RSPD

Roads & Sewers for Planning & Design

Flood Risk Assessment and Drainage Strategy In support of Commercial Development at

Ball Tree Surgery
Western Road North
Sompting
West Sussex
BN15 0JD

Luke Shaw
April 2024
Revision [B]
Job No: 5917

RSPD
Roads & Sewers for Planning & Design

Flood Risk Assessment & Drainage Strategy At Ball Tree Surgery, Western Road North Sompting, West Sussex

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Amendments

Revision	Date	Description
0	February 2024	Planning Issue
A	March 2024	Foul Drainage amended.
B	11th April 2024	Flood Risk Assessment updated as per comments received from WSP.

References

Reference	Title
A	CIRIA Publication 753 – The SUDS Manual (2015)
B	Sewers for Adoption 7th Edition (Wrc 2012)
C	Part H of the Building Regulations (2015)
D	The Soakaway Design Guide (KCC 2000)
E	Planning Practice Guidance (2016)
F	NPPF Guidance (2012)
H	Technical Guidance to the National Planning Policy Framework (2012)
I	West Sussex County Council – Level 1 & Level 2 SFRA
G	Water, People, Places – A guide to master planning sustainable drainage into developments (2013)

Introduction

This Flood Risk Assessment and Drainage Strategy has been developed in support of a planning application for the installation of 1no. commercial modular building, located at Ball Tree Surgery, Western Road North, Sompting, West Sussex, BN15 0JD. This document aims to identify any flood risk areas, offering suggested mitigation where appropriate and also outline the methods of drainage available for the Surface and Foul Water Drainage. A Location Plan and layout of the proposed scheme can be found in the appendices of this document.

As the development site is not located within flood zone 2 or 3, and is not larger than 1 hectare in size, a flood risk assessment would not normally be required. However, a flood risk assessment has been requested from the local Council to '*address the risk of surface water flood risk in the area and to consider safe access and egress for the users of the proposed development*'.

Development Description and Location

The development proposal is for the installation of 1no commercial modular building, and associated drainage systems. The proposed development works are located in the village of Sompting, which is in the Adur District of West Sussex.

The location of the proposed site is at grid reference 517083, 105050 as shown in the location plans in the appendices.

Development Classification

The flood risk vulnerability classification for this type of development in this location is considered as More Vulnerable which is defined in Table 2 of the Technical Guidance to the National Planning Policy Framework.

Sequential Test

As set out in the National Planning Policy Framework, the aim of the Sequential Test is to direct new development to areas with the lowest probability of flooding.

The starting point to the Sequential Test is the Flood Zones, which can be seen in the appendices. As the proposal is entirely within flood zone 1, the sequential test is automatically satisfied.

The proposed development is situated within Zone 1 and is classified as More Vulnerable in accordance with Table 2 of the Technical Guidance to the National Planning Policy Framework.

Following an assessment of Table 3 of the Technical Guidance to the National Planning Policy Framework, it states that development in this situation would be considered appropriate development.

Table 3: Flood risk vulnerability and flood zone 'compatibility'

Flood risk vulnerability classification (see table 2)		Essential infrastructure	Water compatible	Highly vulnerable	More vulnerable	Less vulnerable
Flood zone (see table 1)	Zone 1	✓	✓	✓	✓	✓
	Zone 2	✓	✓	Exception Test required	✓	✓
	Zone 3a	Exception Test required	✓	×	Exception Test required	✓
	Zone 3b functional floodplain	Exception Test required	✓	×	×	×

Key: ✓ Development is appropriate.
× Development should not be permitted.

Definition of the Flood Hazard

For the preparation of this Flood Risk Assessment, it is necessary to consider all of the potential sources of flooding and how this may affect the site. A checklist has been provided below to help identify these areas which can be discussed in greater detail in this section.

Possible Source of Flooding	Applicable to this Site?
Fluvial Flooding from nearby rivers or streams	☒
Coastal Flooding	☒
Surface Water Runoff from the Site, Adjacent or Nearby Land	☑
Flooding from Surface Water Sewers	☑
Flooding from Foul Water Sewers	☑
Flooding from Reservoirs	☒
Flooding from Groundwater	☑
Flooding from other Sources	☒

Flood mapping confirms there is a no risk of flooding from nearby rivers or streams.

After review of the Adur & Worthing Level 1/2 SFRA, there was no mention of this area of Sompting being at risk of Coastal flooding, this is further supported when reviewed alongside the fluvial flood maps for rivers and sea which also shows there to be no risk.

Local Surface Water flood maps have been reviewed which indicate there to be a low-medium risk of surface water flooding through the development site. When reviewing the flood maps, it is clear surface water flood risk is predominantly concentrated along a natural valley in the rear gardens, and along the highway of Western Road North, which would only occur in the event of exceeding flow should the sewer become overloaded.

The SFRA for Adul & Worthing states that areas within the district that are susceptible to surface water flooding are most affected due to a combination of groundwater and sewer flooding - due to either low capacity in the system and/or poor maintenance. This causes a cumulative effect, restricting surface water drainage, thus causing floods in the higher intensity rain fall events.

It should be noted however that although Sompting is mentioned as an area at potential risk of surface water flooding, it is not listed as an area that flooded during any of the key historical incidents of flooding, either in Oct 1980, Oct 2000, June 2007, June 2012 or Winter 13/14.

Southern Water asset plans show there to be an existing public foul sewer that crosses the development. However, although unlikely, were the foul sewer to surcharge, the position of the asset and levels on-site would mean that any water would likely lead away from the new commercial building and head South.

It should also be noted that within the Adul & Worthing SFRA, under a section titled 'Assessing the Available Capacity in UK Sewerage Systems (2018)', mapping carried out by Water UK shows Sompting to be categorised within Risk Level 2 – 'A Good general level of capacity with some potential localised issues.'

Reservoir flood maps have been checked which show there to be no risk of flooding from this source.

Local borehole records have been reviewed which indicate groundwater to be around 4.05m below ground level, this borehole was logged in September 1893, meaning levels would likely be higher in the Winter/Early spring months. A drainage method utilising infiltration to ground would therefore unlikely to be suitable. It should also be noted that after checking the SFRA for Adur & Worthing that no historic groundwater flooding events have been recorded within the vicinity of the development.

There are no other sources on or off site that are thought to be a flood risk at this site.

Probability

The proposed development is situated within flood Zone 1 which can be seen in the Flood Map for Planning, contained in the appendices.

Based on the Information provided in both the Flood Maps for Planning and the Strategic Flood Risk Assessment, the probability of a flood event may be taken as Zone 1 - This zone comprises land assessed as having a less than 1 in 1,000 annual probability of river or sea flooding (<0.1%).

Climate Change

More recent guidelines have been published by the Environment Agency for new flood risk assessments, which suggest regional climate changes and appropriate freeboard levels for commercial development. Usually, appropriate freeboard levels above the predicted flood level would be required, however, as this is flood zone 1 free board levels have not been included, apart from the usual expected 150mm above the external ground levels.

Development Proposals

The development proposals for Ball Tree Surgery, consists of one new commercial building with accompanying Foul and Surface water drainage.

Flood Risk Management Measures

As there is a low-medium risk of surface water flooding on the site, it should be noted that the ground floor level of the new modular building is to be set a minimum of 300mm above existing ground levels on the development, at 10.170mAOD. (Based on local asset plan data).

It is also recommended that flood-resilient doors be installed on all external doors.

The drainage design is to follow guidance in the SUDS Design Manual for West Sussex, so that the construction of the new commercial building does not cause any localised surface water flooding in the area and can be attenuated and discharged in a controlled manner.

As mentioned, the SFRA for Adur & Worthing mentions that Groundwater flooding may be a risk to the local area of Sompting, which could cause flooding within the nearby public sewer. It is therefore essential that all private foul drainage is fitted with non-return valves.

Off Site Impacts

There are no foreseen adverse residual impacts to neighbouring properties or the surrounding area in relation to flood risk as a result of the proposed development scheme.

Residual Risks

There are no additional residual flood risks to the property following the implementation of the new scheme.

Flood Evacuation Procedures

Preparing for a Flood

As mentioned, the new commercial development is situated within flood zone 1, and therefore a site-specific flood evacuation plan would not normally be required. However, as there is a medium risk of surface water flooding on the site, flood evacuations procedures have been detailed below.

Once a warning of an incoming flood has been received by the Environment Agency, preparations to safeguard the property and any valuable items within it should begin if time allows.

Flood forecasts received from the Flood Forecast centre have in the past been able to give accurate flood warnings up to 36 hours before the floodwater has hit, an adequate time for the property owner to safeguard their home and belongings before the evacuation process begins.

Where a flood warning has been received by the Environment Agency, well in advance of a predicted flooding incident, internal valuables can be protected by moving them to the upper floor if possible or elevating them on the lower floor to help keep them away from rising flood water.

Prior to evacuation of the area, property level protection should be used to limit the access of flood water into the property. Property level protection is available as both a temporary and permanent flood mitigation measures.

The permanent flood mitigation measures should follow any recommendations set out in the flood risk assessment section of this report, which include items like flood resilient doors and non-return valves in the wastewater system.

Once the building and valuable belongings within it have been safeguarded where possible, the occupants should ensure the building is safely evacuated and that no staff or clients remain within inside.

Although unlikely, if flooding did occur on the site, the surgery would likely remain closed until any flood waters had subsided.

Drainage Strategy

This Drainage Strategy has been developed in support of a planning application for the installation of 1 new commercial modular building, located at Ball Tree Surgery, Western Road North, Sompting, West Sussex, BN15 0JD.

The aim of the Drainage Strategy is to incorporate and adopt Best Management Practices (BMP's) for Sustainable Urban Drainage Systems (SUD's) (where appropriate) in accordance with Site Specific Technical Reports and Published Documents referenced in Page (ii). This document also aims to identify the methods of drainage available for the Foul and Surface Water Drainage.

A layout of the proposed scheme can be found in the appendices of this document.

Development Description and Location

The development proposal is for the installation of 1 new commercial modular building. The development works are situated on Western North Road, Sompting, which is located in the Adur & Worthing District of West Sussex.

The location of the proposed site is at grid reference 517083, 105050 as shown in the location plans in the appendices.

Existing Drainage

Upon reviewing public sewer asset plans for the development, it is clear that there is both a foul and surface water public sewer that crosses the developments existing car park, to the South of the proposed new modular building.

It should be noted that the footprints of the modular building will sit over an already impermeable tarmac surface.

Site Geology

The site is underlain by the Tarrant Chalk Member, which is typically described by the British Geological Survey as soft white chalk with relatively widely spaced but large flint seams.

Ground Water

Local borehole records have been reviewed which indicate groundwater to be around 4.05m below ground level, this borehole was logged in September 1893, meaning levels would likely be higher in the Winter/Early spring months. A drainage method utilising infiltration to ground would therefore unlikely be suitable. It should also be noted that after checking the SFRA for Adur & Worthing that no historic groundwater flooding events have been recorded within the vicinity of the development.

Topography

A basic topographical survey of the site has been undertaken and reviewed which showed that the development slopes very gently from North to South. Levels to the North are around, 9.78mAOD, with levels on the Southern boundary around 9.49mAOD.

Design Objective

The objective of the design will be to;

a) Retain the quantity of surface water runoff leaving the impermeable areas for all storms, up to and including the 1 in 100 year return period + 45% climate change until it can be disposed of in line with DEFRA guidance.

Development Drainage Proposals

Surface Water Drainage

The rainfall on the impermeable roof areas of the new modular building will be collected via conventional down pipes and will direct the water to an attenuation tank which is to be installed beneath the building. Storm water will then be directed through the surface water system and discharged into the surface water sewer that passes through the development to the South. An orifice place just downstream from the storage vessels will restrict flows into the surface water sewer to 0.5l/s, which will be a significant betterment from an unrestricted flow.

Foul Water Drainage

It is proposed that the foul water will be discharged from the modular building into a foul pump station on the development site, a foul rising main will then pump the foul sewage into an existing chamber to the south – downstream of the existing porch for the Ball Tree Surgery. The indicative positions of the foul drainage can be reviewed on the drainage layout included within the appendices.

Residual Flood Risk

This development has been formally assessed against flood risk earlier in this report. This Drainage strategy takes the principles identified within the FRA, to incorporate them within the detailed design, focusing on reduction and mitigation of flood risk for both on and off site.

Surface Water Drainage systems have been designed to cater for and up to the 1 in 100 year return period, plus 45% climate change, retaining the surface water on site in accordance with LLFA requirements and Industry Guidance.

Future Maintenance

Maintenance regimes of the various drainage methods will vary, depending on the development proposals and surroundings. However, a general guide to the maintenance of the various methods of drainage have been provided below.

Maintenance of Gullies and Catch pits

To ensure the long-term effectiveness of the surface water collection asset, the sediment that accumulates within the sump of the conventional gully pot or catch pit must periodically be removed to prevent it from entering the rest of the network. The frequency of this maintenance operation will vary depending on the density of the site, vegetation, design of the drainage system, other permeable areas and if the site is pre or post construction.

The ongoing maintenance activities for this system are tabulated below in Table 1.

Table 1 – Gully and Catch Pit Maintenance – By the elected management company.

Maintenance of Soakaways and Geocellular Storage

To ensure the long-term effectiveness of the storage asset, the sediment that accumulates within the SUDS system must periodically be removed to prevent it from entering the surface water system. The frequency of this maintenance operation will vary depending on the density of the site, vegetation, design of the drainage system, other permeable areas and if the site is pre or post construction.

All maintenance operations are to be carried out in accordance with the manufacturer's recommendations.

The ongoing maintenance activities for this system are tabulated below in Table 1.

Table 2 – Soakaway/Attenuation Maintenance By the elected management company.

Maintenance Activity	Remedial Action	Inspection Frequency	
Inspect Catch-pits	Clear any sediment or detritus found in the chamber/s. If sediment has built up within the pipe network, this should be cleared with rodding equipment or professional jetting techniques.	Pre-completion	Monthly
		Post completion – up to 1 year	Quarterly
		On-going	Annually

Conclusion

Roads & Sewers for Planning & Design Ltd (RSPD) have been requested to provide a Flood Risk Assessment and Drainage Strategy in support of a planning application for the construction of 1 new commercial building located at Ball Tree Surgery, Western Road North, Sompting, West Sussex, BN15 0JD.

This document aims to identify any flood risk areas, outlining the methods of drainage available for the Surface Water Drainage. A Location Plan and layout of the proposed scheme can be found in the appendices of this document.

As the development site is not located within flood zone 2 or 3, and is not larger than 1 hectare in size, a flood risk assessment would not normally be required. However, a flood risk assessment has been requested from the local Council to '*address the risk of surface water flood risk in the area and to consider safe access and egress for the users of the proposed development*'

The flood risk vulnerability classification for this type of development in this location is considered as More Vulnerable which is defined in Table 2 of the Technical Guidance to the National Planning Policy Framework. However, due to this site being in Flood Zone 1, the development is classified as 'appropriate development'.

Based on the Information provided in both the Flood Maps for Planning and the Strategic Flood Risk Assessment, the probability of a flood event may be taken as Zone 1 – This zone comprises land assessed as having a less than 1 in 1,000 annual probability of river or sea flooding (<0.1%).

Due to the development site being in Flood Zone 1, no specific flood mitigation measures have been proposed in this Flood Risk Assessment in relation to flood water impact on the new building itself, however, it should be noted that the ground floor level of the new modular building is to be set a minimum of 300mm above existing ground levels on the development, at 10.170mAOD.

Due to the risk of groundwater flooding in the village of Sompting, it is proposed that all private foul drainage is to be fitted with non-return valves.

It should be noted, however, that the drainage design for this scheme is to follow guidance in the Southeast of England's 'Guide for planning sustainable drainage into developments' (Water, People and places, 2013). This will help avoid any localised surface water flooding caused by the of the new commercial building on Ball Tree Surgery.

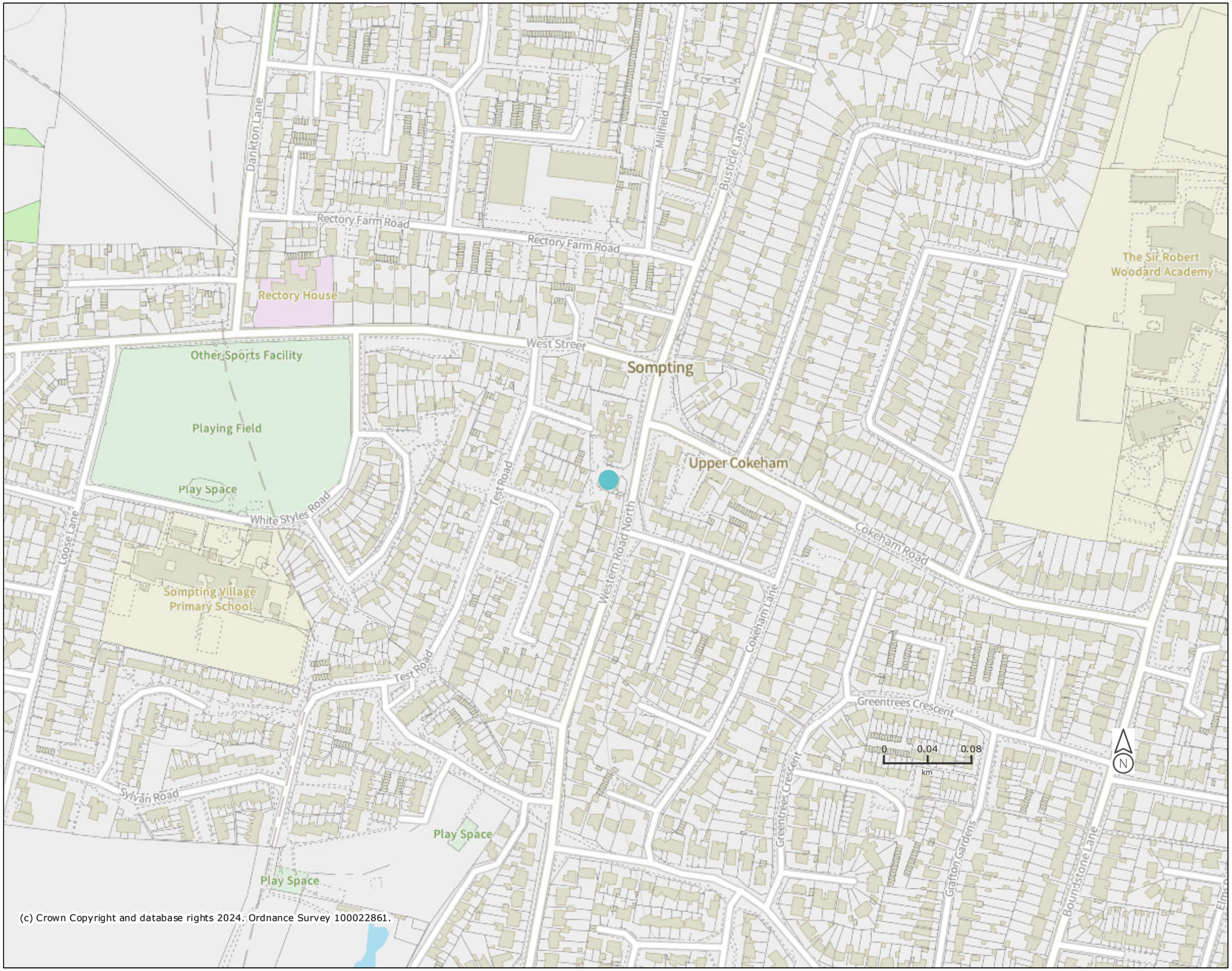
There are no foreseen adverse residual impacts to neighbouring properties or the surrounding area in relation to flood risk as a result of the proposed development scheme.

Based on the findings of this report, it is recommended that no objections should be raised to the development proposals on the grounds of flood risk.

Appendices

- Site Location Plan
- Flood Maps for Planning
- Geoindex Map
- Sewer Asset Plans
- Southern Water Asset Plans
- RSPD Drainage Layout
- FLOW Calculations/Long Sections

Location Plan



Projection = OSGB36
xmin = 516200
ymin = 104600
xmax = 518000
ymax = 105500

0 0.065 0.13
km

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Flood map for planning

Your reference	Location (easting/northing)	Created
<Unspecified>	**517077/105037**	**19 Feb 2024 10:09**

Your selected location is in flood zone 1, an area with a low probability of flooding.

You will need to do a flood risk assessment if your site is **any of the following:**

- bigger that 1 hectare (ha)
- In an area with critical drainage problems as notified by the Environment Agency
- identified as being at increased flood risk in future by the local authority's strategic flood risk assessment
- at risk from other sources of flooding (such as surface water or reservoirs) and its development would increase the vulnerability of its use (such as constructing an office on an undeveloped site or converting a shop to a dwelling)

Notes

The flood map for planning shows river and sea flooding data only. It doesn't include other sources of flooding. It is for use in development planning and flood risk assessments.

This information relates to the selected location and is not specific to any property within it. The map is updated regularly and is correct at the time of printing.

Flood risk data is covered by the Open Government Licence **which** sets out the terms and conditions for using government data. https://www.nationalarchives.gov.uk/doc/open-government-licence/version/3/

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Environment Agency

Flood map for planning

Your reference
<Unspecified>

Location (easting/northing)
517077/105037

Scale
1:2500

Created
19 Feb 2024 10:09

- Selected area
- Flood zone 3
- Flood zone 2
- Flood zone 1
- Flood defence
- Main river
- Water storage area

0 20 40 60m

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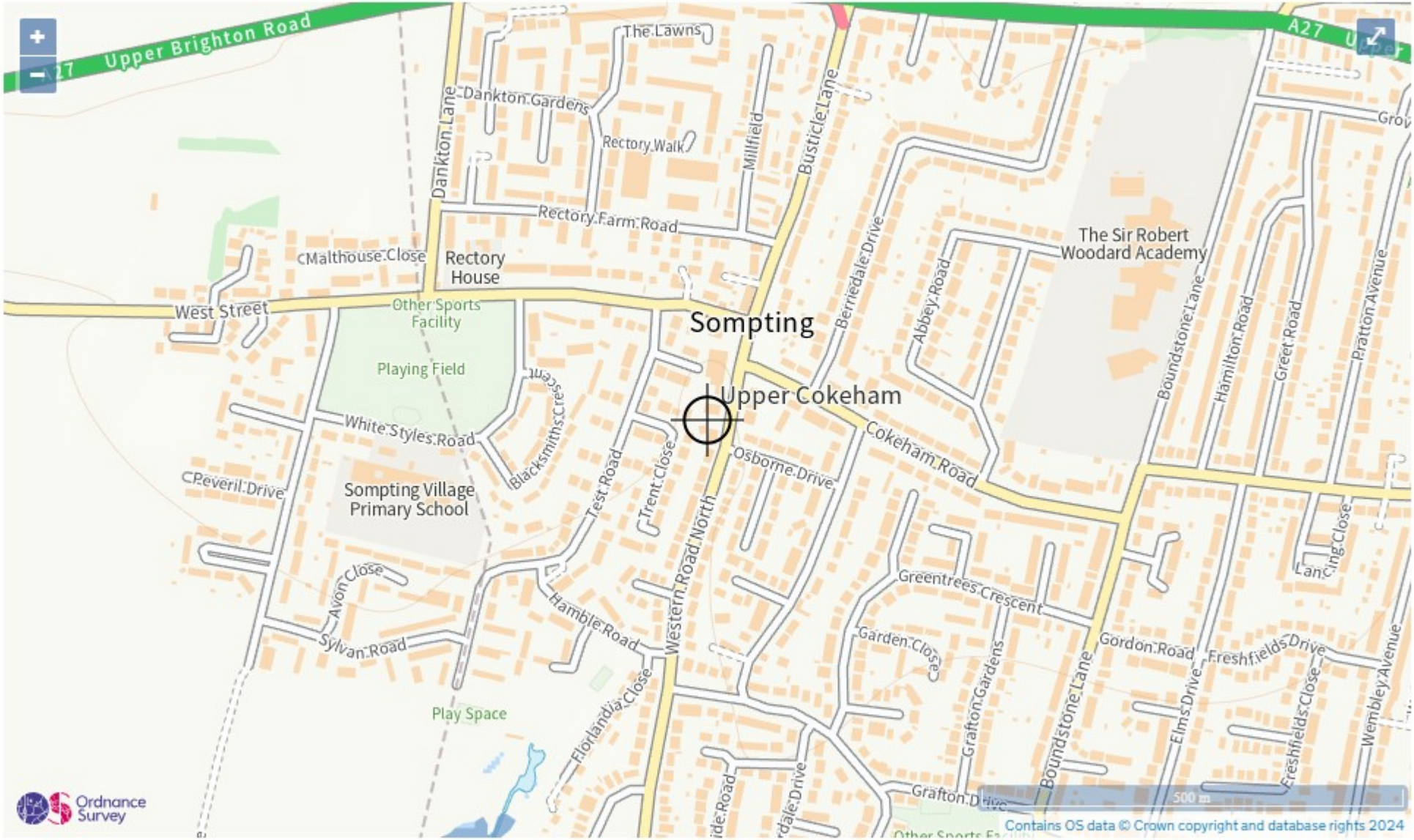
Flood risk

Extent of flooding

Location

BN15 0JD



Extent of flooding from rivers or the sea

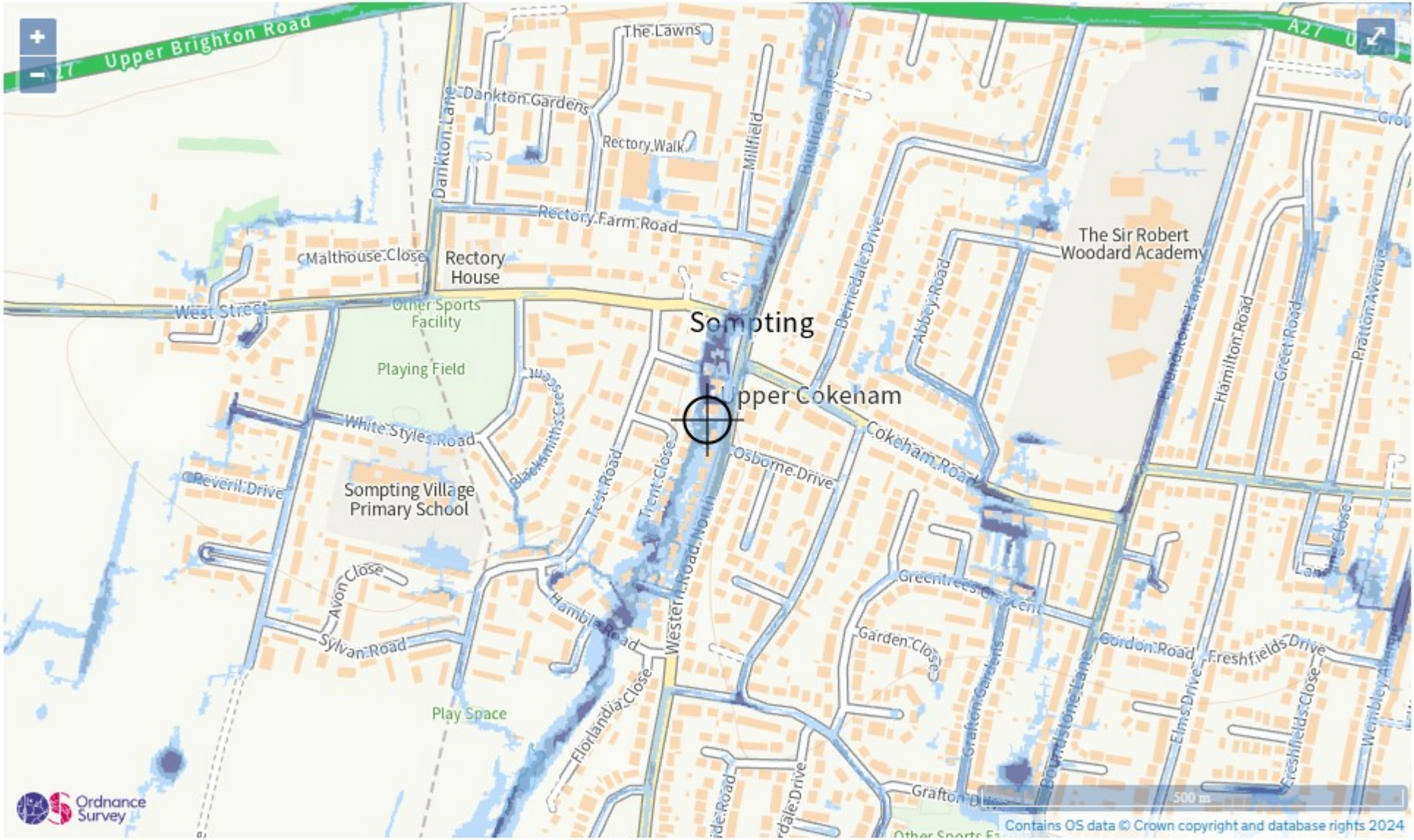
High Medium Low Very low Location you selected

Flood risk

Extent of flooding

Location

BN15 0JD



Extent of flooding from surface water

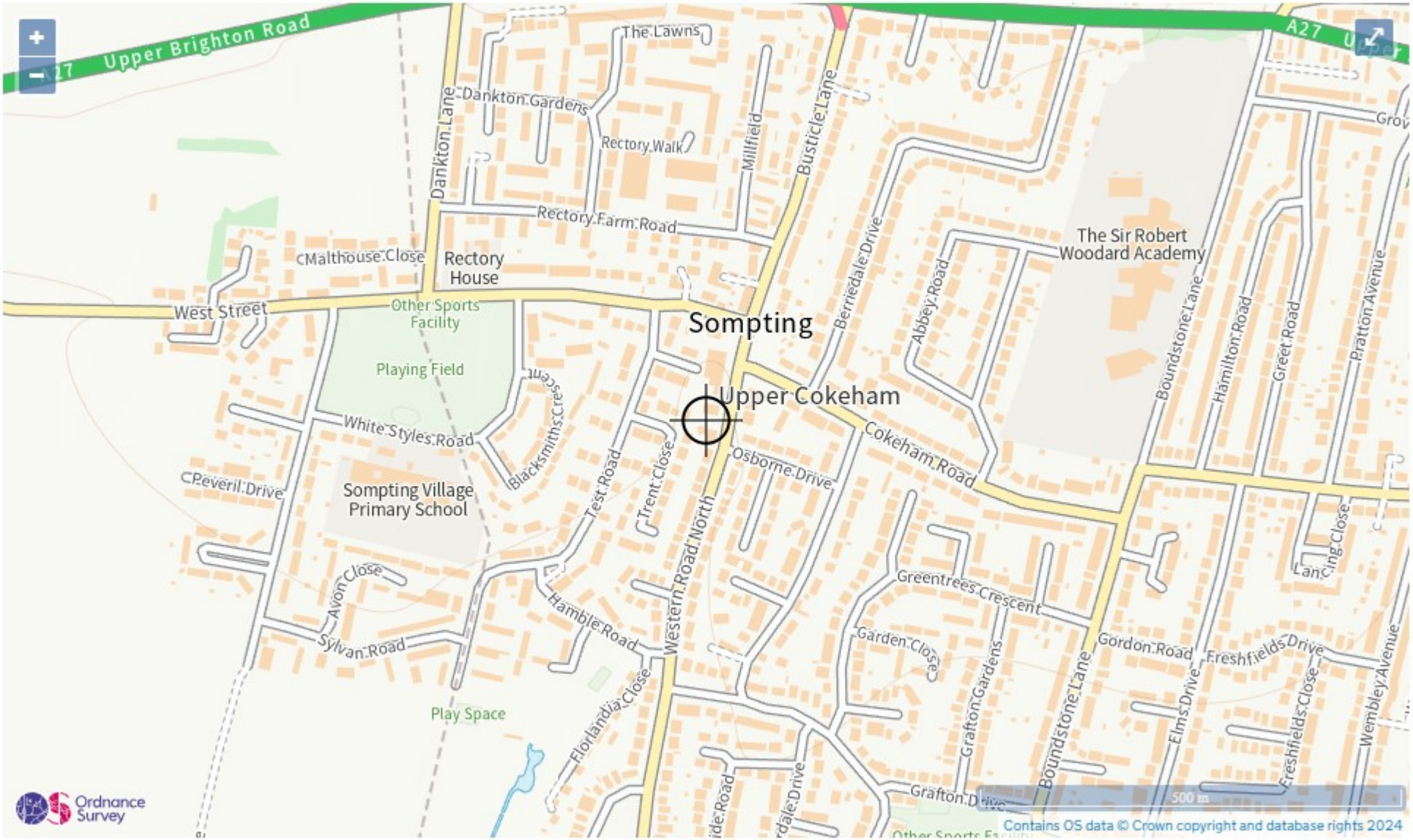
High Medium Low Very low Location you selected

Flood risk

Extent of flooding

Location

BN15 0JD



Maximum extent of flooding from reservoirs:

when river levels are normal

when there is also flooding from rivers

Location you selected

GeoIndex Report



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GeoIndex Onshore Data Sources: NERC, Natural England, English Heritage and Ordnance Survey

Map Key

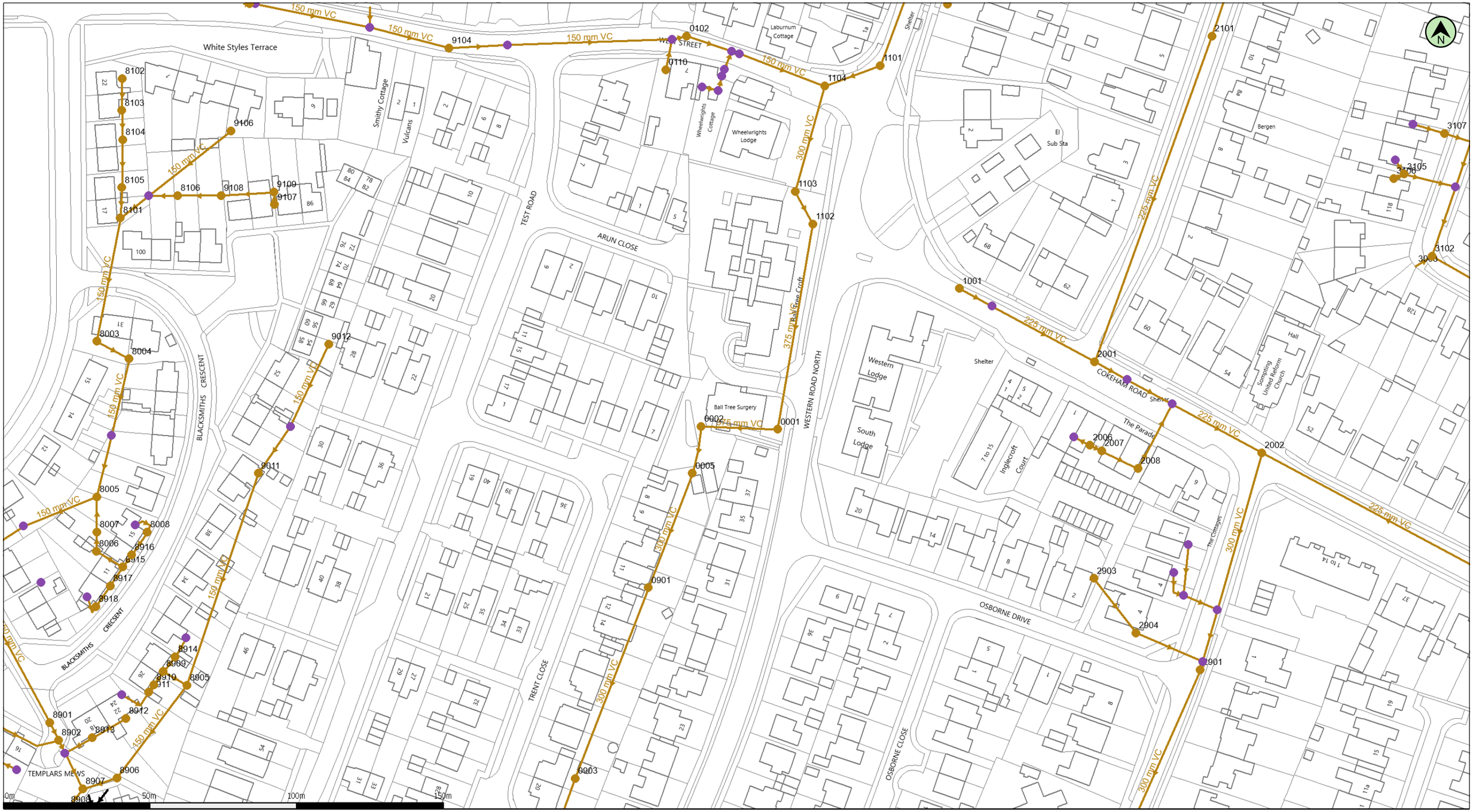
Superficial deposits 1:50,000 scale

- ALLUVIUM - CLAY, SILT, SAND AND PEAT
- ALLUVIUM - CLAY, SILT, SAND AND GRAVEL
- HEAD - CLAY, SILT, SAND AND GRAVEL
- RIVER TERRACE DEPOSITS (UNDIFFERENTIATED) - SAND, SILT AND CLAY
- STORM BEACH DEPOSITS - GRAVEL
- RAISED BEACH DEPOSITS - SAND AND GRAVEL
- BEACH AND TIDAL FLAT DEPOSITS (UNDIFFERENTIATED) - CLAY, SILT, SAND AND GRAVEL
- TIDAL FLAT DEPOSITS - CLAY, SILT, SAND AND GRAVEL
- HEAD, 1 - CLAY, SILT, SAND AND GRAVEL
- CLAY-WITH-FLINTS FORMATION - CLAY, SILT, SAND AND GRAVEL

Bedrock geology 1:50,000 scale

- LONDON CLAY FORMATION - CLAY, SILT AND SAND
- SPETISBURY CHALK MEMBER - CHALK
- SEAFORD CHALK FORMATION - CHALK
- TARRANT CHALK MEMBER - CHALK
- NEW PIT CHALK FORMATION - CHALK
- LEWES NODULAR CHALK FORMATION - CHALK
- LAMBETH GROUP - CLAY, SILT AND SAND
- NEWHAVEN CHALK FORMATION - CHALK

Selection Results



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WARNING: BAC pipes are constructed of Bonded Asbestos Cement.

WARNING: Unknown (UNK) materials may include Bonded Asbestos Cement.

Foul Gravity Sewer
Combined Gravity Sewer
Culverted Water Course or Treated Effluent
Surface Water Gravity Sewer
Rising Main, Vacuum or Syphon
Combined Outfall
Surface Water Outfall
Foul Outfall
Surface Water Inlet
Combined Pumping Station
Surface Water Pumping Station
Foul Pumping Station
WWTW Water Treatment Works
Section 104 Area
Building Over Agreement Area
Foul Manhole
Combined Manhole
Surface Water Manhole
Side Entry Manhole, Decarcation Chamber, Dummy Manhole or Surface Water Soakaway

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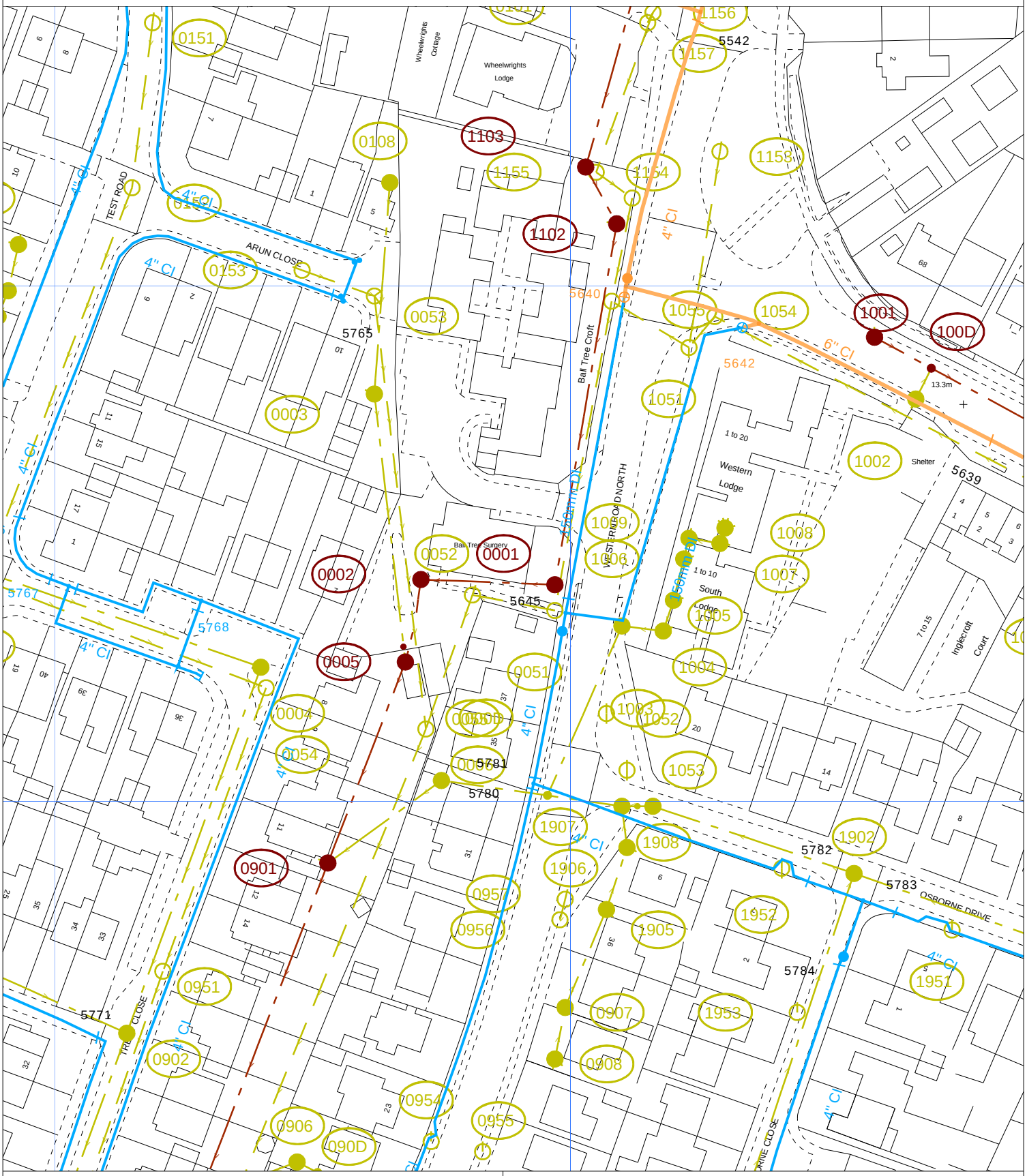
Ball Tree Surgery

WATER for LIFE from Southern Water

Manhole Reference	Liquid Type	Cover Level	Invert Level	Depth to Invert
0001	F	8.81	5.40	
0002	F	8.65	0.00	
0005	F	8.63	5.06	
0102	F	10.91	9.14	
0110	F	0.00	0.00	
0901	F	8.04	4.81	
0903	F	6.87	4.35	
1001	F	11.56	10.91	
1101	F	9.64	6.64	
1102	F	8.74	5.26	
1103	F	8.58	5.94	
1104	F	9.29	6.44	
1105	F	0.00	0.00	
2001	F	13.98	0.00	
2002	F	13.35	9.95	
2006	F	0.00	0.00	
2007	F	0.00	0.00	
2008	F	0.00	0.00	
2101	F	14.64	13.01	
2901	F	12.75	9.60	
2903	F	0.00	0.00	
2904	F	0.00	0.00	
3003	F	0.00	0.00	
3102	F	13.87	12.25	
3105	F	0.00	0.00	
3106	F	0.00	0.00	
3107	F	0.00	0.00	
8003	F	0.00	-1.12	
8004	F	0.00	0.00	
8005	F	12.40	11.19	
8006	F	0.00	0.00	
8007	F	0.00	0.00	
8008	F	0.00	0.00	
8101	F	13.72	12.87	
8102	F	0.00	0.00	
8103	F	0.00	0.00	
8104	F	0.00	0.00	
8105	F	0.00	0.00	
8106	F	0.00	0.00	
8901	F	11.34	9.92	
8902	F	11.31	9.91	
8905	F	0.00	0.00	
8906	F	11.15	9.92	
8907	F	10.77	9.76	
8908	F	10.68	9.60	
8909	F	0.00	0.00	
8910	F	0.00	0.00	
8911	F	0.00	0.00	
8912	F	0.00	0.00	
8913	F	0.00	0.00	
8914	F	0.00	0.00	
8915	F	0.00	0.00	
8916	F	0.00	0.00	
8917	F	0.00	0.00	
8918	F	0.00	0.00	
9011	F	0.00	0.00	
9012	F	13.23	11.81	
9102	F	15.23	13.32	
9104	F	14.52	12.58	
9106	F	0.00	0.00	
9107	F	0.00	0.00	
9108	F	0.00	0.00	
9109	F	0.00	0.00	

Manhole Reference	Liquid Type	Cover Level	Invert Level	Depth to Invert

SOUTHERN WATER



The positions of pipes shown on this plan are believed to be correct, but Southern Water Services Ltd accept no responsibility in the event of inaccuracy. The actual positions should be determined on site.

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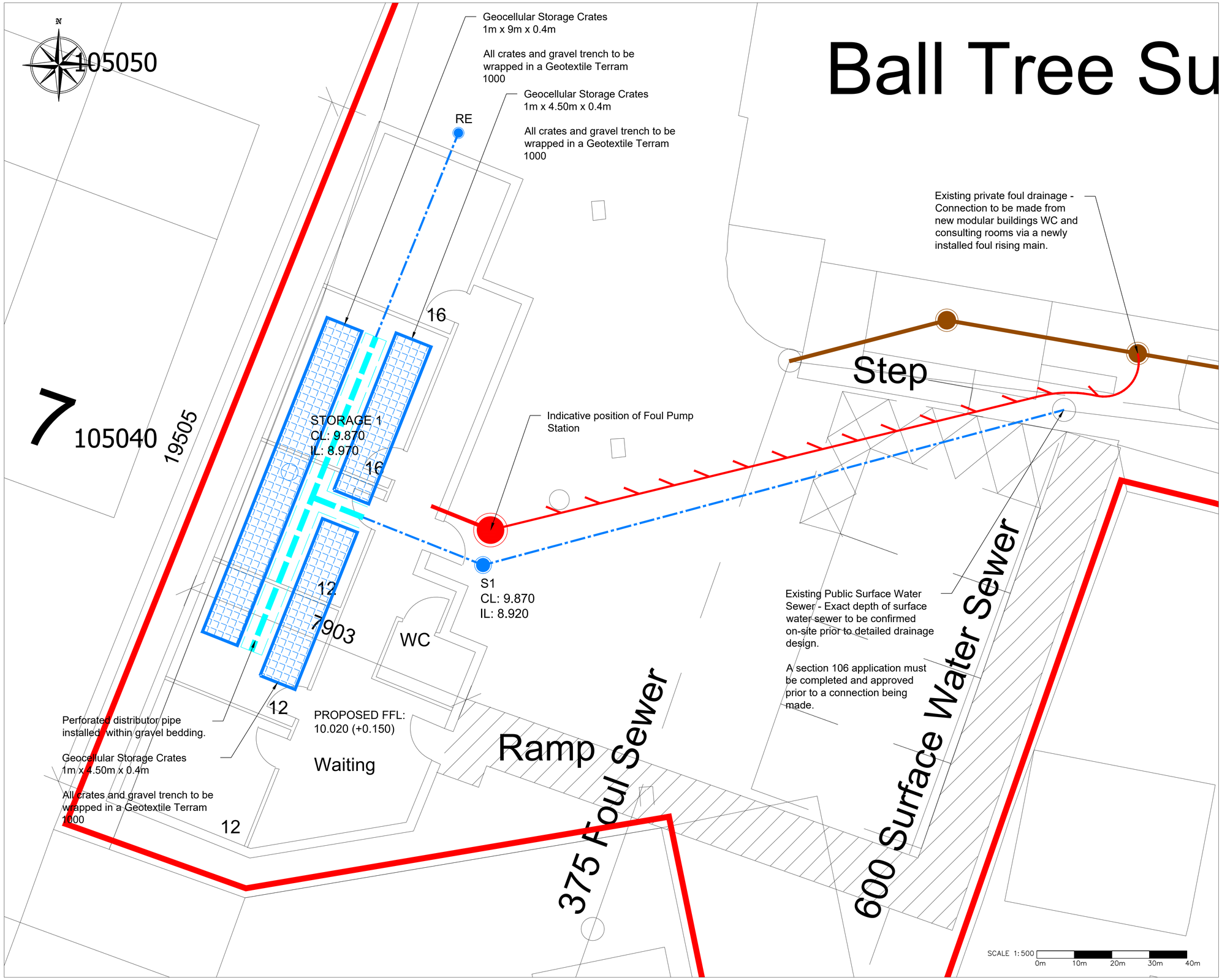
Southern Water

O.S. REF: TQ1705SW	Scale: 1:1000	Printed By: YadavAr	Date: 30-6-2023
Screen Print		Southern Water MapGuide Browser	
WARNING: BAC pipes are constructed of Bonded Asbestos Cement		Requested By:	
WARNING: Unknown (UNK) materials may include Bonded Asbestos Cement			

Ball Tree Su



General Notes

KEY:

- Application Site Boundary
- Surface Water Drain
- Foul Water Drain
- Linear Drainage
- Pipe Protection
- SW Rising Main
- FW Rising Main
- French Drain/Perforated Pipe
- Surface Catch Pit/Manhole
- Foul Water Manhole
- Surface Water Soakaway
- Gully & Lead
- Waste Water Package Treatment Plant
- 1.2m — Retaining Wall
- +153.100 — Spot Levels
- Direction of Flow
- Embankment
- Brick Headwall

FOR PLANNING

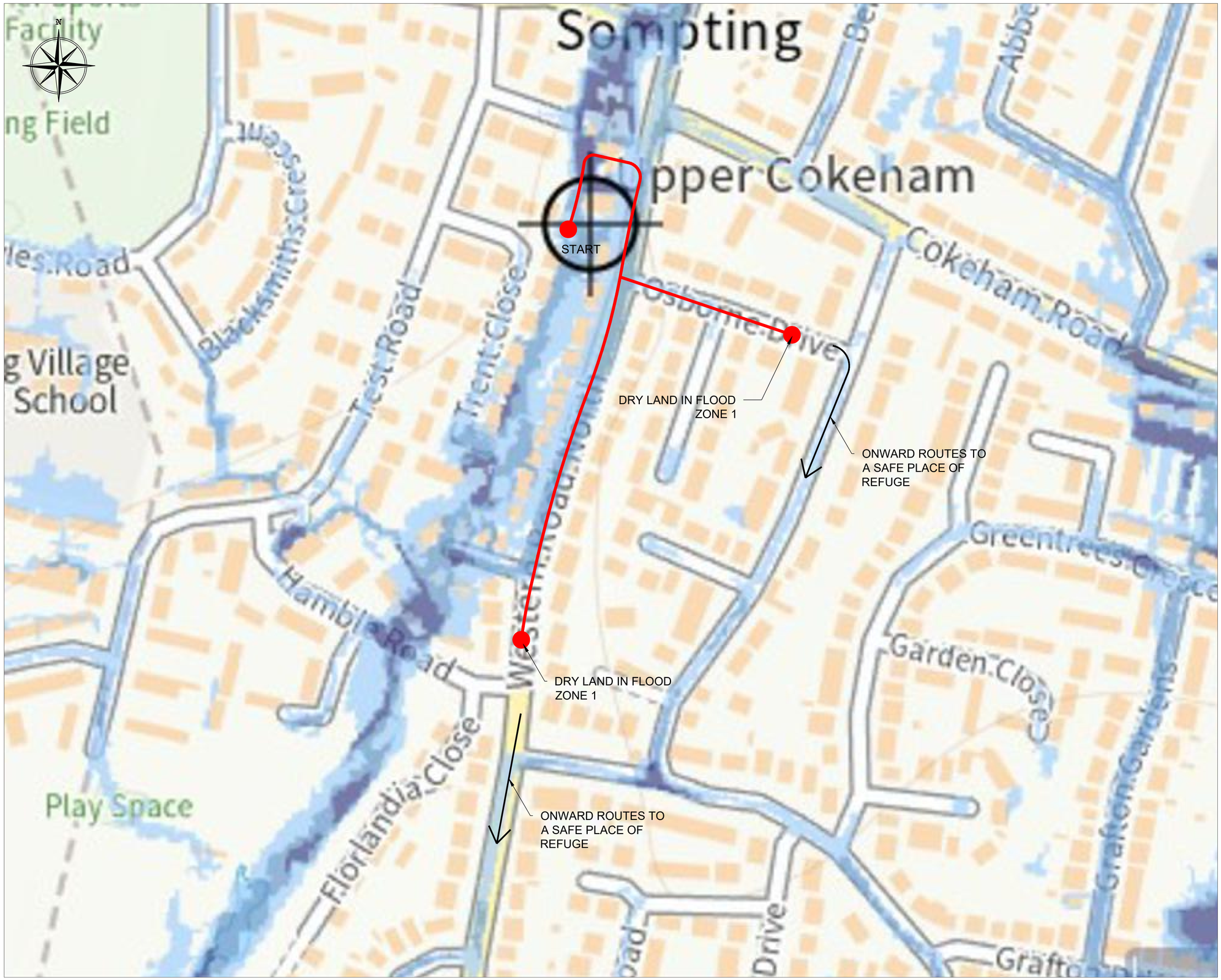
No.	Revision/Issue	Date
Rev A	Foul Strategy Revised	05/03/24

RSPD
Roads & Sewers for Planning & Design Ltd
www.roadsandsewers.co.uk
07876 573377

Project Name and Address
BALL TREE SURGERY,
WESTERN ROAD NORTH,
SOMPTING, WEST SUSSEX.

Description
DRAINAGE STRATEGY

Project: 5917	Sheet: 01
Date: 21/02/2024	
Scale: 1:500 @ A1	



General Notes

KEY:

START — Flood Evacuation route

FOR PLANNING

No.	Revision/Issue	Date

RSPD
Roads & Sewers for Planning & Design Ltd
www.roadsandsewers.co.uk 07876 573377

Project Name and Address
BALL TREE SURGERY, WESTERN ROAD NORTH, SOMPTING, WEST SUSSEX.

Description
FLOOD EVACUATION PLAN

Project	Sheet
5917	02
Date: 11/04/2024	
Scale: NTS @ A1	

Design Settings

Rainfall Methodology	FEH-22	Maximum Time of Concentration (mins)	30.00	Preferred Cover Depth (m)	0.450
Return Period (years)	2	Maximum Rainfall (mm/hr)	50.0	Include Intermediate Ground	✓
Additional Flow (%)	0	Minimum Velocity (m/s)	0.75	Enforce best practice design rules	✓
CV	0.750	Connection Type	Level Soffits		
Time of Entry (mins)	30.00	Minimum Backdrop Height (m)	0.200		

Adoptable Manhole Type

Max Width (mm)	Diameter (mm)	Max Width (mm)	Diameter (mm)	Max Width (mm)	Diameter (mm)	Max Width (mm)	Diameter (mm)
374	1200	499	1350	749	1500	900	1800

>900 Link+900 mm

Max Depth (m)	Diameter (mm)	Max Depth (m)	Diameter (mm)
1.500	1050	99.999	1200

Circular Link Type

Shape	Circular	Barrels	1	Auto Increment (mm)	75	Follow Ground	x

Available Diameters (mm)

100 | 150

Nodes

	Name	Area (ha)	T of E (mins)	Cover Level (m)	Node Type	Manhole Type	Diameter (mm)	Easting (m)	Northing (m)	Depth (m)
✓	STORAGE 1	0.012	30.00	9.870	Manhole	Adoptable	1200	2041.930	417.390	0.900
✓	S1			9.870	Manhole	Adoptable	1200	2046.570	415.010	0.950
✓	SURFACE WATER SEWER			9.650	Manhole	Adoptable	1200	2062.200	418.830	0.884

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Links

	Name	US Node	DS Node	Length (m)	ks (mm) / n	US IL (m)	DS IL (m)	Fall (m)	Slope (1:X)	Dia (mm)	Link Type	T of C (mins)	Rain (mm/hr)
✓	1.000	STORAGE 1	S1	5.215	0.600	8.970	8.920	0.050	104.3	100	Circular	30.00	21.0
✓	1.001	S1	SURFACE WATER SEWER	16.090	0.600	8.920	8.766	0.154	104.5	100	Circular	30.00	21.0

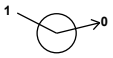
	Name	US Node	DS Node	Vel (m/s)	Cap (l/s)	Flow (l/s)	US Depth (m)	DS Depth (m)	Minimum Depth (m)	Maximum Depth (m)	Σ Area (ha)	Σ Add Inflow (l/s)	Pro Depth (mm)	Pro Velocity (m/s)
✓	1.000	STORAGE 1	S1	0.752	5.9	0.7	0.800	0.850	0.800	0.850	0.012	0.0	23	0.500
✓	1.001	S1	SURFACE WATER SEWER	0.752	5.9	0.7	0.850	0.784	0.784	0.850	0.012	0.0	23	0.500

Pipeline Schedule

Link	Length (m)	Slope (1:X)	Dia (mm)	Link Type	US CL (m)	US IL (m)	US Depth (m)	DS CL (m)	DS IL (m)	DS Depth (m)
1.000	5.215	104.3	100	Circular	9.870	8.970	0.800	9.870	8.920	0.850
1.001	16.090	104.5	100	Circular	9.870	8.920	0.850	9.650	8.766	0.784

Link	US Node	Dia (mm)	Node Type	MH Type	DS Node	Dia (mm)	Node Type	MH Type
1.000	STORAGE 1	1200	Manhole	Adoptable	S1	1200	Manhole	Adoptable
1.001	S1	1200	Manhole	Adoptable	SURFACE WATER SEWER	1200	Manhole	Adoptable

Manhole Schedule

Node	Easting (m)	Northing (m)	CL (m)	Depth (m)	Dia (mm)	Node Type	MH Type	Connections	Link	IL (m)	Dia (mm)	Link Type
STORAGE 1	2041.930	417.390	9.870	0.900	1200	Manhole	Adoptable	 0	1.000	8.970	100	Circular
S1	2046.570	415.010	9.870	0.950	1200	Manhole	Adoptable	 1	1.000	8.920	100	Circular
								0	1.001	8.920	100	Circular

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Manhole Schedule

Node	Easting (m)	Northing (m)	CL (m)	Depth (m)	Dia (mm)	Node Type	MH Type	Connections	Link	IL (m)	Dia (mm)	Link Type
SURFACE WATER SEWER	2062.200	418.830	9.650	0.884	1200	Manhole	Adoptable	1	1.001	8.766	100	Circular



Simulation Settings

Rainfall Methodology	FEH-22	Analysis Speed	Normal	Additional Storage (m³/ha)	20.0
Summer CV	0.750	Skip Steady State	x	Check Discharge Rate(s)	x
Winter CV	0.840	Drain Down Time (mins)	240	Check Discharge Volume	x

Storm Durations

15	30	60	120	180	240	360	480	600	720	960	1440

Return Period (years)	Climate Change (CC %)	Additional Area (A %)	Additional Flow (Q %)	Return Period (years)	Climate Change (CC %)	Additional Area (A %)	Additional Flow (Q %)
2	0	0	0	100	0	0	0
30	0	0	0	100	45	0	0

Node S1 Online Orifice Control

Flap Valve	x	Invert Level (m)	8.920	Design Flow (l/s)	0.5	Discharge Coefficient	0.600
Replaces Downstream Link	✓	Design Depth (m)	0.300	Diameter (m)	0.021		

Node STORAGE 1 Depth/Area Storage Structure

Base Inf Coefficient (m/hr)	0.00000	Safety Factor	2.0	Invert Level (m)	8.970
Side Inf Coefficient (m/hr)	0.00000	Porosity	0.95	Time to half empty (mins)	72

Depth (m)	Area (m²)	Inf Area (m²)	Depth (m)	Area (m²)	Inf Area (m²)	Depth (m)	Area (m²)	Inf Area (m²)
0.000	18.0	0.0	0.400	18.0	0.0	0.401	0.0	0.0

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Other (defaults)

Entry Loss (manhole)	0.250	Entry Loss (junction)	0.000	Apply Recommended Losses	x
Exit Loss (manhole)	0.250	Exit Loss (junction)	0.000	Flood Risk (m)	0.300

Approval Settings

Node Size	✓	Maximum Cover Depth (m)	3.000	Surcharged Depth	✓
Node Losses	✓	Backdrops	✓	Return Period (years)	
Link Size	✓	Minimum Backdrop Height (m)		Maximum Surcharged Depth (m)	0.100
Minimum Diameter (mm)	150	Maximum Backdrop Height (m)	1.500	Flooding	✓
Link Length	✓	Full Bore Velocity	✓	Return Period (years)	30
Maximum Length (m)	100.000	Minimum Full Bore Velocity (m/s)		Time to Half Empty	x
Coordinates	✓	Maximum Full Bore Velocity (m/s)	3.000	Discharge Rates	✓
Accuracy (m)	1.000	Proportional Velocity	✓	Discharge Volume	✓
Crossings	✓	Return Period (years)		100 year 360 minute (m^3)	
Cover Depth	✓	Minimum Proportional Velocity (m/s)	0.750		
Minimum Cover Depth (m)		Maximum Proportional Velocity (m/s)	3.000		

Rainfall

Event	Peak Intensity (mm/hr)	Average Intensity (mm/hr)	Event	Peak Intensity (mm/hr)	Average Intensity (mm/hr)
2 year 15 minute summer	114.014	32.262	2 year 360 minute winter	11.765	4.657
2 year 15 minute winter	80.010	32.262	2 year 480 minute summer	14.250	3.766
2 year 30 minute summer	74.347	21.038	2 year 480 minute winter	9.468	3.766
2 year 30 minute winter	52.173	21.038	2 year 600 minute summer	11.625	3.180
2 year 60 minute summer	50.268	13.284	2 year 600 minute winter	7.943	3.180
2 year 60 minute winter	33.397	13.284	2 year 720 minute summer	10.311	2.763
2 year 120 minute summer	35.664	9.425	2 year 720 minute winter	6.929	2.763
2 year 120 minute winter	23.694	9.425	2 year 960 minute summer	8.388	2.209
2 year 180 minute summer	28.861	7.427	2 year 960 minute winter	5.557	2.209
2 year 180 minute winter	18.760	7.427	2 year 1440 minute summer	6.022	1.614
2 year 240 minute summer	23.368	6.175	2 year 1440 minute winter	4.047	1.614
2 year 240 minute winter	15.525	6.175	30 year 15 minute summer	298.852	84.565
2 year 360 minute summer	18.099	4.657	30 year 15 minute winter	209.721	84.565

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Rainfall

Event	Peak Intensity (mm/hr)	Average Intensity (mm/hr)	Event	Peak Intensity (mm/hr)	Average Intensity (mm/hr)
30 year 30 minute summer	199.189	56.364	100 year 240 minute summer	62.684	16.565
30 year 30 minute winter	139.782	56.364	100 year 240 minute winter	41.646	16.565
30 year 60 minute summer	135.900	35.914	100 year 360 minute summer	46.863	12.059
30 year 60 minute winter	90.289	35.914	100 year 360 minute winter	30.462	12.059
30 year 120 minute summer	84.123	22.231	100 year 480 minute summer	36.279	9.587
30 year 120 minute winter	55.890	22.231	100 year 480 minute winter	24.103	9.587
30 year 180 minute summer	64.253	16.535	100 year 600 minute summer	29.275	8.007
30 year 180 minute winter	41.766	16.535	100 year 600 minute winter	20.002	8.007
30 year 240 minute summer	50.335	13.302	100 year 720 minute summer	25.754	6.902
30 year 240 minute winter	33.441	13.302	100 year 720 minute winter	17.309	6.902
30 year 360 minute summer	37.602	9.676	100 year 960 minute summer	20.689	5.448
30 year 360 minute winter	24.442	9.676	100 year 960 minute winter	13.705	5.448
30 year 480 minute summer	29.035	7.673	100 year 1440 minute summer	14.505	3.888
30 year 480 minute winter	19.290	7.673	100 year 1440 minute winter	9.749	3.888
30 year 600 minute summer	23.373	6.393	100 year +45% CC 15 minute summer	546.954	154.769
30 year 600 minute winter	15.970	6.393	100 year +45% CC 15 minute winter	383.827	154.769
30 year 720 minute summer	20.519	5.499	100 year +45% CC 30 minute summer	367.285	103.929
30 year 720 minute winter	13.790	5.499	100 year +45% CC 30 minute winter	257.744	103.929
30 year 960 minute summer	16.432	4.327	100 year +45% CC 60 minute summer	252.486	66.725
30 year 960 minute winter	10.885	4.327	100 year +45% CC 60 minute winter	167.746	66.725
30 year 1440 minute summer	11.513	3.086	100 year +45% CC 120 minute summer	153.067	40.451
30 year 1440 minute winter	7.738	3.086	100 year +45% CC 120 minute winter	101.694	40.451
100 year 15 minute summer	377.210	106.737	100 year +45% CC 180 minute summer	116.222	29.908
100 year 15 minute winter	264.709	106.737	100 year +45% CC 180 minute winter	75.547	29.908
100 year 30 minute summer	253.300	71.675	100 year +45% CC 240 minute summer	90.891	24.020
100 year 30 minute winter	177.754	71.675	100 year +45% CC 240 minute winter	60.386	24.020
100 year 60 minute summer	174.128	46.017	100 year +45% CC 360 minute summer	67.951	17.486
100 year 60 minute winter	115.687	46.017	100 year +45% CC 360 minute winter	44.170	17.486
100 year 120 minute summer	105.563	27.897	100 year +45% CC 480 minute summer	52.605	13.902
100 year 120 minute winter	70.134	27.897	100 year +45% CC 480 minute winter	34.949	13.902
100 year 180 minute summer	80.153	20.626	100 year +45% CC 600 minute summer	42.448	11.611
100 year 180 minute winter	52.102	20.626	100 year +45% CC 600 minute winter	29.003	11.611

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Rainfall

Event	Peak Intensity (mm/hr)	Average Intensity (mm/hr)	Event	Peak Intensity (mm/hr)	Average Intensity (mm/hr)
100 year +45% CC 720 minute summer	37.344	10.009	100 year +45% CC 960 minute winter	19.872	7.900
100 year +45% CC 720 minute winter	25.097	10.009	100 year +45% CC 1440 minute summer	21.033	5.637
100 year +45% CC 960 minute summer	30.000	7.900	100 year +45% CC 1440 minute winter	14.135	5.637

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Results for 2 year Critical Storm Duration. Lowest mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
120 minute winter	STORAGE 1	100	9.012	0.042	0.6	0.7809	0.0000	OK
120 minute winter	S1	102	9.012	0.092	0.4	0.1044	0.0000	OK
15 minute summer	SURFACE WATER SEWER	1	8.766	0.000	0.2	0.0000	0.0000	OK

Link Event (Upstream Depth)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
120 minute winter	STORAGE 1	1.000	S1	0.4	0.204	0.072	0.0279	
120 minute winter	S1	Orifice	SURFACE WATER SEWER	0.3				1.9

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Results for 30 year Critical Storm Duration. Lowest mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
120 minute winter	STORAGE 1	110	9.106	0.136	1.3	2.5082	0.0000	SURCHARGED
120 minute winter	S1	110	9.105	0.185	0.4	0.2096	0.0000	SURCHARGED
15 minute summer	SURFACE WATER SEWER	1	8.766	0.000	0.3	0.0000	0.0000	OK

Link Event (Upstream Depth)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
120 minute winter	STORAGE 1	1.000	S1	0.4	0.227	0.069	0.0408	
120 minute winter	S1	Orifice	SURFACE WATER SEWER	0.4				4.4

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Results for 100 year Critical Storm Duration. Lowest mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
120 minute winter	STORAGE 1	112	9.148	0.178	1.7	3.2988	0.0000	SURCHARGED
120 minute winter	S1	112	9.148	0.228	0.5	0.2578	0.0000	SURCHARGED
15 minute summer	SURFACE WATER SEWER	1	8.766	0.000	0.3	0.0000	0.0000	OK

Link Event (Upstream Depth)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
120 minute winter	STORAGE 1	1.000	S1	0.5	0.242	0.077	0.0408	
120 minute winter	S1	Orifice	SURFACE WATER SEWER	0.4				5.5

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Results for 100 year +45% CC Critical Storm Duration. Lowest mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
120 minute winter	STORAGE 1	116	9.252	0.282	2.4	5.2226	0.0000	SURCHARGED
120 minute winter	S1	116	9.252	0.332	0.6	0.3753	0.0000	SURCHARGED
15 minute summer	SURFACE WATER SEWER	1	8.766	0.000	0.4	0.0000	0.0000	OK

Link Event (Upstream Depth)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
120 minute winter	STORAGE 1	1.000	S1	0.6	0.248	0.096	0.0408	
120 minute winter	S1	Orifice	SURFACE WATER SEWER	0.5				7.6

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Results for 2 year 15 minute summer. 255 minute analysis at 1 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute summer	STORAGE 1	37	8.990	0.020	0.4	0.3703	0.0000	OK
15 minute summer	S1	38	8.992	0.072	0.4	0.0809	0.0000	OK
15 minute summer	SURFACE WATER SEWER	1	8.766	0.000	0.2	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
15 minute summer	STORAGE 1	1.000	S1	0.4	0.295	0.064	0.0185	
15 minute summer	S1	Orifice	SURFACE WATER SEWER	0.2				0.7

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Results for 2 year 15 minute winter. 255 minute analysis at 1 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute winter	STORAGE 1	38	8.995	0.025	0.5	0.4615	0.0000	OK
15 minute winter	S1	37	8.997	0.077	0.4	0.0866	0.0000	OK
15 minute winter	SURFACE WATER SEWER	1	8.766	0.000	0.2	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
15 minute winter	STORAGE 1	1.000	S1	0.4	0.297	0.076	0.0207	
15 minute winter	S1	Orifice	SURFACE WATER SEWER	0.2				0.8

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Results for 2 year 30 minute summer. 270 minute analysis at 1 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
30 minute summer	STORAGE 1	45	8.997	0.027	0.5	0.4944	0.0000	OK
30 minute summer	S1	46	8.998	0.078	0.5	0.0885	0.0000	OK
30 minute summer	SURFACE WATER SEWER	1	8.766	0.000	0.2	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
30 minute summer	STORAGE 1	1.000	S1	0.5	0.291	0.076	0.0215	
30 minute summer	S1	Orifice	SURFACE WATER SEWER	0.2				0.9

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Results for 2 year 30 minute winter. 270 minute analysis at 1 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
30 minute winter	STORAGE 1	46	9.001	0.031	0.6	0.5727	0.0000	OK
30 minute winter	S1	44	9.003	0.083	0.5	0.0934	0.0000	OK
30 minute winter	SURFACE WATER SEWER	1	8.766	0.000	0.2	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
30 minute winter	STORAGE 1	1.000	S1	0.5	0.286	0.082	0.0233	
30 minute winter	S1	Orifice	SURFACE WATER SEWER	0.2				1.0

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Results for 2 year 60 minute summer. 300 minute analysis at 1 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
60 minute summer	STORAGE 1	62	9.001	0.031	0.5	0.5663	0.0000	OK
60 minute summer	S1	60	9.002	0.082	0.5	0.0927	0.0000	OK
60 minute summer	SURFACE WATER SEWER	1	8.766	0.000	0.2	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
60 minute summer	STORAGE 1	1.000	S1	0.5	0.239	0.078	0.0231	
60 minute summer	S1	Orifice	SURFACE WATER SEWER	0.2				1.1

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Results for 2 year 60 minute winter. 300 minute analysis at 1 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
60 minute winter	STORAGE 1	64	9.006	0.036	0.6	0.6653	0.0000	OK
60 minute winter	S1	64	9.007	0.087	0.5	0.0985	0.0000	OK
60 minute winter	SURFACE WATER SEWER	1	8.766	0.000	0.3	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
60 minute winter	STORAGE 1	1.000	S1	0.5	0.239	0.081	0.0255	
60 minute winter	S1	Orifice	SURFACE WATER SEWER	0.3				1.3

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Results for 2 year 120 minute summer. 360 minute analysis at 2 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
120 minute summer	STORAGE 1	94	9.008	0.038	0.6	0.7029	0.0000	OK
120 minute summer	S1	92	9.009	0.089	0.4	0.1003	0.0000	OK
120 minute summer	SURFACE WATER SEWER	2	8.766	0.000	0.3	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
120 minute summer	STORAGE 1	1.000	S1	0.4	0.204	0.070	0.0262	
120 minute summer	S1	Orifice	SURFACE WATER SEWER	0.3				1.7

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Results for 2 year 120 minute winter. 360 minute analysis at 2 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
120 minute winter	STORAGE 1	100	9.012	0.042	0.6	0.7809	0.0000	OK
120 minute winter	S1	102	9.012	0.092	0.4	0.1044	0.0000	OK
120 minute winter	SURFACE WATER SEWER	2	8.766	0.000	0.3	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
120 minute winter	STORAGE 1	1.000	S1	0.4	0.204	0.072	0.0279	
120 minute winter	S1	Orifice	SURFACE WATER SEWER	0.3				1.9

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Results for 2 year 180 minute summer. 420 minute analysis at 4 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
180 minute summer	STORAGE 1	128	9.007	0.037	0.5	0.6823	0.0000	OK
180 minute summer	S1	124	9.007	0.087	0.4	0.0986	0.0000	OK
180 minute summer	SURFACE WATER SEWER	4	8.766	0.000	0.3	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
180 minute summer	STORAGE 1	1.000	S1	0.4	0.202	0.066	0.0256	
180 minute summer	S1	Orifice	SURFACE WATER SEWER	0.3				2.0

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Results for 2 year 180 minute winter. 420 minute analysis at 4 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
180 minute winter	STORAGE 1	136	9.010	0.040	0.5	0.7321	0.0000	OK
180 minute winter	S1	140	9.010	0.090	0.3	0.1013	0.0000	OK
180 minute winter	SURFACE WATER SEWER	4	8.766	0.000	0.3	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
180 minute winter	STORAGE 1	1.000	S1	0.3	0.202	0.054	0.0268	
180 minute winter	S1	Orifice	SURFACE WATER SEWER	0.3				2.2

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Results for 2 year 240 minute summer. 480 minute analysis at 4 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
240 minute summer	STORAGE 1	164	9.006	0.036	0.5	0.6578	0.0000	OK
240 minute summer	S1	160	9.006	0.086	0.4	0.0976	0.0000	OK
240 minute summer	SURFACE WATER SEWER	4	8.766	0.000	0.3	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
240 minute summer	STORAGE 1	1.000	S1	0.4	0.202	0.061	0.0252	
240 minute summer	S1	Orifice	SURFACE WATER SEWER	0.3				2.3

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Results for 2 year 240 minute winter. 480 minute analysis at 4 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
240 minute winter	STORAGE 1	168	9.005	0.035	0.4	0.6565	0.0000	OK
240 minute winter	S1	164	9.005	0.085	0.4	0.0964	0.0000	OK
240 minute winter	SURFACE WATER SEWER	4	8.766	0.000	0.3	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
240 minute winter	STORAGE 1	1.000	S1	0.4	0.202	0.061	0.0250	
240 minute winter	S1	Orifice	SURFACE WATER SEWER	0.3				2.5

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Results for 2 year 360 minute summer. 600 minute analysis at 8 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
360 minute summer	STORAGE 1	224	9.001	0.031	0.4	0.5748	0.0000	OK
360 minute summer	S1	224	9.000	0.080	0.3	0.0907	0.0000	OK
360 minute summer	SURFACE WATER SEWER	8	8.766	0.000	0.2	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
360 minute summer	STORAGE 1	1.000	S1	0.3	0.170	0.057	0.0229	
360 minute summer	S1	Orifice	SURFACE WATER SEWER	0.2				2.5

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Results for 2 year 360 minute winter. 600 minute analysis at 8 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
360 minute winter	STORAGE 1	232	8.996	0.026	0.3	0.4844	0.0000	OK
360 minute winter	S1	240	8.997	0.077	0.4	0.0873	0.0000	OK
360 minute winter	SURFACE WATER SEWER	8	8.766	0.000	0.2	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
360 minute winter	STORAGE 1	1.000	S1	0.4	0.170	0.072	0.0209	
360 minute winter	S1	Orifice	SURFACE WATER SEWER	0.2				3.0

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Results for 2 year 480 minute summer. 720 minute analysis at 8 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
480 minute summer	STORAGE 1	280	8.991	0.021	0.3	0.3963	0.0000	OK
480 minute summer	S1	296	8.992	0.072	0.4	0.0817	0.0000	OK
480 minute summer	SURFACE WATER SEWER	8	8.766	0.000	0.2	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
480 minute summer	STORAGE 1	1.000	S1	0.4	0.170	0.064	0.0188	
480 minute summer	S1	Orifice	SURFACE WATER SEWER	0.2				2.3

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Results for 2 year 480 minute winter. 720 minute analysis at 8 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
480 minute winter	STORAGE 1	280	8.992	0.022	0.3	0.4009	0.0000	OK
480 minute winter	S1	272	8.992	0.072	0.4	0.0815	0.0000	OK
480 minute winter	SURFACE WATER SEWER	8	8.766	0.000	0.2	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
480 minute winter	STORAGE 1	1.000	S1	0.4	0.170	0.070	0.0188	
480 minute winter	S1	Orifice	SURFACE WATER SEWER	0.2				2.8

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Results for 2 year 600 minute summer. 840 minute analysis at 15 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
600 minute summer	STORAGE 1	345	8.992	0.022	0.3	0.4052	0.0000	OK
600 minute summer	S1	345	8.993	0.073	0.4	0.0831	0.0000	OK
600 minute summer	SURFACE WATER SEWER	15	8.766	0.000	0.2	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
600 minute summer	STORAGE 1	1.000	S1	0.4	0.156	0.066	0.0194	
600 minute summer	S1	Orifice	SURFACE WATER SEWER	0.2				2.4

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Results for 2 year 600 minute winter. 840 minute analysis at 15 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
600 minute winter	STORAGE 1	375	8.983	0.013	0.2	0.2335	0.0000	OK
600 minute winter	S1	375	8.978	0.058	0.2	0.0652	0.0000	OK
600 minute winter	SURFACE WATER SEWER	15	8.766	0.000	0.2	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
600 minute winter	STORAGE 1	1.000	S1	0.2	0.156	0.034	0.0137	
600 minute winter	S1	Orifice	SURFACE WATER SEWER	0.2				2.7

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Results for 2 year 720 minute summer. 960 minute analysis at 15 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
720 minute summer	STORAGE 1	390	8.986	0.016	0.3	0.2905	0.0000	OK
720 minute summer	S1	390	8.986	0.066	0.2	0.0743	0.0000	OK
720 minute summer	SURFACE WATER SEWER	15	8.766	0.000	0.2	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
720 minute summer	STORAGE 1	1.000	S1	0.2	0.156	0.033	0.0163	
720 minute summer	S1	Orifice	SURFACE WATER SEWER	0.2				2.2

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Results for 2 year 720 minute winter. 960 minute analysis at 15 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
720 minute winter	STORAGE 1	435	8.983	0.013	0.2	0.2335	0.0000	OK
720 minute winter	S1	435	8.978	0.058	0.2	0.0652	0.0000	OK
720 minute winter	SURFACE WATER SEWER	15	8.766	0.000	0.2	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
720 minute winter	STORAGE 1	1.000	S1	0.2	0.156	0.034	0.0137	
720 minute winter	S1	Orifice	SURFACE WATER SEWER	0.2				2.9

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Results for 2 year 960 minute summer. 1200 minute analysis at 15 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
960 minute summer	STORAGE 1	525	8.983	0.013	0.2	0.2335	0.0000	OK
960 minute summer	S1	525	8.977	0.057	0.2	0.0647	0.0000	OK
960 minute summer	SURFACE WATER SEWER	15	8.766	0.000	0.2	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
960 minute summer	STORAGE 1	1.000	S1	0.2	0.156	0.034	0.0136	
960 minute summer	S1	Orifice	SURFACE WATER SEWER	0.2				2.1

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Results for 2 year 960 minute winter. 1200 minute analysis at 15 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
960 minute winter	STORAGE 1	510	8.983	0.013	0.2	0.2321	0.0000	OK
960 minute winter	S1	510	8.973	0.053	0.2	0.0595	0.0000	OK
960 minute winter	SURFACE WATER SEWER	15	8.766	0.000	0.2	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
960 minute winter	STORAGE 1	1.000	S1	0.2	0.156	0.033	0.0123	
960 minute winter	S1	Orifice	SURFACE WATER SEWER	0.2				2.7

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Results for 2 year 1440 minute summer. 1680 minute analysis at 30 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
1440 minute summer	STORAGE 1	750	8.983	0.013	0.2	0.2327	0.0000	OK
1440 minute summer	S1	750	8.974	0.054	0.2	0.0614	0.0000	OK
1440 minute summer	SURFACE WATER SEWER	30	8.766	0.000	0.2	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
1440 minute summer	STORAGE 1	1.000	S1	0.2	0.190	0.034	0.0128	
1440 minute summer	S1	Orifice	SURFACE WATER SEWER	0.2				2.5

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Results for 2 year 1440 minute winter. 1680 minute analysis at 30 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
1440 minute winter	STORAGE 1	720	8.979	0.009	0.1	0.1683	0.0000	OK
1440 minute winter	S1	780	8.942	0.022	0.1	0.0252	0.0000	OK
1440 minute winter	SURFACE WATER SEWER	30	8.766	0.000	0.1	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
1440 minute winter	STORAGE 1	1.000	S1	0.1	0.190	0.017	0.0043	
1440 minute winter	S1	Orifice	SURFACE WATER SEWER	0.1				2.9

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Results for 30 year 15 minute summer. 255 minute analysis at 1 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute summer	STORAGE 1	38	9.041	0.071	1.2	1.3116	0.0000	OK
15 minute summer	S1	39	9.041	0.121	0.6	0.1366	0.0000	SURCHARGED
15 minute summer	SURFACE WATER SEWER	1	8.766	0.000	0.3	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
15 minute summer	STORAGE 1	1.000	S1	0.6	0.368	0.105	0.0359	
15 minute summer	S1	Orifice	SURFACE WATER SEWER	0.3				1.9

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Results for 30 year 15 minute winter. 255 minute analysis at 1 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute winter	STORAGE 1	39	9.050	0.080	1.3	1.4840	0.0000	OK
15 minute winter	S1	39	9.050	0.130	0.7	0.1471	0.0000	SURCHARGED
15 minute winter	SURFACE WATER SEWER	1	8.766	0.000	0.3	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
15 minute winter	STORAGE 1	1.000	S1	0.7	0.373	0.119	0.0380	
15 minute winter	S1	Orifice	SURFACE WATER SEWER	0.3				2.1

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Results for 30 year 30 minute summer. 270 minute analysis at 1 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
30 minute summer	STORAGE 1	48	9.063	0.093	1.4	1.7264	0.0000	OK
30 minute summer	S1	48	9.063	0.143	0.7	0.1619	0.0000	SURCHARGED
30 minute summer	SURFACE WATER SEWER	1	8.766	0.000	0.3	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
30 minute summer	STORAGE 1	1.000	S1	0.7	0.316	0.114	0.0402	
30 minute summer	S1	Orifice	SURFACE WATER SEWER	0.3				2.5

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Results for 30 year 30 minute winter. 270 minute analysis at 1 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
30 minute winter	STORAGE 1	48	9.076	0.106	1.6	1.9641	0.0000	SURCHARGED
30 minute winter	S1	49	9.076	0.156	0.7	0.1764	0.0000	SURCHARGED
30 minute winter	SURFACE WATER SEWER	1	8.766	0.000	0.4	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
30 minute winter	STORAGE 1	1.000	S1	0.7	0.325	0.115	0.0408	
30 minute winter	S1	Orifice	SURFACE WATER SEWER	0.4				2.8

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Results for 30 year 60 minute summer. 300 minute analysis at 1 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
60 minute summer	STORAGE 1	67	9.082	0.112	1.4	2.0790	0.0000	SURCHARGED
60 minute summer	S1	67	9.082	0.162	0.6	0.1834	0.0000	SURCHARGED
60 minute summer	SURFACE WATER SEWER	1	8.766	0.000	0.4	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
60 minute summer	STORAGE 1	1.000	S1	0.6	0.244	0.098	0.0408	
60 minute summer	S1	Orifice	SURFACE WATER SEWER	0.4				3.2

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Results for 30 year 60 minute winter. 300 minute analysis at 1 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
60 minute winter	STORAGE 1	70	9.098	0.128	1.6	2.3770	0.0000	SURCHARGED
60 minute winter	S1	70	9.098	0.178	0.6	0.2016	0.0000	SURCHARGED
60 minute winter	SURFACE WATER SEWER	1	8.766	0.000	0.4	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
60 minute winter	STORAGE 1	1.000	S1	0.6	0.257	0.095	0.0408	
60 minute winter	S1	Orifice	SURFACE WATER SEWER	0.4				3.6

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Results for 30 year 120 minute summer. 360 minute analysis at 2 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
120 minute summer	STORAGE 1	104	9.089	0.119	1.4	2.2056	0.0000	SURCHARGED
120 minute summer	S1	104	9.089	0.169	0.5	0.1911	0.0000	SURCHARGED
120 minute summer	SURFACE WATER SEWER	2	8.766	0.000	0.4	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
120 minute summer	STORAGE 1	1.000	S1	0.5	0.227	0.077	0.0408	
120 minute summer	S1	Orifice	SURFACE WATER SEWER	0.4				4.0

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Results for 30 year 120 minute winter. 360 minute analysis at 2 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
120 minute winter	STORAGE 1	110	9.106	0.136	1.3	2.5082	0.0000	SURCHARGED
120 minute winter	S1	110	9.105	0.185	0.4	0.2096	0.0000	SURCHARGED
120 minute winter	SURFACE WATER SEWER	2	8.766	0.000	0.4	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
120 minute winter	STORAGE 1	1.000	S1	0.4	0.227	0.069	0.0408	
120 minute winter	S1	Orifice	SURFACE WATER SEWER	0.4				4.4

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Results for 30 year 180 minute summer. 420 minute analysis at 4 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
180 minute summer	STORAGE 1	136	9.082	0.112	1.2	2.0741	0.0000	SURCHARGED
180 minute summer	S1	136	9.082	0.162	0.4	0.1831	0.0000	SURCHARGED
180 minute summer	SURFACE WATER SEWER	4	8.766	0.000	0.4	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
180 minute summer	STORAGE 1	1.000	S1	0.4	0.202	0.063	0.0408	
180 minute summer	S1	Orifice	SURFACE WATER SEWER	0.4				4.5

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Results for 30 year 180 minute winter. 420 minute analysis at 4 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
180 minute winter	STORAGE 1	148	9.098	0.128	1.1	2.3618	0.0000	SURCHARGED
180 minute winter	S1	148	9.097	0.177	0.4	0.2006	0.0000	SURCHARGED
180 minute winter	SURFACE WATER SEWER	4	8.766	0.000	0.4	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
180 minute winter	STORAGE 1	1.000	S1	0.4	0.204	0.066	0.0408	
180 minute winter	S1	Orifice	SURFACE WATER SEWER	0.4				4.9

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Results for 30 year 240 minute summer. 480 minute analysis at 4 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
240 minute summer	STORAGE 1	172	9.080	0.110	1.0	2.0420	0.0000	SURCHARGED
240 minute summer	S1	172	9.080	0.160	0.4	0.1811	0.0000	SURCHARGED
240 minute summer	SURFACE WATER SEWER	4	8.766	0.000	0.4	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
240 minute summer	STORAGE 1	1.000	S1	0.4	0.202	0.067	0.0408	
240 minute summer	S1	Orifice	SURFACE WATER SEWER	0.4				4.8

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Results for 30 year 240 minute winter. 480 minute analysis at 4 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
240 minute winter	STORAGE 1	184	9.092	0.122	0.9	2.2511	0.0000	SURCHARGED
240 minute winter	S1	184	9.091	0.171	0.4	0.1939	0.0000	SURCHARGED
240 minute winter	SURFACE WATER SEWER	4	8.766	0.000	0.4	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
240 minute winter	STORAGE 1	1.000	S1	0.4	0.202	0.064	0.0408	
240 minute winter	S1	Orifice	SURFACE WATER SEWER	0.4				5.4

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Results for 30 year 360 minute summer. 600 minute analysis at 8 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
360 minute summer	STORAGE 1	240	9.062	0.092	0.8	1.6979	0.0000	OK
360 minute summer	S1	240	9.062	0.142	0.4	0.1601	0.0000	SURCHARGED
360 minute summer	SURFACE WATER SEWER	8	8.766	0.000	0.3	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
360 minute summer	STORAGE 1	1.000	S1	0.4	0.170	0.061	0.0400	
360 minute summer	S1	Orifice	SURFACE WATER SEWER	0.3				5.2

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Results for 30 year 360 minute winter. 600 minute analysis at 8 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
360 minute winter	STORAGE 1	256	9.067	0.097	0.7	1.7855	0.0000	OK
360 minute winter	S1	256	9.066	0.146	0.4	0.1655	0.0000	SURCHARGED
360 minute winter	SURFACE WATER SEWER	8	8.766	0.000	0.3	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
360 minute winter	STORAGE 1	1.000	S1	0.4	0.170	0.062	0.0406	
360 minute winter	S1	Orifice	SURFACE WATER SEWER	0.3				5.5

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Results for 30 year 480 minute summer. 720 minute analysis at 8 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
480 minute summer	STORAGE 1	304	9.054	0.084	0.7	1.5549	0.0000	OK
480 minute summer	S1	304	9.054	0.134	0.4	0.1514	0.0000	SURCHARGED
480 minute summer	SURFACE WATER SEWER	8	8.766	0.000	0.3	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
480 minute summer	STORAGE 1	1.000	S1	0.4	0.170	0.065	0.0387	
480 minute summer	S1	Orifice	SURFACE WATER SEWER	0.3				5.7

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Results for 30 year 480 minute winter. 720 minute analysis at 8 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
480 minute winter	STORAGE 1	320	9.053	0.083	0.5	1.5332	0.0000	OK
480 minute winter	S1	320	9.053	0.133	0.3	0.1501	0.0000	SURCHARGED
480 minute winter	SURFACE WATER SEWER	8	8.766	0.000	0.3	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
480 minute winter	STORAGE 1	1.000	S1	0.3	0.170	0.055	0.0385	
480 minute winter	S1	Orifice	SURFACE WATER SEWER	0.3				6.3

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Results for 30 year 600 minute summer. 840 minute analysis at 15 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
600 minute summer	STORAGE 1	360	9.037	0.067	0.6	1.2460	0.0000	OK
600 minute summer	S1	360	9.037	0.117	0.4	0.1326	0.0000	SURCHARGED
600 minute summer	SURFACE WATER SEWER	15	8.766	0.000	0.3	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
600 minute summer	STORAGE 1	1.000	S1	0.4	0.156	0.059	0.0350	
600 minute summer	S1	Orifice	SURFACE WATER SEWER	0.3				6.3

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Results for 30 year 600 minute winter. 840 minute analysis at 15 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
600 minute winter	STORAGE 1	390	9.033	0.063	0.4	1.1645	0.0000	OK
600 minute winter	S1	390	9.033	0.113	0.3	0.1276	0.0000	SURCHARGED
600 minute winter	SURFACE WATER SEWER	15	8.766	0.000	0.3	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
600 minute winter	STORAGE 1	1.000	S1	0.3	0.156	0.050	0.0339	
600 minute winter	S1	Orifice	SURFACE WATER SEWER	0.3				6.5

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Results for 30 year 720 minute summer. 960 minute analysis at 15 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
720 minute summer	STORAGE 1	435	9.034	0.064	0.5	1.1810	0.0000	OK
720 minute summer	S1	435	9.034	0.114	0.4	0.1286	0.0000	SURCHARGED
720 minute summer	SURFACE WATER SEWER	15	8.766	0.000	0.3	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
720 minute summer	STORAGE 1	1.000	S1	0.4	0.156	0.059	0.0342	
720 minute summer	S1	Orifice	SURFACE WATER SEWER	0.3				6.2

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Results for 30 year 720 minute winter. 960 minute analysis at 15 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
720 minute winter	STORAGE 1	450	9.026	0.056	0.4	1.0450	0.0000	OK
720 minute winter	S1	450	9.026	0.106	0.3	0.1203	0.0000	SURCHARGED
720 minute winter	SURFACE WATER SEWER	15	8.766	0.000	0.3	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
720 minute winter	STORAGE 1	1.000	S1	0.3	0.156	0.053	0.0323	
720 minute winter	S1	Orifice	SURFACE WATER SEWER	0.3				7.0

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Results for 30 year 960 minute summer. 1200 minute analysis at 15 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
960 minute summer	STORAGE 1	555	9.017	0.047	0.4	0.8672	0.0000	OK
960 minute summer	S1	555	9.017	0.097	0.3	0.1095	0.0000	OK
960 minute summer	SURFACE WATER SEWER	15	8.766	0.000	0.3	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
960 minute summer	STORAGE 1	1.000	S1	0.3	0.156	0.053	0.0296	
960 minute summer	S1	Orifice	SURFACE WATER SEWER	0.3				5.7

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Results for 30 year 960 minute winter. 1200 minute analysis at 15 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
960 minute winter	STORAGE 1	555	9.007	0.037	0.3	0.6832	0.0000	OK
960 minute winter	S1	555	9.007	0.087	0.3	0.0984	0.0000	OK
960 minute winter	SURFACE WATER SEWER	15	8.766	0.000	0.3	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
960 minute winter	STORAGE 1	1.000	S1	0.3	0.156	0.051	0.0257	
960 minute winter	S1	Orifice	SURFACE WATER SEWER	0.3				7.6

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Results for 30 year 1440 minute summer. 1680 minute analysis at 30 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
1440 minute summer	STORAGE 1	780	8.994	0.024	0.3	0.4512	0.0000	OK
1440 minute summer	S1	780	8.995	0.075	0.4	0.0844	0.0000	OK
1440 minute summer	SURFACE WATER SEWER	30	8.766	0.000	0.2	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
1440 minute summer	STORAGE 1	1.000	S1	0.4	0.190	0.070	0.0202	
1440 minute summer	S1	Orifice	SURFACE WATER SEWER	0.2				5.4

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Results for 30 year 1440 minute winter. 1680 minute analysis at 30 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
1440 minute winter	STORAGE 1	750	8.983	0.013	0.2	0.2335	0.0000	OK
1440 minute winter	S1	810	8.978	0.058	0.2	0.0652	0.0000	OK
1440 minute winter	SURFACE WATER SEWER	30	8.766	0.000	0.2	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
1440 minute winter	STORAGE 1	1.000	S1	0.2	0.190	0.034	0.0137	
1440 minute winter	S1	Orifice	SURFACE WATER SEWER	0.2				6.5

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Results for 100 year 15 minute summer. 255 minute analysis at 1 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute summer	STORAGE 1	39	9.060	0.090	1.4	1.6582	0.0000	OK
15 minute summer	S1	39	9.059	0.139	0.7	0.1577	0.0000	SURCHARGED
15 minute summer	SURFACE WATER SEWER	1	8.766	0.000	0.3	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
15 minute summer	STORAGE 1	1.000	S1	0.7	0.384	0.122	0.0397	
15 minute summer	S1	Orifice	SURFACE WATER SEWER	0.3				2.3

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Results for 100 year 15 minute winter. 255 minute analysis at 1 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute winter	STORAGE 1	40	9.075	0.105	1.6	1.9438	0.0000	SURCHARGED
15 minute winter	S1	40	9.075	0.155	0.8	0.1751	0.0000	SURCHARGED
15 minute winter	SURFACE WATER SEWER	1	8.766	0.000	0.3	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
15 minute winter	STORAGE 1	1.000	S1	0.8	0.380	0.130	0.0408	
15 minute winter	S1	Orifice	SURFACE WATER SEWER	0.3				2.7

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Results for 100 year 30 minute summer. 270 minute analysis at 1 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
30 minute summer	STORAGE 1	48	9.095	0.125	1.8	2.3162	0.0000	SURCHARGED
30 minute summer	S1	48	9.095	0.175	0.8	0.1979	0.0000	SURCHARGED
30 minute summer	SURFACE WATER SEWER	1	8.766	0.000	0.4	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
30 minute summer	STORAGE 1	1.000	S1	0.8	0.316	0.130	0.0408	
30 minute summer	S1	Orifice	SURFACE WATER SEWER	0.4				3.2

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Results for 100 year 30 minute winter. 270 minute analysis at 1 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
30 minute winter	STORAGE 1	50	9.112	0.142	2.0	2.6337	0.0000	SURCHARGED
30 minute winter	S1	50	9.112	0.192	0.8	0.2172	0.0000	SURCHARGED
30 minute winter	SURFACE WATER SEWER	1	8.766	0.000	0.4	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
30 minute winter	STORAGE 1	1.000	S1	0.8	0.320	0.132	0.0408	
30 minute winter	S1	Orifice	SURFACE WATER SEWER	0.4				3.6

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Results for 100 year 60 minute summer. 300 minute analysis at 1 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
60 minute summer	STORAGE 1	68	9.121	0.151	1.8	2.8010	0.0000	SURCHARGED
60 minute summer	S1	68	9.121	0.201	0.6	0.2275	0.0000	SURCHARGED
60 minute summer	SURFACE WATER SEWER	1	8.766	0.000	0.4	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
60 minute summer	STORAGE 1	1.000	S1	0.6	0.252	0.106	0.0408	
60 minute summer	S1	Orifice	SURFACE WATER SEWER	0.4				4.1

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Results for 100 year 60 minute winter. 300 minute analysis at 1 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
60 minute winter	STORAGE 1	71	9.143	0.173	2.1	3.2017	0.0000	SURCHARGED
60 minute winter	S1	71	9.143	0.223	0.6	0.2519	0.0000	SURCHARGED
60 minute winter	SURFACE WATER SEWER	1	8.766	0.000	0.4	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
60 minute winter	STORAGE 1	1.000	S1	0.6	0.261	0.104	0.0408	
60 minute winter	S1	Orifice	SURFACE WATER SEWER	0.4				4.6

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Results for 100 year 120 minute summer. 360 minute analysis at 2 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
120 minute summer	STORAGE 1	104	9.126	0.156	1.7	2.8934	0.0000	SURCHARGED
120 minute summer	S1	104	9.126	0.206	0.5	0.2331	0.0000	SURCHARGED
120 minute summer	SURFACE WATER SEWER	2	8.766	0.000	0.4	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
120 minute summer	STORAGE 1	1.000	S1	0.5	0.227	0.077	0.0408	
120 minute summer	S1	Orifice	SURFACE WATER SEWER	0.4				4.9

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Results for 100 year 120 minute winter. 360 minute analysis at 2 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
120 minute winter	STORAGE 1	112	9.148	0.178	1.7	3.2988	0.0000	SURCHARGED
120 minute winter	S1	112	9.148	0.228	0.5	0.2578	0.0000	SURCHARGED
120 minute winter	SURFACE WATER SEWER	2	8.766	0.000	0.4	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
120 minute winter	STORAGE 1	1.000	S1	0.5	0.242	0.077	0.0408	
120 minute winter	S1	Orifice	SURFACE WATER SEWER	0.4				5.5

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Results for 100 year 180 minute summer. 420 minute analysis at 4 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
180 minute summer	STORAGE 1	140	9.120	0.150	1.4	2.7801	0.0000	SURCHARGED
180 minute summer	S1	140	9.120	0.200	0.4	0.2262	0.0000	SURCHARGED
180 minute summer	SURFACE WATER SEWER	4	8.766	0.000	0.4	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
180 minute summer	STORAGE 1	1.000	S1	0.4	0.204	0.071	0.0408	
180 minute summer	S1	Orifice	SURFACE WATER SEWER	0.4				5.5

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Results for 100 year 180 minute winter. 420 minute analysis at 4 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
180 minute winter	STORAGE 1	152	9.138	0.168	1.3	3.1138	0.0000	SURCHARGED
180 minute winter	S1	152	9.138	0.218	0.4	0.2465	0.0000	SURCHARGED
180 minute winter	SURFACE WATER SEWER	4	8.766	0.000	0.4	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
180 minute winter	STORAGE 1	1.000	S1	0.4	0.204	0.073	0.0408	
180 minute winter	S1	Orifice	SURFACE WATER SEWER	0.4				6.1

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Results for 100 year 240 minute summer. 480 minute analysis at 4 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
240 minute summer	STORAGE 1	176	9.114	0.144	1.3	2.6659	0.0000	SURCHARGED
240 minute summer	S1	176	9.114	0.194	0.4	0.2192	0.0000	SURCHARGED
240 minute summer	SURFACE WATER SEWER	4	8.766	0.000	0.4	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
240 minute summer	STORAGE 1	1.000	S1	0.4	0.202	0.070	0.0408	
240 minute summer	S1	Orifice	SURFACE WATER SEWER	0.4				6.0

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Results for 100 year 240 minute winter. 480 minute analysis at 4 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
240 minute winter	STORAGE 1	184	9.132	0.162	1.1	2.9876	0.0000	SURCHARGED
240 minute winter	S1	184	9.131	0.211	0.4	0.2388	0.0000	SURCHARGED
240 minute winter	SURFACE WATER SEWER	4	8.766	0.000	0.4	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
240 minute winter	STORAGE 1	1.000	S1	0.4	0.204	0.072	0.0408	
240 minute winter	S1	Orifice	SURFACE WATER SEWER	0.4				6.6

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Results for 100 year 360 minute summer. 600 minute analysis at 8 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
360 minute summer	STORAGE 1	240	9.099	0.129	1.0	2.3903	0.0000	SURCHARGED
360 minute summer	S1	240	9.099	0.179	0.4	0.2024	0.0000	SURCHARGED
360 minute summer	SURFACE WATER SEWER	8	8.766	0.000	0.4	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
360 minute summer	STORAGE 1	1.000	S1	0.4	0.170	0.065	0.0408	
360 minute summer	S1	Orifice	SURFACE WATER SEWER	0.4				6.3

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Results for 100 year 360 minute winter. 600 minute analysis at 8 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
360 minute winter	STORAGE 1	256	9.106	0.136	0.8	2.5129	0.0000	SURCHARGED
360 minute winter	S1	256	9.106	0.186	0.4	0.2099	0.0000	SURCHARGED
360 minute winter	SURFACE WATER SEWER	8	8.766	0.000	0.4	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
360 minute winter	STORAGE 1	1.000	S1	0.4	0.170	0.066	0.0408	
360 minute winter	S1	Orifice	SURFACE WATER SEWER	0.4				7.2

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Results for 100 year 480 minute summer. 720 minute analysis at 8 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
480 minute summer	STORAGE 1	304	9.080	0.110	0.8	2.0438	0.0000	SURCHARGED
480 minute summer	S1	304	9.080	0.160	0.4	0.1812	0.0000	SURCHARGED
480 minute summer	SURFACE WATER SEWER	8	8.766	0.000	0.4	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
480 minute summer	STORAGE 1	1.000	S1	0.4	0.170	0.061	0.0408	
480 minute summer	S1	Orifice	SURFACE WATER SEWER	0.4				6.7

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Results for 100 year 480 minute winter. 720 minute analysis at 8 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
480 minute winter	STORAGE 1	328	9.089	0.119	0.7	2.2056	0.0000	SURCHARGED
480 minute winter	S1	328	9.089	0.169	0.4	0.1911	0.0000	SURCHARGED
480 minute winter	SURFACE WATER SEWER	8	8.766	0.000	0.4	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
480 minute winter	STORAGE 1	1.000	S1	0.4	0.170	0.063	0.0408	
480 minute winter	S1	Orifice	SURFACE WATER SEWER	0.4				7.5

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Results for 100 year 600 minute summer. 840 minute analysis at 15 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
600 minute summer	STORAGE 1	375	9.069	0.099	0.7	1.8401	0.0000	OK
600 minute summer	S1	375	9.069	0.149	0.3	0.1688	0.0000	SURCHARGED
600 minute summer	SURFACE WATER SEWER	15	8.766	0.000	0.3	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
600 minute summer	STORAGE 1	1.000	S1	0.3	0.156	0.059	0.0408	
600 minute summer	S1	Orifice	SURFACE WATER SEWER	0.3				7.3

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Results for 100 year 600 minute winter. 840 minute analysis at 15 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
600 minute winter	STORAGE 1	405	9.075	0.105	0.6	1.9337	0.0000	SURCHARGED
600 minute winter	S1	405	9.074	0.154	0.4	0.1745	0.0000	SURCHARGED
600 minute winter	SURFACE WATER SEWER	15	8.766	0.000	0.3	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
600 minute winter	STORAGE 1	1.000	S1	0.4	0.156	0.065	0.0408	
600 minute winter	S1	Orifice	SURFACE WATER SEWER	0.3				8.1

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Results for 100 year 720 minute summer. 960 minute analysis at 15 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
720 minute summer	STORAGE 1	435	9.061	0.091	0.6	1.6776	0.0000	OK
720 minute summer	S1	435	9.061	0.141	0.4	0.1589	0.0000	SURCHARGED
720 minute summer	SURFACE WATER SEWER	15	8.766	0.000	0.3	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
720 minute summer	STORAGE 1	1.000	S1	0.4	0.156	0.059	0.0399	
720 minute summer	S1	Orifice	SURFACE WATER SEWER	0.3				7.9

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Results for 100 year 720 minute winter. 960 minute analysis at 15 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
720 minute winter	STORAGE 1	450	9.060	0.090	0.5	1.6607	0.0000	OK
720 minute winter	S1	450	9.060	0.140	0.3	0.1579	0.0000	SURCHARGED
720 minute winter	SURFACE WATER SEWER	15	8.766	0.000	0.3	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
720 minute winter	STORAGE 1	1.000	S1	0.3	0.156	0.056	0.0397	
720 minute winter	S1	Orifice	SURFACE WATER SEWER	0.3				8.5

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Results for 100 year 960 minute summer. 1200 minute analysis at 15 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
960 minute summer	STORAGE 1	555	9.043	0.073	0.5	1.3527	0.0000	OK
960 minute summer	S1	555	9.043	0.123	0.3	0.1391	0.0000	SURCHARGED
960 minute summer	SURFACE WATER SEWER	15	8.766	0.000	0.3	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
960 minute summer	STORAGE 1	1.000	S1	0.3	0.156	0.053	0.0364	
960 minute summer	S1	Orifice	SURFACE WATER SEWER	0.3				8.0

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Results for 100 year 960 minute winter. 1200 minute analysis at 15 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
960 minute winter	STORAGE 1	600	9.037	0.067	0.4	1.2307	0.0000	OK
960 minute winter	S1	600	9.036	0.116	0.3	0.1317	0.0000	SURCHARGED
960 minute winter	SURFACE WATER SEWER	15	8.766	0.000	0.3	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
960 minute winter	STORAGE 1	1.000	S1	0.3	0.156	0.051	0.0348	
960 minute winter	S1	Orifice	SURFACE WATER SEWER	0.3				9.3

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Results for 100 year 1440 minute summer. 1680 minute analysis at 30 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
1440 minute summer	STORAGE 1	780	9.018	0.048	0.4	0.8873	0.0000	OK
1440 minute summer	S1	780	9.018	0.098	0.3	0.1107	0.0000	OK
1440 minute summer	SURFACE WATER SEWER	30	8.766	0.000	0.3	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
1440 minute summer	STORAGE 1	1.000	S1	0.3	0.190	0.048	0.0300	
1440 minute summer	S1	Orifice	SURFACE WATER SEWER	0.3				7.2

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Results for 100 year 1440 minute winter. 1680 minute analysis at 30 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
1440 minute winter	STORAGE 1	780	9.004	0.034	0.3	0.6217	0.0000	OK
1440 minute winter	S1	780	9.004	0.084	0.3	0.0945	0.0000	OK
1440 minute winter	SURFACE WATER SEWER	30	8.766	0.000	0.2	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
1440 minute winter	STORAGE 1	1.000	S1	0.3	0.190	0.056	0.0242	
1440 minute winter	S1	Orifice	SURFACE WATER SEWER	0.2				8.6

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Results for 100 year +45% CC 15 minute summer. 255 minute analysis at 1 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute summer	STORAGE 1	39	9.109	0.139	2.1	2.5733	0.0000	SURCHARGED
15 minute summer	S1	39	9.109	0.189	0.9	0.2136	0.0000	SURCHARGED
15 minute summer	SURFACE WATER SEWER	1	8.766	0.000	0.4	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
15 minute summer	STORAGE 1	1.000	S1	0.9	0.412	0.156	0.0408	
15 minute summer	S1	Orifice	SURFACE WATER SEWER	0.4				3.4

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Results for 100 year +45% CC 15 minute winter. 255 minute analysis at 1 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute winter	STORAGE 1	40	9.133	0.163	2.3	3.0136	0.0000	SURCHARGED
15 minute winter	S1	40	9.133	0.213	0.9	0.2404	0.0000	SURCHARGED
15 minute winter	SURFACE WATER SEWER	1	8.766	0.000	0.4	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
15 minute winter	STORAGE 1	1.000	S1	0.9	0.411	0.155	0.0408	
15 minute winter	S1	Orifice	SURFACE WATER SEWER	0.4				3.9

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Results for 100 year +45% CC 30 minute summer. 270 minute analysis at 1 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
30 minute summer	STORAGE 1	50	9.161	0.191	2.6	3.5265	0.0000	SURCHARGED
30 minute summer	S1	50	9.160	0.240	0.9	0.2717	0.0000	SURCHARGED
30 minute summer	SURFACE WATER SEWER	1	8.766	0.000	0.4	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
30 minute summer	STORAGE 1	1.000	S1	0.9	0.313	0.150	0.0408	
30 minute summer	S1	Orifice	SURFACE WATER SEWER	0.4				4.6

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Results for 100 year +45% CC 30 minute winter. 270 minute analysis at 1 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
30 minute winter	STORAGE 1	50	9.186	0.216	2.9	3.9942	0.0000	SURCHARGED
30 minute winter	S1	50	9.186	0.266	0.9	0.3003	0.0000	SURCHARGED
30 minute winter	SURFACE WATER SEWER	1	8.766	0.000	0.5	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
30 minute winter	STORAGE 1	1.000	S1	0.9	0.331	0.144	0.0408	
30 minute winter	S1	Orifice	SURFACE WATER SEWER	0.5				5.1

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Results for 100 year +45% CC 60 minute summer. 300 minute analysis at 1 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
60 minute summer	STORAGE 1	71	9.206	0.236	2.7	4.3568	0.0000	SURCHARGED
60 minute summer	S1	71	9.205	0.285	0.6	0.3224	0.0000	SURCHARGED
60 minute summer	SURFACE WATER SEWER	1	8.766	0.000	0.5	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
60 minute summer	STORAGE 1	1.000	S1	0.6	0.265	0.105	0.0408	
60 minute summer	S1	Orifice	SURFACE WATER SEWER	0.5				5.8

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Results for 100 year +45% CC 60 minute winter. 300 minute analysis at 1 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
60 minute winter	STORAGE 1	72	9.236	0.266	3.0	4.9125	0.0000	SURCHARGED
60 minute winter	S1	72	9.235	0.315	0.7	0.3563	0.0000	SURCHARGED
60 minute winter	SURFACE WATER SEWER	1	8.766	0.000	0.5	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
60 minute winter	STORAGE 1	1.000	S1	0.7	0.274	0.113	0.0408	
60 minute winter	S1	Orifice	SURFACE WATER SEWER	0.5				6.3

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Results for 100 year +45% CC 120 minute summer. 360 minute analysis at 2 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
120 minute summer	STORAGE 1	114	9.216	0.246	2.5	4.5527	0.0000	SURCHARGED
120 minute summer	S1	114	9.216	0.296	0.5	0.3344	0.0000	SURCHARGED
120 minute summer	SURFACE WATER SEWER	2	8.766	0.000	0.5	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
120 minute summer	STORAGE 1	1.000	S1	0.5	0.242	0.092	0.0408	
120 minute summer	S1	Orifice	SURFACE WATER SEWER	0.5				7.0

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Results for 100 year +45% CC 120 minute winter. 360 minute analysis at 2 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
120 minute winter	STORAGE 1	116	9.252	0.282	2.4	5.2226	0.0000	SURCHARGED
120 minute winter	S1	116	9.252	0.332	0.6	0.3753	0.0000	SURCHARGED
120 minute winter	SURFACE WATER SEWER	2	8.766	0.000	0.5	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
120 minute winter	STORAGE 1	1.000	S1	0.6	0.248	0.096	0.0408	
120 minute winter	S1	Orifice	SURFACE WATER SEWER	0.5				7.6

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Results for 100 year +45% CC 180 minute summer. 420 minute analysis at 4 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
180 minute summer	STORAGE 1	148	9.212	0.242	2.1	4.4736	0.0000	SURCHARGED
180 minute summer	S1	148	9.211	0.291	0.5	0.3295	0.0000	SURCHARGED
180 minute summer	SURFACE WATER SEWER	4	8.766	0.000	0.5	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
180 minute summer	STORAGE 1	1.000	S1	0.5	0.224	0.089	0.0408	
180 minute summer	S1	Orifice	SURFACE WATER SEWER	0.5				7.9

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Results for 100 year +45% CC 180 minute winter. 420 minute analysis at 4 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
180 minute winter	STORAGE 1	156	9.252	0.282	1.9	5.2171	0.0000	SURCHARGED
180 minute winter	S1	156	9.252	0.332	0.5	0.3749	0.0000	SURCHARGED
180 minute winter	SURFACE WATER SEWER	4	8.766	0.000	0.5	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
180 minute winter	STORAGE 1	1.000	S1	0.5	0.236	0.093	0.0408	
180 minute winter	S1	Orifice	SURFACE WATER SEWER	0.5				8.7

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Results for 100 year +45% CC 240 minute summer. 480 minute analysis at 4 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
240 minute summer	STORAGE 1	180	9.202	0.232	1.9	4.2903	0.0000	SURCHARGED
240 minute summer	S1	180	9.201	0.281	0.5	0.3184	0.0000	SURCHARGED
240 minute summer	SURFACE WATER SEWER	4	8.766	0.000	0.5	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
240 minute summer	STORAGE 1	1.000	S1	0.5	0.224	0.086	0.0408	
240 minute summer	S1	Orifice	SURFACE WATER SEWER	0.5				8.4

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Results for 100 year +45% CC 240 minute winter. 480 minute analysis at 4 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
240 minute winter	STORAGE 1	192	9.235	0.265	1.6	4.9043	0.0000	SURCHARGED
240 minute winter	S1	192	9.235	0.315	0.5	0.3558	0.0000	SURCHARGED
240 minute winter	SURFACE WATER SEWER	4	8.766	0.000	0.5	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
240 minute winter	STORAGE 1	1.000	S1	0.5	0.236	0.089	0.0408	
240 minute winter	S1	Orifice	SURFACE WATER SEWER	0.5				9.5

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Results for 100 year +45% CC 360 minute summer. 600 minute analysis at 8 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
360 minute summer	STORAGE 1	248	9.188	0.218	1.5	4.0332	0.0000	SURCHARGED
360 minute summer	S1	248	9.188	0.268	0.5	0.3027	0.0000	SURCHARGED
360 minute summer	SURFACE WATER SEWER	8	8.766	0.000	0.5	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
360 minute summer	STORAGE 1	1.000	S1	0.5	0.170	0.081	0.0408	
360 minute summer	S1	Orifice	SURFACE WATER SEWER	0.5				9.5

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Results for 100 year +45% CC 360 minute winter. 600 minute analysis at 8 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
360 minute winter	STORAGE 1	264	9.215	0.245	1.2	4.5307	0.0000	SURCHARGED
360 minute winter	S1	264	9.214	0.294	0.5	0.3330	0.0000	SURCHARGED
360 minute winter	SURFACE WATER SEWER	8	8.766	0.000	0.5	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
360 minute winter	STORAGE 1	1.000	S1	0.5	0.190	0.084	0.0408	
360 minute winter	S1	Orifice	SURFACE WATER SEWER	0.5				10.5

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Results for 100 year +45% CC 480 minute summer. 720 minute analysis at 8 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
480 minute summer	STORAGE 1	312	9.172	0.202	1.2	3.7354	0.0000	SURCHARGED
480 minute summer	S1	312	9.172	0.252	0.5	0.2845	0.0000	SURCHARGED
480 minute summer	SURFACE WATER SEWER	8	8.766	0.000	0.5	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
480 minute summer	STORAGE 1	1.000	S1	0.5	0.170	0.078	0.0408	
480 minute summer	S1	Orifice	SURFACE WATER SEWER	0.5				9.9

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Results for 100 year +45% CC 480 minute winter. 720 minute analysis at 8 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
480 minute winter	STORAGE 1	336	9.184	0.214	1.0	3.9589	0.0000	SURCHARGED
480 minute winter	S1	336	9.184	0.264	0.5	0.2981	0.0000	SURCHARGED
480 minute winter	SURFACE WATER SEWER	8	8.766	0.000	0.5	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
480 minute winter	STORAGE 1	1.000	S1	0.5	0.170	0.079	0.0408	
480 minute winter	S1	Orifice	SURFACE WATER SEWER	0.5				11.3

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Results for 100 year +45% CC 600 minute summer. 840 minute analysis at 15 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
600 minute summer	STORAGE 1	390	9.161	0.191	1.1	3.5407	0.0000	SURCHARGED
600 minute summer	S1	390	9.161	0.241	0.4	0.2726	0.0000	SURCHARGED
600 minute summer	SURFACE WATER SEWER	15	8.766	0.000	0.4	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
600 minute summer	STORAGE 1	1.000	S1	0.4	0.156	0.076	0.0408	
600 minute summer	S1	Orifice	SURFACE WATER SEWER	0.4				10.5

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Results for 100 year +45% CC 600 minute winter. 840 minute analysis at 15 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
600 minute winter	STORAGE 1	405	9.157	0.187	0.8	3.4611	0.0000	SURCHARGED
600 minute winter	S1	405	9.157	0.237	0.4	0.2677	0.0000	SURCHARGED
600 minute winter	SURFACE WATER SEWER	15	8.766	0.000	0.4	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
600 minute winter	STORAGE 1	1.000	S1	0.4	0.156	0.075	0.0408	
600 minute winter	S1	Orifice	SURFACE WATER SEWER	0.4				11.3

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Results for 100 year +45% CC 720 minute summer. 960 minute analysis at 15 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
720 minute summer	STORAGE 1	450	9.142	0.172	0.9	3.1744	0.0000	SURCHARGED
720 minute summer	S1	450	9.141	0.221	0.4	0.2502	0.0000	SURCHARGED
720 minute summer	SURFACE WATER SEWER	15	8.766	0.000	0.4	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
720 minute summer	STORAGE 1	1.000	S1	0.4	0.156	0.072	0.0408	
720 minute summer	S1	Orifice	SURFACE WATER SEWER	0.4				10.9

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Results for 100 year +45% CC 720 minute winter. 960 minute analysis at 15 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
720 minute winter	STORAGE 1	465	9.142	0.172	0.7	3.1726	0.0000	SURCHARGED
720 minute winter	S1	465	9.141	0.221	0.4	0.2501	0.0000	SURCHARGED
720 minute winter	SURFACE WATER SEWER	15	8.766	0.000	0.4	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
720 minute winter	STORAGE 1	1.000	S1	0.4	0.156	0.072	0.0408	
720 minute winter	S1	Orifice	SURFACE WATER SEWER	0.4				11.8

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Results for 100 year +45% CC 960 minute summer. 1200 minute analysis at 15 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
960 minute summer	STORAGE 1	570	9.106	0.136	0.7	2.5168	0.0000	SURCHARGED
960 minute summer	S1	570	9.106	0.186	0.4	0.2101	0.0000	SURCHARGED
960 minute summer	SURFACE WATER SEWER	15	8.766	0.000	0.4	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
960 minute summer	STORAGE 1	1.000	S1	0.4	0.156	0.066	0.0408	
960 minute summer	S1	Orifice	SURFACE WATER SEWER	0.4				11.6

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Results for 100 year +45% CC 960 minute winter. 1200 minute analysis at 15 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
960 minute winter	STORAGE 1	600	9.101	0.131	0.6	2.4284	0.0000	SURCHARGED
960 minute winter	S1	600	9.101	0.181	0.4	0.2047	0.0000	SURCHARGED
960 minute winter	SURFACE WATER SEWER	15	8.766	0.000	0.4	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
960 minute winter	STORAGE 1	1.000	S1	0.4	0.156	0.065	0.0408	
960 minute winter	S1	Orifice	SURFACE WATER SEWER	0.4				12.8

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Results for 100 year +45% CC 1440 minute summer. 1680 minute analysis at 30 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
1440 minute summer	STORAGE 1	840	9.064	0.094	0.5	1.7410	0.0000	OK
1440 minute summer	S1	840	9.064	0.144	0.3	0.1628	0.0000	SURCHARGED
1440 minute summer	SURFACE WATER SEWER	30	8.766	0.000	0.3	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
1440 minute summer	STORAGE 1	1.000	S1	0.3	0.190	0.057	0.0403	
1440 minute summer	S1	Orifice	SURFACE WATER SEWER	0.3				12.9

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Results for 100 year +45% CC 1440 minute winter. 1680 minute analysis at 30 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
1440 minute winter	STORAGE 1	840	9.057	0.087	0.4	1.6126	0.0000	OK
1440 minute winter	S1	840	9.057	0.137	0.3	0.1550	0.0000	SURCHARGED
1440 minute winter	SURFACE WATER SEWER	30	8.766	0.000	0.3	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
1440 minute winter	STORAGE 1	1.000	S1	0.3	0.190	0.056	0.0393	
1440 minute winter	S1	Orifice	SURFACE WATER SEWER	0.3				14.4

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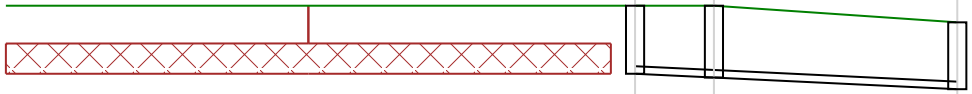
Node Name		STORAGE 1		SURFACE WATER SEWER
A4 drawing Hor Scale 500 Ver Scale 100 Datum (m) 4.000				
Link Name		1.000	1.001	
Section Type		100mm	100mm	
Slope (1:X)		104.3	104.5	
Cover Level (m)		9.870	9.870	9.650
Invert Level (m)		8.970 / 8.920	8.920	8.766
Length (m)		5.215	16.090	

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