged Flooded</th> <th colspan="2">Half Drain Pipe</th> <th rowspan="2">Status</th> </tr> <tr> <th>Level (m)</th> <th>Depth (m)</th> <th>Volume (m³)</th> <th>Flow / Overflow Cap. (l/s)</th> <th>Time (mins)</th> <th>Flow (l/s)</th> </tr> </thead> <tbody> <tr><td>S1.000</td><td>S1.00</td><td>7</td><td>47.778</td><td>-0.072</td><td>0.000</td><td>0.80</td><td>23.9</td><td>OK</td></tr> <tr><td>S2.000</td><td>S13</td><td>24</td><td>47.748</td><td>-0.150</td><td>0.000</td><td>0.00</td><td>0.0</td><td>OK</td></tr> <tr><td>S1.001</td><td>S1.01</td><td>7</td><td>47.703</td><td>-0.122</td><td>0.000</td><td>0.43</td><td>24.7</td><td>OK</td></tr> <tr><td>S3.000</td><td>S2.00</td><td>7</td><td>47.571</td><td>-0.104</td><td>0.000</td><td>0.08</td><td>1.5</td><td>OK</td></tr> <tr><td>S4.000</td><td>S3.00</td><td>7</td><td>47.570</td><td>-0.090</td><td>0.000</td><td>0.09</td><td>2.0</td><td>OK</td></tr> <tr><td>S1.002</td><td>S1.02</td><td>7</td><td>47.569</td><td>0.044</td><td>0.000</td><td>0.63</td><td>29.4</td><td>SURCHARGED</td></tr> <tr><td>S5.000</td><td>S4.00</td><td>7</td><td>47.561</td><td>0.099</td><td>0.000</td><td>0.15</td><td>2.0</td><td>SURCHARGED</td></tr> <tr><td>S1.003</td><td>S1.03</td><td>7</td><td>47.560</td><td>0.803</td><td>0.000</td><td>1.01</td><td>30.1</td><td>SURCHARGED</td></tr> <tr><td>S1.004</td><td>S1.04</td><td>12</td><td>47.556</td><td>0.830</td><td>0.000</td><td>0.32</td><td>38</td><td>9.8 SURCHARGED*</td></tr> <tr><td>S1.005</td><td>S1.05</td><td>10</td><td>47.551</td><td>0.874</td><td>0.000</td><td>0.30</td><td>10.2</td><td>SURCHARGED</td></tr> <tr><td>S6.000</td><td>S5.00</td><td>8</td><td>47.545</td><td>0.874</td><td>0.000</td><td>0.03</td><td>0.4</td><td>SURCHARGED</td></tr> <tr><td>S6.001</td><td>S5.01</td><td>8</td><td>47.545</td><td>0.901</td><td>0.000</td><td>0.42</td><td>4.6</td><td>SURCHARGED</td></tr> <tr><td>S1.006</td><td>S1.06</td><td>14</td><td>47.544</td><td>0.924</td><td>0.000</td><td>0.17</td><td>10.9</td><td>FLOOD RISK</td></tr> </tbody> </table>			PN	US/MH Name	Storm Rank	Water Surcharged Flooded			Half Drain Pipe		Status	Level (m)	Depth (m)	Volume (m³)	Flow / Overflow Cap. (l/s)	Time (mins)	Flow (l/s)	S1.000	S1.00	7	47.778	-0.072	0.000	0.80	23.9	OK	S2.000	S13	24	47.748	-0.150	0.000	0.00	0.0	OK	S1.001	S1.01	7	47.703	-0.122	0.000	0.43	24.7	OK	S3.000	S2.00	7	47.571	-0.104	0.000	0.08	1.5	OK	S4.000	S3.00	7	47.570	-0.090	0.000	0.09	2.0	OK	S1.002	S1.02	7	47.569	0.044	0.000	0.63	29.4	SURCHARGED	S5.000	S4.00	7	47.561	0.099	0.000	0.15	2.0	SURCHARGED	S1.003	S1.03	7	47.560	0.803	0.000	1.01	30.1	SURCHARGED	S1.004	S1.04	12	47.556	0.830	0.000	0.32	38	9.8 SURCHARGED*	S1.005	S1.05	10	47.551	0.874	0.000	0.30	10.2	SURCHARGED	S6.000	S5.00	8	47.545	0.874	0.000	0.03	0.4	SURCHARGED	S6.001	S5.01	8	47.545	0.901	0.000	0.42	4.6	SURCHARGED	S1.006	S1.06	14	47.544	0.924	0.000	0.17	10.9	FLOOD RISK
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Summary Wizard of 120 minute 100 year Winter I+40% 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 Coefficient	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 Storage Structures	1
Number of Online Controls	1	Number of Time/Area Diagrams	0
Number of Offline Controls	0	Number of Real Time Controls	0

Synthetic Rainfall Details

Rainfall Model	FSR	Ratio R	0.357
Region England and Wales Cv (Summer)	0.750		
M5-60 (mm)	18.000	Cv (Winter)	0.840

Margin for Flood Risk Warning (mm)	400.0
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
Return Period(s) (years)	1, 2, 30, 100
Climate Change (%)	0, 0, 0, 40

Water Surcharged Flooded							Half Drain Pipe		Status
PN	US/MH Name	Storm Rank	Level (m)	Depth (m)	Volume (m³)	Flow / Overflow Cap. (l/s)	Time (mins)	Flow (l/s)	
S1.000	S1.00	14	47.738	-0.112	0.000	0.51		15.1	OK
S2.000	S13	25	47.748	-0.150	0.000	0.00		0.0	OK
S1.001	S1.01	14	47.680	-0.145	0.000	0.27		15.7	OK
S3.000	S2.00	14	47.547	-0.128	0.000	0.05		0.9	OK
S4.000	S3.00	14	47.533	-0.127	0.000	0.06		1.3	OK
S1.002	S1.02	14	47.417	-0.108	0.000	0.40		18.6	OK
S5.000	S4.00	14	47.409	-0.053	0.000	0.10		1.3	OK
S1.003	S1.03	14	47.408	0.651	0.000	0.64		19.1	SURCHARGED
S1.004	S1.04	9	47.404	0.679	0.000	0.32	43	9.9	SURCHARGED*
S1.005	S1.05	6	47.400	0.723	0.000	0.31		10.3	SURCHARGED
S6.000	S5.00	14	47.395	0.724	0.000	0.03		0.3	SURCHARGED
S6.001	S5.01	14	47.395	0.751	0.000	0.28		3.0	SURCHARGED
S1.006	S1.06	13	47.393	0.773	0.000	0.17		10.9	SURCHARGED

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Summary Wizard of 180 minute 100 year Winter I+40% 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 Coefficient	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 Storage Structures	1
Number of Online Controls	1	Number of Time/Area Diagrams	0
Number of Offline Controls	0	Number of Real Time Controls	0

Synthetic Rainfall Details

Rainfall Model	FSR	Ratio R	0.357
Region England and Wales Cv (Summer)	0.750		
M5-60 (mm)	18.000	Cv (Winter)	0.840

Margin for Flood Risk Warning (mm)	400.0
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
Return Period(s) (years)	1, 2, 30, 100
Climate Change (%)	0, 0, 0, 40

PN	US/MH Name	Storm Rank	Water Surcharged Flooded			Half Drain Pipe		Status
			Level (m)	Depth (m)	Volume (m³)	Flow / Overflow Cap. (l/s)	Time (mins)	
S1.000	S1.00	19	47.721	-0.129	0.000	0.38	11.3	OK
S2.000	S13	26	47.748	-0.150	0.000	0.00	0.0	OK
S1.001	S1.01	19	47.669	-0.156	0.000	0.21	11.8	OK
S3.000	S2.00	19	47.544	-0.131	0.000	0.04	0.7	OK
S4.000	S3.00	19	47.530	-0.130	0.000	0.04	1.0	OK
S1.002	S1.02	19	47.384	-0.141	0.000	0.30	14.0	OK
S5.000	S4.00	19	47.338	-0.124	0.000	0.07	1.0	OK
S1.003	S1.03	19	47.150	0.393	0.000	0.49	14.6	SURCHARGED
S1.004	S1.04	14	47.146	0.421	0.000	0.32	35 9.7	SURCHARGED*
S1.005	S1.05	13	47.142	0.465	0.000	0.30	10.0	SURCHARGED
S6.000	S5.00	20	47.137	0.466	0.000	0.02	0.2	SURCHARGED
S6.001	S5.01	17	47.137	0.493	0.000	0.22	2.4	SURCHARGED
S1.006	S1.06	6	47.135	0.515	0.000	0.17	10.9	SURCHARGED

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Summary Wizard of 240 minute 100 year Winter I+40% 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 Coefficient	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 Storage Structures	1
Number of Online Controls	1	Number of Time/Area Diagrams	0
Number of Offline Controls	0	Number of Real Time Controls	0

Synthetic Rainfall Details

Rainfall Model	FSR	Ratio R	0.357
Region England and Wales Cv (Summer)	0.750		
M5-60 (mm)	18.000	Cv (Winter)	0.840

Margin for Flood Risk Warning (mm)	400.0
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
Return Period(s) (years)	1, 2, 30, 100
Climate Change (%)	0, 0, 0, 40

PN	US/MH Name	Storm Rank	Water Surcharged Flooded			Half Drain Pipe		Status
			Level (m)	Depth (m)	Volume (m³)	Flow / Overflow Cap. (l/s)	Time (mins)	
S1.000	S1.00	26	47.710	-0.140	0.000	0.31	9.2	OK
S2.000	S13	42	47.748	-0.150	0.000	0.00	0.0	OK
S1.001	S1.01	26	47.661	-0.164	0.000	0.17	9.5	OK
S3.000	S2.00	26	47.542	-0.133	0.000	0.03	0.6	OK
S4.000	S3.00	26	47.528	-0.132	0.000	0.03	0.8	OK
S1.002	S1.02	26	47.375	-0.150	0.000	0.24	11.3	OK
S5.000	S4.00	26	47.335	-0.127	0.000	0.06	0.8	OK
S1.003	S1.03	26	46.860	0.103	0.000	0.40	12.0	SURCHARGED
S1.004	S1.04	15	46.855	0.129	0.000	0.31	27	9.6 SURCHARGED*
S1.005	S1.05	15	46.850	0.173	0.000	0.30	10.0	SURCHARGED
S6.000	S5.00	25	46.845	0.174	0.000	0.02	0.2	SURCHARGED
S6.001	S5.01	22	46.844	0.200	0.000	0.18	2.0	SURCHARGED
S1.006	S1.06	3	46.843	0.223	0.000	0.17	10.9	SURCHARGED

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Summary Wizard of 360 minute 100 year Winter I+40% for Storm

Simulation Criteria

Areal Reduction Factor	1.000	Additional Flow - % of Total Flow	0.000
Hot Start (mins)	0	MADD Factor * 10m ³ /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 Storage Structures	1
Number of Online Controls	1	Number of Time/Area Diagrams	0
Number of Offline Controls	0	Number of Real Time Controls	0

Synthetic Rainfall Details

Rainfall Model	FSR	Ratio R	0.357
Region England and Wales Cv (Summer)	0.750		
M5-60 (mm)	18.000	Cv (Winter)	0.840

Margin for Flood Risk Warning (mm)	400.0
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
Return Period(s) (years)	1, 2, 30, 100
Climate Change (%)	0, 0, 0, 40

PN	US/MH Name	Storm Rank	Water Surcharged Flooded			Half Drain Pipe		Status
			Level (m)	Depth (m)	Volume (m ³)	Flow / Overflow (l/s)	Time (mins)	
S1.000	S1.00	34	47.697	-0.153	0.000	0.23	6.7	OK
S2.000	S13	56	47.748	-0.150	0.000	0.00	0.0	OK
S1.001	S1.01	34	47.652	-0.173	0.000	0.12	7.0	OK
S3.000	S2.00	34	47.540	-0.135	0.000	0.02	0.4	OK
S4.000	S3.00	34	47.526	-0.134	0.000	0.03	0.6	OK
S1.002	S1.02	34	47.364	-0.161	0.000	0.18	8.3	OK
S5.000	S4.00	34	47.332	-0.130	0.000	0.04	0.6	OK
S1.003	S1.03	34	46.616	-0.141	0.000	0.30	8.9	OK
S1.004	S1.04	32	46.607	-0.118	0.000	0.27	55 8.4	OK*
S1.005	S1.05	29	46.601	-0.076	0.000	0.27	9.0	OK
S6.000	S5.00	32	46.595	-0.076	0.000	0.01	0.2	OK
S6.001	S5.01	33	46.595	-0.049	0.000	0.13	1.5	OK
S1.006	S1.06	27	46.594	-0.027	0.000	0.16	10.4	OK

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