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FLOOD RISK ASSESSMENT REPORT FOR 240062 – HINCHLEY RD, CHARLESTOWN

Prepared for:

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1 EXECUTIVE SUMMARY

- EDGE have been instructed by Miller Homes to conduct a Flood Risk Assessment (FRA) in support of a planning application for the development of the greenfield site at Hinchley Road, Charlestown, Manchester. The proposed development is for erection of 106 residential dwellings with the associated road infrastructure on approximately 2.655 hectares of land.
- The site is located north of Manchester city, in Charlestown, bordered by Hinchley Road along the south west boundary. It is situated 320m south of the M60 motorway.
- The Irk Test is located to the 2.5km to west. Boggart Hole Brook is the nearest watercourse, located 220m away from the site.
- This report assesses the risk of flooding to the site from various sources, including fluvial, tidal, pluvial (overland) surface water, and groundwater.
- The site lies in Flood Risk Zone 1 (low probability of flooding).
- The site's topography shows relatively flat levels across the site with a depressed area in centre, that tend to cause water ponding, especially during heavy storms.
- The site has a high probability of surface water flooding during large rainfall events.
- A suitable drainage system is required to manage and store surface water across the site, reducing the risk of flooding.
- A public Ø1200mm surface water and a Ø225mm foul sewers run parallel to the southern boundary along Hinchley road. Surface water and foul connection points for the site drainage discharges are proposed at these sewers, subject to United Utilities approval under a S104 application.
- Surface water will discharge into the Ø1200mm surface water pipe at a restricted greenfield rate, 15.4l/s, with storage provided in oversized pipes.
- Proposed surface water and foul drainage networks will be offered for adoption to United Utilities under a S104 application.
- This report concludes that the development does not increase flood risk on the site or elsewhere.

2 INTRODUCTION

EDGE Consulting Engineers have undertaken a Flood Risk Assessment (FRA) in line with National Planning Policy Framework (NPPF, December 2024) and the main aims of this report are:

- To determine whether the proposed development is likely to be affected by current or future flooding from any source.
- To determine whether it will increase flood risk elsewhere.
- To determine whether the measures proposed to deal with these effects and risks are appropriate.
- To assess under SUDS Guidance the best way of reducing the flow rates from site to an acceptable rate of discharge.

The site is situated on Hinchley Road in Charlestown, Manchester. It comprises an irregularly shaped parcel of land covering approximately 2.655 hectares. Classified as greenfield land, the site remains undeveloped and consists of an open green space.

The site is surrounded by residential dwellings along the northern boundary, while sport facilities are located to the west, with an associated car park along the southwestern boundary. The southern boundary is delineated by Hinchley Rd, with the M60 further to the north.

The proposed residential development includes the construction of 106 dwellings, with associated landscaping and hard surfaces comprising main estate and access roads, along with private roads and driveway areas.

From a geology perspective, the British Geological Survey mapping identifies superficial peat deposits across the north section of the site and Till deposits to the south, with bedrock of the Pennine Middle Coal Measures.

Shallow ground water levels across the site have been identified in the Phase 2 Site Investigation Report by IGE Consulting, dated on March 2024.

The main boundary conditions affecting the site come from the flat nature of the existing topography, along with the slightly depressed levels along the centre of the site, which cause water ponding. Since the centre of the site is lower than the boundary levels, ponded water resulting from heavy storms or flood events has difficulty draining out of the site.

The site and surrounding boundary conditions are shown on the Aerial Image in Figure 2.1.

FIGURE 2.1 – SITE LOCATION



3 NATIONAL PLANNING POLICY FRAMEWORK (NPPF)

The National Planning Policy Framework (NPPF) clearly identifies flood risk as a specific material consideration in the Planning Process and in the allocation and release of sites for development or re-development.

NPPF encourages local planning authorities to use their existing powers to guide, regulate and control development in relation to flooding and flood risk. The framework expects local authorities to adopt a risk-based approach at all levels of planning, through the application of the Sequential Test detailed in Table 1 and 2, of the Technical Guidance to NPPF document, a copy of which is attached in Appendix A.

The aim of the sequential test is to steer new development to areas with the lowest probability of flooding. Development should not be allocated or permitted if there are reasonably available sites appropriate for the proposed development in areas with a lower probability of flooding. The Strategic Flood Risk Assessment (SFRA) will provide the basis for applying this test. A sequential approach should be used in areas known to be at risk from any form of flooding.

The Water Resources Act 1991 [Section 105] also requires the Environment Agency to exercise a general supervision over all flood defence matters, including flood plains and wash lands which accommodate waters during periods of flood. In discharging their functions, the Agency from time to time carries out comprehensive surveys and flood studies, largely of 'main rivers' within its jurisdiction.

A Section 105 Study involves the Agency topographically surveying the subject watercourse (or parts of it) and obtaining details of the flow mechanics within the watercourse. This data then enables them to generate a comprehensive hydraulic computer model for the watercourse.

From this hydraulic model the EA can define the approximate extent of fluvial flood-plain associated with the 1 in 100-year (1% annual probability) flooding event or the extent of tidal floodplain associated with the 1 in 200-year (0.5% annual probability) flooding event.

The extents of the modelled floodplain are then provided to Local Planning Authorities, to enable them to make more informed decisions when considering proposed development in flood susceptible areas. If development is proposed in a flood susceptible area, or in an area where there is a history of flooding, the EA, as a statutory consultee in the Planning Process, will generally recommend that the risk of flooding be formally assessed, in accordance with the NPPF, and that a Flood Risk Assessment report be produced to support the Planning Application.

The broader modelled flood extents are also indicated on the EA's Flood Zone Maps, available through their website (Figure 5.1).

4 STRATEGIC FLOOD RISK ASSESSMENT (SFRA)

Local planning authorities are required to produce local development frameworks, which are a portfolio of local development documents [LDDs] that collectively deliver the spatial planning strategy for the authority area. The LDD's undergo a sustainability appraisal which assists planning authorities in ensuring their policies fulfil the principles of sustainability.

Strategic Flood Risk Assessments [SFRA] are one of the documents to be used as the evidence base for planning decisions and are a component of the Sustainability Appraisal process.

To assist Local Planning Authorities in their strategic land-use planning, SFRA's should present enough information to enable Local Authorities to apply the Sequential Test to their proposed development sites:

"Decision makers should use the SFRA to inform their knowledge of flooding, refine the information on the Flood Map and determine the variations in flood risk from all sources of flooding across and from their area. These should form the basis for preparing appropriate policies for flood risk management for these areas."

In March 2011 Manchester city, Salford City and Trafford Councils produced a level 2 Strategic Flood Risk Assessment.

Among other recommendations, the SFRA highlights the need for more detailed flood risk analysis across the assessed Critical Drainage Areas (CDAs). However, the site is not located within a designated CDA.

As part of the assessment of surface water flood risk developed within the SFRA, it is recommended that: *"All new sites incorporate a drainage strategy to provide further benefits besides water management, including providing recreational facilities, improving biodiversity and making communities a better place to live. It should be recognised that a long term maintenance strategy is needed for such options. Where there are several sites that would share a communal facility, such sites may be funded through developer Section 106 or Community Infrastructure Levy payments. Drainage Strategies can be particularly useful for considering, recommending the implementation of, and long term management arrangements for, SUDS and setting appropriate runoff rates from new development."*

"There is a potential risk of flooding from lost watercourses and a site specific FRA should address mitigation for risk from surface water, culvert blockage and smaller watercourses where appropriate. The Environment Agency recommend that culverts are opened up (deculverted), where possible (although this needs careful consideration due to potential future maintenance problems), to reduce the risk of flooding (due to blockages), for easy access and maintenance and to enhance the biodiversity value of the site."

The SFRA indicates a potential lost watercourse adjacent to the southwest boundary of the site, which may correspond to the Ø1200mm sewer identified in the drainage utility survey.

However, this pipe is currently a United Utilities (UU) asset located outside the site boundary. Nevertheless, flood risk considerations should be taken into account during this analysis.

According to the SFRA maps, the site lies in a zone affected by low to intermediate susceptibility to surface water flooding. As shown in Figure 4.1, the central section of the site has low susceptibility to surface water flooding, while the risk increases along the southern site boundary to an intermediate level.

Due to this flood vulnerability, the site is also categorised in the SFRA based on its flood risk in future scenarios. Figure 4.2 identifies the site within a zone where 1 to 5 properties are at risk across most of the site, increasing to 5 to 20 properties at risk along the southern boundary.

FIGURE 4.1 – SUSCEPTIBILITY TO SURFACE WATER FLOODING – FUTURE SCENARIO

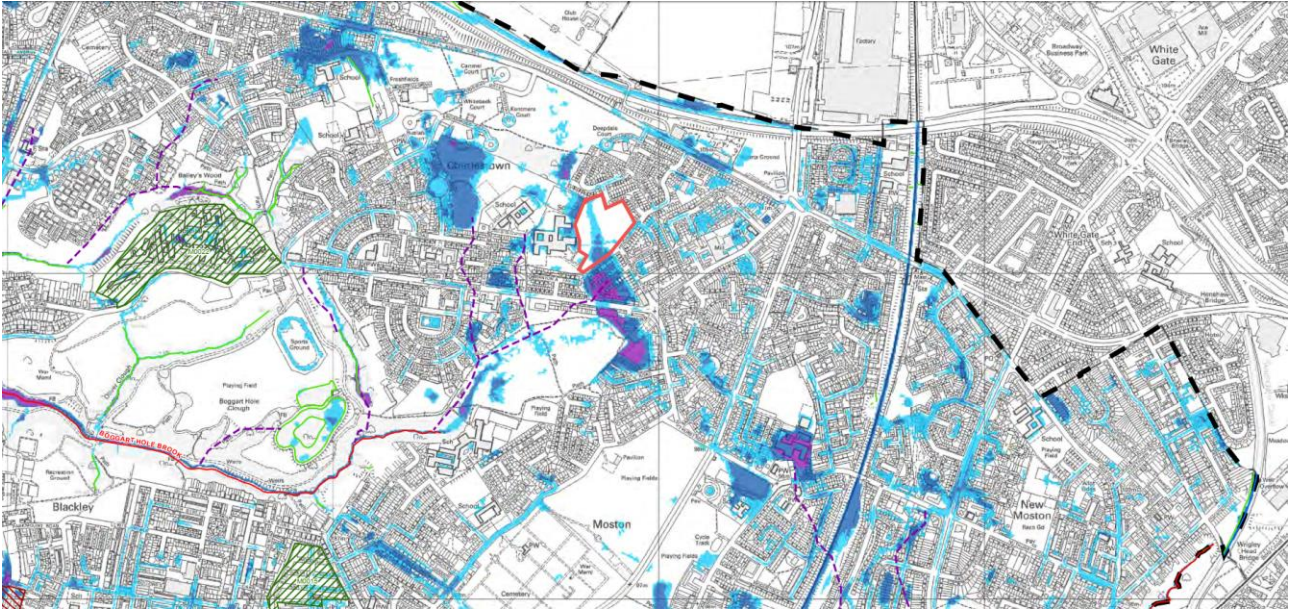
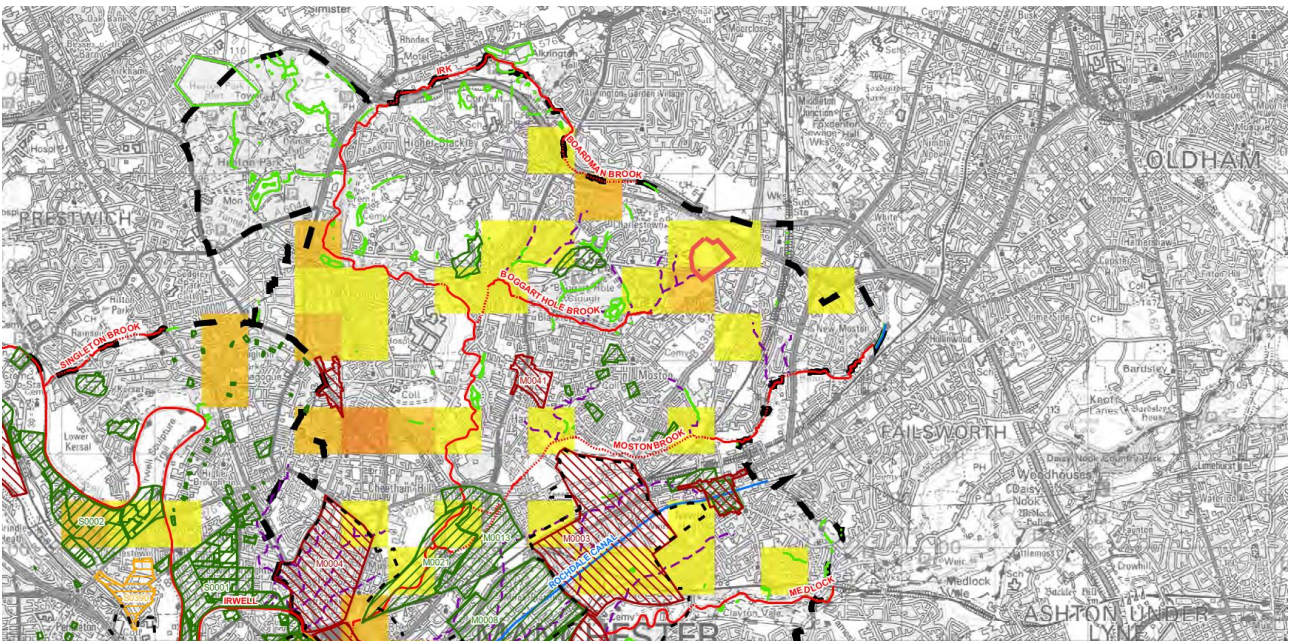


FIGURE 4.2 – SURFACE WATER FLOODING RISK ASSESSMENT – FUTURE SCENARIO

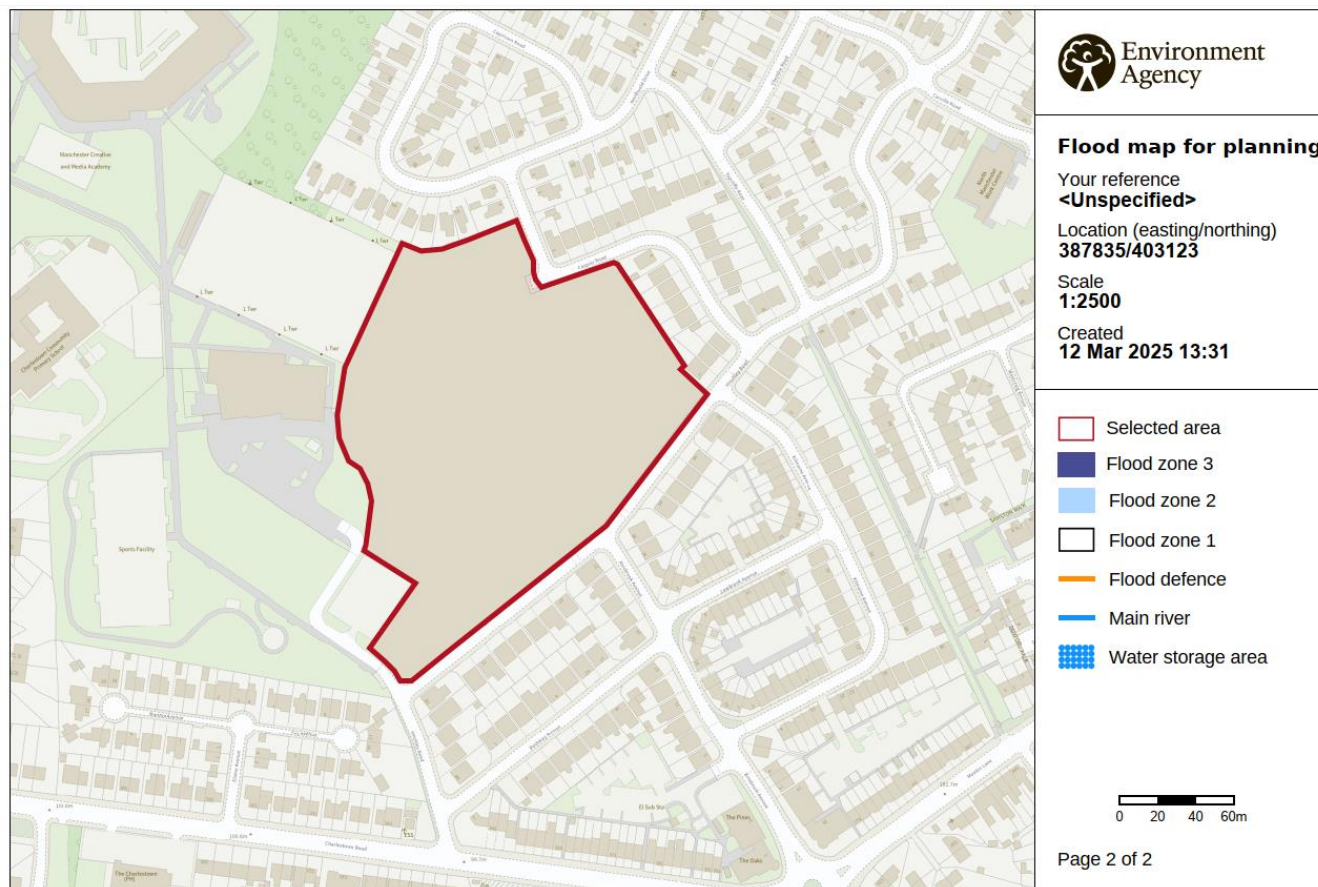


5 FINDINGS OF A FLOOD RISK ASSESSMENT

EDGE Consulting Engineers have carried out a Flood Risk Assessment (FRA) in line with National Planning Policy Framework.

The Environment Agency's flood zone maps, now available on the GOV.uk website, indicate that the site is entirely located within Flood Zone 1 (Ref Figure 5.1).

FIGURE 5.1 – FLOOD ZONE MAP



Flood Zone 1 indicates that there is a low risk of flooding from fluvial or tidal sources and current EA guidance indicates that all proposed developments in zone 1, larger than 1 hectare, should be accompanied by a flood risk assessment.

The site-specific FRA should contain:

- Information about the surface water disposal measures already in place and their state of maintenance.
- An assessment of the volume of surface water run-off likely to be generated from the proposed development.
- Information on how that surface water run-off will be disposed of (from the new development).
- Estimates of how climate change could affect the probability and intensity of flooding events in the future.

CLIMATE CHANGE

Climate change requires careful consideration in all aspects of development, including the construction of new residential areas and it is crucial to analyse the potential impact of climate change on proposed developments. One significant aspect to consider is the increase in rainfall events. With climate change, there is a growing trend of more intense and frequent rainfall, leading to an increased risk of flooding.

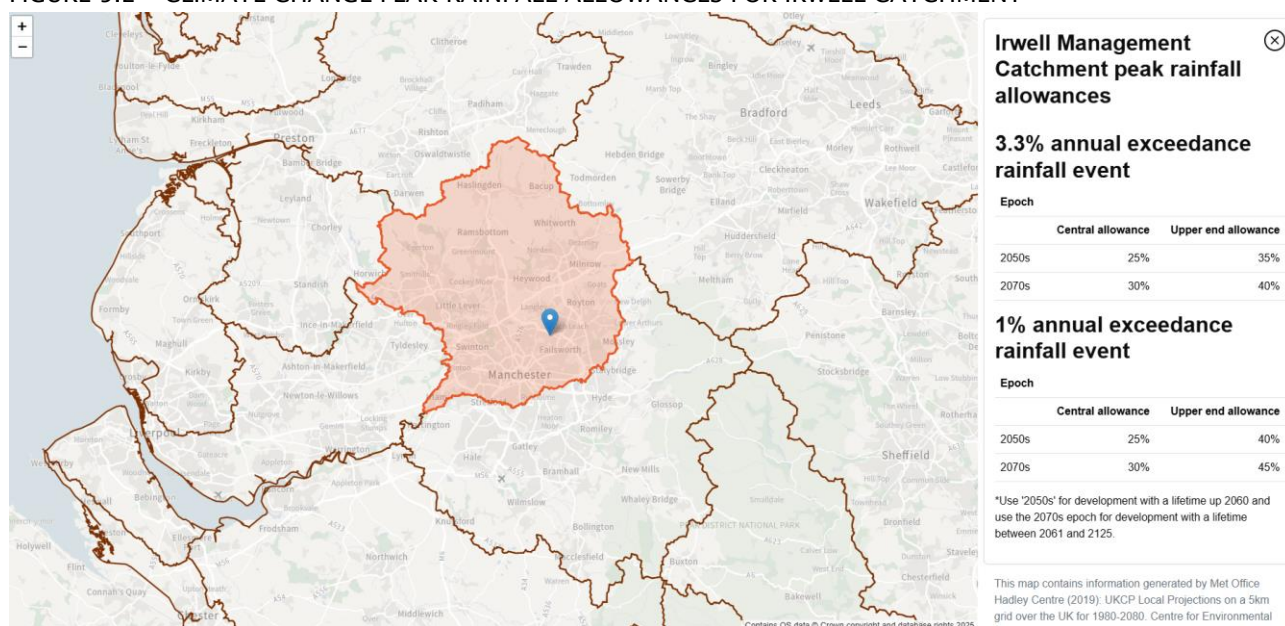
Incorporating climate change allowances into the development proposals will mitigate flood risk and ensure the long-term sustainability and resilience of the development. By implementing measures such as effective drainage systems, green infrastructure, and flood-resistant construction techniques, developments can better withstand the potential impacts of climate change, safeguarding residents and properties.

Taking proactive steps within development proposals will not only protect the investment in the development but also contribute to a more sustainable and climate-resilient future.

An increase to peak rainfall allowances should be accommodated in drainage proposals and the Environment Agency/DEFRA website provides online mapping services indicating central and upper end allowances for climate change in specific management catchments. The development lifetime (100 years) means a requirement to assess the upper end allowance.

The Irwell Management Catchment indicates an additional, upper end, allowance for the 1 in 100-year (1% annual exceedance rainfall) event of 45% in the 2070s epoch so this should be considered within the development's drainage calculations.

FIGURE 5.2 – CLIMATE CHANGE PEAK RAINFALL ALLOWANCES FOR IRWELL CATCHMENT



5.1 DRAINAGE STRATEGY

Existing Foul Drainage

The statutory plans show foul drainage beneath the centre of Caspian Road and Hinchley Road. No foul drainage is mapped within the site boundary.

The utility survey identified a Ø225mm foul sewer along Hinchley Road, as well as a section of a foul drain in the southern part of the site, leading out onto Hinchley Road.

Drainage survey plan is shown in Appendix D and United Utilities sewer records in Appendix E.

Proposed Foul Drainage

It is proposed that the foul flows generated from the new development will utilise a traditional gravity system and connect to the UU foul sewer via an existing manhole in Hinchley Road. The depth of the existing sewer should be sufficient to allow a gravity connection for the whole development, subject to detailed design and careful engineering of the pipework gradients and finished floor levels within the site.

The proposed foul water drainage network will be offered to United Utilities for adoption under a section 104 agreement and will be designed in accordance with industry standard Design Construction Guidance (DCG) and United Utilities guidelines and standard details.

Foul water drainage proposals have been submitted to United Utilities for review under a S104 Pre-design application for adoption of new sewers. A response has yet to be received at the time of writing this report.

Foul water drainage proposals are shown in Appendix F.

Existing Surface Water Drainage

The statutory plans show surface water drainage along Caspian Road and Hinchley Road. No surface water drainage is mapped within the site boundary.

The utility survey identified Ø100mm surface water drains from road gullies discharging into a Ø225mm sewer in Caspian Road, to the north of the site, while Ø375mm and Ø225mm surface sewers leading to a Ø1200mm pipes are present beneath Hinchley Road.

Despite the utility records indicating an absence of drainage within the site, the utility survey identified surface water drains in the southern part of the site, comprising a Ø150mm SW pipe running east-west and a Ø300mm pipe, both discharging into a main Ø1200mm pipe at Hinchley Road. Three manholes have also been identified on site, which are likely to be associated with these drains.

Drawing SS_4.5 of the SFRA for Manchester City, Salford City and Trafford Councils indicates that a lost watercourse is located adjacent to the southwest boundary of the site. This lost watercourse seems to discharge into Boggart Hole Brook, located approximately 220m south of the Site.

The sites drainage characteristics have been explored, and a review of the existing greenfield runoff rate is presented below for the purpose of progressing the site development using the most sustainable means and appropriate rate of runoff.

The greenfield runoff rate for the site has been calculated using Micro drainage source control software. The ICP SUDs estimation approach is used, and the output generated from the software shows that the QBAR greenfield run off rate totals 15.4 litres per second.

	GREENFIELD RUNOFF RATE
Qbar	15.4l/s
1 IN 30 YEARS	26.1 /s
1 IN 100 YEARS	32/s

Simulation summary of the Greenfield runoff calculation can be found in Appendix G.

Drainage survey plan is shown in Appendix D and United Utilities sewer records in Appendix E.

Proposed Storm Water Drainage

Surface water should be discharged by the most sustainable means. Due to the impermeable nature of the underlying strata with low permeability natural soils, discharging surface water flows via infiltration is not considered as a viable option at this stage, however further testing will be required to validate this approach.

Boggart Hole Brook, the nearest watercourse, is located 220m away from the site. A new direct connection to the Brook is not possible due to third-party land. However, a Ø1200mm United Utilities (UU) surface water sewer runs along the southern site boundary in Hinchley Road and appears to discharge into the brook. This is considered the most suitable connection point for surface water discharge

The rate of runoff from the site will be restricted in accordance with the SFRA for Sustainable Drainage Systems, limiting the discharge to the Greenfield Qbar of 15.4 litres per second. United Utilities will also be consulted for the suitability of this approach and the proposed runoff rates.

The construction of the proposed development will result in an increase of impermeable areas and therefore a corresponding increase in surface water run-off. To ensure that the site poses no flood risk to proposed or existing properties a restriction of surface water run-off is required.

The restriction of surface water run will result in storage being required. Ø1350mm pipes are proposed to hold surface water within the site for all return periods up to the 1 in 100-year plus climate change storm events. Table below shows the required storage volumes for the proposed development.

Return Period	Storage Volume
1 in 30-year	372m ³
1 in 100-year + 45%CC	859m ³

The proposed surface water drainage network is proposed to connect to the existing public Ø1200mm sewer via an existing chamber in Hinchley Road. The proposed sewers up to the outfall point will be offered to United Utilities for adoption under a section 104 agreement.

The proposed surface water network will be designed in accordance with Design and Construction Guidance (DCG) which sets out the standards for the design and construction of adoptable foul and surface water systems. Detailed drainage layouts outlining the drainage proposals are included in Appendix F, and Microdrainage calculations within Appendix H.

5.2 FLOOD RISK

5.2.1 Assessment of Fluvial Flood Risk

Flooding from rivers occurs when water levels rise higher than the level of the banks or breach raised banks or defences, causing water to flow out and across adjacent land (the floodplain).

Climate change is likely to result in increased rainfall intensity and increased peak flood flows in watercourses, which has the potential to significantly increase flooding from watercourses.

The River Irk is the nearest main river to the site, located approximately 2.5km to the west. However the nearest waterbody is Boggart Hole Brook, 230m to the south of the site, which is considered a tributary of the River Irk.

Based on the above and as mentioned in previous sections of this report, the site is located within Flood Zone 1, and as such has a low probability of flooding from fluvial sources. There are no watercourses within the immediate vicinity of the site so the risk of flooding from this source is low.

Figure 5.1 above shows the EA mapping confirming the low level of fluvial flooding for the site.

5.2.2 Assessment of Tidal Flood Risk

The site is located far enough inland to be considered at very low risk of flooding from the sea. Climate change is not thought to provide an increased risk to the site from tidal flooding during the lifetime of the development and so tidal flood risk is deemed to be low.

5.2.3 Assessment of Surface Water Flood Risk

Surface water flooding may occur when intense rainfall causes the ground to become saturated and its capacity is exceeded.

The surface water flood map from the EA flood models, Figure 5.3 below, indicates that the site is currently affected by an intermediate to high yearly chance of flooding. This surface water risk is also highlighted in the SFRA as mentioned in paragraph 4.1 of this report.

The existing topographical survey shows the natural ground elevations are relatively flat across the site with a slight depression in the centre running from north to south. This subtle low-lying area aligns with the flooding-affected areas identified in the EA maps.

Moreover, the introduction of impermeable surfaces in the proposed development will increase surface water runoff, potentially exacerbating the existing surface water flood risk projected for the future, as shown in Figure 5.4.

FIGURE 5.3 – CUREENT FLOOD RISK FROM SURFACE WATER

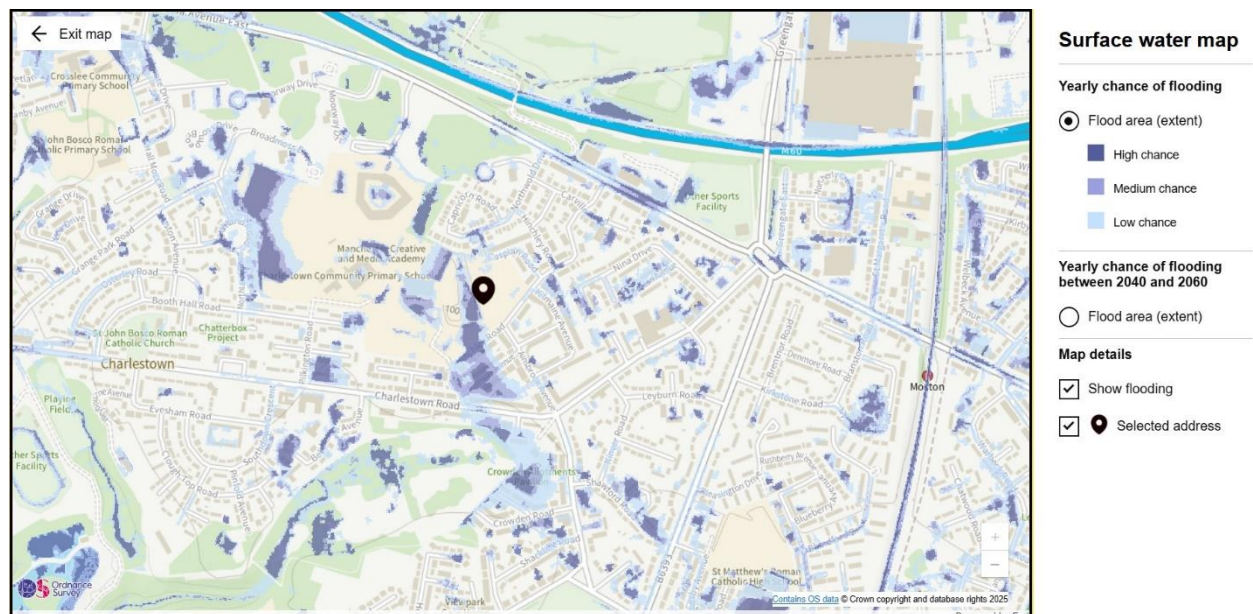
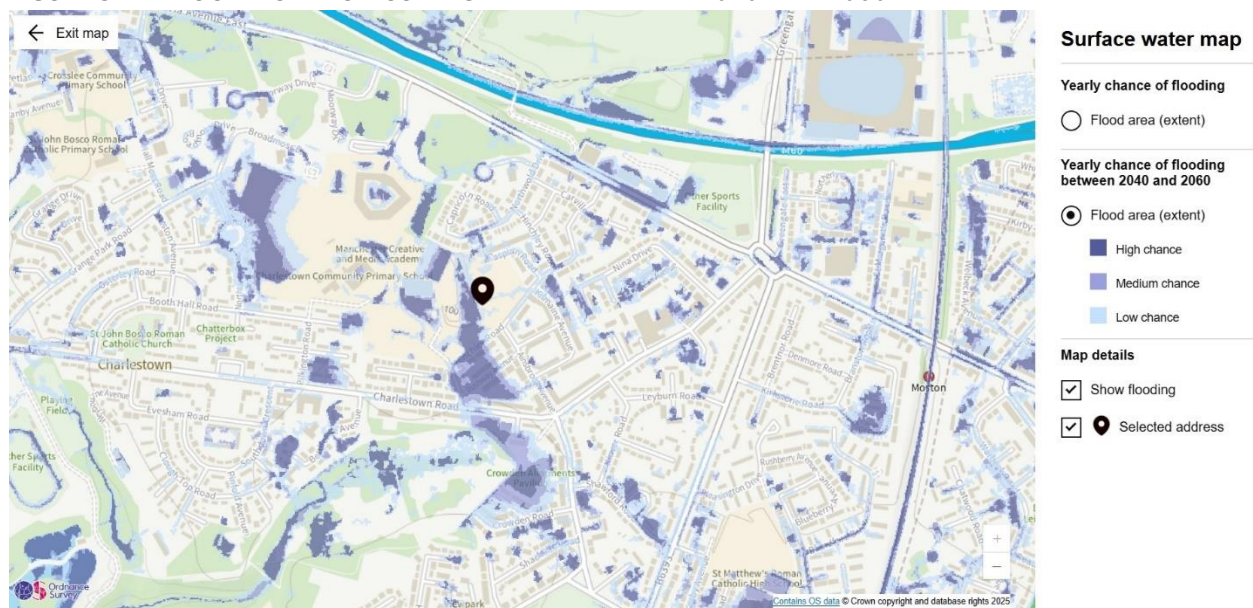


FIGURE 5.4 – FLOOD RISK FROM SURFACE WATER BETWEEN 2040 AND 2060



The development of the site and introduction of a new drainage system further mitigate any overland flows away from buildings to soft landscaped areas, gullies and drainage channels that connect to the proposed drainage network. Finished floor levels of proposed buildings should be set a minimum of 150mm above surrounding ground levels to further minimise the risk of flooding from this source.

According to the EA Historical Flood Map and the SFRA, there is no record of historical flooding events affecting the site.

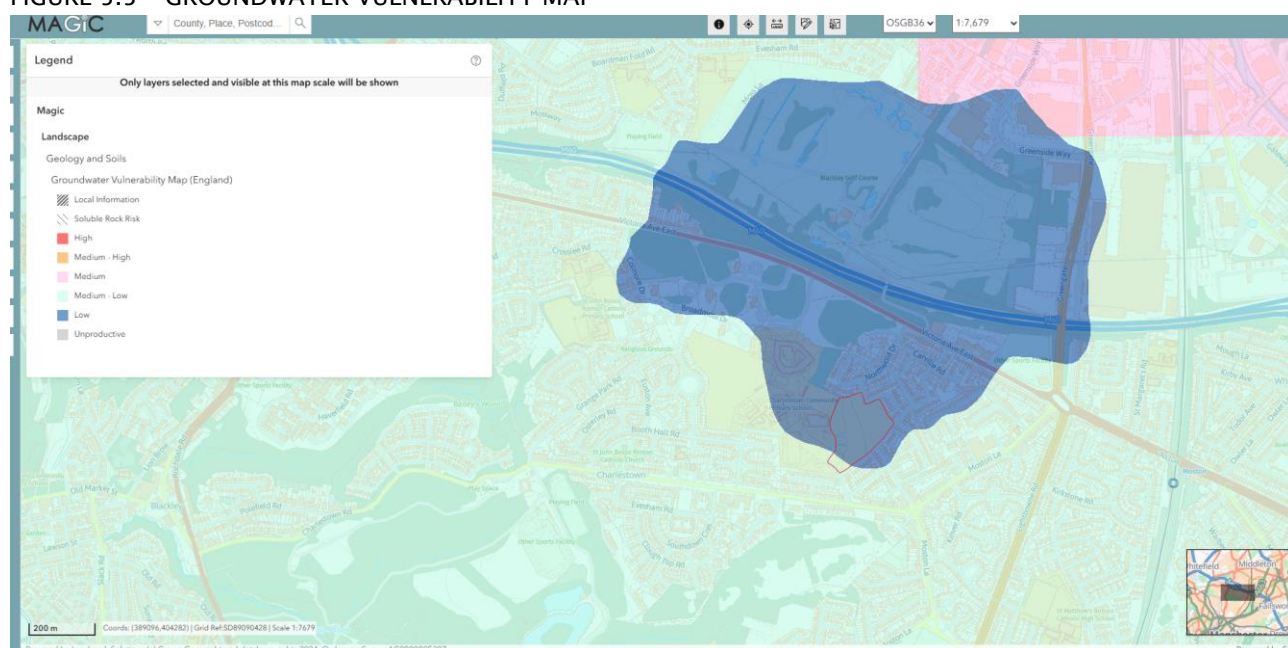
5.2.4 Assessment of Ground Water Flood Risk

Groundwater flooding generally occurs as a result of long duration rainfall events, when the associated recharge of permeable geological deposits raises the water table until it is above ground level. Groundwater flooding is generally of longer duration than fluvial or surface water flooding and may take weeks or months to recede as groundwater flow is much slower. Flooding of subsurface structures can also occur where groundwater levels rise to just below ground. Groundwater flooding can be associated with both permeable bedrock and superficial deposits.

According to the British Geological Survey (BGS), the potential for groundwater flooding affecting below-ground properties on this site is limited.

EA groundwater vulnerability maps show that flooding from groundwater is unlikely in this area, refer to Figure 5.5 below.

FIGURE 5.5 – GROUNDWATER VULNERABILITY MAP

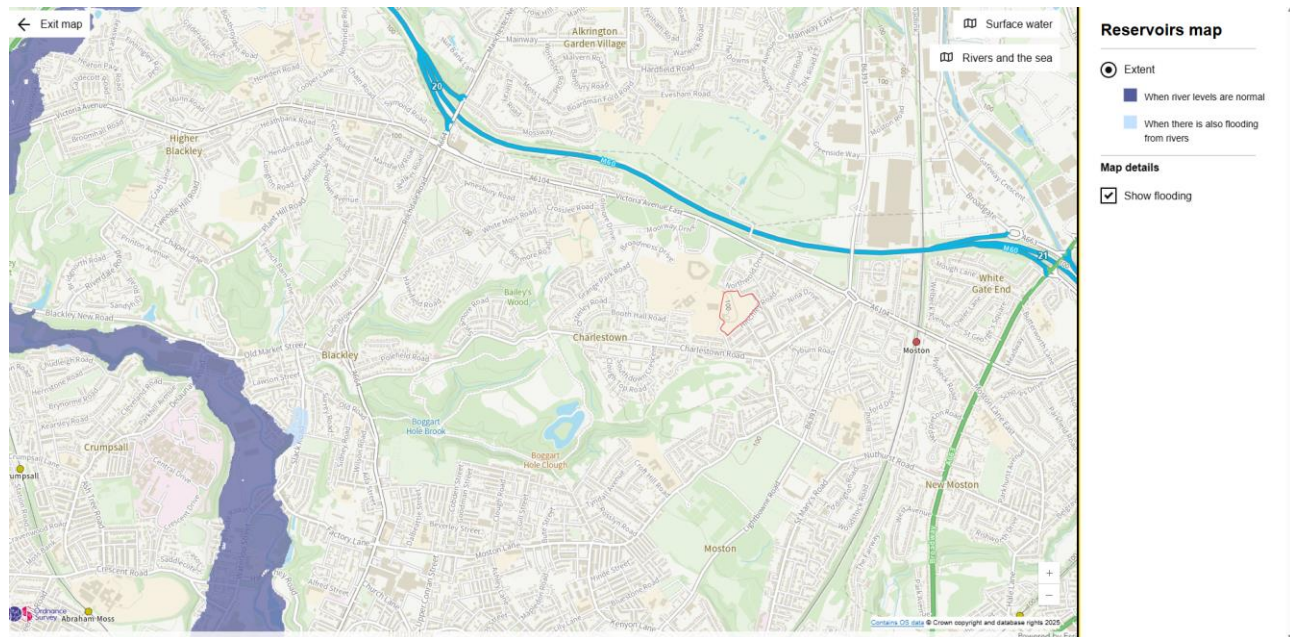


5.2.5 Assessment of Reservoirs and Canals Flood Risk

Flooding can occur due to the release of large volumes of water from reservoirs and canals. The image 5.6 below is taken from the Environment Agency flood risk section, illustrates the extent of flooding from reservoirs and confirms that the site is not at risk of reservoir flooding.

The Rochdale Canal, located approximately 1.5km east of the site, is the nearest canal. As there are no other canals in the vicinity, the risk of flooding from this source is also considered low.

FIGURE 5.6 – FLOOD RISK FROM RESERVOIR



5.2.6 Assessment of Adjacent Sewers Flood Risk

There are existing public sewers outside the site boundary as described in the above sections of the report. The only risk of flooding from this source would be failure or surcharge during periods of high flow. Assuming the existing public sewers have sufficient capacity for the catchments they are serving, and they are regularly maintained and inspected the risk of flooding from sewers is low.

5.2.7 Assessment of Proposed Sewers Flood Risk

Drainage infrastructure is designed to ensure that rainwater drains off site at a restricted rate. An attenuation tank system will hold all volumes up to and including the 1 in 100 year + climate change storm events. This will minimise the risk of flooding from proposed surface water sources. The proposed drainage system is shown in Appendix F.

6 RESIDUAL RISKS

The table below outlines the initial qualitative assessment of risk posed by each potential source of flooding, the mechanisms for flooding and the likely consequences. The Table also includes a review of possible mitigation measures and what effect, if any, the mitigation measures are likely to have on the residual risk posed by each potential flood source. Categories of risk have been qualitatively defined as:

- **High Risk:** Flooding is likely to result in significant damage to property and pose a significant risk to life.
- **Medium Risk:** Flooding is likely to result in possible minor damage to property, but flood progress would allow adequate time for residents to be warned and safely evacuated to higher ground or appropriate places of safety.
- **Low Risk:** Flooding is unlikely to result in any damage to property and pose little or no risk to life.

Source	Flood Mechanism & Consequences	Assessment of Risk	Recommended Mitigation Measures	Residual Risk
Fluvial flooding	Risk of fluvial flooding to the site from adjacent Watercourses, Drains and other Water Bodies.	Very Low	Fluvial flooding of the site is not expected during the 1 in 100-year event + climate change.	Very Low
Pluvial flooding	Risk of flooding from overland flows in extreme events. Ponding of surface water due to ground being saturated and capacity being exceeded.	High	- FFLs to be set in excess of the minimum 150mm above surrounding levels. - Provision of positive drainage network	Low
Surcharging of artificial drainage systems	Drainage systems operating above design capacity, resulting in: - surcharging of manholes / drainage systems. - over-land flow through development. - ponding in low-lying areas of site. - no over-land flow route for flood waters accumulating in low-lying areas.	Low	- Appropriate design of SW drainage system to provide sufficient storage. - Provision of overland flood flow routes through proposed development.	Low
Infrastructure failure	Water main burst resulting in: - Possible over-land flows through / adjacent to the site and possible inundation of property. - Possible ponding in low-lying areas.	Low	- Safe access/egress available to adjacent highway. - Flood flow route through development.	Low

7 SUDS EVALUATION

Development of the site will result in an increase of impermeable areas and therefore a corresponding increase in run-off volumes. The use of SUDs techniques to discharge the additional surface water will be evaluated in this section of the report.

The storm water drainage system for the proposed development will be designed in accordance with the DCG, which requires that any surface water drainage system, should not surcharge during the 1 in 2-year storm event, and should not flood during a 1 in 30-year storm event (i.e., all run-off contained wholly within the sewerage system during the 1 in 30-year event).

Whilst the DCG requires there be no surface flooding during the 1 in 30-year storm event. It is generally accepted that a degree of surface flooding can be permitted during extreme storm events i.e., 1 in 100 year + climate change. This will be subject to specific areas being designated as flood susceptible and subject to flooding of these areas posing little or no risk to human life and damage to property. Examples of surface areas which might be permitted to flood in such events are:

- Agricultural land
- Recreational land (playing fields etc.)
- Landscaped areas
- Highways
- Car parks
- Other non-inhabited, designated areas

In all cases where surface flooding might be permitted or designed into a scheme, due diligence needs to be given to the NPPF and the need to make potential users of such areas aware of their functionality and purpose, and the requirement to maintain safe egress and access at all times.

The Building Regulations Approved Document H (2002) outlines a hierarchy of potential methods of disposing surface water from a site:

- A soakaway: or where that is not practicable.
- A watercourse or river; or where that is not practicable,
- A sewer.

The viability of each has been assessed below:

- Soakaway: Regarding the consideration of soakaway infiltration methods for the disposal of surface water, at this stage. Soakaways have been discounted until further investigation has been undertaken
- Watercourse: There are no watercourses within the site or within its immediate vicinity. The closest waterbody is the Boggart Hole Brook , which is located 230m to the south of the site, and across 3rd party land. Connection to this waterbody is not viable.
- Sewers: United Utilities surface water and foul sewers are located within Hinchley Road. Proposals show a connection to the southern sewer into an existing chamber. United Utilities have been contacted to confirm connection points and flow rates are acceptable. At the time of writing this report they have not yet responded.

8 CONCLUSIONS AND RECOMMENDATIONS

- EDGE have been instructed by Miller Homes to prepare a Flood risk assessment which will support a planning application which seeks permission for the construction of 106 residential dwellings.
- The site is situated on Hinchley Road in Charlestown, Manchester.
- The site area is 2.655 hectares, is an irregular shape and classified as greenfield land.
- The nearest watercourse is Boggart Hole Brook , 230m to the south of the site, and across 3rd party land.
- There are existing public surface water and foul sewer near to the site on Hinchley Road.
- The development area of the site lies within Flood Zone 1 and is therefore unlikely to be affected by fluvial flooding.
- The development of the site will result in an increase in impermeable area and corresponding increase in surface water run-off.
- Surface water flows will be restricted to greenfield QBAR rate of 15.40 litres per second
- Surface water volumes will be stored in oversized pipes.
- Climate change has been factored into the drainage calculations.
- Construction of the proposed development will not increase flood risk on or off the site.
- No mitigation measures are considered necessary to mitigate the risk from infrastructure failure.
- A drainage design (Appendix F) has been submitted in support of this flood risk assessment.
- Development of the site will not increase the flood risk to any other property.
- Based on the information provided to EDGE Consulting Engineers in support of this flood risk assessment, the development of the site would be considered sustainable in terms of flood risk, subject to the various recommendations in line with National and Local Planning Policy.

APPENDICES

Appendix A – Extract from chapter 14 of NPPF December 2023

[Home](#)

National Planning Policy Framework

From: **Department for Levelling Up, Housing and Communities**

(/government/organisations/department-for-levelling-up-housing-and-communities)

Published 27 March 2012

Updated: 27 March 2012 - **See all updates**

[Contents](#)

14. Meeting the challenge of climate change, flooding and coastal change

Paragraphs 157 to 179

157. The planning system should support the transition to a low carbon future in a changing climate, taking full account of flood risk and coastal change. It should help to: shape places in ways that contribute to radical reductions in greenhouse gas emissions, minimise vulnerability and improve resilience; encourage the reuse of existing resources, including the conversion of existing buildings; and support renewable and low carbon energy and associated infrastructure.

Planning for climate change

158. Plans should take a proactive approach to mitigating and adapting to climate change, taking into account the long-term implications for flood risk, coastal change, water supply, biodiversity and landscapes, and the risk of overheating from rising temperatures ⁵⁶. Policies should support appropriate measures to ensure the future resilience of communities and infrastructure to climate change impacts, such as providing space for physical protection measures, or making provision for the possible future relocation of vulnerable development and infrastructure.

159. New development should be planned for in ways that:

(a) avoid increased vulnerability to the range of impacts arising from climate change. When new development is brought forward in areas which are vulnerable, care should be taken to ensure that risks can be managed through suitable adaptation measures, including through the planning of green infrastructure; and

(b) can help to reduce greenhouse gas emissions, such as through its location, orientation and design. Any local requirements for the sustainability of buildings should reflect the government's policy for national technical standards.

160. To help increase the use and supply of renewable and low carbon energy and heat, plans should:

(a) provide a positive strategy for energy from these sources, that maximises the potential for suitable development, and their future re-powering and life extension, while ensuring that adverse impacts are addressed appropriately (including cumulative landscape and visual impacts);

(b) consider identifying suitable areas for renewable and low carbon energy sources, and supporting

infrastructure, where this would help secure their development; and

(c) identify opportunities for development to draw its energy supply from decentralised, renewable or low carbon energy supply systems and for co-locating potential heat customers and suppliers.

161. Local planning authorities should support community-led initiatives for renewable and low carbon energy, including developments outside areas identified in local plans or other strategic policies that are being taken forward through neighbourhood planning.

162. In determining planning applications, local planning authorities should expect new development to:

(a) comply with any development plan policies on local requirements for decentralised energy supply unless it can be demonstrated by the applicant, having regard to the type of development involved and its design, that this is not feasible or viable; and

(b) take account of landform, layout, building orientation, massing and landscaping to minimise energy consumption.

163. When determining planning applications ⁵⁷ for renewable and low carbon development, local planning authorities should:

(a) not require applicants to demonstrate the overall need for renewable or low carbon energy, and recognise that even small-scale projects provide a valuable contribution to significant cutting greenhouse gas emissions;

(b) approve the application if its impacts are (or can be made) acceptable ⁵⁸. Once suitable areas for renewable and low carbon energy have been identified in plans, local planning authorities should expect subsequent applications for commercial scale projects outside these areas to demonstrate that the

proposed location meets the criteria used in identifying suitable areas; and

(c) in the case of applications for the repowering and life-extension of existing renewable sites, give significant weight to the benefits of utilising an established site, and approve the proposal if its impacts are or can be made acceptable.

164. In determining planning applications, local planning authorities should give significant weight to the need to support energy efficiency and low carbon heating improvements to existing buildings, both domestic and non-domestic (including through installation of heat pumps and solar panels where these do not already benefit from permitted development rights). Where the proposals would affect conservation areas, listed buildings or other relevant designated heritage assets, local planning authorities should also apply the policies set out in chapter 16 of this Framework.

Planning and flood risk

165. Inappropriate development in areas at risk of flooding should be avoided by directing development away from areas at highest risk (whether existing or future). Where development is necessary in such areas, the development should be made safe for its lifetime without increasing flood risk elsewhere.

166. Strategic policies should be informed by a strategic flood risk assessment, and should manage flood risk from all sources. They should consider cumulative impacts in, or affecting, local areas susceptible to flooding, and take account of advice from the Environment Agency and other relevant flood risk management authorities, such as lead local flood authorities and internal drainage boards.

167. All plans should apply a sequential, risk-based approach to the location of development – taking into account all sources of flood risk and the current and future impacts of climate change – so as to avoid, where possible, flood risk to people and property.

They should do this, and manage any residual risk, by:

- (a) applying the sequential test and then, if necessary, the exception test as set out below;
- (b) safeguarding land from development that is required, or likely to be required, for current or future flood management;
- (c) using opportunities provided by new development and improvements in green and other infrastructure to reduce the causes and impacts of flooding, (making as much use as possible of natural flood management techniques as part of an integrated approach to flood risk management); and
- (d) where climate change is expected to increase flood risk so that some existing development may not be sustainable in the long-term, seeking opportunities to relocate development, including housing, to more sustainable locations.

168. The aim of the sequential test is to steer new development to areas with the lowest risk of flooding from any source. Development should not be allocated or permitted if there are reasonably available sites appropriate for the proposed development in areas with a lower risk of flooding. The strategic flood risk assessment will provide the basis for applying this test. The sequential approach should be used in areas known to be at risk now or in the future from any form of flooding.

169. If it is not possible for development to be located in areas with a lower risk of flooding (taking into account wider sustainable development objectives), the exception test may have to be applied. The need for the exception test will depend on the potential vulnerability of the site and of the development proposed, in line with the Flood Risk Vulnerability Classification set out in Annex 3.

170. The application of the exception test should be informed by a strategic or site-specific flood risk assessment, depending on whether it is being applied

during plan production or at the application stage. To pass the exception test it should be demonstrated that:

(a) the development would provide wider sustainability benefits to the community that outweigh the flood risk; and

(b) the development will be safe for its lifetime taking account of the vulnerability of its users, without increasing flood risk elsewhere, and, where possible, will reduce flood risk overall.

171. Both elements of the exception test should be satisfied for development to be allocated or permitted.

172. Where planning applications come forward on sites allocated in the development plan through the sequential test, applicants need not apply the sequential test again. However, the exception test may need to be reapplied if relevant aspects of the proposal had not been considered when the test was applied at the plan-making stage, or if more recent information about existing or potential flood risk should be taken into account.

173. When determining any planning applications, local planning authorities should ensure that flood risk is not increased elsewhere. Where appropriate, applications should be supported by a site-specific flood-risk assessment ⁵⁹. Development should only be allowed in areas at risk of flooding where, in the light of this assessment (and the sequential and exception tests, as applicable) it can be demonstrated that:

(a) within the site, the most vulnerable development is located in areas of lowest flood risk, unless there are overriding reasons to prefer a different location;

(b) the development is appropriately flood resistant and resilient such that, in the event of a flood, it could be quickly brought back into use without significant refurbishment;

(c) it incorporates sustainable drainage systems, unless there is clear evidence that this would be inappropriate;

(d) any residual risk can be safely managed; and

(e) safe access and escape routes are included where appropriate, as part of an agreed emergency plan.

174. Applications for some minor development and changes of use ⁶⁰ should not be subject to the sequential or exception tests but should still meet the requirements for site-specific flood risk assessments set out in footnote 59.

175. Major developments should incorporate sustainable drainage systems unless there is clear evidence that this would be inappropriate. The systems used should:

(a) take account of advice from the lead local flood authority;

(b) have appropriate proposed minimum operational standards;

(c) have maintenance arrangements in place to ensure an acceptable standard of operation for the lifetime of the development; and

(d) where possible, provide multifunctional benefits.

Coastal change

176. In coastal areas, planning policies and decisions should take account of the UK Marine Policy Statement

(<https://www.gov.uk/government/publications/uk-marine-policy-statement>) and marine plans

(<https://www.gov.uk/topic/planning-development/marine-planning>). Integrated Coastal Zone Management

should be pursued across local authority and land/sea boundaries, to ensure effective alignment of the terrestrial and marine planning regimes.

177. Plans should reduce risk from coastal change by avoiding inappropriate development in vulnerable areas and not exacerbating the impacts of physical changes to the coast. They should identify as a Coastal Change Management Area any area likely to be affected by physical changes to the coast, and:

(a) be clear as to what development will be appropriate in such areas and in what circumstances; and

(b) make provision for development and infrastructure that needs to be relocated away from Coastal Change Management Areas.

178. Development in a Coastal Change Management Area will be appropriate only where it is demonstrated that:

(a) it will be safe over its planned lifetime and not have an unacceptable impact on coastal change;

(b) the character of the coast including designations is not compromised;

(c) the development provides wider sustainability benefits; and

(d) the development does not hinder the creation and maintenance of a continuous signed and managed route around the coast ⁵⁷.

179. Local planning authorities should limit the planned lifetime of development in a Coastal Change Management Area through temporary permission and restoration conditions, where this is necessary to reduce a potentially unacceptable level of future risk to people and the development.

Footnotes

(56) In line with the objectives and provisions of the Climate Change Act 2008

(<http://www.legislation.gov.uk/ukpga/2008/27/contents>). ↩

(57) Wind energy development involving one or more turbines can also be permitted through Local Development Orders, Neighbourhood Development Orders and Community Right to Build Orders. In the case of Local Development Orders, it should be demonstrated that the planning impacts identified by the affected local community have been appropriately addressed and the proposal has community support.

←

(58) Except for applications for the repowering and life-extension of existing wind turbines, a planning application for wind energy development involving one or more turbines should not be considered acceptable unless it is in an area identified as suitable for wind energy development in the development plan or a supplementary planning document; and, following consultation, it can be demonstrated that the planning impacts identified by the affected local community have been appropriately addressed and the proposal has community support.

←

(59) A site-specific flood risk assessment should be provided for all development in Flood Zones 2 and 3. In Flood Zone 1, an assessment should accompany all proposals involving: sites of 1 hectare or more; land which has been identified by the Environment Agency as having critical drainage problems; land identified in a strategic flood risk assessment as being at increased flood risk in future; or land that may be subject to other sources of flooding, where its development would introduce a more vulnerable use.

←

(60) This includes householder development, small non-residential extensions (with a footprint of less than 250m²) and changes of use; except for changes of use to a caravan, camping or chalet site, or to a mobile home or park home site, where the sequential and exception tests should be applied as appropriate.←

(61) As required by the Marine and Coastal Access Act 2009

(<https://www.legislation.gov.uk/ukpga/2009/23/contents>). ↩

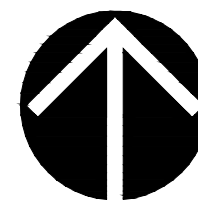
OGL

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Appendix B – Topographic survey

Appendix C – Architects layout



1:500 0 5 10 15 25m

DRAWING LEGEND: -

- Denotes Development Boundary
- Denotes 1.8m High Close Board Fence refer to boundary treatments plan
- Denotes 1.8m High Screen Wall refer to boundary treatments plan
- Denotes 450mm High Low Level Wall & with 600mm Railings above & 1100mm brick piers refer to boundary treatments plan
- Denotes 600mm high Railings with upstand refer to boundary treatments plan
- Denotes Indicative Hedge Planting/Soft Landscaping. Refer to landscaping plans
- Denotes Indicative Hedge Planting/Soft Landscaping within managed areas. Refer to landscaping layout.
- Denotes Affordable Shared Ownership
- Denotes Social Rented
- Denotes Indicative Block Paving Finishes. refer to hard surfacing plan.
- Denotes Indicative trees. Refer to landscaping layout.
- Denotes Timber Cycle Shed
- Denotes Refuse Bin Locations



		Project : Hinchley Road, Charlestown		Rev C 15.07.25	
Open Market					
Housetype	Description	Sqft.	Number	Total Sq ft	% of Mix
Harper Mid	3 Bed Mid Mews	947	2	1894	1.9
Harper Semi	3 Bed Semi	947	17	16099	16.0
Lever Semi	3 Bed Semi	993	9	8937	8.5
Langton Semi	3 Bed Semi	1,177	16	18832	15.1
Barton Detached	3 Bed Detached	1,171	12	14052	11.3
Barton Semi Detached	3 Bed Semi	1,171	14	16394	13.2
Worthington	4 Bed Detached	1,175	6	7050	5.7
Kimpton	4 Bed Detached	1,291	8	10328	7.5
			84	93586	79.2
AFFORDABLE					
Housetype	Description	Sqft.	Number	Total Sq ft	% of Mix
Social Rented					
Latchford Mid	2 Bed Mid Mews	1118	2	2236	1.9
Latchford Semi	2 Bed Semi	1118	6	6708	5.7
Crawford Mid	2 Bed Semi	764	1	764	0.9
Crawford Semi	2 Bed Semi	764	2	1528	1.9
			11		10.4
Shared Ownership					
Crawford Semi	2 Bed Semi	764	2	1528	1.9
Harper Mid	3 Bed Mid Mews	947	1	947	0.9
Harper Semi	3 Bed Semi	947	5	4735	4.7
Lever Semi	3 Bed Semi	993	1	993	0.9
Latchford Semi	2 Bed Semi	1118	2	2236	1.9
			11		10.4
			22	21675	20.8
Total			106	115261	100

C	Layout amended to reflect planner comments.	AD	22.07.25
B	Frontage railing locations amended & set back to create proposed managed landscape buffer.	AD	25.03.25
A	Cycle stores & Refuse points added.	AD	18.03.25
Rev:	Description	Drawn	Date



Miller Homes Limited - North West Region
103 Dalton Avenue
Birchwood Park
Warrington
WA3 6YF

Telephone 0870 336 4700
www.millerhomes.co.uk

Project Title
HINCHLEY ROAD,
CHARLESTOWN

Drawing Title
SITE LAYOUT PLAN

Scale	Drawn By	Checked By	Authorised By
1:500	MG	-	-
	Date 21.02.25	Date -	Date -

Job No.	Drawing No.	Revision
809380	HR-SL-01	C

Original Sheet Size A1 Do Not Scale From This Drawing

Appendix D – Drainage Survey





PROJECT

Hinchley Road, Manchester, M9 7FG

DRAWING TITLE

Topographical & Utility Survey

Scale 1:500 @ A1

Drawn AM

Level datum GNS

Job number 0117430

Drawing no. A2

Date 03.03.23

Checked JAS

Grid orientation GNS

Revision 0

NOTES:

All critical measurements should be checked on site prior to design. No liability is accepted for the use of this plan for purposes other than those for which it was prepared. The surveyor's liability is limited to the accuracy of the data collected. The surveyor's liability is limited to the accuracy of the data collected. The surveyor's liability is limited to the accuracy of the data collected.

Station **Easting** **Northing** **Level** **Level**

M1	387913.378	403032.958	98.180
M2	387877.117	403035.952	101.142
M3	387925.538	403134.954	101.978

REV **DATE** **DESCRIPTION OF WORK** **SURVEYOR** **CHECKED BY**

KEY

Utility Symbols

CEILING

SUSPENDED CEILING

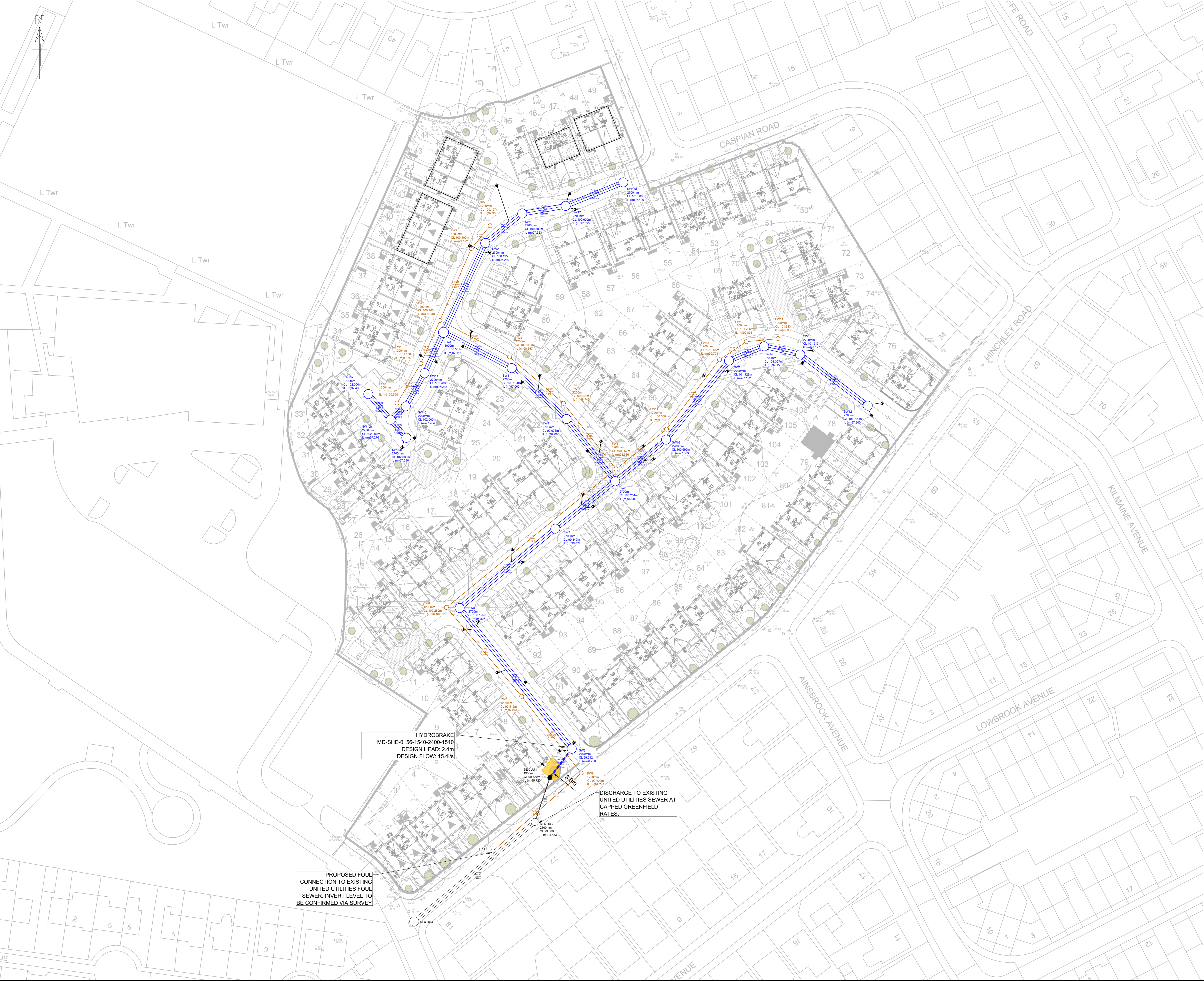
UNDERGROUND SERVICES

KEY FOR UNDERGROUND SERVICES

Appendix E – United Utilities asset search maps

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Appendix F – Proposed drainage layout and site levels



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KEY

- PROPOSED S104 SURFACE WATER SEWER
- PROPOSED S104 FOUL WATER SEWER
- EXISTING FOUL SEWER TO REMAIN
- PROPOSED SEWER EASEMENT
- SITE BOUNDARY
- HIGHWAY GULLY AND CONNECTION
- PROPOSED FINISHED FLOOR LEVEL

P02	UPDATED SITE LAYOUT	LB	AH	AH	28.07.25
P01	FIRST ISSUE	LB	AH	MD	20.05.25
REV	DESCRIPTION	DRN	CHK	APP	DATE

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Project

HINCHLEY ROAD, BLACKLEY

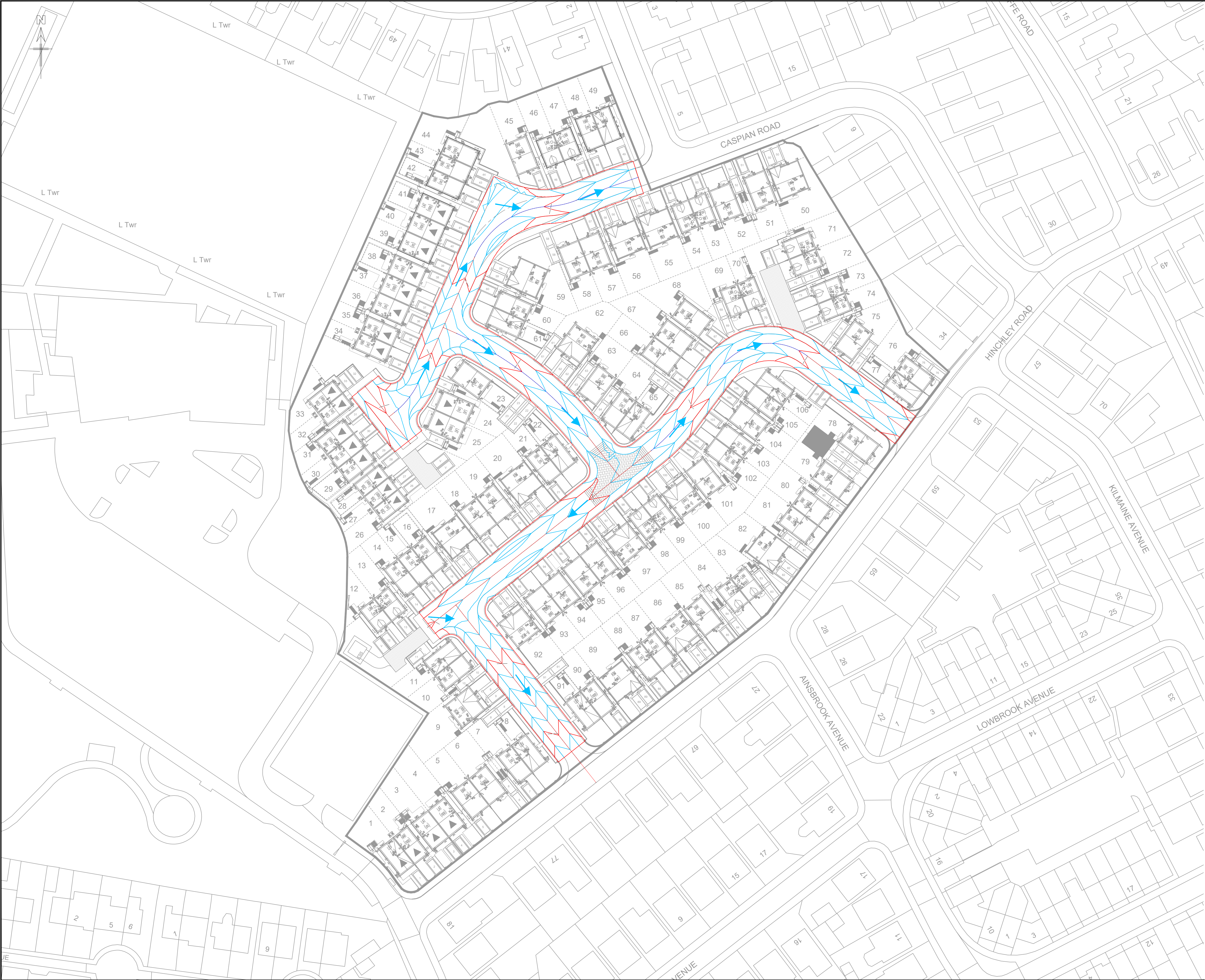
Drawing Title

S104 GENERAL ARRANGEMENT

Drawing Status			
PRELIMINARY			
Name	Date	Status Code	
Drawn	L.BOWLES	20.05.25	S0
Designed	L.BOWLES	20.05.25	Scale
Eng Chk	A.HALL	20.05.25	Revision
Approved	M.DAVIES	20.05.25	P02

Drawing No.

110315 - PEF - S104-HDG-DR-D - 00001



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KEY

➡ OVERLAND FLOW ROUTE

P01	FIRST ISSUE	LB	AH	AH	01.08.25
REV	DESCRIPTION	DRN	CHK	APP	DATE

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Project

HINCHLEY ROAD, BLACKLEY

Drawing Title

**S104
OVERLAND FLOW ROUTE**

Drawing Status				
PRELIMINARY				
Drawn	Name	Date	Status Code	S4
Designed	L.BOWLES	01.08.25	Scale	
Eng Chk	A.HALL	01.08.25	Revision	
Approved	A.HALL	01.08.25	P01	

Drawing No.

110315 - PEF - S104-HDG-DR - D - 00003

Appendix G – Greenfield runoff calculations

Edge Consulting UK		Page 1
Barton Arcade Manchester M3 2BH		
Date 18/03/2025 05:51 File	Designed by phill Checked by	
XP Solutions		Source Control 2020.1.3
<u>ICP SUDS Mean Annual Flood</u> Input Return Period (years) 30 Soil 0.450 Area (ha) 2.655 Urban 0.000 SAAR (mm) 888 Region Number Region 10 Results l/s QBAR Rural 15.4 QBAR Urban 15.4 Q30 years 26.1 Q1 year 13.4 Q30 years 26.1 Q100 years 32.0		
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Appendix H – Microdrainage calculations



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KEY

	DS PIPE	AREA (ha)
	S1.000	0.150
	S1.002	0.077
	S1.003	0.096
	S1.004	0.017
	S1.005	0.094
	S1.007	0.054
	S1.008	0.089
	S1.009	0.139
	S1.010	0.256
	S2.000	0.062
	S2.002	0.035
	S2.003	0.049
	S3.000	0.030
	S4.000	0.037
	S4.001	0.047
	S4.002	0.049
	S4.003	0.051
	S4.004	0.078

P01	FIRST ISSUE	M.L.D.	L.B.	A.H.	29.07.25
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Project
HINCHLEY ROAD, BLACKLEY

Drawing Title
**S104
IMPERMEABLE AREAS**

Drawing Status

PRELIMINARY			
	Name	Date	Status Code
Drawn	M.DUNN	29.07.25	S0
Designed	M.DUNN	29.07.25	Scale
Eng Chk	L.BOWLES	29.07.25	Revision
Approved	A.HALL	29.07.25	P01

Drawing No.
110315 - PEF - S104-GEN-DR-D - 00001

Pell Frischmann		Page 1
5 Manchester Square London W1U 3PD		
Date 28/07/2025 12:50 File 1110315-PEF-XX-ZZ-M2-C-...	Designed by LBowles Checked by	
Innovyze	Network 2020.1	

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)	50	PIMP (%)	100
M5-60 (mm)	20.000	Add Flow / Climate Change (%)	0
Ratio R	0.400	Minimum Backdrop Height (m)	0.200
Maximum Rainfall (mm/hr)	100	Maximum Backdrop Height (m)	1.500
Maximum Time of Concentration (mins)	30	Min Design Depth for Optimisation (m)	1.200
Foul Sewage (l/s/ha)	0.000	Min Vel for Auto Design only (m/s)	1.00
Volumetric Runoff Coeff.	0.750	Min Slope for Optimisation (1:X)	500

Designed with Level Soffits

Time Area Diagram for Storm

Time (mins)	Area (ha)	Time (mins)	Area (ha)
0-4	0.843	4-8	0.533

Total Area Contributing (ha) = 1.376

Total Pipe Volume (m³) = 615.347

Network Design Table for Storm

« - Indicates pipe capacity < flow

PN	Length (m)	Fall (m)	Slope (1:X)	I.Area (ha)	T.E. (mins)	Base Flow (l/s)	k (mm)	HYD SECT	DIA (mm)	Section Type	Auto Design
S1.000	18.120	0.045	402.7	0.150	1.00	0.0	0.600	o	1350	Pipe/Conduit	
S1.001	12.821	0.032	400.7	0.000	0.00	0.0	0.600	o	1350	Pipe/Conduit	
S1.002	13.746	0.034	404.3	0.077	0.00	0.0	0.600	o	1350	Pipe/Conduit	
S1.003	28.674	0.173	165.6	0.096	0.00	0.0	0.600	o	1350	Pipe/Conduit	

Network Results Table

PN	Rain (mm/hr)	T.C. (mins)	US/IL (m)	Σ I.Area (ha)	Σ Base Flow (l/s)	Foul (l/s)	Add Flow (l/s)	Vel (m/s)	Cap (l/s)	Flow (l/s)
S1.000	100.00	1.15	97.400	0.150	0.0	0.0	0.0	2.00	2859.8	40.6
S1.001	100.00	1.26	97.355	0.150	0.0	0.0	0.0	2.00	2867.0	40.6
S1.002	100.00	1.37	97.323	0.227	0.0	0.0	0.0	1.99	2854.0	61.5
S1.003	100.00	1.53	97.289	0.323	0.0	0.0	0.0	3.12	4469.0	87.5

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5 Manchester Square London W1U 3PD		
Date 28/07/2025 12:50 File 1110315-PEF-XX-ZZ-M2-C-...	Designed by LBowles Checked by	
Innovyze	Network 2020.1	

Online Controls for Storm

Hydro-Brake® Optimum Manhole: SW9, DS/PN: S1.010, Volume (m³): 85.1

Unit Reference	MD-SHE-0156-1540-2400-1540
Design Head (m)	2.400
Design Flow (l/s)	15.4
Flush-Flo™	Calculated
Objective	Minimise upstream storage
Application	Surface
Sump Available	Yes
Diameter (mm)	156
Invert Level (m)	96.756
Minimum Outlet Pipe Diameter (mm)	225
Suggested Manhole Diameter (mm)	1800

Control Points	Head (m)	Flow (l/s)
Design Point (Calculated)	2.400	15.4
Flush-Flo™	0.681	15.2
Kick-Flo®	1.399	11.9
Mean Flow over Head Range	-	13.3

The hydrological calculations have been based on the Head/Discharge relationship for the Hydro-Brake® Optimum as specified. Should another type of control device other than a Hydro-Brake Optimum® be utilised then these storage routing calculations will be invalidated

Depth (m)	Flow (l/s)	Depth (m)	Flow (l/s)	Depth (m)	Flow (l/s)	Depth (m)	Flow (l/s)
0.100	5.6	1.200	13.8	3.000	17.1	7.000	25.7
0.200	12.0	1.400	12.0	3.500	18.4	7.500	26.5
0.300	13.6	1.600	12.7	4.000	19.6	8.000	27.4
0.400	14.4	1.800	13.4	4.500	20.8	8.500	28.2
0.500	14.9	2.000	14.1	5.000	21.8	9.000	29.0
0.600	15.1	2.200	14.8	5.500	22.9	9.500	29.8
0.800	15.1	2.400	15.4	6.000	23.8		
1.000	14.7	2.600	16.0	6.500	24.8		

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

Simulation Criteria

Areal Reduction Factor 1.000

Additional Flow - % of Total Flow 0.000

Hot Start (mins) 0

MADD Factor * 10m³/ha Storage 2.000

Hot Start Level (mm) 0

Inlet Coefficient 0.800

Manhole Headloss Coeff (Global) 0.500

Flow per Person per Day (l/per/day) 0.000

Foul Sewage per hectare (l/s) 0.000

Number of Input Hydrographs 0

Number of Storage Structures 0

Number of Online Controls 1

Number of Time/Area Diagrams 0

Number of Offline Controls 0

Number of Real Time Controls 0

Synthetic Rainfall Details

Rainfall Model

FSR

Ratio R 0.355

Region England and Wales Cv (Summer) 0.750

M5-60 (mm)

18.000 Cv (Winter) 0.840

Margin for Flood Risk Warning (mm)

300.0

Analysis Timestep 2.5 Second Increment (Extended)

DTS Status

ON

DVD Status

ON

Inertia Status

ON

Profile(s)

Summer and Winter

Duration(s) (mins)

15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440, 2160, 2880, 4320, 5760, 7200, 8640, 10080

Return Period(s) (years)

2, 30, 100

Climate Change (%)

0, 0, 45

										Water
	US/MH		Return	Climate	First (X)	First (Y)	First (Z)	Overflow		Level
PN	Name	Storm	Period	Change	Surcharge	Flood	Overflow	Act.		(m)
S1.000	SW17a	360 Winter	100	+45%	100/120 Winter					99.136
S1.001	SW17	360 Winter	100	+45%	100/120 Winter					99.135
S1.002	SW1	360 Winter	100	+45%	100/120 Winter					99.134
S1.003	SW2	360 Winter	100	+45%	100/120 Winter					99.133
S2.000	SW10a	360 Winter	100	+45%	100/180 Winter					99.134
S3.000	SW10c	360 Winter	100	+45%	100/120 Winter					99.134
S2.001	SW10b	360 Winter	100	+45%	100/120 Winter					99.133
S2.002	SW10	360 Winter	100	+45%	100/120 Winter					99.132
S2.003	SW11	360 Winter	100	+45%	100/120 Winter					99.132
S1.004	SW3	360 Winter	100	+45%	100/120 Winter					99.135
S1.005	SW4	360 Winter	100	+45%	100/120 Winter					99.161
S1.006	SW5	360 Winter	100	+45%	100/120 Winter					99.179
S4.000	SW12	360 Winter	100	+45%	100/120 Winter					99.167
S4.001	SW13	360 Winter	100	+45%	100/120 Winter					99.166
S4.002	SW14	360 Winter	100	+45%	100/120 Winter					99.167
S4.003	SW15	360 Winter	100	+45%	100/120 Winter					99.170
S4.004	SW16	360 Winter	100	+45%	100/120 Winter					99.179
S1.007	SW6	360 Winter	100	+45%	100/60 Winter					99.189

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

PN	US/MH Name	Surcharged		Flooded		Half Drain Time (mins)	Pipe Flow (l/s)	Status	Level Exceeded
		Depth (m)	Volume (m³)	Flow / Cap.	Overflow (l/s)				
S1.000	SW17a	0.386	0.000	0.01			19.5	SURCHARGED	
S1.001	SW17	0.430	0.000	0.04			43.3	SURCHARGED	
S1.002	SW1	0.461	0.000	0.05			66.6	SURCHARGED	
S1.003	SW2	0.494	0.000	0.03			81.3	SURCHARGED	
S2.000	SW10a	0.321	0.000	0.02			15.0	SURCHARGED	
S3.000	SW10c	0.494	0.000	0.01			15.0	SURCHARGED	
S2.001	SW10b	0.507	0.000	0.04			49.3	SURCHARGED	
S2.002	SW10	0.518	0.000	0.07			62.1	SURCHARGED	
S2.003	SW11	0.540	0.000	0.03			78.1	SURCHARGED	
S1.004	SW3	0.669	0.000	0.13			212.9	SURCHARGED	
S1.005	SW4	0.751	0.000	0.15			249.4	SURCHARGED	
S1.006	SW5	0.823	0.000	0.12			282.0	SURCHARGED	
S4.000	SW12	0.517	0.000	0.01			23.3	SURCHARGED	
S4.001	SW13	0.639	0.000	0.04			47.9	SURCHARGED	
S4.002	SW14	0.667	0.000	0.08			88.9	SURCHARGED	
S4.003	SW15	0.698	0.000	0.08			126.8	SURCHARGED	
S4.004	SW16	0.705	0.000	0.17			212.3	SURCHARGED	
S1.007	SW6	0.935	0.000	0.42			399.4	SURCHARGED	

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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 Coeffiecient 0.800
 Manhole Headloss Coeff (Global) 0.500 Flow per Person per Day (l/per/day) 0.000
 Foul Sewage per hectare (l/s) 0.000

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

Synthetic Rainfall Details

Rainfall Model FSR Ratio R 0.355
 Region England and Wales Cv (Summer) 0.750
 M5-60 (mm) 18.000 Cv (Winter) 0.840

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

Profile(s) Summer and Winter
 Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600,
 720, 960, 1440, 2160, 2880, 4320, 5760,
 7200, 8640, 10080
 Return Period(s) (years) 2, 30, 100
 Climate Change (%) 0, 0, 45

PN	US/MH Name	Storm Rank	Water Level (m)	Surcharged Depth (m)	Flooded Volume (m ³)	Flow / Overflow Cap. (l/s)	Half Drain Time (mins)	Pipe Flow (l/s)	Status
S1.000	SW17a	50	97.547	-1.203	0.000	0.02		29.0	OK
S1.001	SW17	52	97.503	-1.202	0.000	0.02		28.5	OK
S1.002	SW1	52	97.477	-1.196	0.000	0.03		35.8	OK
S1.003	SW2	62	97.402	-1.237	0.000	0.02		46.8	OK
S2.000	SW10a	51	97.515	-1.298	0.000	0.01		6.3	OK
S3.000	SW10c	66	97.364	-1.276	0.000	0.00		5.0	OK
S2.001	SW10b	66	97.361	-1.265	0.000	0.01		9.2	OK
S2.002	SW10	67	97.354	-1.260	0.000	0.01		12.9	OK
S2.003	SW11	69	97.331	-1.261	0.000	0.01		17.6	OK
S1.004	SW3	69	97.331	-1.135	0.000	0.04		62.6	OK
S1.005	SW4	69	97.331	-1.079	0.000	0.04		67.7	OK
S1.006	SW5	69	97.331	-1.025	0.000	0.03		61.5	OK
S4.000	SW12	69	97.330	-1.320	0.000	0.00		8.0	OK
S4.001	SW13	69	97.330	-1.197	0.000	0.01		10.5	OK
S4.002	SW14	69	97.330	-1.170	0.000	0.01		13.6	OK
S4.003	SW15	69	97.330	-1.142	0.000	0.01		18.0	OK
S4.004	SW16	69	97.330	-1.144	0.000	0.02		23.5	OK
S1.007	SW6	69	97.330	-0.923	0.000	0.08		76.7	OK

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

Synthetic Rainfall Details

Rainfall Model FSR Ratio R 0.355
 Region England and Wales Cv (Summer) 0.750
 M5-60 (mm) 18.000 Cv (Winter) 0.840

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

Profile(s) Summer and Winter
 Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600,
 720, 960, 1440, 2160, 2880, 4320, 5760,
 7200, 8640, 10080
 Return Period(s) (years) 2, 30, 100
 Climate Change (%) 0, 0, 45

PN	US/MH Name	Storm Rank	Water		Surcharged		Flooded		Half Drain		Pipe	Status
			Level (m)	Depth (m)	Volume (m ³)	Flow / Cap.	Overflow (l/s)	Time (mins)	Flow (l/s)			
S1.000	SW17a	53	97.528	-1.222	0.000	0.02			23.5	OK		
S1.001	SW17	54	97.490	-1.215	0.000	0.02			21.3	OK		
S1.002	SW1	54	97.465	-1.208	0.000	0.02			29.4	OK		
S1.003	SW2	65	97.388	-1.251	0.000	0.02			40.6	OK		
S2.000	SW10a	54	97.499	-1.314	0.000	0.01			4.9	OK		
S3.000	SW10c	64	97.380	-1.260	0.000	0.00			3.9	OK		
S2.001	SW10b	64	97.380	-1.246	0.000	0.01			7.7	OK		
S2.002	SW10	64	97.380	-1.234	0.000	0.01			11.4	OK		
S2.003	SW11	64	97.380	-1.212	0.000	0.01			16.2	OK		
S1.004	SW3	64	97.380	-1.086	0.000	0.03			54.4	OK		
S1.005	SW4	64	97.381	-1.029	0.000	0.04			60.6	OK		
S1.006	SW5	64	97.380	-0.975	0.000	0.02			51.2	OK		
S4.000	SW12	64	97.379	-1.271	0.000	0.00			6.0	OK		
S4.001	SW13	64	97.379	-1.148	0.000	0.01			8.7	OK		
S4.002	SW14	64	97.379	-1.120	0.000	0.01			12.5	OK		
S4.003	SW15	64	97.380	-1.092	0.000	0.01			16.3	OK		
S4.004	SW16	64	97.380	-1.094	0.000	0.02			20.6	OK		
S1.007	SW6	64	97.380	-0.873	0.000	0.06			59.7	OK		

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

Simulation Criteria

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

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

Synthetic Rainfall Details

Rainfall Model FSR Ratio R 0.355
 Region England and Wales Cv (Summer) 0.750
 M5-60 (mm) 18.000 Cv (Winter) 0.840

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

Profile(s) Summer and Winter
 Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600,
 720, 960, 1440, 2160, 2880, 4320, 5760,
 7200, 8640, 10080
 Return Period(s) (years) 2, 30, 100
 Climate Change (%) 0, 0, 45

PN	US/MH Name	Storm Rank	Water	Surcharged	Flooded	Flow / Overflow Cap.	Half Drain Time (mins)	Pipe	Status
			Level (m)	Depth (m)	Volume (m ³)			Flow (l/s)	
S1.000	SW17a	56	97.494	-1.256	0.000	0.01		16.4	OK
S1.001	SW17	56	97.462	-1.243	0.000	0.01		15.4	OK
S1.002	SW1	59	97.439	-1.234	0.000	0.02		22.3	OK
S1.003	SW2	59	97.407	-1.232	0.000	0.01		30.7	OK
S2.000	SW10a	56	97.488	-1.325	0.000	0.00		3.4	OK
S3.000	SW10c	59	97.406	-1.234	0.000	0.00		3.0	OK
S2.001	SW10b	59	97.406	-1.220	0.000	0.01		5.9	OK
S2.002	SW10	59	97.406	-1.208	0.000	0.01		8.7	OK
S2.003	SW11	59	97.406	-1.186	0.000	0.00		12.5	OK
S1.004	SW3	59	97.406	-1.059	0.000	0.02		40.7	OK
S1.005	SW4	59	97.406	-1.004	0.000	0.03		44.0	OK
S1.006	SW5	59	97.406	-0.950	0.000	0.02		34.7	OK
S4.000	SW12	59	97.405	-1.245	0.000	0.00		4.1	OK
S4.001	SW13	59	97.405	-1.121	0.000	0.01		6.7	OK
S4.002	SW14	59	97.406	-1.094	0.000	0.01		9.5	OK
S4.003	SW15	59	97.406	-1.066	0.000	0.01		11.8	OK
S4.004	SW16	59	97.406	-1.068	0.000	0.01		14.1	OK
S1.007	SW6	59	97.406	-0.847	0.000	0.04		39.8	OK

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

PN	US/MH Name	Storm Rank	Water Level (m)	Surcharged Depth (m)	Flooded Volume (m³)	Flow / Cap. (l/s)	Half Drain Time (mins)	Pipe Flow (l/s)
S1.008	SW7	59	97.405	-0.819	0.000	0.02		34.3
S1.009	SW8	59	97.402	-0.773	0.000	0.02		25.5
S1.010	SW9	59	97.398	0.267	0.000	0.18		15.1
S1.011	SEX UU 1	53	95.892	0.022	0.000	1.15		15.1
S1.012	SEX UU 2	53	94.627	-1.156	0.000	0.01		15.1

PN	US/MH Name	Status
S1.008	SW7	OK
S1.009	SW8	OK
S1.010	SW9	SURCHARGED
S1.011	SEX UU 1	SURCHARGED
S1.012	SEX UU 2	OK

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Summary Wizard of 120 minute 2 year Summer I+0% for Storm

PN	US/MH Name	Storm Rank	Water Level (m)	Surcharged Depth (m)	Flooded Volume (m³)	Flow / Cap. (l/s)	Half Drain Time (mins)	Pipe Flow (l/s)
S1.008	SW7	58	97.407	-0.816	0.000	0.02		24.1
S1.009	SW8	58	97.405	-0.771	0.000	0.01		19.8
S1.010	SW9	58	97.401	0.270	0.000	0.18		15.1
S1.011	SEX UU 1	51	95.892	0.022	0.000	1.15		15.1
S1.012	SEX UU 2	52	94.627	-1.156	0.000	0.01		15.1

PN	US/MH Name	Status
S1.008	SW7	OK
S1.009	SW8	OK
S1.010	SW9	SURCHARGED
S1.011	SEX UU 1	SURCHARGED
S1.012	SEX UU 2	OK

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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 Coeffiecient 0.800										
Manhole Headloss Coeff (Global) 0.500 Flow per Person per Day (l/per/day) 0.000										
Foul Sewage per hectare (l/s) 0.000										
Number of Input Hydrographs 0 Number of Storage Structures 0										
Number of Online Controls 1 Number of Time/Area Diagrams 0										
Number of Offline Controls 0 Number of Real Time Controls 0										
Synthetic Rainfall Details										
Rainfall Model FSR Ratio R 0.355										
Region England and Wales Cv (Summer) 0.750										
M5-60 (mm) 18.000 Cv (Winter) 0.840										
Margin for Flood Risk Warning (mm) 300.0										
Analysis Timestep 2.5 Second Increment (Extended)										
DTS Status ON										
DVD Status ON										
Inertia Status ON										
Profile(s) Summer and Winter										
Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440, 2160, 2880, 4320, 5760, 7200, 8640, 10080										
Return Period(s) (years) 2, 30, 100										
Climate Change (%) 0, 0, 45										
Water Surcharged Flooded Half Drain Pipe										
PN	US/MH Name	Storm Rank	Level (m)	Depth (m)	Volume (m³)	Flow / Cap.	Overflow (l/s)	Time (mins)	Pipe Flow (l/s)	Status
S1.000	SW17a	61	97.446	-1.304	0.000	0.01			8.3	OK
S1.001	SW17	63	97.412	-1.293	0.000	0.01			8.2	OK
S1.002	SW1	63	97.404	-1.269	0.000	0.01			12.2	OK
S1.003	SW2	61	97.403	-1.236	0.000	0.01			16.9	OK
S2.000	SW10a	59	97.475	-1.338	0.000	0.00			1.7	OK
S3.000	SW10c	60	97.402	-1.238	0.000	0.00			1.6	OK
S2.001	SW10b	60	97.402	-1.224	0.000	0.00			3.1	OK
S2.002	SW10	60	97.402	-1.212	0.000	0.01			4.7	OK
S2.003	SW11	60	97.402	-1.190	0.000	0.00			6.8	OK
S1.004	SW3	60	97.402	-1.064	0.000	0.01			21.5	OK
S1.005	SW4	60	97.402	-1.008	0.000	0.01			23.2	OK
S1.006	SW5	60	97.402	-0.954	0.000	0.01			18.7	OK
S4.000	SW12	60	97.401	-1.249	0.000	0.00			2.0	OK
S4.001	SW13	60	97.401	-1.126	0.000	0.00			3.3	OK
S4.002	SW14	60	97.401	-1.099	0.000	0.00			4.8	OK
S4.003	SW15	60	97.401	-1.071	0.000	0.00			6.1	OK
S4.004	SW16	60	97.401	-1.073	0.000	0.01			7.4	OK
S1.007	SW6	60	97.401	-0.852	0.000	0.02			22.3	OK
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Summary Wizard of 180 minute 2 year Summer I+0% for Storm

PN	US/MH Name	Storm Rank	Water Level (m)	Surcharged Depth (m)	Flooded Volume (m³)	Flow / Cap. (l/s)	Half Drain Time (mins)	Pipe Flow (l/s)
S1.008	SW7	60	97.400	-0.823	0.000	0.01		20.5
S1.009	SW8	60	97.398	-0.778	0.000	0.01		17.8
S1.010	SW9	60	97.394	0.263	0.000	0.18		15.1
S1.011 SEX UU 1		57	95.892	0.022	0.000	1.15		15.1
S1.012 SEX UU 2		55	94.627	-1.156	0.000	0.01		15.1

PN	US/MH Name	Status
S1.008	SW7	OK
S1.009	SW8	OK
S1.010	SW9	SURCHARGED
S1.011 SEX UU 1		SURCHARGED
S1.012 SEX UU 2		OK

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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 Coeffiecient 0.800								
Manhole Headloss Coeff (Global) 0.500		Flow per Person per Day (l/per/day) 0.000								
Foul Sewage per hectare (l/s) 0.000										
Number of Input Hydrographs 0 Number of Storage Structures 0										
Number of Online Controls 1 Number of Time/Area Diagrams 0										
Number of Offline Controls 0 Number of Real Time Controls 0										
Synthetic Rainfall Details										
Rainfall Model		FSR Ratio R 0.355								
Region England and Wales Cv (Summer) 0.750										
M5-60 (mm)		18.000 Cv (Winter) 0.840								
Margin for Flood Risk Warning (mm)		300.0								
Analysis Timestep 2.5 Second Increment (Extended)										
DTS Status		ON								
DVD Status		ON								
Inertia Status		ON								
Profile(s)		Summer and Winter								
Duration(s) (mins)		15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440, 2160, 2880, 4320, 5760, 7200, 8640, 10080								
Return Period(s) (years)		2, 30, 100								
Climate Change (%)		0, 0, 45								
Water Surcharged Flooded Half Drain Pipe										
PN	US/MH Name	Storm Rank	Level (m)	Depth (m)	Volume (m³)	Flow / Cap.	Overflow (l/s)	Time (mins)	Flow (l/s)	Status
S1.000	SW17a	63	97.438	-1.312	0.000	0.00			6.8	OK
S1.001	SW17	64	97.401	-1.304	0.000	0.01			6.8	OK
S1.002	SW1	64	97.394	-1.279	0.000	0.01			10.1	OK
S1.003	SW2	63	97.393	-1.246	0.000	0.01			14.1	OK
S2.000	SW10a	61	97.473	-1.340	0.000	0.00			1.4	OK
S3.000	SW10c	61	97.392	-1.248	0.000	0.00			1.3	OK
S2.001	SW10b	61	97.392	-1.234	0.000	0.00			2.6	OK
S2.002	SW10	61	97.392	-1.222	0.000	0.00			4.0	OK
S2.003	SW11	61	97.392	-1.200	0.000	0.00			5.8	OK
S1.004	SW3	61	97.392	-1.073	0.000	0.01			18.1	OK
S1.005	SW4	61	97.393	-1.017	0.000	0.01			19.7	OK
S1.006	SW5	61	97.393	-0.963	0.000	0.01			16.1	OK
S4.000	SW12	61	97.391	-1.259	0.000	0.00			1.7	OK
S4.001	SW13	61	97.391	-1.136	0.000	0.00			2.8	OK
S4.002	SW14	61	97.391	-1.108	0.000	0.00			4.0	OK
S4.003	SW15	61	97.391	-1.080	0.000	0.00			5.2	OK
S4.004	SW16	61	97.392	-1.082	0.000	0.01			6.7	OK
S1.007	SW6	61	97.392	-0.862	0.000	0.02			19.8	OK
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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 Coeffiecient		0.800					
Manhole Headloss Coeff (Global)		0.500	Flow per Person per Day (l/per/day)		0.000					
Foul Sewage per hectare (l/s)		0.000								
Number of Input Hydrographs		0	Number of Storage Structures		0					
Number of Online Controls		1	Number of Time/Area Diagrams		0					
Number of Offline Controls		0	Number of Real Time Controls		0					
Synthetic Rainfall Details										
Rainfall Model		FSR	Ratio R		0.355					
Region England and Wales		Cv (Summer)	0.750							
M5-60 (mm)		18.000	Cv (Winter)		0.840					
Margin for Flood Risk Warning (mm)		300.0								
Analysis Timestep		2.5 Second Increment (Extended)								
DTS Status		ON								
DVD Status		ON								
Inertia Status		ON								
Profile(s)		Summer and Winter								
Duration(s) (mins)		15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440, 2160, 2880, 4320, 5760, 7200, 8640, 10080								
Return Period(s) (years)		2, 30, 100								
Climate Change (%)		0, 0, 45								
Water Surcharged Flooded Half Drain Pipe										
PN	US/MH Name	Storm Rank	Level (m)	Depth (m)	Volume (m³)	Flow / Cap.	Overflow (l/s)	Time (mins)	Pipe Flow (l/s)	Status
S1.000	SW17a	64	97.428	-1.322	0.000	0.00			5.1	OK
S1.001	SW17	66	97.390	-1.315	0.000	0.00			5.1	OK
S1.002	SW1	67	97.372	-1.301	0.000	0.01			7.7	OK
S1.003	SW2	67	97.369	-1.270	0.000	0.00			10.8	OK
S2.000	SW10a	63	97.471	-1.342	0.000	0.00			1.0	OK
S3.000	SW10c	65	97.367	-1.273	0.000	0.00			1.0	OK
S2.001	SW10b	65	97.367	-1.259	0.000	0.00			2.0	OK
S2.002	SW10	65	97.367	-1.247	0.000	0.00			3.1	OK
S2.003	SW11	65	97.367	-1.225	0.000	0.00			4.6	OK
S1.004	SW3	65	97.367	-1.099	0.000	0.01			14.2	OK
S1.005	SW4	65	97.367	-1.043	0.000	0.01			15.7	OK
S1.006	SW5	65	97.367	-0.988	0.000	0.01			13.4	OK
S4.000	SW12	65	97.366	-1.284	0.000	0.00			1.3	OK
S4.001	SW13	65	97.367	-1.160	0.000	0.00			2.2	OK
S4.002	SW14	65	97.367	-1.133	0.000	0.00			3.3	OK
S4.003	SW15	65	97.367	-1.105	0.000	0.00			4.3	OK
S4.004	SW16	65	97.367	-1.107	0.000	0.00			5.7	OK
S1.007	SW6	65	97.367	-0.886	0.000	0.02			17.0	OK
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Summary Wizard of 360 minute 2 year Summer I+0% for Storm

PN	US/MH Name	Storm Rank	Water Level (m)	Surcharged Depth (m)	Flooded Volume (m³)	Flow / Cap. (l/s)	Half Drain Time (mins)	Pipe Flow (l/s)
S1.008	SW7	65	97.366	-0.858	0.000	0.01		16.4
S1.009	SW8	65	97.364	-0.812	0.000	0.01		15.3
S1.010	SW9	65	97.360	0.229	0.000	0.18		15.1
S1.011 SEX UU 1		64	95.891	0.021	0.000	1.15		15.1
S1.012 SEX UU 2		64	94.627	-1.156	0.000	0.01		15.1

PN	US/MH Name	Status
S1.008	SW7	OK
S1.009	SW8	OK
S1.010	SW9	SURCHARGED
S1.011 SEX UU 1		SURCHARGED
S1.012 SEX UU 2		OK

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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 Coeffiecient 0.800						
Manhole Headloss Coeff (Global)		0.500		Flow per Person per Day (l/per/day) 0.000						
Foul Sewage per hectare (l/s)		0.000								
Number of Input Hydrographs		0		Number of Storage Structures 0						
Number of Online Controls		1		Number of Time/Area Diagrams 0						
Number of Offline Controls		0		Number of Real Time Controls 0						
Synthetic Rainfall Details										
Rainfall Model		FSR		Ratio R 0.355						
Region England and Wales		Cv (Summer)		0.750						
M5-60 (mm)		18.000		Cv (Winter) 0.840						
Margin for Flood Risk Warning (mm)				300.0						
Analysis Timestep		2.5 Second Increment (Extended)								
DTS Status				ON						
DVD Status				ON						
Inertia Status				ON						
Profile(s)				Summer and Winter						
Duration(s) (mins)		15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440, 2160, 2880, 4320, 5760, 7200, 8640, 10080								
Return Period(s) (years)		2, 30, 100								
Climate Change (%)		0, 0, 45								
Water Surcharged Flooded Half Drain Pipe										
PN	US/MH Name	Storm Rank	Level (m)	Depth (m)	Volume (m³)	Flow / Cap.	Overflow (l/s)	Time (mins)	Pipe Flow (l/s)	Status
S1.000	SW17a	66	97.422	-1.328	0.000	0.00			4.2	OK
S1.001	SW17	68	97.383	-1.322	0.000	0.00			4.2	OK
S1.002	SW1	68	97.357	-1.316	0.000	0.01			6.3	OK
S1.003	SW2	68	97.341	-1.298	0.000	0.00			8.9	OK
S2.000	SW10a	65	97.470	-1.343	0.000	0.00			0.8	OK
S3.000	SW10c	68	97.339	-1.301	0.000	0.00			0.8	OK
S2.001	SW10b	68	97.339	-1.287	0.000	0.00			1.7	OK
S2.002	SW10	68	97.339	-1.275	0.000	0.00			2.6	OK
S2.003	SW11	67	97.339	-1.253	0.000	0.00			3.9	OK
S1.004	SW3	67	97.339	-1.127	0.000	0.01			12.1	OK
S1.005	SW4	67	97.339	-1.071	0.000	0.01			13.5	OK
S1.006	SW5	67	97.338	-1.017	0.000	0.01			12.1	OK
S4.000	SW12	67	97.338	-1.312	0.000	0.00			1.0	OK
S4.001	SW13	67	97.338	-1.189	0.000	0.00			1.9	OK
S4.002	SW14	67	97.338	-1.162	0.000	0.00			2.9	OK
S4.003	SW15	67	97.338	-1.134	0.000	0.00			3.8	OK
S4.004	SW16	67	97.338	-1.136	0.000	0.00			5.2	OK
S1.007	SW6	67	97.338	-0.915	0.000	0.02			15.5	OK
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Summary Wizard of 480 minute 2 year Summer I+0% for Storm

PN	US/MH Name	Storm Rank	Water Level (m)	Surcharged Depth (m)	Flooded Volume (m³)	Flow / Cap. (l/s)	Half Drain Time (mins)	Pipe Flow (l/s)
S1.008	SW7	67	97.337	-0.886	0.000	0.01		15.2
S1.009	SW8	67	97.335	-0.841	0.000	0.01		14.6
S1.010	SW9	67	97.331	0.200	0.000	0.18		15.1
S1.011	SEX UU 1	67	95.891	0.021	0.000	1.15		15.1
S1.012	SEX UU 2	67	94.627	-1.156	0.000	0.01		15.1

PN	US/MH Name	Status
S1.008	SW7	OK
S1.009	SW8	OK
S1.010	SW9	SURCHARGED
S1.011	SEX UU 1	SURCHARGED
S1.012	SEX UU 2	OK

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Summary Wizard of 600 minute 2 year Summer I+0% for Storm

PN	US/MH Name	Storm Rank	Water Level (m)	Surcharged Depth (m)	Flooded Volume (m³)	Flow / Cap. (l/s)	Half Drain Time (mins)	Pipe Flow (l/s)
S1.008	SW7	71	97.308	-0.916	0.000	0.01		14.4
S1.009	SW8	71	97.306	-0.870	0.000	0.01		14.2
S1.010	SW9	71	97.302	0.171	0.000	0.18		15.0
S1.011	SEX UU 1	71	95.890	0.020	0.000	1.15		15.0
S1.012	SEX UU 2	71	94.627	-1.156	0.000	0.01		15.0

PN	US/MH Name	Status
S1.008	SW7	OK
S1.009	SW8	OK
S1.010	SW9	SURCHARGED
S1.011	SEX UU 1	SURCHARGED
S1.012	SEX UU 2	OK

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Summary Wizard of 1440 minute 2 year Summer I+0% for Storm

PN	US/MH Name	Storm Rank	Water Level (m)	Surcharged Depth (m)	Flooded Volume (m³)	Flow / Cap. (l/s)	Half Drain Time (mins)	Pipe Flow (l/s)
S1.008	SW7	82	97.108	-1.115	0.000	0.01		11.5
S1.009	SW8	82	97.107	-1.068	0.000	0.01		12.3
S1.010	SW9	82	97.106	-0.025	0.000	0.16		14.1
S1.011	SEX UU 1	82	95.875	0.005	0.000	1.07		14.1
S1.012	SEX UU 2	82	94.624	-1.159	0.000	0.01		14.1

PN	US/MH Name	Status
S1.008	SW7	OK
S1.009	SW8	OK
S1.010	SW9	OK
S1.011	SEX UU 1	SURCHARGED
S1.012	SEX UU 2	OK

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Summary Wizard of 2160 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 Coeffiecient 0.800							
Manhole Headloss Coeff (Global)		0.500	Flow per Person per Day (l/per/day) 0.000							
Foul Sewage per hectare (l/s)		0.000								
Number of Input Hydrographs 0 Number of Storage Structures 0										
Number of Online Controls 1 Number of Time/Area Diagrams 0										
Number of Offline Controls 0 Number of Real Time Controls 0										
Synthetic Rainfall Details										
Rainfall Model		FSR	Ratio R 0.355							
Region England and Wales Cv (Summer)		0.750								
M5-60 (mm)		18.000	Cv (Winter) 0.840							
Margin for Flood Risk Warning (mm)		300.0								
Analysis Timestep		2.5 Second Increment (Extended)								
DTS Status		ON								
DVD Status		ON								
Inertia Status		ON								
Profile(s)		Summer and Winter								
Duration(s) (mins)		15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440, 2160, 2880, 4320, 5760, 7200, 8640, 10080								
Return Period(s) (years)		2, 30, 100								
Climate Change (%)		0, 0, 45								
Water Surcharged Flooded Half Drain Pipe										
PN	US/MH Name	Storm Rank	Level (m)	Depth (m)	Volume (m³)	Flow / Overflow Cap.	(l/s)	Time (mins)	Pipe Flow (l/s)	Status
S1.000	SW17a	85	97.407	-1.343	0.000	0.00			1.4	OK
S1.001	SW17	85	97.364	-1.341	0.000	0.00			1.4	OK
S1.002	SW1	85	97.335	-1.338	0.000	0.00			2.2	OK
S1.003	SW2	85	97.296	-1.343	0.000	0.00			3.1	OK
S2.000	SW10a	85	97.466	-1.347	0.000	0.00			0.3	OK
S3.000	SW10c	85	97.292	-1.348	0.000	0.00			0.3	OK
S2.001	SW10b	85	97.281	-1.345	0.000	0.00			0.6	OK
S2.002	SW10	85	97.272	-1.342	0.000	0.00			0.9	OK
S2.003	SW11	85	97.245	-1.347	0.000	0.00			1.4	OK
S1.004	SW3	86	97.137	-1.329	0.000	0.00			4.6	OK
S1.005	SW4	87	97.085	-1.325	0.000	0.00			5.5	OK
S1.006	SW5	87	97.036	-1.319	0.000	0.00			5.5	OK
S4.000	SW12	85	97.301	-1.349	0.000	0.00			0.4	OK
S4.001	SW13	85	97.182	-1.344	0.000	0.00			0.8	OK
S4.002	SW14	85	97.161	-1.339	0.000	0.00			1.3	OK
S4.003	SW15	85	97.146	-1.326	0.000	0.00			1.8	OK
S4.004	SW16	85	97.138	-1.336	0.000	0.00			2.5	OK
S1.007	SW6	87	97.017	-1.236	0.000	0.01			8.5	OK
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Summary Wizard of 2160 minute 2 year Summer I+0% for Storm

PN	US/MH Name	Storm Rank	Water Level (m)	Surcharged Depth (m)	Flooded Volume (m³)	Flow / Cap. (l/s)	Half Drain Time (mins)	Pipe Flow (l/s)	Status
S1.008	SW7	87	96.999	-1.224	0.000	0.01		9.2	OK
S1.009	SW8	87	96.986	-1.189	0.000	0.01		10.4	OK
S1.010	SW9	87	96.980	-0.151	0.000	0.15		12.5	OK
S1.011	SEX UU 1	87	95.836	-0.034	0.000	0.95		12.5	OK
S1.012	SEX UU 2	87	94.620	-1.163	0.000	0.01		12.5	OK

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Summary Wizard of 2880 minute 2 year Summer I+0% for Storm

PN	US/MH Name	Storm Rank	Water Level (m)	Surcharged Depth (m)	Flooded Volume (m³)	Flow / Cap. (l/s)	Half Drain Time (mins)	Pipe Flow (l/s)	Status
S1.008	SW7	91	96.958	-1.265	0.000	0.01		7.7	OK
S1.009	SW8	91	96.938	-1.238	0.000	0.01		8.7	OK
S1.010	SW9	91	96.921	-0.210	0.000	0.13		10.7	OK
S1.011	SEX UU 1	91	95.823	-0.047	0.000	0.82		10.7	OK
S1.012	SEX UU 2	91	94.615	-1.168	0.000	0.01		10.7	OK

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Summary Wizard of 4320 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 Coeffiecient 0.800		
Manhole Headloss Coeff (Global) 0.500 Flow per Person per Day (l/per/day) 0.000		
Foul Sewage per hectare (l/s) 0.000		
Number of Input Hydrographs 0 Number of Storage Structures 0		
Number of Online Controls 1 Number of Time/Area Diagrams 0		
Number of Offline Controls 0 Number of Real Time Controls 0		
Synthetic Rainfall Details		
Rainfall Model FSR Ratio R 0.355		
Region England and Wales Cv (Summer) 0.750		
M5-60 (mm) 18.000 Cv (Winter) 0.840		
Margin for Flood Risk Warning (mm) 300.0		
Analysis Timestep 2.5 Second Increment (Extended)		
DTS Status ON		
DVD Status ON		
Inertia Status ON		
Profile(s) Summer and Winter		
Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440, 2160, 2880, 4320, 5760, 7200, 8640, 10080		
Return Period(s) (years) 2, 30, 100		
Climate Change (%) 0, 0, 45		
Water Surcharged Flooded Half Drain Pipe		
PN	US/MH Storm Level Depth Volume Flow / Overflow Time Flow Status	
	Name Rank (m) (m) (m³) Cap. (l/s) (mins) (l/s)	
S1.000	SW17a 98 97.404 -1.346 0.000 0.00 0.9 OK	
S1.001	SW17 98 97.361 -1.344 0.000 0.00 0.9 OK	
S1.002	SW1 98 97.331 -1.342 0.000 0.00 1.3 OK	
S1.003	SW2 98 97.294 -1.345 0.000 0.00 1.9 OK	
S2.000	SW10a 98 97.465 -1.348 0.000 0.00 0.2 OK	
S3.000	SW10c 98 97.291 -1.349 0.000 0.00 0.2 OK	
S2.001	SW10b 98 97.279 -1.347 0.000 0.00 0.4 OK	
S2.002	SW10 98 97.269 -1.345 0.000 0.00 0.6 OK	
S2.003	SW11 98 97.244 -1.348 0.000 0.00 0.8 OK	
S1.004	SW3 98 97.128 -1.338 0.000 0.00 2.8 OK	
S1.005	SW4 98 97.074 -1.336 0.000 0.00 3.4 OK	
S1.006	SW5 98 97.016 -1.339 0.000 0.00 3.4 OK	
S4.000	SW12 98 97.301 -1.349 0.000 0.00 0.2 OK	
S4.001	SW13 98 97.180 -1.347 0.000 0.00 0.5 OK	
S4.002	SW14 98 97.156 -1.344 0.000 0.00 0.8 OK	
S4.003	SW15 98 97.139 -1.333 0.000 0.00 1.1 OK	
S4.004	SW16 98 97.133 -1.341 0.000 0.00 1.5 OK	
S1.007	SW6 98 96.959 -1.294 0.000 0.01 5.2 OK	
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Summary Wizard of 5760 minute 2 year Summer I+0% for Storm											
Simulation Criteria											
Areal Reduction Factor			1.000		Additional Flow - % of Total Flow			0.000			
Hot Start (mins)			0		MADD Factor * 10m³/ha Storage			2.000			
Hot Start Level (mm)			0		Inlet Coefficient			0.800			
Manhole Headloss Coeff (Global)			0.500		Flow per Person per Day (l/per/day)			0.000			
Foul Sewage per hectare (l/s)			0.000								
Number of Input Hydrographs					0		Number of Storage Structures			0	
Number of Online Controls					1		Number of Time/Area Diagrams			0	
Number of Offline Controls					0		Number of Real Time Controls			0	
Synthetic Rainfall Details											
Rainfall Model			FSR		Ratio R			0.355			
Region England and Wales			Cv (Summer)		0.750						
M5-60 (mm)			18.000		Cv (Winter)			0.840			
Margin for Flood Risk Warning (mm)					300.0						
Analysis Timestep			2.5 Second Increment (Extended)								
DTS Status					ON						
DVD Status					ON						
Inertia Status					ON						
Profile(s)					Summer and Winter						
Duration(s) (mins)			15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440, 2160, 2880, 4320, 5760, 7200, 8640, 10080								
Return Period(s) (years)			2, 30, 100								
Climate Change (%)			0, 0, 45								
Water Surcharged Flooded Half Drain Pipe											
PN	US/MH Name	Storm Rank	Level (m)	Depth (m)	Volume (m³)	Flow / Overflow Cap.	(l/s)	Time (mins)	Pipe Flow (l/s)	Status	
S1.000	SW17a	103	97.404	-1.346	0.000	0.00			0.7	OK	
S1.001	SW17	103	97.359	-1.346	0.000	0.00			0.7	OK	
S1.002	SW1	103	97.329	-1.344	0.000	0.00			1.1	OK	
S1.003	SW2	103	97.293	-1.346	0.000	0.00			1.5	OK	
S2.000	SW10a	103	97.464	-1.349	0.000	0.00			0.1	OK	
S3.000	SW10c	103	97.291	-1.349	0.000	0.00			0.1	OK	
S2.001	SW10b	103	97.278	-1.348	0.000	0.00			0.3	OK	
S2.002	SW10	103	97.268	-1.346	0.000	0.00			0.5	OK	
S2.003	SW11	103	97.244	-1.348	0.000	0.00			0.7	OK	
S1.004	SW3	103	97.126	-1.340	0.000	0.00			2.3	OK	
S1.005	SW4	103	97.072	-1.338	0.000	0.00			2.7	OK	
S1.006	SW5	103	97.014	-1.342	0.000	0.00			2.7	OK	
S4.000	SW12	103	97.300	-1.350	0.000	0.00			0.2	OK	
S4.001	SW13	103	97.179	-1.347	0.000	0.00			0.4	OK	
S4.002	SW14	103	97.155	-1.345	0.000	0.00			0.6	OK	
S4.003	SW15	103	97.136	-1.335	0.000	0.00			0.9	OK	
S4.004	SW16	103	97.131	-1.343	0.000	0.00			1.2	OK	
S1.007	SW6	103	96.948	-1.306	0.000	0.00			4.2	OK	
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Summary Wizard of 7200 minute 2 year Summer I+0% for Storm

PN	US/MH Name	Storm Rank	Water Level (m)	Surcharged Depth (m)	Flooded Volume (m³)	Flow / Cap. (l/s)	Half Drain Time (mins)	Pipe Flow (l/s)	Status
S1.008	SW7	106	96.909	-1.315	0.000	0.00		4.0	OK
S1.009	SW8	106	96.877	-1.298	0.000	0.00		4.5	OK
S1.010	SW9	106	96.856	-0.275	0.000	0.07		5.6	OK
S1.011	SEX UU 1	106	95.788	-0.082	0.000	0.43		5.6	OK
S1.012	SEX UU 2	106	94.601	-1.182	0.000	0.00		5.6	OK

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Summary Wizard of 8640 minute 2 year Summer I+0% for Storm

Simulation Criteria

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

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

Synthetic Rainfall Details

Rainfall Model FSR Ratio R 0.355
 Region England and Wales Cv (Summer) 0.750
 M5-60 (mm) 18.000 Cv (Winter) 0.840

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

Profile(s) Summer and Winter
 Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600,
 720, 960, 1440, 2160, 2880, 4320, 5760,
 7200, 8640, 10080
 Return Period(s) (years) 2, 30, 100
 Climate Change (%) 0, 0, 45

PN	US/MH Name	Storm Rank	Water			Flooded		Half Drain		Pipe Flow (l/s)	Status
			Level (m)	Depth (m)	Volume (m ³)	Flow / Cap.	Overflow (l/s)	Time (mins)			
S1.000	SW17a	109	97.403	-1.347	0.000	0.00			0.5	OK	
S1.001	SW17	109	97.358	-1.347	0.000	0.00			0.5	OK	
S1.002	SW1	109	97.328	-1.345	0.000	0.00			0.8	OK	
S1.003	SW2	109	97.292	-1.347	0.000	0.00			1.2	OK	
S2.000	SW10a	109	97.464	-1.349	0.000	0.00			0.1	OK	
S3.000	SW10c	109	97.291	-1.349	0.000	0.00			0.1	OK	
S2.001	SW10b	109	97.278	-1.348	0.000	0.00			0.2	OK	
S2.002	SW10	109	97.267	-1.347	0.000	0.00			0.3	OK	
S2.003	SW11	109	97.243	-1.349	0.000	0.00			0.5	OK	
S1.004	SW3	109	97.123	-1.342	0.000	0.00			1.7	OK	
S1.005	SW4	109	97.069	-1.341	0.000	0.00			2.1	OK	
S1.006	SW5	109	97.011	-1.344	0.000	0.00			2.1	OK	
S4.000	SW12	109	97.300	-1.350	0.000	0.00			0.1	OK	
S4.001	SW13	109	97.179	-1.348	0.000	0.00			0.3	OK	
S4.002	SW14	109	97.153	-1.346	0.000	0.00			0.5	OK	
S4.003	SW15	109	97.134	-1.338	0.000	0.00			0.7	OK	
S4.004	SW16	109	97.130	-1.344	0.000	0.00			0.9	OK	
S1.007	SW6	109	96.936	-1.317	0.000	0.00			3.2	OK	

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Summary Wizard of 10080 minute 2 year Summer I+0% for Storm

Simulation Criteria

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

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

Synthetic Rainfall Details

Rainfall Model FSR Ratio R 0.355
 Region England and Wales Cv (Summer) 0.750
 M5-60 (mm) 18.000 Cv (Winter) 0.840

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

Profile(s) Summer and Winter
 Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600,
 720, 960, 1440, 2160, 2880, 4320, 5760,
 7200, 8640, 10080
 Return Period(s) (years) 2, 30, 100
 Climate Change (%) 0, 0, 45

PN	US/MH Name	Storm Rank	Water	Surcharged	Flooded	Flow / Overflow Cap.	Half Drain Time (mins)	Pipe	Status
			Level (m)	Depth (m)	Volume (m ³)			Flow (l/s)	
S1.000	SW17a	111	97.402	-1.348	0.000	0.00	0.5	OK	
S1.001	SW17	111	97.358	-1.347	0.000	0.00	0.5	OK	
S1.002	SW1	111	97.327	-1.346	0.000	0.00	0.7	OK	
S1.003	SW2	111	97.291	-1.348	0.000	0.00	1.0	OK	
S2.000	SW10a	111	97.464	-1.349	0.000	0.00	0.1	OK	
S3.000	SW10c	111	97.291	-1.349	0.000	0.00	0.1	OK	
S2.001	SW10b	111	97.277	-1.349	0.000	0.00	0.2	OK	
S2.002	SW10	111	97.267	-1.347	0.000	0.00	0.3	OK	
S2.003	SW11	111	97.243	-1.349	0.000	0.00	0.5	OK	
S1.004	SW3	111	97.123	-1.343	0.000	0.00	1.5	OK	
S1.005	SW4	111	97.068	-1.342	0.000	0.00	1.8	OK	
S1.006	SW5	111	97.011	-1.345	0.000	0.00	1.8	OK	
S4.000	SW12	111	97.300	-1.350	0.000	0.00	0.1	OK	
S4.001	SW13	111	97.178	-1.348	0.000	0.00	0.3	OK	
S4.002	SW14	111	97.153	-1.347	0.000	0.00	0.4	OK	
S4.003	SW15	111	97.133	-1.339	0.000	0.00	0.6	OK	
S4.004	SW16	111	97.129	-1.345	0.000	0.00	0.8	OK	
S1.007	SW6	111	96.933	-1.321	0.000	0.00	2.9	OK	

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Summary Wizard of 15 minute 30 year Summer I+0% for Storm										
Simulation Criteria										
Areal Reduction Factor			1.000		Additional Flow - % of Total Flow			0.000		
Hot Start (mins)			0		MADD Factor * 10m³/ha Storage			2.000		
Hot Start Level (mm)			0		Inlet Coefficient			0.800		
Manhole Headloss Coeff (Global)			0.500		Flow per Person per Day (l/per/day)			0.000		
Foul Sewage per hectare (l/s)			0.000							
Number of Input Hydrographs			0		Number of Storage Structures			0		
Number of Online Controls			1		Number of Time/Area Diagrams			0		
Number of Offline Controls			0		Number of Real Time Controls			0		
Synthetic Rainfall Details										
Rainfall Model			FSR		Ratio R			0.355		
Region England and Wales Cv (Summer)			0.750							
M5-60 (mm)			18.000		Cv (Winter)			0.840		
Margin for Flood Risk Warning (mm)								300.0		
Analysis Timestep			2.5 Second Increment (Extended)							
DTS Status								ON		
DVD Status								ON		
Inertia Status								ON		
Profile(s)								Summer and Winter		
Duration(s) (mins)			15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440, 2160, 2880, 4320, 5760, 7200, 8640, 10080							
Return Period(s) (years)			2, 30, 100							
Climate Change (%)			0, 0, 45							
Water Surcharged Flooded Half Drain Pipe										
PN	US/MH Name	Storm Rank	Level (m)	Depth (m)	Volume (m³)	Flow / Overflow Cap.		Time (mins)	Pipe Flow (l/s)	Status
S1.000	SW17a	45	97.608	-1.142	0.000	0.04		60.0		OK
S1.001	SW17	47	97.569	-1.136	0.000	0.05		56.5		OK
S1.002	SW1	50	97.544	-1.129	0.000	0.06		77.9		OK
S1.003	SW2	50	97.518	-1.121	0.000	0.04		106.1		OK
S2.000	SW10a	47	97.559	-1.254	0.000	0.01		11.9		OK
S3.000	SW10c	50	97.518	-1.122	0.000	0.01		8.9		OK
S2.001	SW10b	50	97.518	-1.108	0.000	0.02		17.9		OK
S2.002	SW10	50	97.518	-1.096	0.000	0.03		25.5		OK
S2.003	SW11	50	97.518	-1.074	0.000	0.01		37.3		OK
S1.004	SW3	50	97.518	-0.948	0.000	0.07		125.0		OK
S1.005	SW4	50	97.518	-0.892	0.000	0.08		126.9		OK
S1.006	SW5	50	97.517	-0.838	0.000	0.04		101.8		OK
S4.000	SW12	50	97.516	-1.134	0.000	0.01		14.0		OK
S4.001	SW13	50	97.516	-1.010	0.000	0.02		22.3		OK
S4.002	SW14	50	97.517	-0.983	0.000	0.03		32.5		OK
S4.003	SW15	50	97.517	-0.955	0.000	0.03		42.1		OK
S4.004	SW16	50	97.517	-0.957	0.000	0.04		47.7		OK
S1.007	SW6	50	97.517	-0.737	0.000	0.11		104.9		OK
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Summary Wizard of 15 minute 30 year Summer I+0% for Storm

PN	US/MH Name	Storm Rank	Water Level (m)	Surcharged Depth (m)	Flooded Volume (m³)	Flow / Cap. (l/s)	Half Drain Time (mins)	Pipe Flow (l/s)
S1.008	SW7	50	97.515	-0.708	0.000	0.06		86.2
S1.009	SW8	50	97.512	-0.664	0.000	0.03		48.8
S1.010	SW9	50	97.507	0.376	0.000	0.18		15.1
S1.011 SEX UU 1		41	95.892	0.022	0.000	1.16		15.1
S1.012 SEX UU 2		41	94.627	-1.156	0.000	0.01		15.1

PN	US/MH Name	Status
S1.008	SW7	OK
S1.009	SW8	OK
S1.010	SW9	SURCHARGED
S1.011 SEX UU 1		SURCHARGED
S1.012 SEX UU 2		OK

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Summary Wizard of 30 minute 30 year Summer I+0% for Storm			
Simulation Criteria			
Areal Reduction Factor 1.000 Additional Flow - % of Total Flow 0.000			
Hot Start (mins) 0 MADD Factor * 10m³/ha Storage 2.000			
Hot Start Level (mm) 0 Inlet Coeffiecient 0.800			
Manhole Headloss Coeff (Global) 0.500 Flow per Person per Day (l/per/day) 0.000			
Foul Sewage per hectare (l/s) 0.000			
Number of Input Hydrographs 0 Number of Storage Structures 0			
Number of Online Controls 1 Number of Time/Area Diagrams 0			
Number of Offline Controls 0 Number of Real Time Controls 0			
Synthetic Rainfall Details			
Rainfall Model FSR Ratio R 0.355			
Region England and Wales Cv (Summer) 0.750			
M5-60 (mm) 18.000 Cv (Winter) 0.840			
Margin for Flood Risk Warning (mm) 300.0			
Analysis Timestep 2.5 Second Increment (Extended)			
DTS Status ON			
DVD Status ON			
Inertia Status ON			
Profile(s) Summer and Winter			
Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440, 2160, 2880, 4320, 5760, 7200, 8640, 10080			
Return Period(s) (years) 2, 30, 100			
Climate Change (%) 0, 0, 45			

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

PN	US/MH Name	Storm Rank	Water Level (m)	Surcharged Depth (m)	Flooded Volume (m³)	Flow / Cap. (l/s)	Half Drain Time (mins)	Pipe Flow (l/s)
S1.008	SW7	45	97.602	-0.622	0.000	0.03		42.4
S1.009	SW8	45	97.599	-0.577	0.000	0.02		26.3
S1.010	SW9	45	97.594	0.463	0.000	0.18		15.1
S1.011 SEX UU 1		52	95.892	0.022	0.000	1.15		15.1
S1.012 SEX UU 2		54	94.627	-1.156	0.000	0.01		15.1

PN	US/MH Name	Status
S1.008	SW7	OK
S1.009	SW8	OK
S1.010	SW9	SURCHARGED
S1.011 SEX UU 1		SURCHARGED
S1.012 SEX UU 2		OK

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Summary Wizard of 60 minute 30 year Summer I+0% for Storm										
Simulation Criteria										
Areal Reduction Factor		1.000		Additional Flow - % of Total Flow	0.000					
Hot Start (mins)		0		MADD Factor * 10m³/ha Storage	2.000					
Hot Start Level (mm)		0		Inlet Coefficient	0.800					
Manhole Headloss Coeff (Global)		0.500		Flow per Person per Day (l/per/day)	0.000					
Foul Sewage per hectare (l/s)		0.000								
Number of Input Hydrographs		0		Number of Storage Structures	0					
Number of Online Controls		1		Number of Time/Area Diagrams	0					
Number of Offline Controls		0		Number of Real Time Controls	0					
Synthetic Rainfall Details										
Rainfall Model		FSR		Ratio R	0.355					
Region England and Wales		Cv (Summer)		0.750						
M5-60 (mm)		18.000		Cv (Winter)	0.840					
Margin for Flood Risk Warning (mm)		300.0								
Analysis Timestep		2.5 Second Increment (Extended)								
DTS Status		ON								
DVD Status		ON								
Inertia Status		ON								
Profile(s)		Summer and Winter								
Duration(s) (mins)		15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440, 2160, 2880, 4320, 5760, 7200, 8640, 10080								
Return Period(s) (years)		2, 30, 100								
Climate Change (%)		0, 0, 45								
Water Surcharged Flooded Half Drain Pipe										
PN	US/MH Name	Storm Rank	Level (m)	Depth (m)	Volume (m³)	Flow / Cap.	Overflow (l/s)	Time (mins)	Pipe Flow (l/s)	Status
S1.000	SW17a	37	97.673	-1.077	0.000	0.02			32.3	OK
S1.001	SW17	37	97.673	-1.032	0.000	0.03			31.0	OK
S1.002	SW1	37	97.674	-0.999	0.000	0.04			44.2	OK
S1.003	SW2	37	97.674	-0.965	0.000	0.02			60.1	OK
S2.000	SW10a	37	97.673	-1.140	0.000	0.01			6.4	OK
S3.000	SW10c	37	97.673	-0.967	0.000	0.00			4.0	OK
S2.001	SW10b	37	97.673	-0.953	0.000	0.01			6.8	OK
S2.002	SW10	37	97.674	-0.940	0.000	0.01			9.9	OK
S2.003	SW11	37	97.674	-0.918	0.000	0.01			13.8	OK
S1.004	SW3	37	97.674	-0.792	0.000	0.03			51.8	OK
S1.005	SW4	37	97.674	-0.736	0.000	0.03			53.5	OK
S1.006	SW5	37	97.673	-0.683	0.000	0.02			35.8	OK
S4.000	SW12	37	97.672	-0.978	0.000	0.00			5.5	OK
S4.001	SW13	37	97.672	-0.855	0.000	0.01			7.1	OK
S4.002	SW14	37	97.672	-0.828	0.000	0.01			10.1	OK
S4.003	SW15	38	97.672	-0.799	0.000	0.01			12.8	OK
S4.004	SW16	37	97.673	-0.801	0.000	0.01			12.1	OK
S1.007	SW6	37	97.673	-0.581	0.000	0.03			29.6	OK
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Summary Wizard of 60 minute 30 year Summer I+0% for Storm

PN	US/MH Name	Storm Rank	Water Level (m)	Surcharged Depth (m)	Flooded Volume (m³)	Flow / Cap. (l/s)	Half Drain Time (mins)	Pipe Flow (l/s)
S1.008	SW7	37	97.672	-0.552	0.000	0.02		25.5
S1.009	SW8	37	97.668	-0.507	0.000	0.01		19.6
S1.010	SW9	37	97.663	0.532	0.000	0.18		15.1
S1.011 SEX UU 1		47	95.892	0.022	0.000	1.16		15.1
S1.012 SEX UU 2		51	94.627	-1.156	0.000	0.01		15.1

PN	US/MH Name	Status
S1.008	SW7	OK
S1.009	SW8	OK
S1.010	SW9	SURCHARGED
S1.011 SEX UU 1		SURCHARGED
S1.012 SEX UU 2		OK

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Summary Wizard of 120 minute 30 year Summer I+0% for Storm

Simulation Criteria

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

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

Synthetic Rainfall Details

Rainfall Model FSR Ratio R 0.355
 Region England and Wales Cv (Summer) 0.750
 M5-60 (mm) 18.000 Cv (Winter) 0.840

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

Profile(s) Summer and Winter
 Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600,
 720, 960, 1440, 2160, 2880, 4320, 5760,
 7200, 8640, 10080
 Return Period(s) (years) 2, 30, 100
 Climate Change (%) 0, 0, 45

PN	US/MH Name	Storm Rank	Water	Surcharged	Flooded	Flow / Overflow Cap.	Half Drain Time (mins)	Pipe	Status
			Level (m)	Depth (m)	Volume (m ³)			Flow (l/s)	
S1.000	SW17a	33	97.710	-1.040	0.000	0.01		20.3	OK
S1.001	SW17	33	97.710	-0.995	0.000	0.02		19.0	OK
S1.002	SW1	33	97.710	-0.963	0.000	0.02		27.1	OK
S1.003	SW2	33	97.710	-0.929	0.000	0.01		36.4	OK
S2.000	SW10a	33	97.709	-1.104	0.000	0.00		4.2	OK
S3.000	SW10c	33	97.709	-0.931	0.000	0.00		2.0	OK
S2.001	SW10b	33	97.710	-0.916	0.000	0.00		3.8	OK
S2.002	SW10	33	97.710	-0.904	0.000	0.01		5.6	OK
S2.003	SW11	33	97.710	-0.882	0.000	0.00		7.8	OK
S1.004	SW3	33	97.710	-0.756	0.000	0.02		28.6	OK
S1.005	SW4	33	97.710	-0.700	0.000	0.02		30.8	OK
S1.006	SW5	33	97.709	-0.646	0.000	0.01		21.1	OK
S4.000	SW12	33	97.709	-0.941	0.000	0.00		2.9	OK
S4.001	SW13	33	97.709	-0.818	0.000	0.00		3.7	OK
S4.002	SW14	33	97.709	-0.791	0.000	0.00		5.1	OK
S4.003	SW15	33	97.709	-0.762	0.000	0.00		6.5	OK
S4.004	SW16	33	97.709	-0.765	0.000	0.01		7.3	OK
S1.007	SW6	33	97.709	-0.544	0.000	0.02		20.7	OK

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Summary Wizard of 120 minute 30 year Summer I+0% for Storm

PN	US/MH Name	Storm Rank	Water Level (m)	Surcharged Depth (m)	Flooded Volume (m³)	Flow / Cap. (l/s)	Half Drain Time (mins)	Pipe Flow (l/s)
S1.008	SW7	33	97.708	-0.516	0.000	0.01		19.2
S1.009	SW8	33	97.704	-0.471	0.000	0.01		16.6
S1.010	SW9	33	97.698	0.567	0.000	0.18		15.1
S1.011 SEX UU 1		46	95.892	0.022	0.000	1.16		15.1
S1.012 SEX UU 2		43	94.627	-1.156	0.000	0.01		15.1

PN	US/MH Name	Status
S1.008	SW7	OK
S1.009	SW8	OK
S1.010	SW9	SURCHARGED
S1.011 SEX UU 1		SURCHARGED
S1.012 SEX UU 2		OK

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Summary Wizard of 180 minute 30 year Summer I+0% for Storm

Simulation Criteria

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

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

Synthetic Rainfall Details

Rainfall Model FSR Ratio R 0.355
 Region England and Wales Cv (Summer) 0.750
 M5-60 (mm) 18.000 Cv (Winter) 0.840

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

Profile(s) Summer and Winter
 Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600,
 720, 960, 1440, 2160, 2880, 4320, 5760,
 7200, 8640, 10080
 Return Period(s) (years) 2, 30, 100
 Climate Change (%) 0, 0, 45

PN	US/MH Name	Storm Rank	Water			Surcharged		Flooded	Half Drain		Pipe	Status
			Level (m)	Depth (m)	Volume (m ³)	Flow / Cap.	Overflow (l/s)		Time (mins)	Flow (l/s)		
S1.000	SW17a	35	97.707	-1.043	0.000	0.01				15.0	OK	
S1.001	SW17	35	97.707	-0.998	0.000	0.01				13.6	OK	
S1.002	SW1	35	97.707	-0.966	0.000	0.02				19.6	OK	
S1.003	SW2	35	97.707	-0.932	0.000	0.01				26.7	OK	
S2.000	SW10a	35	97.706	-1.107	0.000	0.00				3.1	OK	
S3.000	SW10c	35	97.706	-0.934	0.000	0.00				1.6	OK	
S2.001	SW10b	35	97.707	-0.919	0.000	0.00				3.0	OK	
S2.002	SW10	35	97.707	-0.907	0.000	0.01				4.6	OK	
S2.003	SW11	35	97.707	-0.885	0.000	0.00				6.4	OK	
S1.004	SW3	35	97.707	-0.759	0.000	0.01				21.5	OK	
S1.005	SW4	35	97.707	-0.703	0.000	0.01				23.6	OK	
S1.006	SW5	35	97.706	-0.649	0.000	0.01				17.9	OK	
S4.000	SW12	35	97.706	-0.944	0.000	0.00				2.2	OK	
S4.001	SW13	35	97.706	-0.821	0.000	0.00				2.9	OK	
S4.002	SW14	35	97.706	-0.793	0.000	0.00				4.1	OK	
S4.003	SW15	35	97.707	-0.765	0.000	0.00				5.1	OK	
S4.004	SW16	35	97.706	-0.768	0.000	0.00				6.0	OK	
S1.007	SW6	35	97.706	-0.547	0.000	0.02				19.2	OK	

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Summary Wizard of 180 minute 30 year Summer I+0% for Storm

PN	US/MH Name	Storm Rank	Water Level (m)	Surcharged Depth (m)	Flooded Volume (m³)	Flow / Cap. (l/s)	Half Drain Time (mins)	Pipe Flow (l/s)
S1.008	SW7	35	97.705	-0.519	0.000	0.01		18.1
S1.009	SW8	35	97.701	-0.474	0.000	0.01		16.1
S1.010	SW9	35	97.695	0.564	0.000	0.18		15.1
S1.011	SEX UU 1	20	95.892	0.022	0.000	1.16		15.1
S1.012	SEX UU 2	31	94.627	-1.156	0.000	0.01		15.1

PN	US/MH Name	Status
S1.008	SW7	OK
S1.009	SW8	OK
S1.010	SW9	SURCHARGED
S1.011	SEX UU 1	SURCHARGED
S1.012	SEX UU 2	OK

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Summary Wizard of 240 minute 30 year Summer I+0% for Storm

PN	US/MH Name	Storm Rank	Water Level (m)	Surcharged Depth (m)	Flooded Volume (m³)	Flow / Cap. (l/s)	Half Drain Time (mins)	Pipe Flow (l/s)
S1.008	SW7	36	97.695	-0.529	0.000	0.01		17.5
S1.009	SW8	36	97.691	-0.484	0.000	0.01		15.9
S1.010	SW9	36	97.685	0.554	0.000	0.18		15.1
S1.011	SEX UU 1	19	95.892	0.022	0.000	1.16		15.1
S1.012	SEX UU 2	27	94.627	-1.156	0.000	0.01		15.1

PN	US/MH Name	Status
S1.008	SW7	OK
S1.009	SW8	OK
S1.010	SW9	SURCHARGED
S1.011	SEX UU 1	SURCHARGED
S1.012	SEX UU 2	OK

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Summary Wizard of 360 minute 30 year Summer I+0% for Storm										
Simulation Criteria										
Areal Reduction Factor 1.000		Additional Flow - % of Total Flow 0.000								
Hot Start (mins) 0		MADD Factor * 10m³/ha Storage 2.000								
Hot Start Level (mm) 0		Inlet Coeffiecient 0.800								
Manhole Headloss Coeff (Global) 0.500		Flow per Person per Day (l/per/day) 0.000								
Foul Sewage per hectare (l/s) 0.000										
Number of Input Hydrographs 0 Number of Storage Structures 0										
Number of Online Controls 1 Number of Time/Area Diagrams 0										
Number of Offline Controls 0 Number of Real Time Controls 0										
Synthetic Rainfall Details										
Rainfall Model		FSR		Ratio R 0.355						
Region England and Wales		Cv (Summer) 0.750								
M5-60 (mm)		18.000 Cv (Winter) 0.840								
Margin for Flood Risk Warning (mm)		300.0								
Analysis Timestep 2.5 Second Increment (Extended)										
DTS Status		ON								
DVD Status		ON								
Inertia Status		ON								
Profile(s) Summer and Winter										
Duration(s) (mins)		15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440, 2160, 2880, 4320, 5760, 7200, 8640, 10080								
Return Period(s) (years)		2, 30, 100								
Climate Change (%)		0, 0, 45								
Water Surcharged Flooded Half Drain Pipe										
PN	US/MH Name	Storm Rank	Level (m)	Depth (m)	Volume (m³)	Flow / Cap.	Overflow (l/s)	Time (mins)	Flow (l/s)	Status
S1.000	SW17a	38	97.673	-1.077	0.000	0.01			9.0	OK
S1.001	SW17	38	97.673	-1.032	0.000	0.01			8.1	OK
S1.002	SW1	38	97.673	-1.000	0.000	0.01			11.8	OK
S1.003	SW2	38	97.673	-0.966	0.000	0.01			16.3	OK
S2.000	SW10a	38	97.672	-1.141	0.000	0.00			1.9	OK
S3.000	SW10c	38	97.673	-0.967	0.000	0.00			1.1	OK
S2.001	SW10b	38	97.673	-0.953	0.000	0.00			2.2	OK
S2.002	SW10	38	97.673	-0.941	0.000	0.00			3.3	OK
S2.003	SW11	38	97.673	-0.919	0.000	0.00			4.8	OK
S1.004	SW3	38	97.673	-0.793	0.000	0.01			15.6	OK
S1.005	SW4	38	97.673	-0.737	0.000	0.01			16.9	OK
S1.006	SW5	38	97.673	-0.683	0.000	0.01			13.8	OK
S4.000	SW12	38	97.672	-0.978	0.000	0.00			1.5	OK
S4.001	SW13	38	97.672	-0.855	0.000	0.00			2.3	OK
S4.002	SW14	38	97.672	-0.828	0.000	0.00			3.3	OK
S4.003	SW15	37	97.672	-0.799	0.000	0.00			4.4	OK
S4.004	SW16	38	97.672	-0.802	0.000	0.00			5.7	OK
S1.007	SW6	38	97.672	-0.581	0.000	0.02			17.1	OK
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Summary Wizard of 360 minute 30 year Summer I+0% for Storm

PN	US/MH Name	Storm Rank	Water Level (m)	Surcharged Depth (m)	Flooded Volume (m³)	Flow / Cap. (l/s)	Half Drain Time (mins)	Pipe Flow (l/s)
S1.008	SW7	38	97.671	-0.553	0.000	0.01		16.4
S1.009	SW8	38	97.668	-0.508	0.000	0.01		15.3
S1.010	SW9	38	97.661	0.530	0.000	0.18		15.1
S1.011	SEX UU 1	32	95.892	0.022	0.000	1.16		15.1
S1.012	SEX UU 2	18	94.627	-1.156	0.000	0.01		15.1

PN	US/MH Name	Status
S1.008	SW7	OK
S1.009	SW8	OK
S1.010	SW9	SURCHARGED
S1.011	SEX UU 1	SURCHARGED
S1.012	SEX UU 2	OK

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Summary Wizard of 480 minute 30 year Summer I+0% for Storm

PN	US/MH Name	Storm Rank	Water Level (m)	Surcharged Depth (m)	Flooded Volume (m³)	Flow / Cap. (l/s)	Half Drain Time (mins)	Pipe Flow (l/s)
S1.008	SW7	42	97.648	-0.576	0.000	0.01		15.4
S1.009	SW8	42	97.644	-0.532	0.000	0.01		14.8
S1.010	SW9	42	97.638	0.507	0.000	0.18		15.1
S1.011 SEX UU 1		31	95.892	0.022	0.000	1.16		15.1
S1.012 SEX UU 2		16	94.627	-1.156	0.000	0.01		15.1

PN	US/MH Name	Status
S1.008	SW7	OK
S1.009	SW8	OK
S1.010	SW9	SURCHARGED
S1.011 SEX UU 1		SURCHARGED
S1.012 SEX UU 2		OK

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Summary Wizard of 600 minute 30 year Summer I+0% for Storm

PN	US/MH Name	Storm Rank	Water Level (m)	Surcharged Depth (m)	Flooded Volume (m³)	Flow / Cap. (l/s)	Half Drain Time (mins)	Pipe Flow (l/s)
S1.008	SW7	44	97.623	-0.601	0.000	0.01		14.8
S1.009	SW8	44	97.620	-0.556	0.000	0.01		14.4
S1.010	SW9	44	97.614	0.483	0.000	0.18		15.1
S1.011	SEX UU 1	27	95.892	0.022	0.000	1.16		15.1
S1.012	SEX UU 2	12	94.627	-1.156	0.000	0.01		15.1

PN	US/MH Name	Status
S1.008	SW7	OK
S1.009	SW8	OK
S1.010	SW9	SURCHARGED
S1.011	SEX UU 1	SURCHARGED
S1.012	SEX UU 2	OK

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Summary Wizard of 720 minute 30 year Summer I+0% for Storm										
Simulation Criteria										
Areal Reduction Factor 1.000 Additional Flow - % of Total Flow 0.000										
Hot Start (mins) 0 MADD Factor * 10m³/ha Storage 2.000										
Hot Start Level (mm) 0 Inlet Coeffiecient 0.800										
Manhole Headloss Coeff (Global) 0.500 Flow per Person per Day (l/per/day) 0.000										
Foul Sewage per hectare (l/s) 0.000										
Number of Input Hydrographs 0 Number of Storage Structures 0										
Number of Online Controls 1 Number of Time/Area Diagrams 0										
Number of Offline Controls 0 Number of Real Time Controls 0										
Synthetic Rainfall Details										
Rainfall Model FSR Ratio R 0.355										
Region England and Wales Cv (Summer) 0.750										
M5-60 (mm) 18.000 Cv (Winter) 0.840										
Margin for Flood Risk Warning (mm) 300.0										
Analysis Timestep 2.5 Second Increment (Extended)										
DTS Status ON										
DVD Status ON										
Inertia Status ON										
Profile(s) Summer and Winter										
Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440, 2160, 2880, 4320, 5760, 7200, 8640, 10080										
Return Period(s) (years) 2, 30, 100										
Climate Change (%) 0, 0, 45										
Water Surcharged Flooded Half Drain Pipe										
PN	US/MH Name	Storm Rank	Level (m)	Depth (m)	Volume (m³)	Flow / Cap.	Overflow (l/s)	Time (mins)	Pipe Flow (l/s)	Status
S1.000	SW17a	47	97.599	-1.151	0.000	0.00			5.5	OK
S1.001	SW17	46	97.599	-1.106	0.000	0.00			5.2	OK
S1.002	SW1	46	97.599	-1.074	0.000	0.01			7.6	OK
S1.003	SW2	46	97.599	-1.040	0.000	0.00			10.5	OK
S2.000	SW10a	46	97.598	-1.215	0.000	0.00			1.1	OK
S3.000	SW10c	46	97.598	-1.042	0.000	0.00			1.0	OK
S2.001	SW10b	46	97.599	-1.027	0.000	0.00			1.6	OK
S2.002	SW10	46	97.599	-1.016	0.000	0.00			2.4	OK
S2.003	SW11	46	97.599	-0.993	0.000	0.00			3.5	OK
S1.004	SW3	46	97.599	-0.867	0.000	0.01			11.3	OK
S1.005	SW4	46	97.599	-0.811	0.000	0.01			12.6	OK
S1.006	SW5	46	97.599	-0.757	0.000	0.00			11.0	OK
S4.000	SW12	46	97.598	-1.052	0.000	0.00			1.1	OK
S4.001	SW13	46	97.598	-0.928	0.000	0.00			2.0	OK
S4.002	SW14	46	97.599	-0.901	0.000	0.00			2.9	OK
S4.003	SW15	46	97.599	-0.873	0.000	0.00			3.5	OK
S4.004	SW16	46	97.598	-0.876	0.000	0.00			4.7	OK
S1.007	SW6	46	97.598	-0.655	0.000	0.01			14.3	OK
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Summary Wizard of 720 minute 30 year Summer I+0% for Storm

PN	US/MH Name	Storm Rank	Water Level (m)	Surcharged Depth (m)	Flooded Volume (m³)	Flow / Cap. (l/s)	Half Drain Time (mins)	Pipe Flow (l/s)
S1.008	SW7	46	97.597	-0.627	0.000	0.01		14.2
S1.009	SW8	46	97.594	-0.582	0.000	0.01		14.1
S1.010	SW9	46	97.588	0.457	0.000	0.18		15.1
S1.011 SEX UU 1		21	95.892	0.022	0.000	1.16		15.1
S1.012 SEX UU 2		15	94.627	-1.156	0.000	0.01		15.1

PN	US/MH Name	Status
S1.008	SW7	OK
S1.009	SW8	OK
S1.010	SW9	SURCHARGED
S1.011 SEX UU 1		SURCHARGED
S1.012 SEX UU 2		OK

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Summary Wizard of 960 minute 30 year Summer I+0% for Storm

PN	US/MH Name	Storm Rank	Water Level (m)	Surcharged Depth (m)	Flooded Volume (m³)	Flow / Cap. (l/s)	Half Drain Time (mins)	Pipe Flow (l/s)
S1.008	SW7	49	97.545	-0.679	0.000	0.01		13.5
S1.009	SW8	49	97.542	-0.633	0.000	0.01		13.7
S1.010	SW9	49	97.537	0.406	0.000	0.18		15.1
S1.011 SEX UU 1		11	95.892	0.022	0.000	1.16		15.1
S1.012 SEX UU 2		8	94.627	-1.156	0.000	0.01		15.1

PN	US/MH Name	Status
S1.008	SW7	OK
S1.009	SW8	OK
S1.010	SW9	SURCHARGED
S1.011 SEX UU 1		SURCHARGED
S1.012 SEX UU 2		OK

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Summary Wizard of 1440 minute 30 year Summer I+0% for Storm

PN	US/MH Name	Storm Rank	Water Level (m)	Surcharged Depth (m)	Flooded Volume (m³)	Flow / Cap. (l/s)	Half Drain Time (mins)	Pipe Flow (l/s)
S1.008	SW7	54	97.444	-0.779	0.000	0.01		12.7
S1.009	SW8	54	97.442	-0.734	0.000	0.01		13.2
S1.010	SW9	54	97.438	0.307	0.000	0.18		15.1
S1.011 SEX UU 1		6	95.892	0.022	0.000	1.16		15.1
S1.012 SEX UU 2		5	94.627	-1.156	0.000	0.01		15.1

PN	US/MH Name	Status
S1.008	SW7	OK
S1.009	SW8	OK
S1.010	SW9	SURCHARGED
S1.011 SEX UU 1		SURCHARGED
S1.012 SEX UU 2		OK

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Innovyze		Network 2020.1

Summary Wizard of 2160 minute 30 year Summer I+0% for Storm

PN	US/MH Name	Storm Rank	Water Level (m)	Surcharged Depth (m)	Flooded Volume (m³)	Flow / Cap. (l/s)	Half Drain Time (mins)	Pipe Flow (l/s)
S1.008	SW7	72	97.308	-0.916	0.000	0.01		12.1
S1.009	SW8	72	97.306	-0.870	0.000	0.01		12.8
S1.010	SW9	72	97.302	0.171	0.000	0.18		15.0
S1.011	SEX UU 1	72	95.890	0.020	0.000	1.15		15.0
S1.012	SEX UU 2	72	94.627	-1.156	0.000	0.01		15.0

PN	US/MH Name	Status
S1.008	SW7	OK
S1.009	SW8	OK
S1.010	SW9	SURCHARGED
S1.011	SEX UU 1	SURCHARGED
S1.012	SEX UU 2	OK

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Summary Wizard of 2880 minute 30 year Summer I+0% for Storm

PN	US/MH Name	Storm Rank	Water Level (m)	Surcharged Depth (m)	Flooded Volume (m³)	Flow / Cap. (l/s)	Half Drain Time (mins)	Pipe Flow (l/s)
S1.008	SW7	78	97.185	-1.039	0.000	0.01		11.4
S1.009	SW8	78	97.184	-0.992	0.000	0.01		12.3
S1.010	SW9	78	97.181	0.050	0.000	0.17		14.6
S1.011 SEX UU 1		78	95.883	0.013	0.000	1.11		14.6
S1.012 SEX UU 2		78	94.625	-1.158	0.000	0.01		14.6

PN	US/MH Name	Status
S1.008	SW7	OK
S1.009	SW8	OK
S1.010	SW9	SURCHARGED
S1.011 SEX UU 1		SURCHARGED
S1.012 SEX UU 2		OK

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Innovyze	Network 2020.1	

Summary Wizard of 5760 minute 30 year Summer I+0% for Storm

PN	US/MH Name	Storm Rank	Water Level (m)	Surcharged Depth (m)	Flooded Volume (m³)	Flow / Cap. (l/s)	Half Drain Time (mins)	Pipe Flow (l/s)	Status
S1.008	SW7	92	96.956	-1.268	0.000	0.01		7.5	OK
S1.009	SW8	92	96.935	-1.240	0.000	0.01		8.6	OK
S1.010	SW9	92	96.918	-0.213	0.000	0.12		10.5	OK
S1.011	SEX UU 1	92	95.822	-0.048	0.000	0.80		10.5	OK
S1.012	SEX UU 2	92	94.615	-1.168	0.000	0.01		10.5	OK

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Innovyze		Network 2020.1								
Summary Wizard of 7200 minute 30 year Summer I+0% for Storm										
Simulation Criteria										
Areal Reduction Factor 1.000		Additional Flow - % of Total Flow 0.000								
Hot Start (mins) 0		MADD Factor * 10m³/ha Storage 2.000								
Hot Start Level (mm) 0		Inlet Coeffiecient 0.800								
Manhole Headloss Coeff (Global) 0.500		Flow per Person per Day (l/per/day) 0.000								
Foul Sewage per hectare (l/s) 0.000										
Number of Input Hydrographs 0		Number of Storage Structures 0								
Number of Online Controls 1		Number of Time/Area Diagrams 0								
Number of Offline Controls 0		Number of Real Time Controls 0								
Synthetic Rainfall Details										
Rainfall Model		FSR Ratio R 0.355								
Region England and Wales Cv (Summer) 0.750										
M5-60 (mm)		18.000 Cv (Winter) 0.840								
Margin for Flood Risk Warning (mm)		300.0								
Analysis Timestep 2.5 Second Increment (Extended)										
DTS Status		ON								
DVD Status		ON								
Inertia Status		ON								
Profile(s)		Summer and Winter								
Duration(s) (mins)		15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440, 2160, 2880, 4320, 5760, 7200, 8640, 10080								
Return Period(s) (years)		2, 30, 100								
Climate Change (%)		0, 0, 45								
Water Surcharged Flooded Half Drain Pipe										
PN	US/MH Name	Storm Rank	Level (m)	Depth (m)	Volume (m³)	Flow / Cap.	Overflow (l/s)	Time (mins)	Pipe Flow (l/s)	Status
S1.000	SW17a	96	97.405	-1.345	0.000	0.00			1.0	OK
S1.001	SW17	96	97.361	-1.344	0.000	0.00			1.0	OK
S1.002	SW1	96	97.331	-1.342	0.000	0.00			1.5	OK
S1.003	SW2	96	97.294	-1.345	0.000	0.00			2.1	OK
S2.000	SW10a	96	97.465	-1.348	0.000	0.00			0.2	OK
S3.000	SW10c	96	97.292	-1.348	0.000	0.00			0.2	OK
S2.001	SW10b	96	97.279	-1.347	0.000	0.00			0.4	OK
S2.002	SW10	96	97.269	-1.345	0.000	0.00			0.6	OK
S2.003	SW11	96	97.244	-1.348	0.000	0.00			0.9	OK
S1.004	SW3	96	97.130	-1.336	0.000	0.00			3.1	OK
S1.005	SW4	96	97.076	-1.334	0.000	0.00			3.7	OK
S1.006	SW5	96	97.018	-1.337	0.000	0.00			3.7	OK
S4.000	SW12	96	97.301	-1.349	0.000	0.00			0.2	OK
S4.001	SW13	96	97.180	-1.346	0.000	0.00			0.5	OK
S4.002	SW14	96	97.157	-1.343	0.000	0.00			0.9	OK
S4.003	SW15	96	97.140	-1.332	0.000	0.00			1.2	OK
S4.004	SW16	96	97.134	-1.340	0.000	0.00			1.7	OK
S1.007	SW6	96	96.966	-1.287	0.000	0.01			5.8	OK
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Summary Wizard of 7200 minute 30 year Summer I+0% for Storm

PN	US/MH Name	Storm Rank	Water Level (m)	Surcharged Depth (m)	Flooded Volume (m³)	Flow / Cap. (l/s)	Overflow (l/s)	Half Drain Time (mins)	Pipe Flow (l/s)	Status
S1.008	SW7	96	96.938	-1.286	0.000	0.00			6.3	OK
S1.009	SW8	96	96.913	-1.262	0.000	0.00			7.2	OK
S1.010	SW9	96	96.894	-0.237	0.000	0.10			8.9	OK
S1.011	SEX UU 1	96	95.811	-0.059	0.000	0.68			8.9	OK
S1.012	SEX UU 2	96	94.610	-1.173	0.000	0.00			8.9	OK

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Summary Wizard of 8640 minute 30 year Summer I+0% for Storm										
Simulation Criteria										
Areal Reduction Factor 1.000 Additional Flow - % of Total Flow 0.000										
Hot Start (mins) 0 MADD Factor * 10m³/ha Storage 2.000										
Hot Start Level (mm) 0 Inlet Coeffiecient 0.800										
Manhole Headloss Coeff (Global) 0.500 Flow per Person per Day (l/per/day) 0.000										
Foul Sewage per hectare (l/s) 0.000										
Number of Input Hydrographs 0 Number of Storage Structures 0										
Number of Online Controls 1 Number of Time/Area Diagrams 0										
Number of Offline Controls 0 Number of Real Time Controls 0										
Synthetic Rainfall Details										
Rainfall Model FSR Ratio R 0.355										
Region England and Wales Cv (Summer) 0.750										
M5-60 (mm) 18.000 Cv (Winter) 0.840										
Margin for Flood Risk Warning (mm) 300.0										
Analysis Timestep 2.5 Second Increment (Extended)										
DTS Status ON										
DVD Status ON										
Inertia Status ON										
Profile(s) Summer and Winter										
Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440, 2160, 2880, 4320, 5760, 7200, 8640, 10080										
Return Period(s) (years) 2, 30, 100										
Climate Change (%) 0, 0, 45										
Water Surcharged Flooded Half Drain Pipe										
PN	US/MH Name	Storm Rank	Level (m)	Depth (m)	Volume (m³)	Flow / Overflow Cap.	(l/s)	Time (mins)	Pipe Flow (l/s)	Status
S1.000	SW17a	100	97.404	-1.346	0.000	0.00			0.8	OK
S1.001	SW17	100	97.360	-1.345	0.000	0.00			0.8	OK
S1.002	SW1	100	97.330	-1.343	0.000	0.00			1.3	OK
S1.003	SW2	100	97.293	-1.346	0.000	0.00			1.8	OK
S2.000	SW10a	100	97.465	-1.348	0.000	0.00			0.2	OK
S3.000	SW10c	100	97.291	-1.349	0.000	0.00			0.2	OK
S2.001	SW10b	100	97.279	-1.347	0.000	0.00			0.3	OK
S2.002	SW10	100	97.269	-1.345	0.000	0.00			0.5	OK
S2.003	SW11	100	97.244	-1.348	0.000	0.00			0.8	OK
S1.004	SW3	100	97.128	-1.338	0.000	0.00			2.7	OK
S1.005	SW4	100	97.074	-1.336	0.000	0.00			3.2	OK
S1.006	SW5	100	97.016	-1.340	0.000	0.00			3.2	OK
S4.000	SW12	100	97.301	-1.349	0.000	0.00			0.2	OK
S4.001	SW13	100	97.180	-1.347	0.000	0.00			0.5	OK
S4.002	SW14	100	97.156	-1.344	0.000	0.00			0.7	OK
S4.003	SW15	100	97.138	-1.333	0.000	0.00			1.0	OK
S4.004	SW16	100	97.133	-1.341	0.000	0.00			1.5	OK
S1.007	SW6	100	96.957	-1.297	0.000	0.01			5.0	OK
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Return Period(s) (years)		2, 30, 100																																																																																																																																																																																																
Climate Change (%)		0, 0, 45																																																																																																																																																																																																
<table><tr><th>PN</th><th>US/MH Name</th><th>Storm Rank</th><th>Water Level (m)</th><th>Surcharged Depth (m)</th><th>Flooded Volume (m³)</th><th>Flow / Overflow Cap. (l/s)</th><th>Half Drain Time (mins)</th><th>Pipe Flow (l/s)</th><th>Status</th></tr><tr><td>S1.000</td><td>SW17a</td><td>102</td><td>97.404</td><td>-1.346</td><td>0.000</td><td>0.00</td><td></td><td>0.7</td><td>OK</td></tr><tr><td>S1.001</td><td>SW17</td><td>102</td><td>97.360</td><td>-1.345</td><td>0.000</td><td>0.00</td><td></td><td>0.7</td><td>OK</td></tr><tr><td>S1.002</td><td>SW1</td><td>102</td><td>97.330</td><td>-1.343</td><td>0.000</td><td>0.00</td><td></td><td>1.1</td><td>OK</td></tr><tr><td>S1.003</td><td>SW2</td><td>102</td><td>97.293</td><td>-1.346</td><td>0.000</td><td>0.00</td><td></td><td>1.6</td><td>OK</td></tr><tr><td>S2.000</td><td>SW10a</td><td>102</td><td>97.464</td><td>-1.349</td><td>0.000</td><td>0.00</td><td></td><td>0.1</td><td>OK</td></tr><tr><td>S3.000</td><td>SW10c</td><td>102</td><td>97.291</td><td>-1.349</td><td>0.000</td><td>0.00</td><td></td><td>0.1</td><td>OK</td></tr><tr><td>S2.001</td><td>SW10b</td><td>102</td><td>97.278</td><td>-1.348</td><td>0.000</td><td>0.00</td><td></td><td>0.3</td><td>OK</td></tr><tr><td>S2.002</td><td>SW10</td><td>102</td><td>97.268</td><td>-1.346</td><td>0.000</td><td>0.00</td><td></td><td>0.5</td><td>OK</td></tr><tr><td>S2.003</td><td>SW11</td><td>102</td><td>97.244</td><td>-1.348</td><td>0.000</td><td>0.00</td><td></td><td>0.7</td><td>OK</td></tr><tr><td>S1.004</td><td>SW3</td><td>102</td><td>97.127</td><td>-1.339</td><td>0.000</td><td>0.00</td><td></td><td>2.4</td><td>OK</td></tr><tr><td>S1.005</td><td>SW4</td><td>102</td><td>97.072</td><td>-1.338</td><td>0.000</td><td>0.00</td><td></td><td>2.9</td><td>OK</td></tr><tr><td>S1.006</td><td>SW5</td><td>102</td><td>97.014</td><td>-1.341</td><td>0.000</td><td>0.00</td><td></td><td>2.9</td><td>OK</td></tr><tr><td>S4.000</td><td>SW12</td><td>102</td><td>97.300</td><td>-1.350</td><td>0.000</td><td>0.00</td><td></td><td>0.2</td><td>OK</td></tr><tr><td>S4.001</td><td>SW13</td><td>102</td><td>97.180</td><td>-1.347</td><td>0.000</td><td>0.00</td><td></td><td>0.4</td><td>OK</td></tr><tr><td>S4.002</td><td>SW14</td><td>102</td><td>97.155</td><td>-1.345</td><td>0.000</td><td>0.00</td><td></td><td>0.7</td><td>OK</td></tr><tr><td>S4.003</td><td>SW15</td><td>102</td><td>97.137</td><td>-1.335</td><td>0.000</td><td>0.00</td><td></td><td>0.9</td><td>OK</td></tr><tr><td>S4.004</td><td>SW16</td><td>102</td><td>97.132</td><td>-1.342</td><td>0.000</td><td>0.00</td><td></td><td>1.3</td><td>OK</td></tr><tr><td>S1.007</td><td>SW6</td><td>102</td><td>96.950</td><td>-1.304</td><td>0.000</td><td>0.00</td><td></td><td>4.4</td><td>OK</td></tr></table>					PN	US/MH Name	Storm Rank	Water Level (m)	Surcharged Depth (m)	Flooded Volume (m³)	Flow / Overflow Cap. (l/s)	Half Drain Time (mins)	Pipe Flow (l/s)	Status	S1.000	SW17a	102	97.404	-1.346	0.000	0.00		0.7	OK	S1.001	SW17	102	97.360	-1.345	0.000	0.00		0.7	OK	S1.002	SW1	102	97.330	-1.343	0.000	0.00		1.1	OK	S1.003	SW2	102	97.293	-1.346	0.000	0.00		1.6	OK	S2.000	SW10a	102	97.464	-1.349	0.000	0.00		0.1	OK	S3.000	SW10c	102	97.291	-1.349	0.000	0.00		0.1	OK	S2.001	SW10b	102	97.278	-1.348	0.000	0.00		0.3	OK	S2.002	SW10	102	97.268	-1.346	0.000	0.00		0.5	OK	S2.003	SW11	102	97.244	-1.348	0.000	0.00		0.7	OK	S1.004	SW3	102	97.127	-1.339	0.000	0.00		2.4	OK	S1.005	SW4	102	97.072	-1.338	0.000	0.00		2.9	OK	S1.006	SW5	102	97.014	-1.341	0.000	0.00		2.9	OK	S4.000	SW12	102	97.300	-1.350	0.000	0.00		0.2	OK	S4.001	SW13	102	97.180	-1.347	0.000	0.00		0.4	OK	S4.002	SW14	102	97.155	-1.345	0.000	0.00		0.7	OK	S4.003	SW15	102	97.137	-1.335	0.000	0.00		0.9	OK	S4.004	SW16	102	97.132	-1.342	0.000	0.00		1.3	OK	S1.007	SW6	102	96.950	-1.304	0.000	0.00		4.4	OK
PN	US/MH Name	Storm Rank	Water Level (m)	Surcharged Depth (m)	Flooded Volume (m³)	Flow / Overflow Cap. (l/s)	Half Drain Time (mins)	Pipe Flow (l/s)	Status																																																																																																																																																																																									
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S1.003	SW2	102	97.293	-1.346	0.000	0.00		1.6	OK																																																																																																																																																																																									
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S3.000	SW10c	102	97.291	-1.349	0.000	0.00		0.1	OK																																																																																																																																																																																									
S2.001	SW10b	102	97.278	-1.348	0.000	0.00		0.3	OK																																																																																																																																																																																									
S2.002	SW10	102	97.268	-1.346	0.000	0.00		0.5	OK																																																																																																																																																																																									
S2.003	SW11	102	97.244	-1.348	0.000	0.00		0.7	OK																																																																																																																																																																																									
S1.004	SW3	102	97.127	-1.339	0.000	0.00		2.4	OK																																																																																																																																																																																									
S1.005	SW4	102	97.072	-1.338	0.000	0.00		2.9	OK																																																																																																																																																																																									
S1.006	SW5	102	97.014	-1.341	0.000	0.00		2.9	OK																																																																																																																																																																																									
S4.000	SW12	102	97.300	-1.350	0.000	0.00		0.2	OK																																																																																																																																																																																									
S4.001	SW13	102	97.180	-1.347	0.000	0.00		0.4	OK																																																																																																																																																																																									
S4.002	SW14	102	97.155	-1.345	0.000	0.00		0.7	OK																																																																																																																																																																																									
S4.003	SW15	102	97.137	-1.335	0.000	0.00		0.9	OK																																																																																																																																																																																									
S4.004	SW16	102	97.132	-1.342	0.000	0.00		1.3	OK																																																																																																																																																																																									
S1.007	SW6	102	96.950	-1.304	0.000	0.00		4.4	OK																																																																																																																																																																																									
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Summary Wizard of 15 minute 100 year Summer I+45% for Storm

PN	US/MH Name	Storm Rank	Water Level (m)	Surcharged Depth (m)	Flooded Volume (m³)	Flow / Cap. (l/s)	Overflow (l/s)	Half Drain Time (mins)	Pipe Flow (l/s)
S1.008	SW7	27	97.789	-0.435	0.000	0.05			73.1
S1.009	SW8	27	97.786	-0.389	0.000	0.03			39.4
S1.010	SW9	26	97.781	0.650	0.000	0.18			15.1
S1.011	SEX UU 1	65	95.891	0.021	0.000	1.15			15.1
S1.012	SEX UU 2	61	94.627	-1.156	0.000	0.01			15.1

PN	US/MH Name	Status
S1.008	SW7	OK
S1.009	SW8	OK
S1.010	SW9	SURCHARGED
S1.011	SEX UU 1	SURCHARGED
S1.012	SEX UU 2	OK

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Summary Wizard of 30 minute 100 year Summer I+45% for Storm										
Simulation Criteria										
Areal Reduction Factor		1.000		Additional Flow - % of Total Flow	0.000					
Hot Start (mins)		0		MADD Factor * 10m³/ha Storage	2.000					
Hot Start Level (mm)		0		Inlet Coefficient	0.800					
Manhole Headloss Coeff (Global)		0.500		Flow per Person per Day (l/per/day)	0.000					
Foul Sewage per hectare (l/s)		0.000								
Number of Input Hydrographs		0		Number of Storage Structures	0					
Number of Online Controls		1		Number of Time/Area Diagrams	0					
Number of Offline Controls		0		Number of Real Time Controls	0					
Synthetic Rainfall Details										
Rainfall Model		FSR		Ratio R	0.355					
Region England and Wales		Cv (Summer)		0.750						
M5-60 (mm)		18.000		Cv (Winter)	0.840					
Margin for Flood Risk Warning (mm)				300.0						
Analysis Timestep		2.5 Second Increment (Extended)								
DTS Status				ON						
DVD Status				ON						
Inertia Status				ON						
Profile(s)				Summer and Winter						
Duration(s) (mins)		15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440, 2160, 2880, 4320, 5760, 7200, 8640, 10080								
Return Period(s) (years)		2, 30, 100								
Climate Change (%)		0, 0, 45								
Water Surcharged Flooded Half Drain Pipe										
PN	US/MH Name	Storm Rank	Level (m)	Depth (m)	Volume (m³)	Flow / Cap.	Overflow (l/s)	Time (mins)	Pipe Flow (l/s)	Status
S1.000	SW17a	22	97.962	-0.788	0.000	0.06			87.9	OK
S1.001	SW17	22	97.962	-0.743	0.000	0.07			79.7	OK
S1.002	SW1	22	97.962	-0.711	0.000	0.09			107.6	OK
S1.003	SW2	22	97.962	-0.677	0.000	0.05			133.3	OK
S2.000	SW10a	22	97.962	-0.851	0.000	0.02			17.3	OK
S3.000	SW10c	22	97.961	-0.679	0.000	0.01			12.4	OK
S2.001	SW10b	22	97.962	-0.664	0.000	0.02			18.8	OK
S2.002	SW10	22	97.962	-0.653	0.000	0.03			24.9	OK
S2.003	SW11	22	97.962	-0.630	0.000	0.01			31.6	OK
S1.004	SW3	22	97.962	-0.504	0.000	0.06			101.8	OK
S1.005	SW4	22	97.962	-0.448	0.000	0.06			101.3	OK
S1.006	SW5	22	97.961	-0.394	0.000	0.02			56.8	OK
S4.000	SW12	22	97.961	-0.689	0.000	0.01			14.8	OK
S4.001	SW13	22	97.961	-0.565	0.000	0.01			13.7	OK
S4.002	SW14	22	97.961	-0.538	0.000	0.02			19.2	OK
S4.003	SW15	22	97.961	-0.510	0.000	0.01			23.2	OK
S4.004	SW16	22	97.961	-0.513	0.000	0.02			20.4	OK
S1.007	SW6	22	97.961	-0.292	0.000	0.05			50.6	OK
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Summary Wizard of 30 minute 100 year Summer I+45% for Storm

PN	US/MH Name	Storm Rank	Water Level (m)	Surcharged Depth (m)	Flooded Volume (m³)	Flow / Cap. (l/s)	Half Drain Time (mins)	Pipe Flow (l/s)
S1.008	SW7	22	97.961	-0.263	0.000	0.03		44.9
S1.009	SW8	22	97.958	-0.217	0.000	0.02		32.8
S1.010	SW9	22	97.952	0.821	0.000	0.18		15.1
S1.011 SEX UU 1		56	95.892	0.022	0.000	1.15		15.1
S1.012 SEX UU 2		59	94.627	-1.156	0.000	0.01		15.1

PN	US/MH Name	Status
S1.008	SW7	OK
S1.009	SW8	OK
S1.010	SW9	SURCHARGED
S1.011 SEX UU 1		SURCHARGED
S1.012 SEX UU 2		OK

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Summary Wizard of 60 minute 100 year Summer I+45% for Storm											
Simulation Criteria											
Areal Reduction Factor			1.000		Additional Flow - % of Total Flow			0.000			
Hot Start (mins)			0		MADD Factor * 10m³/ha Storage			2.000			
Hot Start Level (mm)			0		Inlet Coefficient			0.800			
Manhole Headloss Coeff (Global)			0.500		Flow per Person per Day (l/per/day)			0.000			
Foul Sewage per hectare (l/s)			0.000								
Number of Input Hydrographs					0		Number of Storage Structures			0	
Number of Online Controls					1		Number of Time/Area Diagrams			0	
Number of Offline Controls					0		Number of Real Time Controls			0	
Synthetic Rainfall Details											
Rainfall Model			FSR		Ratio R			0.355			
Region England and Wales			Cv (Summer)		0.750						
M5-60 (mm)			18.000		Cv (Winter)			0.840			
Margin for Flood Risk Warning (mm)					300.0						
Analysis Timestep					2.5 Second Increment (Extended)						
DTS Status					ON						
DVD Status					ON						
Inertia Status					ON						
Profile(s)					Summer and Winter						
Duration(s) (mins)			15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440, 2160, 2880, 4320, 5760, 7200, 8640, 10080								
Return Period(s) (years)			2, 30, 100								
Climate Change (%)			0, 0, 45								
Water Surcharged Flooded Half Drain Pipe											
PN	US/MH Name	Storm Rank	Level (m)	Depth (m)	Volume (m³)	Flow / Overflow Cap.	Time (mins)	Flow (l/s)	Status		
S1.000	SW17a	19	98.145	-0.605	0.000	0.04		57.3	OK		
S1.001	SW17	19	98.145	-0.560	0.000	0.04		42.1	OK		
S1.002	SW1	19	98.145	-0.528	0.000	0.05		56.6	OK		
S1.003	SW2	19	98.145	-0.494	0.000	0.03		75.7	OK		
S2.000	SW10a	19	98.145	-0.668	0.000	0.01		7.8	OK		
S3.000	SW10c	19	98.145	-0.495	0.000	0.01		6.9	OK		
S2.001	SW10b	19	98.145	-0.481	0.000	0.01		6.4	OK		
S2.002	SW10	19	98.145	-0.469	0.000	0.01		9.0	OK		
S2.003	SW11	19	98.145	-0.447	0.000	0.00		12.9	OK		
S1.004	SW3	19	98.146	-0.320	0.000	0.03		48.3	OK		
S1.005	SW4	19	98.145	-0.265	0.000	0.03		51.9	OK		
S1.006	SW5	19	98.145	-0.210	0.000	0.01		28.6	OK		
S4.000	SW12	19	98.145	-0.505	0.000	0.00		9.4	OK		
S4.001	SW13	19	98.145	-0.382	0.000	0.00		4.1	OK		
S4.002	SW14	19	98.145	-0.355	0.000	0.01		6.1	OK		
S4.003	SW15	19	98.145	-0.327	0.000	0.00		8.0	OK		
S4.004	SW16	19	98.145	-0.329	0.000	0.01		10.6	OK		
S1.007	SW6	19	98.145	-0.109	0.000	0.03		31.1	OK		
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Summary Wizard of 60 minute 100 year Summer I+45% for Storm

PN	US/MH Name	Storm Rank	Water Level (m)	Surcharged Depth (m)	Flooded Volume (m³)	Flow / Cap. (l/s)	Half Drain Time (mins)	Pipe Flow (l/s)
S1.008	SW7	19	98.144	-0.079	0.000	0.02		30.6
S1.009	SW8	19	98.141	-0.035	0.000	0.02		25.8
S1.010	SW9	19	98.125	0.994	0.000	0.18		15.1
S1.011 SEX UU 1		48	95.892	0.022	0.000	1.16		15.1
S1.012 SEX UU 2		47	94.627	-1.156	0.000	0.01		15.1

PN	US/MH Name	Status
S1.008	SW7	OK
S1.009	SW8	OK
S1.010	SW9	SURCHARGED
S1.011 SEX UU 1		SURCHARGED
S1.012 SEX UU 2		OK

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Summary Wizard of 120 minute 100 year Summer I+45% for Storm

PN	US/MH Name	Storm Rank	Water Level (m)	Surcharged Depth (m)	Flooded Volume (m³)	Flow / Cap. (l/s)	Half Drain Time (mins)	Pipe Flow (l/s)
S1.008	SW7	13	98.333	0.109	0.000	0.01		20.4
S1.009	SW8	13	98.333	0.157	0.000	0.01		19.4
S1.010	SW9	13	98.333	1.202	0.000	0.18		15.1
S1.011	SEX UU 1	43	95.892	0.022	0.000	1.16		15.1
S1.012	SEX UU 2	42	94.627	-1.156	0.000	0.01		15.1

PN	US/MH Name	Status
S1.008	SW7	SURCHARGED
S1.009	SW8	SURCHARGED
S1.010	SW9	SURCHARGED
S1.011	SEX UU 1	SURCHARGED
S1.012	SEX UU 2	OK

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Summary Wizard of 180 minute 100 year Summer I+45% for Storm

Simulation Criteria

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

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

Synthetic Rainfall Details

Rainfall Model FSR Ratio R 0.355
 Region England and Wales Cv (Summer) 0.750
 M5-60 (mm) 18.000 Cv (Winter) 0.840

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

Profile(s) Summer and Winter
 Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600,
 720, 960, 1440, 2160, 2880, 4320, 5760,
 7200, 8640, 10080
 Return Period(s) (years) 2, 30, 100
 Climate Change (%) 0, 0, 45

PN	US/MH Name	Storm Rank	Water Level (m)	Surcharged Depth (m)	Flooded Volume (m ³)	Flow / Overflow Cap. (l/s)	Half Drain Time (mins)	Pipe Flow (l/s)	Status
S1.000	SW17a	11	98.429	-0.321	0.000	0.02		26.7	OK
S1.001	SW17	11	98.429	-0.276	0.000	0.01		16.6	OK
S1.002	SW1	11	98.429	-0.244	0.000	0.02		23.1	OK
S1.003	SW2	11	98.429	-0.210	0.000	0.01		32.8	OK
S2.000	SW10a	11	98.429	-0.384	0.000	0.00		3.4	OK
S3.000	SW10c	11	98.429	-0.211	0.000	0.00		3.4	OK
S2.001	SW10b	11	98.429	-0.197	0.000	0.00		2.3	OK
S2.002	SW10	11	98.429	-0.185	0.000	0.00		3.5	OK
S2.003	SW11	11	98.429	-0.163	0.000	0.00		5.4	OK
S1.004	SW3	11	98.429	-0.036	0.000	0.01		19.1	OK
S1.005	SW4	11	98.430	0.020	0.000	0.01		21.3	SURCHARGED
S1.006	SW5	11	98.430	0.075	0.000	0.01		13.6	SURCHARGED
S4.000	SW12	11	98.429	-0.221	0.000	0.00		4.7	OK
S4.001	SW13	11	98.429	-0.097	0.000	0.00		3.3	OK
S4.002	SW14	11	98.430	-0.070	0.000	0.00		4.6	OK
S4.003	SW15	11	98.430	-0.042	0.000	0.00		5.1	OK
S4.004	SW16	11	98.430	-0.044	0.000	0.01		8.2	OK
S1.007	SW6	11	98.430	0.177	0.000	0.02		21.5	SURCHARGED

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Summary Wizard of 180 minute 100 year Summer I+45% for Storm

PN	US/MH Name	Storm Rank	Water Level (m)	Surcharged Depth (m)	Flooded Volume (m³)	Flow / Cap. (l/s)	Half Drain Time (mins)	Pipe Flow (l/s)
S1.008	SW7	11	98.430	0.206	0.000	0.01		17.7
S1.009	SW8	11	98.430	0.254	0.000	0.01		15.6
S1.010	SW9	11	98.430	1.299	0.000	0.18		15.1
S1.011	SEX UU 1	39	95.892	0.022	0.000	1.16		15.1
S1.012	SEX UU 2	38	94.627	-1.156	0.000	0.01		15.1

PN	US/MH Name	Status
S1.008	SW7	SURCHARGED
S1.009	SW8	SURCHARGED
S1.010	SW9	SURCHARGED
S1.011	SEX UU 1	SURCHARGED
S1.012	SEX UU 2	OK

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Summary Wizard of 240 minute 100 year Summer I+45% for Storm

Simulation Criteria

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

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

Synthetic Rainfall Details

Rainfall Model FSR Ratio R 0.355
 Region England and Wales Cv (Summer) 0.750
 M5-60 (mm) 18.000 Cv (Winter) 0.840

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

Profile(s) Summer and Winter
 Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600,
 720, 960, 1440, 2160, 2880, 4320, 5760,
 7200, 8640, 10080
 Return Period(s) (years) 2, 30, 100
 Climate Change (%) 0, 0, 45

PN	US/MH Name	Storm Rank	Water Level (m)	Surcharged Depth (m)	Flooded Volume (m ³)	Flow / Overflow Cap. (l/s)	Half Drain Time (mins)	Pipe Flow (l/s)	Status
S1.000	SW17a	9	98.460	-0.290	0.000	0.01		21.6	OK
S1.001	SW17	9	98.460	-0.245	0.000	0.01		13.4	OK
S1.002	SW1	9	98.460	-0.213	0.000	0.02		18.9	OK
S1.003	SW2	9	98.460	-0.179	0.000	0.01		26.9	OK
S2.000	SW10a	9	98.460	-0.353	0.000	0.00		2.8	OK
S3.000	SW10c	9	98.460	-0.180	0.000	0.00		2.8	OK
S2.001	SW10b	9	98.460	-0.166	0.000	0.00		1.9	OK
S2.002	SW10	9	98.460	-0.154	0.000	0.00		3.1	OK
S2.003	SW11	9	98.460	-0.132	0.000	0.00		4.7	OK
S1.004	SW3	9	98.460	-0.006	0.000	0.01		16.5	OK
S1.005	SW4	9	98.460	0.050	0.000	0.01		18.4	SURCHARGED
S1.006	SW5	9	98.460	0.104	0.000	0.01		12.6	SURCHARGED
S4.000	SW12	9	98.459	-0.191	0.000	0.00		3.8	OK
S4.001	SW13	9	98.459	-0.068	0.000	0.00		2.6	OK
S4.002	SW14	9	98.459	-0.041	0.000	0.00		3.9	OK
S4.003	SW15	9	98.458	-0.013	0.000	0.00		4.4	OK
S4.004	SW16	9	98.459	-0.015	0.000	0.00		6.3	OK
S1.007	SW6	9	98.460	0.206	0.000	0.02		18.4	SURCHARGED

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Summary Wizard of 240 minute 100 year Summer I+45% for Storm

PN	US/MH Name	Storm Rank	Water Level (m)	Surcharged Depth (m)	Flooded Volume (m³)	Flow / Cap.	Overflow (l/s)	Half Drain Time (mins)	Pipe Flow (l/s)
S1.008	SW7	9	98.460	0.236	0.000	0.01			17.1
S1.009	SW8	8	98.460	0.285	0.000	0.01			14.1
S1.010	SW9	8	98.460	1.329	0.000	0.18			15.1
S1.011	SEX UU 1	38	95.892	0.022	0.000	1.16			15.1
S1.012	SEX UU 2	37	94.627	-1.156	0.000	0.01			15.1

PN	US/MH Name	Status
S1.008	SW7	SURCHARGED
S1.009	SW8	SURCHARGED
S1.010	SW9	SURCHARGED
S1.011	SEX UU 1	SURCHARGED
S1.012	SEX UU 2	OK

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Summary Wizard of 360 minute 100 year Summer I+45% for Storm

PN	US/MH Name	Storm Rank	Water Level (m)	Surcharged Depth (m)	Flooded Volume (m³)	Flow / Cap. (l/s)	Half Drain Time (mins)	Pipe Flow (l/s)
S1.008	SW7	10	98.435	0.211	0.000	0.01		15.5
S1.009	SW8	10	98.435	0.259	0.000	0.01		13.8
S1.010	SW9	10	98.435	1.304	0.000	0.18		15.1
S1.011	SEX UU 1	36	95.892	0.022	0.000	1.16		15.1
S1.012	SEX UU 2	36	94.627	-1.156	0.000	0.01		15.1

PN	US/MH Name	Status
S1.008	SW7	SURCHARGED
S1.009	SW8	SURCHARGED
S1.010	SW9	SURCHARGED
S1.011	SEX UU 1	SURCHARGED
S1.012	SEX UU 2	OK

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Summary Wizard of 480 minute 100 year Summer I+45% for Storm

Simulation Criteria

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

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

Synthetic Rainfall Details

Rainfall Model FSR Ratio R 0.355
 Region England and Wales Cv (Summer) 0.750
 M5-60 (mm) 18.000 Cv (Winter) 0.840

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

Profile(s) Summer and Winter
 Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600,
 720, 960, 1440, 2160, 2880, 4320, 5760,
 7200, 8640, 10080
 Return Period(s) (years) 2, 30, 100
 Climate Change (%) 0, 0, 45

PN	US/MH Name	Storm Rank	Water Level (m)	Surcharged Depth (m)	Flooded Volume (m³)	Flow / Overflow Cap. (l/s)	Half Drain Time (mins)	Pipe Flow (l/s)	Status
S1.000	SW17a	12	98.383	-0.367	0.000	0.01		12.8	OK
S1.001	SW17	12	98.383	-0.322	0.000	0.01		8.6	OK
S1.002	SW1	12	98.383	-0.290	0.000	0.01		12.2	OK
S1.003	SW2	12	98.384	-0.255	0.000	0.01		17.2	OK
S2.000	SW10a	12	98.383	-0.430	0.000	0.00		1.7	OK
S3.000	SW10c	12	98.383	-0.257	0.000	0.00		1.7	OK
S2.001	SW10b	12	98.383	-0.243	0.000	0.00		1.7	OK
S2.002	SW10	12	98.383	-0.231	0.000	0.00		2.5	OK
S2.003	SW11	12	98.383	-0.209	0.000	0.00		3.7	OK
S1.004	SW3	12	98.383	-0.083	0.000	0.01		12.9	OK
S1.005	SW4	12	98.382	-0.027	0.000	0.01		14.4	OK
S1.006	SW5	12	98.380	0.025	0.000	0.00		11.3	SURCHARGED
S4.000	SW12	12	98.380	-0.270	0.000	0.00		2.3	OK
S4.001	SW13	12	98.380	-0.147	0.000	0.00		3.1	OK
S4.002	SW14	12	98.380	-0.120	0.000	0.00		4.5	OK
S4.003	SW15	12	98.380	-0.092	0.000	0.00		5.3	OK
S4.004	SW16	12	98.380	-0.094	0.000	0.01		6.9	OK
S1.007	SW6	12	98.380	0.127	0.000	0.01		13.5	SURCHARGED

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Summary Wizard of 480 minute 100 year Summer I+45% for Storm

PN	US/MH Name	Storm Rank	Water Level (m)	Surcharged Depth (m)	Flooded Volume (m³)	Flow / Cap. (l/s)	Half Drain Time (mins)	Pipe Flow (l/s)
S1.008	SW7	12	98.380	0.157	0.000	0.01		13.6
S1.009	SW8	12	98.380	0.205	0.000	0.01		13.7
S1.010	SW9	12	98.381	1.250	0.000	0.18		15.1
S1.011	SEX UU 1	35	95.892	0.022	0.000	1.16		15.1
S1.012	SEX UU 2	35	94.627	-1.156	0.000	0.01		15.1

PN	US/MH Name	Status
S1.008	SW7	SURCHARGED
S1.009	SW8	SURCHARGED
S1.010	SW9	SURCHARGED
S1.011	SEX UU 1	SURCHARGED
S1.012	SEX UU 2	OK

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Summary Wizard of 600 minute 100 year Summer I+45% for Storm

Simulation Criteria

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

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

Synthetic Rainfall Details

Rainfall Model FSR Ratio R 0.355
 Region England and Wales Cv (Summer) 0.750
 M5-60 (mm) 18.000 Cv (Winter) 0.840

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

Profile(s) Summer and Winter
 Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600,
 720, 960, 1440, 2160, 2880, 4320, 5760,
 7200, 8640, 10080
 Return Period(s) (years) 2, 30, 100
 Climate Change (%) 0, 0, 45

PN	US/MH Name	Storm Rank	Water Level (m)	Surcharged Depth (m)	Flooded Volume (m ³)	Flow / Overflow Cap. (l/s)	Half Drain Time (mins)	Pipe Flow (l/s)	Status
S1.000	SW17a	13	98.339	-0.411	0.000	0.01		10.8	OK
S1.001	SW17	13	98.339	-0.366	0.000	0.01		7.4	OK
S1.002	SW1	13	98.339	-0.334	0.000	0.01		10.6	OK
S1.003	SW2	13	98.339	-0.300	0.000	0.01		14.9	OK
S2.000	SW10a	13	98.339	-0.474	0.000	0.00		1.4	OK
S3.000	SW10c	13	98.339	-0.301	0.000	0.00		1.4	OK
S2.001	SW10b	13	98.339	-0.287	0.000	0.00		1.6	OK
S2.002	SW10	13	98.339	-0.276	0.000	0.00		2.5	OK
S2.003	SW11	13	98.339	-0.253	0.000	0.00		3.6	OK
S1.004	SW3	13	98.339	-0.127	0.000	0.01		12.0	OK
S1.005	SW4	13	98.338	-0.072	0.000	0.01		13.3	OK
S1.006	SW5	13	98.336	-0.019	0.000	0.00		11.1	OK
S4.000	SW12	14	98.331	-0.319	0.000	0.00		2.0	OK
S4.001	SW13	14	98.331	-0.196	0.000	0.00		2.8	OK
S4.002	SW14	14	98.331	-0.169	0.000	0.00		4.1	OK
S4.003	SW15	14	98.331	-0.141	0.000	0.00		5.2	OK
S4.004	SW16	14	98.331	-0.143	0.000	0.01		6.6	OK
S1.007	SW6	14	98.331	0.077	0.000	0.01		14.1	SURCHARGED

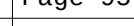
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Summary Wizard of 600 minute 100 year Summer I+45% for Storm

PN	US/MH Name	Storm Rank	Water Level (m)	Surcharged Depth (m)	Flooded Volume (m³)	Flow / Cap. (l/s)	Half Drain Time (mins)	Pipe Flow (l/s)
S1.008	SW7	14	98.331	0.107	0.000	0.01		14.4
S1.009	SW8	14	98.331	0.156	0.000	0.01		13.8
S1.010	SW9	14	98.331	1.200	0.000	0.18		15.1
S1.011	SEX UU 1	26	95.892	0.022	0.000	1.16		15.1
S1.012	SEX UU 2	32	94.627	-1.156	0.000	0.01		15.1

PN	US/MH Name	Status
S1.008	SW7	SURCHARGED
S1.009	SW8	SURCHARGED
S1.010	SW9	SURCHARGED
S1.011	SEX UU 1	SURCHARGED
S1.012	SEX UU 2	OK

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Summary Wizard of 720 minute 100 year Summer I+45% for Storm

Areal Reduction Factor	1.000	Additional Flow - % of Total Flow	0.000
Hot Start (mins)	0	MADD Factor * 10m ³ /ha Storage	2.000
Hot Start Level (mm)	0	Inlet Coeffiecient	0.800
Manhole Headloss Coeff (Global)	0.500	Flow per Person per Day (l/per/day)	0.000
Foul Sewage per hectare (l/s)	0.000		

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

Rainfall Model	FSR	Ratio R	0.355
Region	England and Wales	Cv (Summer)	0.750
M5-60 (mm)	18.000	Cv (Winter)	0.840

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

Profile(s)	Summer and Winter
Duration(s) (mins)	15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440, 2160, 2880, 4320, 5760, 7200, 8640, 10080
Return Period(s) (years)	2, 30, 100
Climate Change (%)	0, 0, 45

PN	US/MH Name	Storm Rank	Water	Surcharged	Flooded	Flow / Cap.	Overflow (l/s)	Half Drain	Pipe	Status
			Level (m)	Depth (m)	Volume (m³)			Time (mins)	Flow (l/s)	
S1.000	SW17a	15	98.296	-0.454	0.000	0.01			9.4	OK
S1.001	SW17	15	98.296	-0.409	0.000	0.01			6.5	OK
S1.002	SW1	15	98.296	-0.377	0.000	0.01			9.4	OK
S1.003	SW2	15	98.296	-0.343	0.000	0.01			13.3	OK
S2.000	SW10a	15	98.296	-0.517	0.000	0.00			1.3	OK
S3.000	SW10c	15	98.296	-0.344	0.000	0.00			1.3	OK
S2.001	SW10b	15	98.296	-0.330	0.000	0.00			2.8	OK
S2.002	SW10	15	98.296	-0.318	0.000	0.00			2.9	OK
S2.003	SW11	15	98.296	-0.296	0.000	0.00			3.5	OK
S1.004	SW3	15	98.296	-0.170	0.000	0.01			11.4	OK
S1.005	SW4	15	98.296	-0.114	0.000	0.01			12.7	OK
S1.006	SW5	15	98.294	-0.061	0.000	0.00			10.9	OK
S4.000	SW12	15	98.293	-0.357	0.000	0.00			1.7	OK
S4.001	SW13	15	98.293	-0.234	0.000	0.00			2.9	OK
S4.002	SW14	15	98.293	-0.207	0.000	0.00			4.3	OK
S4.003	SW15	15	98.293	-0.179	0.000	0.00			5.4	OK
S4.004	SW16	15	98.293	-0.181	0.000	0.01			6.8	OK
S1.007	SW6	15	98.293	0.039	0.000	0.02			15.1	SURCHARGED

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Summary Wizard of 720 minute 100 year Summer I+45% for Storm

PN	US/MH Name	Storm Rank	Water Level (m)	Surcharged Depth (m)	Flooded Volume (m³)	Flow / Cap. (l/s)	Half Drain Time (mins)	Pipe Flow (l/s)
S1.008	SW7	15	98.293	0.069	0.000	0.01		14.0
S1.009	SW8	15	98.293	0.117	0.000	0.01		13.8
S1.010	SW9	15	98.293	1.162	0.000	0.18		15.1
S1.011	SEX UU 1	29	95.892	0.022	0.000	1.16		15.1
S1.012	SEX UU 2	25	94.627	-1.156	0.000	0.01		15.1

PN	US/MH Name	Status
S1.008	SW7	SURCHARGED
S1.009	SW8	SURCHARGED
S1.010	SW9	SURCHARGED
S1.011	SEX UU 1	SURCHARGED
S1.012	SEX UU 2	OK

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Summary Wizard of 960 minute 100 year Summer I+45% for Storm										
Simulation Criteria										
Areal Reduction Factor		1.000		Additional Flow - % of Total Flow		0.000				
Hot Start (mins)		0		MADD Factor * 10m³/ha Storage		2.000				
Hot Start Level (mm)		0		Inlet Coefficient		0.800				
Manhole Headloss Coeff (Global)		0.500		Flow per Person per Day (l/per/day)		0.000				
Foul Sewage per hectare (l/s)		0.000								
Number of Input Hydrographs		0		Number of Storage Structures		0				
Number of Online Controls		1		Number of Time/Area Diagrams		0				
Number of Offline Controls		0		Number of Real Time Controls		0				
Synthetic Rainfall Details										
Rainfall Model		FSR		Ratio R		0.355				
Region England and Wales Cv (Summer)		0.750		M5-60 (mm)		18.000		Cv (Winter) 0.840		
Margin for Flood Risk Warning (mm)								300.0		
Analysis Timestep		2.5		Second Increment (Extended)						
DTS Status								ON		
DVD Status								ON		
Inertia Status								ON		
Profile(s)								Summer and Winter		
Duration(s) (mins)		15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440, 2160, 2880, 4320, 5760, 7200, 8640, 10080								
Return Period(s) (years)		2, 30, 100								
Climate Change (%)		0, 0, 45								
Water Surcharged Flooded Half Drain Pipe										
PN	US/MH Name	Storm Rank	Level (m)	Depth (m)	Volume (m³)	Flow / Overflow Cap.	(l/s)	Time (mins)	Pipe Flow (l/s)	Status
S1.000	SW17a	17	98.226	-0.524	0.000	0.01			7.6	OK
S1.001	SW17	17	98.226	-0.479	0.000	0.00			5.5	OK
S1.002	SW1	17	98.226	-0.447	0.000	0.01			7.9	OK
S1.003	SW2	17	98.226	-0.413	0.000	0.00			11.3	OK
S2.000	SW10a	17	98.225	-0.588	0.000	0.00			1.2	OK
S3.000	SW10c	17	98.225	-0.415	0.000	0.00			1.0	OK
S2.001	SW10b	17	98.225	-0.401	0.000	0.00			2.0	OK
S2.002	SW10	17	98.226	-0.389	0.000	0.00			2.7	OK
S2.003	SW11	17	98.225	-0.367	0.000	0.00			3.5	OK
S1.004	SW3	17	98.226	-0.240	0.000	0.01			10.6	OK
S1.005	SW4	17	98.225	-0.185	0.000	0.01			11.7	OK
S1.006	SW5	17	98.224	-0.132	0.000	0.00			10.3	OK
S4.000	SW12	17	98.222	-0.428	0.000	0.00			1.4	OK
S4.001	SW13	17	98.223	-0.304	0.000	0.00			2.2	OK
S4.002	SW14	17	98.223	-0.277	0.000	0.00			3.1	OK
S4.003	SW15	17	98.223	-0.249	0.000	0.00			3.1	OK
S4.004	SW16	17	98.223	-0.251	0.000	0.00			4.2	OK
S1.007	SW6	17	98.223	-0.031	0.000	0.01			13.4	OK
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Summary Wizard of 960 minute 100 year Summer I+45% for Storm

PN	US/MH Name	Storm Rank	Water Level (m)	Surcharged Depth (m)	Flooded Volume (m³)	Flow / Cap. (l/s)	Half Drain Time (mins)	Pipe Flow (l/s)
S1.008	SW7	17	98.216	-0.008	0.000	0.01		13.5
S1.009	SW8	17	98.191	0.015	0.000	0.01		13.7
S1.010	SW9	17	98.190	1.059	0.000	0.18		15.1
S1.011	SEX UU 1	16	95.892	0.022	0.000	1.16		15.1
S1.012	SEX UU 2	21	94.627	-1.156	0.000	0.01		15.1

PN	US/MH Name	Status
S1.008	SW7	OK
S1.009	SW8	SURCHARGED
S1.010	SW9	SURCHARGED
S1.011	SEX UU 1	SURCHARGED
S1.012	SEX UU 2	OK

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Summary Wizard of 1440 minute 100 year Summer I+45% for Storm			
Simulation Criteria			
Areal Reduction Factor 1.000		Additional Flow - % of Total Flow 0.000	
Hot Start (mins) 0		MADD Factor * 10m³/ha Storage 2.000	
Hot Start Level (mm) 0		Inlet Coefficient 0.800	
Manhole Headloss Coeff (Global) 0.500		Flow per Person per Day (l/per/day) 0.000	
Foul Sewage per hectare (l/s) 0.000			
Number of Input Hydrographs 0		Number of Storage Structures 0	
Number of Online Controls 1		Number of Time/Area Diagrams 0	
Number of Offline Controls 0		Number of Real Time Controls 0	
Synthetic Rainfall Details			
Rainfall Model		FSR Ratio R 0.355	
Region England and Wales Cv (Summer) 0.750			
M5-60 (mm)		18.000 Cv (Winter) 0.840	
Margin for Flood Risk Warning (mm)		300.0	
Analysis Timestep 2.5 Second Increment (Extended)			
DTS Status		ON	
DVD Status		ON	
Inertia Status		ON	
Profile(s)		Summer and Winter	
Duration(s) (mins)		15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440, 2160, 2880, 4320, 5760, 7200, 8640, 10080	
Return Period(s) (years)		2, 30, 100	
Climate Change (%)		0, 0, 45	

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Summary Wizard of 1440 minute 100 year Summer I+45% for Storm

PN	US/MH Name	Storm Rank	Water Level (m)	Surcharged Depth (m)	Flooded Volume (m³)	Flow / Cap. (l/s)	Half Drain Time (mins)	Pipe Flow (l/s)
S1.008	SW7	20	98.081	-0.143	0.000	0.01		13.0
S1.009	SW8	20	98.073	-0.102	0.000	0.01		13.3
S1.010	SW9	20	98.054	0.923	0.000	0.18		15.1
S1.011 SEX UU 1		15	95.892	0.022	0.000	1.16		15.1
S1.012 SEX UU 2		22	94.627	-1.156	0.000	0.01		15.1

PN	US/MH Name	Status
S1.008	SW7	OK
S1.009	SW8	OK
S1.010	SW9	SURCHARGED
S1.011 SEX UU 1		SURCHARGED
S1.012 SEX UU 2		OK

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Summary Wizard of 2160 minute 100 year Summer I+45% for Storm

PN	US/MH Name	Storm Rank	Water Level (m)	Surcharged Depth (m)	Flooded Volume (m³)	Flow / Cap. (l/s)	Half Drain Time (mins)	Pipe Flow (l/s)
S1.008	SW7	23	97.903	-0.321	0.000	0.01		12.3
S1.009	SW8	23	97.898	-0.277	0.000	0.01		13.0
S1.010	SW9	23	97.888	0.757	0.000	0.18		15.1
S1.011	SEX UU 1	25	95.892	0.022	0.000	1.16		15.1
S1.012	SEX UU 2	11	94.627	-1.156	0.000	0.01		15.1

PN	US/MH Name	Status
S1.008	SW7	OK
S1.009	SW8	OK
S1.010	SW9	SURCHARGED
S1.011	SEX UU 1	SURCHARGED
S1.012	SEX UU 2	OK

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Summary Wizard of 2880 minute 100 year Summer I+45% for Storm

PN	US/MH Name	Storm Rank	Water Level (m)	Surcharged Depth (m)	Flooded Volume (m³)	Flow / Cap. (l/s)	Overflow (l/s)	Half Drain Time (mins)	Pipe Flow (l/s)
S1.008	SW7	30	97.750	-0.474	0.000	0.01			11.9
S1.009	SW8	30	97.746	-0.430	0.000	0.01			12.8
S1.010	SW9	30	97.739	0.608	0.000	0.18			15.1
S1.011	SEX UU 1	10	95.892	0.022	0.000	1.16			15.1
S1.012	SEX UU 2	14	94.627	-1.156	0.000	0.01			15.1

PN	US/MH Name	Status
S1.008	SW7	OK
S1.009	SW8	OK
S1.010	SW9	SURCHARGED
S1.011	SEX UU 1	SURCHARGED
S1.012	SEX UU 2	OK

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Summary Wizard of 4320 minute 100 year Summer I+45% for Storm										
Simulation Criteria										
Areal Reduction Factor 1.000		Additional Flow - % of Total Flow 0.000								
Hot Start (mins) 0		MADD Factor * 10m³/ha Storage 2.000								
Hot Start Level (mm) 0		Inlet Coeffiecient 0.800								
Manhole Headloss Coeff (Global) 0.500		Flow per Person per Day (l/per/day) 0.000								
Foul Sewage per hectare (l/s) 0.000										
Number of Input Hydrographs 0 Number of Storage Structures 0										
Number of Online Controls 1 Number of Time/Area Diagrams 0										
Number of Offline Controls 0 Number of Real Time Controls 0										
Synthetic Rainfall Details										
Rainfall Model		FSR Ratio R 0.355								
Region England and Wales Cv (Summer) 0.750										
M5-60 (mm)		18.000 Cv (Winter) 0.840								
Margin for Flood Risk Warning (mm)		300.0								
Analysis Timestep 2.5 Second Increment (Extended)										
DTS Status		ON								
DVD Status		ON								
Inertia Status		ON								
Profile(s)		Summer and Winter								
Duration(s) (mins)		15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440, 2160, 2880, 4320, 5760, 7200, 8640, 10080								
Return Period(s) (years)		2, 30, 100								
Climate Change (%)		0, 0, 45								
Water Surcharged Flooded Half Drain Pipe										
PN	US/MH Name	Storm Rank	Level (m)	Depth (m)	Volume (m³)	Flow / Cap.	Overflow (l/s)	Time (mins)	Pipe Flow (l/s)	Status
S1.000	SW17a	55	97.504	-1.246	0.000	0.00			2.6	OK
S1.001	SW17	51	97.504	-1.201	0.000	0.00			2.6	OK
S1.002	SW1	51	97.504	-1.169	0.000	0.00			3.9	OK
S1.003	SW2	51	97.504	-1.135	0.000	0.00			5.4	OK
S2.000	SW10a	53	97.504	-1.309	0.000	0.00			0.5	OK
S3.000	SW10c	51	97.504	-1.136	0.000	0.00			0.9	OK
S2.001	SW10b	51	97.504	-1.122	0.000	0.00			1.4	OK
S2.002	SW10	51	97.504	-1.110	0.000	0.00			1.7	OK
S2.003	SW11	51	97.504	-1.088	0.000	0.00			2.2	OK
S1.004	SW3	51	97.504	-0.962	0.000	0.00			7.2	OK
S1.005	SW4	51	97.504	-0.906	0.000	0.00			8.4	OK
S1.006	SW5	51	97.504	-0.852	0.000	0.00			7.9	OK
S4.000	SW12	51	97.503	-1.147	0.000	0.00			1.0	OK
S4.001	SW13	51	97.503	-1.023	0.000	0.00			2.1	OK
S4.002	SW14	51	97.504	-0.996	0.000	0.00			2.4	OK
S4.003	SW15	51	97.504	-0.968	0.000	0.00			2.9	OK
S4.004	SW16	51	97.504	-0.970	0.000	0.00			3.7	OK
S1.007	SW6	51	97.504	-0.750	0.000	0.01			10.9	OK
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Summary Wizard of 5760 minute 100 year Summer I+45% for Storm

PN	US/MH Name	Storm Rank	Water Level (m)	Surcharged Depth (m)	Flooded Volume (m³)	Flow / Cap. (l/s)	Half Drain Time (mins)	Pipe Flow (l/s)
S1.008	SW7	70	97.314	-0.910	0.000	0.01		11.3
S1.009	SW8	70	97.312	-0.863	0.000	0.01		12.4
S1.010	SW9	70	97.308	0.177	0.000	0.18		15.0
S1.011	SEX UU 1	70	95.890	0.020	0.000	1.15		15.0
S1.012	SEX UU 2	70	94.627	-1.156	0.000	0.01		15.0

PN	US/MH Name	Status
S1.008	SW7	OK
S1.009	SW8	OK
S1.010	SW9	SURCHARGED
S1.011	SEX UU 1	SURCHARGED
S1.012	SEX UU 2	OK

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Summary Wizard of 7200 minute 100 year Summer I+45% for Storm

PN	US/MH Name	Storm Rank	Water Level (m)	Surcharged Depth (m)	Flooded Volume (m³)	Flow / Cap. (l/s)	Half Drain Time (mins)	Pipe Flow (l/s)
S1.008	SW7	80	97.157	-1.067	0.000	0.01		10.7
S1.009	SW8	80	97.157	-1.019	0.000	0.01		11.9
S1.010	SW9	80	97.154	0.023	0.000	0.17		14.4
S1.011	SEX UU 1	80	95.881	0.011	0.000	1.10		14.4
S1.012	SEX UU 2	80	94.625	-1.158	0.000	0.01		14.4

PN	US/MH Name	Status
S1.008	SW7	OK
S1.009	SW8	OK
S1.010	SW9	SURCHARGED
S1.011	SEX UU 1	SURCHARGED
S1.012	SEX UU 2	OK

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Summary Wizard of 8640 minute 100 year Summer I+45% for Storm

Simulation Criteria

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

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

Synthetic Rainfall Details

Rainfall Model FSR Ratio R 0.355
 Region England and Wales Cv (Summer) 0.750
 M5-60 (mm) 18.000 Cv (Winter) 0.840

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

Profile(s) Summer and Winter
 Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600,
 720, 960, 1440, 2160, 2880, 4320, 5760,
 7200, 8640, 10080
 Return Period(s) (years) 2, 30, 100
 Climate Change (%) 0, 0, 45

PN	US/MH Name	Storm Rank	Water	Surcharged	Flooded	Flow / Cap.	Overflow (l/s)	Half Drain	Pipe	Status
			Level (m)	Depth (m)	Volume (m³)			Time (mins)	Flow (l/s)	
S1.000	SW17a	83	97.408	-1.342	0.000	0.00			1.5	OK
S1.001	SW17	83	97.365	-1.340	0.000	0.00			1.5	OK
S1.002	SW1	83	97.336	-1.337	0.000	0.00			2.2	OK
S1.003	SW2	83	97.297	-1.342	0.000	0.00			3.2	OK
S2.000	SW10a	83	97.466	-1.347	0.000	0.00			0.3	OK
S3.000	SW10c	83	97.292	-1.348	0.000	0.00			0.3	OK
S2.001	SW10b	83	97.281	-1.345	0.000	0.00			0.6	OK
S2.002	SW10	83	97.272	-1.342	0.000	0.00			0.9	OK
S2.003	SW11	83	97.246	-1.347	0.000	0.00			1.4	OK
S1.004	SW3	84	97.139	-1.327	0.000	0.00			4.8	OK
S1.005	SW4	84	97.093	-1.317	0.000	0.00			5.7	OK
S1.006	SW5	84	97.061	-1.295	0.000	0.00			5.7	OK
S4.000	SW12	83	97.301	-1.349	0.000	0.00			0.4	OK
S4.001	SW13	83	97.183	-1.344	0.000	0.00			0.8	OK
S4.002	SW14	83	97.161	-1.339	0.000	0.00			1.3	OK
S4.003	SW15	83	97.146	-1.325	0.000	0.00			1.8	OK
S4.004	SW16	83	97.138	-1.336	0.000	0.00			2.6	OK
S1.007	SW6	84	97.054	-1.199	0.000	0.01			8.8	OK

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Summary Wizard of 15 minute 2 year Winter I+0% for Storm

PN	US/MH Name	Storm Rank	Water Level (m)	Surcharged Depth (m)	Flooded Volume (m³)	Flow / Cap. (l/s)	Overflow (l/s)	Half Drain Time (mins)	Pipe Flow (l/s)
S1.008	SW7	66	97.358	-0.866	0.000	0.05			66.2
S1.009	SW8	66	97.355	-0.821	0.000	0.03			44.0
S1.010	SW9	66	97.351	0.220	0.000	0.18			15.1
S1.011	SEX UU 1	66	95.891	0.021	0.000	1.15			15.1
S1.012	SEX UU 2	66	94.627	-1.156	0.000	0.01			15.1

PN	US/MH Name	Status
S1.008	SW7	OK
S1.009	SW8	OK
S1.010	SW9	SURCHARGED
S1.011	SEX UU 1	SURCHARGED
S1.012	SEX UU 2	OK

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Summary Wizard of 30 minute 2 year Winter I+0% for Storm										
Simulation Criteria										
Areal Reduction Factor		1.000		Additional Flow - % of Total Flow		0.000				
Hot Start (mins)		0		MADD Factor * 10m³/ha Storage		2.000				
Hot Start Level (mm)		0		Inlet Coefficient		0.800				
Manhole Headloss Coeff (Global)		0.500		Flow per Person per Day (l/per/day)		0.000				
Foul Sewage per hectare (l/s)		0.000								
Number of Input Hydrographs		0		Number of Storage Structures		0				
Number of Online Controls		1		Number of Time/Area Diagrams		0				
Number of Offline Controls		0		Number of Real Time Controls		0				
Synthetic Rainfall Details										
Rainfall Model		FSR		Ratio R		0.355				
Region England and Wales Cv (Summer)		0.750		M5-60 (mm)		18.000 Cv (Winter)		0.840		
Margin for Flood Risk Warning (mm)						300.0				
Analysis Timestep		2.5 Second Increment (Extended)								
DTS Status						ON				
DVD Status						ON				
Inertia Status						ON				
Profile(s)						Summer and Winter				
Duration(s) (mins)						15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440, 2160, 2880, 4320, 5760, 7200, 8640, 10080				
Return Period(s) (years)						2, 30, 100				
Climate Change (%)						0, 0, 45				
Water Surcharged Flooded Half Drain Pipe										
PN	US/MH Name	Storm Rank	Level (m)	Depth (m)	Volume (m³)	Flow / Overflow Cap.	(l/s)	Time (mins)	Pipe Flow (l/s)	Status
S1.000	SW17a	54	97.510	-1.240	0.000	0.01			18.9	OK
S1.001	SW17	55	97.481	-1.224	0.000	0.01			17.8	OK
S1.002	SW1	55	97.458	-1.215	0.000	0.02			26.1	OK
S1.003	SW2	57	97.415	-1.224	0.000	0.01			36.2	OK
S2.000	SW10a	55	97.492	-1.321	0.000	0.00			3.9	OK
S3.000	SW10c	57	97.415	-1.225	0.000	0.00			3.4	OK
S2.001	SW10b	57	97.415	-1.211	0.000	0.01			6.9	OK
S2.002	SW10	57	97.415	-1.199	0.000	0.01			10.3	OK
S2.003	SW11	57	97.415	-1.177	0.000	0.01			15.0	OK
S1.004	SW3	57	97.415	-1.051	0.000	0.03			48.5	OK
S1.005	SW4	57	97.415	-0.995	0.000	0.03			53.5	OK
S1.006	SW5	57	97.414	-0.941	0.000	0.02			44.3	OK
S4.000	SW12	57	97.414	-1.236	0.000	0.00			4.7	OK
S4.001	SW13	57	97.414	-1.113	0.000	0.01			7.8	OK
S4.002	SW14	57	97.414	-1.086	0.000	0.01			11.5	OK
S4.003	SW15	57	97.414	-1.058	0.000	0.01			15.1	OK
S4.004	SW16	57	97.414	-1.060	0.000	0.01			18.5	OK
S1.007	SW6	57	97.414	-0.839	0.000	0.06			52.9	OK
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Summary Wizard of 30 minute 2 year Winter I+0% for Storm

PN	US/MH Name	Storm Rank	Water Level (m)	Surcharged Depth (m)	Flooded Volume (m³)	Flow / Cap. (l/s)	Half Drain Time (mins)	Pipe Flow (l/s)
S1.008	SW7	57	97.413	-0.811	0.000	0.03		46.0
S1.009	SW8	57	97.410	-0.765	0.000	0.02		31.3
S1.010	SW9	57	97.406	0.275	0.000	0.18		15.1
S1.011	SEX UU 1	50	95.892	0.022	0.000	1.16		15.1
S1.012	SEX UU 2	48	94.627	-1.156	0.000	0.01		15.1

PN	US/MH Name	Status
S1.008	SW7	OK
S1.009	SW8	OK
S1.010	SW9	SURCHARGED
S1.011	SEX UU 1	SURCHARGED
S1.012	SEX UU 2	OK

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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 Coeffiecient	0.800				
Manhole Headloss Coeff (Global)		0.500		Flow per Person per Day (l/per/day)	0.000				
Foul Sewage per hectare (l/s)		0.000							
Number of Input Hydrographs		0		Number of Storage Structures	0				
Number of Online Controls		1		Number of Time/Area Diagrams	0				
Number of Offline Controls		0		Number of Real Time Controls	0				
Synthetic Rainfall Details									
Rainfall Model		FSR		Ratio R	0.355				
Region England and Wales		Cv (Summer)		0.750					
M5-60 (mm)		18.000		Cv (Winter)	0.840				
Margin for Flood Risk Warning (mm)				300.0					
Analysis Timestep		2.5 Second Increment (Extended)							
DTS Status				ON					
DVD Status				ON					
Inertia Status				ON					
Profile(s)				Summer and Winter					
Duration(s) (mins)		15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440, 2160, 2880, 4320, 5760, 7200, 8640, 10080							
Return Period(s) (years)				2, 30, 100					
Climate Change (%)				0, 0, 45					
	US/MH	Storm	Water Level	Surcharged Depth	Flooded Volume	Flow / Overflow	Half Drain Time	Pipe Flow	Status
PN	Name	Rank	(m)	(m)	(m³)	Cap. (l/s)	(mins)	(l/s)	
S1.000	SW17a	62	97.441	-1.309	0.000	0.00		6.0	OK
S1.001	SW17	60	97.439	-1.266	0.000	0.00		6.0	OK
S1.002	SW1	60	97.439	-1.234	0.000	0.01		8.9	OK
S1.003	SW2	55	97.439	-1.200	0.000	0.00		12.4	OK
S2.000	SW10a	62	97.472	-1.341	0.000	0.00		1.2	OK
S3.000	SW10c	55	97.438	-1.202	0.000	0.00		1.1	OK
S2.001	SW10b	55	97.438	-1.188	0.000	0.00		2.2	OK
S2.002	SW10	55	97.438	-1.176	0.000	0.00		3.5	OK
S2.003	SW11	55	97.438	-1.154	0.000	0.00		5.0	OK
S1.004	SW3	55	97.438	-1.027	0.000	0.01		15.8	OK
S1.005	SW4	55	97.438	-0.972	0.000	0.01		17.2	OK
S1.006	SW5	55	97.438	-0.917	0.000	0.01		14.8	OK
S4.000	SW12	55	97.437	-1.213	0.000	0.00		1.4	OK
S4.001	SW13	55	97.438	-1.089	0.000	0.00		2.5	OK
S4.002	SW14	55	97.438	-1.062	0.000	0.00		3.8	OK
S4.003	SW15	55	97.438	-1.034	0.000	0.00		4.9	OK
S4.004	SW16	55	97.438	-1.036	0.000	0.01		6.5	OK
S1.007	SW6	55	97.438	-0.816	0.000	0.02		18.7	OK
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Summary Wizard of 180 minute 2 year Winter I+0% for Storm

PN	US/MH Name	Storm Rank	Water Level (m)	Surcharged Depth (m)	Flooded Volume (m³)	Flow / Cap. (l/s)	Half Drain Time (mins)	Pipe Flow (l/s)
S1.008	SW7	55	97.437	-0.787	0.000	0.01		17.9
S1.009	SW8	55	97.434	-0.742	0.000	0.01		16.5
S1.010	SW9	55	97.430	0.299	0.000	0.18		15.1
S1.011	SEX UU 1	7	95.892	0.022	0.000	1.16		15.1
S1.012	SEX UU 2	7	94.627	-1.156	0.000	0.01		15.1

PN	US/MH Name	Status
S1.008	SW7	OK
S1.009	SW8	OK
S1.010	SW9	SURCHARGED
S1.011	SEX UU 1	SURCHARGED
S1.012	SEX UU 2	OK

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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 Coeffiecient 0.800											
Manhole Headloss Coeff (Global) 0.500 Flow per Person per Day (l/per/day) 0.000											
Foul Sewage per hectare (l/s) 0.000											
Number of Input Hydrographs 0 Number of Storage Structures 0											
Number of Online Controls 1 Number of Time/Area Diagrams 0											
Number of Offline Controls 0 Number of Real Time Controls 0											
Synthetic Rainfall Details											
Rainfall Model FSR Ratio R 0.355											
Region England and Wales Cv (Summer) 0.750											
M5-60 (mm) 18.000 Cv (Winter) 0.840											
Margin for Flood Risk Warning (mm) 300.0											
Analysis Timestep 2.5 Second Increment (Extended)											
DTS Status ON											
DVD Status ON											
Inertia Status ON											
Profile(s) Summer and Winter											
Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440, 2160, 2880, 4320, 5760, 7200, 8640, 10080											
Return Period(s) (years) 2, 30, 100											
Climate Change (%) 0, 0, 45											
Water Surcharged Flooded Half Drain Pipe											
PN	US/MH Name	Storm Rank	Level (m)	Depth (m)	Volume (m³)	Flow / Cap.	Overflow (l/s)	Time (mins)	Pipe Flow (l/s)	Status	
S1.000	SW17a	65	97.428	-1.322	0.000	0.00			4.9	OK	
S1.001	SW17	62	97.423	-1.282	0.000	0.00			4.9	OK	
S1.002	SW1	61	97.423	-1.250	0.000	0.01			7.4	OK	
S1.003	SW2	56	97.422	-1.217	0.000	0.00			10.3	OK	
S2.000	SW10a	64	97.471	-1.342	0.000	0.00			1.0	OK	
S3.000	SW10c	56	97.421	-1.219	0.000	0.00			1.0	OK	
S2.001	SW10b	56	97.421	-1.205	0.000	0.00			1.9	OK	
S2.002	SW10	56	97.422	-1.193	0.000	0.00			2.9	OK	
S2.003	SW11	56	97.422	-1.170	0.000	0.00			4.2	OK	
S1.004	SW3	56	97.422	-1.044	0.000	0.01			13.3	OK	
S1.005	SW4	56	97.421	-0.988	0.000	0.01			14.6	OK	
S1.006	SW5	56	97.421	-0.934	0.000	0.01			13.0	OK	
S4.000	SW12	56	97.420	-1.230	0.000	0.00			1.2	OK	
S4.001	SW13	56	97.420	-1.106	0.000	0.00			2.2	OK	
S4.002	SW14	56	97.421	-1.079	0.000	0.00			3.3	OK	
S4.003	SW15	56	97.421	-1.051	0.000	0.00			4.3	OK	
S4.004	SW16	56	97.421	-1.053	0.000	0.00			5.7	OK	
S1.007	SW6	56	97.421	-0.832	0.000	0.02			16.6	OK	
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Summary Wizard of 360 minute 2 year Winter I+0% for Storm

PN	US/MH Name	Storm Rank	Water Level (m)	Surcharged Depth (m)	Flooded Volume (m³)	Flow / Cap. (l/s)	Half Drain Time (mins)	Pipe Flow (l/s)
S1.008	SW7	63	97.379	-0.844	0.000	0.01		14.5
S1.009	SW8	63	97.377	-0.799	0.000	0.01		14.3
S1.010	SW9	63	97.373	0.242	0.000	0.18		15.1
S1.011 SEX UU 1		62	95.891	0.021	0.000	1.15		15.1
S1.012 SEX UU 2		62	94.627	-1.156	0.000	0.01		15.1

PN	US/MH Name	Status
S1.008	SW7	OK
S1.009	SW8	OK
S1.010	SW9	SURCHARGED
S1.011 SEX UU 1		SURCHARGED
S1.012 SEX UU 2		OK

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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 Coeffiecient 0.800	
Manhole Headloss Coeff (Global) 0.500		Flow per Person per Day (l/per/day) 0.000	
Foul Sewage per hectare (l/s) 0.000			
Number of Input Hydrographs 0 Number of Storage Structures 0			
Number of Online Controls 1 Number of Time/Area Diagrams 0			
Number of Offline Controls 0 Number of Real Time Controls 0			
Synthetic Rainfall Details			
Rainfall Model		FSR Ratio R 0.355	
Region England and Wales Cv (Summer) 0.750			
M5-60 (mm)		18.000 Cv (Winter) 0.840	
Margin for Flood Risk Warning (mm)		300.0	
Analysis Timestep 2.5 Second Increment (Extended)			
DTS Status		ON	
DVD Status		ON	
Inertia Status		ON	
Profile(s)		Summer and Winter	
Duration(s) (mins)		15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440, 2160, 2880, 4320, 5760, 7200, 8640, 10080	
Return Period(s) (years)		2, 30, 100	
Climate Change (%)		0, 0, 45	

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Summary Wizard of 480 minute 2 year Winter I+0% for Storm

PN	US/MH Name	Storm Rank	Water Level (m)	Surcharged Depth (m)	Flooded Volume (m³)	Flow / Cap. (l/s)	Half Drain Time (mins)	Pipe Flow (l/s)
S1.008	SW7	68	97.334	-0.890	0.000	0.01		13.4
S1.009	SW8	68	97.331	-0.844	0.000	0.01		13.6
S1.010	SW9	68	97.328	0.197	0.000	0.18		15.1
S1.011	SEX UU 1	68	95.890	0.020	0.000	1.15		15.1
S1.012	SEX UU 2	68	94.627	-1.156	0.000	0.01		15.1

PN	US/MH Name	Status
S1.008	SW7	OK
S1.009	SW8	OK
S1.010	SW9	SURCHARGED
S1.011	SEX UU 1	SURCHARGED
S1.012	SEX UU 2	OK

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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 Coeffiecient	0.800					
Manhole Headloss Coeff (Global)		0.500		Flow per Person per Day (l/per/day)	0.000					
Foul Sewage per hectare (l/s)		0.000								
Number of Input Hydrographs		0		Number of Storage Structures	0					
Number of Online Controls		1		Number of Time/Area Diagrams	0					
Number of Offline Controls		0		Number of Real Time Controls	0					
Synthetic Rainfall Details										
Rainfall Model		FSR		Ratio R	0.355					
Region England and Wales		Cv (Summer)		0.750						
M5-60 (mm)		18.000		Cv (Winter)	0.840					
Margin for Flood Risk Warning (mm)				300.0						
Analysis Timestep		2.5 Second Increment (Extended)								
DTS Status				ON						
DVD Status				ON						
Inertia Status				ON						
Profile(s)				Summer and Winter						
Duration(s) (mins)		15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440, 2160, 2880, 4320, 5760, 7200, 8640, 10080								
Return Period(s) (years)		2, 30, 100								
Climate Change (%)		0, 0, 45								
Water Surcharged Flooded										
PN	US/MH Name	Storm Rank	Level (m)	Depth (m)	Volume (m³)	Flow / Cap.	Overflow (l/s)	Half Drain Time (mins)	Pipe Flow (l/s)	Status
S1.000	SW17a	71	97.413	-1.337	0.000	0.00			2.6	OK
S1.001	SW17	72	97.372	-1.333	0.000	0.00			2.6	OK
S1.002	SW1	72	97.344	-1.329	0.000	0.00			3.9	OK
S1.003	SW2	74	97.308	-1.331	0.000	0.00			5.6	OK
S2.000	SW10a	71	97.467	-1.346	0.000	0.00			0.5	OK
S3.000	SW10c	75	97.295	-1.345	0.000	0.00			0.5	OK
S2.001	SW10b	74	97.291	-1.335	0.000	0.00			1.0	OK
S2.002	SW10	74	97.290	-1.324	0.000	0.00			1.6	OK
S2.003	SW11	74	97.288	-1.304	0.000	0.00			2.5	OK
S1.004	SW3	74	97.287	-1.179	0.000	0.00			8.0	OK
S1.005	SW4	74	97.287	-1.123	0.000	0.01			9.2	OK
S1.006	SW5	74	97.287	-1.069	0.000	0.00			8.6	OK
S4.000	SW12	74	97.302	-1.348	0.000	0.00			0.6	OK
S4.001	SW13	74	97.287	-1.240	0.000	0.00			1.4	OK
S4.002	SW14	74	97.287	-1.213	0.000	0.00			2.1	OK
S4.003	SW15	74	97.287	-1.185	0.000	0.00			2.8	OK
S4.004	SW16	74	97.287	-1.187	0.000	0.00			3.9	OK
S1.007	SW6	74	97.286	-0.967	0.000	0.01			12.2	OK
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Summary Wizard of 600 minute 2 year Winter I+0% for Storm

PN	US/MH Name	Storm Rank	Water Level (m)	Surcharged Depth (m)	Flooded Volume (m³)	Flow / Cap. (l/s)	Half Drain Time (mins)	Pipe Flow (l/s)
S1.008	SW7	74	97.286	-0.938	0.000	0.01		12.6
S1.009	SW8	74	97.284	-0.892	0.000	0.01		13.1
S1.010	SW9	74	97.280	0.149	0.000	0.17		15.0
S1.011 SEX UU 1		74	95.889	0.019	0.000	1.14		15.0
S1.012 SEX UU 2		74	94.626	-1.157	0.000	0.01		15.0

PN	US/MH Name	Status
S1.008	SW7	OK
S1.009	SW8	OK
S1.010	SW9	SURCHARGED
S1.011 SEX UU 1		SURCHARGED
S1.012 SEX UU 2		OK

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Summary Wizard of 720 minute 2 year Winter I+0% for Storm

PN	US/MH Name	Storm Rank	Water Level (m)	Surcharged Depth (m)	Flooded Volume (m³)	Flow / Cap. (l/s)	Half Drain Time (mins)	Pipe Flow (l/s)
S1.008	SW7	76	97.236	-0.988	0.000	0.01		12.1
S1.009	SW8	76	97.234	-0.941	0.000	0.01		12.7
S1.010	SW9	76	97.231	0.100	0.000	0.17		14.8
S1.011	SEX UU 1	76	95.886	0.016	0.000	1.13		14.8
S1.012	SEX UU 2	76	94.626	-1.157	0.000	0.01		14.8

PN	US/MH Name	Status
S1.008	SW7	OK
S1.009	SW8	OK
S1.010	SW9	SURCHARGED
S1.011	SEX UU 1	SURCHARGED
S1.012	SEX UU 2	OK

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Summary Wizard of 1440 minute 2 year Winter I+0% for Storm

PN	US/MH Name	Storm Rank	Water Level (m)	Surcharged Depth (m)	Flooded Volume (m³)	Flow / Cap. (l/s)	Overflow (l/s)	Half Drain Time (mins)	Pipe Flow (l/s)	Status
S1.008	SW7	88	96.994	-1.230	0.000	0.01			9.0	OK
S1.009	SW8	88	96.981	-1.195	0.000	0.01			10.2	OK
S1.010	SW9	88	96.973	-0.158	0.000	0.14			12.4	OK
S1.011	SEX UU 1	88	95.835	-0.035	0.000	0.94			12.4	OK
S1.012	SEX UU 2	88	94.620	-1.163	0.000	0.01			12.4	OK

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Summary Wizard of 4320 minute 2 year Winter I+0% for Storm

PN	US/MH Name	Storm Rank	Water Level (m)	Surcharged Depth (m)	Flooded Volume (m³)	Flow / Cap. (l/s)	Overflow (l/s)	Half Drain Time (mins)	Pipe Flow (l/s)	Status
S1.008	SW7	105	96.911	-1.313	0.000	0.00			4.1	OK
S1.009	SW8	105	96.880	-1.296	0.000	0.00			4.7	OK
S1.010	SW9	105	96.858	-0.273	0.000	0.07			5.8	OK
S1.011	SEX UU 1	105	95.790	-0.080	0.000	0.44			5.8	OK
S1.012	SEX UU 2	105	94.601	-1.182	0.000	0.00			5.8	OK

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Summary Wizard of 5760 minute 2 year Winter I+0% for Storm

PN	US/MH Name	Storm Rank	Water Level (m)	Surcharged Depth (m)	Flooded Volume (m³)	Flow / Cap. (l/s)	Overflow (l/s)	Half Drain Time (mins)	Pipe Flow (l/s)	Status
S1.008	SW7	110	96.903	-1.321	0.000	0.00			3.4	OK
S1.009	SW8	110	96.869	-1.307	0.000	0.00			3.8	OK
S1.010	SW9	110	96.846	-0.285	0.000	0.06			4.7	OK
S1.011	SEX UU 1	110	95.782	-0.088	0.000	0.36			4.7	OK
S1.012	SEX UU 2	110	94.598	-1.185	0.000	0.00			4.7	OK

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Summary Wizard of 10080 minute 2 year Winter I+0% for Storm

PN	US/MH Name	Storm Rank	Water Level (m)	Surcharged Depth (m)	Flooded Volume (m³)	Flow / Cap. (l/s)	Half Drain Time (mins)	Pipe Flow (l/s)	Status
S1.008	SW7	114	96.892	-1.332	0.000	0.00		2.3	OK
S1.009	SW8	114	96.853	-1.323	0.000	0.00		2.6	OK
S1.010	SW9	114	96.828	-0.303	0.000	0.04		3.2	OK
S1.011	SEX UU 1	114	95.770	-0.100	0.000	0.24		3.2	OK
S1.012	SEX UU 2	114	94.593	-1.190	0.000	0.00		3.2	OK

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Summary Wizard of 15 minute 30 year Winter I+0% for Storm

PN	US/MH Name	Storm Rank	Water Level (m)	Surcharged Depth (m)	Flooded Volume (m³)	Flow / Cap. (l/s)	Half Drain Time (mins)	Pipe Flow (l/s)
S1.008	SW7	47	97.556	-0.668	0.000	0.06		80.6
S1.009	SW8	47	97.553	-0.623	0.000	0.03		48.6
S1.010	SW9	47	97.547	0.416	0.000	0.18		15.1
S1.011	SEX UU 1	58	95.891	0.021	0.000	1.15		15.1
S1.012	SEX UU 2	56	94.627	-1.156	0.000	0.01		15.1

PN	US/MH Name	Status
S1.008	SW7	OK
S1.009	SW8	OK
S1.010	SW9	SURCHARGED
S1.011	SEX UU 1	SURCHARGED
S1.012	SEX UU 2	OK

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Summary Wizard of 30 minute 30 year Winter I+0% for Storm										
Simulation Criteria										
Areal Reduction Factor 1.000 Additional Flow - % of Total Flow 0.000										
Hot Start (mins) 0 MADD Factor * 10m³/ha Storage 2.000										
Hot Start Level (mm) 0 Inlet Coeffiecient 0.800										
Manhole Headloss Coeff (Global) 0.500 Flow per Person per Day (l/per/day) 0.000										
Foul Sewage per hectare (l/s) 0.000										
Number of Input Hydrographs 0 Number of Storage Structures 0										
Number of Online Controls 1 Number of Time/Area Diagrams 0										
Number of Offline Controls 0 Number of Real Time Controls 0										
Synthetic Rainfall Details										
Rainfall Model FSR Ratio R 0.355										
Region England and Wales Cv (Summer) 0.750										
M5-60 (mm) 18.000 Cv (Winter) 0.840										
Margin for Flood Risk Warning (mm) 300.0										
Analysis Timestep 2.5 Second Increment (Extended)										
DTS Status ON										
DVD Status ON										
Inertia Status ON										
Profile(s) Summer and Winter										
Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440, 2160, 2880, 4320, 5760, 7200, 8640, 10080										
Return Period(s) (years) 2, 30, 100										
Climate Change (%) 0, 0, 45										
Water Surcharged Flooded Half Drain Pipe										
PN	US/MH Name	Storm Rank	Level (m)	Depth (m)	Volume (m³)	Flow / Cap.	Overflow (l/s)	Time (mins)	Pipe Flow (l/s)	Status
S1.000	SW17a	41	97.655	-1.095	0.000	0.02			37.3	OK
S1.001	SW17	41	97.655	-1.050	0.000	0.03			36.4	OK
S1.002	SW1	41	97.655	-1.018	0.000	0.04			53.6	OK
S1.003	SW2	41	97.655	-0.984	0.000	0.03			73.4	OK
S2.000	SW10a	41	97.655	-1.158	0.000	0.01			7.4	OK
S3.000	SW10c	41	97.654	-0.986	0.000	0.01			5.6	OK
S2.001	SW10b	41	97.655	-0.971	0.000	0.01			10.1	OK
S2.002	SW10	41	97.655	-0.960	0.000	0.02			15.3	OK
S2.003	SW11	41	97.655	-0.937	0.000	0.01			21.0	OK
S1.004	SW3	41	97.655	-0.811	0.000	0.04			71.5	OK
S1.005	SW4	41	97.655	-0.755	0.000	0.04			73.1	OK
S1.006	SW5	41	97.654	-0.701	0.000	0.02			49.4	OK
S4.000	SW12	41	97.654	-0.996	0.000	0.00			8.0	OK
S4.001	SW13	41	97.654	-0.873	0.000	0.01			12.9	OK
S4.002	SW14	41	97.654	-0.846	0.000	0.02			19.1	OK
S4.003	SW15	41	97.654	-0.818	0.000	0.01			24.2	OK
S4.004	SW16	41	97.654	-0.820	0.000	0.02			24.1	OK
S1.007	SW6	41	97.654	-0.599	0.000	0.06			52.7	OK
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Summary Wizard of 120 minute 30 year Winter I+0% for Storm

PN	US/MH Name	Storm Rank	Water Level (m)	Surcharged Depth (m)	Flooded Volume (m³)	Flow / Cap. (l/s)	Half Drain Time (mins)	Pipe Flow (l/s)
S1.008	SW7	28	97.788	-0.436	0.000	0.01		19.2
S1.009	SW8	28	97.784	-0.392	0.000	0.01		16.8
S1.010	SW9	28	97.777	0.646	0.000	0.18		15.1
S1.011 SEX UU 1		42	95.892	0.022	0.000	1.16		15.1
S1.012 SEX UU 2		39	94.627	-1.156	0.000	0.01		15.1

PN	US/MH Name	Status
S1.008	SW7	OK
S1.009	SW8	OK
S1.010	SW9	SURCHARGED
S1.011 SEX UU 1		SURCHARGED
S1.012 SEX UU 2		OK

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Summary Wizard of 180 minute 30 year Winter I+0% for Storm

PN	US/MH Name	Storm Rank	Water Level (m)	Surcharged Depth (m)	Flooded Volume (m³)	Flow / Cap. (l/s)	Half Drain Time (mins)	Pipe Flow (l/s)
S1.008	SW7	26	97.792	-0.432	0.000	0.01		17.3
S1.009	SW8	26	97.787	-0.388	0.000	0.01		15.8
S1.010	SW9	27	97.780	0.649	0.000	0.18		15.1
S1.011	SEX UU 1	37	95.892	0.022	0.000	1.16		15.1
S1.012	SEX UU 2	40	94.627	-1.156	0.000	0.01		15.1

PN	US/MH Name	Status
S1.008	SW7	OK
S1.009	SW8	OK
S1.010	SW9	SURCHARGED
S1.011	SEX UU 1	SURCHARGED
S1.012	SEX UU 2	OK

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Summary Wizard of 240 minute 30 year Winter I+0% for Storm																																																																																																																																																																																																												
Simulation Criteria																																																																																																																																																																																																												
Areal Reduction Factor			1.000		Additional Flow - % of Total Flow			0.000																																																																																																																																																																																																				
Hot Start (mins)			0		MADD Factor * 10m³/ha Storage			2.000																																																																																																																																																																																																				
Hot Start Level (mm)			0		Inlet Coeffiecient			0.800																																																																																																																																																																																																				
Manhole Headloss Coeff (Global)			0.500		Flow per Person per Day (l/per/day)			0.000																																																																																																																																																																																																				
Foul Sewage per hectare (l/s)			0.000																																																																																																																																																																																																									
Number of Input Hydrographs					0		Number of Storage Structures		0																																																																																																																																																																																																			
Number of Online Controls					1		Number of Time/Area Diagrams		0																																																																																																																																																																																																			
Number of Offline Controls					0		Number of Real Time Controls		0																																																																																																																																																																																																			
Synthetic Rainfall Details																																																																																																																																																																																																												
Rainfall Model			FSR		Ratio R			0.355																																																																																																																																																																																																				
Region England and Wales			Cv (Summer)		0.750																																																																																																																																																																																																							
M5-60 (mm)			18.000		Cv (Winter)			0.840																																																																																																																																																																																																				
Margin for Flood Risk Warning (mm)					300.0																																																																																																																																																																																																							
Analysis Timestep			2.5 Second Increment (Extended)																																																																																																																																																																																																									
DTS Status					ON																																																																																																																																																																																																							
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Profile(s)					Summer and Winter																																																																																																																																																																																																							
Duration(s) (mins)			15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440, 2160, 2880, 4320, 5760, 7200, 8640, 10080																																																																																																																																																																																																									
Return Period(s) (years)					2, 30, 100																																																																																																																																																																																																							
Climate Change (%)					0, 0, 45																																																																																																																																																																																																							
<table><tr><th rowspan="2">PN</th><th rowspan="2">US/MH Name</th><th rowspan="2">Storm Rank</th><th>Water</th><th>Surcharged</th><th>Flooded</th><th rowspan="2">Flow / Overflow Cap.</th><th rowspan="2">Half Drain Time (mins)</th><th>Pipe</th><th rowspan="2">Status</th></tr><tr><th>Level (m)</th><th>Depth (m)</th><th>Volume (m³)</th><th>Flow (l/s)</th></tr><tr><td>S1.000</td><td>SW17a</td><td>29</td><td>97.779</td><td>-0.971</td><td>0.000</td><td>0.01</td><td></td><td>8.4</td><td>OK</td></tr><tr><td>S1.001</td><td>SW17</td><td>29</td><td>97.779</td><td>-0.926</td><td>0.000</td><td>0.01</td><td></td><td>7.5</td><td>OK</td></tr><tr><td>S1.002</td><td>SW1</td><td>29</td><td>97.779</td><td>-0.894</td><td>0.000</td><td>0.01</td><td></td><td>10.9</td><td>OK</td></tr><tr><td>S1.003</td><td>SW2</td><td>29</td><td>97.779</td><td>-0.860</td><td>0.000</td><td>0.01</td><td></td><td>15.1</td><td>OK</td></tr><tr><td>S2.000</td><td>SW10a</td><td>29</td><td>97.778</td><td>-1.035</td><td>0.000</td><td>0.00</td><td></td><td>1.7</td><td>OK</td></tr><tr><td>S3.000</td><td>SW10c</td><td>29</td><td>97.778</td><td>-0.862</td><td>0.000</td><td>0.00</td><td></td><td>1.1</td><td>OK</td></tr><tr><td>S2.001</td><td>SW10b</td><td>29</td><td>97.778</td><td>-0.848</td><td>0.000</td><td>0.00</td><td></td><td>2.2</td><td>OK</td></tr><tr><td>S2.002</td><td>SW10</td><td>29</td><td>97.779</td><td>-0.836</td><td>0.000</td><td>0.00</td><td></td><td>3.4</td><td>OK</td></tr><tr><td>S2.003</td><td>SW11</td><td>29</td><td>97.779</td><td>-0.813</td><td>0.000</td><td>0.00</td><td></td><td>4.9</td><td>OK</td></tr><tr><td>S1.004</td><td>SW3</td><td>29</td><td>97.779</td><td>-0.687</td><td>0.000</td><td>0.01</td><td></td><td>15.7</td><td>OK</td></tr><tr><td>S1.005</td><td>SW4</td><td>29</td><td>97.779</td><td>-0.631</td><td>0.000</td><td>0.01</td><td></td><td>17.0</td><td>OK</td></tr><tr><td>S1.006</td><td>SW5</td><td>29</td><td>97.778</td><td>-0.577</td><td>0.000</td><td>0.01</td><td></td><td>14.0</td><td>OK</td></tr><tr><td>S4.000</td><td>SW12</td><td>29</td><td>97.777</td><td>-0.873</td><td>0.000</td><td>0.00</td><td></td><td>1.5</td><td>OK</td></tr><tr><td>S4.001</td><td>SW13</td><td>29</td><td>97.778</td><td>-0.749</td><td>0.000</td><td>0.00</td><td></td><td>2.3</td><td>OK</td></tr><tr><td>S4.002</td><td>SW14</td><td>29</td><td>97.778</td><td>-0.722</td><td>0.000</td><td>0.00</td><td></td><td>3.3</td><td>OK</td></tr><tr><td>S4.003</td><td>SW15</td><td>29</td><td>97.778</td><td>-0.694</td><td>0.000</td><td>0.00</td><td></td><td>4.3</td><td>OK</td></tr><tr><td>S4.004</td><td>SW16</td><td>29</td><td>97.778</td><td>-0.696</td><td>0.000</td><td>0.00</td><td></td><td>5.6</td><td>OK</td></tr><tr><td>S1.007</td><td>SW6</td><td>29</td><td>97.778</td><td>-0.476</td><td>0.000</td><td>0.02</td><td></td><td>17.2</td><td>OK</td></tr></table>											PN	US/MH Name	Storm Rank	Water	Surcharged	Flooded	Flow / Overflow Cap.	Half Drain Time (mins)	Pipe	Status	Level (m)	Depth (m)	Volume (m³)	Flow (l/s)	S1.000	SW17a	29	97.779	-0.971	0.000	0.01		8.4	OK	S1.001	SW17	29	97.779	-0.926	0.000	0.01		7.5	OK	S1.002	SW1	29	97.779	-0.894	0.000	0.01		10.9	OK	S1.003	SW2	29	97.779	-0.860	0.000	0.01		15.1	OK	S2.000	SW10a	29	97.778	-1.035	0.000	0.00		1.7	OK	S3.000	SW10c	29	97.778	-0.862	0.000	0.00		1.1	OK	S2.001	SW10b	29	97.778	-0.848	0.000	0.00		2.2	OK	S2.002	SW10	29	97.779	-0.836	0.000	0.00		3.4	OK	S2.003	SW11	29	97.779	-0.813	0.000	0.00		4.9	OK	S1.004	SW3	29	97.779	-0.687	0.000	0.01		15.7	OK	S1.005	SW4	29	97.779	-0.631	0.000	0.01		17.0	OK	S1.006	SW5	29	97.778	-0.577	0.000	0.01		14.0	OK	S4.000	SW12	29	97.777	-0.873	0.000	0.00		1.5	OK	S4.001	SW13	29	97.778	-0.749	0.000	0.00		2.3	OK	S4.002	SW14	29	97.778	-0.722	0.000	0.00		3.3	OK	S4.003	SW15	29	97.778	-0.694	0.000	0.00		4.3	OK	S4.004	SW16	29	97.778	-0.696	0.000	0.00		5.6	OK	S1.007	SW6	29	97.778	-0.476	0.000	0.02		17.2	OK
PN	US/MH Name	Storm Rank	Water	Surcharged	Flooded	Flow / Overflow Cap.	Half Drain Time (mins)	Pipe	Status																																																																																																																																																																																																			
			Level (m)	Depth (m)	Volume (m³)			Flow (l/s)																																																																																																																																																																																																				
S1.000	SW17a	29	97.779	-0.971	0.000	0.01		8.4	OK																																																																																																																																																																																																			
S1.001	SW17	29	97.779	-0.926	0.000	0.01		7.5	OK																																																																																																																																																																																																			
S1.002	SW1	29	97.779	-0.894	0.000	0.01		10.9	OK																																																																																																																																																																																																			
S1.003	SW2	29	97.779	-0.860	0.000	0.01		15.1	OK																																																																																																																																																																																																			
S2.000	SW10a	29	97.778	-1.035	0.000	0.00		1.7	OK																																																																																																																																																																																																			
S3.000	SW10c	29	97.778	-0.862	0.000	0.00		1.1	OK																																																																																																																																																																																																			
S2.001	SW10b	29	97.778	-0.848	0.000	0.00		2.2	OK																																																																																																																																																																																																			
S2.002	SW10	29	97.779	-0.836	0.000	0.00		3.4	OK																																																																																																																																																																																																			
S2.003	SW11	29	97.779	-0.813	0.000	0.00		4.9	OK																																																																																																																																																																																																			
S1.004	SW3	29	97.779	-0.687	0.000	0.01		15.7	OK																																																																																																																																																																																																			
S1.005	SW4	29	97.779	-0.631	0.000	0.01		17.0	OK																																																																																																																																																																																																			
S1.006	SW5	29	97.778	-0.577	0.000	0.01		14.0	OK																																																																																																																																																																																																			
S4.000	SW12	29	97.777	-0.873	0.000	0.00		1.5	OK																																																																																																																																																																																																			
S4.001	SW13	29	97.778	-0.749	0.000	0.00		2.3	OK																																																																																																																																																																																																			
S4.002	SW14	29	97.778	-0.722	0.000	0.00		3.3	OK																																																																																																																																																																																																			
S4.003	SW15	29	97.778	-0.694	0.000	0.00		4.3	OK																																																																																																																																																																																																			
S4.004	SW16	29	97.778	-0.696	0.000	0.00		5.6	OK																																																																																																																																																																																																			
S1.007	SW6	29	97.778	-0.476	0.000	0.02		17.2	OK																																																																																																																																																																																																			
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Summary Wizard of 240 minute 30 year Winter I+0% for Storm

PN	US/MH Name	Storm Rank	Water Level (m)	Surcharged Depth (m)	Flooded Volume (m³)	Flow / Cap. (l/s)	Half Drain Time (mins)	Pipe Flow (l/s)
S1.008	SW7	29	97.776	-0.447	0.000	0.01		16.5
S1.009	SW8	29	97.772	-0.403	0.000	0.01		15.3
S1.010	SW9	29	97.765	0.634	0.000	0.18		15.1
S1.011 SEX UU 1		28	95.892	0.022	0.000	1.16		15.1
S1.012 SEX UU 2		30	94.627	-1.156	0.000	0.01		15.1

PN	US/MH Name	Status
S1.008	SW7	OK
S1.009	SW8	OK
S1.010	SW9	SURCHARGED
S1.011 SEX UU 1		SURCHARGED
S1.012 SEX UU 2		OK

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Summary Wizard of 360 minute 30 year Winter I+0% for Storm									
Simulation Criteria									
Areal Reduction Factor		1.000		Additional Flow - % of Total Flow	0.000				
Hot Start (mins)		0		MADD Factor * 10m³/ha Storage	2.000				
Hot Start Level (mm)		0		Inlet Coefficient	0.800				
Manhole Headloss Coeff (Global)		0.500		Flow per Person per Day (l/per/day)	0.000				
Foul Sewage per hectare (l/s)		0.000							
Number of Input Hydrographs		0		Number of Storage Structures	0				
Number of Online Controls		1		Number of Time/Area Diagrams	0				
Number of Offline Controls		0		Number of Real Time Controls	0				
Synthetic Rainfall Details									
Rainfall Model		FSR		Ratio R	0.355				
Region England and Wales Cv (Summer)		0.750							
M5-60 (mm)		18.000		Cv (Winter)	0.840				
Margin for Flood Risk Warning (mm)				300.0					
Analysis Timestep		2.5 Second Increment (Extended)							
DTS Status				ON					
DVD Status				ON					
Inertia Status				ON					
Profile(s)				Summer and Winter					
Duration(s) (mins)		15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440, 2160, 2880, 4320, 5760, 7200, 8640, 10080							
Return Period(s) (years)		2, 30, 100							
Climate Change (%)		0, 0, 45							
PN	US/MH Name	Storm Rank	Water Level (m)	Surcharged Depth (m)	Flooded Volume (m³)	Flow / Overflow Cap. (l/s)	Half Drain Time (mins)	Pipe Flow (l/s)	Status
S1.000	SW17a	31	97.744	-1.006	0.000	0.00		6.2	OK
S1.001	SW17	31	97.744	-0.961	0.000	0.00		5.7	OK
S1.002	SW1	31	97.744	-0.929	0.000	0.01		8.3	OK
S1.003	SW2	31	97.745	-0.894	0.000	0.00		11.5	OK
S2.000	SW10a	31	97.744	-1.069	0.000	0.00		1.3	OK
S3.000	SW10c	31	97.744	-0.896	0.000	0.00		1.0	OK
S2.001	SW10b	31	97.744	-0.882	0.000	0.00		2.0	OK
S2.002	SW10	31	97.744	-0.870	0.000	0.00		2.8	OK
S2.003	SW11	31	97.744	-0.848	0.000	0.00		4.1	OK
S1.004	SW3	31	97.745	-0.721	0.000	0.01		12.9	OK
S1.005	SW4	31	97.744	-0.666	0.000	0.01		14.2	OK
S1.006	SW5	31	97.744	-0.612	0.000	0.01		12.2	OK
S4.000	SW12	31	97.743	-0.907	0.000	0.00		1.2	OK
S4.001	SW13	31	97.743	-0.784	0.000	0.00		2.5	OK
S4.002	SW14	31	97.743	-0.757	0.000	0.00		3.0	OK
S4.003	SW15	31	97.743	-0.728	0.000	0.00		3.9	OK
S4.004	SW16	31	97.743	-0.731	0.000	0.00		5.2	OK
S1.007	SW6	31	97.743	-0.510	0.000	0.02		15.6	OK
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Summary Wizard of 360 minute 30 year Winter I+0% for Storm

PN	US/MH Name	Storm Rank	Water Level (m)	Surcharged Depth (m)	Flooded Volume (m³)	Flow / Cap. (l/s)	Half Drain Time (mins)	Pipe Flow (l/s)
S1.008	SW7	31	97.742	-0.482	0.000	0.01		15.3
S1.009	SW8	31	97.738	-0.437	0.000	0.01		14.7
S1.010	SW9	31	97.731	0.600	0.000	0.18		15.1
S1.011 SEX UU 1		22	95.892	0.022	0.000	1.16		15.1
S1.012 SEX UU 2		33	94.627	-1.156	0.000	0.01		15.1

PN	US/MH Name	Status
S1.008	SW7	OK
S1.009	SW8	OK
S1.010	SW9	SURCHARGED
S1.011 SEX UU 1		SURCHARGED
S1.012 SEX UU 2		OK

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Summary Wizard of 480 minute 30 year Winter I+0% for Storm

PN	US/MH Name	Storm Rank	Water Level (m)	Surcharged Depth (m)	Flooded Volume (m³)	Flow / Cap. (l/s)	Half Drain Time (mins)	Pipe Flow (l/s)
S1.008	SW7	34	97.707	-0.517	0.000	0.01		14.4
S1.009	SW8	34	97.703	-0.473	0.000	0.01		14.1
S1.010	SW9	34	97.696	0.565	0.000	0.18		15.1
S1.011	SEX UU 1	33	95.892	0.022	0.000	1.16		15.1
S1.012	SEX UU 2	19	94.627	-1.156	0.000	0.01		15.1

PN	US/MH Name	Status
S1.008	SW7	OK
S1.009	SW8	OK
S1.010	SW9	SURCHARGED
S1.011	SEX UU 1	SURCHARGED
S1.012	SEX UU 2	OK

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Summary Wizard of 600 minute 30 year Winter I+0% for Storm

PN	US/MH Name	Storm Rank	Water Level (m)	Surcharged Depth (m)	Flooded Volume (m³)	Flow / Cap. (l/s)	Half Drain Time (mins)	Pipe Flow (l/s)
S1.008	SW7	40	97.668	-0.556	0.000	0.01		13.7
S1.009	SW8	40	97.664	-0.511	0.000	0.01		13.7
S1.010	SW9	40	97.658	0.527	0.000	0.18		15.1
S1.011	SEX UU 1	34	95.892	0.022	0.000	1.16		15.1
S1.012	SEX UU 2	20	94.627	-1.156	0.000	0.01		15.1

PN	US/MH Name	Status
S1.008	SW7	OK
S1.009	SW8	OK
S1.010	SW9	SURCHARGED
S1.011	SEX UU 1	SURCHARGED
S1.012	SEX UU 2	OK

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Summary Wizard of 720 minute 30 year Winter I+0% for Storm

PN	US/MH Name	Storm Rank	Water Level (m)	Surcharged Depth (m)	Flooded Volume (m³)	Flow / Cap. (l/s)	Half Drain Time (mins)	Pipe Flow (l/s)
S1.008	SW7	43	97.628	-0.596	0.000	0.01		13.2
S1.009	SW8	43	97.624	-0.551	0.000	0.01		13.5
S1.010	SW9	43	97.619	0.488	0.000	0.18		15.1
S1.011	SEX UU 1	13	95.892	0.022	0.000	1.16		15.1
S1.012	SEX UU 2	29	94.627	-1.156	0.000	0.01		15.1

PN	US/MH Name	Status
S1.008	SW7	OK
S1.009	SW8	OK
S1.010	SW9	SURCHARGED
S1.011	SEX UU 1	SURCHARGED
S1.012	SEX UU 2	OK

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Innovyze		Network 2020.1

Summary Wizard of 960 minute 30 year Winter I+0% for Storm

PN	US/MH Name	Storm Rank	Water Level (m)	Surcharged Depth (m)	Flooded Volume (m³)	Flow / Cap. (l/s)	Half Drain Time (mins)	Pipe Flow (l/s)
S1.008	SW7	48	97.547	-0.677	0.000	0.01		12.5
S1.009	SW8	48	97.544	-0.632	0.000	0.01		13.1
S1.010	SW9	48	97.538	0.407	0.000	0.18		15.1
S1.011	SEX UU 1	23	95.892	0.022	0.000	1.16		15.1
S1.012	SEX UU 2	10	94.627	-1.156	0.000	0.01		15.1

PN	US/MH Name	Status
S1.008	SW7	OK
S1.009	SW8	OK
S1.010	SW9	SURCHARGED
S1.011	SEX UU 1	SURCHARGED
S1.012	SEX UU 2	OK

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Innovyze		Network 2020.1

Summary Wizard of 1440 minute 30 year Winter I+0% for Storm

PN	US/MH Name	Storm Rank	Water Level (m)	Surcharged Depth (m)	Flooded Volume (m³)	Flow / Cap. (l/s)	Half Drain Time (mins)	Pipe Flow (l/s)
S1.008	SW7	62	97.388	-0.836	0.000	0.01		11.7
S1.009	SW8	62	97.385	-0.790	0.000	0.01		12.6
S1.010	SW9	62	97.381	0.250	0.000	0.18		15.1
S1.011 SEX UU 1		60	95.891	0.021	0.000	1.15		15.1
S1.012 SEX UU 2		60	94.627	-1.156	0.000	0.01		15.1

PN	US/MH Name	Status
S1.008	SW7	OK
S1.009	SW8	OK
S1.010	SW9	SURCHARGED
S1.011 SEX UU 1		SURCHARGED
S1.012 SEX UU 2		OK

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Summary Wizard of 2160 minute 30 year Winter I+0% for Storm

PN	US/MH Name	Storm Rank	Water Level (m)	Surcharged Depth (m)	Flooded Volume (m³)	Flow / Cap. (l/s)	Half Drain Time (mins)	Pipe Flow (l/s)
S1.008	SW7	79	97.167	-1.057	0.000	0.01		10.7
S1.009	SW8	79	97.166	-1.009	0.000	0.01		11.9
S1.010	SW9	79	97.164	0.033	0.000	0.17		14.5
S1.011 SEX UU 1		79	95.882	0.012	0.000	1.10		14.5
S1.012 SEX UU 2		79	94.625	-1.158	0.000	0.01		14.5

PN	US/MH Name	Status
S1.008	SW7	OK
S1.009	SW8	OK
S1.010	SW9	SURCHARGED
S1.011 SEX UU 1		SURCHARGED
S1.012 SEX UU 2		OK

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Summary Wizard of 4320 minute 30 year Winter I+0% for Storm		
Simulation Criteria		
Areal Reduction Factor 1.000 Additional Flow - % of Total Flow 0.000		
Hot Start (mins) 0 MADD Factor * 10m³/ha Storage 2.000		
Hot Start Level (mm) 0 Inlet Coeffiecient 0.800		
Manhole Headloss Coeff (Global) 0.500 Flow per Person per Day (l/per/day) 0.000		
Foul Sewage per hectare (l/s) 0.000		
Number of Input Hydrographs 0 Number of Storage Structures 0		
Number of Online Controls 1 Number of Time/Area Diagrams 0		
Number of Offline Controls 0 Number of Real Time Controls 0		
Synthetic Rainfall Details		
Rainfall Model FSR Ratio R 0.355		
Region England and Wales Cv (Summer) 0.750		
M5-60 (mm) 18.000 Cv (Winter) 0.840		
Margin for Flood Risk Warning (mm) 300.0		
Analysis Timestep 2.5 Second Increment (Extended)		
DTS Status ON		
DVD Status ON		
Inertia Status ON		
Profile(s) Summer and Winter		
Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440, 2160, 2880, 4320, 5760, 7200, 8640, 10080		
Return Period(s) (years) 2, 30, 100		
Climate Change (%) 0, 0, 45		

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Summary Wizard of 15 minute 100 year Winter I+45% for Storm

PN	US/MH Name	Storm Rank	Water Level (m)	Surcharged Depth (m)	Flooded Volume (m³)	Flow / Cap. (l/s)	Half Drain Time (mins)	Pipe Flow (l/s)
S1.008	SW7	25	97.857	-0.367	0.000	0.06		83.2
S1.009	SW8	25	97.855	-0.321	0.000	0.03		45.7
S1.010	SW9	25	97.851	0.720	0.000	0.18		15.1
S1.011 SEX UU 1		61	95.891	0.021	0.000	1.15		15.1
S1.012 SEX UU 2		65	94.627	-1.156	0.000	0.01		15.1

PN	US/MH Name	Status
S1.008	SW7	OK
S1.009	SW8	OK
S1.010	SW9	SURCHARGED
S1.011 SEX UU 1		SURCHARGED
S1.012 SEX UU 2		OK

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Summary Wizard of 30 minute 100 year Winter I+45% for Storm

PN	US/MH Name	Storm Rank	Water Level (m)	Surcharged Depth (m)	Flooded Volume (m³)	Flow / Cap. (l/s)	Half Drain Time (mins)	Pipe Flow (l/s)
S1.008	SW7	21	98.056	-0.168	0.000	0.04		52.3
S1.009	SW8	21	98.054	-0.121	0.000	0.02		36.1
S1.010	SW9	21	98.049	0.918	0.000	0.18		15.1
S1.011 SEX UU 1		54	95.892	0.022	0.000	1.15		15.1
S1.012 SEX UU 2		58	94.627	-1.156	0.000	0.01		15.1

PN	US/MH Name	Status
S1.008	SW7	OK
S1.009	SW8	OK
S1.010	SW9	SURCHARGED
S1.011 SEX UU 1		SURCHARGED
S1.012 SEX UU 2		OK

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Summary Wizard of 60 minute 100 year Winter I+45% for Storm

PN	US/MH Name	Storm Rank	Water Level (m)	Surcharged Depth (m)	Flooded Volume (m³)	Flow / Cap. (l/s)	Half Drain Time (mins)	Pipe Flow (l/s)
S1.008	SW7	16	98.289	0.065	0.000	0.03		35.6
S1.009	SW8	16	98.289	0.113	0.000	0.02		28.0
S1.010	SW9	16	98.289	1.158	0.000	0.18		15.1
S1.011	SEX UU 1	45	95.892	0.022	0.000	1.16		15.1
S1.012	SEX UU 2	49	94.627	-1.156	0.000	0.01		15.1

PN	US/MH Name	Status
S1.008	SW7	SURCHARGED
S1.009	SW8	SURCHARGED
S1.010	SW9	SURCHARGED
S1.011	SEX UU 1	SURCHARGED
S1.012	SEX UU 2	OK

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Summary Wizard of 120 minute 100 year Winter I+45% for Storm											
Simulation Criteria											
Areal Reduction Factor		1.000		Additional Flow - % of Total Flow		0.000					
Hot Start (mins)		0		MADD Factor * 10m³/ha Storage		2.000					
Hot Start Level (mm)		0		Inlet Coeffiecient		0.800					
Manhole Headloss Coeff (Global)		0.500		Flow per Person per Day (l/per/day)		0.000					
Foul Sewage per hectare (l/s)		0.000									
Number of Input Hydrographs				0		Number of Storage Structures				0	
Number of Online Controls				1		Number of Time/Area Diagrams				0	
Number of Offline Controls				0		Number of Real Time Controls				0	
Synthetic Rainfall Details											
Rainfall Model		FSR		Ratio R		0.355					
Region England and Wales		Cv (Summer)		0.750							
M5-60 (mm)		18.000		Cv (Winter)		0.840					
Margin for Flood Risk Warning (mm)				300.0							
Analysis Timestep				2.5 Second Increment (Extended)							
DTS Status				ON							
DVD Status				ON							
Inertia Status				ON							
Profile(s)				Summer and Winter							
Duration(s) (mins)		15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440, 2160, 2880, 4320, 5760, 7200, 8640, 10080									
Return Period(s) (years)		2, 30, 100									
Climate Change (%)		0, 0, 45									
Water Surcharged Flooded Half Drain Pipe											
PN	US/MH Name	Storm Rank	Level (m)	Depth (m)	Volume (m³)	Flow / Cap.	Overflow (l/s)	Time (mins)	Flow (l/s)	Status	
S1.000	SW17a	7	98.794	0.044	0.000	0.02			25.8	SURCHARGED	
S1.001	SW17	6	98.795	0.090	0.000	0.02			27.2	SURCHARGED	
S1.002	SW1	6	98.796	0.123	0.000	0.04			48.1	SURCHARGED	
S1.003	SW2	6	98.821	0.182	0.000	0.02			58.6	SURCHARGED	
S2.000	SW10a	7	98.791	-0.022	0.000	0.01			9.6	OK	
S3.000	SW10c	7	98.791	0.151	0.000	0.01			8.9	SURCHARGED	
S2.001	SW10b	7	98.791	0.165	0.000	0.03			39.2	SURCHARGED	
S2.002	SW10	6	98.795	0.181	0.000	0.05			47.3	SURCHARGED	
S2.003	SW11	6	98.812	0.219	0.000	0.02			59.6	SURCHARGED	
S1.004	SW3	6	98.834	0.368	0.000	0.09			149.9	SURCHARGED	
S1.005	SW4	6	98.863	0.453	0.000	0.11			181.2	SURCHARGED	
S1.006	SW5	6	98.885	0.529	0.000	0.09			210.4	SURCHARGED	
S4.000	SW12	6	98.871	0.221	0.000	0.01			13.9	SURCHARGED	
S4.001	SW13	6	98.871	0.344	0.000	0.04			43.2	SURCHARGED	
S4.002	SW14	6	98.871	0.372	0.000	0.06			72.0	SURCHARGED	
S4.003	SW15	6	98.875	0.403	0.000	0.05			87.5	SURCHARGED	
S4.004	SW16	6	98.892	0.418	0.000	0.14			176.4	SURCHARGED	
S1.007	SW6	6	98.909	0.655	0.000	0.36			345.4	SURCHARGED	
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Summary Wizard of 120 minute 100 year Winter I+45% for Storm

PN	US/MH Name	Storm Rank	Water Level (m)	Surcharged Depth (m)	Flooded Volume (m³)	Flow / Cap. (l/s)	Half Drain Time (mins)	Pipe Flow (l/s)
S1.008	SW7	6	98.940	0.716	0.000	0.14		198.8
S1.009	SW8	6	98.965	0.789	0.000	0.07		117.2
S1.010	SW9	6	98.976	1.845	0.000	0.18		15.1
S1.011	SEX UU 1	40	95.892	0.022	0.000	1.16		15.1
S1.012	SEX UU 2	44	94.627	-1.156	0.000	0.01		15.1

PN	US/MH Name	Status
S1.008	SW7	SURCHARGED
S1.009	SW8	SURCHARGED
S1.010	SW9	FLOOD RISK
S1.011	SEX UU 1	SURCHARGED
S1.012	SEX UU 2	OK

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Summary Wizard of 180 minute 100 year Winter I+45% for Storm

Simulation Criteria

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

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

Synthetic Rainfall Details

Rainfall Model FSR Ratio R 0.355
 Region England and Wales Cv (Summer) 0.750
 M5-60 (mm) 18.000 Cv (Winter) 0.840

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

Profile(s) Summer and Winter
 Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600,
 720, 960, 1440, 2160, 2880, 4320, 5760,
 7200, 8640, 10080
 Return Period(s) (years) 2, 30, 100
 Climate Change (%) 0, 0, 45

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

PN	US/MH Name	Storm Rank	Water Level (m)	Surcharged Depth (m)	Flooded Volume (m ³)	Flow / Overflow Cap. (l/s)	Half Drain Time (mins)	Pipe Flow (l/s)	Status
S1.000	SW17a	4	99.074	0.324	0.000	0.01		19.9	SURCHARGED
S1.001	SW17	4	99.074	0.369	0.000	0.04		43.8	SURCHARGED
S1.002	SW1	4	99.075	0.402	0.000	0.05		66.9	SURCHARGED
S1.003	SW2	4	99.077	0.438	0.000	0.03		82.5	SURCHARGED
S2.000	SW10a	4	99.076	0.263	0.000	0.02		15.2	SURCHARGED
S3.000	SW10c	4	99.076	0.436	0.000	0.01		15.2	SURCHARGED
S2.001	SW10b	4	99.076	0.450	0.000	0.04		48.0	SURCHARGED
S2.002	SW10	4	99.078	0.463	0.000	0.07		62.5	SURCHARGED
S2.003	SW11	4	99.079	0.486	0.000	0.03		78.4	SURCHARGED
S1.004	SW3	4	99.079	0.613	0.000	0.13		214.5	SURCHARGED
S1.005	SW4	4	99.110	0.700	0.000	0.15		252.9	SURCHARGED
S1.006	SW5	4	99.135	0.780	0.000	0.12		283.5	SURCHARGED
S4.000	SW12	4	99.138	0.488	0.000	0.01		22.9	SURCHARGED
S4.001	SW13	4	99.128	0.601	0.000	0.04		47.8	SURCHARGED
S4.002	SW14	4	99.125	0.625	0.000	0.08		88.0	SURCHARGED

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Summary Wizard of 180 minute 100 year Winter I+45% for Storm

PN	US/MH Name	Storm Rank	Water Level (m)	Surcharged Depth (m)	Flooded Volume (m³)	Flow / Cap. (l/s)	Half Drain Time (mins)	Pipe Flow (l/s)
S4.003	SW15	4	99.125	0.654	0.000	0.08		127.0
S4.004	SW16	4	99.135	0.661	0.000	0.17		218.4
S1.007	SW6	4	99.150	0.897	0.000	0.42		401.9
S1.008	SW7	4	99.179	0.955	0.000	0.21		294.4
S1.009	SW8	4	99.204	1.028	0.000	0.09		142.0
S1.010	SW9	3	99.214	2.083	1.800	0.18		15.5
S1.011	SEX UU 1	4	95.897	0.027	0.000	1.17		15.3
S1.012	SEX UU 2	4	94.628	-1.155	0.000	0.01		15.1

PN	US/MH Name	Status
S4.003	SW15	SURCHARGED
S4.004	SW16	SURCHARGED
S1.007	SW6	SURCHARGED
S1.008	SW7	SURCHARGED
S1.009	SW8	SURCHARGED
S1.010	SW9	FLOOD
S1.011	SEX UU 1	SURCHARGED
S1.012	SEX UU 2	OK

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Summary Wizard of 240 minute 100 year Winter I+45% for Storm

Simulation Criteria

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

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

Synthetic Rainfall Details

Rainfall Model FSR Ratio R 0.355
 Region England and Wales Cv (Summer) 0.750
 M5-60 (mm) 18.000 Cv (Winter) 0.840

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

Profile(s) Summer and Winter
 Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600,
 720, 960, 1440, 2160, 2880, 4320, 5760,
 7200, 8640, 10080
 Return Period(s) (years) 2, 30, 100
 Climate Change (%) 0, 0, 45

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

PN	US/MH Name	Storm Rank	Water Level (m)	Surcharged Depth (m)	Flooded Volume (m ³)	Flow / Overflow Cap. (l/s)	Half Drain Time (mins)	Pipe Flow (l/s)	Status
S1.000	SW17a	2	99.125	0.375	0.000	0.01		20.1	SURCHARGED
S1.001	SW17	2	99.124	0.419	0.000	0.04		43.9	SURCHARGED
S1.002	SW1	2	99.124	0.451	0.000	0.05		66.5	SURCHARGED
S1.003	SW2	2	99.125	0.486	0.000	0.03		82.4	SURCHARGED
S2.000	SW10a	2	99.123	0.310	0.000	0.02		15.5	SURCHARGED
S3.000	SW10c	2	99.123	0.483	0.000	0.01		15.4	SURCHARGED
S2.001	SW10b	2	99.124	0.498	0.000	0.04		49.4	SURCHARGED
S2.002	SW10	2	99.124	0.510	0.000	0.07		63.6	SURCHARGED
S2.003	SW11	2	99.126	0.534	0.000	0.03		78.3	SURCHARGED
S1.004	SW3	2	99.127	0.661	0.000	0.13		222.8	SURCHARGED
S1.005	SW4	2	99.144	0.734	0.000	0.15		250.7	SURCHARGED
S1.006	SW5	2	99.163	0.808	0.000	0.12		278.7	SURCHARGED
S4.000	SW12	2	99.157	0.507	0.000	0.01		22.9	SURCHARGED
S4.001	SW13	2	99.153	0.627	0.000	0.04		48.1	SURCHARGED
S4.002	SW14	2	99.152	0.652	0.000	0.08		89.2	SURCHARGED

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Summary Wizard of 240 minute 100 year Winter I+45% for Storm

PN	US/MH Name	Storm Rank	Water Level (m)	Surcharged Depth (m)	Flooded Volume (m³)	Flow / Cap. (l/s)	Half Drain Time (mins)	Pipe Flow (l/s)
S4.003	SW15	2	99.150	0.679	0.000	0.08		127.1
S4.004	SW16	2	99.164	0.690	0.000	0.16		205.6
S1.007	SW6	2	99.179	0.926	0.000	0.43		408.1
S1.008	SW7	2	99.202	0.978	0.000	0.21		290.7
S1.009	SW8	2	99.214	1.039	0.000	0.09		142.4
S1.010	SW9	1	99.214	2.083	2.038	0.18		15.5
S1.011	SEX UU 1	2	95.898	0.028	0.000	1.18		15.5
S1.012	SEX UU 2	2	94.628	-1.155	0.000	0.01		15.3

PN	US/MH Name	Status
S4.003	SW15	SURCHARGED
S4.004	SW16	SURCHARGED
S1.007	SW6	SURCHARGED
S1.008	SW7	SURCHARGED
S1.009	SW8	SURCHARGED
S1.010	SW9	FLOOD
S1.011	SEX UU 1	SURCHARGED
S1.012	SEX UU 2	OK

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Summary Wizard of 360 minute 100 year Winter I+45% for Storm

Simulation Criteria

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

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

Synthetic Rainfall Details

Rainfall Model FSR Ratio R 0.355
 Region England and Wales Cv (Summer) 0.750
 M5-60 (mm) 18.000 Cv (Winter) 0.840

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

Profile(s) Summer and Winter
 Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600,
 720, 960, 1440, 2160, 2880, 4320, 5760,
 7200, 8640, 10080
 Return Period(s) (years) 2, 30, 100
 Climate Change (%) 0, 0, 45

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

PN	US/MH Name	Storm Rank	Water Level (m)	Surcharged Depth (m)	Flooded Volume (m ³)	Flow / Overflow Cap. (l/s)	Half Drain Time (mins)	Pipe Flow (l/s)	Status
S1.000	SW17a	1	99.136	0.386	0.000	0.01		19.5	SURCHARGED
S1.001	SW17	1	99.135	0.430	0.000	0.04		43.3	SURCHARGED
S1.002	SW1	1	99.134	0.461	0.000	0.05		66.6	SURCHARGED
S1.003	SW2	1	99.133	0.494	0.000	0.03		81.3	SURCHARGED
S2.000	SW10a	1	99.134	0.321	0.000	0.02		15.0	SURCHARGED
S3.000	SW10c	1	99.134	0.494	0.000	0.01		15.0	SURCHARGED
S2.001	SW10b	1	99.133	0.507	0.000	0.04		49.3	SURCHARGED
S2.002	SW10	1	99.132	0.518	0.000	0.07		62.1	SURCHARGED
S2.003	SW11	1	99.132	0.540	0.000	0.03		78.1	SURCHARGED
S1.004	SW3	1	99.135	0.669	0.000	0.13		212.9	SURCHARGED
S1.005	SW4	1	99.161	0.751	0.000	0.15		249.4	SURCHARGED
S1.006	SW5	1	99.179	0.823	0.000	0.12		282.0	SURCHARGED
S4.000	SW12	1	99.167	0.517	0.000	0.01		23.3	SURCHARGED
S4.001	SW13	1	99.166	0.639	0.000	0.04		47.9	SURCHARGED
S4.002	SW14	1	99.167	0.667	0.000	0.08		88.9	SURCHARGED

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Summary Wizard of 360 minute 100 year Winter I+45% for Storm

PN	US/MH Name	Storm Rank	Water Level (m)	Surcharged Depth (m)	Flooded Volume (m³)	Flow / Cap. (l/s)	Half Drain Time (mins)	Pipe Flow (l/s)
S4.003	SW15	1	99.170	0.698	0.000	0.08		126.8
S4.004	SW16	1	99.179	0.705	0.000	0.17		212.3
S1.007	SW6	1	99.189	0.935	0.000	0.42		399.4
S1.008	SW7	1	99.207	0.983	0.000	0.21		292.2
S1.009	SW8	1	99.218	1.042	0.000	0.09		143.0
S1.010	SW9	2	99.214	2.083	1.928	0.18		15.5
S1.011	SEX UU 1	1	95.898	0.028	0.000	1.18		15.5
S1.012	SEX UU 2	1	94.628	-1.155	0.000	0.01		15.3

PN	US/MH Name	Status
S4.003	SW15	SURCHARGED
S4.004	SW16	SURCHARGED
S1.007	SW6	SURCHARGED
S1.008	SW7	SURCHARGED
S1.009	SW8	SURCHARGED
S1.010	SW9	FLOOD
S1.011	SEX UU 1	SURCHARGED
S1.012	SEX UU 2	OK

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Summary Wizard of 480 minute 100 year Winter I+45% for Storm

Simulation Criteria

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

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

Synthetic Rainfall Details

Rainfall Model FSR Ratio R 0.355
 Region England and Wales Cv (Summer) 0.750
 M5-60 (mm) 18.000 Cv (Winter) 0.840

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

Profile(s) Summer and Winter
 Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600,
 720, 960, 1440, 2160, 2880, 4320, 5760,
 7200, 8640, 10080
 Return Period(s) (years) 2, 30, 100
 Climate Change (%) 0, 0, 45

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

PN	US/MH Name	Storm Rank	Water Level (m)	Surcharged Depth (m)	Flooded Volume (m ³)	Flow / Overflow Cap. (l/s)	Half Drain Time (mins)	Pipe Flow (l/s)	Status
S1.000	SW17a	3	99.094	0.344	0.000	0.01		18.7	SURCHARGED
S1.001	SW17	3	99.093	0.388	0.000	0.04		42.9	SURCHARGED
S1.002	SW1	3	99.091	0.418	0.000	0.05		66.2	SURCHARGED
S1.003	SW2	3	99.092	0.453	0.000	0.03		80.2	SURCHARGED
S2.000	SW10a	3	99.091	0.278	0.000	0.02		15.4	SURCHARGED
S3.000	SW10c	3	99.091	0.451	0.000	0.01		15.3	SURCHARGED
S2.001	SW10b	3	99.090	0.464	0.000	0.04		49.4	SURCHARGED
S2.002	SW10	3	99.091	0.477	0.000	0.07		62.7	SURCHARGED
S2.003	SW11	3	99.092	0.500	0.000	0.03		77.5	SURCHARGED
S1.004	SW3	3	99.100	0.634	0.000	0.13		216.2	SURCHARGED
S1.005	SW4	3	99.133	0.723	0.000	0.15		250.1	SURCHARGED
S1.006	SW5	3	99.155	0.799	0.000	0.12		280.6	SURCHARGED
S4.000	SW12	3	99.144	0.494	0.000	0.01		22.6	SURCHARGED
S4.001	SW13	3	99.140	0.614	0.000	0.04		47.4	SURCHARGED
S4.002	SW14	3	99.140	0.641	0.000	0.08		87.7	SURCHARGED

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Summary Wizard of 480 minute 100 year Winter I+45% for Storm

PN	US/MH Name	Storm Rank	Water Level (m)	Surcharged Depth (m)	Flooded Volume (m³)	Flow / Cap. (l/s)	Half Drain Time (mins)	Pipe Flow (l/s)
S4.003	SW15	3	99.142	0.671	0.000	0.08		125.7
S4.004	SW16	3	99.153	0.679	0.000	0.17		215.6
S1.007	SW6	3	99.166	0.912	0.000	0.43		404.2
S1.008	SW7	3	99.193	0.969	0.000	0.21		289.4
S1.009	SW8	3	99.212	1.036	0.000	0.09		142.6
S1.010	SW9	4	99.214	2.083	1.556	0.18		15.5
S1.011	SEX UU 1	3	95.897	0.027	0.000	1.17		15.4
S1.012	SEX UU 2	3	94.628	-1.155	0.000	0.01		15.1

PN	US/MH Name	Status
S4.003	SW15	SURCHARGED
S4.004	SW16	SURCHARGED
S1.007	SW6	SURCHARGED
S1.008	SW7	SURCHARGED
S1.009	SW8	SURCHARGED
S1.010	SW9	FLOOD
S1.011	SEX UU 1	SURCHARGED
S1.012	SEX UU 2	OK

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Summary Wizard of 600 minute 100 year Winter I+45% for Storm

PN	US/MH Name	Storm Rank	Water Level (m)	Surcharged Depth (m)	Flooded Volume (m³)	Flow / Cap. (l/s)	Half Drain Time (mins)	Pipe Flow (l/s)
S1.008	SW7	5	99.138	0.914	0.000	0.21		289.2
S1.009	SW8	5	99.168	0.992	0.000	0.09		138.4
S1.010	SW9	5	99.184	2.053	0.000	0.18		15.2
S1.011	SEX UU 1	5	95.892	0.022	0.000	1.16		15.1
S1.012	SEX UU 2	34	94.627	-1.156	0.000	0.01		15.1

PN	US/MH Name	Status
S1.008	SW7	SURCHARGED
S1.009	SW8	SURCHARGED
S1.010	SW9	FLOOD RISK
S1.011	SEX UU 1	SURCHARGED
S1.012	SEX UU 2	OK

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5 Manchester Square London W1U 3PD																																																																																																																																																																																																																																
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Summary Wizard of 720 minute 100 year Winter I+45% for Storm																																																																																																																																																																																																																																
Simulation Criteria																																																																																																																																																																																																																																
Areal Reduction Factor		1.000		Additional Flow - % of Total Flow 0.000																																																																																																																																																																																																																												
Hot Start (mins)		0		MADD Factor * 10m³/ha Storage 2.000																																																																																																																																																																																																																												
Hot Start Level (mm)		0		Inlet Coeffiecient 0.800																																																																																																																																																																																																																												
Manhole Headloss Coeff (Global)		0.500		Flow per Person per Day (l/per/day) 0.000																																																																																																																																																																																																																												
Foul Sewage per hectare (l/s)		0.000																																																																																																																																																																																																																														
Number of Input Hydrographs		0		Number of Storage Structures 0																																																																																																																																																																																																																												
Number of Online Controls		1		Number of Time/Area Diagrams 0																																																																																																																																																																																																																												
Number of Offline Controls		0		Number of Real Time Controls 0																																																																																																																																																																																																																												
Synthetic Rainfall Details																																																																																																																																																																																																																																
Rainfall Model		FSR		Ratio R 0.355																																																																																																																																																																																																																												
Region England and Wales Cv (Summer)		0.750																																																																																																																																																																																																																														
M5-60 (mm)		18.000		Cv (Winter) 0.840																																																																																																																																																																																																																												
Margin for Flood Risk Warning (mm)				300.0																																																																																																																																																																																																																												
Analysis Timestep		2.5 Second Increment (Extended)																																																																																																																																																																																																																														
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Profile(s)				Summer and Winter																																																																																																																																																																																																																												
Duration(s) (mins)		15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440, 2160, 2880, 4320, 5760, 7200, 8640, 10080																																																																																																																																																																																																																														
Return Period(s) (years)				2, 30, 100																																																																																																																																																																																																																												
Climate Change (%)				0, 0, 45																																																																																																																																																																																																																												
<table><tr><th colspan="3"></th><th>Water</th><th>Surcharged</th><th>Flooded</th><th colspan="2"></th><th>Half Drain</th><th>Pipe</th><th rowspan="2">Status</th></tr><tr><th>PN</th><th>US/MH Name</th><th>Storm Rank</th><th>Level (m)</th><th>Depth (m)</th><th>Volume (m³)</th><th>Flow / Cap.</th><th>Overflow (l/s)</th><th>Time (mins)</th><th>Flow (l/s)</th></tr><tr><td>S1.000</td><td>SW17a</td><td>6</td><td>98.795</td><td>0.045</td><td>0.000</td><td>0.01</td><td></td><td></td><td>8.4</td><td>SURCHARGED</td></tr><tr><td>S1.001</td><td>SW17</td><td>7</td><td>98.794</td><td>0.089</td><td>0.000</td><td>0.02</td><td></td><td></td><td>27.4</td><td>SURCHARGED</td></tr><tr><td>S1.002</td><td>SW1</td><td>7</td><td>98.791</td><td>0.118</td><td>0.000</td><td>0.04</td><td></td><td></td><td>47.8</td><td>SURCHARGED</td></tr><tr><td>S1.003</td><td>SW2</td><td>7</td><td>98.807</td><td>0.168</td><td>0.000</td><td>0.02</td><td></td><td></td><td>56.7</td><td>SURCHARGED</td></tr><tr><td>S2.000</td><td>SW10a</td><td>6</td><td>98.803</td><td>-0.010</td><td>0.000</td><td>0.01</td><td></td><td></td><td>10.2</td><td>OK</td></tr><tr><td>S3.000</td><td>SW10c</td><td>6</td><td>98.796</td><td>0.156</td><td>0.000</td><td>0.01</td><td></td><td></td><td>9.2</td><td>SURCHARGED</td></tr><tr><td>S2.001</td><td>SW10b</td><td>6</td><td>98.795</td><td>0.169</td><td>0.000</td><td>0.03</td><td></td><td></td><td>38.9</td><td>SURCHARGED</td></tr><tr><td>S2.002</td><td>SW10</td><td>7</td><td>98.793</td><td>0.178</td><td>0.000</td><td>0.05</td><td></td><td></td><td>47.7</td><td>SURCHARGED</td></tr><tr><td>S2.003</td><td>SW11</td><td>7</td><td>98.800</td><td>0.208</td><td>0.000</td><td>0.02</td><td></td><td></td><td>60.0</td><td>SURCHARGED</td></tr><tr><td>S1.004</td><td>SW3</td><td>7</td><td>98.819</td><td>0.353</td><td>0.000</td><td>0.10</td><td></td><td></td><td>167.9</td><td>SURCHARGED</td></tr><tr><td>S1.005</td><td>SW4</td><td>7</td><td>98.847</td><td>0.437</td><td>0.000</td><td>0.11</td><td></td><td></td><td>178.6</td><td>SURCHARGED</td></tr><tr><td>S1.006</td><td>SW5</td><td>7</td><td>98.867</td><td>0.511</td><td>0.000</td><td>0.09</td><td></td><td></td><td>203.4</td><td>SURCHARGED</td></tr><tr><td>S4.000</td><td>SW12</td><td>7</td><td>98.859</td><td>0.209</td><td>0.000</td><td>0.01</td><td></td><td></td><td>14.8</td><td>SURCHARGED</td></tr><tr><td>S4.001</td><td>SW13</td><td>7</td><td>98.858</td><td>0.331</td><td>0.000</td><td>0.04</td><td></td><td></td><td>43.2</td><td>SURCHARGED</td></tr><tr><td>S4.002</td><td>SW14</td><td>7</td><td>98.858</td><td>0.358</td><td>0.000</td><td>0.06</td><td></td><td></td><td>74.9</td><td>SURCHARGED</td></tr><tr><td>S4.003</td><td>SW15</td><td>7</td><td>98.859</td><td>0.387</td><td>0.000</td><td>0.06</td><td></td><td></td><td>95.2</td><td>SURCHARGED</td></tr><tr><td>S4.004</td><td>SW16</td><td>7</td><td>98.871</td><td>0.397</td><td>0.000</td><td>0.14</td><td></td><td></td><td>177.1</td><td>SURCHARGED</td></tr><tr><td>S1.007</td><td>SW6</td><td>7</td><td>98.888</td><td>0.634</td><td>0.000</td><td>0.35</td><td></td><td></td><td>334.2</td><td>SURCHARGED</td></tr></table>									Water	Surcharged	Flooded			Half Drain	Pipe	Status	PN	US/MH Name	Storm Rank	Level (m)	Depth (m)	Volume (m³)	Flow / Cap.	Overflow (l/s)	Time (mins)	Flow (l/s)	S1.000	SW17a	6	98.795	0.045	0.000	0.01			8.4	SURCHARGED	S1.001	SW17	7	98.794	0.089	0.000	0.02			27.4	SURCHARGED	S1.002	SW1	7	98.791	0.118	0.000	0.04			47.8	SURCHARGED	S1.003	SW2	7	98.807	0.168	0.000	0.02			56.7	SURCHARGED	S2.000	SW10a	6	98.803	-0.010	0.000	0.01			10.2	OK	S3.000	SW10c	6	98.796	0.156	0.000	0.01			9.2	SURCHARGED	S2.001	SW10b	6	98.795	0.169	0.000	0.03			38.9	SURCHARGED	S2.002	SW10	7	98.793	0.178	0.000	0.05			47.7	SURCHARGED	S2.003	SW11	7	98.800	0.208	0.000	0.02			60.0	SURCHARGED	S1.004	SW3	7	98.819	0.353	0.000	0.10			167.9	SURCHARGED	S1.005	SW4	7	98.847	0.437	0.000	0.11			178.6	SURCHARGED	S1.006	SW5	7	98.867	0.511	0.000	0.09			203.4	SURCHARGED	S4.000	SW12	7	98.859	0.209	0.000	0.01			14.8	SURCHARGED	S4.001	SW13	7	98.858	0.331	0.000	0.04			43.2	SURCHARGED	S4.002	SW14	7	98.858	0.358	0.000	0.06			74.9	SURCHARGED	S4.003	SW15	7	98.859	0.387	0.000	0.06			95.2	SURCHARGED	S4.004	SW16	7	98.871	0.397	0.000	0.14			177.1	SURCHARGED	S1.007	SW6	7	98.888	0.634	0.000	0.35			334.2	SURCHARGED
			Water	Surcharged	Flooded			Half Drain	Pipe	Status																																																																																																																																																																																																																						
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S1.004	SW3	7	98.819	0.353	0.000	0.10			167.9	SURCHARGED																																																																																																																																																																																																																						
S1.005	SW4	7	98.847	0.437	0.000	0.11			178.6	SURCHARGED																																																																																																																																																																																																																						
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S1.007	SW6	7	98.888	0.634	0.000	0.35			334.2	SURCHARGED																																																																																																																																																																																																																						
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Summary Wizard of 720 minute 100 year Winter I+45% for Storm

PN	US/MH Name	Storm Rank	Water Level (m)	Surcharged Depth (m)	Flooded Volume (m³)	Flow / Cap. (l/s)	Half Drain Time (mins)	Pipe Flow (l/s)
S1.008	SW7	7	98.917	0.693	0.000	0.17		240.0
S1.009	SW8	7	98.942	0.766	0.000	0.07		115.2
S1.010	SW9	7	98.955	1.824	0.000	0.18		15.1
S1.011	SEX UU 1	24	95.892	0.022	0.000	1.16		15.1
S1.012	SEX UU 2	17	94.627	-1.156	0.000	0.01		15.1

PN	US/MH Name	Status
S1.008	SW7	SURCHARGED
S1.009	SW8	SURCHARGED
S1.010	SW9	FLOOD RISK
S1.011	SEX UU 1	SURCHARGED
S1.012	SEX UU 2	OK

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Summary Wizard of 960 minute 100 year Winter I+45% for Storm

PN	US/MH Name	Storm Rank	Water Level (m)	Surcharged Depth (m)	Flooded Volume (m³)	Flow / Cap. (l/s)	Half Drain Time (mins)	Pipe Flow (l/s)
S1.008	SW7	8	98.460	0.236	0.000	0.01		16.1
S1.009	SW8	9	98.460	0.285	0.000	0.01		13.3
S1.010	SW9	9	98.460	1.329	0.000	0.18		15.1
S1.011	SEX UU 1	17	95.892	0.022	0.000	1.16		15.1
S1.012	SEX UU 2	28	94.627	-1.156	0.000	0.01		15.1

PN	US/MH Name	Status
S1.008	SW7	SURCHARGED
S1.009	SW8	SURCHARGED
S1.010	SW9	SURCHARGED
S1.011	SEX UU 1	SURCHARGED
S1.012	SEX UU 2	OK

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Summary Wizard of 1440 minute 100 year Winter I+45% for Storm

PN	US/MH Name	Storm Rank	Water	Surcharged	Flooded	Flow / Cap.	Overflow (l/s)	Half Drain	Pipe
			Level (m)	Depth (m)	Volume (m³)			Time (mins)	Flow (l/s)
S1.008	SW7	18	98.205	-0.019	0.000	0.01			12.3
S1.009	SW8	18	98.183	0.008	0.000	0.01			13.0
S1.010	SW9	18	98.183	1.052	0.000	0.18			15.1
S1.011 SEX UU 1		18	95.892	0.022	0.000	1.16			15.1
S1.012 SEX UU 2		23	94.627	-1.156	0.000	0.01			15.1

PN	US/MH Name	Status
S1.008	SW7	OK
S1.009	SW8	SURCHARGED
S1.010	SW9	SURCHARGED
S1.011 SEX UU 1		SURCHARGED
S1.012 SEX UU 2		OK

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Summary Wizard of 2160 minute 100 year Winter I+45% for Storm

PN	US/MH Name	Storm Rank	Water Level (m)	Surcharged Depth (m)	Flooded Volume (m³)	Flow / Cap. (l/s)	Half Drain Time (mins)	Pipe Flow (l/s)
S1.008	SW7	24	97.900	-0.324	0.000	0.01		11.7
S1.009	SW8	24	97.895	-0.280	0.000	0.01		12.7
S1.010	SW9	24	97.885	0.754	0.000	0.18		15.1
S1.011	SEX UU 1	12	95.892	0.022	0.000	1.16		15.1
S1.012	SEX UU 2	9	94.627	-1.156	0.000	0.01		15.1

PN	US/MH Name	Status
S1.008	SW7	OK
S1.009	SW8	OK
S1.010	SW9	SURCHARGED
S1.011	SEX UU 1	SURCHARGED
S1.012	SEX UU 2	OK

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Summary Wizard of 2880 minute 100 year Winter I+45% for Storm

PN	US/MH Name	Storm Rank	Water Level (m)	Surcharged Depth (m)	Flooded Volume (m³)	Flow / Cap. (l/s)	Half Drain Time (mins)	Pipe Flow (l/s)
S1.008	SW7	39	97.668	-0.555	0.000	0.01		11.4
S1.009	SW8	39	97.665	-0.511	0.000	0.01		12.8
S1.010	SW9	39	97.659	0.528	0.000	0.18		15.1
S1.011 SEX UU 1		9	95.892	0.022	0.000	1.16		15.1
S1.012 SEX UU 2		13	94.627	-1.156	0.000	0.01		15.1

PN	US/MH Name	Status
S1.008	SW7	OK
S1.009	SW8	OK
S1.010	SW9	SURCHARGED
S1.011 SEX UU 1		SURCHARGED
S1.012 SEX UU 2		OK

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Summary Wizard of 4320 minute 100 year Winter I+45% for Storm										
Simulation Criteria										
Areal Reduction Factor		1.000		Additional Flow - % of Total Flow		0.000				
Hot Start (mins)		0		MADD Factor * 10m³/ha Storage		2.000				
Hot Start Level (mm)		0		Inlet Coeffiecient		0.800				
Manhole Headloss Coeff (Global)		0.500		Flow per Person per Day (l/per/day)		0.000				
Foul Sewage per hectare (l/s)		0.000								
Number of Input Hydrographs		0		Number of Storage Structures		0				
Number of Online Controls		1		Number of Time/Area Diagrams		0				
Number of Offline Controls		0		Number of Real Time Controls		0				
Synthetic Rainfall Details										
Rainfall Model		FSR		Ratio R		0.355				
Region England and Wales Cv (Summer)		0.750								
M5-60 (mm)		18.000		Cv (Winter)		0.840				
Margin for Flood Risk Warning (mm)						300.0				
Analysis Timestep		2.5		Second Increment (Extended)						
DTS Status						ON				
DVD Status						ON				
Inertia Status						ON				
Profile(s)						Summer and Winter				
Duration(s) (mins)						15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440, 2160, 2880, 4320, 5760, 7200, 8640, 10080				
Return Period(s) (years)						2, 30, 100				
Climate Change (%)						0, 0, 45				
Water Surcharged Flooded Half Drain Pipe										
PN	US/MH Name	Storm Rank	Level (m)	Depth (m)	Volume (m³)	Flow / Overflow Cap.		Time (mins)	Pipe Flow (l/s)	Status
S1.000	SW17a	79	97.409	-1.341	0.000	0.00			1.9	OK
S1.001	SW17	79	97.367	-1.338	0.000	0.00			1.9	OK
S1.002	SW1	77	97.341	-1.332	0.000	0.00			2.8	OK
S1.003	SW2	73	97.315	-1.324	0.000	0.00			4.0	OK
S2.000	SW10a	79	97.466	-1.347	0.000	0.00			0.4	OK
S3.000	SW10c	73	97.306	-1.334	0.000	0.00			0.4	OK
S2.001	SW10b	73	97.306	-1.320	0.000	0.00			0.7	OK
S2.002	SW10	73	97.306	-1.308	0.000	0.00			1.2	OK
S2.003	SW11	73	97.305	-1.287	0.000	0.00			1.9	OK
S1.004	SW3	73	97.305	-1.161	0.000	0.00			6.0	OK
S1.005	SW4	73	97.305	-1.105	0.000	0.00			7.2	OK
S1.006	SW5	73	97.304	-1.051	0.000	0.00			7.0	OK
S4.000	SW12	73	97.306	-1.344	0.000	0.00			0.5	OK
S4.001	SW13	73	97.304	-1.223	0.000	0.00			1.3	OK
S4.002	SW14	73	97.304	-1.196	0.000	0.00			2.0	OK
S4.003	SW15	73	97.304	-1.168	0.000	0.00			2.4	OK
S4.004	SW16	73	97.304	-1.170	0.000	0.00			3.5	OK
S1.007	SW6	73	97.304	-0.949	0.000	0.01			10.2	OK
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Summary Wizard of 4320 minute 100 year Winter I+45% for Storm

PN	US/MH Name	Storm Rank	Water Level (m)	Surcharged Depth (m)	Flooded Volume (m³)	Flow / Cap. (l/s)	Overflow (l/s)	Half Drain Time (mins)	Pipe Flow (l/s)
S1.008	SW7	73	97.303	-0.920	0.000	0.01			11.0
S1.009	SW8	73	97.301	-0.874	0.000	0.01			12.4
S1.010	SW9	73	97.298	0.167	0.000	0.18			15.0
S1.011	SEX UU 1	73	95.890	0.020	0.000	1.14			15.0
S1.012	SEX UU 2	73	94.627	-1.156	0.000	0.01			15.0

PN	US/MH Name	Status
S1.008	SW7	OK
S1.009	SW8	OK
S1.010	SW9	SURCHARGED
S1.011	SEX UU 1	SURCHARGED
S1.012	SEX UU 2	OK

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Summary Wizard of 8640 minute 100 year Winter I+45% for Storm

Simulation Criteria

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

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

Synthetic Rainfall Details

Rainfall Model FSR Ratio R 0.355
 Region England and Wales Cv (Summer) 0.750
 M5-60 (mm) 18.000 Cv (Winter) 0.840

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

Profile(s) Summer and Winter
 Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600,
 720, 960, 1440, 2160, 2880, 4320, 5760,
 7200, 8640, 10080
 Return Period(s) (years) 2, 30, 100
 Climate Change (%) 0, 0, 45

PN	US/MH Name	Storm Rank	Water			Surcharged		Flooded	Half Drain		Pipe	Status
			Level (m)	Depth (m)	Volume (m ³)	Flow / Cap.	Overflow (l/s)		Time (mins)	Flow (l/s)		
S1.000	SW17a	93	97.405	-1.345	0.000	0.00				1.1	OK	
S1.001	SW17	93	97.362	-1.343	0.000	0.00				1.1	OK	
S1.002	SW1	93	97.332	-1.341	0.000	0.00				1.6	OK	
S1.003	SW2	93	97.295	-1.344	0.000	0.00				2.3	OK	
S2.000	SW10a	93	97.465	-1.348	0.000	0.00				0.2	OK	
S3.000	SW10c	93	97.292	-1.348	0.000	0.00				0.2	OK	
S2.001	SW10b	93	97.279	-1.347	0.000	0.00				0.4	OK	
S2.002	SW10	93	97.270	-1.344	0.000	0.00				0.7	OK	
S2.003	SW11	93	97.245	-1.348	0.000	0.00				1.0	OK	
S1.004	SW3	93	97.131	-1.335	0.000	0.00				3.5	OK	
S1.005	SW4	93	97.078	-1.332	0.000	0.00				4.1	OK	
S1.006	SW5	93	97.020	-1.335	0.000	0.00				4.1	OK	
S4.000	SW12	93	97.301	-1.349	0.000	0.00				0.3	OK	
S4.001	SW13	93	97.181	-1.346	0.000	0.00				0.6	OK	
S4.002	SW14	93	97.158	-1.342	0.000	0.00				0.9	OK	
S4.003	SW15	93	97.141	-1.330	0.000	0.00				1.3	OK	
S4.004	SW16	93	97.135	-1.339	0.000	0.00				1.9	OK	
S1.007	SW6	93	96.975	-1.279	0.000	0.01				6.4	OK	

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Summary Wizard of 10080 minute 100 year Winter I+45% for Storm

PN	US/MH Name	Storm Rank	Water Level (m)	Surcharged Depth (m)	Flooded Volume (m³)	Flow / Cap. (l/s)	Half Drain Time (mins)	Pipe Flow (l/s)	Status
S1.008	SW7	97	96.936	-1.288	0.000	0.00		6.2	OK
S1.009	SW8	97	96.911	-1.265	0.000	0.00		7.1	OK
S1.010	SW9	97	96.892	-0.239	0.000	0.10		8.7	OK
S1.011	SEX UU 1	97	95.809	-0.061	0.000	0.66		8.7	OK
S1.012	SEX UU 2	97	94.610	-1.173	0.000	0.00		8.7	OK