

Chancellor's Building

Surface Water Strategy

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1. Introduction

- 1.1 AECOM have been appointed by the University of Reading to assess and prepare a surface water drainage strategy to accompany a planning application for the retention of the Chancellor's Building within the Whiteknights Campus.
- 1.2 The Chancellor's Building consists of a two-storey modular building form and was granted temporary planning permission for a period of 5 years to accommodate the transfer of School of Architecture from other facilities on the campus during refurbishment works.
- 1.3 A pre-application enquiry was submitted to Reading Borough Council (RBC), as the local planning authority, to obtain their comments on the acceptability of maintaining the current building form on a permanent basis. The response comments relating to drainage are summarised below:

The original permission for the building accepted that due to its temporary nature, there were likely to be limitations in the extent to which new alternative drainage could be provided. The sustainable drainage that was secured included the provision of filter strips, the retention of grassed areas and trees around the building and an area of shrub planting. It was accepted that these SuDS measures were commensurate with the temporary nature of the building, and acceptable on that basis. It was however noted that a more permanent building would be expected to provide a higher standard of sustainable drainage; justification for permission being granted for a temporary period only.

Policy EN18 requires all major development to incorporate sustainable drainage systems in line with the Government's Technical Standards. The policy notes that SuDS provision should maximise ecological benefits, link into the existing Green network, incorporate tree planting and landscaping and avoid damage to existing significant trees. It has already been established above that additional tree planting and landscaping is required, to soften the impact of the building. A carefully considered scheme of landscaping should address the SuDS requirements. Any future submission should therefore include a proposed drainage strategy, which can be overlaid against the proposed landscaping scheme. There are variety of additional SuDS techniques that could be implemented. The provision of a green roof and rainwater re-use would also be likely to receive officer support at application stage.

- 1.4 The purpose of this assessment is to review the existing drainage provision to the building and to determine where opportunities exist to undertake improvements to the system commensurate with the retention of the existing building in accordance with planning policy.

2. Surface Water Drainage

Existing Building

- 2.1 The existing building consists of a two-storey modular construction with a lightweight flat roof.
- 2.2 There are access paths to the immediate perimeter of the building and linking to the footway to Chancellor's Way, with an area of cycle storage hoops to the east of the building.

Existing Drainage

- 2.3 As part of the construction of the current building, a shallow traditional drainage system was installed to take run-off from the roof and external areas into the existing Whiteknights Campus sewer network.
- 2.4 An element of filter drainage and grass verge was installed as part of the drainage network to provide some initial interception and treatment of run-off prior to discharge to the drainage network.
- 2.5 No specific attenuation was included within the drainage system installed to serve the building.

Design Limitations

- 2.6 The pre-application response from RBC suggested a number of SuDS techniques that would be considered acceptable to form part of a drainage system to serve the building on a permanent basis.
- 2.7 This report provides an assessment of the feasibility of the suggested SuDS techniques in the context of the existing building, and to identify opportunities to enhance the existing drainage system, in accordance with planning policy.
- 2.8 The site is constrained by the presence of a number of existing trees and woodland areas that surround the building and are in close proximity to it. These trees significantly limit the space available to excavate further filter drains or form shallow swales to accommodate run-off from the building and its surrounding area.
- 2.9 The building is of a modular construction, comprising units with a lightweight roof. This roof structure is unable to support the additional applied loads associated with a green or blue roof. Additionally, the building foundations were not designed for the additional loadings that would be imposed by the retrofitting of a green or blue roof. As a result, this is not considered a viable option for this building.
- 2.10 The modular building construction also limits the introduction of water re-use systems as the building cannot be easily modified to accommodate the plumbing and header tanks required to connect to a rainwater harvesting system.
- 2.11 Consideration has been given to the excavation of a shallow swale feature to provide water treatment and storage to be located along the boundary of the field to the north of Chancellor's Way. However, due to constraints imposed by the level differences between the building and the pitches, and the invert levels of the receiving drainage, the footprint area required was too extensive to coordinate with the pitch and training facilities used by the University Sports Park. The implementation of attenuation in this location would therefore impact on the current amenity of the land.
- 2.12 Given the existing constraints within the site, it is proposed that limiting the existing flows from the building into the wider drainage network is the preferred method. The flow would provide betterment to the existing drainage network by restricting discharge to greenfield flow rates with on-site attenuation. to

Surface Water Management Methodology

Peak Run-off Rates

- 2.13 In accordance with best practice, the rate of run-off for the developed site should be no greater than for the undeveloped site.
- 2.14 An assessment of the building proposals and topographical survey has been undertaken to determine the existing impermeable area occupied by the building. This has been measured as being 0.315ha.
- 2.15 The SuDS Manual indicates that for catchment areas of less than 50ha, the Institute of Hydrology Report 124 method is to be utilised to determine the existing peak run-off rates from the site. This methodology uses annual rainfall and soil characteristic variables to determine the greenfield run-off for a site area of 50ha. For smaller sites, the figures are adjusted by pro-rata of the areas.
- 2.16 The principal hydrological factors for the site used in the calculation of run-off using this method are defined below:
- Region: 6
- SAAR: 700mm
- SOIL: 0.3
- 2.17 An assessment of the existing greenfield run-off from the development site has been completed to determine the permitted rates of discharge. This has been completed for a range of return periods up to the 1 in 100 year event.
- 2.18 The derived greenfield runoff rates for the different return periods are summarised in Table 6.3 and a copy of these calculations is included in Appendix A.

Table 2.1. Greenfield flow rates

Return Period (1:x years)	Growth factor	Runoff (l/s/ha)	Runoff (l/s)
Qbar	-	1.82	0.58
1: 1 year	0.85	1.55	0.49
1: 2 year	0.88	1.60	0.51
1: 10 year	1.62	2.95	0.93
1: 30 year	2.27	4.14	1.31
1: 100 year	3.19	5.81	2.16

- 2.19 The drainage strategy for the development will therefore seek to limit flow rates to those calculated above to minimise the impact on peak flows during storm events. As such, it will be necessary to provide attenuation within the site to accommodate the increased run-off from the development.

Volumetric Run-off

- 2.20 Wherever possible, the volumes of run-off should also be assessed and maintained at existing equivalent rates.
- 2.21 The volume comparison is generally made for a 1 in 100 year storm of 6 hours duration; this storm has been assessed as having the most severe effect on downstream watercourses. Given the increased impermeable areas associated with the proposed development, this volume will increase for the same storm in the post-developed condition.
- 2.22 The SuDS Manual identifies that a provision for long term storage (LTS) should be allowed to accommodate attenuation of run-off volumes in excess of the existing assessed volume. It is

recommended that this is provided in an off-line location where water can be retained to either dissipate to ground via infiltration or for re-use within the development. Where opportunities do not exist for discharge via infiltration or reuse, additional run-off volumes may be controlled or be permitted to discharge through an outfall at a lower flow rate equivalent to 2l/s/ha.

- 2.23 Where an appropriate area is not available, an alternative approach is to release all run-off above the 1 year event from the site at a maximum rate equivalent to the higher of 2 l/s/ha, or Q_{Bar} .
- 2.24 Given the existing layout for the site and low flow rates, it will be necessary to limit flows to 2 l/s for all storm return durations up to the 1 in 100 year return period, plus 40% allowance for climate change in accordance with guidance provided in the National Planning Policy Framework (NPPF) and supporting guidance.

Initial Attenuation Storage Sizing

- 2.25 The design intent will be to restrict flows from the building to a minimum achievable flow rate of 2.0l/s for all storms up to the 1 in 100 year return period, plus 40% allowance for climate change to help mimic existing drainage regime.
- 2.26 The underlying ground conditions are unlikely to allow for run-off to be discharged via infiltration. It is therefore proposed that attenuation features will be installed with an impermeable lining to prevent groundwater flows entering the system.
- 2.27 Given the small nature of this catchment, the use of FSR rainfall data has been used in the drainage calculations.
- 2.28 An initial volume estimate has been undertaken at each catchment using XP Solutions Microdrainage software. The results of this assessment are included in Table 6.3 below and in Appendix A.

Table 2.2. Estimated attenuation volumes

Return Period	Climate Change Allowance	Discharge Rate, l/s	Storage Volume, m ³	
			Minimum	Maximum
1 in 30 year	10%	2.0	93	131
1 in 100 year	40%		177	241

- 2.29 For the purpose of the initial design, the estimated storage volume has been assumed to be 215m³.

On Site Attenuation and Treatment Features

- 2.30 The surface water runoff from the development will be collected within the site and discharged using SuDS features to the proposed outfall. The objectives of sustainable drainage systems are threefold:
- To limit the peak run-off rate to that of the greenfield condition;
 - To limit the volume of run-off to that of the greenfield condition;
 - To maintain the quality of the surface water which is discharged to that of the greenfield condition.
- 2.31 The nature of run-off from the building is mainly limited to roof water, with some drainage from footpaths immediately adjacent to the building.
- 2.32 The majority of the attenuation will be provided in a below ground cellular tank. Due to limitations on space, this will be located beneath the existing cycle parking area, which will be reinstated above the tank on completion.
- 2.33 A landscaped depression is to be constructed within the existing grassed area adjacent to the cycle parking to provide additional volume in more extreme rainfall events. This will also provide direct drainage to the adjacent footpath areas.

- 2.34 A localised swale is also to be provided to the rear of the building to intercept overland flows resulting from limited capacity of the existing drainage network, where upsizing of downstream pipes is not possible due to excavation within tree root zones.
- 2.35 XP Solutions Microdrainage software has been used to assess the existing drainage network and assess the modifications to include the attenuation. The output of these calculations and associated simulations are included in Appendix B of this document.
- 2.36 A General Arrangement drawing has been prepared to reflect the proposals for the scheme. This is indicated in Appendix C of this note.

Exceedance Flows

- 2.37 The design of the drainage system must consider the effects of potential exceedance flows. These may occur either through a more severe storm occurrence than the design situation or partial blockage of the system which would restrict the available capacity.
- 2.38 The fall of the ground is generally away from the building where overland flows would either drain to soft landscaping or be directed towards Chancellor's Way.

Adoption and Maintenance

- 2.39 The drainage systems are part of the private campus drainage network and are maintained by the University.
- 2.40 Typical maintenance tasks associated with SuDS drainage are indicated in Figure 6.1.

Operation and maintenance activity	SuDS component											
	Pond	Wetland	Detention basin	Infiltration basin	Soakaway	Infiltration trench	Filter drain	Modular storage	Pervious pavement	Swale/bioretention/trees	Filter strip	Green roofs
Regular maintenance												
Inspection	■	■	■	■	■	■	■	■	■	■	■	■
Litter and debris removal	■	■	■	■	□	■	■	□	■	■	■	□
Grass cutting	■	■	■	■	□	■	■	□	□	■	■	
Weed and invasive plant control	□	□	□	□		□	□		□		□	■
Shrub management (including pruning)	□	□	□	□					□	□	□	
Shoreline vegetation management	■	■	□									
Aquatic vegetation management	■	■	□									
Occasional maintenance												
Sediment management ¹	■	■	■	■	■	■	■	■	■	■	■	■
Vegetation replacement	□	□	□	□						□	□	■
Vacuum sweeping and brushing								■				
Remedial maintenance												
Structure rehabilitation /repair	□	□	□	□	□	□	□	□	□	□	□	□
Infiltration surface reconditioning				□	□	□	□		□	□	□	
Key ■ will be required □ may be required Notes 1 Sediment should be collected and managed in pre-treatment systems, upstream of the main device.												

Figure 2.1. Typical SuDS components operation and maintenance activities (The SuDS Manual, 2015)

- 2.41 Maintenance activities, including regular and occasional actions, for the proposed drainage network and SuDS will ensure the effectiveness of the proposed drainage. The CIRIA SuDS Manual 2015 includes

suggested maintenance and monitoring schedules, and an outline is provided below for each selected feature:

- Regular inspections and cleaning of inlets, outlets, and overflow, along with regular landscape maintenance, will be needed to ensure adequate maintenance for the swale and channels. Occasionally, sediment removal might be required.

Maintenance schedule	Required action	Typical frequency
Regular maintenance	Remove litter and debris	Monthly, or as required
	Cut grass – to retain grass height within specified design range	Monthly (during growing season), or as required
	Manage other vegetation and remove nuisance plants	Monthly at start, then as required
	Inspect inlets, outlets and overflows for blockages, and clear if required	Monthly
	Inspect infiltration surfaces for ponding, compaction, silt accumulation, record areas where water is ponding for > 48 hours	Monthly, or when required
	Inspect vegetation coverage	Monthly for 6 months, quarterly for 2 years, then half yearly
	Inspect inlets and facility surface for silt accumulation, establish appropriate silt removal frequencies	Half yearly
Occasional maintenance	Reseed areas of poor vegetation growth, alter plant types to better suit conditions, if required	As required or if bare soil is exposed over 10% or more of the swale treatment area
Remedial actions	Repair erosion or other damage by re-turfing or reseeded	As required
	Relevel uneven surfaces and reinstate design levels	As required
	Scarify and spike topsoil layer to improve infiltration performance, break up silt deposits and prevent compaction of the soil surface	As required
	Remove build-up of sediment on upstream gravel trench, flow spreader or at top of filter strip	As required
	Remove and dispose of oils or petrol residues using safe standard practices	As required

Figure 2.2. Operation and maintenance requirements for swales (The SuDS Manual, 2015)

- 2.42 The maintenance and monitoring schedule should be reviewed and updated as necessary so that maintenance activities are adjusted over time as required.

3. Conclusions

- 3.1 The modular form of construction for the building limits the opportunities to retrofit SuDS systems, such as green roofs or water re-use options.
- 3.2 Run-off from the scheme is to be limited to as close to greenfield rates as possible, with a minimum discharge rate of 2.0l/s.
- 3.3 Run-off from the building is to be attenuated prior to discharge into the existing drainage network.
- 3.4 The scheme will include the formation of a landscaped basin and grassed swale to provide source control, interception and storage during extreme rainfall events. An attenuation tank will be installed beneath the cycle park area.
- 3.5 Surface water design calculations and an associated drainage scheme have been prepared to indicate the required changes to the existing drainage network.
- 3.6 The system will remain within the private ownership of the University.

Appendix A – Greenfield Run-off Calculations

Greenfield Runoff Rate Calculation

Calculation of the mean annual flood of a small catchment is determined using the mean annual flood flow rate equation from the Institute of Hydrology Report No. 124

Catchment

Total Area 0.315 Ha
Developed 100%

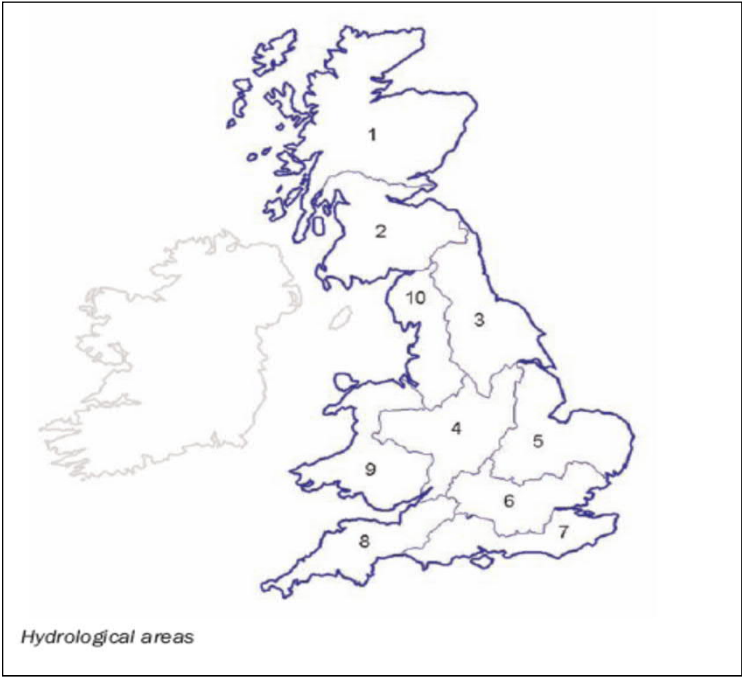
$QBAR_{rural} = 0.00108 AREA^{0.89} SAAR^{1.17} SOIL^{2.17}$

		<u>Total Proposed Area of</u>	<u>Actual site area</u>		
		<u>Hardstanding (m²)</u>	<u>(km²)</u>	<u>Scaling factor</u>	
AREA	0.5 (km ²)	3150	0.00315	0.01	
SAAR	700 (mm)				
SOIL	0.3				
REGION NUMBER	6				

Scaled mean annual flood (m³/s) = 0.001
Scaled mean annual flood (l/s) = 0.574
Scaled mean annual flood (l/s/Ha) = 1.822

$QBAR_{rural} = 0.091 \text{ m}^3/\text{s}$

Return Period	Growth Factor	Runoff Rate	Runoff (l/s/Ha)
1	0.85	0.49	1.55
2	0.88	0.51	1.60
5	1.28	0.73	2.33
10	1.62	0.93	2.95
25	2.14	1.23	3.90
30	2.27	1.30	4.14
50	2.62	1.50	4.77
100	3.19	1.83	5.81
200	3.75	2.15	6.83
500	4.49	2.58	8.18



For Ireland, use Region Number 11

WinDES Quick Storage Estimates - FEH Rainfall				
Return Period	Climate Change	Discharge Rate	Storage Volume	
			Minimum	Maximum
1	0	2.00	25	42
10	0	2.00	59	86
30	10	2.00	93	131
100	20	2.00	146	199
100	40	2.00	177	241

Estimated Storage for design 215.4
Estimated storage per hectare 683.810

Appendix B – Drainage Calculations

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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)	1	PIMP (%)	100
M5-60 (mm)	18.700	Add Flow / Climate Change (%)	0
Ratio R	0.400	Minimum Backdrop Height (m)	0.000
Maximum Rainfall (mm/hr)	0	Maximum Backdrop Height (m)	0.000
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

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)	n	HYD SECT	DIA (mm)	Section Type	Auto Design
1.000	24.420	0.410	59.6	0.087	4.00	0.0	0.600		o	100	Pipe/Conduit	
1.001	13.770	0.170	81.0	0.000	0.00	0.0	0.600		o	100	Pipe/Conduit	
1.002	24.090	0.220	109.5	0.007	0.00	0.0	0.600		o	150	Pipe/Conduit	
1.003	32.790	0.210	156.1	0.012	0.00	0.0	0.600		o	150	Pipe/Conduit	
1.004	6.810	0.060	113.5	0.003	0.00	0.0	0.600		o	225	Pipe/Conduit	
1.005	12.105	0.100	121.1	0.004	0.00	0.0	0.600		o	225	Pipe/Conduit	
2.000	31.330	0.270	116.0	0.030	4.00	0.0	0.600		o	100	Pipe/Conduit	
3.000	30.000	0.003	10000.0	0.000	4.00	0.0		0.030		-1	Pipe/Conduit	
3.001	2.000	0.177	11.3	0.000	0.00	0.0	0.600		o	100	Pipe/Conduit	
2.001	16.370	0.150	109.1	0.002	0.00	0.0	0.600		o	100	Pipe/Conduit	
2.002	44.750	0.380	117.8	0.087	0.00	0.0	0.600		o	100	Pipe/Conduit	
2.003	11.929	0.240	49.7	0.000	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)
1.000	0.00	4.41	70.010	0.087	0.0	0.0	0.0	1.00	7.9	0.0
1.001	0.00	4.68	69.600	0.087	0.0	0.0	0.0	0.86	6.7	0.0
1.002	0.00	5.09	69.380	0.094	0.0	0.0	0.0	0.96	17.0	0.0
1.003	0.00	5.78	69.160	0.106	0.0	0.0	0.0	0.80	14.2	0.0
1.004	0.00	5.87	68.875	0.109	0.0	0.0	0.0	1.23	48.8	0.0
1.005	0.00	6.04	68.815	0.113	0.0	0.0	0.0	1.19	47.2	0.0
2.000	0.00	4.73	70.240	0.030	0.0	0.0	0.0	0.71	5.6	0.0
3.000	0.00	9.02	70.150	0.000	0.0	0.0	0.0	0.10	38.8	0.0
3.001	0.00	9.03	70.147	0.000	0.0	0.0	0.0	2.31	18.2	0.0
2.001	0.00	9.41	69.970	0.032	0.0	0.0	0.0	0.74	5.8	0.0
2.002	0.00	10.46	69.820	0.119	0.0	0.0	0.0	0.71	5.6	0.0
2.003	0.00	10.57	69.315	0.119	0.0	0.0	0.0	1.86	73.9	0.0

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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)	n	HYD SECT	DIA (mm)	Section Type	Auto Design
2.004	20.700	0.100	207.0	0.000	0.00	0.0	0.600		o	300	Pipe/Conduit	
1.006	4.930	0.100	49.3	0.000	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)
2.004	0.00	10.88	68.800	0.119	0.0	0.0	0.0	1.09	77.0	0.0
1.006	0.00	10.94	68.700	0.232	0.0	0.0	0.0	1.44	25.4	0.0

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Manhole Schedules for Storm

MH Name	MH CL (m)	MH Depth (m)	MH Connection	MH Diam., L*W (mm)	PN	Pipe Out Invert Level (m)	Diameter (mm)	PN	Pipes In Invert Level (m)	Diameter (mm)	Backdrop (mm)
SW9	70.700	0.690	Open Manhole	450	1.000	70.010	100				
SW3	70.060	0.460	Open Manhole	450	1.001	69.600	100	1.000	69.600	100	
SW2	70.700	1.320	Open Manhole	450	1.002	69.380	150	1.001	69.430	100	
SW1	70.410	1.250	Open Manhole	450	1.003	69.160	150	1.002	69.160	150	
S10	70.620	1.745	Open Manhole	450	1.004	68.875	225	1.003	68.950	150	
S11	70.680	1.865	Open Manhole	450	1.005	68.815	225	1.004	68.815	225	
SW8	70.490	0.250	Open Manhole	450	2.000	70.240	100				
Swale	70.450	0.300	Junction		3.000	70.150	-1				
Swale	70.450	0.303	Open Manhole	10000	3.001	70.147	100	3.000	70.147	-1	
SW6	70.470	0.500	Open Manhole	450	2.001	69.970	100	2.000	69.970	100	
								3.001	69.970	100	
SW5	70.660	0.840	Open Manhole	450	2.002	69.820	100	2.001	69.820	100	
SW4	70.660	1.345	Open Manhole	450	2.003	69.315	225	2.002	69.440	100	
S12	70.600	1.800	Open Manhole	1200	2.004	68.800	300	2.003	69.075	225	200
S13	70.560	1.860	Open Manhole	1200	1.006	68.700	150	1.005	68.715	225	90
								2.004	68.700	300	
	70.360	1.760	Open Manhole	0		OUTFALL		1.006	68.600	150	

No coordinates have been specified, layout information cannot be produced.

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)
1.006		70.360	68.600	0.000	0	0

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Online Controls for Storm

Hydro-Brake® Optimum Manhole: S13, DS/PN: 1.006, Volume (m³): 3.9

Unit Reference MD-SHE-0058-2000-1860-2000
Design Head (m) 1.860
Design Flow (l/s) 2.0
Flush-Flo™ Calculated
Objective Minimise upstream storage
Application Surface
Sump Available Yes
Diameter (mm) 58
Invert Level (m) 68.700
Minimum Outlet Pipe Diameter (mm) 75
Suggested Manhole Diameter (mm) 1200

Control Points	Head (m)	Flow (l/s)	Control Points	Head (m)	Flow (l/s)
Design Point (Calculated)	1.860	2.0	Kick-Flo®	0.519	1.1
Flush-Flo™	0.254	1.4	Mean Flow over Head Range	-	1.5

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)	Depth (m)	Flow (l/s)
0.100	1.2	0.800	1.4	2.000	2.1	4.000	2.8	7.000	3.7
0.200	1.4	1.000	1.5	2.200	2.2	4.500	3.0	7.500	3.8
0.300	1.4	1.200	1.6	2.400	2.2	5.000	3.2	8.000	3.9
0.400	1.3	1.400	1.8	2.600	2.3	5.500	3.3	8.500	4.0
0.500	1.2	1.600	1.9	3.000	2.5	6.000	3.4	9.000	4.1
0.600	1.2	1.800	2.0	3.500	2.7	6.500	3.6	9.500	4.3

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Offline Controls for Storm

Pipe Manhole: SW8, DS/PN: 2.000, Loop to PN: 3.000

Diameter (m)	0.100	Roughness k (mm)	0.600
Section Type	Pipe/Conduit	Entry Loss Coefficient	0.500
Slope (1:X)	25.0	Coefficient of Contraction	0.600
Length (m)	2.000	Upstream Invert Level (m)	70.240

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Storage Structures for Storm

Complex Manhole: S12, DS/PN: 2.004

Cellular Storage

Invert Level (m) 68.800 Safety Factor 2.0
Infiltration Coefficient Base (m/hr) 0.00000 Porosity 0.95
Infiltration Coefficient Side (m/hr) 0.00000

Depth (m)	Area (m ²)	Inf. Area (m ²)	Depth (m)	Area (m ²)	Inf. Area (m ²)	Depth (m)	Area (m ²)	Inf. Area (m ²)
0.000	110.0	0.0	1.199	110.0	0.0	1.200	0.0	0.0

Swale

Warning:- Volume should always be included unless the upstream pipe is being used for storage and/or as a carrier

Infiltration Coefficient Base (m/hr) 0.00000 Length (m) 15.5
Infiltration Coefficient Side (m/hr) 0.00000 Side Slope (1:X) 3.0
Safety Factor 2.0 Slope (1:X) 0.0
Porosity 1.00 Cap Volume Depth (m) 0.000
Invert Level (m) 69.800 Cap Infiltration Depth (m) 0.000
Base Width (m) 1.0 Include Swale Volume Yes

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Summary Wizard of 15 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 Offline Controls 1 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) 18.700 Cv (Summer) 0.750
 Region England and Wales Ratio R 0.400 Cv (Winter) 0.840

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

Profile(s) Summer and Winter
 Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440
 Return Period(s) (years) 2, 5, 10, 30, 100
 Climate Change (%) 0, 0, 5, 10, 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)	
1.000	SW9	31	70.500	0.390	0.000	1.23		9.3	FLOOD RISK
1.001	SW3	37	69.883	0.183	0.000	1.45		9.2	FLOOD RISK
1.002	SW2	45	69.466	-0.064	0.000	0.62		9.9	OK
1.003	SW1	60	69.264	-0.046	0.000	0.81		11.1	OK
1.004	S10	103	69.011	-0.089	0.000	0.32		11.1	OK
1.005	S11	105	69.002	-0.038	0.000	0.28		11.2	OK
2.000	SW8	31	70.286	-0.054	0.000	0.38	3.2	2.1	FLOOD RISK
3.000	Swale	37	70.206	-0.244	0.000	0.03		3.1	FLOOD RISK*
3.001	Swale	47	70.173	-0.074	0.000	0.14		1.7	FLOOD RISK
2.001	SW6	32	70.272	0.202	0.000	0.50		2.8	FLOOD RISK
2.002	SW5	36	70.315	0.395	0.000	1.43		7.8	SURCHARGED
2.003	SW4	53	69.367	-0.173	0.000	0.12		7.8	OK
2.004	S12	118	68.912	-0.188	0.000	0.02	100	1.5	OK
1.006	S13	110	68.986	0.136	0.000	0.07		1.4	SURCHARGED

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Summary Wizard of 30 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 Offline Controls 1 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) 18.700 Cv (Summer) 0.750
 Region England and Wales Ratio R 0.400 Cv (Winter) 0.840

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

Profile(s) Summer and Winter
 Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440
 Return Period(s) (years) 2, 5, 10, 30, 100
 Climate Change (%) 0, 0, 5, 10, 40

PN	US/MH Name	Storm Rank	Water Level	Surcharged Depth	Flooded Volume	Flow / Overflow	Half Drain Time (mins)	Pipe Flow	Status
			(m)	(m)	(m³)	Cap. (l/s)		(l/s)	
1.000	SW9	33	70.418	0.308	0.000	1.17		8.9	FLOOD RISK
1.001	SW3	40	69.854	0.154	0.000	1.39		8.8	FLOOD RISK
1.002	SW2	47	69.464	-0.066	0.000	0.59		9.5	OK
1.003	SW1	63	69.261	-0.049	0.000	0.79		10.7	OK
1.004	S10	100	69.018	-0.082	0.000	0.31		10.8	OK
1.005	S11	100	69.009	-0.031	0.000	0.27		11.0	OK
2.000	SW8	35	70.281	-0.059	0.000	0.34	2.7	1.8	FLOOD RISK
3.000	Swale	40	70.202	-0.248	0.000	0.03		2.7	FLOOD RISK*
3.001	Swale	45	70.174	-0.073	0.000	0.16		1.9	FLOOD RISK
2.001	SW6	37	70.269	0.199	0.000	0.50		2.8	FLOOD RISK
2.002	SW5	38	70.309	0.389	0.000	1.43		7.8	SURCHARGED
2.003	SW4	55	69.367	-0.173	0.000	0.12		7.8	OK
2.004	S12	113	68.947	-0.153	0.000	0.02	121	1.3	OK
1.006	S13	105	68.994	0.144	0.000	0.07		1.4	SURCHARGED

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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 * 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 Offline Controls 1 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) 18.700 Cv (Summer) 0.750
 Region England and Wales Ratio R 0.400 Cv (Winter) 0.840

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

Profile(s) Summer and Winter
 Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440
 Return Period(s) (years) 2, 5, 10, 30, 100
 Climate Change (%) 0, 0, 5, 10, 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)	
1.000	SW9	40	70.219	0.109	0.000	1.03		7.8	SURCHARGED
1.001	SW3	49	69.782	0.082	0.000	1.23		7.8	FLOOD RISK
1.002	SW2	54	69.457	-0.073	0.000	0.52		8.4	OK
1.003	SW1	69	69.253	-0.057	0.000	0.70		9.5	OK
1.004	S10	101	69.012	-0.088	0.000	0.28		9.6	OK
1.005	S11	104	69.004	-0.036	0.000	0.24		9.8	OK
2.000	SW8	40	70.274	-0.066	0.000	0.24	2.0	1.3	FLOOD RISK
3.000	Swale	45	70.195	-0.255	0.000	0.02		1.9	FLOOD RISK*
3.001	Swale	51	70.169	-0.078	0.000	0.10		1.2	FLOOD RISK
2.001	SW6	44	70.244	0.174	0.000	0.41		2.2	FLOOD RISK
2.002	SW5	44	70.241	0.321	0.000	1.36		7.4	SURCHARGED
2.003	SW4	58	69.366	-0.174	0.000	0.12		7.4	OK
2.004	S12	104	68.978	-0.122	0.000	0.02	137	1.6	OK
1.006	S13	107	68.991	0.141	0.000	0.07		1.4	SURCHARGED

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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 Offline Controls 1 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) 18.700 Cv (Summer) 0.750
 Region England and Wales Ratio R 0.400 Cv (Winter) 0.840

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

Profile(s) Summer and Winter
 Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440
 Return Period(s) (years) 2, 5, 10, 30, 100
 Climate Change (%) 0, 0, 5, 10, 40

PN	US/MH Name	Storm Rank	Water			Flow / Overflow Cap.	Half Drain Time (mins)	Pipe Flow (l/s)	Status
			Level (m)	Depth (m)	Volume (m³)				
1.000	SW9	50	70.080	-0.030	0.000	0.82		6.3	OK
1.001	SW3	58	69.679	-0.021	0.000	0.98		6.3	OK
1.002	SW2	61	69.447	-0.083	0.000	0.42		6.7	OK
1.003	SW1	75	69.240	-0.070	0.000	0.55		7.5	OK
1.004	S10	107	68.997	-0.103	0.000	0.22		7.7	OK
1.005	S11	107	68.996	-0.044	0.000	0.19		7.8	OK
2.000	SW8	50	70.267	-0.073	0.000	0.16	1.3	0.9	FLOOD RISK
3.000	Swale	55	70.189	-0.261	0.000	0.01		1.3	FLOOD RISK*
3.001	Swale	67	70.163	-0.084	0.000	0.06		0.7	FLOOD RISK
2.001	SW6	58	70.074	0.004	0.000	0.27		1.5	SURCHARGED
2.002	SW5	58	70.060	0.140	0.000	1.17		6.4	SURCHARGED
2.003	SW4	68	69.363	-0.177	0.000	0.10		6.4	OK
2.004	S12	98	68.996	-0.104	0.000	0.02	146	1.6	OK
1.006	S13	104	68.995	0.145	0.000	0.07		1.4	SURCHARGED

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Summary Wizard of 180 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 Offline Controls 1 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) 18.700 Cv (Summer) 0.750
 Region England and Wales Ratio R 0.400 Cv (Winter) 0.840

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

Profile(s) Summer and Winter
 Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440
 Return Period(s) (years) 2, 5, 10, 30, 100
 Climate Change (%) 0, 0, 5, 10, 40

PN	US/MH Name	Storm Rank	Water			Flow / Overflow Cap.	Half Drain Time (mins)	Pipe Flow (l/s)	Status
			Level (m)	Depth (m)	Volume (m³)				
1.000	SW9	60	70.068	-0.042	0.000	0.63		4.8	OK
1.001	SW3	66	69.665	-0.035	0.000	0.75		4.8	OK
1.002	SW2	68	69.438	-0.092	0.000	0.32		5.2	OK
1.003	SW1	80	69.228	-0.082	0.000	0.43		5.8	OK
1.004	S10	106	68.997	-0.103	0.000	0.17		5.9	OK
1.005	S11	106	68.997	-0.043	0.000	0.15		6.1	OK
2.000	SW8	60	70.263	-0.077	0.000	0.12	1.0	0.7	FLOOD RISK
3.000	Swale	63	70.185	-0.265	0.000	0.01		1.0	FLOOD RISK*
3.001	Swale	75	70.162	-0.085	0.000	0.05		0.6	FLOOD RISK
2.001	SW6	70	70.002	-0.068	0.000	0.23		1.3	OK
2.002	SW5	66	69.930	0.010	0.000	1.02		5.6	SURCHARGED
2.003	SW4	73	69.360	-0.180	0.000	0.09		5.6	OK
2.004	S12	97	68.996	-0.104	0.000	0.03	163	1.9	OK
1.006	S13	103	68.996	0.146	0.000	0.07		1.4	SURCHARGED

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Summary Wizard of 240 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 Offline Controls 1 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) 18.700 Cv (Summer) 0.750
 Region England and Wales Ratio R 0.400 Cv (Winter) 0.840

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

Profile(s) Summer and Winter
 Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440
 Return Period(s) (years) 2, 5, 10, 30, 100
 Climate Change (%) 0, 0, 5, 10, 40

PN	US/MH Name	Storm Rank	Water			Flooded		Half Drain Time (mins)	Pipe Flow (l/s)	Status
			Level (m)	Depth (m)	Volume (m³)	Flow / Cap.	Overflow (l/s)			
1.000	SW9	71	70.061	-0.049	0.000	0.52			3.9	OK
1.001	SW3	74	69.657	-0.043	0.000	0.62			3.9	OK
1.002	SW2	75	69.432	-0.098	0.000	0.26			4.2	OK
1.003	SW1	85	69.221	-0.089	0.000	0.35			4.8	OK
1.004	S10	108	68.995	-0.105	0.000	0.14			4.9	OK
1.005	S11	108	68.994	-0.046	0.000	0.12			5.0	OK
2.000	SW8	71	70.261	-0.079	0.000	0.10	0.8		0.6	FLOOD RISK
3.000	Swale	71	70.183	-0.267	0.000	0.01			0.8	FLOOD RISK*
3.001	Swale	81	70.161	-0.086	0.000	0.05			0.6	FLOOD RISK
2.001	SW6	78	70.000	-0.070	0.000	0.20			1.1	OK
2.002	SW5	72	69.894	-0.026	0.000	0.90			4.9	OK
2.003	SW4	77	69.356	-0.184	0.000	0.08			4.9	OK
2.004	S12	99	68.994	-0.106	0.000	0.02		179	1.5	OK
1.006	S13	106	68.994	0.144	0.000	0.07			1.4	SURCHARGED

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Summary Wizard of 360 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 Offline Controls 1 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) 18.700 Cv (Summer) 0.750
 Region England and Wales Ratio R 0.400 Cv (Winter) 0.840

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

Profile(s) Summer and Winter
 Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440
 Return Period(s) (years) 2, 5, 10, 30, 100
 Climate Change (%) 0, 0, 5, 10, 40

PN	US/MH Name	Storm Rank	Water Surcharged			Flooded		Half Drain Time (mins)	Pipe Flow (l/s)	Status
			Level (m)	Depth (m)	Volume (m³)	Flow / Cap.	Overflow (l/s)			
1.000	SW9	82	70.053	-0.057	0.000	0.39			2.9	OK
1.001	SW3	83	69.648	-0.052	0.000	0.46			2.9	OK
1.002	SW2	84	69.425	-0.105	0.000	0.20			3.2	OK
1.003	SW1	92	69.212	-0.098	0.000	0.26			3.6	OK
1.004	S10	110	68.988	-0.112	0.000	0.11			3.7	OK
1.005	S11	110	68.988	-0.052	0.000	0.09			3.8	OK
2.000	SW8	82	70.258	-0.082	0.000	0.08	0.6		0.4	FLOOD RISK
3.000	Swale	84	70.180	-0.270	0.000	0.01			0.6	FLOOD RISK*
3.001	Swale	91	70.160	-0.087	0.000	0.04			0.5	FLOOD RISK
2.001	SW6	90	69.997	-0.073	0.000	0.16			0.9	OK
2.002	SW5	84	69.881	-0.039	0.000	0.69			3.8	OK
2.003	SW4	86	69.350	-0.190	0.000	0.06			3.8	OK
2.004	S12	102	68.987	-0.113	0.000	0.02		204	1.5	OK
1.006	S13	109	68.987	0.137	0.000	0.07			1.4	SURCHARGED

AECOM		Page 14
Midpoint	UoR Chancellors Building	
Alencon Link	Surface water drainage	
Basingstoke, RG21 7PP	Revision 1	
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Summary Wizard of 480 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 Offline Controls 1 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) 18.700 Cv (Summer) 0.750
 Region England and Wales Ratio R 0.400 Cv (Winter) 0.840

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

Profile(s) Summer and Winter
 Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440
 Return Period(s) (years) 2, 5, 10, 30, 100
 Climate Change (%) 0, 0, 5, 10, 40

PN	US/MH Name	Storm Rank	Water			Flooded		Half Drain Time (mins)	Pipe Flow (l/s)	Status
			Level (m)	Depth (m)	Volume (m³)	Flow / Cap.	Overflow (l/s)			
1.000	SW9	92	70.048	-0.062	0.000	0.31			2.4	OK
1.001	SW3	93	69.642	-0.058	0.000	0.37			2.4	OK
1.002	SW2	93	69.420	-0.110	0.000	0.16			2.6	OK
1.003	SW1	98	69.207	-0.103	0.000	0.21			2.9	OK
1.004	S10	111	68.979	-0.121	0.000	0.09			3.0	OK
1.005	S11	111	68.978	-0.062	0.000	0.08			3.0	OK
2.000	SW8	92	70.256	-0.084	0.000	0.06	0.5		0.3	FLOOD RISK
3.000	Swale	93	70.176	-0.274	0.000	0.01			0.5	FLOOD RISK*
3.001	Swale	96	70.159	-0.088	0.000	0.03			0.4	FLOOD RISK
2.001	SW6	94	69.994	-0.076	0.000	0.14			0.7	OK
2.002	SW5	93	69.874	-0.046	0.000	0.57			3.1	OK
2.003	SW4	93	69.347	-0.193	0.000	0.05			3.1	OK
2.004	S12	105	68.978	-0.122	0.000	0.02		216	1.3	OK
1.006	S13	111	68.977	0.127	0.000	0.07			1.4	SURCHARGED

AECOM		Page 15
Midpoint	UoR Chancellors Building	
Alencon Link	Surface water drainage	
Basingstoke, RG21 7PP	Revision 1	
Date 18/12/2020 16:15	Designed by dm	
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Innovyze	Network 2020.1	

Summary Wizard of 600 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 Offline Controls 1 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) 18.700 Cv (Summer) 0.750
 Region England and Wales Ratio R 0.400 Cv (Winter) 0.840

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

Profile(s) Summer and Winter
 Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440
 Return Period(s) (years) 2, 5, 10, 30, 100
 Climate Change (%) 0, 0, 5, 10, 40

PN	US/MH Name	Storm Rank	Water			Flooded		Half Drain Time (mins)	Pipe Flow (l/s)	Status
			Level (m)	Depth (m)	Volume (m³)	Flow / Cap.	Overflow (l/s)			
1.000	SW9	99	70.045	-0.065	0.000	0.26			2.0	OK
1.001	SW3	99	69.638	-0.062	0.000	0.32			2.0	OK
1.002	SW2	99	69.416	-0.114	0.000	0.13			2.2	OK
1.003	SW1	103	69.203	-0.107	0.000	0.18			2.4	OK
1.004	S10	113	68.969	-0.131	0.000	0.07			2.5	OK
1.005	S11	113	68.968	-0.072	0.000	0.06			2.6	OK
2.000	SW8	99	70.255	-0.085	0.000	0.05	0.4		0.3	FLOOD RISK
3.000	Swale	101	70.174	-0.276	0.000	0.00			0.4	FLOOD RISK*
3.001	Swale	103	70.158	-0.089	0.000	0.03			0.3	FLOOD RISK
2.001	SW6	102	69.993	-0.077	0.000	0.12			0.7	OK
2.002	SW5	101	69.869	-0.051	0.000	0.49			2.7	OK
2.003	SW4	101	69.344	-0.196	0.000	0.04			2.7	OK
2.004	S12	107	68.968	-0.132	0.000	0.02		221	1.4	OK
1.006	S13	113	68.967	0.117	0.000	0.07			1.4	SURCHARGED

AECOM		Page 16
Midpoint	UoR Chancellors Building	
Alencon Link	Surface water drainage	
Basingstoke, RG21 7PP	Revision 1	
Date 18/12/2020 16:15	Designed by dm	
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Summary Wizard of 720 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 Offline Controls 1 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) 18.700 Cv (Summer) 0.750
 Region England and Wales Ratio R 0.400 Cv (Winter) 0.840

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

Profile(s) Summer and Winter
 Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440
 Return Period(s) (years) 2, 5, 10, 30, 100
 Climate Change (%) 0, 0, 5, 10, 40

PN	US/MH Name	Storm Rank	Water			Flooded		Half Drain Time (mins)	Pipe Flow (l/s)	Status
			Level (m)	Depth (m)	Volume (m³)	Flow / Cap.	Overflow (l/s)			
1.000	SW9	104	70.042	-0.068	0.000	0.23			1.8	OK
1.001	SW3	104	69.636	-0.064	0.000	0.28			1.8	OK
1.002	SW2	104	69.414	-0.116	0.000	0.12			1.9	OK
1.003	SW1	105	69.199	-0.111	0.000	0.16			2.1	OK
1.004	S10	115	68.960	-0.140	0.000	0.06			2.2	OK
1.005	S11	115	68.959	-0.081	0.000	0.06			2.3	OK
2.000	SW8	104	70.254	-0.086	0.000	0.05	0.4		0.2	FLOOD RISK
3.000	Swale	104	70.172	-0.278	0.000	0.00			0.4	FLOOD RISK*
3.001	Swale	106	70.158	-0.089	0.000	0.03			0.3	FLOOD RISK
2.001	SW6	106	69.992	-0.078	0.000	0.10			0.6	OK
2.002	SW5	104	69.865	-0.055	0.000	0.43			2.3	OK
2.003	SW4	104	69.343	-0.197	0.000	0.04			2.3	OK
2.004	S12	111	68.958	-0.142	0.000	0.02		216	1.2	OK
1.006	S13	115	68.958	0.108	0.000	0.07			1.4	SURCHARGED

AECOM		Page 17
Midpoint	UoR Chancellors Building	
Alencon Link	Surface water drainage	
Basingstoke, RG21 7PP	Revision 1	
Date 18/12/2020 16:15	Designed by dm	
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Innovyze	Network 2020.1	

Summary Wizard of 960 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 Offline Controls 1 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) 18.700 Cv (Summer) 0.750
 Region England and Wales Ratio R 0.400 Cv (Winter) 0.840

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

Profile(s) Summer and Winter
 Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440
 Return Period(s) (years) 2, 5, 10, 30, 100
 Climate Change (%) 0, 0, 5, 10, 40

			Water	Surcharged	Flooded	Half Drain			Pipe	
	US/MH	Storm	Level	Depth	Volume	Flow /	Overflow	Time	Flow	
PN	Name	Rank	(m)	(m)	(m³)	Cap.	(l/s)	(mins)	(l/s)	Status
1.000	SW9	112	70.039	-0.071	0.000	0.19			1.4	OK
1.001	SW3	112	69.632	-0.068	0.000	0.22			1.4	OK
1.002	SW2	112	69.411	-0.119	0.000	0.09			1.5	OK
1.003	SW1	112	69.195	-0.115	0.000	0.13			1.7	OK
1.004	S10	118	68.940	-0.160	0.000	0.05			1.8	OK
1.005	S11	118	68.939	-0.101	0.000	0.05			1.8	OK
2.000	SW8	112	70.252	-0.088	0.000	0.04	0.3		0.2	FLOOD RISK
3.000	Swale	112	70.169	-0.281	0.000	0.00			0.3	FLOOD RISK*
3.001	Swale	112	70.157	-0.090	0.000	0.02			0.3	FLOOD RISK
2.001	SW6	112	69.990	-0.080	0.000	0.09			0.5	OK
2.002	SW5	112	69.860	-0.060	0.000	0.35			1.9	OK
2.003	SW4	112	69.340	-0.200	0.000	0.03			1.9	OK
2.004	S12	116	68.939	-0.161	0.000	0.02		200	1.2	OK
1.006	S13	118	68.938	0.088	0.000	0.07			1.4	SURCHARGE

AECOM		Page 18
Midpoint	UoR Chancellors Building	
Alencon Link	Surface water drainage	
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Innovyze	Network 2020.1	

Summary Wizard of 1440 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 Offline Controls 1 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) 18.700 Cv (Summer) 0.750
 Region England and Wales Ratio R 0.400 Cv (Winter) 0.840

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

Profile(s) Summer and Winter
 Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440
 Return Period(s) (years) 2, 5, 10, 30, 100
 Climate Change (%) 0, 0, 5, 10, 40

			Water	Surcharged	Flooded	Half Drain				Pipe
	US/MH	Storm	Level	Depth	Volume	Flow /	Overflow	Time	Flow	
PN	Name	Rank	(m)	(m)	(m³)	Cap.	(l/s)	(mins)	(l/s)	Status
1.000	SW9	117	70.034	-0.076	0.000	0.14			1.0	OK
1.001	SW3	117	69.627	-0.073	0.000	0.16			1.0	OK
1.002	SW2	117	69.406	-0.124	0.000	0.07			1.1	OK
1.003	SW1	117	69.191	-0.119	0.000	0.09			1.3	OK
1.004	S10	119	68.908	-0.192	0.000	0.04			1.3	OK
1.005	S11	119	68.904	-0.136	0.000	0.03			1.4	OK
2.000	SW8	117	70.251	-0.089	0.000	0.03	0.2		0.1	FLOOD RISK
3.000	Swale	117	70.165	-0.285	0.000	0.00			0.2	FLOOD RISK*
3.001	Swale	118	70.155	-0.092	0.000	0.02			0.2	FLOOD RISK
2.001	SW6	118	69.987	-0.083	0.000	0.07			0.4	OK
2.002	SW5	117	69.854	-0.066	0.000	0.26			1.4	OK
2.003	SW4	117	69.338	-0.202	0.000	0.02			1.4	OK
2.004	S12	119	68.904	-0.196	0.000	0.02		180	1.0	OK
1.006	S13	119	68.903	0.053	0.000	0.07			1.4	SURCHARGED

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Midpoint	UoR Chancellors Building	
Alencon Link	Surface water drainage	
Basingstoke, RG21 7PP	Revision 1	
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Innovyze	Network 2020.1	

Summary Wizard of 15 minute 5 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 Offline Controls 1 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) 18.700 Cv (Summer) 0.750
 Region England and Wales Ratio R 0.400 Cv (Winter) 0.840

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

Profile(s) Summer and Winter
 Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440
 Return Period(s) (years) 2, 5, 10, 30, 100
 Climate Change (%) 0, 0, 5, 10, 40

WARNING: The analysis maybe unstable. Please see the method of analysis help for more details.

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)	
1.000	SW9	23	70.700	0.590	0.252	1.36		10.3	FLOOD
1.001	SW3	27	69.962	0.262	0.000	1.60		10.2	FLOOD RISK
1.002	SW2	37	69.472	-0.058	0.000	0.69		11.1	OK
1.003	SW1	53	69.274	-0.036	0.000	0.92		12.6	OK
1.004	S10	87	69.058	-0.042	0.000	0.36		12.6	OK
1.005	S11	89	69.046	0.006	0.000	0.31		12.7	SURCHARGED
2.000	SW8	21	70.306	-0.034	0.000	0.42	5.8	2.3	FLOOD RISK
3.000	Swale	29	70.223	-0.227	0.000	0.06		5.6	FLOOD RISK*
3.001	Swale	35	70.191	-0.056	0.000	0.33		3.8	FLOOD RISK
2.001	SW6	23	70.303	0.233	0.000	0.79		4.4	FLOOD RISK
2.002	SW5	22	70.439	0.519	0.000	1.53		8.4	FLOOD RISK
2.003	SW4	44	69.369	-0.171	0.000	0.13		8.4	OK
2.004	S12	114	68.946	-0.154	0.000	0.02	123	1.6	OK
1.006	S13	95	69.028	0.178	0.000	0.07		1.4	SURCHARGED

AECOM		Page 20
Midpoint	UoR Chancellors Building	
Alencon Link	Surface water drainage	
Basingstoke, RG21 7PP	Revision 1	
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Innovyze	Network 2020.1	

Summary Wizard of 30 minute 5 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 Offline Controls 1 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) 18.700 Cv (Summer) 0.750
 Region England and Wales Ratio R 0.400 Cv (Winter) 0.840

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

Profile(s) Summer and Winter
 Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440
 Return Period(s) (years) 2, 5, 10, 30, 100
 Climate Change (%) 0, 0, 5, 10, 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)	
1.000	SW9	24	70.677	0.567	0.000	1.34		10.2	FLOOD RISK
1.001	SW3	29	69.951	0.251	0.000	1.58		10.1	FLOOD RISK
1.002	SW2	38	69.471	-0.059	0.000	0.68		10.9	OK
1.003	SW1	54	69.273	-0.037	0.000	0.91		12.4	OK
1.004	S10	82	69.072	-0.028	0.000	0.36		12.3	OK
1.005	S11	85	69.060	0.020	0.000	0.31		12.5	SURCHARGED
2.000	SW8	25	70.300	-0.040	0.000	0.38	5.0	2.1	FLOOD RISK
3.000	Swale	30	70.220	-0.230	0.000	0.05		5.0	FLOOD RISK*
3.001	Swale	34	70.194	-0.053	0.000	0.31		3.6	FLOOD RISK
2.001	SW6	25	70.297	0.227	0.000	0.75		4.1	FLOOD RISK
2.002	SW5	24	70.419	0.499	0.000	1.52		8.3	FLOOD RISK
2.003	SW4	45	69.369	-0.171	0.000	0.13		8.3	OK
2.004	S12	100	68.991	-0.109	0.000	0.03	154	1.9	OK
1.006	S13	88	69.042	0.192	0.000	0.07		1.4	SURCHARGED

AECOM		Page 21
Midpoint	UoR Chancellors Building	
Alencon Link	Surface water drainage	
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File Surface Water Network - addi...	Checked by	
Innovyze	Network 2020.1	

Summary Wizard of 60 minute 5 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 Offline Controls 1 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) 18.700 Cv (Summer) 0.750
 Region England and Wales Ratio R 0.400 Cv (Winter) 0.840

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

Profile(s) Summer and Winter
 Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440
 Return Period(s) (years) 2, 5, 10, 30, 100
 Climate Change (%) 0, 0, 5, 10, 40

PN	US/MH Name	Storm Rank	Water	Surcharged	Flooded	Flow / Overflow		Half Drain	Pipe	Status
			Level (m)	Depth (m)	Volume (m³)			Time (mins)	Flow (l/s)	
1.000	SW9	32	70.420	0.310	0.000	1.17			8.9	FLOOD RISK
1.001	SW3	39	69.856	0.156	0.000	1.40			8.9	FLOOD RISK
1.002	SW2	46	69.464	-0.066	0.000	0.60			9.6	OK
1.003	SW1	62	69.262	-0.048	0.000	0.80			10.9	OK
1.004	S10	84	69.065	-0.035	0.000	0.31			10.9	OK
1.005	S11	87	69.056	0.016	0.000	0.27			11.1	SURCHARGED
2.000	SW8	32	70.284	-0.056	0.000	0.30	3.2		1.7	FLOOD RISK
3.000	Swale	36	70.207	-0.243	0.000	0.03			3.1	FLOOD RISK*
3.001	Swale	39	70.187	-0.060	0.000	0.27			3.1	FLOOD RISK
2.001	SW6	31	70.276	0.206	0.000	0.67			3.7	FLOOD RISK
2.002	SW5	30	70.339	0.419	0.000	1.45			7.9	SURCHARGED
2.003	SW4	50	69.368	-0.172	0.000	0.13			7.9	OK
2.004	S12	85	69.036	-0.064	0.000	0.03		180	1.7	OK
1.006	S13	90	69.040	0.190	0.000	0.07			1.4	SURCHARGED

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Midpoint	UoR Chancellors Building	
Alencon Link	Surface water drainage	
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Summary Wizard of 120 minute 5 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 Offline Controls 1 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) 18.700 Cv (Summer) 0.750
 Region England and Wales Ratio R 0.400 Cv (Winter) 0.840

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

Profile(s) Summer and Winter
 Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440
 Return Period(s) (years) 2, 5, 10, 30, 100
 Climate Change (%) 0, 0, 5, 10, 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)	
1.000	SW9	44	70.126	0.016	0.000	0.96		7.3	SURCHARGED
1.001	SW3	52	69.748	0.048	0.000	1.15		7.3	SURCHARGED
1.002	SW2	56	69.454	-0.076	0.000	0.49		7.9	OK
1.003	SW1	70	69.248	-0.062	0.000	0.65		8.9	OK
1.004	S10	83	69.069	-0.031	0.000	0.26		8.9	OK
1.005	S11	80	69.068	0.028	0.000	0.22		9.0	SURCHARGED
2.000	SW8	43	70.271	-0.069	0.000	0.20	1.6	1.1	FLOOD RISK
3.000	Swale	47	70.193	-0.257	0.000	0.02		1.6	FLOOD RISK*
3.001	Swale	49	70.171	-0.076	0.000	0.12		1.4	FLOOD RISK
2.001	SW6	47	70.214	0.144	0.000	0.41		2.3	FLOOD RISK
2.002	SW5	47	70.207	0.287	0.000	1.33		7.3	SURCHARGED
2.003	SW4	61	69.366	-0.174	0.000	0.12		7.3	OK
2.004	S12	76	69.066	-0.034	0.000	0.03	194	1.8	OK
1.006	S13	77	69.069	0.219	0.000	0.07		1.4	SURCHARGED

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Midpoint	UoR Chancellors Building	
Alencon Link	Surface water drainage	
Basingstoke, RG21 7PP	Revision 1	
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Summary Wizard of 180 minute 5 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 Offline Controls 1 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) 18.700 Cv (Summer) 0.750
 Region England and Wales Ratio R 0.400 Cv (Winter) 0.840

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

Profile(s) Summer and Winter
 Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440
 Return Period(s) (years) 2, 5, 10, 30, 100
 Climate Change (%) 0, 0, 5, 10, 40

PN	US/MH Name	Storm Rank	Water			Flooded		Half Drain Time (mins)	Pipe Flow (l/s)	Status
			Level (m)	Depth (m)	Volume (m³)	Flow / Cap.	Overflow (l/s)			
1.000	SW9	51	70.077	-0.033	0.000	0.79			6.0	OK
1.001	SW3	60	69.676	-0.024	0.000	0.94			6.0	OK
1.002	SW2	63	69.446	-0.084	0.000	0.40			6.4	OK
1.003	SW1	77	69.238	-0.072	0.000	0.53			7.2	OK
1.004	S10	80	69.073	-0.027	0.000	0.21			7.2	OK
1.005	S11	79	69.072	0.032	0.000	0.18			7.3	SURCHARGED
2.000	SW8	51	70.266	-0.074	0.000	0.15	1.2		0.8	FLOOD RISK
3.000	Swale	57	70.189	-0.261	0.000	0.01			1.2	FLOOD RISK*
3.001	Swale	62	70.164	-0.083	0.000	0.07			0.8	FLOOD RISK
2.001	SW6	57	70.088	0.018	0.000	0.29			1.6	SURCHARGED
2.002	SW5	57	70.073	0.153	0.000	1.19			6.5	SURCHARGED
2.003	SW4	67	69.363	-0.177	0.000	0.10			6.5	OK
2.004	S12	75	69.070	-0.030	0.000	0.03		193	2.4	OK
1.006	S13	76	69.072	0.222	0.000	0.07			1.4	SURCHARGED

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Midpoint	UoR Chancellors Building	
Alencon Link	Surface water drainage	
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Summary Wizard of 240 minute 5 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 Offline Controls 1 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) 18.700 Cv (Summer) 0.750
 Region England and Wales Ratio R 0.400 Cv (Winter) 0.840

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

Profile(s) Summer and Winter
 Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440
 Return Period(s) (years) 2, 5, 10, 30, 100
 Climate Change (%) 0, 0, 5, 10, 40

PN	US/MH Name	Storm Rank	Water Level	Surcharged Depth	Flooded Volume	Flow / Overflow	Half Drain Time (mins)	Pipe Flow	Status
			(m)	(m)	(m³)	Cap. (l/s)		(l/s)	
1.000	SW9	59	70.068	-0.042	0.000	0.64		4.9	OK
1.001	SW3	65	69.666	-0.034	0.000	0.77		4.9	OK
1.002	SW2	67	69.439	-0.091	0.000	0.33		5.3	OK
1.003	SW1	79	69.229	-0.081	0.000	0.43		5.9	OK
1.004	S10	79	69.073	-0.027	0.000	0.18		6.1	OK
1.005	S11	77	69.073	0.033	0.000	0.15		6.1	SURCHARGED
2.000	SW8	59	70.264	-0.076	0.000	0.13	1.0	0.7	FLOOD RISK
3.000	Swale	61	70.186	-0.264	0.000	0.01		1.0	FLOOD RISK*
3.001	Swale	68	70.163	-0.084	0.000	0.06		0.7	FLOOD RISK
2.001	SW6	65	70.004	-0.066	0.000	0.25		1.4	OK
2.002	SW5	62	69.958	0.038	0.000	1.05		5.8	SURCHARGED
2.003	SW4	70	69.361	-0.179	0.000	0.09		5.8	OK
2.004	S12	74	69.071	-0.029	0.000	0.03	214	1.7	OK
1.006	S13	75	69.073	0.223	0.000	0.07		1.4	SURCHARGED

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Midpoint	UoR Chancellors Building	
Alencon Link	Surface water drainage	
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Summary Wizard of 360 minute 5 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 Offline Controls 1 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) 18.700 Cv (Summer) 0.750
 Region England and Wales Ratio R 0.400 Cv (Winter) 0.840

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

Profile(s) Summer and Winter
 Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440
 Return Period(s) (years) 2, 5, 10, 30, 100
 Climate Change (%) 0, 0, 5, 10, 40

PN	US/MH Name	Storm Rank	Water			Flooded		Half Drain Time (mins)	Pipe Flow (l/s)	Status
			Level (m)	Depth (m)	Volume (m³)	Flow / Cap.	Overflow (l/s)			
1.000	SW9	72	70.059	-0.051	0.000	0.48			3.6	OK
1.001	SW3	75	69.654	-0.046	0.000	0.57			3.6	OK
1.002	SW2	76	69.430	-0.100	0.000	0.24			3.9	OK
1.003	SW1	86	69.218	-0.092	0.000	0.32			4.4	OK
1.004	S10	86	69.062	-0.038	0.000	0.13			4.5	OK
1.005	S11	83	69.062	0.022	0.000	0.11			4.6	SURCHARGED
2.000	SW8	72	70.260	-0.080	0.000	0.09	0.7		0.5	FLOOD RISK
3.000	Swale	72	70.182	-0.268	0.000	0.01			0.7	FLOOD RISK*
3.001	Swale	79	70.161	-0.086	0.000	0.05			0.6	FLOOD RISK
2.001	SW6	77	70.000	-0.070	0.000	0.20			1.1	OK
2.002	SW5	74	69.891	-0.029	0.000	0.86			4.7	OK
2.003	SW4	79	69.355	-0.185	0.000	0.07			4.7	OK
2.004	S12	78	69.057	-0.043	0.000	0.03		251	1.7	OK
1.006	S13	79	69.064	0.214	0.000	0.07			1.4	SURCHARGED

AECOM		Page 26
Midpoint	UoR Chancellors Building	
Alencon Link	Surface water drainage	
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Summary Wizard of 480 minute 5 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 Offline Controls 1 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) 18.700 Cv (Summer) 0.750
 Region England and Wales Ratio R 0.400 Cv (Winter) 0.840

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

Profile(s) Summer and Winter
 Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440
 Return Period(s) (years) 2, 5, 10, 30, 100
 Climate Change (%) 0, 0, 5, 10, 40

PN	US/MH Name	Storm Rank	Water			Flooded		Half Drain Time (mins)	Pipe Flow (l/s)	Status
			Level (m)	Depth (m)	Volume (m³)	Flow / Cap.	Overflow (l/s)			
1.000	SW9	83	70.053	-0.057	0.000	0.38			2.9	OK
1.001	SW3	84	69.647	-0.053	0.000	0.46			2.9	OK
1.002	SW2	85	69.425	-0.105	0.000	0.20			3.2	OK
1.003	SW1	93	69.212	-0.098	0.000	0.26			3.6	OK
1.004	S10	88	69.055	-0.045	0.000	0.11			3.6	OK
1.005	S11	86	69.057	0.017	0.000	0.09			3.7	SURCHARGED
2.000	SW8	83	70.258	-0.082	0.000	0.08	0.6		0.4	FLOOD RISK
3.000	Swale	83	70.180	-0.270	0.000	0.01			0.6	FLOOD RISK*
3.001	Swale	86	70.160	-0.087	0.000	0.04			0.5	FLOOD RISK
2.001	SW6	84	69.997	-0.073	0.000	0.17			0.9	OK
2.002	SW5	83	69.882	-0.038	0.000	0.70			3.8	OK
2.003	SW4	85	69.351	-0.189	0.000	0.06			3.8	OK
2.004	S12	79	69.052	-0.048	0.000	0.02		273	1.7	OK
1.006	S13	82	69.059	0.209	0.000	0.07			1.4	SURCHARGED

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Midpoint	UoR Chancellors Building	
Alencon Link	Surface water drainage	
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Summary Wizard of 600 minute 5 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 Offline Controls 1 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) 18.700 Cv (Summer) 0.750
 Region England and Wales Ratio R 0.400 Cv (Winter) 0.840

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

Profile(s) Summer and Winter
 Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440
 Return Period(s) (years) 2, 5, 10, 30, 100
 Climate Change (%) 0, 0, 5, 10, 40

PN	US/MH Name	Storm Rank	Water			Flooded		Half Drain Time (mins)	Pipe Flow (l/s)	Status
			Level (m)	Depth (m)	Volume (m³)	Flow / Cap.	Overflow (l/s)			
1.000	SW9	91	70.049	-0.061	0.000	0.32			2.5	OK
1.001	SW3	92	69.643	-0.057	0.000	0.39			2.5	OK
1.002	SW2	92	69.421	-0.109	0.000	0.17			2.7	OK
1.003	SW1	97	69.207	-0.103	0.000	0.22			3.0	OK
1.004	S10	91	69.041	-0.059	0.000	0.09			3.1	OK
1.005	S11	91	69.041	0.001	0.000	0.08			3.1	SURCHARGED
2.000	SW8	91	70.256	-0.084	0.000	0.06	0.5		0.3	FLOOD RISK
3.000	Swale	91	70.177	-0.273	0.000	0.01			0.5	FLOOD RISK*
3.001	Swale	92	70.159	-0.088	0.000	0.04			0.4	FLOOD RISK
2.001	SW6	92	69.995	-0.075	0.000	0.15			0.8	OK
2.002	SW5	91	69.876	-0.044	0.000	0.60			3.3	OK
2.003	SW4	92	69.348	-0.192	0.000	0.05			3.3	OK
2.004	S12	84	69.036	-0.064	0.000	0.03		272	1.9	OK
1.006	S13	86	69.043	0.193	0.000	0.07			1.4	SURCHARGED

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Midpoint	UoR Chancellors Building	
Alencon Link	Surface water drainage	
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Summary Wizard of 720 minute 5 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 Offline Controls 1 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) 18.700 Cv (Summer) 0.750
 Region England and Wales Ratio R 0.400 Cv (Winter) 0.840

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

Profile(s) Summer and Winter
 Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440
 Return Period(s) (years) 2, 5, 10, 30, 100
 Climate Change (%) 0, 0, 5, 10, 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)	
1.000	SW9	95	70.046	-0.064	0.000	0.28		2.1	OK
1.001	SW3	95	69.640	-0.060	0.000	0.34		2.1	OK
1.002	SW2	95	69.418	-0.112	0.000	0.14		2.3	OK
1.003	SW1	99	69.204	-0.106	0.000	0.19		2.6	OK
1.004	S10	97	69.027	-0.073	0.000	0.08		2.7	OK
1.005	S11	95	69.028	-0.012	0.000	0.07		2.7	OK
2.000	SW8	95	70.255	-0.085	0.000	0.06	0.4	0.3	FLOOD RISK
3.000	Swale	95	70.175	-0.275	0.000	0.00		0.4	FLOOD RISK*
3.001	Swale	100	70.159	-0.088	0.000	0.03		0.4	FLOOD RISK
2.001	SW6	98	69.994	-0.076	0.000	0.13		0.7	OK
2.002	SW5	95	69.871	-0.049	0.000	0.52		2.9	OK
2.003	SW4	95	69.346	-0.194	0.000	0.05		2.9	OK
2.004	S12	89	69.024	-0.076	0.000	0.02	282	1.7	OK
1.006	S13	94	69.031	0.181	0.000	0.07		1.4	SURCHARGED

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Midpoint	UoR Chancellors Building	
Alencon Link	Surface water drainage	
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Innovyze	Network 2020.1	

Summary Wizard of 960 minute 5 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 Offline Controls 1 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) 18.700 Cv (Summer) 0.750
 Region England and Wales Ratio R 0.400 Cv (Winter) 0.840

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

Profile(s) Summer and Winter
 Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440
 Return Period(s) (years) 2, 5, 10, 30, 100
 Climate Change (%) 0, 0, 5, 10, 40

PN	US/MH Name	Storm Rank	Water			Flow / Overflow Cap.	Half Drain Time (mins)	Pipe Flow (l/s)	Status
			Level (m)	Depth (m)	Volume (m³)				
1.000	SW9	105	70.042	-0.068	0.000	0.23		1.7	OK
1.001	SW3	105	69.635	-0.065	0.000	0.27		1.7	OK
1.002	SW2	105	69.414	-0.116	0.000	0.12		1.9	OK
1.003	SW1	106	69.199	-0.111	0.000	0.15		2.1	OK
1.004	S10	105	69.005	-0.095	0.000	0.06		2.2	OK
1.005	S11	103	69.004	-0.036	0.000	0.05		2.2	OK
2.000	SW8	105	70.253	-0.087	0.000	0.04	0.4	0.2	FLOOD RISK
3.000	Swale	105	70.172	-0.278	0.000	0.00		0.4	FLOOD RISK*
3.001	Swale	105	70.158	-0.089	0.000	0.03		0.3	FLOOD RISK
2.001	SW6	105	69.992	-0.078	0.000	0.11		0.6	OK
2.002	SW5	105	69.865	-0.055	0.000	0.42		2.3	OK
2.003	SW4	105	69.343	-0.197	0.000	0.04		2.3	OK
2.004	S12	96	69.003	-0.097	0.000	0.02		269	OK
1.006	S13	101	69.004	0.154	0.000	0.07		1.4	SURCHARGED

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Midpoint	UoR Chancellors Building	
Alencon Link	Surface water drainage	
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Summary Wizard of 1440 minute 5 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 Offline Controls 1 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) 18.700 Cv (Summer) 0.750
 Region England and Wales Ratio R 0.400 Cv (Winter) 0.840

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

Profile(s) Summer and Winter
 Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440
 Return Period(s) (years) 2, 5, 10, 30, 100
 Climate Change (%) 0, 0, 5, 10, 40

PN	US/MH Name	Storm Rank	Water			Flooded		Half Drain Time (mins)	Pipe Flow (l/s)	Status
			Level (m)	Depth (m)	Volume (m³)	Flow / Cap.	Overflow (l/s)			
1.000	SW9	113	70.037	-0.073	0.000	0.17			1.3	OK
1.001	SW3	113	69.630	-0.070	0.000	0.20			1.3	OK
1.002	SW2	113	69.409	-0.121	0.000	0.09			1.4	OK
1.003	SW1	113	69.193	-0.117	0.000	0.11			1.5	OK
1.004	S10	114	68.963	-0.137	0.000	0.05			1.6	OK
1.005	S11	114	68.963	-0.077	0.000	0.04			1.6	OK
2.000	SW8	113	70.252	-0.088	0.000	0.03	0.3		0.2	FLOOD RISK
3.000	Swale	114	70.168	-0.282	0.000	0.00			0.3	FLOOD RISK*
3.001	Swale	115	70.157	-0.090	0.000	0.02			0.2	FLOOD RISK
2.001	SW6	115	69.989	-0.081	0.000	0.08			0.4	OK
2.002	SW5	113	69.858	-0.062	0.000	0.31			1.7	OK
2.003	SW4	113	69.339	-0.201	0.000	0.03			1.7	OK
2.004	S12	110	68.962	-0.138	0.000	0.02		244	1.2	OK
1.006	S13	114	68.962	0.112	0.000	0.07			1.4	SURCHARGED

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Midpoint	UoR Chancellors Building	
Alencon Link	Surface water drainage	
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Summary Wizard of 15 minute 10 year Summer I+5% 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 Offline Controls 1 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) 18.700 Cv (Summer) 0.750
 Region England and Wales Ratio R 0.400 Cv (Winter) 0.840

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

Profile(s) Summer and Winter
 Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440
 Return Period(s) (years) 2, 5, 10, 30, 100
 Climate Change (%) 0, 0, 5, 10, 40

WARNING: The analysis maybe unstable. Please see the method of analysis help for more details.

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)	
1.000	SW9	18	70.701	0.591	1.393	1.36		10.4	FLOOD
1.001	SW3	21	69.963	0.263	0.000	1.60		10.2	FLOOD RISK
1.002	SW2	30	69.476	-0.054	0.000	0.72		11.6	OK
1.003	SW1	44	69.313	0.003	0.000	1.00		13.7	SURCHARGED
1.004	S10	78	69.075	-0.025	0.000	0.39		13.6	OK
1.005	S11	81	69.063	0.023	0.000	0.34		13.9	SURCHARGED
2.000	SW8	14	70.338	-0.002	0.000	0.34	7.9	1.9	FLOOD RISK
3.000	Swale	21	70.240	-0.210	0.000	0.08		7.8	FLOOD RISK*
3.001	Swale	28	70.213	-0.034	0.000	0.47		5.5	FLOOD RISK
2.001	SW6	15	70.335	0.265	0.000	1.01		5.6	FLOOD RISK
2.002	SW5	13	70.660	0.740	0.482	1.72		9.4	FLOOD
2.003	SW4	38	69.373	-0.167	0.000	0.15		9.4	OK
2.004	S12	103	68.981	-0.119	0.000	0.02	148	1.6	OK
1.006	S13	87	69.042	0.192	0.000	0.07		1.4	SURCHARGED

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Midpoint	UoR Chancellors Building	
Alencon Link	Surface water drainage	
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Summary Wizard of 30 minute 10 year Summer I+5% 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 Offline Controls 1 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) 18.700 Cv (Summer) 0.750
 Region England and Wales Ratio R 0.400 Cv (Winter) 0.840

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

Profile(s) Summer and Winter
 Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440
 Return Period(s) (years) 2, 5, 10, 30, 100
 Climate Change (%) 0, 0, 5, 10, 40

WARNING: The analysis maybe unstable. Please see the method of analysis help for more details.

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)	
1.000	SW9	21	70.701	0.591	1.069	1.36		10.4	FLOOD
1.001	SW3	23	69.963	0.263	0.000	1.60		10.2	FLOOD RISK
1.002	SW2	32	69.475	-0.055	0.000	0.71		11.4	OK
1.003	SW1	49	69.286	-0.024	0.000	0.99		13.5	OK
1.004	S10	72	69.095	-0.005	0.000	0.38		13.2	OK
1.005	S11	73	69.083	0.043	0.000	0.34		13.6	SURCHARGED
2.000	SW8	17	70.317	-0.023	0.000	0.32	7.3	1.7	FLOOD RISK
3.000	Swale	22	70.236	-0.214	0.000	0.08		7.2	FLOOD RISK*
3.001	Swale	25	70.217	-0.030	0.000	0.44		5.2	FLOOD RISK
2.001	SW6	17	70.331	0.261	0.000	0.98		5.4	FLOOD RISK
2.002	SW5	15	70.660	0.740	0.075	1.72		9.4	FLOOD
2.003	SW4	39	69.373	-0.167	0.000	0.15		9.4	OK
2.004	S12	82	69.040	-0.060	0.000	0.03	186	1.7	OK
1.006	S13	80	69.063	0.213	0.000	0.07		1.4	SURCHARGED

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Midpoint	UoR Chancellors Building	
Alencon Link	Surface water drainage	
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Summary Wizard of 60 minute 10 year Summer I+5% 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 Offline Controls 1 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) 18.700 Cv (Summer) 0.750
 Region England and Wales Ratio R 0.400 Cv (Winter) 0.840

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

Profile(s) Summer and Winter
 Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440
 Return Period(s) (years) 2, 5, 10, 30, 100
 Climate Change (%) 0, 0, 5, 10, 40

			Water	Surcharged	Flooded	Half Drain			Pipe	
	US/MH	Storm	Level	Depth	Volume	Flow /	Overflow	Time	Flow	
PN	Name	Rank	(m)	(m)	(m³)	Cap.	(l/s)	(mins)	(l/s)	Status
1.000	SW9	25	70.672	0.562	0.000	1.33			10.1	FLOOD RISK
1.001	SW3	30	69.950	0.250	0.000	1.58			10.1	FLOOD RISK
1.002	SW2	40	69.470	-0.060	0.000	0.67			10.8	OK
1.003	SW1	56	69.271	-0.039	0.000	0.90			12.2	OK
1.004	S10	71	69.110	0.010	0.000	0.35			12.1	SURCHARGED
1.005	S11	71	69.102	0.062	0.000	0.31			12.4	SURCHARGED
2.000	SW8	26	70.300	-0.040	0.000	0.27	5.2		1.5	FLOOD RISK
3.000	Swale	28	70.224	-0.226	0.000	0.05			5.1	FLOOD RISK*
3.001	Swale	29	70.211	-0.036	0.000	0.35			4.1	FLOOD RISK
2.001	SW6	22	70.304	0.234	0.000	0.81			4.5	FLOOD RISK
2.002	SW5	21	70.466	0.546	0.000	1.56			8.5	FLOOD RISK
2.003	SW4	43	69.370	-0.170	0.000	0.13			8.5	OK
2.004	S12	68	69.101	0.001	0.000	0.03		235	1.7	SURCHARGED
1.006	S13	68	69.105	0.255	0.000	0.07			1.4	SURCHARGED

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Midpoint	UoR Chancellors Building	
Alencon Link	Surface water drainage	
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Summary Wizard of 120 minute 10 year Summer I+5% 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 Offline Controls 1 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) 18.700 Cv (Summer) 0.750
 Region England and Wales Ratio R 0.400 Cv (Winter) 0.840

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

Profile(s) Summer and Winter
 Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440
 Return Period(s) (years) 2, 5, 10, 30, 100
 Climate Change (%) 0, 0, 5, 10, 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)	
1.000	SW9	39	70.276	0.166	0.000	1.07		8.2	SURCHARGED
1.001	SW3	48	69.804	0.104	0.000	1.28		8.2	FLOOD RISK
1.002	SW2	53	69.459	-0.071	0.000	0.55		8.8	OK
1.003	SW1	68	69.255	-0.055	0.000	0.73		9.9	OK
1.004	S10	56	69.240	0.140	0.000	0.29		9.9	SURCHARGED
1.005	S11	56	69.350	0.310	0.000	0.25		10.2	SURCHARGED
2.000	SW8	38	70.279	-0.061	0.000	0.23	2.6	1.3	FLOOD RISK
3.000	Swale	38	70.204	-0.246	0.000	0.03		2.6	FLOOD RISK*
3.001	Swale	36	70.189	-0.058	0.000	0.26		3.1	FLOOD RISK
2.001	SW6	38	70.268	0.198	0.000	0.67		3.7	FLOOD RISK
2.002	SW5	37	70.311	0.391	0.000	1.43		7.8	SURCHARGED
2.003	SW4	54	69.367	-0.173	0.000	0.12		7.8	OK
2.004	S12	56	69.154	0.054	0.000	0.13	255	8.5	SURCHARGED
1.006	S13	56	69.451	0.601	0.000	0.07		1.4	SURCHARGED

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Midpoint	UoR Chancellors Building	
Alencon Link	Surface water drainage	
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Summary Wizard of 180 minute 10 year Summer I+5% 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 Offline Controls 1 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) 18.700 Cv (Summer) 0.750
 Region England and Wales Ratio R 0.400 Cv (Winter) 0.840

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

Profile(s) Summer and Winter
 Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440
 Return Period(s) (years) 2, 5, 10, 30, 100
 Climate Change (%) 0, 0, 5, 10, 40

			Water	Surcharged	Flooded				Half Drain	Pipe	
	US/MH	Storm	Level	Depth	Volume	Flow /	Overflow		Time	Flow	
PN	Name	Rank	(m)	(m)	(m³)	Cap.	(l/s)		(mins)	(l/s)	Status
1.000	SW9	47	70.097	-0.013	0.000	0.94				7.1	OK
1.001	SW3	55	69.738	0.038	0.000	1.12				7.1	SURCHARGED
1.002	SW2	58	69.453	-0.077	0.000	0.48				7.7	OK
1.003	SW1	72	69.247	-0.063	0.000	0.63				8.7	OK
1.004	S10	54	69.277	0.177	0.000	0.25				8.6	SURCHARGED
1.005	S11	54	69.364	0.324	0.000	0.22				8.8	SURCHARGED
2.000	SW8	47	70.270	-0.070	0.000	0.19	1.5			1.0	FLOOD RISK
3.000	Swale	48	70.192	-0.258	0.000	0.02				1.5	FLOOD RISK*
3.001	Swale	46	70.173	-0.074	0.000	0.14				1.6	FLOOD RISK
2.001	SW6	46	70.217	0.147	0.000	0.44				2.5	FLOOD RISK
2.002	SW5	46	70.210	0.290	0.000	1.33				7.3	SURCHARGED
2.003	SW4	60	69.366	-0.174	0.000	0.12				7.3	OK
2.004	S12	54	69.167	0.067	0.000	0.14			239	9.3	SURCHARGED
1.006	S13	54	69.471	0.621	0.000	0.07				1.4	SURCHARGE

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Midpoint	UoR Chancellors Building	
Alencon Link	Surface water drainage	
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Summary Wizard of 240 minute 10 year Summer I+5% 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 Offline Controls 1 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) 18.700 Cv (Summer) 0.750
 Region England and Wales Ratio R 0.400 Cv (Winter) 0.840

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

Profile(s) Summer and Winter
 Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440
 Return Period(s) (years) 2, 5, 10, 30, 100
 Climate Change (%) 0, 0, 5, 10, 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)	
1.000	SW9	52	70.077	-0.033	0.000	0.79		6.0	OK
1.001	SW3	59	69.676	-0.024	0.000	0.94		6.0	OK
1.002	SW2	62	69.446	-0.084	0.000	0.40		6.5	OK
1.003	SW1	76	69.238	-0.072	0.000	0.53		7.3	OK
1.004	S10	53	69.280	0.180	0.000	0.21		7.2	SURCHARGED
1.005	S11	53	69.365	0.325	0.000	0.18		7.4	SURCHARGED
2.000	SW8	52	70.266	-0.074	0.000	0.15	1.2	0.8	FLOOD RISK
3.000	Swale	54	70.189	-0.261	0.000	0.01		1.2	FLOOD RISK*
3.001	Swale	57	70.165	-0.082	0.000	0.07		0.9	FLOOD RISK
2.001	SW6	55	70.127	0.057	0.000	0.33		1.8	SURCHARGED
2.002	SW5	55	70.110	0.190	0.000	1.23		6.7	SURCHARGED
2.003	SW4	65	69.364	-0.176	0.000	0.11		6.7	OK
2.004	S12	53	69.170	0.070	0.000	0.15	254	9.8	SURCHARGED
1.006	S13	53	69.472	0.622	0.000	0.07		1.4	SURCHARGED

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Midpoint	UoR Chancellors Building	
Alencon Link	Surface water drainage	
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Summary Wizard of 360 minute 10 year Summer I+5% 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 Offline Controls 1 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) 18.700 Cv (Summer) 0.750
 Region England and Wales Ratio R 0.400 Cv (Winter) 0.840

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

Profile(s) Summer and Winter
 Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440
 Return Period(s) (years) 2, 5, 10, 30, 100
 Climate Change (%) 0, 0, 5, 10, 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)	
1.000	SW9	65	70.065	-0.045	0.000	0.58		4.4	OK
1.001	SW3	69	69.662	-0.038	0.000	0.70		4.4	OK
1.002	SW2	71	69.436	-0.094	0.000	0.30		4.8	OK
1.003	SW1	82	69.225	-0.085	0.000	0.40		5.4	OK
1.004	S10	55	69.258	0.158	0.000	0.17		5.7	SURCHARGED
1.005	S11	55	69.350	0.310	0.000	0.14		5.5	SURCHARGED
2.000	SW8	65	70.262	-0.078	0.000	0.11	0.9	0.6	FLOOD RISK
3.000	Swale	67	70.185	-0.265	0.000	0.01		0.9	FLOOD RISK*
3.001	Swale	65	70.163	-0.084	0.000	0.06		0.7	FLOOD RISK
2.001	SW6	67	70.004	-0.066	0.000	0.25		1.4	OK
2.002	SW5	69	69.927	0.007	0.000	1.02		5.5	SURCHARGED
2.003	SW4	75	69.360	-0.180	0.000	0.09		5.5	OK
2.004	S12	55	69.158	0.058	0.000	0.14	275	9.1	SURCHARGED
1.006	S13	55	69.455	0.605	0.000	0.07		1.4	SURCHARGED

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Midpoint	UoR Chancellors Building	
Alencon Link	Surface water drainage	
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Summary Wizard of 480 minute 10 year Summer I+5% 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 Offline Controls 1 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) 18.700 Cv (Summer) 0.750
 Region England and Wales Ratio R 0.400 Cv (Winter) 0.840

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

Profile(s) Summer and Winter
 Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440
 Return Period(s) (years) 2, 5, 10, 30, 100
 Climate Change (%) 0, 0, 5, 10, 40

			Water	Surcharged	Flooded	Half Drain			Pipe	
	US/MH	Storm	Level	Depth	Volume	Flow /	Overflow	Time	Flow	
PN	Name	Rank	(m)	(m)	(m³)	Cap.	(l/s)	(mins)	(l/s)	Status
1.000	SW9	73	70.058	-0.052	0.000	0.47			3.6	OK
1.001	SW3	76	69.653	-0.047	0.000	0.56			3.6	OK
1.002	SW2	77	69.429	-0.101	0.000	0.24			3.8	OK
1.003	SW1	87	69.218	-0.092	0.000	0.32			4.3	OK
1.004	S10	57	69.240	0.140	0.000	0.16			5.5	SURCHARGED
1.005	S11	57	69.330	0.290	0.000	0.11			4.5	SURCHARGED
2.000	SW8	73	70.260	-0.080	0.000	0.09	0.7		0.5	FLOOD RISK
3.000	Swale	73	70.182	-0.268	0.000	0.01			0.7	FLOOD RISK*
3.001	Swale	76	70.162	-0.085	0.000	0.05			0.6	FLOOD RISK
2.001	SW6	76	70.001	-0.069	0.000	0.21			1.1	OK
2.002	SW5	73	69.891	-0.029	0.000	0.86			4.7	OK
2.003	SW4	78	69.355	-0.185	0.000	0.07			4.7	OK
2.004	S12	58	69.147	0.047	0.000	0.13		315	8.8	SURCHARGED
1.006	S13	57	69.424	0.574	0.000	0.07			1.4	SURCHARGED

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Midpoint	UoR Chancellors Building	
Alencon Link	Surface water drainage	
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Summary Wizard of 600 minute 10 year Summer I+5% 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 Offline Controls 1 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) 18.700 Cv (Summer) 0.750
 Region England and Wales Ratio R 0.400 Cv (Winter) 0.840

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

Profile(s) Summer and Winter
 Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440
 Return Period(s) (years) 2, 5, 10, 30, 100
 Climate Change (%) 0, 0, 5, 10, 40

PN	US/MH Name	Storm Rank	Water Surcharged			Flow / Overflow Cap.	Half Drain Time (mins)	Pipe Flow (l/s)	Status
			Level (m)	Depth (m)	Volume (m³)				
1.000	SW9	81	70.053	-0.057	0.000	0.39		3.0	OK
1.001	SW3	82	69.648	-0.052	0.000	0.47		3.0	OK
1.002	SW2	83	69.425	-0.105	0.000	0.20		3.2	OK
1.003	SW1	91	69.213	-0.097	0.000	0.27		3.7	OK
1.004	S10	61	69.213	0.113	0.000	0.15		5.0	SURCHARGED
1.005	S11	60	69.304	0.264	0.000	0.09		3.8	SURCHARGED
2.000	SW8	81	70.258	-0.082	0.000	0.08	0.6	0.4	FLOOD RISK
3.000	Swale	81	70.181	-0.269	0.000	0.01		0.6	FLOOD RISK*
3.001	Swale	82	70.161	-0.086	0.000	0.05		0.5	FLOOD RISK
2.001	SW6	82	69.999	-0.071	0.000	0.18		1.0	OK
2.002	SW5	81	69.884	-0.036	0.000	0.73		4.0	OK
2.003	SW4	84	69.352	-0.188	0.000	0.06		4.0	OK
2.004	S12	61	69.134	0.034	0.000	0.12		356	SURCHARGED
1.006	S13	60	69.392	0.542	0.000	0.07		1.4	SURCHARGED

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Midpoint	UoR Chancellors Building	
Alencon Link	Surface water drainage	
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Summary Wizard of 720 minute 10 year Summer I+5% 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 Offline Controls 1 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) 18.700 Cv (Summer) 0.750
 Region England and Wales Ratio R 0.400 Cv (Winter) 0.840

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

Profile(s) Summer and Winter
 Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440
 Return Period(s) (years) 2, 5, 10, 30, 100
 Climate Change (%) 0, 0, 5, 10, 40

PN	US/MH Name	Storm Rank	Water	Surcharged	Flooded	Flow / Overflow		Half Drain	Pipe	Status
			Level (m)	Depth (m)	Volume (m³)			Time (mins)	Flow (l/s)	
1.000	SW9	88	70.050	-0.060	0.000	0.34			2.6	OK
1.001	SW3	89	69.644	-0.056	0.000	0.41			2.6	OK
1.002	SW2	89	69.422	-0.108	0.000	0.18			2.8	OK
1.003	SW1	96	69.209	-0.101	0.000	0.23			3.2	OK
1.004	S10	65	69.179	0.079	0.000	0.13			4.4	SURCHARGED
1.005	S11	64	69.268	0.228	0.000	0.08			3.3	SURCHARGED
2.000	SW8	88	70.257	-0.083	0.000	0.07	0.5		0.4	FLOOD RISK
3.000	Swale	88	70.178	-0.272	0.000	0.01			0.5	FLOOD RISK*
3.001	Swale	90	70.160	-0.087	0.000	0.04			0.5	FLOOD RISK
2.001	SW6	89	69.997	-0.073	0.000	0.16			0.9	OK
2.002	SW5	88	69.878	-0.042	0.000	0.64			3.5	OK
2.003	SW4	90	69.349	-0.191	0.000	0.06			3.5	OK
2.004	S12	64	69.118	0.018	0.000	0.11		355	7.6	SURCHARGED
1.006	S13	64	69.343	0.493	0.000	0.07			1.4	SURCHARGED

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Midpoint	UoR Chancellors Building	
Alencon Link	Surface water drainage	
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Summary Wizard of 960 minute 10 year Summer I+5% 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 Offline Controls 1 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) 18.700 Cv (Summer) 0.750
 Region England and Wales Ratio R 0.400 Cv (Winter) 0.840

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

Profile(s) Summer and Winter
 Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440
 Return Period(s) (years) 2, 5, 10, 30, 100
 Climate Change (%) 0, 0, 5, 10, 40

PN	US/MH Name	Storm Rank	Water	Surcharged	Flooded	Flow / Overflow		Half Drain	Pipe	Status
			Level (m)	Depth (m)	Volume (m³)			Time (mins)	Flow (l/s)	
1.000	SW9	98	70.046	-0.064	0.000	0.27			2.1	OK
1.001	SW3	98	69.639	-0.061	0.000	0.33			2.1	OK
1.002	SW2	98	69.417	-0.113	0.000	0.14			2.3	OK
1.003	SW1	102	69.204	-0.106	0.000	0.19			2.6	OK
1.004	S10	68	69.130	0.030	0.000	0.09			3.1	SURCHARGED
1.005	S11	67	69.208	0.168	0.000	0.07			2.7	SURCHARGED
2.000	SW8	98	70.255	-0.085	0.000	0.05	0.4		0.3	FLOOD RISK
3.000	Swale	98	70.175	-0.275	0.000	0.00			0.4	FLOOD RISK*
3.001	Swale	98	70.159	-0.088	0.000	0.03			0.4	FLOOD RISK
2.001	SW6	96	69.994	-0.076	0.000	0.13			0.7	OK
2.002	SW5	98	69.871	-0.049	0.000	0.52			2.8	OK
2.003	SW4	98	69.345	-0.195	0.000	0.04			2.8	OK
2.004	S12	67	69.101	0.001	0.000	0.11		360	7.3	SURCHARGED
1.006	S13	67	69.248	0.398	0.000	0.07			1.4	SURCHARGED

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Midpoint	UoR Chancellors Building	
Alencon Link	Surface water drainage	
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Summary Wizard of 1440 minute 10 year Summer I+5% 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 Offline Controls 1 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) 18.700 Cv (Summer) 0.750
 Region England and Wales Ratio R 0.400 Cv (Winter) 0.840

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

Profile(s) Summer and Winter
 Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440
 Return Period(s) (years) 2, 5, 10, 30, 100
 Climate Change (%) 0, 0, 5, 10, 40

PN	US/MH Name	Storm Rank	Water			Flow / Overflow Cap.	Half Drain Time (mins)	Pipe Flow (l/s)	Status
			Level (m)	Depth (m)	Volume (m³)				
1.000	SW9	108	70.040	-0.070	0.000	0.20		1.5	OK
1.001	SW3	108	69.633	-0.067	0.000	0.24		1.5	OK
1.002	SW2	108	69.412	-0.118	0.000	0.10		1.7	OK
1.003	SW1	109	69.197	-0.113	0.000	0.14		1.9	OK
1.004	S10	90	69.043	-0.057	0.000	0.06		1.9	OK
1.005	S11	90	69.044	0.004	0.000	0.05		2.0	SURCHARGED
2.000	SW8	108	70.253	-0.087	0.000	0.04	0.3	0.2	FLOOD RISK
3.000	Swale	108	70.170	-0.280	0.000	0.00		0.3	FLOOD RISK*
3.001	Swale	109	70.158	-0.089	0.000	0.03		0.3	FLOOD RISK
2.001	SW6	109	69.991	-0.079	0.000	0.10		0.5	OK
2.002	SW5	108	69.863	-0.057	0.000	0.38		2.1	OK
2.003	SW4	108	69.341	-0.199	0.000	0.03		2.1	OK
2.004	S12	83	69.039	-0.061	0.000	0.03		317	OK
1.006	S13	85	69.046	0.196	0.000	0.07		1.4	SURCHARGED

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Midpoint	UoR Chancellors Building	
Alencon Link	Surface water drainage	
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Summary Wizard of 15 minute 30 year Summer I+10% 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 Offline Controls 1 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) 18.700 Cv (Summer) 0.750
 Region England and Wales Ratio R 0.400 Cv (Winter) 0.840

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

Profile(s) Summer and Winter
 Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440
 Return Period(s) (years) 2, 5, 10, 30, 100
 Climate Change (%) 0, 0, 5, 10, 40

WARNING: The analysis maybe unstable. Please see the method of analysis help for more details.

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)	
1.000	SW9	11	70.704	0.594	3.651	1.36		10.4	FLOOD
1.001	SW3	18	69.963	0.263	0.000	1.61		10.2	FLOOD RISK
1.002	SW2	26	69.505	-0.025	0.000	0.76		12.3	OK
1.003	SW1	33	69.376	0.066	0.000	1.13		15.4	SURCHARGED
1.004	S10	69	69.128	0.028	0.000	0.43		14.7	SURCHARGED
1.005	S11	69	69.115	0.075	0.000	0.38		15.3	SURCHARGED
2.000	SW8	8	70.377	0.037	0.000	0.28	9.7	1.5	FLOOD RISK
3.000	Swale	19	70.247	-0.203	0.000	0.10		9.6	FLOOD RISK*
3.001	Swale	19	70.246	-0.001	0.000	0.49		5.8	FLOOD RISK
2.001	SW6	10	70.358	0.288	0.000	1.06		5.9	FLOOD RISK
2.002	SW5	8	70.662	0.742	2.241	1.72		9.4	FLOOD
2.003	SW4	35	69.373	-0.167	0.000	0.15		9.4	OK
2.004	S12	81	69.049	-0.051	0.000	0.03	196	1.8	OK
1.006	S13	71	69.092	0.242	0.000	0.07		1.4	SURCHARGED

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Midpoint	UoR Chancellors Building	
Alencon Link	Surface water drainage	
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Summary Wizard of 30 minute 30 year Summer I+10% 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 Offline Controls 1 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) 18.700 Cv (Summer) 0.750
 Region England and Wales Ratio R 0.400 Cv (Winter) 0.840

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

Profile(s) Summer and Winter
 Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440
 Return Period(s) (years) 2, 5, 10, 30, 100
 Climate Change (%) 0, 0, 5, 10, 40

WARNING: The analysis maybe unstable. Please see the method of analysis help for more details.

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)	
1.000	SW9	12	70.704	0.594	3.570	1.37		10.4	FLOOD
1.001	SW3	19	69.963	0.263	0.000	1.61		10.2	FLOOD RISK
1.002	SW2	28	69.487	-0.043	0.000	0.76		12.3	OK
1.003	SW1	35	69.368	0.058	0.000	1.09		14.9	SURCHARGED
1.004	S10	60	69.215	0.115	0.000	0.42		14.6	SURCHARGED
1.005	S11	58	69.317	0.277	0.000	0.38		15.2	SURCHARGED
2.000	SW8	11	70.354	0.014	0.000	0.31	8.8	1.7	FLOOD RISK
3.000	Swale	16	70.258	-0.192	0.000	0.09		8.6	FLOOD RISK*
3.001	Swale	16	70.257	0.010	0.000	0.49		5.8	FLOOD RISK
2.001	SW6	11	70.346	0.276	0.000	1.06		5.9	FLOOD RISK
2.002	SW5	9	70.662	0.742	1.739	1.72		9.4	FLOOD
2.003	SW4	36	69.373	-0.167	0.000	0.15		9.4	OK
2.004	S12	59	69.138	0.038	0.000	0.13	258	9.0	SURCHARGED
1.006	S13	58	69.405	0.555	0.000	0.07		1.4	SURCHARGED

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Midpoint	UoR Chancellors Building	
Alencon Link	Surface water drainage	
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Summary Wizard of 60 minute 30 year Summer I+10% 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 Offline Controls 1 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) 18.700 Cv (Summer) 0.750
 Region England and Wales Ratio R 0.400 Cv (Winter) 0.840

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

Profile(s) Summer and Winter
 Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440
 Return Period(s) (years) 2, 5, 10, 30, 100
 Climate Change (%) 0, 0, 5, 10, 40

WARNING: The analysis maybe unstable. Please see the method of analysis help for more details.

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)	
1.000	SW9	14	70.702	0.592	2.177	1.36		10.4	FLOOD
1.001	SW3	22	69.963	0.263	0.000	1.60		10.2	FLOOD RISK
1.002	SW2	31	69.476	-0.054	0.000	0.73		11.7	OK
1.003	SW1	38	69.342	0.032	0.000	0.99		13.5	SURCHARGED
1.004	S10	46	69.378	0.278	0.000	0.41		14.1	SURCHARGED
1.005	S11	45	69.423	0.383	0.000	0.36		14.6	SURCHARGED
2.000	SW8	18	70.315	-0.025	0.000	0.28	7.1	1.5	FLOOD RISK
3.000	Swale	17	70.255	-0.195	0.000	0.07		7.0	FLOOD RISK*
3.001	Swale	17	70.254	0.007	0.000	0.48		5.6	FLOOD RISK
2.001	SW6	16	70.333	0.263	0.000	1.03		5.7	FLOOD RISK
2.002	SW5	14	70.660	0.740	0.159	1.72		9.4	FLOOD
2.003	SW4	34	69.373	-0.167	0.000	0.15		9.4	OK
2.004	S12	46	69.225	0.125	0.000	0.16	303	10.7	SURCHARGED
1.006	S13	45	69.552	0.702	0.000	0.07		1.4	SURCHARGED

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Midpoint	UoR Chancellors Building	
Alencon Link	Surface water drainage	
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Summary Wizard of 120 minute 30 year Summer I+10% 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 Offline Controls 1 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) 18.700 Cv (Summer) 0.750
 Region England and Wales Ratio R 0.400 Cv (Winter) 0.840

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

Profile(s) Summer and Winter
 Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440
 Return Period(s) (years) 2, 5, 10, 30, 100
 Climate Change (%) 0, 0, 5, 10, 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)	
1.000	SW9	27	70.646	0.536	0.000	1.31		10.0	FLOOD RISK
1.001	SW3	32	69.941	0.241	0.000	1.56		10.0	FLOOD RISK
1.002	SW2	41	69.470	-0.060	0.000	0.67		10.7	OK
1.003	SW1	46	69.306	-0.004	0.000	0.88		12.1	OK
1.004	S10	33	69.490	0.390	0.000	0.36		12.5	SURCHARGED
1.005	S11	33	69.473	0.433	0.000	0.32		13.0	SURCHARGED
2.000	SW8	28	70.294	-0.046	0.000	0.23	4.4	1.3	FLOOD RISK
3.000	Swale	24	70.234	-0.216	0.000	0.05		4.3	FLOOD RISK*
3.001	Swale	20	70.232	-0.015	0.000	0.37		4.3	FLOOD RISK
2.001	SW6	27	70.293	0.223	0.000	0.84		4.6	FLOOD RISK
2.002	SW5	26	70.411	0.491	0.000	1.52		8.3	FLOOD RISK
2.003	SW4	47	69.369	-0.171	0.000	0.13		8.3	OK
2.004	S12	36	69.300	0.200	0.000	0.16	347	10.5	SURCHARGED
1.006	S13	26	69.590	0.740	0.000	0.07		1.4	SURCHARGED

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Midpoint	UoR Chancellors Building	
Alencon Link	Surface water drainage	
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Summary Wizard of 180 minute 30 year Summer I+10% 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 Offline Controls 1 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) 18.700 Cv (Summer) 0.750
 Region England and Wales Ratio R 0.400 Cv (Winter) 0.840

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

Profile(s) Summer and Winter
 Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440
 Return Period(s) (years) 2, 5, 10, 30, 100
 Climate Change (%) 0, 0, 5, 10, 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)	
1.000	SW9	37	70.331	0.221	0.000	1.11		8.5	SURCHARGED
1.001	SW3	45	69.824	0.124	0.000	1.33		8.5	FLOOD RISK
1.002	SW2	50	69.461	-0.069	0.000	0.57		9.1	OK
1.003	SW1	40	69.332	0.022	0.000	0.75		10.3	SURCHARGED
1.004	S10	34	69.489	0.389	0.000	0.34		11.7	SURCHARGED
1.005	S11	35	69.472	0.432	0.000	0.27		11.1	SURCHARGED
2.000	SW8	34	70.281	-0.059	0.000	0.21	2.8	1.2	FLOOD RISK
3.000	Swale	34	70.212	-0.238	0.000	0.03		2.7	FLOOD RISK*
3.001	Swale	30	70.208	-0.039	0.000	0.32		3.8	FLOOD RISK
2.001	SW6	34	70.270	0.200	0.000	0.77		4.2	FLOOD RISK
2.002	SW5	31	70.320	0.400	0.000	1.44		7.9	SURCHARGED
2.003	SW4	51	69.367	-0.173	0.000	0.12		7.9	OK
2.004	S12	32	69.330	0.230	0.000	0.16	365	10.5	SURCHARGED
1.006	S13	31	69.589	0.739	0.000	0.07		1.4	SURCHARGED

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Midpoint	UoR Chancellors Building	
Alencon Link	Surface water drainage	
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Summary Wizard of 240 minute 30 year Summer I+10% 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 Offline Controls 1 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) 18.700 Cv (Summer) 0.750
 Region England and Wales Ratio R 0.400 Cv (Winter) 0.840

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

Profile(s) Summer and Winter
 Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440
 Return Period(s) (years) 2, 5, 10, 30, 100
 Climate Change (%) 0, 0, 5, 10, 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)	
1.000	SW9	42	70.152	0.042	0.000	0.98		7.5	SURCHARGED
1.001	SW3	51	69.758	0.058	0.000	1.17		7.5	SURCHARGED
1.002	SW2	55	69.455	-0.075	0.000	0.50		8.0	OK
1.003	SW1	37	69.352	0.042	0.000	0.67		9.1	SURCHARGED
1.004	S10	30	69.513	0.413	0.000	0.31		10.7	SURCHARGED
1.005	S11	30	69.505	0.465	0.000	0.24		9.7	SURCHARGED
2.000	SW8	41	70.272	-0.068	0.000	0.20	1.8	1.1	FLOOD RISK
3.000	Swale	43	70.198	-0.252	0.000	0.02		1.8	FLOOD RISK*
3.001	Swale	37	70.189	-0.058	0.000	0.24		2.8	FLOOD RISK
2.001	SW6	40	70.256	0.186	0.000	0.61		3.4	FLOOD RISK
2.002	SW5	40	70.265	0.345	0.000	1.38		7.6	SURCHARGED
2.003	SW4	57	69.367	-0.173	0.000	0.12		7.6	OK
2.004	S12	30	69.342	0.242	0.000	0.16	372	10.6	SURCHARGED
1.006	S13	24	69.590	0.740	0.000	0.07		1.4	SURCHARGED

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Midpoint	UoR Chancellors Building	
Alencon Link	Surface water drainage	
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Summary Wizard of 360 minute 30 year Summer I+10% 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 Offline Controls 1 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) 18.700 Cv (Summer) 0.750
 Region England and Wales Ratio R 0.400 Cv (Winter) 0.840

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

Profile(s) Summer and Winter
 Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440
 Return Period(s) (years) 2, 5, 10, 30, 100
 Climate Change (%) 0, 0, 5, 10, 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)	
1.000	SW9	54	70.076	-0.034	0.000	0.77		5.9	OK
1.001	SW3	62	69.676	-0.024	0.000	0.93		5.9	OK
1.002	SW2	64	69.445	-0.085	0.000	0.40		6.4	OK
1.003	SW1	41	69.326	0.016	0.000	0.53		7.2	SURCHARGED
1.004	S10	35	69.489	0.389	0.000	0.28		9.6	SURCHARGED
1.005	S11	34	69.472	0.432	0.000	0.20		8.2	SURCHARGED
2.000	SW8	54	70.266	-0.074	0.000	0.15	1.2	0.8	FLOOD RISK
3.000	Swale	53	70.189	-0.261	0.000	0.01		1.2	FLOOD RISK*
3.001	Swale	53	70.166	-0.081	0.000	0.08		1.0	FLOOD RISK
2.001	SW6	53	70.162	0.092	0.000	0.34		1.9	SURCHARGED
2.002	SW5	53	70.147	0.227	0.000	1.27		6.9	SURCHARGED
2.003	SW4	63	69.364	-0.176	0.000	0.11		6.9	OK
2.004	S12	33	69.329	0.229	0.000	0.16	392	10.6	SURCHARGED
1.006	S13	30	69.589	0.739	0.000	0.07		1.4	SURCHARGED

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Midpoint	UoR Chancellors Building	
Alencon Link	Surface water drainage	
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Summary Wizard of 480 minute 30 year Summer I+10% 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 Offline Controls 1 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) 18.700 Cv (Summer) 0.750
 Region England and Wales Ratio R 0.400 Cv (Winter) 0.840

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

Profile(s) Summer and Winter
 Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440
 Return Period(s) (years) 2, 5, 10, 30, 100
 Climate Change (%) 0, 0, 5, 10, 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)	
1.000	SW9	61	70.067	-0.043	0.000	0.62		4.7	OK
1.001	SW3	67	69.664	-0.036	0.000	0.74		4.7	OK
1.002	SW2	69	69.438	-0.092	0.000	0.32		5.1	OK
1.003	SW1	43	69.317	0.007	0.000	0.42		5.8	SURCHARGED
1.004	S10	36	69.488	0.388	0.000	0.26		9.0	SURCHARGED
1.005	S11	36	69.472	0.432	0.000	0.18		7.4	SURCHARGED
2.000	SW8	61	70.263	-0.077	0.000	0.12	1.0	0.7	FLOOD RISK
3.000	Swale	60	70.186	-0.264	0.000	0.01		1.0	FLOOD RISK*
3.001	Swale	60	70.164	-0.083	0.000	0.07		0.8	FLOOD RISK
2.001	SW6	61	70.006	-0.064	0.000	0.28		1.5	OK
2.002	SW5	61	69.985	0.065	0.000	1.09		5.9	SURCHARGED
2.003	SW4	69	69.361	-0.179	0.000	0.09		5.9	OK
2.004	S12	34	69.321	0.221	0.000	0.16	429	10.6	SURCHARGED
1.006	S13	23	69.590	0.740	0.000	0.07		1.4	SURCHARGED

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Midpoint	UoR Chancellors Building	
Alencon Link	Surface water drainage	
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Summary Wizard of 600 minute 30 year Summer I+10% 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 Offline Controls 1 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) 18.700 Cv (Summer) 0.750
 Region England and Wales Ratio R 0.400 Cv (Winter) 0.840

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

Profile(s) Summer and Winter
 Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440
 Return Period(s) (years) 2, 5, 10, 30, 100
 Climate Change (%) 0, 0, 5, 10, 40

PN	US/MH Name	Storm Rank	Water Surcharged			Flooded		Half Drain Time (mins)	Pipe Flow (l/s)	Status
			Level (m)	Depth (m)	Volume (m³)	Flow / Cap.	Overflow (l/s)			
1.000	SW9	70	70.061	-0.049	0.000	0.52			4.0	OK
1.001	SW3	73	69.657	-0.043	0.000	0.62			4.0	OK
1.002	SW2	74	69.432	-0.098	0.000	0.27			4.3	OK
1.003	SW1	45	69.307	-0.003	0.000	0.36			4.8	OK
1.004	S10	32	69.492	0.392	0.000	0.24			8.3	SURCHARGED
1.005	S11	32	69.476	0.436	0.000	0.17			6.7	SURCHARGED
2.000	SW8	70	70.261	-0.079	0.000	0.10	0.8		0.6	FLOOD RISK
3.000	Swale	70	70.184	-0.266	0.000	0.01			0.8	FLOOD RISK*
3.001	Swale	66	70.163	-0.084	0.000	0.06			0.7	FLOOD RISK
2.001	SW6	69	70.003	-0.067	0.000	0.24			1.3	OK
2.002	SW5	70	69.898	-0.022	0.000	0.97			5.3	OK
2.003	SW4	76	69.358	-0.182	0.000	0.08			5.3	OK
2.004	S12	35	69.308	0.208	0.000	0.16		439	10.5	SURCHARGED
1.006	S13	37	69.587	0.737	0.000	0.07			1.4	SURCHARGED

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Midpoint	UoR Chancellors Building	
Alencon Link	Surface water drainage	
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Summary Wizard of 720 minute 30 year Summer I+10% 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 Offline Controls 1 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) 18.700 Cv (Summer) 0.750
 Region England and Wales Ratio R 0.400 Cv (Winter) 0.840

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

Profile(s) Summer and Winter
 Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440
 Return Period(s) (years) 2, 5, 10, 30, 100
 Climate Change (%) 0, 0, 5, 10, 40

PN	US/MH Name	Storm Rank	Water			Flow / Overflow Cap.	Half Drain Time (mins)	Pipe Flow (l/s)	Status
			Level (m)	Depth (m)	Volume (m³)				
1.000	SW9	76	70.057	-0.053	0.000	0.45		3.4	OK
1.001	SW3	79	69.652	-0.048	0.000	0.54		3.4	OK
1.002	SW2	80	69.429	-0.101	0.000	0.23		3.7	OK
1.003	SW1	47	69.299	-0.011	0.000	0.31		4.2	OK
1.004	S10	37	69.481	0.381	0.000	0.22		7.7	SURCHARGED
1.005	S11	37	69.466	0.426	0.000	0.16		6.4	SURCHARGED
2.000	SW8	76	70.260	-0.080	0.000	0.09	0.7	0.5	FLOOD RISK
3.000	Swale	75	70.182	-0.268	0.000	0.01		0.7	FLOOD RISK*
3.001	Swale	73	70.162	-0.085	0.000	0.05		0.6	FLOOD RISK
2.001	SW6	73	70.001	-0.069	0.000	0.21		1.2	OK
2.002	SW5	76	69.891	-0.029	0.000	0.84		4.6	OK
2.003	SW4	81	69.355	-0.185	0.000	0.07		4.6	OK
2.004	S12	37	69.293	0.193	0.000	0.16		472 10.5	SURCHARGED
1.006	S13	39	69.585	0.735	0.000	0.07		1.4	SURCHARGED

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Midpoint	UoR Chancellors Building	
Alencon Link	Surface water drainage	
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Summary Wizard of 960 minute 30 year Summer I+10% 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 Offline Controls 1 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) 18.700 Cv (Summer) 0.750
 Region England and Wales Ratio R 0.400 Cv (Winter) 0.840

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

Profile(s) Summer and Winter
 Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440
 Return Period(s) (years) 2, 5, 10, 30, 100
 Climate Change (%) 0, 0, 5, 10, 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)	
1.000	SW9	86	70.051	-0.059	0.000	0.36		2.8	OK
1.001	SW3	87	69.646	-0.054	0.000	0.43		2.8	OK
1.002	SW2	87	69.423	-0.107	0.000	0.18		3.0	OK
1.003	SW1	50	69.282	-0.028	0.000	0.25		3.4	OK
1.004	S10	40	69.450	0.350	0.000	0.21		7.1	SURCHARGED
1.005	S11	40	69.448	0.408	0.000	0.14		5.5	SURCHARGED
2.000	SW8	86	70.257	-0.083	0.000	0.07	0.6	0.4	FLOOD RISK
3.000	Swale	86	70.180	-0.270	0.000	0.01		0.6	FLOOD RISK*
3.001	Swale	83	70.160	-0.087	0.000	0.04		0.5	FLOOD RISK
2.001	SW6	83	69.998	-0.072	0.000	0.17		1.0	OK
2.002	SW5	86	69.881	-0.039	0.000	0.68		3.7	OK
2.003	SW4	88	69.350	-0.190	0.000	0.06		3.7	OK
2.004	S12	40	69.263	0.163	0.000	0.15		495	SURCHARGED
1.006	S13	41	69.573	0.723	0.000	0.07		1.4	SURCHARGED

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Midpoint	UoR Chancellors Building	
Alencon Link	Surface water drainage	
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Summary Wizard of 1440 minute 30 year Summer I+10% 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 Offline Controls 1 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) 18.700 Cv (Summer) 0.750
 Region England and Wales Ratio R 0.400 Cv (Winter) 0.840

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

Profile(s) Summer and Winter
 Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440
 Return Period(s) (years) 2, 5, 10, 30, 100
 Climate Change (%) 0, 0, 5, 10, 40

			Water	Surcharged	Flooded	Half Drain			Pipe	
	US/MH	Storm	Level	Depth	Volume	Flow /	Overflow	Time	Flow	
PN	Name	Rank	(m)	(m)	(m³)	Cap.	(l/s)	(mins)	(l/s)	Status
1.000	SW9	100	70.045	-0.065	0.000	0.26			2.0	OK
1.001	SW3	100	69.638	-0.062	0.000	0.31			2.0	OK
1.002	SW2	100	69.416	-0.114	0.000	0.13			2.2	OK
1.003	SW1	73	69.244	-0.066	0.000	0.18			2.4	OK
1.004	S10	47	69.378	0.278	0.000	0.18			6.3	SURCHARGED
1.005	S11	47	69.416	0.376	0.000	0.12			4.7	SURCHARGED
2.000	SW8	100	70.255	-0.085	0.000	0.05	0.4		0.3	FLOOD RISK
3.000	Swale	99	70.174	-0.276	0.000	0.00			0.4	FLOOD RISK*
3.001	Swale	99	70.159	-0.088	0.000	0.03			0.4	FLOOD RISK
2.001	SW6	100	69.994	-0.076	0.000	0.13			0.7	OK
2.002	SW5	99	69.870	-0.050	0.000	0.50			2.7	OK
2.003	SW4	99	69.345	-0.195	0.000	0.04			2.7	OK
2.004	S12	48	69.212	0.112	0.000	0.15		524	10.0	SURCHARGED
1.006	S13	47	69.541	0.691	0.000	0.07			1.4	SURCHARGE

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Midpoint	UoR Chancellors Building	
Alencon Link	Surface water drainage	
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Summary Wizard of 15 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 Offline Controls 1 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) 18.700 Cv (Summer) 0.750
 Region England and Wales Ratio R 0.400 Cv (Winter) 0.840

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

Profile(s) Summer and Winter
 Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440
 Return Period(s) (years) 2, 5, 10, 30, 100
 Climate Change (%) 0, 0, 5, 10, 40

WARNING: The analysis maybe unstable. Please see the method of analysis help for more details.

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)	
1.000	SW9	5	70.711	0.601	10.617	1.36		10.4	FLOOD
1.001	SW3	7	70.060	0.360	0.036	1.63		10.4	FLOOD
1.002	SW2	21	69.721	0.191	0.000	0.80		12.8	SURCHARGED
1.003	SW1	22	69.577	0.267	0.000	1.37		18.7	SURCHARGED
1.004	S10	43	69.405	0.305	0.000	0.58		20.1	SURCHARGED
1.005	S11	42	69.435	0.395	0.000	0.53		21.6	SURCHARGED
2.000	SW8	2	70.490	0.150	0.094	0.55	13.3	3.0	FLOOD
3.000	Swale	10	70.309	-0.141	0.000	0.14		13.1	FLOOD RISK*
3.001	Swale	10	70.309	0.062	0.000	0.50		5.9	FLOOD RISK
2.001	SW6	5	70.408	0.338	0.000	1.13		6.2	FLOOD RISK
2.002	SW5	3	70.668	0.748	8.223	1.73		9.4	FLOOD
2.003	SW4	33	69.373	-0.167	0.000	0.15		9.4	OK
2.004	S12	42	69.239	0.139	0.000	0.16	305	10.7	SURCHARGED
1.006	S13	42	69.560	0.710	0.000	0.07		1.4	SURCHARGED

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Midpoint	UoR Chancellors Building	
Alencon Link	Surface water drainage	
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Summary Wizard of 30 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 Offline Controls 1 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) 18.700 Cv (Summer) 0.750
 Region England and Wales Ratio R 0.400 Cv (Winter) 0.840

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

Profile(s) Summer and Winter
 Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440
 Return Period(s) (years) 2, 5, 10, 30, 100
 Climate Change (%) 0, 0, 5, 10, 40

WARNING: The analysis maybe unstable. Please see the method of analysis help for more details.

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)	
1.000	SW9	4	70.711	0.601	11.467	1.37		10.4	FLOOD
1.001	SW3	9	70.060	0.360	0.007	1.62		10.3	FLOOD
1.002	SW2	22	69.693	0.163	0.000	0.80		12.8	SURCHARGED
1.003	SW1	24	69.551	0.241	0.000	1.34		18.2	SURCHARGED
1.004	S10	27	69.529	0.429	0.000	0.57		19.5	SURCHARGED
1.005	S11	27	69.525	0.485	0.000	0.53		21.2	SURCHARGED
2.000	SW8	3	70.465	0.125	0.000	0.47	12.3	2.6	FLOOD RISK
3.000	Swale	5	70.347	-0.103	0.000	0.13		12.0	FLOOD RISK*
3.001	Swale	5	70.347	0.100	0.000	0.50		5.9	FLOOD RISK
2.001	SW6	6	70.402	0.332	0.000	1.16		6.4	FLOOD RISK
2.002	SW5	4	70.668	0.748	8.205	1.73		9.4	FLOOD
2.003	SW4	27	69.382	-0.158	0.000	0.15		9.4	OK
2.004	S12	27	69.379	0.279	0.000	0.16	420	10.6	SURCHARGED
1.006	S13	21	69.594	0.744	0.000	0.07		1.4	SURCHARGED

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Midpoint	UoR Chancellors Building	
Alencon Link	Surface water drainage	
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Summary Wizard of 60 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 Offline Controls 1 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) 18.700 Cv (Summer) 0.750
 Region England and Wales Ratio R 0.400 Cv (Winter) 0.840

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

Profile(s) Summer and Winter
 Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440
 Return Period(s) (years) 2, 5, 10, 30, 100
 Climate Change (%) 0, 0, 5, 10, 40

WARNING: The analysis maybe unstable. Please see the method of analysis help for more details.

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)	
1.000	SW9	6	70.710	0.600	10.341	1.36		10.4	FLOOD
1.001	SW3	11	70.036	0.336	0.000	1.61		10.3	FLOOD RISK
1.002	SW2	23	69.672	0.142	0.000	0.77		12.4	SURCHARGED
1.003	SW1	20	69.628	0.318	0.000	1.21		16.5	SURCHARGED
1.004	S10	20	69.610	0.510	0.000	0.51		17.6	SURCHARGED
1.005	S11	20	69.609	0.569	0.000	0.47		19.0	SURCHARGED
2.000	SW8	6	70.392	0.052	0.000	0.25	9.8	1.3	FLOOD RISK
3.000	Swale	4	70.360	-0.090	0.000	0.10		9.6	FLOOD RISK*
3.001	Swale	4	70.360	0.113	0.000	0.50		5.9	FLOOD RISK
2.001	SW6	3	70.416	0.346	0.000	1.16		6.4	FLOOD RISK
2.002	SW5	5	70.666	0.746	5.659	1.72		9.4	FLOOD
2.003	SW4	20	69.528	-0.012	0.000	0.15		9.4	OK
2.004	S12	20	69.526	0.426	0.000	0.16	516	10.6	SURCHARGED
1.006	S13	20	69.615	0.765	0.000	0.07		1.4	SURCHARGED

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Midpoint	UoR Chancellors Building	
Alencon Link	Surface water drainage	
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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 Offline Controls 1 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) 18.700 Cv (Summer) 0.750
 Region England and Wales Ratio R 0.400 Cv (Winter) 0.840

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

Profile(s) Summer and Winter
 Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440
 Return Period(s) (years) 2, 5, 10, 30, 100
 Climate Change (%) 0, 0, 5, 10, 40

WARNING: The analysis maybe unstable. Please see the method of analysis help for more details.

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)	
1.000	SW9	7	70.707	0.597	6.650	1.35		10.3	FLOOD
1.001	SW3	5	70.060	0.360	0.069	1.60		10.2	FLOOD
1.002	SW2	17	69.778	0.248	0.000	0.74		11.8	SURCHARGED
1.003	SW1	17	69.748	0.438	0.000	1.06		14.5	SURCHARGED
1.004	S10	17	69.706	0.606	0.000	0.49		17.0	SURCHARGED
1.005	S11	18	69.699	0.659	0.000	0.42		16.9	SURCHARGED
2.000	SW8	10	70.357	0.017	0.000	0.23	7.3	1.3	FLOOD RISK
3.000	Swale	6	70.346	-0.104	0.000	0.08		7.2	FLOOD RISK*
3.001	Swale	6	70.345	0.098	0.000	0.47		5.5	FLOOD RISK
2.001	SW6	7	70.396	0.326	0.000	1.03		5.7	FLOOD RISK
2.002	SW5	11	70.661	0.741	1.193	1.72		9.4	FLOOD
2.003	SW4	17	69.674	0.134	0.000	0.15		9.4	SURCHARGED
2.004	S12	17	69.672	0.572	0.000	0.16	584	10.6	SURCHARGED
1.006	S13	18	69.683	0.833	0.000	0.08		1.5	SURCHARGED

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Midpoint	UoR Chancellors Building	
Alencon Link	Surface water drainage	
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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 Offline Controls 1 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) 18.700 Cv (Summer) 0.750
 Region England and Wales Ratio R 0.400 Cv (Winter) 0.840

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

Profile(s) Summer and Winter
 Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440
 Return Period(s) (years) 2, 5, 10, 30, 100
 Climate Change (%) 0, 0, 5, 10, 40

WARNING: The analysis maybe unstable. Please see the method of analysis help for more details.

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)	
1.000	SW9	13	70.703	0.593	3.442	1.35		10.3	FLOOD
1.001	SW3	3	70.060	0.360	0.120	1.60		10.2	FLOOD
1.002	SW2	15	69.827	0.297	0.000	0.70		11.3	SURCHARGED
1.003	SW1	15	69.799	0.489	0.000	0.95		13.0	SURCHARGED
1.004	S10	15	69.769	0.669	0.000	0.47		16.2	SURCHARGED
1.005	S11	15	69.785	0.745	0.000	0.41		16.4	SURCHARGED
2.000	SW8	16	70.330	-0.010	0.000	0.21	5.9	1.2	FLOOD RISK
3.000	Swale	9	70.323	-0.127	0.000	0.06		5.8	FLOOD RISK*
3.001	Swale	9	70.323	0.076	0.000	0.35		4.0	FLOOD RISK
2.001	SW6	14	70.339	0.269	0.000	0.82		4.5	FLOOD RISK
2.002	SW5	18	70.563	0.643	0.000	1.64		9.0	FLOOD RISK
2.003	SW4	15	69.759	0.219	0.000	0.14		9.0	SURCHARGED
2.004	S12	15	69.755	0.655	0.000	0.16	646	10.6	SURCHARGED
1.006	S13	14	69.818	0.968	0.000	0.08		1.6	SURCHARGED

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Midpoint	UoR Chancellors Building	
Alencon Link	Surface water drainage	
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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 Offline Controls 1 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) 18.700 Cv (Summer) 0.750
 Region England and Wales Ratio R 0.400 Cv (Winter) 0.840

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

Profile(s) Summer and Winter
 Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440
 Return Period(s) (years) 2, 5, 10, 30, 100
 Climate Change (%) 0, 0, 5, 10, 40

WARNING: The analysis maybe unstable. Please see the method of analysis help for more details.

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)	
1.000	SW9	20	70.701	0.591	1.104	1.34		10.2	FLOOD
1.001	SW3	8	70.060	0.360	0.023	1.56		9.9	FLOOD
1.002	SW2	11	69.892	0.362	0.000	0.67		10.9	SURCHARGED
1.003	SW1	11	69.865	0.555	0.000	0.91		12.4	SURCHARGED
1.004	S10	12	69.821	0.721	0.000	0.46		15.9	SURCHARGED
1.005	S11	10	69.834	0.794	0.000	0.37		15.0	SURCHARGED
2.000	SW8	22	70.305	-0.035	0.000	0.20	4.6	1.1	FLOOD RISK
3.000	Swale	11	70.298	-0.152	0.000	0.05		4.5	FLOOD RISK*
3.001	Swale	11	70.298	0.051	0.000	0.34		3.9	FLOOD RISK
2.001	SW6	24	70.299	0.229	0.000	0.78		4.3	FLOOD RISK
2.002	SW5	23	70.423	0.503	0.000	1.53		8.4	FLOOD RISK
2.003	SW4	10	69.801	0.261	0.000	0.13		8.4	SURCHARGED
2.004	S12	10	69.799	0.699	0.000	0.16	651	10.6	SURCHARGED
1.006	S13	9	69.863	1.013	0.000	0.08		1.6	SURCHARGED

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Midpoint	UoR Chancellors Building	
Alencon Link	Surface water drainage	
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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 Offline Controls 1 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) 18.700 Cv (Summer) 0.750
 Region England and Wales Ratio R 0.400 Cv (Winter) 0.840

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

Profile(s) Summer and Winter
 Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440
 Return Period(s) (years) 2, 5, 10, 30, 100
 Climate Change (%) 0, 0, 5, 10, 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)	
1.000	SW9	34	70.418	0.308	0.000	1.13		8.6	FLOOD RISK
1.001	SW3	34	69.913	0.213	0.000	1.34		8.5	FLOOD RISK
1.002	SW2	8	69.931	0.401	0.000	0.58		9.3	SURCHARGED
1.003	SW1	8	69.914	0.604	0.000	0.77		10.5	SURCHARGED
1.004	S10	8	69.853	0.753	0.000	0.38		13.0	SURCHARGED
1.005	S11	8	69.845	0.805	0.000	0.32		12.9	SURCHARGED
2.000	SW8	36	70.280	-0.060	0.000	0.19	2.7	1.0	FLOOD RISK
3.000	Swale	18	70.253	-0.197	0.000	0.03		2.7	FLOOD RISK*
3.001	Swale	18	70.252	0.005	0.000	0.30		3.5	FLOOD RISK
2.001	SW6	35	70.270	0.200	0.000	0.70		3.8	FLOOD RISK
2.002	SW5	33	70.318	0.398	0.000	1.44		7.8	SURCHARGED
2.003	SW4	8	69.811	0.271	0.000	0.12		7.8	SURCHARGED
2.004	S12	8	69.810	0.710	0.000	0.16	623	10.6	SURCHARGED
1.006	S13	13	69.828	0.978	0.000	0.08		1.6	SURCHARGED

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Midpoint	UoR Chancellors Building	
Alencon Link	Surface water drainage	
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Summary Wizard of 480 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 Offline Controls 1 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) 18.700 Cv (Summer) 0.750
 Region England and Wales Ratio R 0.400 Cv (Winter) 0.840

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

Profile(s) Summer and Winter
 Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440
 Return Period(s) (years) 2, 5, 10, 30, 100
 Climate Change (%) 0, 0, 5, 10, 40

PN	US/MH Name	Storm Rank	Water Level	Surcharged Depth	Flooded Volume	Flow / Overflow	Half Drain Time (mins)	Pipe Flow	Status
			(m)	(m)	(m³)	Cap. (l/s)		(l/s)	
1.000	SW9	41	70.160	0.050	0.000	0.98		7.5	SURCHARGED
1.001	SW3	38	69.858	0.158	0.000	1.16		7.4	FLOOD RISK
1.002	SW2	10	69.895	0.365	0.000	0.50		8.0	SURCHARGED
1.003	SW1	10	69.872	0.562	0.000	0.66		9.1	SURCHARGED
1.004	S10	11	69.821	0.721	0.000	0.35		12.2	SURCHARGED
1.005	S11	9	69.835	0.795	0.000	0.28		11.4	SURCHARGED
2.000	SW8	42	70.272	-0.068	0.000	0.19	1.8	1.0	FLOOD RISK
3.000	Swale	33	70.216	-0.234	0.000	0.02		1.7	FLOOD RISK*
3.001	Swale	27	70.213	-0.034	0.000	0.25		2.9	FLOOD RISK
2.001	SW6	41	70.254	0.184	0.000	0.61		3.4	FLOOD RISK
2.002	SW5	41	70.260	0.340	0.000	1.38		7.6	SURCHARGED
2.003	SW4	9	69.809	0.269	0.000	0.12		7.6	SURCHARGED
2.004	S12	9	69.808	0.708	0.000	0.16	655	10.6	SURCHARGED
1.006	S13	8	69.865	1.015	0.000	0.08		1.6	SURCHARGED

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Midpoint	UoR Chancellors Building	
Alencon Link	Surface water drainage	
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Summary Wizard of 600 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 Offline Controls 1 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) 18.700 Cv (Summer) 0.750
 Region England and Wales Ratio R 0.400 Cv (Winter) 0.840

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

Profile(s) Summer and Winter
 Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440
 Return Period(s) (years) 2, 5, 10, 30, 100
 Climate Change (%) 0, 0, 5, 10, 40

PN	US/MH Name	Storm Rank	Water Level	Surcharged Depth	Flooded Volume	Flow / Overflow	Half Drain Time (mins)	Pipe Flow	Status
			(m)	(m)	(m³)	Cap. (l/s)		(l/s)	
1.000	SW9	49	70.081	-0.029	0.000	0.86		6.5	OK
1.001	SW3	43	69.838	0.138	0.000	1.03		6.5	FLOOD RISK
1.002	SW2	13	69.872	0.342	0.000	0.44		7.1	SURCHARGED
1.003	SW1	13	69.848	0.538	0.000	0.58		8.0	SURCHARGED
1.004	S10	13	69.809	0.709	0.000	0.33		11.3	SURCHARGED
1.005	S11	12	69.823	0.783	0.000	0.24		9.8	SURCHARGED
2.000	SW8	49	70.267	-0.073	0.000	0.17	1.3	0.9	FLOOD RISK
3.000	Swale	44	70.197	-0.253	0.000	0.01		1.3	FLOOD RISK*
3.001	Swale	40	70.187	-0.060	0.000	0.19		2.2	FLOOD RISK
2.001	SW6	48	70.210	0.140	0.000	0.53		2.9	FLOOD RISK
2.002	SW5	48	70.202	0.282	0.000	1.32		7.2	SURCHARGED
2.003	SW4	11	69.791	0.251	0.000	0.11		7.2	SURCHARGED
2.004	S12	12	69.790	0.690	0.000	0.16	688	10.5	SURCHARGED
1.006	S13	10	69.854	1.004	0.000	0.08		1.6	SURCHARGED

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Summary Wizard of 720 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 Offline Controls 1 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) 18.700 Cv (Summer) 0.750
 Region England and Wales Ratio R 0.400 Cv (Winter) 0.840

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

Profile(s) Summer and Winter
 Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440
 Return Period(s) (years) 2, 5, 10, 30, 100
 Climate Change (%) 0, 0, 5, 10, 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)	
1.000	SW9	56	70.074	-0.036	0.000	0.74		5.7	OK
1.001	SW3	46	69.817	0.117	0.000	0.89		5.7	FLOOD RISK
1.002	SW2	14	69.852	0.322	0.000	0.38		6.1	SURCHARGED
1.003	SW1	14	69.828	0.518	0.000	0.51		7.0	SURCHARGED
1.004	S10	14	69.791	0.691	0.000	0.30		10.3	SURCHARGED
1.005	S11	14	69.805	0.765	0.000	0.24		9.5	SURCHARGED
2.000	SW8	56	70.265	-0.075	0.000	0.15	1.2	0.8	FLOOD RISK
3.000	Swale	52	70.190	-0.260	0.000	0.01		1.2	FLOOD RISK*
3.001	Swale	50	70.170	-0.077	0.000	0.11		1.3	FLOOD RISK
2.001	SW6	52	70.168	0.098	0.000	0.39		2.1	SURCHARGED
2.002	SW5	52	70.154	0.234	0.000	1.28		7.0	SURCHARGED
2.003	SW4	14	69.773	0.233	0.000	0.11		7.0	SURCHARGED
2.004	S12	14	69.772	0.672	0.000	0.16	735	10.6	SURCHARGED
1.006	S13	11	69.836	0.986	0.000	0.08		1.6	SURCHARGED

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Summary Wizard of 960 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 Offline Controls 1 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) 18.700 Cv (Summer) 0.750
 Region England and Wales Ratio R 0.400 Cv (Winter) 0.840

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

Profile(s) Summer and Winter
 Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440
 Return Period(s) (years) 2, 5, 10, 30, 100
 Climate Change (%) 0, 0, 5, 10, 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)	
1.000	SW9	64	70.065	-0.045	0.000	0.59		4.5	OK
1.001	SW3	50	69.777	0.077	0.000	0.71		4.5	FLOOD RISK
1.002	SW2	16	69.813	0.283	0.000	0.30		4.9	SURCHARGED
1.003	SW1	16	69.787	0.477	0.000	0.41		5.6	SURCHARGED
1.004	S10	16	69.755	0.655	0.000	0.28		9.6	SURCHARGED
1.005	S11	16	69.770	0.730	0.000	0.21		8.3	SURCHARGED
2.000	SW8	64	70.263	-0.077	0.000	0.12	0.9	0.6	FLOOD RISK
3.000	Swale	62	70.186	-0.264	0.000	0.01		0.9	FLOOD RISK*
3.001	Swale	58	70.165	-0.082	0.000	0.07		0.9	FLOOD RISK
2.001	SW6	60	70.007	-0.063	0.000	0.29		1.6	OK
2.002	SW5	60	69.987	0.067	0.000	1.09		6.0	SURCHARGED
2.003	SW4	16	69.736	0.196	0.000	0.09		6.0	SURCHARGED
2.004	S12	16	69.735	0.635	0.000	0.16	789	10.6	SURCHARGED
1.006	S13	16	69.800	0.950	0.000	0.08		1.5	SURCHARGED

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Alencon Link	Surface water drainage	
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Summary Wizard of 1440 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 Offline Controls 1 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) 18.700 Cv (Summer) 0.750
 Region England and Wales Ratio R 0.400 Cv (Winter) 0.840

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

Profile(s) Summer and Winter
 Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440
 Return Period(s) (years) 2, 5, 10, 30, 100
 Climate Change (%) 0, 0, 5, 10, 40

			Water	Surcharged	Flooded	Half Drain			Pipe	
	US/MH	Storm	Level	Depth	Volume	Flow /	Overflow	Time	Flow	
PN	Name	Rank	(m)	(m)	(m³)	Cap.	(l/s)	(mins)	(l/s)	Status
1.000	SW9	78	70.056	-0.054	0.000	0.43			3.3	OK
1.001	SW3	57	69.709	0.009	0.000	0.51			3.3	SURCHARGED
1.002	SW2	20	69.747	0.217	0.000	0.22			3.5	SURCHARGED
1.003	SW1	18	69.709	0.399	0.000	0.31			4.2	SURCHARGED
1.004	S10	18	69.686	0.586	0.000	0.25			8.8	SURCHARGED
1.005	S11	17	69.701	0.661	0.000	0.18			7.2	SURCHARGED
2.000	SW8	78	70.259	-0.081	0.000	0.08	0.7		0.5	FLOOD RISK
3.000	Swale	79	70.182	-0.268	0.000	0.01			0.7	FLOOD RISK*
3.001	Swale	72	70.162	-0.085	0.000	0.05			0.6	FLOOD RISK
2.001	SW6	74	70.001	-0.069	0.000	0.21			1.2	OK
2.002	SW5	79	69.889	-0.031	0.000	0.81			4.4	OK
2.003	SW4	18	69.667	0.127	0.000	0.07			4.4	SURCHARGED
2.004	S12	18	69.666	0.566	0.000	0.16		865	10.6	SURCHARGED
1.006	S13	17	69.732	0.882	0.000	0.08			1.5	SURCHARGED

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Midpoint	UoR Chancellors Building	
Alencon Link	Surface water drainage	
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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 Offline Controls 1 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) 18.700 Cv (Summer) 0.750
 Region England and Wales Ratio R 0.400 Cv (Winter) 0.840

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

Profile(s) Summer and Winter
 Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440
 Return Period(s) (years) 2, 5, 10, 30, 100
 Climate Change (%) 0, 0, 5, 10, 40

PN	US/MH Name	Storm Rank	Water			Flow / Overflow Cap.	Half Drain Time (mins)	Pipe Flow (l/s)	Status
			Level (m)	Depth (m)	Volume (m³)				
1.000	SW9	28	70.541	0.431	0.000	1.26		9.6	FLOOD RISK
1.001	SW3	36	69.900	0.200	0.000	1.49		9.5	FLOOD RISK
1.002	SW2	42	69.467	-0.063	0.000	0.63		10.2	OK
1.003	SW1	58	69.267	-0.043	0.000	0.84		11.5	OK
1.004	S10	98	69.025	-0.075	0.000	0.33		11.5	OK
1.005	S11	99	69.015	-0.025	0.000	0.29		11.7	OK
2.000	SW8	29	70.290	-0.050	0.000	0.39	3.7	2.1	FLOOD RISK
3.000	Swale	35	70.210	-0.240	0.000	0.04		3.8	FLOOD RISK*
3.001	Swale	42	70.179	-0.068	0.000	0.21		2.5	FLOOD RISK
2.001	SW6	30	70.283	0.213	0.000	0.61		3.4	FLOOD RISK
2.002	SW5	29	70.356	0.436	0.000	1.47		8.0	SURCHARGED
2.003	SW4	49	69.368	-0.172	0.000	0.13		8.0	OK
2.004	S12	117	68.926	-0.174	0.000	0.02	110	1.6	OK
1.006	S13	102	68.999	0.149	0.000	0.07		1.4	SURCHARGED

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Midpoint	UoR Chancellors Building	
Alencon Link	Surface water drainage	
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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 Offline Controls 1 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) 18.700 Cv (Summer) 0.750
 Region England and Wales Ratio R 0.400 Cv (Winter) 0.840

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

Profile(s) Summer and Winter
 Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440
 Return Period(s) (years) 2, 5, 10, 30, 100
 Climate Change (%) 0, 0, 5, 10, 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)	
1.000	SW9	36	70.377	0.267	0.000	1.14		8.7	SURCHARGED
1.001	SW3	42	69.840	0.140	0.000	1.36		8.7	FLOOD RISK
1.002	SW2	49	69.463	-0.067	0.000	0.58		9.4	OK
1.003	SW1	65	69.261	-0.049	0.000	0.78		10.6	OK
1.004	S10	95	69.030	-0.070	0.000	0.31		10.7	OK
1.005	S11	97	69.021	-0.019	0.000	0.27		10.9	OK
2.000	SW8	33	70.281	-0.059	0.000	0.29	2.7	1.6	FLOOD RISK
3.000	Swale	39	70.203	-0.247	0.000	0.03		2.7	FLOOD RISK*
3.001	Swale	43	70.179	-0.068	0.000	0.20		2.4	FLOOD RISK
2.001	SW6	33	70.270	0.200	0.000	0.56		3.1	FLOOD RISK
2.002	SW5	32	70.319	0.399	0.000	1.43		7.8	SURCHARGED
2.003	SW4	52	69.367	-0.173	0.000	0.12		7.8	OK
2.004	S12	108	68.967	-0.133	0.000	0.02	136	1.4	OK
1.006	S13	98	69.006	0.156	0.000	0.07		1.4	SURCHARGED

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Midpoint	UoR Chancellors Building	
Alencon Link	Surface water drainage	
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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 Offline Controls 1 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) 18.700 Cv (Summer) 0.750
 Region England and Wales Ratio R 0.400 Cv (Winter) 0.840

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

Profile(s) Summer and Winter
 Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440
 Return Period(s) (years) 2, 5, 10, 30, 100
 Climate Change (%) 0, 0, 5, 10, 40

PN	US/MH Name	Storm Rank	Water Level	Surcharged Depth	Flooded Volume	Flow / Overflow	Half Drain Time (mins)	Pipe Flow	Status
			(m)	(m)	(m³)	Cap. (l/s)		(l/s)	
1.000	SW9	45	70.110	0.000	0.000	0.95		7.2	SURCHARGED
1.001	SW3	53	69.742	0.042	0.000	1.13		7.2	SURCHARGED
1.002	SW2	57	69.453	-0.077	0.000	0.48		7.8	OK
1.003	SW1	71	69.248	-0.062	0.000	0.64		8.8	OK
1.004	S10	102	69.011	-0.089	0.000	0.26		8.8	OK
1.005	S11	101	69.006	-0.034	0.000	0.22		9.0	OK
2.000	SW8	45	70.270	-0.070	0.000	0.20	1.5	1.1	FLOOD RISK
3.000	Swale	50	70.192	-0.258	0.000	0.02		1.5	FLOOD RISK*
3.001	Swale	52	70.168	-0.079	0.000	0.10		1.2	FLOOD RISK
2.001	SW6	49	70.203	0.133	0.000	0.39		2.1	FLOOD RISK
2.002	SW5	49	70.196	0.276	0.000	1.32		7.2	SURCHARGED
2.003	SW4	62	69.365	-0.175	0.000	0.11		7.2	OK
2.004	S12	94	69.005	-0.095	0.000	0.02	157	1.6	OK
1.006	S13	100	69.005	0.155	0.000	0.07		1.4	SURCHARGED

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Midpoint	UoR Chancellors Building	
Alencon Link	Surface water drainage	
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Summary Wizard of 120 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 Offline Controls 1 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) 18.700 Cv (Summer) 0.750
 Region England and Wales Ratio R 0.400 Cv (Winter) 0.840

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

Profile(s) Summer and Winter
 Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440
 Return Period(s) (years) 2, 5, 10, 30, 100
 Climate Change (%) 0, 0, 5, 10, 40

PN	US/MH Name	Storm Rank	Water			Flooded		Half Drain Time (mins)	Pipe Flow (l/s)	Status
			Level (m)	Depth (m)	Volume (m³)	Flow / Cap.	Overflow (l/s)			
1.000	SW9	63	70.067	-0.043	0.000	0.62			4.7	OK
1.001	SW3	68	69.664	-0.036	0.000	0.74			4.7	OK
1.002	SW2	70	69.438	-0.092	0.000	0.31			5.1	OK
1.003	SW1	81	69.227	-0.083	0.000	0.42			5.7	OK
1.004	S10	93	69.034	-0.066	0.000	0.17			5.9	OK
1.005	S11	93	69.033	-0.007	0.000	0.15			6.0	OK
2.000	SW8	63	70.263	-0.077	0.000	0.12	1.0		0.7	FLOOD RISK
3.000	Swale	64	70.185	-0.265	0.000	0.01			1.0	FLOOD RISK*
3.001	Swale	69	70.163	-0.084	0.000	0.06			0.7	FLOOD RISK
2.001	SW6	68	70.003	-0.067	0.000	0.24			1.4	OK
2.002	SW5	63	69.948	0.028	0.000	1.04			5.7	SURCHARGED
2.003	SW4	71	69.360	-0.180	0.000	0.09			5.7	OK
2.004	S12	88	69.029	-0.071	0.000	0.03		170	1.7	OK
1.006	S13	93	69.034	0.184	0.000	0.07			1.4	SURCHARGED

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Midpoint	UoR Chancellors Building	
Alencon Link	Surface water drainage	
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Summary Wizard of 180 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 Offline Controls 1 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) 18.700 Cv (Summer) 0.750
 Region England and Wales Ratio R 0.400 Cv (Winter) 0.840

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

Profile(s) Summer and Winter
 Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440
 Return Period(s) (years) 2, 5, 10, 30, 100
 Climate Change (%) 0, 0, 5, 10, 40

PN	US/MH Name	Storm Rank	Water Surcharged			Flooded		Half Drain Time (mins)	Pipe Flow (l/s)	Status
			Level (m)	Depth (m)	Volume (m³)	Flow / Cap.	Overflow (l/s)			
1.000	SW9	75	70.058	-0.052	0.000	0.46			3.5	OK
1.001	SW3	78	69.653	-0.047	0.000	0.55			3.5	OK
1.002	SW2	79	69.429	-0.101	0.000	0.24			3.8	OK
1.003	SW1	89	69.217	-0.093	0.000	0.31			4.3	OK
1.004	S10	92	69.037	-0.063	0.000	0.13			4.4	OK
1.005	S11	92	69.036	-0.004	0.000	0.11			4.5	OK
2.000	SW8	75	70.260	-0.080	0.000	0.09	0.7		0.5	FLOOD RISK
3.000	Swale	77	70.182	-0.268	0.000	0.01			0.7	FLOOD RISK*
3.001	Swale	78	70.161	-0.086	0.000	0.05			0.6	FLOOD RISK
2.001	SW6	80	70.000	-0.070	0.000	0.20			1.1	OK
2.002	SW5	78	69.890	-0.030	0.000	0.83			4.6	OK
2.003	SW4	82	69.355	-0.185	0.000	0.07			4.6	OK
2.004	S12	86	69.033	-0.067	0.000	0.02		182	1.6	OK
1.006	S13	91	69.038	0.188	0.000	0.07			1.4	SURCHARGED

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Midpoint	UoR Chancellors Building	
Alencon Link	Surface water drainage	
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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 Offline Controls 1 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) 18.700 Cv (Summer) 0.750
 Region England and Wales Ratio R 0.400 Cv (Winter) 0.840

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

Profile(s) Summer and Winter
 Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440
 Return Period(s) (years) 2, 5, 10, 30, 100
 Climate Change (%) 0, 0, 5, 10, 40

PN	US/MH Name	Storm Rank	Water			Flooded		Half Drain Time (mins)	Pipe Flow (l/s)	Status
			Level (m)	Depth (m)	Volume (m³)	Flow / Cap.	Overflow (l/s)			
1.000	SW9	85	70.052	-0.058	0.000	0.38			2.9	OK
1.001	SW3	86	69.647	-0.053	0.000	0.45			2.9	OK
1.002	SW2	86	69.424	-0.106	0.000	0.19			3.1	OK
1.003	SW1	94	69.211	-0.099	0.000	0.25			3.5	OK
1.004	S10	94	69.032	-0.068	0.000	0.10			3.6	OK
1.005	S11	94	69.033	-0.007	0.000	0.09			3.6	OK
2.000	SW8	85	70.258	-0.082	0.000	0.07	0.6		0.4	FLOOD RISK
3.000	Swale	85	70.180	-0.270	0.000	0.01			0.6	FLOOD RISK*
3.001	Swale	84	70.160	-0.087	0.000	0.04			0.5	FLOOD RISK
2.001	SW6	85	69.997	-0.073	0.000	0.17			0.9	OK
2.002	SW5	85	69.881	-0.039	0.000	0.69			3.8	OK
2.003	SW4	87	69.350	-0.190	0.000	0.06			3.8	OK
2.004	S12	87	69.029	-0.071	0.000	0.02		188	1.6	OK
1.006	S13	92	69.035	0.185	0.000	0.07			1.4	SURCHARGED

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Midpoint	UoR Chancellors Building	
Alencon Link	Surface water drainage	
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Summary Wizard of 360 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 Offline Controls 1 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) 18.700 Cv (Summer) 0.750
 Region England and Wales Ratio R 0.400 Cv (Winter) 0.840

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

Profile(s) Summer and Winter
 Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440
 Return Period(s) (years) 2, 5, 10, 30, 100
 Climate Change (%) 0, 0, 5, 10, 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)	
1.000	SW9	96	70.046	-0.064	0.000	0.28		2.1	OK
1.001	SW3	96	69.640	-0.060	0.000	0.33		2.1	OK
1.002	SW2	96	69.417	-0.113	0.000	0.14		2.3	OK
1.003	SW1	100	69.204	-0.106	0.000	0.19		2.6	OK
1.004	S10	99	69.020	-0.080	0.000	0.08		2.7	OK
1.005	S11	98	69.019	-0.021	0.000	0.07		2.7	OK
2.000	SW8	96	70.255	-0.085	0.000	0.05	0.4	0.3	FLOOD RISK
3.000	Swale	97	70.175	-0.275	0.000	0.00		0.4	FLOOD RISK*
3.001	Swale	97	70.159	-0.088	0.000	0.03		0.4	FLOOD RISK
2.001	SW6	97	69.994	-0.076	0.000	0.13		0.7	OK
2.002	SW5	97	69.871	-0.049	0.000	0.52		2.8	OK
2.003	SW4	97	69.345	-0.195	0.000	0.04		2.8	OK
2.004	S12	91	69.016	-0.084	0.000	0.03	226	2.1	OK
1.006	S13	97	69.022	0.172	0.000	0.07		1.4	SURCHARGED

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Midpoint	UoR Chancellors Building	
Alencon Link	Surface water drainage	
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Summary Wizard of 480 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 Offline Controls 1 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) 18.700 Cv (Summer) 0.750
 Region England and Wales Ratio R 0.400 Cv (Winter) 0.840

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

Profile(s) Summer and Winter
 Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440
 Return Period(s) (years) 2, 5, 10, 30, 100
 Climate Change (%) 0, 0, 5, 10, 40

PN	US/MH Name	Storm Rank	Water			Flow / Overflow	Half Drain Time	Pipe Flow	Status
			Level (m)	Depth (m)	Volume (m³)				
1.000	SW9	106	70.042	-0.068	0.000	0.23		1.7	OK
1.001	SW3	106	69.635	-0.065	0.000	0.27		1.7	OK
1.002	SW2	106	69.414	-0.116	0.000	0.11		1.9	OK
1.003	SW1	107	69.199	-0.111	0.000	0.15		2.1	OK
1.004	S10	104	69.005	-0.095	0.000	0.06		2.1	OK
1.005	S11	102	69.005	-0.035	0.000	0.05		2.2	OK
2.000	SW8	106	70.253	-0.087	0.000	0.04	0.3	0.2	FLOOD RISK
3.000	Swale	106	70.172	-0.278	0.000	0.00		0.3	FLOOD RISK*
3.001	Swale	104	70.158	-0.089	0.000	0.03		0.3	FLOOD RISK
2.001	SW6	104	69.992	-0.078	0.000	0.11		0.6	OK
2.002	SW5	106	69.865	-0.055	0.000	0.42		2.3	OK
2.003	SW4	106	69.343	-0.197	0.000	0.04		2.3	OK
2.004	S12	95	69.004	-0.096	0.000	0.02		213	OK
1.006	S13	99	69.005	0.155	0.000	0.07		1.4	SURCHARGED

AECOM		Page 75
Midpoint	UoR Chancellors Building	
Alencon Link	Surface water drainage	
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Summary Wizard of 600 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 Offline Controls 1 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) 18.700 Cv (Summer) 0.750
 Region England and Wales Ratio R 0.400 Cv (Winter) 0.840

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

Profile(s) Summer and Winter
 Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440
 Return Period(s) (years) 2, 5, 10, 30, 100
 Climate Change (%) 0, 0, 5, 10, 40

PN	US/MH Name	Storm Rank	Water Surcharged			Flooded		Half Drain Time (mins)	Pipe Flow (l/s)	Status
			Level (m)	Depth (m)	Volume (m³)	Flow / Cap.	Overflow (l/s)			
1.000	SW9	110	70.039	-0.071	0.000	0.19			1.5	OK
1.001	SW3	110	69.632	-0.068	0.000	0.23			1.5	OK
1.002	SW2	110	69.411	-0.119	0.000	0.10			1.6	OK
1.003	SW1	111	69.196	-0.114	0.000	0.13			1.8	OK
1.004	S10	109	68.989	-0.111	0.000	0.05			1.8	OK
1.005	S11	109	68.989	-0.051	0.000	0.05			1.9	OK
2.000	SW8	110	70.252	-0.088	0.000	0.04	0.3		0.2	FLOOD RISK
3.000	Swale	111	70.170	-0.280	0.000	0.00			0.3	FLOOD RISK*
3.001	Swale	111	70.157	-0.090	0.000	0.02			0.3	FLOOD RISK
2.001	SW6	111	69.990	-0.080	0.000	0.09			0.5	OK
2.002	SW5	111	69.861	-0.059	0.000	0.36			2.0	OK
2.003	SW4	111	69.341	-0.199	0.000	0.03			2.0	OK
2.004	S12	101	68.988	-0.112	0.000	0.02		224	1.4	OK
1.006	S13	108	68.988	0.138	0.000	0.07			1.4	SURCHARGED

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Midpoint	UoR Chancellors Building	
Alencon Link	Surface water drainage	
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Summary Wizard of 720 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 Offline Controls 1 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) 18.700 Cv (Summer) 0.750
 Region England and Wales Ratio R 0.400 Cv (Winter) 0.840

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

Profile(s) Summer and Winter
 Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440
 Return Period(s) (years) 2, 5, 10, 30, 100
 Climate Change (%) 0, 0, 5, 10, 40

PN	US/MH Name	Storm Rank	Water			Flooded		Half Drain Time (mins)	Pipe Flow (l/s)	Status
			Level (m)	Depth (m)	Volume (m³)	Flow / Cap.	Overflow (l/s)			
1.000	SW9	114	70.037	-0.073	0.000	0.17			1.3	OK
1.001	SW3	114	69.630	-0.070	0.000	0.20			1.3	OK
1.002	SW2	114	69.409	-0.121	0.000	0.08			1.4	OK
1.003	SW1	114	69.193	-0.117	0.000	0.11			1.5	OK
1.004	S10	112	68.973	-0.127	0.000	0.05			1.6	OK
1.005	S11	112	68.973	-0.067	0.000	0.04			1.6	OK
2.000	SW8	114	70.252	-0.088	0.000	0.03	0.3		0.2	FLOOD RISK
3.000	Swale	113	70.168	-0.282	0.000	0.00			0.3	FLOOD RISK*
3.001	Swale	114	70.157	-0.090	0.000	0.02			0.2	FLOOD RISK
2.001	SW6	114	69.989	-0.081	0.000	0.08			0.4	OK
2.002	SW5	114	69.858	-0.062	0.000	0.31			1.7	OK
2.003	SW4	114	69.339	-0.201	0.000	0.03			1.7	OK
2.004	S12	106	68.972	-0.128	0.000	0.02		228	1.4	OK
1.006	S13	112	68.972	0.122	0.000	0.07			1.4	SURCHARGED

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Midpoint	UoR Chancellors Building	
Alencon Link	Surface water drainage	
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Summary Wizard of 960 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 Offline Controls 1 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) 18.700 Cv (Summer) 0.750
 Region England and Wales Ratio R 0.400 Cv (Winter) 0.840

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

Profile(s) Summer and Winter
 Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440
 Return Period(s) (years) 2, 5, 10, 30, 100
 Climate Change (%) 0, 0, 5, 10, 40

PN	US/MH Name	Storm Rank	Water Surcharged			Flooded		Half Drain Time (mins)	Pipe Flow (l/s)	Status
			Level (m)	Depth (m)	Volume (m³)	Flow / Cap.	Overflow (l/s)			
1.000	SW9	118	70.034	-0.076	0.000	0.13			1.0	OK
1.001	SW3	118	69.627	-0.073	0.000	0.16			1.0	OK
1.002	SW2	118	69.406	-0.124	0.000	0.07			1.1	OK
1.003	SW1	118	69.190	-0.120	0.000	0.09			1.2	OK
1.004	S10	117	68.942	-0.158	0.000	0.04			1.3	OK
1.005	S11	117	68.942	-0.098	0.000	0.03			1.3	OK
2.000	SW8	118	70.251	-0.089	0.000	0.03	0.2		0.1	FLOOD RISK
3.000	Swale	118	70.165	-0.285	0.000	0.00			0.2	FLOOD RISK*
3.001	Swale	117	70.155	-0.092	0.000	0.02			0.2	FLOOD RISK
2.001	SW6	117	69.987	-0.083	0.000	0.07			0.4	OK
2.002	SW5	118	69.854	-0.066	0.000	0.25			1.4	OK
2.003	SW4	118	69.338	-0.202	0.000	0.02			1.4	OK
2.004	S12	115	68.941	-0.159	0.000	0.02		213	1.2	OK
1.006	S13	117	68.941	0.091	0.000	0.07			1.4	SURCHARGED

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Midpoint	UoR Chancellors Building	
Alencon Link	Surface water drainage	
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Summary Wizard of 1440 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 Offline Controls 1 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) 18.700 Cv (Summer) 0.750
 Region England and Wales Ratio R 0.400 Cv (Winter) 0.840

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

Profile(s) Summer and Winter
 Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440
 Return Period(s) (years) 2, 5, 10, 30, 100
 Climate Change (%) 0, 0, 5, 10, 40

PN	US/MH Name	Storm Rank	Water	Surcharged	Flooded	Flow / Overflow		Half Drain	Pipe	Status
			Level (m)	Depth (m)	Volume (m³)			Time (mins)	Flow (l/s)	
1.000	SW9	120	70.031	-0.079	0.000	0.10			0.8	OK
1.001	SW3	120	69.623	-0.077	0.000	0.12			0.8	OK
1.002	SW2	120	69.402	-0.128	0.000	0.05			0.8	OK
1.003	SW1	120	69.185	-0.125	0.000	0.07			0.9	OK
1.004	S10	120	68.900	-0.200	0.000	0.03			0.9	OK
1.005	S11	120	68.889	-0.151	0.000	0.02			1.0	OK
2.000	SW8	120	70.249	-0.091	0.000	0.02	0.2		0.1	FLOOD RISK
3.000	Swale	120	70.162	-0.288	0.000	0.00			0.2	FLOOD RISK*
3.001	Swale	120	70.153	-0.094	0.000	0.01			0.2	FLOOD RISK
2.001	SW6	120	69.984	-0.086	0.000	0.05			0.3	OK
2.002	SW5	120	69.849	-0.071	0.000	0.19			1.0	OK
2.003	SW4	120	69.332	-0.208	0.000	0.02			1.0	OK
2.004	S12	120	68.888	-0.212	0.000	0.01		193	1.0	OK
1.006	S13	120	68.888	0.038	0.000	0.07			1.4	SURCHARGED

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Midpoint	UoR Chancellors Building	
Alencon Link	Surface water drainage	
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Summary Wizard of 15 minute 5 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 Offline Controls 1 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) 18.700 Cv (Summer) 0.750
 Region England and Wales Ratio R 0.400 Cv (Winter) 0.840

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

Profile(s) Summer and Winter
 Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440
 Return Period(s) (years) 2, 5, 10, 30, 100
 Climate Change (%) 0, 0, 5, 10, 40

WARNING: The analysis maybe unstable. Please see the method of analysis help for more details.

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)	
1.000	SW9	22	70.701	0.591	0.617	1.36		10.4	FLOOD
1.001	SW3	24	69.963	0.263	0.000	1.60		10.2	FLOOD RISK
1.002	SW2	35	69.473	-0.057	0.000	0.70		11.3	OK
1.003	SW1	52	69.277	-0.033	0.000	0.96		13.1	OK
1.004	S10	81	69.073	-0.027	0.000	0.38		13.0	OK
1.005	S11	84	69.061	0.021	0.000	0.33		13.2	SURCHARGED
2.000	SW8	19	70.310	-0.030	0.000	0.43	6.2	2.3	FLOOD RISK
3.000	Swale	27	70.226	-0.224	0.000	0.06		6.1	FLOOD RISK*
3.001	Swale	32	70.201	-0.046	0.000	0.40		4.7	FLOOD RISK
2.001	SW6	21	70.309	0.239	0.000	0.90		5.0	FLOOD RISK
2.002	SW5	20	70.482	0.562	0.000	1.58		8.6	FLOOD RISK
2.003	SW4	42	69.370	-0.170	0.000	0.14		8.6	OK
2.004	S12	109	68.965	-0.135	0.000	0.02	137	1.6	OK
1.006	S13	89	69.042	0.192	0.000	0.07		1.4	SURCHARGED

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Midpoint	UoR Chancellors Building	
Alencon Link	Surface water drainage	
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Summary Wizard of 30 minute 5 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 Offline Controls 1 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) 18.700 Cv (Summer) 0.750
 Region England and Wales Ratio R 0.400 Cv (Winter) 0.840

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

Profile(s) Summer and Winter
 Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440
 Return Period(s) (years) 2, 5, 10, 30, 100
 Climate Change (%) 0, 0, 5, 10, 40

			Water	Surcharged	Flooded				Half Drain	Pipe	
	US/MH	Storm	Level	Depth	Volume	Flow /	Overflow		Time	Flow	
PN	Name	Rank	(m)	(m)	(m³)	Cap.	(l/s)		(mins)	(l/s)	Status
1.000	SW9	26	70.664	0.554	0.000	1.32				10.1	FLOOD RISK
1.001	SW3	31	69.947	0.247	0.000	1.57				10.0	FLOOD RISK
1.002	SW2	39	69.471	-0.059	0.000	0.67				10.9	OK
1.003	SW1	55	69.272	-0.038	0.000	0.91				12.4	OK
1.004	S10	75	69.087	-0.013	0.000	0.36				12.3	OK
1.005	S11	76	69.076	0.036	0.000	0.31				12.6	SURCHARGED
2.000	SW8	27	70.296	-0.044	0.000	0.34	4.6			1.9	FLOOD RISK
3.000	Swale	31	70.219	-0.231	0.000	0.05				4.7	FLOOD RISK*
3.001	Swale	31	70.202	-0.045	0.000	0.37				4.3	FLOOD RISK
2.001	SW6	26	70.295	0.225	0.000	0.85				4.7	FLOOD RISK
2.002	SW5	25	70.417	0.497	0.000	1.52				8.3	FLOOD RISK
2.003	SW4	46	69.369	-0.171	0.000	0.13				8.3	OK
2.004	S12	90	69.016	-0.084	0.000	0.02			178	1.6	OK
1.006	S13	83	69.057	0.207	0.000	0.07				1.4	SURCHARGED

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Midpoint	UoR Chancellors Building	
Alencon Link	Surface water drainage	
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Summary Wizard of 60 minute 5 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 Offline Controls 1 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) 18.700 Cv (Summer) 0.750
 Region England and Wales Ratio R 0.400 Cv (Winter) 0.840

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

Profile(s) Summer and Winter
 Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440
 Return Period(s) (years) 2, 5, 10, 30, 100
 Climate Change (%) 0, 0, 5, 10, 40

PN	US/MH Name	Storm Rank	Water			Flow / Overflow Cap.	Half Drain Time (mins)	Pipe Flow (l/s)	Status
			Level (m)	Depth (m)	Volume (m³)				
1.000	SW9	38	70.292	0.182	0.000	1.08		8.3	SURCHARGED
1.001	SW3	47	69.810	0.110	0.000	1.29		8.2	FLOOD RISK
1.002	SW2	52	69.460	-0.070	0.000	0.55		8.9	OK
1.003	SW1	67	69.257	-0.053	0.000	0.74		10.1	OK
1.004	S10	77	69.078	-0.022	0.000	0.29		10.1	OK
1.005	S11	78	69.073	0.033	0.000	0.26		10.3	SURCHARGED
2.000	SW8	39	70.278	-0.062	0.000	0.24	2.4	1.3	FLOOD RISK
3.000	Swale	41	70.202	-0.248	0.000	0.03		2.4	FLOOD RISK*
3.001	Swale	38	70.188	-0.059	0.000	0.27		3.1	FLOOD RISK
2.001	SW6	39	70.265	0.195	0.000	0.67		3.7	FLOOD RISK
2.002	SW5	39	70.299	0.379	0.000	1.42		7.8	SURCHARGED
2.003	SW4	56	69.367	-0.173	0.000	0.12		7.8	OK
2.004	S12	73	69.072	-0.028	0.000	0.03	209	1.8	OK
1.006	S13	74	69.074	0.224	0.000	0.07		1.4	SURCHARGED

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Midpoint	UoR Chancellors Building	
Alencon Link	Surface water drainage	
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Summary Wizard of 120 minute 5 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 Offline Controls 1 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) 18.700 Cv (Summer) 0.750
 Region England and Wales Ratio R 0.400 Cv (Winter) 0.840

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

Profile(s) Summer and Winter
 Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440
 Return Period(s) (years) 2, 5, 10, 30, 100
 Climate Change (%) 0, 0, 5, 10, 40

			Water	Surcharged	Flooded	Half Drain			Pipe	
	US/MH	Storm	Level	Depth	Volume	Flow /	Overflow	Time	Flow	
PN	Name	Rank	(m)	(m)	(m³)	Cap.	(l/s)	(mins)	(l/s)	Status
1.000	SW9	53	70.076	-0.034	0.000	0.78			5.9	OK
1.001	SW3	61	69.676	-0.024	0.000	0.93			5.9	OK
1.002	SW2	65	69.445	-0.085	0.000	0.40			6.4	OK
1.003	SW1	78	69.237	-0.073	0.000	0.53			7.2	OK
1.004	S10	64	69.179	0.079	0.000	0.21			7.2	SURCHARGED
1.005	S11	65	69.267	0.227	0.000	0.18			7.3	SURCHARGED
2.000	SW8	53	70.266	-0.074	0.000	0.15	1.2		0.8	FLOOD RISK
3.000	Swale	56	70.189	-0.261	0.000	0.01			1.2	FLOOD RISK*
3.001	Swale	56	70.165	-0.082	0.000	0.07			0.9	FLOOD RISK
2.001	SW6	54	70.145	0.075	0.000	0.33			1.8	SURCHARGED
2.002	SW5	54	70.128	0.208	0.000	1.25			6.8	SURCHARGED
2.003	SW4	64	69.364	-0.176	0.000	0.11			6.8	OK
2.004	S12	65	69.118	0.018	0.000	0.12		221	8.2	SURCHARGED
1.006	S13	65	69.342	0.492	0.000	0.07			1.4	SURCHARGED

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Midpoint	UoR Chancellors Building	
Alencon Link	Surface water drainage	
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Summary Wizard of 180 minute 5 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 Offline Controls 1 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) 18.700 Cv (Summer) 0.750
 Region England and Wales Ratio R 0.400 Cv (Winter) 0.840

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

Profile(s) Summer and Winter
 Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440
 Return Period(s) (years) 2, 5, 10, 30, 100
 Climate Change (%) 0, 0, 5, 10, 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)	
1.000	SW9	66	70.065	-0.045	0.000	0.58		4.4	OK
1.001	SW3	70	69.661	-0.039	0.000	0.69		4.4	OK
1.002	SW2	72	69.435	-0.095	0.000	0.29		4.7	OK
1.003	SW1	83	69.225	-0.085	0.000	0.39		5.3	OK
1.004	S10	63	69.198	0.098	0.000	0.16		5.5	SURCHARGED
1.005	S11	61	69.298	0.258	0.000	0.14		5.5	SURCHARGED
2.000	SW8	66	70.262	-0.078	0.000	0.11	0.9	0.6	FLOOD RISK
3.000	Swale	68	70.185	-0.265	0.000	0.01		0.9	FLOOD RISK*
3.001	Swale	64	70.163	-0.084	0.000	0.06		0.7	FLOOD RISK
2.001	SW6	66	70.004	-0.066	0.000	0.25		1.4	OK
2.002	SW5	67	69.929	0.009	0.000	1.02		5.6	SURCHARGED
2.003	SW4	74	69.360	-0.180	0.000	0.09		5.6	OK
2.004	S12	62	69.129	0.029	0.000	0.12	234	8.2	SURCHARGED
1.006	S13	62	69.377	0.527	0.000	0.07		1.4	SURCHARGED

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Midpoint	UoR Chancellors Building	
Alencon Link	Surface water drainage	
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Summary Wizard of 240 minute 5 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 Offline Controls 1 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) 18.700 Cv (Summer) 0.750
 Region England and Wales Ratio R 0.400 Cv (Winter) 0.840

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

Profile(s) Summer and Winter
 Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440
 Return Period(s) (years) 2, 5, 10, 30, 100
 Climate Change (%) 0, 0, 5, 10, 40

			Water	Surcharged	Flooded	Half Drain			Pipe	
	US/MH	Storm	Level	Depth	Volume	Flow /	Overflow	Time	Flow	
PN	Name	Rank	(m)	(m)	(m³)	Cap.	(l/s)	(mins)	(l/s)	Status
1.000	SW9	74	70.058	-0.052	0.000	0.47			3.6	OK
1.001	SW3	77	69.653	-0.047	0.000	0.56			3.6	OK
1.002	SW2	78	69.429	-0.101	0.000	0.24			3.8	OK
1.003	SW1	88	69.218	-0.092	0.000	0.32			4.3	OK
1.004	S10	62	69.202	0.102	0.000	0.14			4.8	SURCHARGED
1.005	S11	63	69.289	0.249	0.000	0.11			4.5	SURCHARGED
2.000	SW8	74	70.260	-0.080	0.000	0.09	0.7		0.5	FLOOD RISK
3.000	Swale	74	70.182	-0.268	0.000	0.01			0.7	FLOOD RISK*
3.001	Swale	74	70.162	-0.085	0.000	0.05			0.6	FLOOD RISK
2.001	SW6	75	70.001	-0.069	0.000	0.21			1.2	OK
2.002	SW5	75	69.891	-0.029	0.000	0.86			4.7	OK
2.003	SW4	80	69.355	-0.185	0.000	0.07			4.7	OK
2.004	S12	63	69.127	0.027	0.000	0.13		231	8.4	SURCHARGED
1.006	S13	63	69.372	0.522	0.000	0.07			1.4	SURCHARGED

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Midpoint	UoR Chancellors Building	
Alencon Link	Surface water drainage	
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Summary Wizard of 360 minute 5 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 Offline Controls 1 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) 18.700 Cv (Summer) 0.750
 Region England and Wales Ratio R 0.400 Cv (Winter) 0.840

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

Profile(s) Summer and Winter
 Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440
 Return Period(s) (years) 2, 5, 10, 30, 100
 Climate Change (%) 0, 0, 5, 10, 40

			Water	Surcharged	Flooded	Half Drain			Pipe	
	US/MH	Storm	Level	Depth	Volume	Flow /	Overflow	Time	Flow	
PN	Name	Rank	(m)	(m)	(m³)	Cap.	(l/s)	(mins)	(l/s)	Status
1.000	SW9	87	70.050	-0.060	0.000	0.34			2.6	OK
1.001	SW3	88	69.645	-0.055	0.000	0.41			2.6	OK
1.002	SW2	88	69.422	-0.108	0.000	0.18			2.8	OK
1.003	SW1	95	69.209	-0.101	0.000	0.23			3.2	OK
1.004	S10	66	69.169	0.069	0.000	0.12			4.1	SURCHARGED
1.005	S11	66	69.257	0.217	0.000	0.08			3.3	SURCHARGED
2.000	SW8	87	70.257	-0.083	0.000	0.07	0.5		0.4	FLOOD RISK
3.000	Swale	87	70.178	-0.272	0.000	0.01			0.5	FLOOD RISK*
3.001	Swale	88	70.160	-0.087	0.000	0.04			0.5	FLOOD RISK
2.001	SW6	87	69.997	-0.073	0.000	0.16			0.9	OK
2.002	SW5	87	69.878	-0.042	0.000	0.64			3.5	OK
2.003	SW4	89	69.349	-0.191	0.000	0.06			3.5	OK
2.004	S12	66	69.112	0.012	0.000	0.11		265	7.4	SURCHARGED
1.006	S13	66	69.320	0.470	0.000	0.07			1.4	SURCHARGED

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Midpoint	UoR Chancellors Building	
Alencon Link	Surface water drainage	
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Summary Wizard of 480 minute 5 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 Offline Controls 1 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) 18.700 Cv (Summer) 0.750
 Region England and Wales Ratio R 0.400 Cv (Winter) 0.840

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

Profile(s) Summer and Winter
 Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440
 Return Period(s) (years) 2, 5, 10, 30, 100
 Climate Change (%) 0, 0, 5, 10, 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)	
1.000	SW9	97	70.046	-0.064	0.000	0.28		2.1	OK
1.001	SW3	97	69.639	-0.061	0.000	0.33		2.1	OK
1.002	SW2	97	69.417	-0.113	0.000	0.14		2.3	OK
1.003	SW1	101	69.204	-0.106	0.000	0.19		2.6	OK
1.004	S10	73	69.095	-0.005	0.000	0.08		2.6	OK
1.005	S11	72	69.095	0.055	0.000	0.07		2.7	SURCHARGED
2.000	SW8	97	70.255	-0.085	0.000	0.05	0.4	0.3	FLOOD RISK
3.000	Swale	96	70.175	-0.275	0.000	0.00		0.4	FLOOD RISK*
3.001	Swale	94	70.159	-0.088	0.000	0.03		0.4	FLOOD RISK
2.001	SW6	95	69.994	-0.076	0.000	0.13		0.7	OK
2.002	SW5	96	69.871	-0.049	0.000	0.52		2.8	OK
2.003	SW4	96	69.345	-0.195	0.000	0.05		2.8	OK
2.004	S12	69	69.093	-0.007	0.000	0.03		290	OK
1.006	S13	70	69.096	0.246	0.000	0.07		1.4	SURCHARGED

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Midpoint	UoR Chancellors Building	
Alencon Link	Surface water drainage	
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Summary Wizard of 600 minute 5 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 Offline Controls 1 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) 18.700 Cv (Summer) 0.750
 Region England and Wales Ratio R 0.400 Cv (Winter) 0.840

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

Profile(s) Summer and Winter
 Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440
 Return Period(s) (years) 2, 5, 10, 30, 100
 Climate Change (%) 0, 0, 5, 10, 40

PN	US/MH Name	Storm Rank	Water			Flow / Overflow Cap.	Half Drain Time (mins)	Pipe Flow (l/s)	Status
			Level (m)	Depth (m)	Volume (m³)				
1.000	SW9	103	70.043	-0.067	0.000	0.23		1.8	OK
1.001	SW3	103	69.636	-0.064	0.000	0.28		1.8	OK
1.002	SW2	103	69.414	-0.116	0.000	0.12		1.9	OK
1.003	SW1	104	69.200	-0.110	0.000	0.16		2.2	OK
1.004	S10	76	69.080	-0.020	0.000	0.06		2.2	OK
1.005	S11	74	69.082	0.042	0.000	0.06		2.3	SURCHARGED
2.000	SW8	103	70.254	-0.086	0.000	0.05	0.4	0.3	FLOOD RISK
3.000	Swale	103	70.172	-0.278	0.000	0.00		0.4	FLOOD RISK*
3.001	Swale	102	70.158	-0.089	0.000	0.03		0.3	FLOOD RISK
2.001	SW6	103	69.992	-0.078	0.000	0.11		0.6	OK
2.002	SW5	103	69.866	-0.054	0.000	0.44		2.4	OK
2.003	SW4	103	69.343	-0.197	0.000	0.04		2.4	OK
2.004	S12	71	69.077	-0.023	0.000	0.03		291	OK
1.006	S13	73	69.084	0.234	0.000	0.07		1.4	SURCHARGED

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Midpoint	UoR Chancellors Building	
Alencon Link	Surface water drainage	
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Summary Wizard of 720 minute 5 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 Offline Controls 1 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) 18.700 Cv (Summer) 0.750
 Region England and Wales Ratio R 0.400 Cv (Winter) 0.840

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

Profile(s) Summer and Winter
 Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440
 Return Period(s) (years) 2, 5, 10, 30, 100
 Climate Change (%) 0, 0, 5, 10, 40

PN	US/MH Name	Storm Rank	Water			Flooded		Half Drain Time (mins)	Pipe Flow (l/s)	Status
			Level (m)	Depth (m)	Volume (m³)	Flow / Cap.	Overflow (l/s)			
1.000	SW9	107	70.040	-0.070	0.000	0.20			1.6	OK
1.001	SW3	107	69.633	-0.067	0.000	0.24			1.6	OK
1.002	SW2	107	69.412	-0.118	0.000	0.10			1.7	OK
1.003	SW1	108	69.197	-0.113	0.000	0.14			1.9	OK
1.004	S10	85	69.062	-0.038	0.000	0.06			1.9	OK
1.005	S11	82	69.063	0.023	0.000	0.05			2.0	SURCHARGED
2.000	SW8	107	70.253	-0.087	0.000	0.04	0.3		0.2	FLOOD RISK
3.000	Swale	107	70.170	-0.280	0.000	0.00			0.3	FLOOD RISK*
3.001	Swale	107	70.158	-0.089	0.000	0.03			0.3	FLOOD RISK
2.001	SW6	107	69.991	-0.079	0.000	0.10			0.6	OK
2.002	SW5	107	69.863	-0.057	0.000	0.39			2.1	OK
2.003	SW4	107	69.342	-0.198	0.000	0.03			2.1	OK
2.004	S12	77	69.057	-0.043	0.000	0.03		295	2.1	OK
1.006	S13	78	69.064	0.214	0.000	0.07			1.4	SURCHARGED

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Midpoint	UoR Chancellors Building	
Alencon Link	Surface water drainage	
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Summary Wizard of 960 minute 5 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 Offline Controls 1 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) 18.700 Cv (Summer) 0.750
 Region England and Wales Ratio R 0.400 Cv (Winter) 0.840

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

Profile(s) Summer and Winter
 Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440
 Return Period(s) (years) 2, 5, 10, 30, 100
 Climate Change (%) 0, 0, 5, 10, 40

PN	US/MH Name	Storm Rank	Water Surcharged			Flooded		Half Drain Time (mins)	Pipe Flow (l/s)	Status
			Level (m)	Depth (m)	Volume (m³)	Flow / Cap.	Overflow (l/s)			
1.000	SW9	115	70.037	-0.073	0.000	0.16			1.2	OK
1.001	SW3	115	69.630	-0.070	0.000	0.20			1.2	OK
1.002	SW2	115	69.409	-0.121	0.000	0.08			1.3	OK
1.003	SW1	115	69.193	-0.117	0.000	0.11			1.5	OK
1.004	S10	96	69.029	-0.071	0.000	0.05			1.6	OK
1.005	S11	96	69.026	-0.014	0.000	0.04			1.6	OK
2.000	SW8	115	70.252	-0.088	0.000	0.03	0.3		0.2	FLOOD RISK
3.000	Swale	115	70.168	-0.282	0.000	0.00			0.3	FLOOD RISK*
3.001	Swale	113	70.157	-0.090	0.000	0.02			0.2	FLOOD RISK
2.001	SW6	113	69.989	-0.081	0.000	0.08			0.4	OK
2.002	SW5	115	69.858	-0.062	0.000	0.31			1.7	OK
2.003	SW4	115	69.339	-0.201	0.000	0.03			1.7	OK
2.004	S12	92	69.016	-0.084	0.000	0.03		294	2.3	OK
1.006	S13	96	69.025	0.175	0.000	0.07			1.4	SURCHARGED

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Midpoint	UoR Chancellors Building	
Alencon Link	Surface water drainage	
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Summary Wizard of 1440 minute 5 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 Offline Controls 1 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) 18.700 Cv (Summer) 0.750
 Region England and Wales Ratio R 0.400 Cv (Winter) 0.840

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

Profile(s) Summer and Winter
 Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440
 Return Period(s) (years) 2, 5, 10, 30, 100
 Climate Change (%) 0, 0, 5, 10, 40

PN	US/MH Name	Storm Rank	Water Surcharged			Flooded		Half Drain Time (mins)	Pipe Flow (l/s)	Status
			Level (m)	Depth (m)	Volume (m³)	Flow / Cap.	Overflow (l/s)			
1.000	SW9	119	70.033	-0.077	0.000	0.12			0.9	OK
1.001	SW3	119	69.625	-0.075	0.000	0.14			0.9	OK
1.002	SW2	119	69.404	-0.126	0.000	0.06			1.0	OK
1.003	SW1	119	69.189	-0.121	0.000	0.08			1.1	OK
1.004	S10	116	68.956	-0.144	0.000	0.03			1.1	OK
1.005	S11	116	68.956	-0.084	0.000	0.03			1.2	OK
2.000	SW8	119	70.250	-0.090	0.000	0.02	0.2		0.1	FLOOD RISK
3.000	Swale	119	70.164	-0.286	0.000	0.00			0.2	FLOOD RISK*
3.001	Swale	119	70.154	-0.093	0.000	0.02			0.2	FLOOD RISK
2.001	SW6	119	69.986	-0.084	0.000	0.06			0.3	OK
2.002	SW5	119	69.852	-0.068	0.000	0.23			1.2	OK
2.003	SW4	119	69.336	-0.204	0.000	0.02			1.2	OK
2.004	S12	112	68.955	-0.145	0.000	0.02		254	1.2	OK
1.006	S13	116	68.955	0.105	0.000	0.07			1.4	SURCHARGED

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Midpoint	UoR Chancellors Building	
Alencon Link	Surface water drainage	
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Summary Wizard of 15 minute 10 year Winter I+5% 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 Offline Controls 1 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) 18.700 Cv (Summer) 0.750
 Region England and Wales Ratio R 0.400 Cv (Winter) 0.840

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

Profile(s) Summer and Winter
 Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440
 Return Period(s) (years) 2, 5, 10, 30, 100
 Climate Change (%) 0, 0, 5, 10, 40

WARNING: The analysis maybe unstable. Please see the method of analysis help for more details.

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)	
1.000	SW9	15	70.702	0.592	1.940	1.37		10.4	FLOOD
1.001	SW3	20	69.963	0.263	0.000	1.60		10.2	FLOOD RISK
1.002	SW2	29	69.477	-0.053	0.000	0.73		11.8	OK
1.003	SW1	42	69.325	0.015	0.000	1.04		14.1	SURCHARGED
1.004	S10	74	69.094	-0.006	0.000	0.40		13.8	OK
1.005	S11	75	69.081	0.041	0.000	0.35		14.1	SURCHARGED
2.000	SW8	12	70.340	0.000	0.000	0.31	7.9	1.7	FLOOD RISK
3.000	Swale	20	70.241	-0.209	0.000	0.08		7.8	FLOOD RISK*
3.001	Swale	23	70.226	-0.021	0.000	0.48		5.7	FLOOD RISK
2.001	SW6	13	70.340	0.270	0.000	1.04		5.7	FLOOD RISK
2.002	SW5	12	70.661	0.741	0.678	1.72		9.4	FLOOD
2.003	SW4	30	69.373	-0.167	0.000	0.15		9.4	OK
2.004	S12	93	69.006	-0.094	0.000	0.03	160	1.8	OK
1.006	S13	81	69.060	0.210	0.000	0.07		1.4	SURCHARGED

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Midpoint	UoR Chancellors Building	
Alencon Link	Surface water drainage	
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Summary Wizard of 30 minute 10 year Winter I+5% 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 Offline Controls 1 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) 18.700 Cv (Summer) 0.750
 Region England and Wales Ratio R 0.400 Cv (Winter) 0.840

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

Profile(s) Summer and Winter
 Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440
 Return Period(s) (years) 2, 5, 10, 30, 100
 Climate Change (%) 0, 0, 5, 10, 40

WARNING: The analysis maybe unstable. Please see the method of analysis help for more details.

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)	
1.000	SW9	19	70.701	0.591	1.193	1.36		10.3	FLOOD
1.001	SW3	26	69.963	0.263	0.000	1.60		10.2	FLOOD RISK
1.002	SW2	33	69.474	-0.056	0.000	0.71		11.4	OK
1.003	SW1	48	69.291	-0.019	0.000	0.99		13.4	OK
1.004	S10	70	69.115	0.015	0.000	0.38		13.1	SURCHARGED
1.005	S11	70	69.105	0.065	0.000	0.34		13.6	SURCHARGED
2.000	SW8	20	70.310	-0.030	0.000	0.30	6.4	1.6	FLOOD RISK
3.000	Swale	23	70.236	-0.214	0.000	0.07		6.4	FLOOD RISK*
3.001	Swale	22	70.229	-0.018	0.000	0.48		5.6	FLOOD RISK
2.001	SW6	19	70.322	0.252	0.000	1.04		5.7	FLOOD RISK
2.002	SW5	16	70.608	0.688	0.000	1.68		9.2	FLOOD RISK
2.003	SW4	40	69.372	-0.168	0.000	0.15		9.2	OK
2.004	S12	72	69.073	-0.027	0.000	0.03	209	1.7	OK
1.006	S13	72	69.089	0.239	0.000	0.07		1.4	SURCHARGED

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Midpoint	UoR Chancellors Building	
Alencon Link	Surface water drainage	
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Summary Wizard of 60 minute 10 year Winter I+5% 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 Offline Controls 1 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) 18.700 Cv (Summer) 0.750
 Region England and Wales Ratio R 0.400 Cv (Winter) 0.840

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

Profile(s) Summer and Winter
 Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440
 Return Period(s) (years) 2, 5, 10, 30, 100
 Climate Change (%) 0, 0, 5, 10, 40

			Water	Surcharged	Flooded				Half Drain	Pipe	
	US/MH	Storm	Level	Depth	Volume	Flow /	Overflow		Time	Flow	
PN	Name	Rank	(m)	(m)	(m³)	Cap.	(l/s)		(mins)	(l/s)	Status
1.000	SW9	29	70.541	0.431	0.000	1.25				9.5	FLOOD RISK
1.001	SW3	35	69.903	0.203	0.000	1.49				9.5	FLOOD RISK
1.002	SW2	43	69.467	-0.063	0.000	0.63				10.2	OK
1.003	SW1	59	69.266	-0.044	0.000	0.85				11.5	OK
1.004	S10	58	69.237	0.137	0.000	0.33				11.5	SURCHARGED
1.005	S11	62	69.296	0.256	0.000	0.29				11.8	SURCHARGED
2.000	SW8	30	70.289	-0.051	0.000	0.25	3.8			1.3	FLOOD RISK
3.000	Swale	32	70.218	-0.232	0.000	0.04				3.7	FLOOD RISK*
3.001	Swale	26	70.216	-0.031	0.000	0.34				4.0	FLOOD RISK
2.001	SW6	29	70.284	0.214	0.000	0.80				4.4	FLOOD RISK
2.002	SW5	28	70.376	0.456	0.000	1.49				8.1	FLOOD RISK
2.003	SW4	48	69.368	-0.172	0.000	0.13				8.1	OK
2.004	S12	57	69.150	0.050	0.000	0.13			250	9.0	SURCHARGED
1.006	S13	61	69.392	0.542	0.000	0.07				1.4	SURCHARGED

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Midpoint	UoR Chancellors Building	
Alencon Link	Surface water drainage	
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Summary Wizard of 120 minute 10 year Winter I+5% 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 Offline Controls 1 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) 18.700 Cv (Summer) 0.750
 Region England and Wales Ratio R 0.400 Cv (Winter) 0.840

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

Profile(s) Summer and Winter
 Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440
 Return Period(s) (years) 2, 5, 10, 30, 100
 Climate Change (%) 0, 0, 5, 10, 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)	
1.000	SW9	48	70.096	-0.014	0.000	0.94		7.1	OK
1.001	SW3	56	69.737	0.037	0.000	1.12		7.1	SURCHARGED
1.002	SW2	59	69.453	-0.077	0.000	0.48		7.7	OK
1.003	SW1	64	69.261	-0.049	0.000	0.64		8.7	OK
1.004	S10	48	69.378	0.278	0.000	0.25		8.7	SURCHARGED
1.005	S11	48	69.415	0.375	0.000	0.22		8.9	SURCHARGED
2.000	SW8	48	70.269	-0.071	0.000	0.19	1.5	1.0	FLOOD RISK
3.000	Swale	46	70.194	-0.256	0.000	0.02		1.5	FLOOD RISK*
3.001	Swale	41	70.182	-0.065	0.000	0.20		2.4	FLOOD RISK
2.001	SW6	45	70.242	0.172	0.000	0.56		3.1	FLOOD RISK
2.002	SW5	45	70.237	0.317	0.000	1.36		7.4	SURCHARGED
2.003	SW4	59	69.366	-0.174	0.000	0.12		7.4	OK
2.004	S12	47	69.212	0.112	0.000	0.16	280	10.5	SURCHARGED
1.006	S13	48	69.535	0.685	0.000	0.07		1.4	SURCHARGED

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Midpoint	UoR Chancellors Building	
Alencon Link	Surface water drainage	
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Summary Wizard of 180 minute 10 year Winter I+5% 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 Offline Controls 1 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) 18.700 Cv (Summer) 0.750
 Region England and Wales Ratio R 0.400 Cv (Winter) 0.840

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

Profile(s) Summer and Winter
 Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440
 Return Period(s) (years) 2, 5, 10, 30, 100
 Climate Change (%) 0, 0, 5, 10, 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)	
1.000	SW9	58	70.072	-0.038	0.000	0.71		5.4	OK
1.001	SW3	64	69.671	-0.029	0.000	0.85		5.4	OK
1.002	SW2	66	69.442	-0.088	0.000	0.36		5.8	OK
1.003	SW1	61	69.263	-0.047	0.000	0.48		6.6	OK
1.004	S10	45	69.388	0.288	0.000	0.24		8.4	SURCHARGED
1.005	S11	44	69.423	0.383	0.000	0.17		6.8	SURCHARGED
2.000	SW8	58	70.265	-0.075	0.000	0.14	1.1	0.8	FLOOD RISK
3.000	Swale	58	70.188	-0.262	0.000	0.01		1.1	FLOOD RISK*
3.001	Swale	55	70.165	-0.082	0.000	0.08		0.9	FLOOD RISK
2.001	SW6	56	70.110	0.040	0.000	0.32		1.8	SURCHARGED
2.002	SW5	56	70.093	0.173	0.000	1.21		6.6	SURCHARGED
2.003	SW4	66	69.363	-0.177	0.000	0.10		6.6	OK
2.004	S12	44	69.230	0.130	0.000	0.16	298	10.6	SURCHARGED
1.006	S13	44	69.552	0.702	0.000	0.07		1.4	SURCHARGED

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Alencon Link	Surface water drainage	
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Summary Wizard of 240 minute 10 year Winter I+5% 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 Offline Controls 1 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) 18.700 Cv (Summer) 0.750
 Region England and Wales Ratio R 0.400 Cv (Winter) 0.840

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

Profile(s) Summer and Winter
 Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440
 Return Period(s) (years) 2, 5, 10, 30, 100
 Climate Change (%) 0, 0, 5, 10, 40

PN	US/MH Name	Storm Rank	Water Level	Surcharged Depth	Flooded Volume	Flow / Overflow	Half Drain Time (mins)	Pipe Flow	Status
			(m)	(m)	(m³)	Cap. (l/s)		(l/s)	
1.000	SW9	67	70.064	-0.046	0.000	0.57		4.4	OK
1.001	SW3	71	69.661	-0.039	0.000	0.68		4.4	OK
1.002	SW2	73	69.435	-0.095	0.000	0.29		4.7	OK
1.003	SW1	57	69.270	-0.040	0.000	0.39		5.3	OK
1.004	S10	42	69.417	0.317	0.000	0.23		7.8	SURCHARGED
1.005	S11	43	69.431	0.391	0.000	0.16		6.5	SURCHARGED
2.000	SW8	67	70.262	-0.078	0.000	0.11	0.9	0.6	FLOOD RISK
3.000	Swale	65	70.185	-0.265	0.000	0.01		0.9	FLOOD RISK*
3.001	Swale	63	70.164	-0.083	0.000	0.07		0.8	FLOOD RISK
2.001	SW6	64	70.004	-0.066	0.000	0.26		1.4	OK
2.002	SW5	65	69.936	0.016	0.000	1.03		5.6	SURCHARGED
2.003	SW4	72	69.360	-0.180	0.000	0.09		5.6	OK
2.004	S12	43	69.236	0.136	0.000	0.16	303	10.6	SURCHARGED
1.006	S13	43	69.557	0.707	0.000	0.07		1.4	SURCHARGED

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Midpoint	UoR Chancellors Building	
Alencon Link	Surface water drainage	
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Summary Wizard of 360 minute 10 year Winter I+5% 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 Offline Controls 1 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) 18.700 Cv (Summer) 0.750
 Region England and Wales Ratio R 0.400 Cv (Winter) 0.840

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

Profile(s) Summer and Winter
 Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440
 Return Period(s) (years) 2, 5, 10, 30, 100
 Climate Change (%) 0, 0, 5, 10, 40

PN	US/MH Name	Storm Rank	Water			Flooded		Half Drain Time (mins)	Pipe Flow (l/s)	Status
			Level (m)	Depth (m)	Volume (m³)	Flow / Cap.	Overflow (l/s)			
1.000	SW9	80	70.055	-0.055	0.000	0.42			3.2	OK
1.001	SW3	81	69.650	-0.050	0.000	0.50			3.2	OK
1.002	SW2	82	69.427	-0.103	0.000	0.21			3.5	OK
1.003	SW1	66	69.258	-0.052	0.000	0.29			3.9	OK
1.004	S10	44	69.403	0.303	0.000	0.21			7.2	SURCHARGED
1.005	S11	46	69.422	0.382	0.000	0.14			5.8	SURCHARGED
2.000	SW8	80	70.259	-0.081	0.000	0.08	0.7		0.5	FLOOD RISK
3.000	Swale	80	70.181	-0.269	0.000	0.01			0.7	FLOOD RISK*
3.001	Swale	77	70.161	-0.086	0.000	0.05			0.6	FLOOD RISK
2.001	SW6	79	70.000	-0.070	0.000	0.20			1.1	OK
2.002	SW5	80	69.887	-0.033	0.000	0.78			4.3	OK
2.003	SW4	83	69.353	-0.187	0.000	0.07			4.3	OK
2.004	S12	45	69.225	0.125	0.000	0.16		298	10.5	SURCHARGED
1.006	S13	46	69.550	0.700	0.000	0.07			1.4	SURCHARGED

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Summary Wizard of 480 minute 10 year Winter I+5% 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 Offline Controls 1 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) 18.700 Cv (Summer) 0.750
 Region England and Wales Ratio R 0.400 Cv (Winter) 0.840

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

Profile(s) Summer and Winter
 Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440
 Return Period(s) (years) 2, 5, 10, 30, 100
 Climate Change (%) 0, 0, 5, 10, 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)	
1.000	SW9	89	70.050	-0.060	0.000	0.34		2.6	OK
1.001	SW3	90	69.644	-0.056	0.000	0.40		2.6	OK
1.002	SW2	90	69.422	-0.108	0.000	0.17		2.8	OK
1.003	SW1	74	69.243	-0.067	0.000	0.23		3.1	OK
1.004	S10	49	69.362	0.262	0.000	0.20		6.8	SURCHARGED
1.005	S11	49	69.410	0.370	0.000	0.13		5.2	SURCHARGED
2.000	SW8	89	70.257	-0.083	0.000	0.07	0.5	0.4	FLOOD RISK
3.000	Swale	89	70.178	-0.272	0.000	0.01		0.5	FLOOD RISK*
3.001	Swale	85	70.160	-0.087	0.000	0.04		0.5	FLOOD RISK
2.001	SW6	86	69.997	-0.073	0.000	0.16		0.9	OK
2.002	SW5	89	69.878	-0.042	0.000	0.63		3.5	OK
2.003	SW4	91	69.349	-0.191	0.000	0.05		3.5	OK
2.004	S12	49	69.206	0.106	0.000	0.15	354	10.3	SURCHARGED
1.006	S13	49	69.532	0.682	0.000	0.07		1.4	SURCHARGED

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Midpoint	UoR Chancellors Building	
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Summary Wizard of 600 minute 10 year Winter I+5% 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 Offline Controls 1 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) 18.700 Cv (Summer) 0.750
 Region England and Wales Ratio R 0.400 Cv (Winter) 0.840

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

Profile(s) Summer and Winter
 Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440
 Return Period(s) (years) 2, 5, 10, 30, 100
 Climate Change (%) 0, 0, 5, 10, 40

PN	US/MH Name	Storm Rank	Water			Flooded		Half Drain Time (mins)	Pipe Flow (l/s)	Status
			Level (m)	Depth (m)	Volume (m³)	Flow / Cap.	Overflow (l/s)			
1.000	SW9	94	70.046	-0.064	0.000	0.28			2.2	OK
1.001	SW3	94	69.640	-0.060	0.000	0.34			2.2	OK
1.002	SW2	94	69.418	-0.112	0.000	0.15			2.3	OK
1.003	SW1	84	69.223	-0.087	0.000	0.19			2.6	OK
1.004	S10	50	69.329	0.229	0.000	0.18			6.2	SURCHARGED
1.005	S11	50	69.392	0.352	0.000	0.12			4.8	SURCHARGED
2.000	SW8	94	70.255	-0.085	0.000	0.06	0.4		0.3	FLOOD RISK
3.000	Swale	94	70.175	-0.275	0.000	0.00			0.4	FLOOD RISK*
3.001	Swale	93	70.159	-0.088	0.000	0.04			0.4	FLOOD RISK
2.001	SW6	93	69.995	-0.075	0.000	0.14			0.8	OK
2.002	SW5	94	69.872	-0.048	0.000	0.54			2.9	OK
2.003	SW4	94	69.346	-0.194	0.000	0.05			2.9	OK
2.004	S12	50	69.188	0.088	0.000	0.15		364	9.8	SURCHARGED
1.006	S13	50	69.514	0.664	0.000	0.07			1.4	SURCHARGED

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Midpoint	UoR Chancellors Building	
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Summary Wizard of 720 minute 10 year Winter I+5% 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 Offline Controls 1 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) 18.700 Cv (Summer) 0.750
 Region England and Wales Ratio R 0.400 Cv (Winter) 0.840

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

Profile(s) Summer and Winter
 Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440
 Return Period(s) (years) 2, 5, 10, 30, 100
 Climate Change (%) 0, 0, 5, 10, 40

PN	US/MH Name	Storm Rank	Water Surcharged			Flow / Overflow Cap.	Half Drain Time (mins)	Pipe Flow (l/s)	Status
			Level (m)	Depth (m)	Volume (m³)				
1.000	SW9	102	70.044	-0.066	0.000	0.25		1.9	OK
1.001	SW3	102	69.637	-0.063	0.000	0.30		1.9	OK
1.002	SW2	102	69.415	-0.115	0.000	0.13		2.0	OK
1.003	SW1	90	69.213	-0.097	0.000	0.17		2.3	OK
1.004	S10	52	69.287	0.187	0.000	0.17		5.9	SURCHARGED
1.005	S11	52	69.371	0.331	0.000	0.11		4.4	SURCHARGED
2.000	SW8	102	70.254	-0.086	0.000	0.05	0.4	0.3	FLOOD RISK
3.000	Swale	102	70.173	-0.277	0.000	0.00		0.4	FLOOD RISK*
3.001	Swale	101	70.159	-0.088	0.000	0.03		0.4	FLOOD RISK
2.001	SW6	101	69.993	-0.077	0.000	0.12		0.7	OK
2.002	SW5	102	69.868	-0.052	0.000	0.47		2.6	OK
2.003	SW4	102	69.344	-0.196	0.000	0.04		2.6	OK
2.004	S12	52	69.172	0.072	0.000	0.14		365	SURCHARGED
1.006	S13	52	69.485	0.635	0.000	0.07		1.4	SURCHARGED

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Midpoint	UoR Chancellors Building	
Alencon Link	Surface water drainage	
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Summary Wizard of 960 minute 10 year Winter I+5% 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 Offline Controls 1 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) 18.700 Cv (Summer) 0.750
 Region England and Wales Ratio R 0.400 Cv (Winter) 0.840

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

Profile(s) Summer and Winter
 Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440
 Return Period(s) (years) 2, 5, 10, 30, 100
 Climate Change (%) 0, 0, 5, 10, 40

			Water	Surcharged	Flooded	Half Drain			Pipe	
	US/MH	Storm	Level	Depth	Volume	Flow /	Overflow	Time	Flow	
PN	Name	Rank	(m)	(m)	(m³)	Cap.	(l/s)	(mins)	(l/s)	Status
1.000	SW9	109	70.040	-0.070	0.000	0.20			1.5	OK
1.001	SW3	109	69.633	-0.067	0.000	0.24			1.5	OK
1.002	SW2	109	69.412	-0.118	0.000	0.10			1.6	OK
1.003	SW1	110	69.196	-0.114	0.000	0.14			1.8	OK
1.004	S10	59	69.218	0.118	0.000	0.14			5.0	SURCHARGED
1.005	S11	59	69.309	0.269	0.000	0.09			3.7	SURCHARGED
2.000	SW8	109	70.253	-0.087	0.000	0.04	0.3		0.2	FLOOD RISK
3.000	Swale	109	70.170	-0.280	0.000	0.00			0.3	FLOOD RISK*
3.001	Swale	108	70.158	-0.089	0.000	0.03			0.3	FLOOD RISK
2.001	SW6	108	69.991	-0.079	0.000	0.10			0.5	OK
2.002	SW5	109	69.862	-0.058	0.000	0.38			2.1	OK
2.003	SW4	109	69.341	-0.199	0.000	0.03			2.1	OK
2.004	S12	60	69.136	0.036	0.000	0.13		378	8.5	SURCHARGED
1.006	S13	59	69.394	0.544	0.000	0.07			1.4	SURCHARGED

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Midpoint	UoR Chancellors Building	
Alencon Link	Surface water drainage	
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Summary Wizard of 1440 minute 10 year Winter I+5% 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 Offline Controls 1 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) 18.700 Cv (Summer) 0.750
 Region England and Wales Ratio R 0.400 Cv (Winter) 0.840

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

Profile(s) Summer and Winter
 Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440
 Return Period(s) (years) 2, 5, 10, 30, 100
 Climate Change (%) 0, 0, 5, 10, 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)	
1.000	SW9	116	70.035	-0.075	0.000	0.15		1.1	OK
1.001	SW3	116	69.628	-0.072	0.000	0.17		1.1	OK
1.002	SW2	116	69.407	-0.123	0.000	0.07		1.2	OK
1.003	SW1	116	69.191	-0.119	0.000	0.10		1.3	OK
1.004	S10	89	69.053	-0.047	0.000	0.04		1.4	OK
1.005	S11	88	69.053	0.013	0.000	0.04		1.5	SURCHARGED
2.000	SW8	116	70.251	-0.089	0.000	0.03	0.2	0.2	FLOOD RISK
3.000	Swale	116	70.166	-0.284	0.000	0.00		0.2	FLOOD RISK*
3.001	Swale	116	70.156	-0.091	0.000	0.02		0.2	FLOOD RISK
2.001	SW6	116	69.988	-0.082	0.000	0.07		0.4	OK
2.002	SW5	116	69.856	-0.064	0.000	0.28		1.5	OK
2.003	SW4	116	69.338	-0.202	0.000	0.02		1.5	OK
2.004	S12	80	69.051	-0.049	0.000	0.02	365	1.5	OK
1.006	S13	84	69.056	0.206	0.000	0.07		1.4	SURCHARGED

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Midpoint	UoR Chancellors Building	
Alencon Link	Surface water drainage	
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Summary Wizard of 15 minute 30 year Winter I+10% 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 Offline Controls 1 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) 18.700 Cv (Summer) 0.750
 Region England and Wales Ratio R 0.400 Cv (Winter) 0.840

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

Profile(s) Summer and Winter
 Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440
 Return Period(s) (years) 2, 5, 10, 30, 100
 Climate Change (%) 0, 0, 5, 10, 40

WARNING: The analysis maybe unstable. Please see the method of analysis help for more details.

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)	
1.000	SW9	9	70.705	0.595	4.697	1.37		10.5	FLOOD
1.001	SW3	16	69.964	0.264	0.000	1.61		10.2	FLOOD RISK
1.002	SW2	25	69.518	-0.012	0.000	0.77		12.4	OK
1.003	SW1	32	69.389	0.079	0.000	1.14		15.6	SURCHARGED
1.004	S10	67	69.139	0.039	0.000	0.44		15.3	SURCHARGED
1.005	S11	68	69.124	0.084	0.000	0.39		16.0	SURCHARGED
2.000	SW8	7	70.378	0.038	0.000	0.34	9.7	1.9	FLOOD RISK
3.000	Swale	15	70.260	-0.190	0.000	0.10		9.6	FLOOD RISK*
3.001	Swale	15	70.260	0.013	0.000	0.50		5.9	FLOOD RISK
2.001	SW6	9	70.359	0.289	0.000	1.07		5.9	FLOOD RISK
2.002	SW5	7	70.663	0.743	2.772	1.72		9.4	FLOOD
2.003	SW4	31	69.373	-0.167	0.000	0.15		9.4	OK
2.004	S12	70	69.083	-0.017	0.000	0.03	223	1.7	OK
1.006	S13	69	69.100	0.250	0.000	0.07		1.4	SURCHARGED

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Midpoint	UoR Chancellors Building	
Alencon Link	Surface water drainage	
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Summary Wizard of 30 minute 30 year Winter I+10% 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 Offline Controls 1 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) 18.700 Cv (Summer) 0.750
 Region England and Wales Ratio R 0.400 Cv (Winter) 0.840

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

Profile(s) Summer and Winter
 Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440
 Return Period(s) (years) 2, 5, 10, 30, 100
 Climate Change (%) 0, 0, 5, 10, 40

WARNING: The analysis maybe unstable. Please see the method of analysis help for more details.

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)	
1.000	SW9	10	70.704	0.594	4.202	1.36		10.4	FLOOD
1.001	SW3	17	69.964	0.264	0.000	1.61		10.2	FLOOD RISK
1.002	SW2	27	69.488	-0.042	0.000	0.75		12.1	OK
1.003	SW1	34	69.371	0.061	0.000	1.07		14.5	SURCHARGED
1.004	S10	51	69.299	0.199	0.000	0.43		15.0	SURCHARGED
1.005	S11	51	69.384	0.344	0.000	0.39		15.7	SURCHARGED
2.000	SW8	13	70.340	0.000	0.000	0.29	8.0	1.6	FLOOD RISK
3.000	Swale	13	70.274	-0.176	0.000	0.08		7.9	FLOOD RISK*
3.001	Swale	13	70.273	0.026	0.000	0.50		5.9	FLOOD RISK
2.001	SW6	12	70.341	0.271	0.000	1.08		6.0	FLOOD RISK
2.002	SW5	10	70.661	0.741	1.433	1.72		9.4	FLOOD
2.003	SW4	37	69.373	-0.167	0.000	0.15		9.4	OK
2.004	S12	51	69.182	0.082	0.000	0.15	275	10.4	SURCHARGED
1.006	S13	51	69.499	0.649	0.000	0.07		1.4	SURCHARGED

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Midpoint	UoR Chancellors Building	
Alencon Link	Surface water drainage	
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Summary Wizard of 60 minute 30 year Winter I+10% 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 Offline Controls 1 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) 18.700 Cv (Summer) 0.750
 Region England and Wales Ratio R 0.400 Cv (Winter) 0.840

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

Profile(s) Summer and Winter
 Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440
 Return Period(s) (years) 2, 5, 10, 30, 100
 Climate Change (%) 0, 0, 5, 10, 40

WARNING: The analysis maybe unstable. Please see the method of analysis help for more details.

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)	
1.000	SW9	16	70.702	0.592	1.796	1.35		10.3	FLOOD
1.001	SW3	25	69.963	0.263	0.000	1.60		10.2	FLOOD RISK
1.002	SW2	34	69.474	-0.056	0.000	0.71		11.5	OK
1.003	SW1	36	69.362	0.052	0.000	0.97		13.3	SURCHARGED
1.004	S10	39	69.463	0.363	0.000	0.40		13.9	SURCHARGED
1.005	S11	39	69.456	0.416	0.000	0.36		14.4	SURCHARGED
2.000	SW8	23	70.303	-0.037	0.000	0.25	5.7	1.4	FLOOD RISK
3.000	Swale	14	70.268	-0.182	0.000	0.06		5.6	FLOOD RISK*
3.001	Swale	14	70.267	0.020	0.000	0.49		5.8	FLOOD RISK
2.001	SW6	20	70.312	0.242	0.000	1.06		5.8	FLOOD RISK
2.002	SW5	19	70.528	0.608	0.000	1.61		8.8	FLOOD RISK
2.003	SW4	41	69.371	-0.169	0.000	0.14		8.8	OK
2.004	S12	39	69.281	0.181	0.000	0.16	347	10.5	SURCHARGED
1.006	S13	38	69.586	0.736	0.000	0.07		1.4	SURCHARGED

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Midpoint	UoR Chancellors Building	
Alencon Link	Surface water drainage	
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Summary Wizard of 120 minute 30 year Winter I+10% 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 Offline Controls 1 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) 18.700 Cv (Summer) 0.750
 Region England and Wales Ratio R 0.400 Cv (Winter) 0.840

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

Profile(s) Summer and Winter
 Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440
 Return Period(s) (years) 2, 5, 10, 30, 100
 Climate Change (%) 0, 0, 5, 10, 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)	
1.000	SW9	35	70.399	0.289	0.000	1.16		8.8	SURCHARGED
1.001	SW3	41	69.850	0.150	0.000	1.38		8.8	FLOOD RISK
1.002	SW2	48	69.463	-0.067	0.000	0.59		9.5	OK
1.003	SW1	31	69.405	0.095	0.000	0.79		10.7	SURCHARGED
1.004	S10	29	69.519	0.419	0.000	0.40		13.8	SURCHARGED
1.005	S11	29	69.516	0.476	0.000	0.31		12.6	SURCHARGED
2.000	SW8	37	70.280	-0.060	0.000	0.21	2.7	1.1	FLOOD RISK
3.000	Swale	25	70.232	-0.218	0.000	0.03		2.7	FLOOD RISK*
3.001	Swale	21	70.231	-0.016	0.000	0.36		4.2	FLOOD RISK
2.001	SW6	36	70.269	0.199	0.000	0.83		4.6	FLOOD RISK
2.002	SW5	34	70.318	0.398	0.000	1.44		7.8	SURCHARGED
2.003	SW4	29	69.375	-0.165	0.000	0.12		7.8	OK
2.004	S12	29	69.372	0.272	0.000	0.16	410	10.6	SURCHARGED
1.006	S13	32	69.589	0.739	0.000	0.07		1.4	SURCHARGED

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Midpoint	UoR Chancellors Building	
Alencon Link	Surface water drainage	
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Summary Wizard of 180 minute 30 year Winter I+10% 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 Offline Controls 1 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) 18.700 Cv (Summer) 0.750
 Region England and Wales Ratio R 0.400 Cv (Winter) 0.840

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

Profile(s) Summer and Winter
 Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440
 Return Period(s) (years) 2, 5, 10, 30, 100
 Climate Change (%) 0, 0, 5, 10, 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)	
1.000	SW9	46	70.098	-0.012	0.000	0.94		7.1	OK
1.001	SW3	54	69.738	0.038	0.000	1.12		7.1	SURCHARGED
1.002	SW2	51	69.460	-0.070	0.000	0.48		7.7	OK
1.003	SW1	27	69.456	0.146	0.000	0.64		8.7	SURCHARGED
1.004	S10	25	69.548	0.448	0.000	0.36		12.4	SURCHARGED
1.005	S11	25	69.546	0.506	0.000	0.26		10.4	SURCHARGED
2.000	SW8	44	70.270	-0.070	0.000	0.19	1.6	1.0	FLOOD RISK
3.000	Swale	42	70.202	-0.248	0.000	0.02		1.6	FLOOD RISK*
3.001	Swale	33	70.195	-0.052	0.000	0.26		3.1	FLOOD RISK
2.001	SW6	42	70.249	0.179	0.000	0.65		3.6	FLOOD RISK
2.002	SW5	42	70.246	0.326	0.000	1.37		7.5	SURCHARGED
2.003	SW4	25	69.417	-0.123	0.000	0.12		7.5	OK
2.004	S12	25	69.416	0.316	0.000	0.16	441	10.6	SURCHARGED
1.006	S13	36	69.588	0.738	0.000	0.07		1.4	SURCHARGED

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Midpoint	UoR Chancellors Building	
Alencon Link	Surface water drainage	
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Summary Wizard of 240 minute 30 year Winter I+10% 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 Offline Controls 1 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) 18.700 Cv (Summer) 0.750
 Region England and Wales Ratio R 0.400 Cv (Winter) 0.840

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

Profile(s) Summer and Winter
 Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440
 Return Period(s) (years) 2, 5, 10, 30, 100
 Climate Change (%) 0, 0, 5, 10, 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)	
1.000	SW9	55	70.076	-0.034	0.000	0.77		5.8	OK
1.001	SW3	63	69.675	-0.025	0.000	0.92		5.8	OK
1.002	SW2	36	69.473	-0.057	0.000	0.39		6.3	OK
1.003	SW1	26	69.470	0.160	0.000	0.52		7.1	SURCHARGED
1.004	S10	23	69.561	0.461	0.000	0.30		10.5	SURCHARGED
1.005	S11	23	69.560	0.520	0.000	0.24		9.9	SURCHARGED
2.000	SW8	55	70.266	-0.074	0.000	0.15	1.2	0.8	FLOOD RISK
3.000	Swale	51	70.190	-0.260	0.000	0.01		1.2	FLOOD RISK*
3.001	Swale	48	70.172	-0.075	0.000	0.13		1.5	FLOOD RISK
2.001	SW6	51	70.169	0.099	0.000	0.41		2.3	SURCHARGED
2.002	SW5	51	70.155	0.235	0.000	1.28		7.0	SURCHARGED
2.003	SW4	23	69.431	-0.109	0.000	0.11		7.0	OK
2.004	S12	23	69.430	0.330	0.000	0.16	445	10.6	SURCHARGED
1.006	S13	29	69.589	0.739	0.000	0.07		1.4	SURCHARGED

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Midpoint	UoR Chancellors Building	
Alencon Link	Surface water drainage	
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Summary Wizard of 360 minute 30 year Winter I+10% 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 Offline Controls 1 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) 18.700 Cv (Summer) 0.750
 Region England and Wales Ratio R 0.400 Cv (Winter) 0.840

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

Profile(s) Summer and Winter
 Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440
 Return Period(s) (years) 2, 5, 10, 30, 100
 Climate Change (%) 0, 0, 5, 10, 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)	
1.000	SW9	68	70.064	-0.046	0.000	0.56		4.3	OK
1.001	SW3	72	69.660	-0.040	0.000	0.67		4.3	OK
1.002	SW2	44	69.467	-0.063	0.000	0.29		4.6	OK
1.003	SW1	25	69.473	0.163	0.000	0.38		5.2	SURCHARGED
1.004	S10	22	69.563	0.463	0.000	0.28		9.7	SURCHARGED
1.005	S11	22	69.561	0.521	0.000	0.20		8.2	SURCHARGED
2.000	SW8	68	70.262	-0.078	0.000	0.11	0.9	0.6	FLOOD RISK
3.000	Swale	66	70.185	-0.265	0.000	0.01		0.9	FLOOD RISK*
3.001	Swale	61	70.164	-0.083	0.000	0.07		0.8	FLOOD RISK
2.001	SW6	62	70.005	-0.065	0.000	0.27		1.5	OK
2.002	SW5	64	69.938	0.018	0.000	1.03		5.6	SURCHARGED
2.003	SW4	22	69.432	-0.108	0.000	0.09		5.6	OK
2.004	S12	22	69.431	0.331	0.000	0.16	457	10.6	SURCHARGED
1.006	S13	28	69.589	0.739	0.000	0.07		1.4	SURCHARGED

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Midpoint	UoR Chancellors Building	
Alencon Link	Surface water drainage	
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Summary Wizard of 480 minute 30 year Winter I+10% 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 Offline Controls 1 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) 18.700 Cv (Summer) 0.750
 Region England and Wales Ratio R 0.400 Cv (Winter) 0.840

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

Profile(s) Summer and Winter
 Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440
 Return Period(s) (years) 2, 5, 10, 30, 100
 Climate Change (%) 0, 0, 5, 10, 40

PN	US/MH Name	Storm Rank	Water			Flow / Overflow Cap.	Half Drain Time (mins)	Pipe Flow (l/s)	Status
			Level (m)	Depth (m)	Volume (m³)				
1.000	SW9	77	70.057	-0.053	0.000	0.45		3.4	OK
1.001	SW3	80	69.652	-0.048	0.000	0.54		3.4	OK
1.002	SW2	60	69.451	-0.079	0.000	0.23		3.7	OK
1.003	SW1	28	69.456	0.146	0.000	0.31		4.2	SURCHARGED
1.004	S10	24	69.552	0.452	0.000	0.26		8.9	SURCHARGED
1.005	S11	24	69.550	0.510	0.000	0.18		7.4	SURCHARGED
2.000	SW8	77	70.260	-0.080	0.000	0.09	0.7	0.5	FLOOD RISK
3.000	Swale	76	70.182	-0.268	0.000	0.01		0.7	FLOOD RISK*
3.001	Swale	70	70.162	-0.085	0.000	0.06		0.7	FLOOD RISK
2.001	SW6	71	70.002	-0.068	0.000	0.22		1.2	OK
2.002	SW5	77	69.891	-0.029	0.000	0.84		4.6	OK
2.003	SW4	24	69.420	-0.120	0.000	0.07		4.6	OK
2.004	S12	24	69.419	0.319	0.000	0.16		464 10.6	SURCHARGED
1.006	S13	25	69.590	0.740	0.000	0.07		1.4	SURCHARGED

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Midpoint	UoR Chancellors Building	
Alencon Link	Surface water drainage	
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Summary Wizard of 600 minute 30 year Winter I+10% 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 Offline Controls 1 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) 18.700 Cv (Summer) 0.750
 Region England and Wales Ratio R 0.400 Cv (Winter) 0.840

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

Profile(s) Summer and Winter
 Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440
 Return Period(s) (years) 2, 5, 10, 30, 100
 Climate Change (%) 0, 0, 5, 10, 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)	
1.000	SW9	84	70.052	-0.058	0.000	0.38		2.9	OK
1.001	SW3	85	69.647	-0.053	0.000	0.45		2.9	OK
1.002	SW2	81	69.428	-0.102	0.000	0.19		3.1	OK
1.003	SW1	29	69.434	0.124	0.000	0.26		3.5	SURCHARGED
1.004	S10	26	69.532	0.432	0.000	0.24		8.2	SURCHARGED
1.005	S11	26	69.531	0.491	0.000	0.17		6.7	SURCHARGED
2.000	SW8	84	70.258	-0.082	0.000	0.07	0.6	0.4	FLOOD RISK
3.000	Swale	82	70.180	-0.270	0.000	0.01		0.6	FLOOD RISK*
3.001	Swale	80	70.161	-0.086	0.000	0.05		0.6	FLOOD RISK
2.001	SW6	81	69.999	-0.071	0.000	0.19		1.0	OK
2.002	SW5	82	69.883	-0.037	0.000	0.71		3.9	OK
2.003	SW4	26	69.401	-0.139	0.000	0.06		3.9	OK
2.004	S12	26	69.399	0.299	0.000	0.16		450 10.6	SURCHARGED
1.006	S13	34	69.589	0.739	0.000	0.07		1.4	SURCHARGED

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Midpoint	UoR Chancellors Building	
Alencon Link	Surface water drainage	
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Summary Wizard of 720 minute 30 year Winter I+10% 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 Offline Controls 1 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) 18.700 Cv (Summer) 0.750
 Region England and Wales Ratio R 0.400 Cv (Winter) 0.840

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

Profile(s) Summer and Winter
 Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440
 Return Period(s) (years) 2, 5, 10, 30, 100
 Climate Change (%) 0, 0, 5, 10, 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)	
1.000	SW9	90	70.049	-0.061	0.000	0.33		2.5	OK
1.001	SW3	91	69.643	-0.057	0.000	0.39		2.5	OK
1.002	SW2	91	69.421	-0.109	0.000	0.17		2.7	OK
1.003	SW1	30	69.408	0.098	0.000	0.22		3.0	SURCHARGED
1.004	S10	28	69.522	0.422	0.000	0.23		7.8	SURCHARGED
1.005	S11	28	69.518	0.478	0.000	0.15		6.2	SURCHARGED
2.000	SW8	90	70.256	-0.084	0.000	0.06	0.5	0.4	FLOOD RISK
3.000	Swale	90	70.178	-0.272	0.000	0.01		0.5	FLOOD RISK*
3.001	Swale	87	70.160	-0.087	0.000	0.04		0.5	FLOOD RISK
2.001	SW6	88	69.997	-0.073	0.000	0.16		0.9	OK
2.002	SW5	90	69.877	-0.043	0.000	0.62		3.4	OK
2.003	SW4	28	69.378	-0.162	0.000	0.05		3.4	OK
2.004	S12	28	69.377	0.277	0.000	0.16	508	10.5	SURCHARGED
1.006	S13	27	69.589	0.739	0.000	0.07		1.4	SURCHARGED

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Alencon Link	Surface water drainage	
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Summary Wizard of 960 minute 30 year Winter I+10% 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 Offline Controls 1 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) 18.700 Cv (Summer) 0.750
 Region England and Wales Ratio R 0.400 Cv (Winter) 0.840

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

Profile(s) Summer and Winter
 Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440
 Return Period(s) (years) 2, 5, 10, 30, 100
 Climate Change (%) 0, 0, 5, 10, 40

PN	US/MH Name	Storm Rank	Water Surcharged			Flooded		Half Drain Time (mins)	Pipe Flow (l/s)	Status
			Level (m)	Depth (m)	Volume (m³)	Flow / Cap.	Overflow (l/s)			
1.000	SW9	101	70.045	-0.065	0.000	0.26			2.0	OK
1.001	SW3	101	69.638	-0.062	0.000	0.31			2.0	OK
1.002	SW2	101	69.416	-0.114	0.000	0.13			2.2	OK
1.003	SW1	39	69.340	0.030	0.000	0.18			2.4	SURCHARGED
1.004	S10	31	69.511	0.411	0.000	0.21			7.2	SURCHARGED
1.005	S11	31	69.500	0.460	0.000	0.14			5.6	SURCHARGED
2.000	SW8	101	70.254	-0.086	0.000	0.05	0.4		0.3	FLOOD RISK
3.000	Swale	100	70.174	-0.276	0.000	0.00			0.4	FLOOD RISK*
3.001	Swale	95	70.159	-0.088	0.000	0.03			0.4	FLOOD RISK
2.001	SW6	99	69.994	-0.076	0.000	0.13			0.7	OK
2.002	SW5	100	69.870	-0.050	0.000	0.50			2.7	OK
2.003	SW4	100	69.345	-0.195	0.000	0.04			2.7	OK
2.004	S12	31	69.338	0.238	0.000	0.16		520	10.6	SURCHARGED
1.006	S13	35	69.588	0.738	0.000	0.07			1.4	SURCHARGED

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Summary Wizard of 1440 minute 30 year Winter I+10% 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 Offline Controls 1 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) 18.700 Cv (Summer) 0.750
 Region England and Wales Ratio R 0.400 Cv (Winter) 0.840

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

Profile(s) Summer and Winter
 Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440
 Return Period(s) (years) 2, 5, 10, 30, 100
 Climate Change (%) 0, 0, 5, 10, 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)	
1.000	SW9	111	70.039	-0.071	0.000	0.19		1.4	OK
1.001	SW3	111	69.632	-0.068	0.000	0.23		1.4	OK
1.002	SW2	111	69.411	-0.119	0.000	0.10		1.6	OK
1.003	SW1	51	69.281	-0.029	0.000	0.13		1.8	OK
1.004	S10	41	69.447	0.347	0.000	0.19		6.5	SURCHARGED
1.005	S11	41	69.448	0.408	0.000	0.12		4.9	SURCHARGED
2.000	SW8	111	70.252	-0.088	0.000	0.04	0.3	0.2	FLOOD RISK
3.000	Swale	110	70.170	-0.280	0.000	0.00		0.3	FLOOD RISK*
3.001	Swale	110	70.158	-0.089	0.000	0.02		0.3	FLOOD RISK
2.001	SW6	110	69.991	-0.079	0.000	0.10		0.5	OK
2.002	SW5	110	69.861	-0.059	0.000	0.36		2.0	OK
2.003	SW4	110	69.341	-0.199	0.000	0.03		2.0	OK
2.004	S12	41	69.261	0.161	0.000	0.15		538	SURCHARGED
1.006	S13	40	69.574	0.724	0.000	0.07		1.4	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 Offline Controls 1 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) 18.700 Cv (Summer) 0.750
 Region England and Wales Ratio R 0.400 Cv (Winter) 0.840

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

Profile(s) Summer and Winter
 Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440
 Return Period(s) (years) 2, 5, 10, 30, 100
 Climate Change (%) 0, 0, 5, 10, 40

WARNING: The analysis maybe unstable. Please see the method of analysis help for more details.

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)	
1.000	SW9	2	70.713	0.603	12.948	1.37		10.4	FLOOD
1.001	SW3	4	70.060	0.360	0.071	1.66		10.6	FLOOD
1.002	SW2	19	69.756	0.226	0.000	0.79		12.8	SURCHARGED
1.003	SW1	21	69.614	0.304	0.000	1.41		19.2	SURCHARGED
1.004	S10	38	69.474	0.374	0.000	0.60		20.7	SURCHARGED
1.005	S11	38	69.461	0.421	0.000	0.56		22.8	SURCHARGED
2.000	SW8	1	70.490	0.150	0.122	0.55	13.3	3.0	FLOOD
3.000	Swale	8	70.328	-0.122	0.000	0.14		13.0	FLOOD RISK*
3.001	Swale	8	70.328	0.081	0.000	0.50		5.9	FLOOD RISK
2.001	SW6	4	70.409	0.339	0.000	1.15		6.3	FLOOD RISK
2.002	SW5	1	70.670	0.750	9.830	1.73		9.4	FLOOD
2.003	SW4	32	69.373	-0.167	0.000	0.15		9.4	OK
2.004	S12	38	69.293	0.193	0.000	0.16	359	10.6	SURCHARGED
1.006	S13	33	69.589	0.739	0.000	0.07		1.4	SURCHARGED

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Midpoint	UoR Chancellors Building	
Alencon Link	Surface water drainage	
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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 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 Offline Controls 1 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) 18.700 Cv (Summer) 0.750
 Region England and Wales Ratio R 0.400 Cv (Winter) 0.840

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

Profile(s) Summer and Winter
 Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440
 Return Period(s) (years) 2, 5, 10, 30, 100
 Climate Change (%) 0, 0, 5, 10, 40

WARNING: The analysis maybe unstable. Please see the method of analysis help for more details.

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)	
1.000	SW9	1	70.714	0.604	13.793	1.36		10.3	FLOOD
1.001	SW3	10	70.048	0.348	0.000	1.62		10.3	FLOOD RISK
1.002	SW2	24	69.659	0.129	0.000	0.79		12.7	SURCHARGED
1.003	SW1	23	69.568	0.258	0.000	1.31		17.8	SURCHARGED
1.004	S10	21	69.577	0.477	0.000	0.55		19.1	SURCHARGED
1.005	S11	21	69.578	0.538	0.000	0.51		20.7	SURCHARGED
2.000	SW8	4	70.433	0.093	0.000	0.39	11.2	2.1	FLOOD RISK
3.000	Swale	2	70.370	-0.080	0.000	0.12		10.9	FLOOD RISK*
3.001	Swale	2	70.370	0.123	0.000	0.50		5.9	FLOOD RISK
2.001	SW6	2	70.426	0.356	0.000	1.18		6.5	FLOOD RISK
2.002	SW5	2	70.669	0.749	9.123	1.73		9.4	FLOOD
2.003	SW4	21	69.454	-0.086	0.000	0.15		9.4	OK
2.004	S12	21	69.451	0.351	0.000	0.16	486	10.6	SURCHARGED
1.006	S13	22	69.590	0.740	0.000	0.07		1.4	SURCHARGED

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Midpoint	UoR Chancellors Building	
Alencon Link	Surface water drainage	
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Summary Wizard of 60 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 Offline Controls 1 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) 18.700 Cv (Summer) 0.750
 Region England and Wales Ratio R 0.400 Cv (Winter) 0.840

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

Profile(s) Summer and Winter
 Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440
 Return Period(s) (years) 2, 5, 10, 30, 100
 Climate Change (%) 0, 0, 5, 10, 40

WARNING: The analysis maybe unstable. Please see the method of analysis help for more details.

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)	
1.000	SW9	3	70.712	0.602	11.630	1.35		10.3	FLOOD
1.001	SW3	6	70.060	0.360	0.050	1.61		10.3	FLOOD
1.002	SW2	18	69.764	0.234	0.000	0.76		12.2	SURCHARGED
1.003	SW1	19	69.695	0.385	0.000	1.15		15.7	SURCHARGED
1.004	S10	19	69.655	0.555	0.000	0.49		16.9	SURCHARGED
1.005	S11	19	69.655	0.615	0.000	0.45		18.1	SURCHARGED
2.000	SW8	5	70.399	0.059	0.000	0.25	8.4	1.4	FLOOD RISK
3.000	Swale	1	70.390	-0.060	0.000	0.09		8.2	FLOOD RISK*
3.001	Swale	1	70.390	0.143	0.000	0.49		5.8	FLOOD RISK
2.001	SW6	1	70.443	0.373	0.000	1.19		6.6	FLOOD RISK
2.002	SW5	6	70.665	0.745	4.758	1.72		9.4	FLOOD
2.003	SW4	19	69.618	0.078	0.000	0.15		9.4	SURCHARGED
2.004	S12	19	69.616	0.516	0.000	0.16	563	10.6	SURCHARGED
1.006	S13	19	69.662	0.812	0.000	0.07		1.5	SURCHARGED

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Midpoint	UoR Chancellors Building	
Alencon Link	Surface water drainage	
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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 Offline Controls 1 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) 18.700 Cv (Summer) 0.750
 Region England and Wales Ratio R 0.400 Cv (Winter) 0.840

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

Profile(s) Summer and Winter
 Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440
 Return Period(s) (years) 2, 5, 10, 30, 100
 Climate Change (%) 0, 0, 5, 10, 40

WARNING: The analysis maybe unstable. Please see the method of analysis help for more details.

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)	
1.000	SW9	8	70.706	0.596	5.943	1.35		10.3	FLOOD
1.001	SW3	1	70.061	0.361	0.764	1.60		10.2	FLOOD
1.002	SW2	12	69.878	0.348	0.000	0.71		11.5	SURCHARGED
1.003	SW1	12	69.863	0.553	0.000	0.97		13.2	SURCHARGED
1.004	S10	10	69.826	0.726	0.000	0.49		16.8	SURCHARGED
1.005	S11	11	69.825	0.785	0.000	0.40		16.3	SURCHARGED
2.000	SW8	9	70.375	0.035	0.000	0.22	5.8	1.2	FLOOD RISK
3.000	Swale	3	70.367	-0.083	0.000	0.06		5.7	FLOOD RISK*
3.001	Swale	3	70.367	0.120	0.000	0.43		5.0	FLOOD RISK
2.001	SW6	8	70.380	0.310	0.000	1.02		5.6	FLOOD RISK
2.002	SW5	17	70.585	0.665	0.000	1.66		9.1	FLOOD RISK
2.003	SW4	13	69.782	0.242	0.000	0.14		9.1	SURCHARGED
2.004	S12	13	69.779	0.679	0.000	0.16	624	10.6	SURCHARGED
1.006	S13	12	69.831	0.981	0.000	0.08		1.6	SURCHARGED

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Midpoint	UoR Chancellors Building	
Alencon Link	Surface water drainage	
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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 Offline Controls 1 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) 18.700 Cv (Summer) 0.750
 Region England and Wales Ratio R 0.400 Cv (Winter) 0.840

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

Profile(s) Summer and Winter
 Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440
 Return Period(s) (years) 2, 5, 10, 30, 100
 Climate Change (%) 0, 0, 5, 10, 40

WARNING: The analysis maybe unstable. Please see the method of analysis help for more details.

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)	
1.000	SW9	17	70.701	0.591	1.447	1.33		10.1	FLOOD
1.001	SW3	2	70.061	0.361	0.679	1.55		9.9	FLOOD
1.002	SW2	7	69.955	0.425	0.000	0.67		10.8	SURCHARGED
1.003	SW1	7	69.947	0.637	0.000	0.91		12.3	SURCHARGED
1.004	S10	7	69.898	0.798	0.000	0.45		15.5	SURCHARGED
1.005	S11	7	69.891	0.851	0.000	0.36		14.4	SURCHARGED
2.000	SW8	15	70.338	-0.002	0.000	0.20	4.3	1.1	FLOOD RISK
3.000	Swale	7	70.332	-0.118	0.000	0.04		4.3	FLOOD RISK*
3.001	Swale	7	70.331	0.084	0.000	0.38		4.5	FLOOD RISK
2.001	SW6	18	70.330	0.260	0.000	0.82		4.5	FLOOD RISK
2.002	SW5	27	70.397	0.477	0.000	1.51		8.2	FLOOD RISK
2.003	SW4	7	69.861	0.321	0.000	0.13		8.2	SURCHARGED
2.004	S12	7	69.858	0.758	0.000	0.15	654	9.9	SURCHARGED
1.006	S13	7	69.876	1.026	0.000	0.08		1.6	SURCHARGED

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Midpoint	UoR Chancellors Building	
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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 Offline Controls 1 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) 18.700 Cv (Summer) 0.750
 Region England and Wales Ratio R 0.400 Cv (Winter) 0.840

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

Profile(s) Summer and Winter
 Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440
 Return Period(s) (years) 2, 5, 10, 30, 100
 Climate Change (%) 0, 0, 5, 10, 40

PN	US/MH Name	Storm Rank	Water Level	Surcharged Depth	Flooded Volume	Flow / Overflow	Half Drain Time (mins)	Pipe Flow	Status
			(m)	(m)	(m³)	Cap. (l/s)		(l/s)	
1.000	SW9	30	70.538	0.428	0.000	1.16		8.8	FLOOD RISK
1.001	SW3	12	70.021	0.321	0.000	1.38		8.8	FLOOD RISK
1.002	SW2	5	70.023	0.493	0.000	0.60		9.6	SURCHARGED
1.003	SW1	5	70.003	0.693	0.000	0.79		10.8	SURCHARGED
1.004	S10	5	69.948	0.848	0.000	0.40		13.8	SURCHARGED
1.005	S11	5	69.941	0.901	0.000	0.31		12.7	SURCHARGED
2.000	SW8	24	70.300	-0.040	0.000	0.19	2.9	1.0	FLOOD RISK
3.000	Swale	12	70.294	-0.156	0.000	0.03		2.9	FLOOD RISK*
3.001	Swale	12	70.294	0.047	0.000	0.28		3.3	FLOOD RISK
2.001	SW6	28	70.291	0.221	0.000	0.65		3.6	FLOOD RISK
2.002	SW5	35	70.317	0.397	0.000	1.43		7.8	SURCHARGED
2.003	SW4	4	69.910	0.370	0.000	0.12		7.8	SURCHARGED
2.004	S12	5	69.907	0.807	0.000	0.16	675	10.6	SURCHARGED
1.006	S13	5	69.926	1.076	0.000	0.08		1.6	SURCHARGED

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Alencon Link	Surface water drainage	
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Innovyze	Network 2020.1	

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 * 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 Offline Controls 1 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) 18.700 Cv (Summer) 0.750
 Region England and Wales Ratio R 0.400 Cv (Winter) 0.840

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

Profile(s) Summer and Winter
 Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440
 Return Period(s) (years) 2, 5, 10, 30, 100
 Climate Change (%) 0, 0, 5, 10, 40

PN	US/MH Name	Storm Rank	Water Level	Surcharged Depth	Flooded Volume	Flow / Overflow	Half Drain Time (mins)	Pipe Flow	Status
			(m)	(m)	(m³)	Cap. (l/s)		(l/s)	
1.000	SW9	43	70.133	0.023	0.000	0.92		7.0	SURCHARGED
1.001	SW3	13	69.998	0.298	0.000	1.09		6.9	FLOOD RISK
1.002	SW2	1	70.066	0.536	0.000	0.47		7.5	SURCHARGED
1.003	SW1	1	70.047	0.737	0.000	0.62		8.4	SURCHARGED
1.004	S10	2	69.986	0.886	0.000	0.34		11.8	SURCHARGED
1.005	S11	2	69.978	0.938	0.000	0.26		10.6	SURCHARGED
2.000	SW8	46	70.270	-0.070	0.000	0.18	1.5	1.0	FLOOD RISK
3.000	Swale	26	70.227	-0.223	0.000	0.02		1.5	FLOOD RISK*
3.001	Swale	24	70.225	-0.022	0.000	0.22		2.5	FLOOD RISK
2.001	SW6	43	70.247	0.177	0.000	0.51		2.8	FLOOD RISK
2.002	SW5	43	70.243	0.323	0.000	1.37		7.5	SURCHARGED
2.003	SW4	2	69.942	0.402	0.000	0.12		7.5	SURCHARGED
2.004	S12	2	69.940	0.840	0.000	0.16	675	10.6	SURCHARGED
1.006	S13	2	69.961	1.111	0.000	0.08		1.7	SURCHARGED

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Alencon Link	Surface water drainage	
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Summary Wizard of 480 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 Offline Controls 1 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) 18.700 Cv (Summer) 0.750
 Region England and Wales Ratio R 0.400 Cv (Winter) 0.840

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

Profile(s) Summer and Winter
 Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440
 Return Period(s) (years) 2, 5, 10, 30, 100
 Climate Change (%) 0, 0, 5, 10, 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)	
1.000	SW9	57	70.074	-0.036	0.000	0.74		5.6	OK
1.001	SW3	14	69.990	0.290	0.000	0.88		5.6	FLOOD RISK
1.002	SW2	2	70.063	0.533	0.000	0.39		6.3	SURCHARGED
1.003	SW1	2	70.046	0.736	0.000	0.51		6.9	SURCHARGED
1.004	S10	1	69.986	0.886	0.000	0.31		10.6	SURCHARGED
1.005	S11	1	69.978	0.938	0.000	0.23		9.2	SURCHARGED
2.000	SW8	57	70.265	-0.075	0.000	0.15	1.1	0.8	FLOOD RISK
3.000	Swale	49	70.192	-0.258	0.000	0.01		1.1	FLOOD RISK*
3.001	Swale	44	70.177	-0.070	0.000	0.12		1.4	FLOOD RISK
2.001	SW6	50	70.175	0.105	0.000	0.36		2.0	FLOOD RISK
2.002	SW5	50	70.158	0.238	0.000	1.28		7.0	SURCHARGED
2.003	SW4	1	69.942	0.402	0.000	0.11		7.0	SURCHARGED
2.004	S12	1	69.941	0.841	0.000	0.16	679	10.6	SURCHARGED
1.006	S13	1	69.962	1.112	0.000	0.08		1.7	SURCHARGED

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Midpoint	UoR Chancellors Building	
Alencon Link	Surface water drainage	
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Summary Wizard of 600 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 Offline Controls 1 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) 18.700 Cv (Summer) 0.750
 Region England and Wales Ratio R 0.400 Cv (Winter) 0.840

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

Profile(s) Summer and Winter
 Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440
 Return Period(s) (years) 2, 5, 10, 30, 100
 Climate Change (%) 0, 0, 5, 10, 40

PN	US/MH Name	Storm Rank	Water Level	Surcharged Depth	Flooded Volume	Flow / Overflow	Half Drain Time (mins)	Pipe Flow	Status
			(m)	(m)	(m³)	Cap. (l/s)		(l/s)	
1.000	SW9	62	70.067	-0.043	0.000	0.62		4.7	OK
1.001	SW3	15	69.979	0.279	0.000	0.74		4.7	FLOOD RISK
1.002	SW2	3	70.050	0.520	0.000	0.33		5.3	SURCHARGED
1.003	SW1	3	70.033	0.723	0.000	0.43		5.8	SURCHARGED
1.004	S10	3	69.975	0.875	0.000	0.28		9.7	SURCHARGED
1.005	S11	3	69.967	0.927	0.000	0.20		8.2	SURCHARGED
2.000	SW8	62	70.263	-0.077	0.000	0.12	1.0	0.7	FLOOD RISK
3.000	Swale	59	70.187	-0.263	0.000	0.01		1.0	FLOOD RISK*
3.001	Swale	54	70.166	-0.081	0.000	0.08		0.9	FLOOD RISK
2.001	SW6	59	70.061	-0.009	0.000	0.31		1.7	OK
2.002	SW5	59	70.044	0.124	0.000	1.16		6.3	SURCHARGED
2.003	SW4	3	69.931	0.391	0.000	0.10		6.3	SURCHARGED
2.004	S12	3	69.930	0.830	0.000	0.16	684	10.6	SURCHARGED
1.006	S13	3	69.950	1.100	0.000	0.08		1.7	SURCHARGED

UoR Chancellors Building

Surface water drainage

Revision 1

Designed by dm

Checked by

Network 2020.1



Simulation Criteria

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

Rainfall Model	FSR M5-60 (mm)	18.700	Cv (Summer)	0.750
Region	England and Wales	Ratio R	0.400	Cv (Winter)
				0.840

Profile(s)	Summer and Winter
Duration(s) (mins)	15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440
Return Period(s) (years)	2, 5, 10, 30, 100
Climate Change (%)	0, 0, 5, 10, 40

			Water	Surcharged	Flooded	Half Drain			Pipe	
	US/MH	Storm	Level	Depth	Volume	Flow /	Overflow	Time	Flow	
PN	Name	Rank	(m)	(m)	(m³)	Cap.	(l/s)	(mins)	(l/s)	Status
1.000	SW9	69	70.062	-0.048	0.000	0.54			4.1	OK
1.001	SW3	28	69.960	0.260	0.000	0.64			4.1	FLOOD RISK
1.002	SW2	4	70.027	0.497	0.000	0.29			4.6	SURCHARGED
1.003	SW1	4	70.012	0.702	0.000	0.37			5.1	SURCHARGED
1.004	S10	4	69.953	0.853	0.000	0.27			9.2	SURCHARGED
1.005	S11	4	69.946	0.906	0.000	0.19			7.8	SURCHARGED
2.000	SW8	69	70.262	-0.078	0.000	0.11	0.8		0.6	FLOOD RISK
3.000	Swale	69	70.185	-0.265	0.000	0.01			0.8	FLOOD RISK*
3.001	Swale	59	70.164	-0.083	0.000	0.07			0.8	FLOOD RISK
2.001	SW6	63	70.005	-0.065	0.000	0.27			1.5	OK
2.002	SW5	68	69.929	0.009	0.000	1.01			5.5	SURCHARGED
2.003	SW4	5	69.910	0.370	0.000	0.09			5.5	SURCHARGED
2.004	S12	4	69.909	0.809	0.000	0.16		690	10.6	SURCHARGED
1.006	S13	4	69.929	1.079	0.000	0.08			1.6	SURCHARGED

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Midpoint	UoR Chancellors Building	
Alencon Link	Surface water drainage	
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Summary Wizard of 960 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 Offline Controls 1 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) 18.700 Cv (Summer) 0.750
 Region England and Wales Ratio R 0.400 Cv (Winter) 0.840

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

Profile(s) Summer and Winter
 Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440
 Return Period(s) (years) 2, 5, 10, 30, 100
 Climate Change (%) 0, 0, 5, 10, 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)	
1.000	SW9	79	70.055	-0.055	0.000	0.43		3.3	OK
1.001	SW3	33	69.929	0.229	0.000	0.51		3.3	FLOOD RISK
1.002	SW2	6	69.994	0.464	0.000	0.23		3.7	SURCHARGED
1.003	SW1	6	69.978	0.668	0.000	0.30		4.1	SURCHARGED
1.004	S10	6	69.920	0.820	0.000	0.24		8.4	SURCHARGED
1.005	S11	6	69.912	0.872	0.000	0.17		6.9	SURCHARGED
2.000	SW8	79	70.259	-0.081	0.000	0.08	0.7	0.5	FLOOD RISK
3.000	Swale	78	70.182	-0.268	0.000	0.01		0.7	FLOOD RISK*
3.001	Swale	71	70.162	-0.085	0.000	0.06		0.7	FLOOD RISK
2.001	SW6	72	70.001	-0.069	0.000	0.21		1.2	OK
2.002	SW5	71	69.897	-0.023	0.000	0.81		4.4	OK
2.003	SW4	6	69.877	0.337	0.000	0.07		4.4	SURCHARGED
2.004	S12	6	69.876	0.776	0.000	0.16		801 10.6	SURCHARGED
1.006	S13	6	69.900	1.050	0.000	0.08		1.6	SURCHARGED

AECOM		Page 126
Midpoint	UoR Chancellors Building	
Alencon Link	Surface water drainage	
Basingstoke, RG21 7PP	Revision 1	
Date 18/12/2020 16:15	Designed by dm	
File Surface Water Network - addi...	Checked by	
Innovyze	Network 2020.1	

Summary Wizard of 1440 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 Offline Controls 1 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

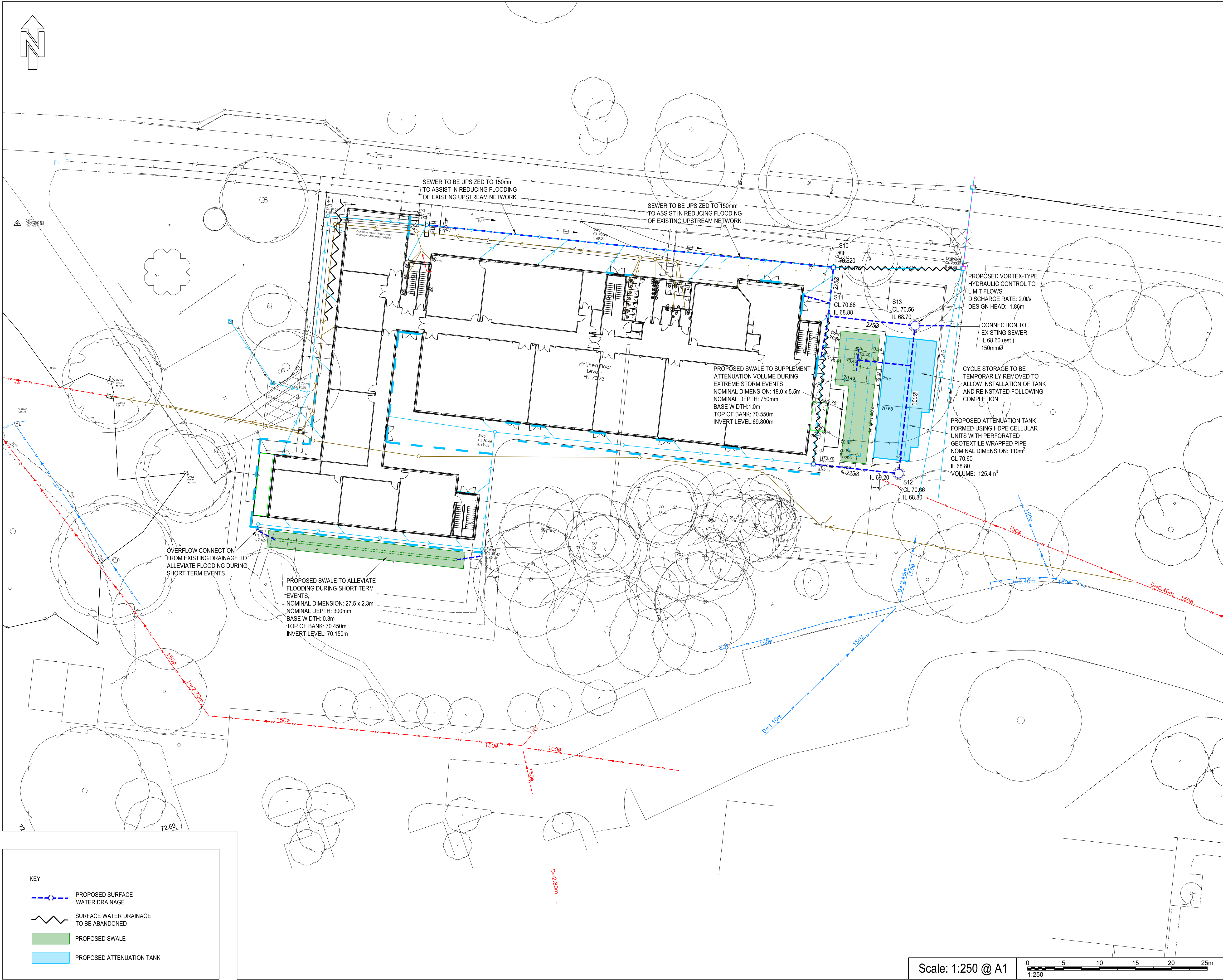
Rainfall Model FSR M5-60 (mm) 18.700 Cv (Summer) 0.750
 Region England and Wales Ratio R 0.400 Cv (Winter) 0.840

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

Profile(s) Summer and Winter
 Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440
 Return Period(s) (years) 2, 5, 10, 30, 100
 Climate Change (%) 0, 0, 5, 10, 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)	
1.000	SW9	93	70.048	-0.062	0.000	0.31		2.4	OK
1.001	SW3	44	69.830	0.130	0.000	0.37		2.4	FLOOD RISK
1.002	SW2	9	69.906	0.376	0.000	0.17		2.7	SURCHARGED
1.003	SW1	9	69.889	0.579	0.000	0.23		3.1	SURCHARGED
1.004	S10	9	69.829	0.729	0.000	0.22		7.7	SURCHARGED
1.005	S11	13	69.822	0.782	0.000	0.15		6.1	SURCHARGED
2.000	SW8	93	70.256	-0.084	0.000	0.06	0.5	0.3	FLOOD RISK
3.000	Swale	92	70.177	-0.273	0.000	0.01		0.5	FLOOD RISK*
3.001	Swale	89	70.160	-0.087	0.000	0.04		0.5	FLOOD RISK
2.001	SW6	91	69.996	-0.074	0.000	0.16		0.9	OK
2.002	SW5	92	69.875	-0.045	0.000	0.59		3.2	OK
2.003	SW4	12	69.791	0.251	0.000	0.05		3.2	SURCHARGED
2.004	S12	11	69.790	0.690	0.000	0.16	848	10.5	SURCHARGED
1.006	S13	15	69.805	0.955	0.000	0.08		1.6	SURCHARGED

Appendix C – Drainage Proposals



AECOM

PROJECT
Chancellors Building

CLIENT
University of Reading

CONSULTANT
AECOM
Portwall Place, Portwall Lane
Bristol, BS1 6NA
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NOTES

- Do not scale this drawing.
- Existing drainage based on supplied record drawing for the Chancellor's Building, reference W259-CB-002 Revision AB, dated 14/10/2016.
- Proposed drainage system based on achieving design parameters in accordance current planning policy.
- Discharge rates to be restricted to greenfield equivalent flow rates, or 2.0l/s where rates are lower than this threshold.
- Attenuation system to be designed to accommodate run-off up to the 1 in 100 year return period, plus a 40% allowance for climate change.
- Upgrades have been identified to the existing drainage network to reduce flooding occurring in events less than the 1 in 30 year event. Flooding is estimated to occur in shorter duration events.
- Outfall of surface water drainage to be confirmed on receipt of buried services GPR survey.
- Location of attenuation tank relocated due to inadequate cover achievable within sports field to discharge to existing drainage network.

PURPOSE OF ISSUE
Stage 3 Issue

ISSUE/REVISION

Rev	Date	Detail	Made	Chk'd	App'd
P3	18/02/2021	Hydraulic control details added	RA	DM	DM
P2	18/02/2021	External plant compounds added	RA	RA	DM
P1	18/12/2020	Initial issue	RA	RA	DM

KEY PLAN

PROJECT NUMBER
60491899

SHEET TITLE
Below Ground Drainage General Arrangement

SHEET NUMBER
60491899-ACM-XX-GA-C-10001

REV.
P03

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