

Pound Farm St. Ippolyts, Hitchin

Drainage Strategy Report

Prepared by: **Rowshan Gulam MEng**
Reviewed by: **Mark Gordan CEng MIEI**
Job Number: **32505**
Document Reference:

Date	Revision	Notes/Amendments/Issue Purpose
May 2026	P01	Issued to Design Team for Comment

Contents

Page

1	Introduction	4
1.1	Relevant Policy	
2	Site Description and Location	5
2.1	Existing Drainage	
3	Development Proposal	7
4	Surface Water Run-off Assessment	8
4.1	Existing Run-off	
4.2	Design Criteria	
4.3	Surface Water SuDS Strategy	
4.4	Exceedance Routes and Overland Flows	
4.5	Water Quality	
4.6	Biodiversity and Amenity	
4.7	Summary of SuDS Measures	
5	Surface Water Maintenance Strategy	19
6	Foul Water Assessment	22
7	Conclusions	23

Appendices:

Appendix A	Topographic Survey
Appendix B	Anglian Water Asset Maps
Appendix C	Greenfield Run off Calculation
Appendix D	Proposed Drainage Layout
Appendix E	Catchment Plan
Appendix F	Ground Investigation - BRE 365 Infiltration Test Report
Appendix G	Hydraulic Model Calculations - Infodrainage
Appendix H	Exceedance Routes Flow Plan
Appendix I	Anglian Water Pre-Planning Capacity Report

Contains Ordnance Survey material © Crown copyright. All rights reserved. Licence number 0100058197

Contains British Geological Survey materials © NERC 2026 All rights reserved.

Contains Flood Risk Data © Crown copyright © Environment Agency copyright. All rights reserved. Reproduced under the Open Government Licence.

Acronyms	
AOD	Above Ordnance Datum
CIRIA	Construction Industry Research and Information Association
DCG	Design and Construction Guidance
DEFRA	Department for Environment, Food and Rural Affairs
EA	Environment Agency
FRA	Flood Risk Assessment
LLFA	Lead Local Flood Authority
LPA	Local Planning Authority
LFRRMS	Local Flood Risk Management Strategy
NPPF	National Planning Policy Framework
PPG	Planning Practice Guidance
SFRA	Strategic Flood Risk Assessment
SuDS	Sustainable Drainage Systems
SWMP	Surface Water Management Plan

1 Introduction

Price & Myers have been commissioned to develop a drainage strategy to manage surface water and foul water in support of the planning application for the proposed development at Pound Farm, off London Road, St Ippolyts, SG4 7NE.

The National Planning Policy Framework (NPPF) states that an appropriate Flood Risk Assessment (FRA) will be required for all development proposals of 1 ha or greater in Flood Zone 1 and for any development within Flood Zones 2 or 3.

The Environmental Agency's (EA) Flood Map for Planning shows that the site is in Flood Zone 1 and the site area is less than 1 ha, therefore a Flood Risk Assessment (FRA) is not required. A Drainage Strategy Report is required to support the planning application.

This report will outline the proposed drainage strategy for the site, including a detailed Sustainable Drainage Systems (SuDS) assessment and a concept foul water drainage design.

1.1 Relevant Policy

This Drainage Strategy has been carried out in accordance with the NPPF and the accompanying Planning Practice Guidance (PPG) "Flood Risk and Coastal Change". This drainage strategy also incorporates advice and guidance from the Environment Agency (EA), the Local Planning Authority (LPA) North Hertfordshire Council, Lead Local Flood Authority (LLFA) Hertfordshire County Council and CIRIA documents.

The surface water drainage strategy is in accordance with:

- National standards for Sustainable Drainage Systems (SuDS) (Updated 30 July 2025).
- Hertfordshire County Council Local Flood Risk Management Strategy (Adopted 18 February 2019).
- Building Regulations Part H

The topographical survey (Appendix A) indicates the ground generally falls from the south to northeast. The northwest part of the site slopes down towards the centre, forming a low point on the site before joining the slope falling northeast. The northwestern boundary of the site, near London Road has the highest elevations, with levels ranging from 74.0m - 74.6m AOD, thus the road frontage sits on the high ground ridge. The lowest level of the site lies within the central part of the site, levels ranging from 70.4m - 71.0m AOD, which evidences the described trend of the topography.

The total fall across the site is roughly 4m, creating a natural potential drainage pathway directing surface water runoff from the higher ground levels towards the central low points of the site.

2.1 Existing Drainage

Public sewer records from Anglian Water indicates that a 150mm diameter foul water public sewer run originating from southwest of the site, with a manhole MH2304 connecting to the run along London Road south of the site access road at manhole MH2301. This foul sewer runs from southwest to southeast and partially through the site, which eventually outfalls to the public pumping station northeast of the site, shown on the Anglian Water asset map extract, Figure 2.3.

A drainage CCTV survey was not available at the time of writing. However, the topographic survey (Appendix A) identifies a manhole (cover level 74.20) west of the existing stable building, along London Road, indicating a sewer within the highway corridor. It's assumed this manhole services the stable building and connects to Anglian Water public foul water sewer manhole MH2304. However, this is not shown in the statutory sewer records, Figure 2.3 (Appendix B) and the proposed development is outside the route of the existing public sewer.

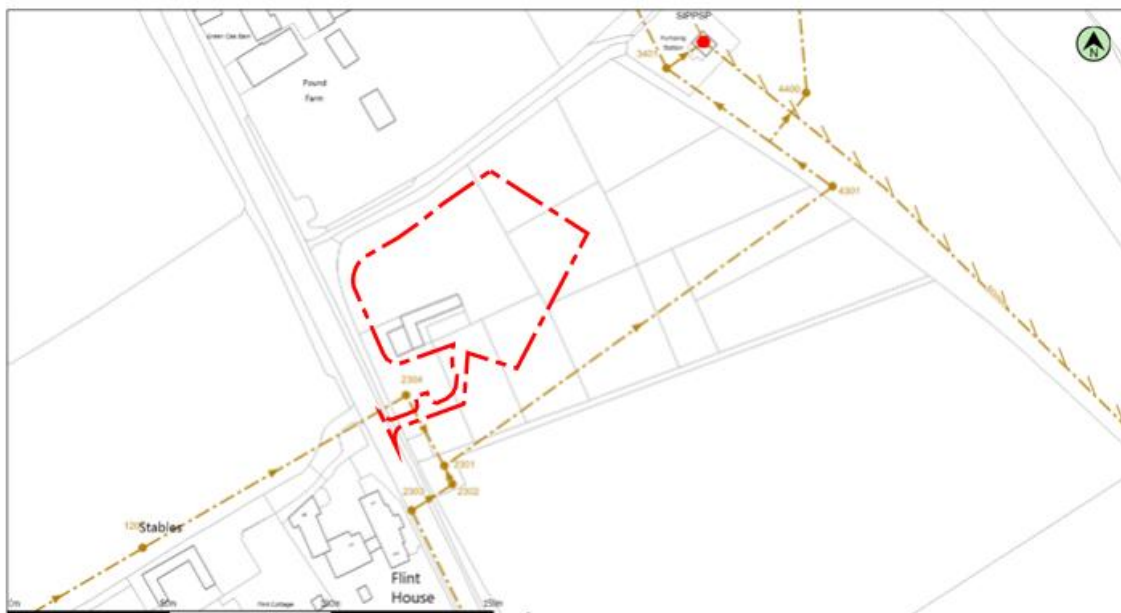
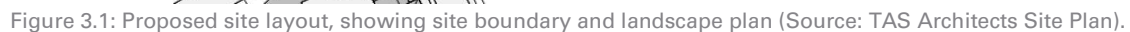


Figure 2.3: Extract from Anglian Water Sewer Asset Map with site boundary overlaid.

The development proposal comprises the redevelopment of an existing equestrian site on land east of London Road, St Ippolyts, Hertfordshire. The proposed scheme includes the demolition of the existing stable buildings and associated hardstanding, and construction of nine residential dwellings arranged around a shared central communal garden. The dwellings will also benefit from private amenity gardens facing south and east; the dwellings with south facing gardens are proposed to have green roofs. For the full proposed site plan, refer to Appendix C.



4 Surface Water Run-off Assessment

4.1 Existing Run-off

The total site area is approximately 5040m² (0.5 ha), which comprises the existing stable building and access road, all of which is impermeable. The remainder of the site is open field - soft landscaped. As described in Section 2.1, it is assumed the site is not served by an existing positive surface water drainage system and drains into the soft landscaping or flows via overland flows to existing watercourse during extreme events.

The greenfield runoff rates for the site have been estimated using the HR Wallingford UKSuDS Greenfield Runoff Rate Estimation Tool (FEH statistical method, 2025 dataset). The calculated greenfield runoff rates are summarised below, with supporting documentation provided in Appendix C.

Q _{bar}	= 0.1 l/s
Q _{1Gr}	= 0.1 l/s
Q _{30Gr}	= 0.3 l/s
Q _{100Gr}	= 0.5 l/s

4.2 Design Criteria

The National Standards for Sustainable Drainage Systems (SuDS) requires that the drainage system must be designed so that, unless an area is designated to hold and/or convey water as part of the design, flooding does not occur:

- on any part of the site in a 1 in 30-year rainfall event;
- in any part of a building (including basement) or in any utility plant susceptible to water, in a 1 in 100-year rainfall event.

The current EA guidance on ensuring that new development does not increase flood risk elsewhere gives values for climate change allowance on rainfall intensity based on the expected lifetime of the building and the location of the site.

For development with a lifetime beyond the year 2100, the “upper end” allowance must be used for the 2070s epoch, which covers the period 2061 to 2125.

The site location falls under the 'Upper and Bedford Ouse Management Catchment', where the climate change allowance for the 2070s epoch is greater than that for the 2050s epoch. As the development lifetime extends beyond 2061, the higher of the two allowances has been used.

The upper end allowance for the 2070s epoch in the Upper and Bedford Ouse Management Catchment is 40%. This allowance has been applied to the rainfall intensity to carry out the drainage design.

4.2.1 Urban Creep

Urban creep describes future expansion within a development and activities such as building extensions and paving gardens. These activities increase the impermeable area of a site and often sit outside of the development control process.

The SuDS Manual states that a 10% increase in paved area should be allowed for in the hydraulic calculations (Appendix G). Therefore, the impermeable areas for the proposed site have been divided into roof and paved areas. As shown in the Architect's Site Plan, the hardstanding areas is all proposed to be permeable paved (Appendix C).

Table 4.1 below summarises the catchment of the proposed development, which is used as the basis of the hydraulic model. The proposed site plan minimises hardstanding area as much as reasonably possible, with the site area being 0.5 Ha, the total contributing hardstanding area to the surface water drainage system is 0.24 Ha.

Table 4-1: Catchment Areas with Urban Creep Factor.

Approximate Hardstanding Area (m2)		Urban Creep (10%)	Total Contributing Area (Ha)
Roof Area	1116	-	0.112
Paved Area	1129	112.9	0.124

These roof and paved catchment areas have been illustrated in further detail in the Catchment Plan PM Drawing 32505-6010 (Appendix E).

4.3 Surface Water SuDS Strategy

In accordance with DEFRA's National Standards for SuDS, surface water runoff should be managed as close to its source as possible. Hertfordshire County Council, acting as Lead Local Flood Authority (LLFA), sets out in its Local Flood Risk Management Strategy (LFRMS) guidance that proposals must follow the discharge hierarchy set out in the National Standards for SuDS.

Surface water runoff has been assessed in line with the discharge hierarchy set out in Standard 1 of the National Standards of SuDS to determine the appropriate runoff destination, as presented below. Standard 1 is supported by the requirements set out in Standards 2 through 7, which relate to the design, construction, maintenance and operation of surface water drainage systems.

4.3.1 Priority 1: Collected for Non-potable Use

Rainwater harvesting promotes the storage and re-use of rainwater collected from roofs and hard surfaced areas. This type of system contributes to the reduction of runoff rates and volumes within a development.

The capacity of rainwater harvesting systems to attenuate rainwater depends on the water use within the building. If there is no activity in the building or water demand and the harvester is full, no attenuation will be provided during a subsequent storm event. In the worst-case scenario, the rainwater harvester will provide no attenuation. Therefore, rainwater harvesting is not included in the drainage strategy for the site.

4.3.2 Priority 2: Infiltration Into the Ground

Infiltration into the ground is the preferred method of surface water disposal in accordance with the Hertfordshire County Council SuDS design guidance and National SuDS Standards.

The site lies within Environment Agency Source Protection Zone II (Outer Protection Zone). Infiltration is therefore considered feasible in principle, subject to demonstrating that the proposed SuDS will not pose an unacceptable risk to groundwater quality. In accordance with the SuDS Manual treatment train principles, runoff from trafficked areas will receive primary treatment via permeable paving prior to infiltration.

Published British Geological Survey mapping (Figure 4.1) indicates that the site is underlain by River Terrace Deposits comprising of chalky sand and gravel with chalk fragments, overlying Chalk Formation bedrock. These geological conditions are typically considered favourable for infiltration-based drainage solutions.

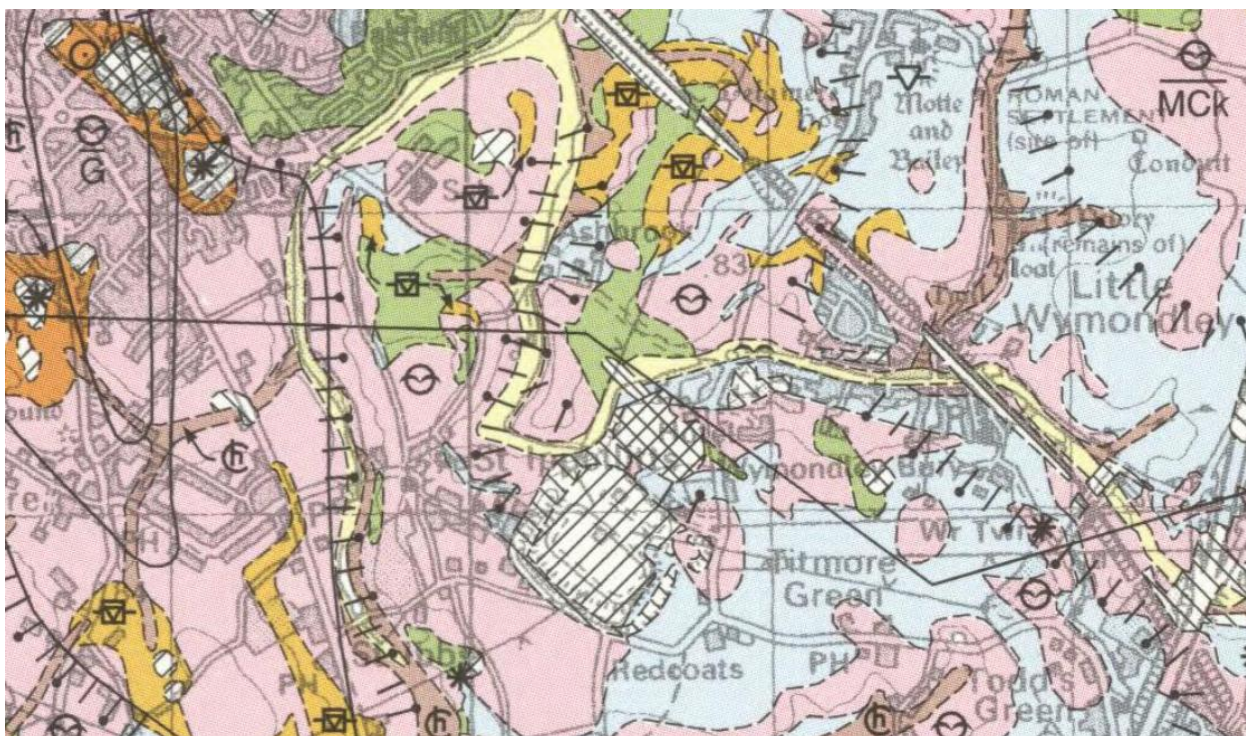


Figure 4.1: BGS Survey Map Extract of Hitchin (Source: British Geological Society)

A series of infiltration tests was carried out in accordance with BRE 365 by H20geo on site on 19th March 2026. In total, three trial pit locations were specified and tested in the central and northeast parts of the site; two of which were deep (2.5m BGL) and one shallow (0.5m BGL). Table 4.1 shows a summary of the test results, with the full summary and report in Appendix F.

Table 4-2: Summary of BRE365 infiltration testing results (H20geo, 2026).

Location ID	Test #	Depth tested (mBGL)	Testing Method	Infiltration Test Result (m/s)	Comment
DP1	1	1.7	BRE 365	n/a	Test unable to be completed due to slow drainage and water ingress at 1.7mBGL.
	-	-	-	-	
	-	-	-	-	
DP2	1	1.1	BRE 365	n/a	Test unable to be completed due to slow drainage and water ingress at 1.1mBGL.
	-	-	-	-	
	-	-	-	-	
SP1	1	0.5	BRE 365	3.33×10^{-5}	Average infiltration coefficient was 2.01×10^{-5} m/s.
	2	0.5	BRE 365	1.25×10^{-5}	
	3	0.5	BRE 365	1.45×10^{-5}	

As shown in the Site Investigations report (Appendix F), the deep infiltration test DP1 was conducted in the central communal landscaped area where the infiltration basin is proposed. DP2 was conducted northeast of the site, behind the residential garden plots, as a secondary drainage option. SP1 was conducted approximately centre of the site plan, slightly southeast of DP1.

The results indicate a relatively shallow groundwater table throughout the site as the trial pits encountered water seepage in both deep trial pits, 1.7mBGL and 1.1mBGL respectively. The shallow test results show infiltration is feasible.

As DP1 encountered water ingress at 1.7mBGL, this is the Ground Water Level used for the design parameters of the drainage strategy. In addition, the ground profile is the same at SP1 and within close proximity, therefore the infiltration rate is used for design is derived from SP1.

The existing Ground Level at DP1 is 70.75m, thus Groundwater Level is taken to be approximately 69.05m. As per SuDS guidance, a 1m separation of unsaturated soil zone is required from the base infiltration systems to the maximum anticipated groundwater level.

The proposed surface water strategy includes a proposed modular soakaway at the natural low point of the central landscaped area (location of DP1 trial pit) using the infiltration rate calculated from shallow test SP1. The soakaway will be 0.5m deep, with 0.6m of fill cover below ground level. The soakaway plan area has been designed to accommodate all peak storm events from the 1 in 2-year up to the 1 in 100-year return periods shown in the Infodrainage Hydraulic Calculations (Appendix G).

However, during the critical storm event for the extreme 1 in 100-year (+40% climate change) return period, the soakaway is shown to surcharge, with the maximum water level raising to 71.36m, referring to the Infodrainage Hydraulic Calculations (Appendix G). Thus, a detention basin is designed to provide attenuation storage in conjunction for the extreme storm; this water level is below top of the detention basin.

The modular soakaway will be located under the detention basin base. The external ground level at this point is proposed to be raised from 70.75m to 71.45m to satisfy the 1m groundwater clearance requirement. The level at the bottom of the basin is proposed to be 71.05m, therefore a 0.4m depression at a 1:3 banking from surrounding proposed ground level. A section sketch illustrating the basin configuration with the soakaway is shown in the PM Drainage Layout 32505-6000 Drawing (Appendix D).

The detention basin's function is to control the surcharged soakaway in the extreme storm events, holding the water as it rises from the soakaway into the basin. As the ground levels are raised around the basin, all the surface water volume is expected to retain within the detention basin footprint, see PM Drainage Layout 32505-6000 Drawing (Appendix D).

Permeable paved roadways and parking areas will provide source control by allowing runoff to infiltrate into the underlying sub-base, reducing peak flows and providing water quality treatment prior to discharge to the wider site drainage system. This will be above the 1m Groundwater clearance and supported by the positive infiltration rates from SP1 test. Surface water runoff will be conveyed via a private drainage network towards the natural low point within the communal landscaped area.

Furthermore, as per the architectural site layout, the dwellings with south facing gardens will have green roofs, providing source control benefits, improving water quality prior to discharge into the drainage system.

With the combination of proposed green roofs, permeable paving throughout the site and soakaway detention basin, the proposed development provides sufficient interception methods for the first 5mm of rainfall to be captured according to SuDS Manual Table 24.6 and therefore satisfying Standard 2 of the National Standards for SuDS.

4.3.3 Priority 3: Discharge to a Surface Water Body

A watercourse associated with Ippollitts Brook is located to the north-east of the site; however, discharge to this feature is not proposed as part of the proposed drainage strategy.

4.3.4 Priority 4: Discharge to a Surface Water Sewer Highway Drain, or Another Drainage System

Discharge to a surface water sewer, highway drain, or alternative drainage network is not required as part of the proposed drainage strategy.

4.3.5 Priority 5: Discharge to a Combined Sewer

Given that the proposed strategy enables all surface water runoff to be managed sustainably within the site boundary through infiltration-based SuDS features, discharge to a combined sewer is not required.

4.4 Exceedance Routes and Overland Flows

In accordance with the National Standards for Sustainable Drainage Systems, site drainage design must ensure that flows resulting from rainfall events exceeding the design standard are safely managed through exceedance routing, minimising risks to people and property. Thus, the proposed drainage strategy has been designed so that there is no flooding to buildings for up to and including the 1 in 100-year +40% peak storm event. However, during the extended storm periods, outside the modelled durations e.g. the 1 in 100 year +40% long period of rainfall event, the site drainage system may exceed its design capacity, resulting in localised surface water ponding at low points of the site.

Figure 4.2 shows the overland flows with the proposed site layout and possible exceedance routes, determined by proposed levels and design of hard landscaped areas, see PM 32505-6020 Exceedance Flow Plan Drawing (Appendix H). The site benefits from favourable topography, with ground levels generally falling from the north-western and southern boundaries towards a central low point within the communal landscaped area. This natural fall has been utilised to provide controlled exceedance routing; whereby overland flows are conveyed via internal access roads and landscaped corridors towards the designed basin and soft landscaped areas

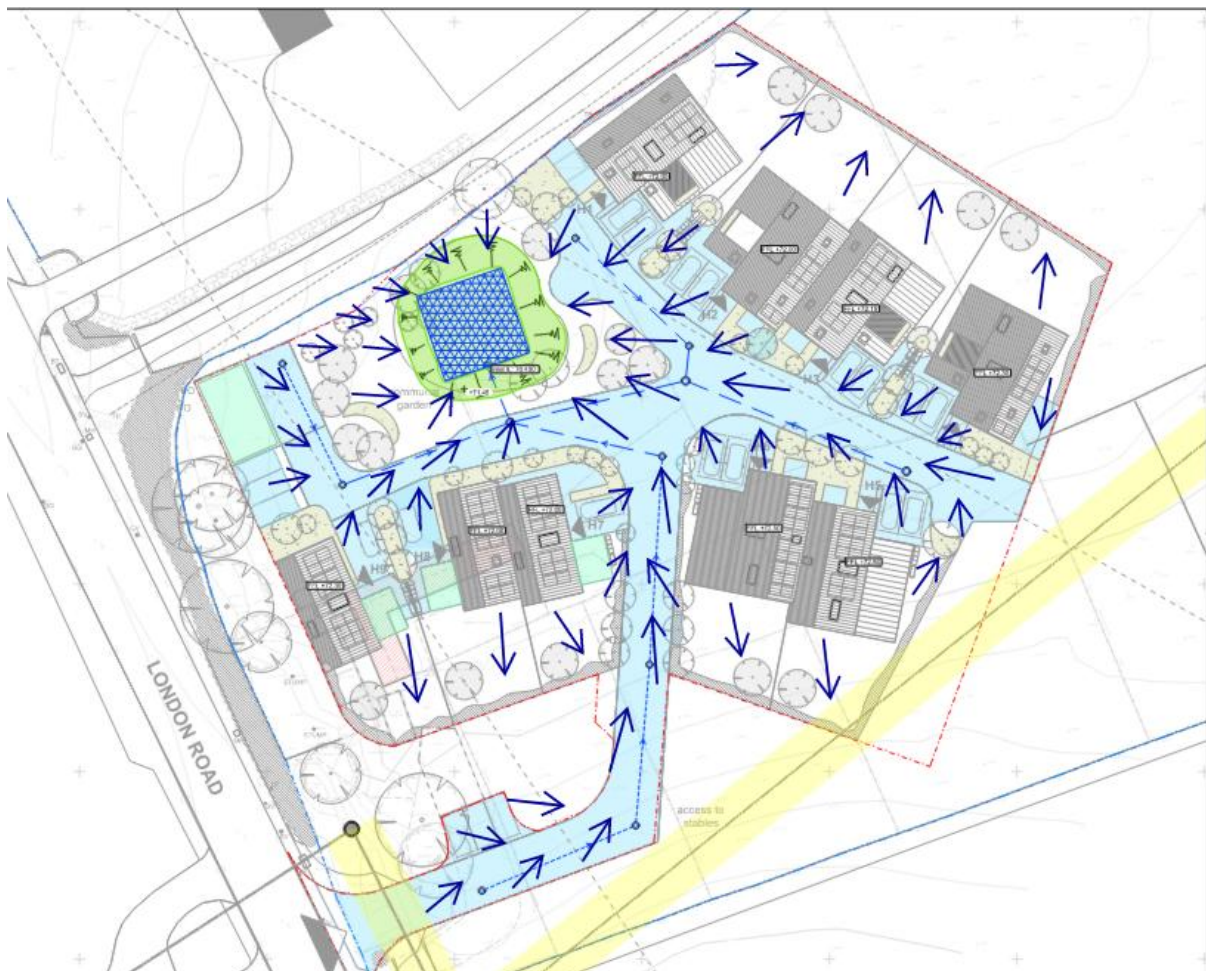


Figure 4.2: Sketch showing overland flows and exceedance route from proposed levels (Source: Appendix H).

The detention basin provides storage during design storm events where the soakaway beneath the base surcharges, causing water to rise within the basin. However, during extreme rainfall events exceeding this design standard, the basin may surcharge, and excess flows will be safely contained within the central communal soft landscaped area, away from residential buildings.

The proposed layout will ensure that exceedance flows are directed away from buildings and managed within designated landscaped areas. Finished floor levels are recommended to be set a minimum of 150 mm above adjacent ground levels and external levels falling away from thresholds to provide additional protection against the overland flow routes from extreme rainfall events; these Finished Floor Levels are shown on the proposed drainage design, see PM 32505-6000 Drainage Layout Drawing (Appendix D).

Overall, exceedance routing has been integrated into the proposed site layout, utilising finished external levels which compliments the natural topography of the site to minimise risks to property, and residents in accordance with national standards and SuDS best practice.

4.5 Water Quality

SuDS have the potential to provide water quality benefits to runoff entering the environment. The SuDS Manual states that SuDS should be designed to treat runoff to reduce the risk of environmental pollution. Chapter 26 of The SuDS Manual sets out the 'simple index approach' to water quality risk management. This approach has been used to quantify the benefits of the proposed SuDS scheme on water quality.

Step 1 of the simple index approach is to identify the pollution hazard indices for the proposed land use. The proposed residential development is considered to have a 'Low' pollution hazard level and Table 4-3 below shows the associated pollution hazard for typical residential land uses:

Table 4-3: Pollution Hazard Indices, taken from Table 26.2 of The SuDS Manual (CIRIA, 2015)

Land Use	Pollution Hazard Level	Total Suspended Solids (TSS)	Metals	Hydrocarbons
Individual property driveways, residential car parks, low traffic roads and non-residential car parking with infrequent change	Low	0.5	0.4	0.4

Step 2 of the simple index approach is to select SuDS with a total pollution mitigation index that equals or exceeds the pollution hazard index.

As the principal destination of the runoff is to groundwater, via infiltration through permeable paving and a soakaway underlain with soil with good soil contaminant potential, designed to function as an infiltration basin, the groundwater pollution mitigation indices should be used as shown in Table 6.4, Chapter 26 of the SuDS Manual.

The indicative groundwater pollution mitigation indices for permeable paving and detention basin are shown in Table 4-4 below:

Table 4-4 Groundwater Pollution Mitigation Indices, taken from Table 26.4 of the SuDS Manual.

Characteristics of the material overlying the proposed infiltration surface, through which the runoff percolates	TSS	Metals	Hydrocarbons
A layer of dense vegetation*	0.6	0.5	0.6
A soil with good contaminant attenuation potential of at least 300mm in depth	0.4	0.3	0.3
Permeable pavement*	0.7	0.6	0.7
Detention Basin	0.5	0.5	0.6
* All features to be underlain by a soil with good contaminant attenuation potential of at least 300mm in depth.			

The treatment train comprises green roofs, permeable paving, and vegetated pond margins prior to infiltration. Provided that the mitigation indices of the treatment techniques are greater than or equal to the hazard indices for the proposed development then there should be no reduction in the overall water quality within the receiving watercourse or groundwater body. Therefore, the proposed treatment train will provide suitable prevention from pollution to groundwater.

4.6 Biodiversity and Amenity

The SuDS Manual describes that in addition to water quantity and water quality, key aspects of SUDS are amenity and biodiversity. The proposed drainage strategy has been developed in accordance with this multi-functional SuDS approach.

The detention basin will provide amenity and ecological value as it will be dry when there is no rainfall and saturated during storm events. The basin will incorporate gently sloping vegetated margins and native planting, creating habitat opportunities for invertebrates, birds, and small mammals, contributing to local biodiversity.

The integration of SuDS features within landscaped areas enhances the visual quality of the development by creating attractive green spaces that contribute to the character of the site. The central basin and surrounding planting will form a focal amenity feature within the communal open space, supporting recreational use and providing a natural landscape setting.

Overall, the proposed SuDS features provide multiple benefits beyond drainage, contributing positively to biodiversity, amenity, and the creation of a sustainable and attractive residential environment in accordance with the principles of the SuDS Manual, therefore in accordance with national and local planning policy.

4.7 Summary of SuDS Measures

The proposed drainage strategy incorporates a range of sustainable drainage measures designed to manage surface water runoff in accordance with the National Standards for SuDS drainage hierarchy, SuDS best practice, and Hertfordshire County Council LFMRS Guidance.

The proposed drainage plan is provided and illustrates the SuDS features, see PM 32505-600 Drawing (Appendix D).

Table 4-5 Summary of Suds Methods Used on Site.

SUDS Method	Area Used on site:	Comment:
Permeable Pavement	Internal roads, parking areas, and driveways	Provides source control, infiltration, and primary water quality treatment and reduces runoff rates.
Detention Basin	Central communal garden area	Provides design storm storage; exceedance flows are routed via overland pathway and facilitates infiltration to ground
Landscaping and Vegetated Areas	Throughout the site	Provides interception, promotes infiltration, enhances biodiversity, and supports amenity value.
Green Roofs	Plots with south facing gardens	Provides source control, infiltration, and primary water quality treatment and reduces runoff rates. Improves energy efficiency of the properties.

5 Surface Water Maintenance Strategy

The successful implementation and operation of a SuDS system depend on a robust and clear maintenance strategy being implemented. The following measures should form part of the site's proposed management plan.

Most of the SuDS will remain privately owned and maintained by the site owner and will form part of the overall maintenance regime for the site.

Routine inspections and maintenance activities will ensure that the SuDS continue to operate effectively, managing runoff rates, maintaining water quality treatment, and preserving amenity and biodiversity benefits.

Table 5-1 SuDS Maintenance Strategy as taken from The SuDS Manual

SuDS Element	Maintenance		
	Activity	Required Action	Typical Frequency
Permeable Paving	Monitoring / Inspections	Initial inspection	Monthly for three months after installation
		Inspect for evidence of poor operation and/or weed growth – if required, take remedial action	Three-monthly, 48 hours after large storms in first six months
		Inspect silt accumulation rates and establish appropriate brushing frequencies	Annually
		Monitor inspection chambers	Annually
	Regular Maintenance	Brushing and vacuuming -standard cosmetic sweep over whole surface	Once a year after autumn leaf fall
		Rubbish and litter removal	As required
	Occasional maintenance	Monitor and remove sediment from inlets	As required
	Remedial Actions	Remediate any landscaping which through vegetation maintenance or soil slip, has been raised to within 50mm of the level of the paving.	As required
		Remedial work to any depressions, rutting and cracked or broken blocks considered detrimental to the structural performance or a hazard to users, and replace lost jointing material.	
		Rehabilitation of surface and upper substructure by remedial sweeping to restore infiltration performance.	Every 10 to 15 years or as required.
Detention Basin	Monitoring / Inspections	Inspect inlets and overflows for blockages, and clear if required.	Monthly
		Inspect basin surface for ponding, compacting, or sediment build-up.	Half yearly

		Inspect banksides, structures, pipework etc. for evidence of physical damage	Annually
	Regular Maintenance Regular Maintenance	Remove litter and debris	Monthly
		Cut grass - for spillways and access routes	Monthly during growing season, or as required.
		Cut grass - meadow grass in and around basin	Half yearly - before nesting season in spring and autumn
		Manage other vegetation and remove nuisance plants	Monthly at start, then as required.
		Inspect inlets and facility surface for silt accumulation. Establish appropriate silt removal frequencies.	Monthly for first year, then as required.
	Occasional Maintenance	Re-seed areas of poor vegetation growth	As required
		Prune and trim any trees and remove cuttings	Every 2 years or as required.
		Check any penstocks and other mechanical devices	Monthly for first year, then annually or as required
		Tidy all dead growth before start of growing season	Annually
		Remove sediment from inlets, forebay and main basin when required.	Annually or as required.
	Remedial Actions	Repair erosion or other damage by re-seeding or re-turfing	As required
		Remove and replace filter medium (cover from soakaway) and vegetation above	
		Repair/rehabilitation of inlets and overflows	
		Relevel uneven surfaces and reinstate design levels	
		Scarify infiltration surface if infiltration performance declines	
Soakaway	Monitoring / Inspections	Inspect silt traps and note rate of sediment accumulation	Monthly in the first year and then annually
		Inspect for sediment and debris in pre-treatment components and floor of inspection tube or chamber and inside of concrete manhole rings	Annually
	Regular Maintenance	Cleaning of gutters and any filters on downpipes	Annually or as required based on inspections
		Trimming any roots that may be causing blockages	Annually or as required

	Occasional Maintenance	Remove sediment and debris from pre-treatment components, silt traps and floor of inspection tube or chamber and inside of concrete manhole rings	As required, based on inspections
	Remedial Actions	Reconstruct soakaway and/or replace or clean void fill, if performance deteriorates or failure occurs	As required
		Replacement of clogged geotextile (will require reconstruction of soakaway)	

Effective SuDS design must assess all foreseeable risks during construction and maintenance. These must be mitigated during the detailed design stages where effective design will aim to avoid, reduce and mitigate risks.

This process will also require input from the principal contractor who will ensure the construction of SuDS components are carried out in a safe and sustainable manner.

6 Foul Water Assessment

As outlined in Section 2.1, the site has an existing foul drainage sewer running partially through the site which eventually outfalls to the public pumping station northeast of the site.

It is proposed to utilise this existing foul sewer and propose a connection as shown in the proposed Drainage Layout, see PM 32505-6000 Drawing (Appendix D). This network provides a suitable point of connection for the proposed development.

The development will comprise nine residential dwellings, and foul flows will be generated from typical domestic sources including kitchens, bathrooms, and utility areas. These flows will be conveyed via a gravity-fed private foul drainage network within the site, before discharging to the existing public foul sewer via a new connection, subject to approval from Anglian Water.

All proposed networks will be designed to Adoptable Standards as outlined in the Design and Construction Guidance (Appendix C of the Sewerage Sector Guidance in relation to the adoption of sewerage assets) (DCG) and in accordance with Building Regulations Part H.

The average daily foul discharge allowance from the site is calculated using the figure of 4000 l/dwelling/day as outlined in the DCG.

The development will include the construction of 9 residential dwellings which, assuming total gravity connection, equates to a potential proposed average daily foul water discharge allowance flow of:

$$9 \text{ dwellings} \times 4000 \text{ l/dwelling/day} / 86400 \text{ s/day} = 0.42 \text{ l/s}$$

A 'Pre-development Enquiry' was submitted to Anglian Water to confirm capacity exists within the receiving public foul sewer network and to obtain consent for connection, the accepted consent and report can be found in Appendix I. According to the report, Anglian Water is able to accept a foul connection anywhere along upstream of existing manhole MH ref 2301 (Appendix B). The proposed indicative foul connection point is shown on the proposed drainage layout, see PM 32505-6000 Drawing (Appendix D).

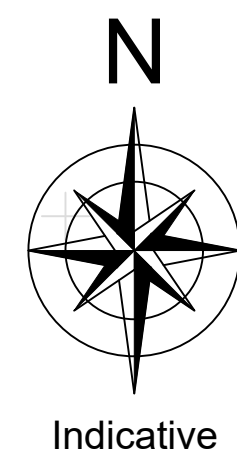
A Section 106 application will be made to the Water Authority for consent to connect to the public sewer.

7 Conclusions

- The site falls within Flood Zone 1 "areas with little or no potential risk of flooding" from fluvial / tidal sources. The site is not at risk of flooding from watercourses or reservoirs.
- Infiltration testing in accordance with BRE 365 was carried out on site to determine feasibility of infiltration-based surface water drainage strategy. The results showed the deep testing trial pits failed due to groundwater ingress. The shallow pit test at depth 0.5mBGL was successful, giving an average infiltration coefficient of 2.01×10^{-5} m/s.
- Using the infiltration rate from shallow pit test the proposed surface water drainage strategy is a modular soakaway located underneath the base of the detention basin.
- External ground levels are proposed to be raised at the detention basin location to satisfy the 1m clearance above the Groundwater table.
- The SuDS scheme is to manage surface water on site and include permeable paving, modular soakaway and a detention basin to accommodate the peak 1 in 100-year +40% storm event when the soakaway be surcharges, containing the runoff.
- An additional allowance for urban creep of 10% impermeable area for paved surfaces is accounted for in design calculations.
- Exceedance flows will be designed to route away from building thresholds and towards less vulnerable areas, following external levels which compliments natural topography.
- A new connection to the Anglian Water public foul water sewer running partially through the southeastern part of the site, is proposed to dispose of foul water flows from the development, subject to Section 106 approval. A pre-development application was submitted and capacity has been confirmed.

Appendix A

Topographic Survey



STANDARD ABBREVIATIONS & SYMBOLS			
AB	Air Brick	FB	Fluebrick
AC	Air Conditioning Unit	FE	Fire Ejector
AD	Architrave	FI	Fire Insulation
AE	Air Entry	FL	Flag Pile
AF	Air Spring	FM	Flag Pile
AG	Air Valve	FL	Flag Roof Level
AH	Air Valve	G	Gravel
AI	Air Valve	GV	Gas Valve
AK	Architrave	HC	Heavy Concrete
AL	Aluminum	JL	Joint Level
AM	Aluminum	LC	Light Concrete
AN	Aluminum	L	Lamp
AO	Aluminum	LP	Lamp Post
AP	Aluminum	MR	Market Road
AS	Aluminum	MS	Market Street
AT	Aluminum	MS	Market Street
CA	Aluminum	MS	Market Street
CB	Aluminum	MS	Market Street
CC	Aluminum	MS	Market Street
CD	Aluminum	MS	Market Street
CE	Aluminum	MS	Market Street
CF	Aluminum	MS	Market Street
CG	Aluminum	MS	Market Street
CH	Aluminum	MS	Market Street
CI	Aluminum	MS	Market Street
CJ	Aluminum	MS	Market Street
CK	Aluminum	MS	Market Street
CL	Aluminum	MS	Market Street
CM	Aluminum	MS	Market Street
CN	Aluminum	MS	Market Street
CO	Aluminum	MS	Market Street
CP	Aluminum	MS	Market Street
CQ	Aluminum	MS	Market Street
CR	Aluminum	MS	Market Street
CS	Aluminum	MS	Market Street
CT	Aluminum	MS	Market Street
CU	Aluminum	MS	Market Street
CV	Aluminum	MS	Market Street
CW	Aluminum	MS	Market Street
CX	Aluminum	MS	Market Street
CY	Aluminum	MS	Market Street
CZ	Aluminum	MS	Market Street
DA	Aluminum	MS	Market Street
DB	Aluminum	MS	Market Street
DC	Aluminum	MS	Market Street
DD	Aluminum	MS	Market Street
DE	Aluminum	MS	Market Street
DF	Aluminum	MS	Market Street
DG	Aluminum	MS	Market Street
DH	Aluminum	MS	Market Street
DI	Aluminum	MS	Market Street
DJ	Aluminum	MS	Market Street
DK	Aluminum	MS	Market Street
DL	Aluminum	MS	Market Street
DM	Aluminum	MS	Market Street
DN	Aluminum	MS	Market Street
DO	Aluminum	MS	Market Street
DP	Aluminum	MS	Market Street
DQ	Aluminum	MS	Market Street
DR	Aluminum	MS	Market Street
DS	Aluminum	MS	Market Street
DT	Aluminum	MS	Market Street
DU	Aluminum	MS	Market Street
DV	Aluminum	MS	Market Street
DW	Aluminum	MS	Market Street
DX	Aluminum	MS	Market Street
DY	Aluminum	MS	Market Street
EZ	Aluminum	MS	Market Street
FA	Aluminum	MS	Market Street
FB	Aluminum	MS	Market Street
FC	Aluminum	MS	Market Street
FD	Aluminum	MS	Market Street
FE	Aluminum	MS	Market Street
FF	Aluminum	MS	Market Street
FG	Aluminum	MS	Market Street
FH	Aluminum	MS	Market Street
FI	Aluminum	MS	Market Street
FJ	Aluminum	MS	Market Street
FK	Aluminum	MS	Market Street
FL	Aluminum	MS	Market Street
FM	Aluminum	MS	Market Street
FN	Aluminum	MS	Market Street
FO	Aluminum	MS	Market Street
FP			

[illegible]

GENERAL NOTES

The accuracy of the data presented in this drawing is consistent with the scale specified in the title block. Any dimensions taken from it will be within the tolerance associated with this and smaller scales only.

All control should be checked before use. All dimensions should be checked on site prior to design and construction. Any deviations or errors in the drawing should be reported to Baseline Surveys immediately.

True information presented should be used as a guide only. Species information cannot be guaranteed and should be verified by a qualified arboriculturist or fitter.

Any drainage information presented has been inspected remotely and should be used as a guide only.

Physical features such as walls, fences and posts shown on drawings do not necessarily represent legal boundaries.

COORDINATE SYSTEM & LEVEL DATUM

The survey grid and level datum have been established on a localised version of the Ordnance Survey National Grid (OSGB36), averaged from multiple GRS93 observations with a scale factor of 1.00001 applied.

CONTROL SCHEDULE			
STATION	PASTING	NORTHING	LEVEL
ST01	1/10/21 5:47	207386.888	14.008
ST02	1/10/21 1:14	227514.870	14.237
			1401 Nail
			1401 Nail

Baseline

Surveys

Land & Topographic Surveys
Measured Building Surveys
Site Engineering & Setting Out

www.baselinesurveys.co.uk

T: 01473 807030
M: 07404 840736

contact@baselinesurveys.co.uk

PROJECT:
Pound Farm
St Ippolyts
SG4 7NE

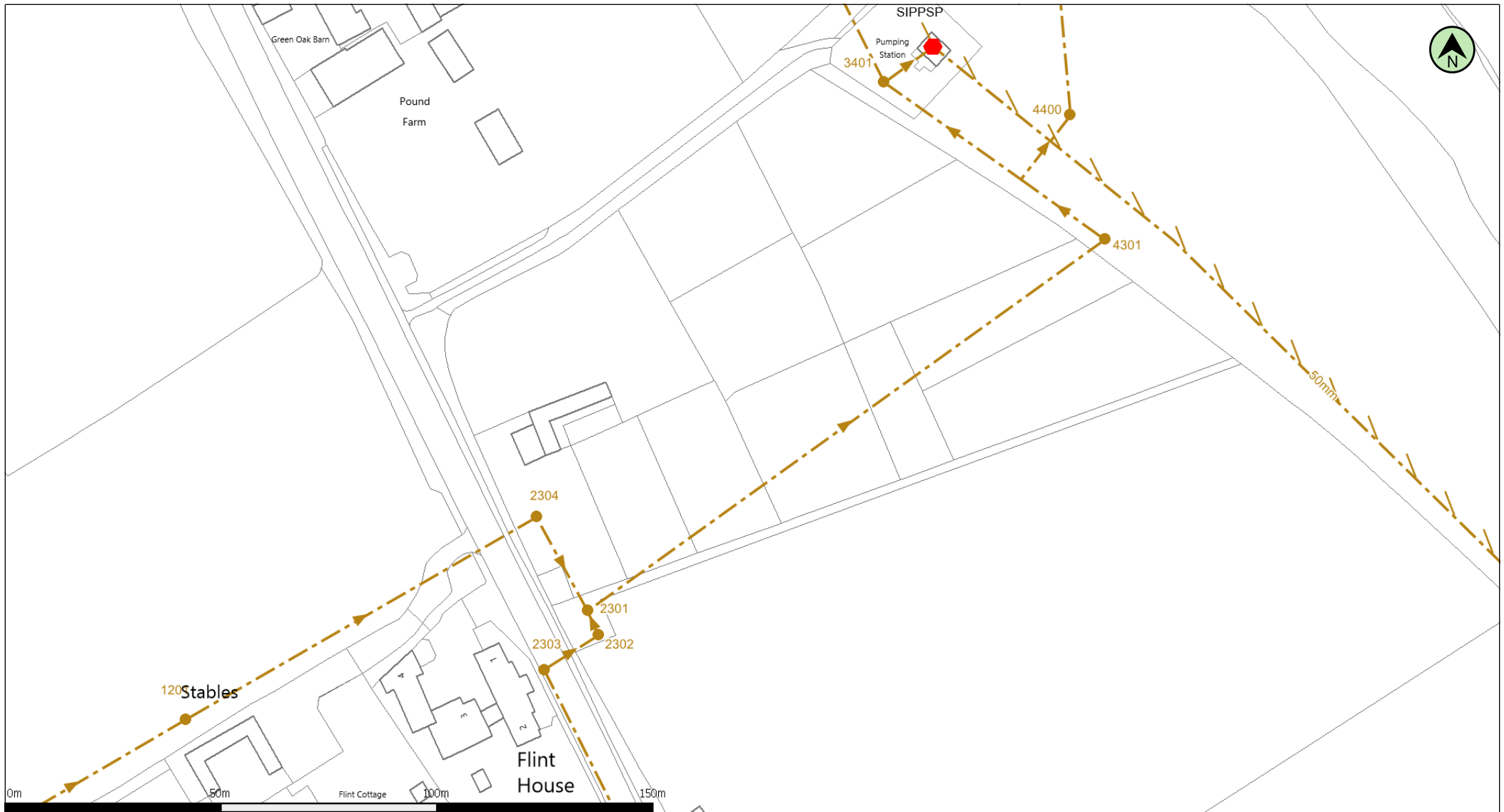
CLIENT:
City Displays Ltd

DRAWING DETAILS:				
Topographic Survey				
SCALE AT A0:	SURVEYED BY:	CHECKED BY:	SURVEY DATE:	ISSUE DATE:
1:200	DJC	BTC	23/09/25	25/09/25
PROJECT NO:	DRAWING NO:	REVISION:	STATUS:	
BSP25_1126	BSP25_1126-01		FINAL	

REVISIONS		
REV:	DATE:	DETAILS:

Appendix B

Anglian Water Asset Maps



(c) Crown copyright and database rights 2026 Ordnance Survey AC0000813445 Date: 20/02/26 Scale: 1:1250 Map Centre: 519320,227360 Data updated: 31/01/26 Our Ref: 2036028 - 1 Wastewater Plan A4 Powered by digdat

This plan is provided by Anglian Water pursuant to its obligations under the Water Industry Act 1991 sections 198 or 199. It must be used in conjunction with any search results attached. The information on this plan is based on data currently recorded but position must be regarded as approximate. Service pipes, private sewers and drains are generally not shown. Users of this map are strongly advised to commission their own survey of the area shown on the plan before carrying out any works. The actual position of all apparatus MUST be established by trial holes. No liability whatsoever, including liability for negligence, is accepted by Anglian Water for any error or inaccuracy or omission, including the failure to accurately record, or record at all, the location of any water main, discharge pipe, sewer or disposal main or any item of apparatus. This information is valid for the date printed. This plan is produced by Anglian Water Services Limited (c) Crown copyright and database rights 2026 Ordnance Survey AC0000813445. This map is to be used for the purposes of viewing the location of Anglian Water plant only. Any other uses of the map data or further copies is not permitted. This notice is not intended to exclude or restrict liability for death or personal injury resulting from negligence.

Foul Sewer	---	Outfall*	⊕	Sewage Treatment Works	□
Surface Sewer	---		⊕	Public Pumping Station	●
Combined Sewer	---		⊕	Decommissioned Pumping Station	⬢
Final Effluent	---	Inlet*			
Rising Main*	---				
Private Sewer*	---				
Decommissioned Sewer*	---	Manhole*			

*(Colour denotes effluent type)

kpatel@pricemyers.com

32505

love every drop
anglianwater

Appendix C

Greenfield Run off Calculation

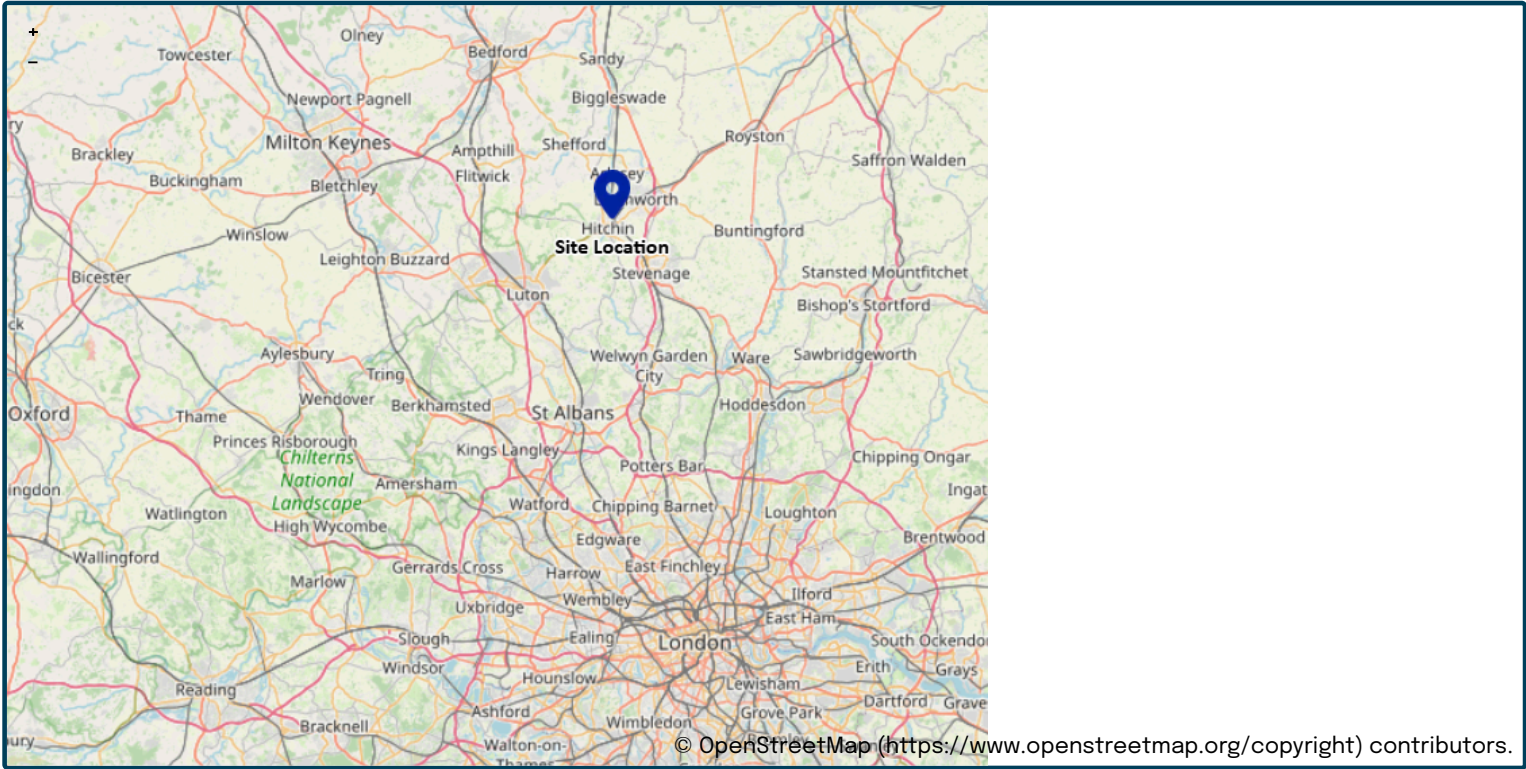
This is an estimation of the greenfield runoff rates that are used to meet normal best practice criteria in line with Environment Agency guidance “Rainfall runoff management for developments”, SC030219 (2013), the SuDS Manual C753 (CIRIA, 2015) and the non-statutory standards for SuDS (Defra, 2015). This information on greenfield runoff rates may be the basis for setting consents for the drainage of surface water runoff from sites.

Project details

Date	12/02/2026
Calculated by	Rowshan
Reference	32505
Model version	2.2.2

Location

Site name	Pound Farm
Site location	St Ippolyts



Site easting (British National Grid)	519037
Site northing (British National Grid)	227818

Site details

Total site area (ha)	0.5	ha
----------------------	----------------------------------	----

Greenfield runoff

Method

Method	FEH statistical (2025)
--------	------------------------

FEH statistical (2025)

	My value	Map value
SAAR9120 (mm)	649	mm
BFIHOST19scaled	0.945	
QMed-QBar conversion	1.124	1.124
QMed (l/s)	0.1	l/s
QBar (FEH statistical 2025) (l/s)	0.1	l/s

Growth curve factors

	My value	Map value
Hydrological region	5	
1 year growth factor	0.87	
2 year growth factor	0.89	
10 year growth factor	1.65	
30 year growth factor	2.45	
100 year growth factor	3.56	
200 year growth factor	4.21	

Results

Method	FEH statistical (2025)	
Flow rate 1 year (l/s)	0.1	l/s
Flow rate 2 year (l/s)	0.1	l/s
Flow rate 10 years (l/s)	0.2	l/s
Flow rate 30 years (l/s)	0.3	l/s
Flow rate 100 years (l/s)	0.5	l/s
Flow rate 200 years (l/s)	0.6	l/s

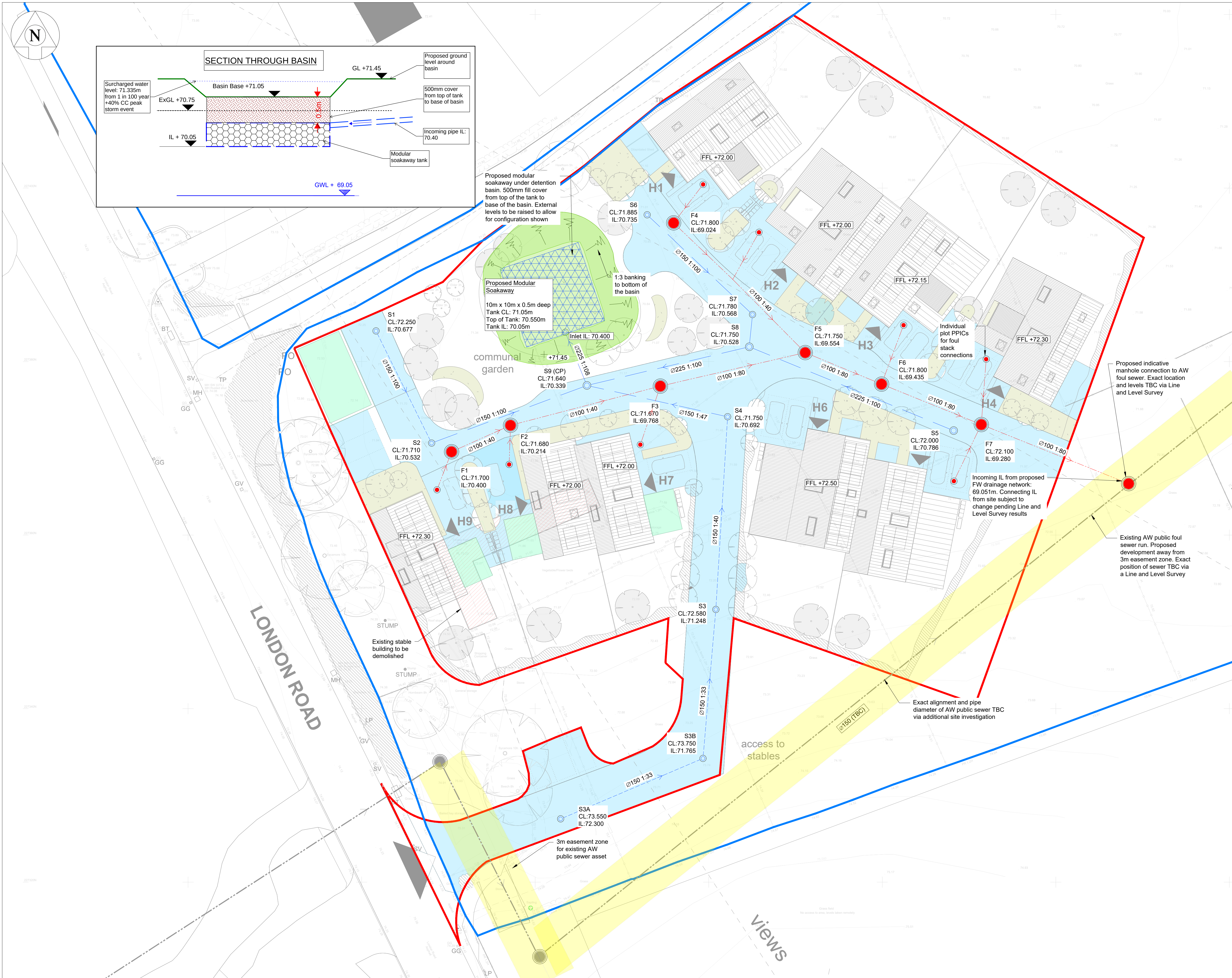
Please note runoff estimation is subject to significant uncertainty. Results are therefore normally reported to only 1 decimal place. Where 2 decimal places are provided, this does not indicate accuracy to this level, it has been adopted to prevent ‘zero’ figures from being reported. Outputs less than 0.01 l/s are reported as 0.01 l/s.

Disclaimer

This report was produced using the Greenfield runoff rate estimation tool (2.2.2) developed by HR Wallingford and available at [uksuds.com](https://www.uksuds.com/) (<https://www.uksuds.com/>). The use of this tool is subject to the UK SuDS terms and conditions and licence agreement, which can both be found at [uksuds.com/terms-conditions](https://www.uksuds.com/terms-conditions) (<https://www.uksuds.com/terms-conditions>). The outputs from this tool have been used to estimate Greenfield runoff rates. The use of these results is the responsibility of the users of this tool. No liability will be accepted by HR Wallingford, the Environment Agency, Centre for Ecology and Hydrology, Wallingford Hydrosolutions or any other organisation for the use of these data in the design or operational characteristics of any drainage scheme.

Appendix D

Proposed Drainage Layout



- NOTES :
1. This drawing is to be read in conjunction with all relevant Architect's, Engineer's and specialists' drawings and specifications.
 2. Do not scale from this drawing in either paper or digital form. Use written dimensions only. To check that this drawing has been printed to the intended scale this bar should be 50mm long @ A1 or 25mm long @ A3.
 3. Health & Safety : All specific drawing notes are to be read in conjunction with the project "Information Pack" and "Site Rules".

DRAINAGE LEGEND	
Site Planning Boundary	
Site Ownership Boundary	
Surface Water Drain	
Surface Water Perforated Pipe	
Foul Water Drain	
Existing Foul Water Sewer	

DRAINAGE KEY	
	CD Channel Drain
S1	Surface Water Manhole Chamber
F1	Foul Water Manhole Chamber
	Existing Foul Water Manhole
	Permeable Paving
	Green Roof
	Sewer Easement Zone
	Soft Landscape to Architect's Detail
	Modular Soakaway
	Detention Basin

ABBREVIATIONS	
IL	- Invert Level
CL	- Cover Level
RA	- Above Ground Rodding Access
REIL	- Rodding Eye Invert Level
BDIL	- Backdrop Invert Level

HEALTH & SAFETY	
List of site specific or unusual hazards relevant to the drawing: (Must be read in conjunction with the CDM risk register.)	
Excavations	Excavation for manholes Contractor to ensure adequate edge protection to excavations for workers and plant and to ensure sides of excavations are sufficiently stable or shored up. Contractor to restrict access into areas where excavations are being carried out.
Sewer Connections	Working with live sewers Extra care must be taken when dealing with live sewers to ensure there is no adverse effect to the existing drainage.
Existing Services	Working alongside/near existing services. Extra care must be taken when working/digging near existing services. A survey should be carried out prior to works commencing to determine the exact location of existing services.

P02	14/05/26	RG	RG	Issued for Information
P01	24/02/26	RG	RG	Issued for Information
Rev	Date Drawn	Eng	Amendment	

POUND FARM, ST IPPOLYTS

BELOW GROUND DRAINAGE PROPOSED LAYOUT

Status
FOR INFORMATION
NOT FOR CONSTRUCTION

Drawn	RG	Eng	RG
Scales	1:200 at A1		
Drawing No	Rev		
32505/6000	P02		

PRICE & MYERS
Consulting Engineers
37 Alfred Place
London
WC1E 7DP
020 7631 5128
mail@pricemyers.com
www.pricemyers.com

Appendix E

Catchment Plan



- NOTES :
1. This drawing is to be read in conjunction with all relevant Architect's, Engineer's and specialists' drawings and specifications.
 2. Do not scale from this drawing in either paper or digital form. Use written dimensions only. To check that this drawing has been printed to the intended scale this bar should be 50mm long @ A1 or 25mm long @ A3.
 3. Health & Safety : All specific drawing notes are to be read in conjunction with the project "Information Pack" and "Site Rules".

LEGEND	
Site Planning Boundary	
Site Ownership Boundary	
CATCHMENT AREAS KEY	
	S1 - PAVED
	S2 - PAVED
	S3 - PAVED
	S4 - PAVED
	S5 - PAVED
	S6 - PAVED
	S7 - PAVED
	S8 - PAVED
	S9 - PAVED
	ROOF AREAS

P01	19/05/26	RG	RG	Issued for Information
Rev	Date	Drawn	Eng	Amendment

POUND FARM,
ST IPPOLYTS

HARD LANDSCAPED
CATCHMENT PLAN

Status
FOR INFORMATION
NOT FOR CONSTRUCTION

Drawn	RG	Eng	RG
Scales	1:200 at A1		
Drawing No	Rev		
32505/6010	P01		

PRICE & MYERS
Consulting Engineers
37 Alfred Place
London
WC1E 7DP
020 7631 5128
mail@pricemyers.com
www.pricemyers.com

Appendix F

Ground Investigation - BRE 365 Infiltration Test Report

BRE365 SOAKAGE TESTING AT POUND FARM, LONDON ROAD, HERTFORDSHIRE, SG4 7NE.

H2Ogeo Reference: 20260203P1v1

Date: 20 March 2026

Version: Final v1.0

<i>Date</i>	<i>Version</i>	<i>Author</i>
20 March 2026	Final v1.0	David Walker

H2Ogeo
Hydrogeology & Environmental Consultancy

Tel: 07787 231455

Email: info@h2ogeo.co.uk

www: www.h2ogeo.co.uk

Statement of Limitations

The report will be prepared in accordance with the scope of work outlined within this proposal and is subject to the applicable cost, time and other constraints. It has been prepared for the sole use of the Client and H2Ogeo accepts no liability as a result of the use or reliance of this report by any other parties.

The advice and opinions in the report should be read and relied on only in the context of the report as a whole. As with any environmental appraisal or investigation, the conclusions and observations are based on limited data. The risk of undiscovered environmental impairment of the site cannot be ruled out. H2Ogeo cannot therefore warrant the actual conditions or LPA responses for the site and advice given is limited to those conditions for which information is held by H2Ogeo at the time. The findings are based on the information made available to H2Ogeo at the date of the report and will have been assumed to be correct.

This report will be provided to the Client and should they wish to release this report to any other third party for that party's reliance, H2Ogeo accepts no responsibility to any third party to whom this report or any part thereof is made known. H2Ogeo accepts no responsibility for any loss or damage incurred as a result, and the third party does not acquire any rights whatsoever, contractual or otherwise, against H2Ogeo except as expressly agreed with H2Ogeo in writing.

The findings will not purport to include any manner of legal advice or opinion. New information or changes in conditions and regulatory requirements may occur in future, which may change the conclusions presented.

H2Ogeo will perform the services on behalf of the Client in a manner consistent with the normal level of care and expertise exercised by members of the environmental profession. No warranties, expressed or implied, are made. Except as otherwise stated, H2Ogeo's assessment is limited strictly to the scope of work outlined in the Scope of Work section and does not evaluate structural or geotechnical conditions of any part of the Site (including any buildings, equipment or infrastructure) or outside the Site boundary.

All conclusions and recommendations made in the report are the professional opinions of H2Ogeo personnel involved with the project and, while normal checking of the accuracy of data has been conducted, H2Ogeo assumes no responsibility or liability for errors in data obtained from external sources, regulatory agencies or any other external sources, nor from occurrences outside the scope of this project.

H2Ogeo is not engaged in environmental consulting and reporting for the purpose of advertising, sales promoting, or endorsement of any client interests, including raising investment capital, recommending investment decisions, or other publicity or investment purposes.

This report has been prepared for the sole use of Client. The report may not be relied upon by any other party without the express written agreement of H2Ogeo. The provision of a copy of this report to any third party is provided for informational purposes only and any reliance on this report by a third party is done so at their own risk and H2Ogeo disclaim all liability to such third party to the extent permitted by law.

Any use of this report by a third party is deemed to constitute acceptance of this limitation.

This report does not constitute legal advice.

Contents

Statement of Limitations	1
Executive Summary.....	3
1 Introduction	4
1.1 Project Details.....	4
2 BRE365 Testing.....	5
2.1 Test Methodology	5
3 Test Results	6
4 Summary	7
5 Figures.....	8
Figure 1 – Trial Pit Locations	9
Figure 2 - Site Photos	10
6 Appendices	11
Table 1 Test Pit Descriptions.....	5
Table 2 Test Pit Details.....	5
Table 3 Analysis Results.....	6

Executive Summary

H2Ogeo Ltd was instructed to undertake infiltration (soakage) testing in accordance with *BRE Digest 365: Soakaway Design* at Pound Farm in Hertfordshire on 19 March 2026.

The purpose of the investigation was to investigate the infiltration rates in the near-surface soils to enable an infiltration-based Sustainable Drainage System.

Three repeat BRE365 infiltration tests were undertaken in SP1 and one test was undertaken in each of DP1 and DP2.

Each trial pit was machine-excavated revealing the soil profile across the site.

Three soakage fills were undertaken in SP1 and one test in DP1 and DP2.

Water-level measurements were recorded at defined time intervals to determine infiltration performance, with analysis undertaken using the BRE365 infiltration formula based on the 75%–25% effective storage interval and the internal surface area at 50% storage depth.

The soakage test in DP1 and DP2 failed and did not achieve the required 75% drawdown within the monitoring period and are therefore classified as failed tests in accordance with BRE365.

The average infiltration rate for SP1 was 2.01×10^{-5} m/s.

1 Introduction

H2Ogeo Ltd undertook infiltration (soakage) testing in accordance with *BRE Digest 365: Soakaway Design* at Pound Farm, London Road, St Ippolyts in Hertfordshire.

The purpose of the investigation was to assess the suitability of the near-surface soils for supporting infiltration-based Sustainable Drainage Systems (SuDS). The works were carried out in excavated trial pits positioned to represent the likely locations of proposed drainage features, enabling site-specific assessment of infiltration performance.

All testing was undertaken by H2Ogeo Ltd following the procedural requirements of BRE365, including controlled filling, measurement of water-level recession over defined time intervals and detailed observation of ground conditions encountered during excavation.

The data collected provide the basis for determining characteristic infiltration rates.

1.1 Project Details

Site Name: Pound Farm

Site Address: London Road, St Ippolyts, Hertfordshire, SG4 7NE

Client: David Fisk

Test Date: 19 March 2026

Weather Conditions: Bright, clear skies, dry with light winds, temperatures ranging from 10 to 16°C.

2 BRE365 Testing

2.1 Test Methodology

Three test pits were excavated across the site and tested in accordance with 32505 PM Infiltration Test Method Statement and *BRE Digest 365: Soakaway Design*.

The encountered soil conditions in each of the three test pits are described below:

Table 1 Test Pit Descriptions

TP ID	From (mbgl)	To (mbgl)	Description
DP1	0	0.3	Dark brown, horse manure/organic content (Topsoil). Rootlets.
	0.3	1.5	Orange/Brown Sandy/Silty soil with Gravelly, cobbles 25cm and gravels 10 to 60mm angular and sub angular. Dry.
	1.5	1.7	As above, becoming more Silty from 1.5m. Water ingress at 1.7mbgl.
DP2	0.0	0.1	Grass with rootlets, (Topsoil).
	0.1	1.2	Orange/Brown Silty, Sandy soil with Gravel, 10mm to 50mm, angular/sub angular. Seepages at 1.1mbgl.
SP1	0	0.1	Grass with rootlets (Topsoil).
	0.1	0.5	Orange/Brown Silty/Sandy with Gravels 10 to 100mm cobbles. Dry throughout.

The table below summarises the location and dimensions of the test pits:

Table 2 Test Pit Details

Test Pit ID	Easting	Northing	National Grid Reference	Length (m)	Width (m)	Test Depth (m)
DP1	519295	227387	TL19295 27387	1.2	0.6	1.7
DP2	519331	227421	TL19331 27421	1.2	0.5	1.2
SP1	519311	227380	TL19311 27380	0.7	0.5	0.5

The locations of each pit are presented in Figure 1 and photos in Figure 2.

Following excavation, the pits were filled with clean water to the test level then levels recorded at defined time intervals to capture the rate of infiltration through the soils. Recorded measurements represent the depth to water below ground level (bgl), increasing as the test pit drains, in accordance with BRE365 methodology.

Three tests took place in SP1. DP1 and DP2 did not achieve the required 75% drawdown within the monitoring period and are therefore classified as failed tests in accordance with BRE365.

On completion all three pits were backfilled.

3 Test Results

The records of each test are presented in Annex A and have been analysed using the following formulae:

$$\text{Soil Infiltration Rate } f = Vp(75-25) / (as50 \times tp(75-25))$$

Where:

- Vp_{75-25} – effective storage volume of water in the soakage trial pit between 75% and 25% effective storage depth
- as_{50} internal surface area of the soakage trial pit up to 50% effective storage depth and including the base area
- tp_{75-25} time for water level to fall from 75% to 25% effective storage depth

The test results are as follows:

Table 3 Analysis Results

TP ID	Test	m/sec	Average/TP
SP1	1	3.33×10^{-05}	2.01×10^{-05}
SP1	2	1.25×10^{-05}	
SP1	3	1.45×10^{-05}	
DP1	1	FAILED	FAILED
DP2	1	FAILED	FAILED

4 Summary

Infiltration rates at Pound Farm were tested using the BRE365 standard methodology.

Three soakage tests were carried out in SP1 with only single tests carried out in DP1 and DP2 due to very slow infiltration.

The average infiltration coefficient for SP1 was 2.01×10^{-05} m/second.

5 Figures

Figure 1 – Trial Pit Locations

Figure 2 - Site Photos

Figure 1 – Trial Pit Locations

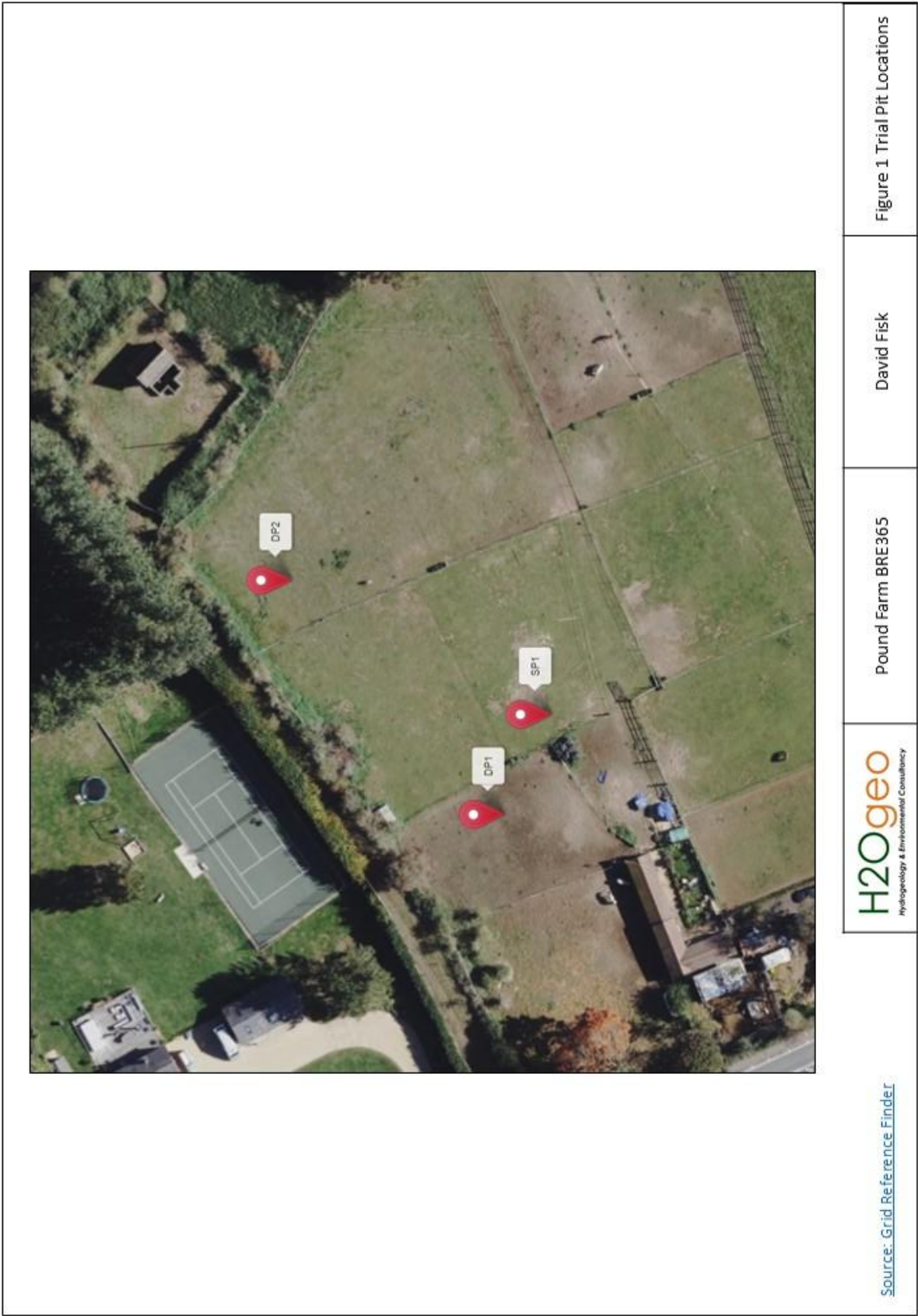


Figure 2 - Site Photos

		
SP1 Trial Pit Looking East	DP1 Trial Pit Looking West	DP2 Trial Pit Looking East
		
Pound Farm BRE365		David Fisk
Figure 2 Trial Pit Photos		

6 Appendices

Appendix A – Results

Test Pit	SP1
Test Number	1
Width (m)	0.5
Length (m)	0.7
Depth (m)	0.5

Time (Minutes)	Water Level (mbgl)
0	0.2
0.5	0.22
1	0.22
1.5	0.22
2	0.23
2.5	0.24
3	0.24
3.5	0.24
4	0.24
4.5	0.24
5	0.25
5.5	0.25
6	0.26
6.5	0.26
7	0.27
7.5	0.27
8	0.27
8.5	0.28
9	0.27
9.5	0.28
10	0.28
10.5	0.29
11	0.29
11.5	0.29
12	0.29
12.5	0.29
13	0.29
13.5	0.3
14	0.3
14.5	0.3
15	0.31
15.5	0.31
16	0.31
16.5	0.31
17	0.32
17.5	0.32
18	0.32
18.5	0.32
19	0.33
19.5	0.33
20	0.33
20.5	0.33
21	0.33
21.5	0.335
22	0.335
23	0.345
24	0.345
25	0.345
30	0.365
35	0.385
40	0.4
45	0.42
50	0.435
55	0.48

Test Pit	SP1
Test Number	2
Width (m)	0.5
Length (m)	0.7
Depth (m)	0.5

Time (Minutes)	Water Level (mbgl)
0	0.22
0.5	0.22
1	0.23
1.5	0.23
2	0.23
2.5	0.23
3	0.23
3.5	0.23
4	0.23
4.5	0.23
5	0.23
5.5	0.23
6	0.24
6.5	0.24
7	0.24
7.5	0.24
8	0.24
8.5	0.24
9	0.24
9.5	0.24
10	0.24
11	0.25
12	0.25
13	0.25
14	0.25
15	0.25
16	0.25
17	0.27
18	0.27
19	0.27
20	0.27
25	0.28
30	0.29
35	0.31
40	0.32
45	0.32
50	0.33
55	0.34
60	0.35
70	0.37
80	0.38
90	0.4
100	0.41
110	0.42
120	0.425
150	0.45

Test Pit	SP1
Test Number	3
Width (m)	0.5
Length (m)	0.7
Depth (m)	0.5

Time (Minutes)	Water Level (mbgl)
0	0.2
0.5	0.21
1	0.21
1.5	0.21
2	0.21
2.5	0.21
3	0.21
3.5	0.21
4	0.21
4.5	0.22
5	0.22
5.5	0.22
6	0.22
6.5	0.22
7	0.22
7.5	0.22
8	0.22
8.5	0.22
9	0.22
9.5	0.22
10	0.22
11	0.23
12	0.23
13	0.23
14	0.23
15	0.23
16	0.23
17	0.23
18	0.23
19	0.23
20	0.24
25	0.25
30	0.26
35	0.27
40	0.28
45	0.28
50	0.3
55	0.3
60	0.32
70	0.33
80	0.34
90	0.36
100	0.38
110	0.39
120	0.42
130	0.43

Test Pit	DP1
Test Number	1
Width (m)	0.6
Length (m)	1.2
Depth (m)	1.7

Time (Minutes)	Water Level (mbgl)
0	0.68
0.5	0.69
1	0.71
1.5	0.71
2	0.71
2.5	0.72
3	0.72
3.5	0.72
4	0.72
4.5	0.73
5	0.73
5.5	0.73
6	0.73
6.5	0.73
7	0.74
7.5	0.76
8	0.74
8.5	0.74
9	0.75
9.5	0.75
10	0.75
10.5	0.75
11	0.75
11.5	0.75
12	0.76
12.5	0.76
13	0.76
13.5	0.76
14	0.76
14.5	0.765
15	0.77
16	0.77
17	0.77
18	0.775
19	0.775
20	0.78
25	0.79
30	0.8
35	0.81
40	0.815
50	0.83
60	0.835
70	0.845
80	0.86
90	0.865
100	0.87
130	0.885
160	0.905
220	0.915
260	0.93

Test Pit	DP2
Test Number	1
Width (m)	0.5
Length (m)	1.2
Depth (m)	1.2

Time (Minutes)	Water Level (mbgl)
0	0.28
0.5	0.32
1	0.35
1.5	0.35
2	0.37
2.5	0.38
3	0.39
3.5	0.39
4	0.4
4.5	0.4
5	0.41
5.5	0.42
6	0.43
6.5	0.43
7	0.44
7.5	0.44
8	0.45
8.5	0.45
9	0.45
9.5	0.45
10	0.46
11	0.46
12	0.47
13	0.48
14	0.49
15	0.49
16	0.5
17	0.51
18	0.52
19	0.53
20	0.53
21	0.54
22	0.54
23	0.54
24	0.55
25	0.56
26	0.56
27	0.57
28	0.57
29	0.57
30	0.57
35	0.59.5
45	0.635
50	0.64
55	0.665
60	0.675
70	0.705
150	0.815
180	0.845

Appendix G

Hydraulic Model Calculations - Infodrainage

Project:	Date: 21/04/2026			
	Designed by: rgulam	Checked by:	Approved By:	
Report Details:	Company Address:			
Type: Stormwater Controls Storm Phase: Phase				



Soakaway

Type : Soakaway

Dimensions	
Exceedance Level (m)	70.550
Depth (m)	0.500
Base Level (m)	70.050
Freeboard (mm)	0
Soakaway Shape	Rectangular
Diameter / Width (m)	10.000
Length (m)	10.000
Porosity (%)	95
Ineffective Storage Depth (m)	0.000
Number of Soakaways	1
Base Infiltration Rate (m/hr)	0.0724
Side Infiltration Rate (m/hr)	0.0724
Safety Factor	5.0
Total Volume (m³)	47.500
Inlets	
Inlet	
Incoming Item(s)	S9-TANK
Bypass Destination	(None)
Capacity Type	No Restriction

Project:	Date: 21/04/2026		
	Designed by: rgulam	Checked by:	Approved By:
Report Details: Type: Inflow Summary Storm Phase: Phase	Company Address:		



Inflow Label	Connected To	Flow (L/s)	Runoff Method	Area (ha)	Percentage Impervious (%)	Urban Creep (%)	Adjusted Percentage Impervious (%)	Area Analysed (ha)
Catchment Area	S3A		Time of Concentration	0.010	30	0	30	0.003
s1 paved	S1		Time of Concentration	0.004	30	0	30	0.001
s2 paved	S2		Time of Concentration	0.011	30	0	30	0.003
s2 roof	S2		Time of Concentration	0.009	100	0	100	0.009
s3 paved	S3		Time of Concentration	0.014	30	0	30	0.004
s3b paved	S3B		Time of Concentration	0.014	30	0	30	0.004
s4 paved	S4		Time of Concentration	0.020	30	0	30	0.006
s4 roof	S4		Time of Concentration	0.015	100	0	100	0.015
s5 paved	S5		Time of Concentration	0.018	30	0	30	0.005
s5 roof	S5		Time of Concentration	0.029	100	0	100	0.029
s6 paved	S6		Time of Concentration	0.011	30	0	30	0.003
s6 roof area	S6		Time of Concentration	0.014	100	0	100	0.014
s7 paved	S7		Time of Concentration	0.009	30	0	30	0.003
s7 roof	S7		Time of Concentration	0.014	100	0	100	0.014
s8 paved	S8		Time of Concentration	0.014	30	0	30	0.004
s8 roof	S8		Time of Concentration	0.014	100	0	100	0.014
s9 paved	S9		Time of Concentration	0.009	30	0	30	0.003
s9 roof	S9		Time of Concentration	0.017	100	0	100	0.017
TOTAL		0.0		0.246				0.152

Project:	Date: 21/04/2026		
	Designed by: rgulam	Checked by:	Approved By:
Report Details: Type: Network Design Criteria Storm Phase: Phase		Company Address:	



Flow Options

Peak Flow Calculation	(UK) Modified Rational Method
Min. Time of Entry (mins)	5
Max. Travel Time (mins)	30

Pipe Options

Lock Slope Options	None
Design Options	Minimise Excavation
Design Level	Level Soffits
Min. Cover Depth (m)	1.200
Min. Slope (1:X)	500.00
Max. Slope (1:X)	40.00
Min. Velocity (m/s)	1.0
Max. Velocity (m/s)	3.0
Use Flow Restriction	☐
Reduce Channel Depths	☐

Pipe Size Library

Default

Add. Increment (mm)	75
Max. Diameter (mm)	0

Diameter (mm)	Min. Slope (1:X)	Max. Slope (1:X)
100	0.00	0.00
150	0.00	0.00

Project:	Date: 21/04/2026		
	Designed by: rgulam	Checked by:	Approved By:
Report Details: Type: Network Design Criteria Storm Phase: Phase	Company Address:		



Manhole Options

Apply Offset	☐
--------------	--------------------------

Manhole Size Library

Default

Diameter / Width

Connection (mm)	Diameter / Length (m)	Width (m)
0	1.200	0.000
375	1.350	0.000
500	1.500	0.000
750	1.800	0.000

Additional Sizing

Connection (mm)	900
Diameter / Length (m)	0.900
Width (m)	0.000

Depth

Depth (m)	Diameter / Length (m)	Width (m)
0.000	1.050	0.000
1.500	1.200	0.000

Access

Depth (m)	Ladder Protrusion (mm)
0.000	130
3.000	230

Benching Requirements

Landing Width (mm)	500
Benching Width (mm)	225

Project:	Date: 21/04/2026			
	Designed by: rgulam	Checked by:	Approved By:	
Report Title: Rainfall Analysis Criteria	Company Address:			

Runoff Type	Dynamic
Output Interval (mins)	5
Time Step	Default
Urban Creep	Apply Global Value
Urban Creep Global Value (%)	0
Junction Flood Risk Margin (mm)	300
Perform No Discharge Analysis	☐

Rainfall

FEH	Type: FEH	
Site Location	GB 518391 229162 TL 18391 29162	
Rainfall Version	2022	
Summer	☒	
Winter	☒	

Return Period

Return Period (years)	Increase Rainfall (%)
2.0	0.000
30.0	0.000
100.0	40.000
100.0	0.000

Storm Durations

Duration (mins)	Run Time (mins)
60	120
120	240
240	480
360	720
480	960
960	1920
1440	2880

Project:	Date: 21/04/2026		
	Designed by: rgulam	Checked by:	Approved By:
Report Details: Type: Junctions Summary Storm Phase: Phase	Company Address:		





FEH: 2 years: Increase Rainfall (%): +0: Critical Storm Per Item: Rank By: Max. Depth

Junction	Storm Event	Cover Level (m)	Invert Level (m)	Max. Level (m)	Max. Depth (m)	Max. Inflow (L/s)	Max. Resident Volume (m³)	Max. Flooded Volume (m³)	Max. Outflow (L/s)	Total Discharge Volume (m³)	Status
S9	FEH: 2 years: +0 %: 60 mins: Summer	71.66 0	70.33 9	70.417	0.078	16.1	0.022	0.000	16.1	20.294	OK
S1	FEH: 2 years: +0 %: 60 mins: Summer	72.25 0	70.67 7	70.686	0.009	0.1	0.001	0.000	0.1	0.158	OK
S2	FEH: 2 years: +0 %: 60 mins: Summer	71.71 0	70.53 2	70.560	0.028	1.4	0.004	0.000	1.4	1.792	OK
S6	FEH: 2 years: +0 %: 60 mins: Summer	71.88 5	70.73 5	70.768	0.033	1.8	0.005	0.000	1.8	2.294	OK
S7	FEH: 2 years: +0 %: 60 mins: Summer	71.78 0	70.56 8	70.620	0.052	3.6	0.008	0.000	3.6	4.521	OK
S8	FEH: 2 years: +0 %: 60 mins: Summer	71.75 0	70.52 8	70.594	0.066	9.2	0.010	0.000	9.2	11.521	OK
S4	FEH: 2 years: +0 %: 60 mins: Summer	71.75 0	70.69 2	70.724	0.032	3.4	0.005	0.000	3.4	4.329	OK
S3	FEH: 2 years: +0 %: 60 mins: Summer	72.78 0	71.24 8	71.269	0.021	1.2	0.003	0.000	1.2	1.534	OK
S5	FEH: 2 years: +0 %: 60 mins: Summer	72.00 0	70.78 6	70.826	0.040	3.7	0.006	0.000	3.7	4.577	OK
S3B	FEH: 2 years: +0 %: 60 mins: Summer	73.75 0	71.76 5	71.781	0.016	0.8	0.003	0.000	0.7	0.968	OK
S3A	FEH: 2 years: +0 %: 60 mins: Summer	73.55 0	72.30 0	72.311	0.011	0.3	0.002	0.000	0.3	0.401	OK

Project:	Date: 21/04/2026		
	Designed by: rgulam	Checked by:	Approved By:
Report Details: Type: Junctions Summary Storm Phase: Phase	Company Address:		





FEH: 30 years: Increase Rainfall (%): +0: Critical Storm Per Item: Rank By: Max. Depth

Junction	Storm Event	Cover Level (m)	Invert Level (m)	Max. Level (m)	Max. Depth (m)	Max. Inflow (L/s)	Max. Resident Volume (m³)	Max. Flooded Volume (m³)	Max. Outflow (L/s)	Total Discharge Volume (m³)	Status
S9	FEH: 30 years: +0 %: 240 mins: Summer	71.660	70.339	70.557	0.218	18.7	0.062	0.000	17.8	70.986	OK
S1	FEH: 30 years: +0 %: 60 mins: Summer	72.250	70.677	70.690	0.013	0.3	0.002	0.000	0.3	0.377	OK
S2	FEH: 30 years: +0 %: 60 mins: Summer	71.710	70.532	70.575	0.043	3.4	0.007	0.000	3.4	4.234	OK
S6	FEH: 30 years: +0 %: 60 mins: Summer	71.885	70.735	70.785	0.050	4.3	0.008	0.000	4.3	5.407	OK
S7	FEH: 30 years: +0 %: 60 mins: Summer	71.780	70.568	70.660	0.092	8.5	0.015	0.000	8.5	10.631	OK
S8	FEH: 30 years: +0 %: 60 mins: Summer	71.750	70.528	70.636	0.108	21.6	0.017	0.000	21.6	27.068	OK
S4	FEH: 30 years: +0 %: 60 mins: Summer	71.750	70.692	70.740	0.048	8.0	0.008	0.000	8.0	10.112	OK
S3	FEH: 30 years: +0 %: 60 mins: Summer	72.780	71.248	71.280	0.032	2.8	0.005	0.000	2.8	3.552	OK
S5	FEH: 30 years: +0 %: 60 mins: Summer	72.000	70.786	70.847	0.061	8.6	0.010	0.000	8.6	10.742	OK
S3B	FEH: 30 years: +0 %: 60 mins: Summer	73.750	71.765	71.789	0.024	1.8	0.004	0.000	1.8	2.243	OK
S3A	FEH: 30 years: +0 %: 60 mins: Summer	73.550	72.300	72.316	0.016	0.7	0.003	0.000	0.7	0.932	OK

Project:	Date: 21/04/2026		
	Designed by: rgulam	Checked by:	Approved By:
Report Details: Type: Junctions Summary Storm Phase: Phase	Company Address:		





FEH: 100 years: Increase Rainfall (%): +40: Critical Storm Per Item: Rank By: Max. Depth

Junction	Storm Event	Cover Level (m)	Invert Level (m)	Max. Level (m)	Max. Depth (m)	Max. Inflow (L/s)	Max. Resident Volume (m³)	Max. Flooded Volume (m³)	Max. Outflow (L/s)	Total Discharge Volume (m³)	Status
S9	FEH: 100 years: +40 %: 60 mins: Summer	71.660	70.339	70.812	0.473	61.7	0.134	0.000	59.8	84.176	Surcharged
S1	FEH: 100 years: +40 %: 60 mins: Summer	72.250	70.677	70.825	0.148	0.9	0.023	0.000	1.5	0.754	OK
S2	FEH: 100 years: +40 %: 60 mins: Summer	71.710	70.532	70.825	0.293	5.5	0.047	0.000	5.5	7.660	Surcharged
S6	FEH: 100 years: +40 %: 60 mins: Summer	71.885	70.735	70.982	0.247	7.7	0.039	0.000	7.2	9.715	Surcharged
S7	FEH: 100 years: +40 %: 60 mins: Summer	71.780	70.568	70.952	0.384	14.4	0.061	0.000	14.0	19.084	Surcharged
S8	FEH: 100 years: +40 %: 60 mins: Summer	71.750	70.528	70.917	0.389	36.2	0.062	0.000	36.0	48.588	Surcharged
S4	FEH: 100 years: +40 %: 60 mins: Summer	71.750	70.692	70.826	0.134	14.4	0.021	0.000	12.6	18.199	OK
S3	FEH: 100 years: +40 %: 60 mins: Summer	72.780	71.248	71.290	0.042	5.0	0.007	0.000	5.0	6.399	OK
S5	FEH: 100 years: +40 %: 60 mins: Summer	72.000	70.786	70.941	0.155	15.4	0.025	0.000	14.5	19.317	OK
S3B	FEH: 100 years: +40 %: 60 mins: Summer	73.750	71.765	71.797	0.032	3.2	0.005	0.000	3.2	4.042	OK
S3A	FEH: 100 years: +40 %: 60 mins: Summer	73.550	72.300	72.321	0.021	1.3	0.003	0.000	1.3	1.683	OK

Project:	Date: 21/04/2026		
	Designed by: rgulam	Checked by:	Approved By:
Report Details: Type: Junctions Summary Storm Phase: Phase	Company Address:		





FEH: 100 years: Increase Rainfall (%): +0: Critical Storm Per Item: Rank By: Max. Depth

Junction	Storm Event	Cover Level (m)	Invert Level (m)	Max. Level (m)	Max. Depth (m)	Max. Inflow (L/s)	Max. Resident Volume (m³)	Max. Flooded Volume (m³)	Max. Outflow (L/s)	Total Discharge Volume (m³)	Status
S9	FEH: 100 years: +0 %: 120 mins: Summer	71.660	70.339	70.595	0.256	35.7	0.072	0.000	33.3	74.064	Surcharged
S1	FEH: 100 years: +0 %: 60 mins: Summer	72.250	70.677	70.692	0.015	0.4	0.002	0.000	0.4	0.479	OK
S2	FEH: 100 years: +0 %: 120 mins: Summer	71.710	70.532	70.599	0.067	3.2	0.011	0.000	3.1	6.667	OK
S6	FEH: 100 years: +0 %: 60 mins: Summer	71.885	70.735	70.792	0.057	5.5	0.009	0.000	5.5	6.928	OK
S7	FEH: 100 years: +0 %: 60 mins: Summer	71.780	70.568	70.678	0.110	10.9	0.017	0.000	11.0	13.618	OK
S8	FEH: 100 years: +0 %: 60 mins: Summer	71.750	70.528	70.648	0.120	27.8	0.019	0.000	28.7	34.658	OK
S4	FEH: 100 years: +0 %: 60 mins: Summer	71.750	70.692	70.746	0.054	10.3	0.009	0.000	10.3	12.984	OK
S3	FEH: 100 years: +0 %: 60 mins: Summer	72.780	71.248	71.284	0.036	3.6	0.006	0.000	3.6	4.563	OK
S5	FEH: 100 years: +0 %: 60 mins: Summer	72.000	70.786	70.856	0.070	11.0	0.011	0.000	11.0	13.790	OK
S3B	FEH: 100 years: +0 %: 60 mins: Summer	73.750	71.765	71.793	0.028	2.3	0.004	0.000	2.3	2.882	OK
S3A	FEH: 100 years: +0 %: 60 mins: Summer	73.550	72.300	72.318	0.018	1.0	0.003	0.000	0.9	1.199	OK

Project:	Date: 21/04/2026		
	Designed by: rgulam	Checked by:	Approved By:
Report Details: Type: Stormwater Controls Summary Storm Phase: Phase	Company Address:		





FEH: 2 years: Increase Rainfall (%): +0: Critical Storm Per Item: Rank By: Max. Avg. Depth

Stormwater Control	Storm Event	Max. US Level (m)	Max. DS Level (m)	Max. US Depth (m)	Max. DS Depth (m)	Max. Inflow (L/s)	Max. Resident Volume (m³)	Max. Flooded Volume (m³)	Total Lost Volume (m³)	Max. Outflow (L/s)	Total Discharge Volume (m³)	Half Drain Down Time (mins)	Percentage Available (%)
Soakaway	FEH: 2 years: +0 %: 360 mins: Winter	70.395	70.395	0.345	0.345	4.9	32.812	0.000	18.716	0.0	0.000	350	30.921

Project:	Date: 21/04/2026			
	Designed by:	Checked by:	Approved By:	
	rgulam			
Report Details:	Company Address:			
Type: Stormwater Controls Summary				
Storm Phase: Phase				

Status
OK

Project:	Date: 21/04/2026		
	Designed by: rgulam	Checked by:	Approved By:
Report Details: Type: Stormwater Controls Summary Storm Phase: Phase	Company Address:		





FEH: 30 years: Increase Rainfall (%): +0: Critical Storm Per Item: Rank By: Max.
Avg. Depth

Stormwater Control	Storm Event	Max. US Level (m)	Max. DS Level (m)	Max. US Depth (m)	Max. DS Depth (m)	Max. Inflow (L/s)	Max. Resident Volume (m³)	Max. Flooded Volume (m³)	Total Lost Volume (m³)	Max. Outflow (L/s)	Total Discharge Volume (m³)	Half Drain Down Time (mins)	Percentage Available (%)
Soakaway	FEH: 30 years: +0 %: 480 mins: Winter	70.757	70.757	0.707	0.707	6.9	68.161	20.656	26.568	0.0	0.000		-43.496

Project:	Date: 21/04/2026			
	Designed by:	Checked by:	Approved By:	
	rgulam			
Report Details: Type: Stormwater Controls Summary Storm Phase: Phase		Company Address:		

Status
Flood

Project:	Date: 21/04/2026		
	Designed by: rgulam	Checked by:	Approved By:
Report Details: Type: Stormwater Controls Summary Storm Phase: Phase	Company Address:		





**FEH: 100 years: Increase Rainfall (%): +40: Critical Storm Per Item: Rank By:
Max. Avg. Depth**

Stormwater Control	Storm Event	Max. US Level (m)	Max. DS Level (m)	Max. US Depth (m)	Max. DS Depth (m)	Max. Inflow (L/s)	Max. Resident Volume (m³)	Max. Flooded Volume (m³)	Total Lost Volume (m³)	Max. Outflow (L/s)	Total Discharge Volume (m³)	Half Drain Down Time (mins)	Percentage Available (%)
Soakaway	FEH: 100 years: +40 %: 960 mins: Winter	71.359	71.359	1.309	1.309	6.8	128.390	80.885	53.683	0.0	0.240		-170.294

Project:	Date: 21/04/2026			
	Designed by:	Checked by:	Approved By:	
	rgulam			
Report Details:	Company Address:			
Type: Stormwater Controls Summary				
Storm Phase: Phase				

Status
Flood

Project:	Date: 21/04/2026		
	Designed by: rgulam	Checked by:	Approved By:
Report Details: Type: Stormwater Controls Summary Storm Phase: Phase	Company Address:		





FEH: 100 years: Increase Rainfall (%): +0: Critical Storm Per Item: Rank By: Max. Avg. Depth

Stormwater Control	Storm Event	Max. US Level (m)	Max. DS Level (m)	Max. US Depth (m)	Max. DS Depth (m)	Max. Inflow (L/s)	Max. Residual Volume (m³)	Max. Flooded Volume (m³)	Total Lost Volume (m³)	Max. Outflow (L/s)	Total Discharge Volume (m³)	Half Drain Down Time (mins)	Percentage Available (%)
Soakaway	FEH: 100 years: +0 %: 480 mins: Winter	70.942	70.942	0.892	0.892	8.5	86.730	39.225	26.670	0.0	0.131		-82.591

Project:	Date: 21/04/2026			
	Designed by:	Checked by:	Approved By:	
	rgulam			
Report Details:	Company Address:			
Type: Stormwater Controls Summary				
Storm Phase: Phase				

Status
Flood

Project:	Date: 21/04/2026		
	Designed by: rgulam	Checked by:	Approved By:
Report Details: Type: Connections Summary Storm Phase: Phase	Company Address:		





FEH: 2 years: Increase Rainfall (%): +0: Critical Storm Per Item: Rank By: Max. Flow

Connection	Storm Event	Connection Type	From	To	Upstream Cover Level (m)	Max. US Water Level (m)	Max. Flow Depth (m)	Discharge Volume (m³)	Max. Velocity (m/s)	Flow / Capacity	Max. Flow (L/s)	Status
S9-TANK	FEH: 2 years: +0 %: 60 mins: Summer	Pipe	S9	Soakaway	71.660	70.417	0.109	20.294	1.4	0.25	16.1	OK
S1-S2	FEH: 2 years: +0 %: 60 mins: Summer	Pipe	S1	S2	72.250	70.686	0.018	0.158	0.1	0.01	0.1	OK
S2-S9	FEH: 2 years: +0 %: 60 mins: Summer	Pipe	S2	S9	71.710	70.560	0.053	1.792	0.3	0.08	1.4	OK
S6-S7	FEH: 2 years: +0 %: 60 mins: Summer	Pipe	S6	S7	71.885	70.768	0.042	2.294	0.5	0.1	1.8	OK
S7-S8	FEH: 2 years: +0 %: 60 mins: Summer	Pipe	S7	S8	71.780	70.620	0.059	4.521	0.6	0.2	3.6	OK
S8-S9	FEH: 2 years: +0 %: 60 mins: Summer	Pipe	S8	S9	71.750	70.594	0.072	11.521	0.8	0.18	9.2	OK
S4-S9	FEH: 2 years: +0 %: 60 mins: Summer	Pipe	S4	S9	71.750	70.724	0.055	4.329	0.5	0.04	3.4	OK
S3-S4	FEH: 2 years: +0 %: 60 mins: Summer	Pipe	S3	S4	72.780	71.269	0.026	1.534	0.6	0.04	1.2	OK
S5-S8	FEH: 2 years: +0 %: 60 mins: Summer	Pipe	S5	S8	72.000	70.826	0.053	4.577	0.5	0.07	3.7	OK
Pipe	FEH: 2 years: +0 %: 60 mins: Summer	Pipe	S3B	S3	73.750	71.781	0.019	0.968	0.6	0.02	0.7	OK
Pipe (1)	FEH: 2 years: +0 %: 60 mins: Summer	Pipe	S3A	S3B	73.550	72.311	0.014	0.401	0.4	0.01	0.3	OK

Project:	Date: 21/04/2026		
	Designed by: rgulam	Checked by:	Approved By:
Report Details: Type: Connections Summary Storm Phase: Phase	Company Address:		





FEH: 30 years: Increase Rainfall (%): +0: Critical Storm Per Item: Rank By: Max. Flow

Connection	Storm Event	Connection Type	From	To	Upstream Cover Level (m)	Max. US Water Level (m)	Max. Flow Depth (m)	Discharge Volume (m³)	Max. Velocity (m/s)	Flow / Capacity	Max. Flow (L/s)	Status
S9-TANK	FEH: 30 years: +0 %: 60 mins: Summer	Pipe	S9	Soakaway	71.660	70.519	0.225	46.534	1.5	0.58	37.7	OK
S1-S2	FEH: 30 years: +0 %: 60 mins: Summer	Pipe	S1	S2	72.250	70.690	0.028	0.377	0.1	0.02	0.3	OK
S2-S9	FEH: 30 years: +0 %: 60 mins: Summer	Pipe	S2	S9	71.710	70.575	0.095	4.234	0.3	0.19	3.4	OK
S6-S7	FEH: 30 years: +0 %: 60 mins: Summer	Pipe	S6	S7	71.885	70.785	0.071	5.407	0.5	0.24	4.3	OK
S7-S8	FEH: 30 years: +0 %: 60 mins: Summer	Pipe	S7	S8	71.780	70.660	0.100	10.631	0.7	0.46	8.5	OK
S8-S9	FEH: 30 years: +0 %: 60 mins: Summer	Pipe	S8	S9	71.750	70.636	0.116	27.068	1.0	0.42	21.6	OK
S4-S9	FEH: 30 years: +0 %: 60 mins: Summer	Pipe	S4	S9	71.750	70.740	0.096	10.112	0.6	0.11	8.0	OK
S3-S4	FEH: 30 years: +0 %: 60 mins: Summer	Pipe	S3	S4	72.780	71.280	0.040	3.552	0.7	0.1	2.8	OK
S5-S8	FEH: 30 years: +0 %: 60 mins: Summer	Pipe	S5	S8	72.000	70.847	0.085	10.742	0.6	0.16	8.6	OK
Pipe	FEH: 30 years: +0 %: 60 mins: Summer	Pipe	S3B	S3	73.750	71.789	0.028	2.243	0.8	0.06	1.8	OK
Pipe (1)	FEH: 30 years: +0 %: 60 mins: Summer	Pipe	S3A	S3B	73.550	72.316	0.020	0.932	0.5	0.02	0.7	OK

Project:	Date: 21/04/2026		
	Designed by: rgulam	Checked by:	Approved By:
Report Details: Type: Connections Summary Storm Phase: Phase	Company Address:		





FEH: 100 years: Increase Rainfall (%): +40: Critical Storm Per Item: Rank By: Max. Flow

Connection	Storm Event	Connection Type	From	To	Upstream Cover Level (m)	Max. US Water Level (m)	Max. Flow Depth (m)	Discharge Volume (m³)	Max. Velocity (m/s)	Flow / Capacity	Max. Flow (L/s)	Status
S9-TANK	FEH: 100 years: +40 %: 60 mins: Summer	Pipe	S9	Soakaway	71.660	70.812	0.225	84.128	1.8	0.92	59.8	Surcharged
S1-S2	FEH: 100 years: +40 %: 60 mins: Summer	Pipe	S1	S2	72.250	70.825	0.150	0.676	0.1	0.08	1.5	OK
S2-S9	FEH: 100 years: +40 %: 60 mins: Summer	Pipe	S2	S9	71.710	70.825	0.150	7.571	0.3	0.31	5.5	Surcharged
S6-S7	FEH: 100 years: +40 %: 60 mins: Summer	Pipe	S6	S7	71.885	70.982	0.150	9.715	0.5	0.41	7.2	Surcharged
S7-S8	FEH: 100 years: +40 %: 60 mins: Summer	Pipe	S7	S8	71.780	70.952	0.150	19.084	0.8	0.76	14.0	Surcharged
S8-S9	FEH: 100 years: +40 %: 60 mins: Summer	Pipe	S8	S9	71.750	70.917	0.225	48.573	1.0	0.7	36.0	Surcharged
S4-S9	FEH: 100 years: +40 %: 60 mins: Summer	Pipe	S4	S9	71.750	70.826	0.225	18.199	0.5	0.17	12.6	OK
S3-S4	FEH: 100 years: +40 %: 60 mins: Summer	Pipe	S3	S4	72.780	71.290	0.088	6.399	0.8	0.18	5.0	OK
S5-S8	FEH: 100 years: +40 %: 60 mins: Summer	Pipe	S5	S8	72.000	70.941	0.225	19.317	0.7	0.28	14.5	OK
Pipe	FEH: 100 years: +40 %: 60 mins: Summer	Pipe	S3B	S3	73.750	71.797	0.037	4.042	0.9	0.1	3.2	OK
Pipe (1)	FEH: 100 years: +40 %: 60 mins: Summer	Pipe	S3A	S3B	73.550	72.321	0.027	1.683	0.6	0.04	1.3	OK

Project:	Date: 21/04/2026		
	Designed by: rgulam	Checked by:	Approved By:
Report Details: Type: Connections Summary Storm Phase: Phase	Company Address:		



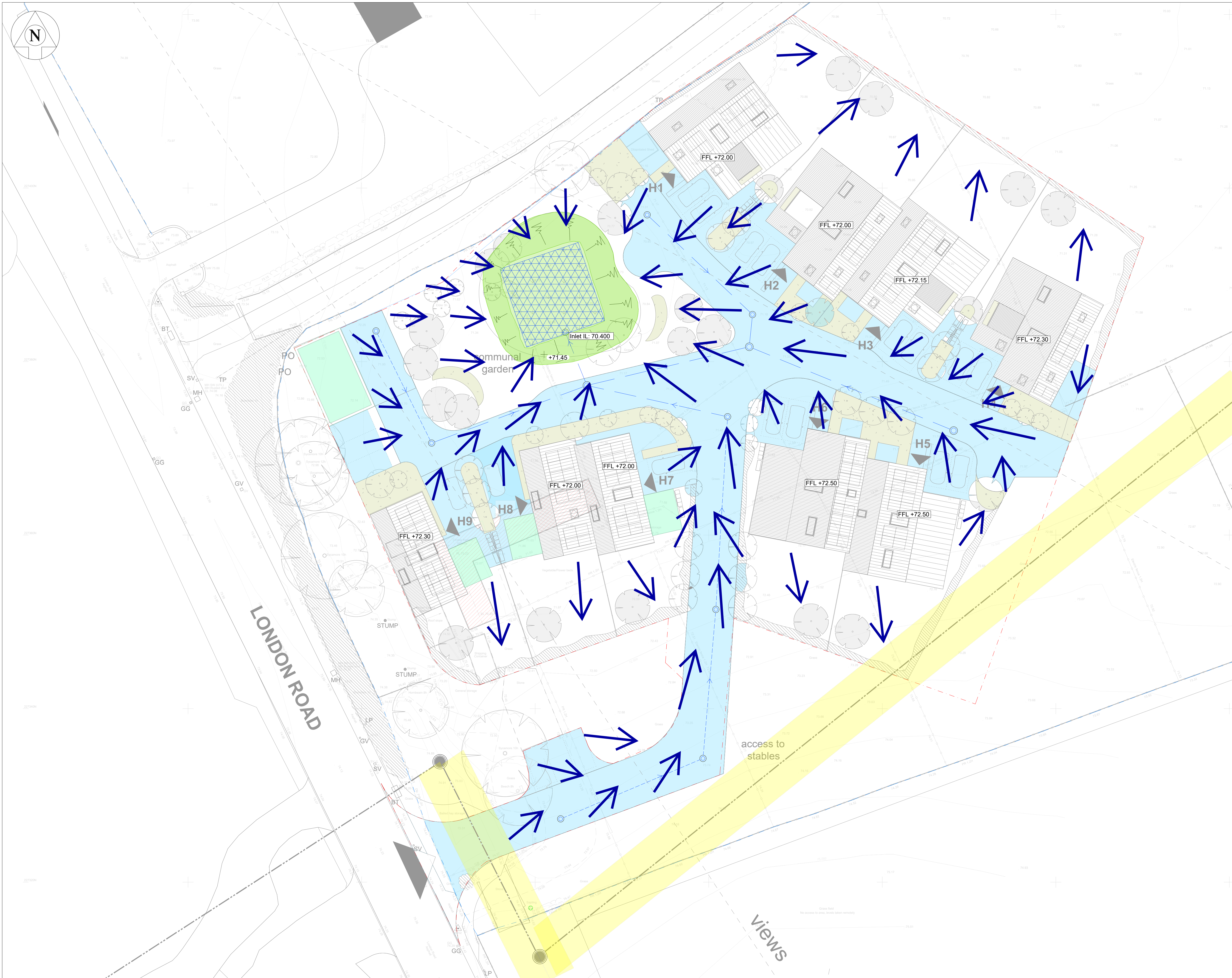


FEH: 100 years: Increase Rainfall (%): +0: Critical Storm Per Item: Rank By: Max. Flow

Connection	Storm Event	Connection Type	From	To	Upstream Cover Level (m)	Max. US Water Level (m)	Max. Flow Depth (m)	Discharge Volume (m³)	Max. Velocity (m/s)	Flow / Capacity	Max. Flow (L/s)	Status
S9-TANK	FEH: 100 years: +0 %: 60 mins: Summer	Pipe	S9	Soakaway	71.660	70.568	0.225	59.606	1.7	0.7	45.2	Surcharged
S1-S2	FEH: 100 years: +0 %: 60 mins: Summer	Pipe	S1	S2	72.250	70.692	0.032	0.479	0.1	0.02	0.4	OK
S2-S9	FEH: 100 years: +0 %: 60 mins: Summer	Pipe	S2	S9	71.710	70.581	0.136	5.374	0.3	0.24	4.3	OK
S6-S7	FEH: 100 years: +0 %: 60 mins: Summer	Pipe	S6	S7	71.885	70.792	0.084	6.928	0.5	0.31	5.5	OK
S7-S8	FEH: 100 years: +0 %: 60 mins: Summer	Pipe	S7	S8	71.780	70.678	0.115	13.618	0.8	0.6	11.0	OK
S8-S9	FEH: 100 years: +0 %: 60 mins: Summer	Pipe	S8	S9	71.750	70.648	0.168	34.644	1.0	0.56	28.7	OK
S4-S9	FEH: 100 years: +0 %: 60 mins: Summer	Pipe	S4	S9	71.750	70.746	0.136	12.984	0.5	0.14	10.3	OK
S3-S4	FEH: 100 years: +0 %: 60 mins: Summer	Pipe	S3	S4	72.780	71.284	0.045	4.563	0.8	0.13	3.6	OK
S5-S8	FEH: 100 years: +0 %: 60 mins: Summer	Pipe	S5	S8	72.000	70.856	0.095	13.790	0.7	0.21	11.0	OK
Pipe	FEH: 100 years: +0 %: 60 mins: Summer	Pipe	S3B	S3	73.750	71.793	0.032	2.882	0.8	0.07	2.3	OK
Pipe (1)	FEH: 100 years: +0 %: 60 mins: Summer	Pipe	S3A	S3B	73.550	72.318	0.023	1.199	0.6	0.03	0.9	OK

Appendix H

Exceedance Routes Flow Plan



NOTES :

1. This drawing is to be read in conjunction with all relevant Architect's, Engineer's and specialists' drawings and specifications.
2. Do not scale from this drawing in either paper or digital form. Use written dimensions only. To check that this drawing has been printed to the intended scale this bar should be 50mm long @ A1 or 25mm long @ A3.
3. Health & Safety : All specific drawing notes are to be read in conjunction with the project "Information Pack" and "Site Rules".

P01	19/05/26	RG	RG	ISSUED FOR INFORMATION
Rev	Date	Drawn	Eng	Amendment

**POUND FARM,
ST IPPOLYTS**

EXCEEDANCE FLOW PLAN

Status
FOR INFORMATION
NOT FOR CONSTRUCTION

Drawn	RG	Eng	RG
Scales	1:200 at A1		
Drawing No	32505/6020	Rev	P01

**PRICE &
MYERS**

Consulting Engineers
37 Alfred Place
London
WC1E 7DP
020 7631 5128
mail@pricemyers.com
www.pricemyers.com

Appendix I

Anglian Water Pre-Planning Capacity Report



Tier 1 Pre-Planning Assessment Report

Domestic Foul Water Drainage Feasibility Study

Anglian Water Reference Number:	PPE-0239204
Report Engineer:	Maks Zdunek
Publication Date:	17/03/2026
Expiration Date:	17/03/2027
Site Name:	Pound Farm, St Ippolyts
Development Details:	9 Dwellings
Site National Grid Reference:	TL1930327364
Development Type:	Greenfield
Planning Application Status:	Submitted

This report has been produced for Price and Myers LLP and is to be submitted as part of a developed drainage strategy should planning permission be sought.

Anglian Water will use this report as the basis for any forthcoming planning application response relevant to this application.

Anglian Water cannot reserve capacity and therefore you are recommended to formally apply for a connection at your earliest convenience. Please note that available capacity in both the receiving network and Water Recycling Centre (WRC) can be reduced at any time due to increased requirements from existing businesses and houses as well as from new housing and new commercial developments.



Summary

Please note that our assessment process was updated on the 1st April 2025. We recommend reviewing this report in its entirety. You can also read our [FAQ's](#)

Easements

We have assessed above and below ground operational assets in relation to your proposed development site

Water Recycling Centre (WRC)

We have assessed the receiving water recycling centre to determine whether it can process the increased flows and effluent quality arising from your development and continue to meet its permitted discharge consents.

Our reference data tables are updated in April each year (following submission to regulators). Previously identified headroom may no longer be available.

Foul Drainage Network - Sustainable Point of Connection (SPOC)

We have assessed the receiving foul water drainage system to identify a sustainable point of connection for your site to connect to the public sewerage network without causing a detriment to the operation of the system.

Indicative costs –

The network infrastructure charge per dwelling is set for the 2025-26 charging period at £403.00. For a development of 9 dwellings the total infrastructure charge will total £3,627.00 excluding VAT.

Please note that you should also budget for infrastructure charges on non-household premises where applicable and these will be calculated according to the number and type of water fittings in the premises. This is called the “relevant multiplier” method of calculating the charge. The relevant multiplier will be applied to the figures set out in our 2025-26 Developer Charging Arrangements to arrive at the amount payable. Details of the relevant multiplier for each fitting can be found on our website.

Section 1 - Anglian Water Assets and Easements

The comments contained within this report relate to the public water mains and sewers indicated on our records. Your attention is drawn to the disclaimer in the useful information section of this report.

Pipes - We have identified pipework infrastructure within the boundaries of your site

Operational Assets – We do not have operational assets within 20m of your site

Source Protection Zone (SPZ) – Your site does not sit within an identified SPZ

Water Recycling Centre (WRC) – Your site is not within the encroachment zone of Ashbrook WRC

The proposed development site boundary is highlighted on Anglian Water's asset record in figure 1. Additionally, it is highly recommended that you carry out a thorough investigation of your proposed working area to establish whether any unmapped public or private sewers and lateral drains are in existence.

Any potential instances of asset encroachment are to be identified and addressed at planning. Anglian Water are unable to permit development either over or within the easement strip without prior consent. The extent of asset easements are available in Table 1 for used water and Table 2 for potable water. Please be aware that the existing water mains/public sewers should be located in highway or open space and not in private gardens. This is to ensure available access for any future maintenance and repair and this should be taken into consideration when planning your site layout.

Used Water Easements – Measured either side of the centre line (m)						
	Depth to Invert (m)					
Sewer Diameter(mm)	< 3	3 - 4	4 - 5	5 - 6	6 - 7.5	> 7.5
< 150	3.0	3.0	4.0	5.0	6.0	4.0
150 - 299	3.0	3.0	4.0	5.0	6.0	4.0
300 - 449	3.0	3.0	4.0	5.0	6.0	4.0
450 - 600	3.5	4.0	5.0	6.0	6.0	4.0
601 - 749	3.5	4.0	5.0	6.0	6.0	4.0
750 - 924	4.0	5.0	5.0	6.5	6.5	5.0
925 - 1000	5.0	5.0	6.0	6.5	6.5	5.0

Table 1: Anglian Water used water asset easements

Potable Water Easements - Measured either side of the centre line (m)	
Potable Mains Pipe Diameter (mm)	Distance either side of the centre line (m)
< 150	2.25
150 - 449	3.0
450 - 749	4.5
750 >	6

Table 2: Anglian Water potable water asset easements

If it is not possible to avoid our assets then these may need to be diverted in accordance with Section 185 of the Water Industry Act (1991). You will need to make a formal application if you would like a diversion to be considered; please note that in some instances assets cannot be diverted; it is therefore vital to engage with our Drainage team prior to finalising site layout. The Drainage team can be contacted by calling 03456 066 087.

Due to the private sewer transfer in October 2011 many newly adopted public used water assets and their history are not indicated on our records. You also need to be aware that your development site may contain private water mains, drains or other assets not shown on our records. These are private assets and not the responsibility of Anglian Water but that of the landowner.

For your information, please be aware:

- We need to inform you that there are sewer mains (Size unknown) within your site boundary.
- Anglian Water does not permit existing assets to be located within the curtilage of the proposed development buildings and we do not permit permeable paving or suds features over our assets. These assets should be located in areas of public open space and/or adoptable highways to ensure on-going maintenance and access is possible.
- Development is not permissible either over or within the established easement strip of any public asset without Anglian Water's granted prior consent.
- A new developments site layout must adhere to the required easements. You may also discuss potential diversions with us.
- Please be aware that existing water mains/public sewers should be located in highway or open space and not in private gardens or curtilages.
- Rising mains may not be located under play equipment or SUDS features. This is to ensure available access for any future maintenance and repair and this should be taken into consideration when planning your site layout.
- No significant planting can be located in the designated easement strip, to ensure that root intrusion does not pose a risk to our assets. Where necessary and to maintain the aesthetics of the proposed landscaping, ornamental/low lying hedges or similar are considered acceptable, but should be limited.
- In any case where site levels are to be altered within an easement strip, Anglian Water will request a CCTV survey is undertaken to understand the existing condition of the affected sewer and potential impact of this proposal. The footage and accompanying report should be provided to Anglian Water alongside any observations or recommendations (should these be identified) by your designer. In addition, the manholes in this area would also need to be raised to finished level. Anglian Water would expect photographs confirming the existing construction of these chambers and a design drawing which illustrates how this outcome will be achieved whilst maintaining compliance with Design and Construction Guidance (DCG) standards.
- Anglian Water will expect confirmation of the established measures that will allow 24 hour unencumbered access for assets within the vicinity of the development. It is beneficial to understand how awareness of Anglian Water's need for access to provide this in perpetuity will be established going forward. It can be assumed that plot transfers (if appropriate) will contain covenants/rights relating to these assets; we would appreciate clarification on this point.
- It is the developer's responsibility to ensure the correct sight surveys are completed i.e. trial holes, to ascertain the exact location of Anglian Water assets. You should then present your findings to Anglian Water – we may need to complete formal risk assessments (at the developers cost) for certain asset types.



Figure 1: The site boundary for the proposed development as shown on Anglian Water asset records.

Section 2 – Used Water Assessment

In examining the used water system we assess the ability for your site to connect to the public sewerage network without causing a detriment to the operation of the system. We also assess the receiving Water Recycling Centre and determine the headroom available to manage the increased effluent flows and effluent quality from your development.

Water Recycling Centre

When assessing the receiving Water Recycling Centre's (WRC) dry weather flow (DWF) headroom, we use the latest Q90 DWF figures, as verified by the Environment Agency. We then add to this the flows from sites with existing planning consent. Our DWF data is reviewed and updated annually in consultation with the Environment Agency.

This data is used to determine whether the WRC continues to comply with its environmental permit and whether it has sufficient capacity to accommodate flows from the new development without causing an unacceptable risk of breaching environmental legislation. It is also used to ensure there is no pollution or deterioration in the receiving watercourse.

Based on the above assessment, Ashbrook WRC is within the acceptance parameters and can accommodate the flows from the proposed growth.

The available capacity at all Water Recycling Centres in the Anglian Water region is updated annually in April. This update ensures the most current data is used in evaluating developments. Consequently the available headroom will change for Ashbrook WRC which could potentially change the recommendation of our pre-planning capacity assessment and our planning response, both of which will be in line with the most recent flow figures for Ashbrook Water Recycling Centre.

Used Water Network

Our assessment has been based on development flows connecting to the nearest foul water sewer of the same size or greater pipe diameter to that required to drain the site. The infrastructure to convey foul water flows to the receiving sewerage network is the responsibility of the developer. Conveyance to the connection point is considered as Onsite Work and includes all work carried out upstream from the point of connection, including making the connection to our existing network.

This connection point has been determined in reference to the calculated discharge flow and on this basis, a 150mm internal diameter pipe is required to drain the development site. We have assessed the sustainable point of connection, which is to the 150mm foul sewer on the southern edge of the proposed development, at any point downstream of MH2301, located at national grid reference (NGR) TL 19282 27312.

The cover and invert levels for this manhole are unavailable in our asset record.

Anglian Water has assessed the local foul sewerage network up to the water recycling centre and determined that the additional foul flow from the proposed development would not create an unacceptable risk of flooding to our existing customers and the environment. Anglian Water cannot reserve capacity and therefore you are recommended to formally apply for a connection at your earliest convenience. Please note that available capacity in our network can be reduced at any time due to increased requirements from existing businesses and houses as well as from new housing and new commercial developments.

Please note that Anglian Water will request a suitably worded condition at planning application stage to ensure this strategy is implemented to mitigate the risk of flooding.

Trade Effluent

It is noted that there are no specified trade effluent requirements for the proposed development site. Should this be required in the future, please submit a Tier 2 PPE assessment.

Used Water Budget Costs

For a development site that benefits from full planning permission, infrastructure charges are raised on a standard basis of one charge per new connection, one each for water supply and drainage connections.

Infrastructure charges are applied to each new property connecting to the public water and sewerage network. The infrastructure charge type is set out in Section 146(2) of the Water Industry Act 1991.

The charge should be paid by any party that wishes to build or develop a property and is payable upon request of connection.

The sewerage infrastructure charge per dwelling is set for the 2025-26 charging period at £403.00. For a development of 9 dwellings the total infrastructure charge will total £3,627.00 excluding VAT.

Please note that you should also budget for infrastructure charges on non-household premises where applicable and these will be calculated according to the number and type of water fittings in the premises. This is called the “relevant multiplier” method of calculating the charge. The relevant multiplier will be applied to the figures set out in our 2025-26 Developer Charging Arrangements to arrive at the amount payable. Details of the relevant multiplier for each fitting can be found on our website.



Figure 2: Showing your connection point for foul drainage
Anglian Water Foul Water Drainage Feasibility Study

Reference: PPE-0239204

Section 3 – Useful Information

Water Industry Act – Key used water sections

Section 98:

This provides you with the right to requisition a new public sewer. The new public sewer can be constructed by Anglian Water on your behalf. Alternatively, you can construct the sewer yourself under section 30 of the Anglian Water Authority Act 1977.

Section 102:

This provides you with the right to have an existing sewerage asset vested by us. It is your responsibility to bring the infrastructure to an adoptable condition ahead of the asset being vested.

Section 104:

This provides you with the right to have a design technically vetted and an agreement reached that will see us adopt your assets following their satisfactory construction and connection to the public sewer.

Section 106:

This provides you with the right to have your constructed sewer connected to the public sewer.

Section 185:

This provides you with the right to have a public sewerage asset diverted. Details on how to make a formal application for a new sewer, new connection or diversion are available on our website or via our Development Services team on 0345 60 66 087.

Surface Water Drainage

All surface water must be managed in line with Building Regs / Sewer Sector Guidance (SSG). Our guidance document and Surface Water policy (insert website link) detail our requirements and expectations. You must explore all on-site options per the SUDS hierarchy before speaking to us about a possible connection to our SW drainage network. We recommend that you contact the Local Authority and Lead Local Flood Authority (LLFA) for your site to discuss your application.

Sustainable drainage systems

Some existing urban drainage systems have additional risks of flooding, pollution or damage to the environment and are not resilient to climate change in the long term. Our preferred method of surface water disposal is through the use of Sustainable Drainage Systems or SuDS. SuDS are a range of techniques that aim to mimic the way surface water drains in natural systems within urban areas. For more information on SuDS, please visit our [website](#).

Private sewer transfers

Sewers and lateral drains connected to the public sewer on the 1 July 2011 transferred into Water Company ownership on the 1 October 2011. This follows the implementation of the Floods and Water Management Act (FWMA). This included sewers and lateral drains that were subject to an existing Section 104 Adoption Agreement and those that were not. There were exemptions and the main non-transferable assets were as follows:

Surface water sewers and lateral drains that do not discharge to the public sewer, e.g. those that discharged to a watercourse.

Foul sewers and lateral drains that discharged to a privately owned sewage treatment/collection facility. Pumping stations and rising mains will transfer between 1 October 2011 and 1 October 2016.

The implementation of Section 42 of the FWMA will ensure that future private sewers will not be created. It is anticipated that all new sewer applications will need to have an approved section 104 application ahead of a section 106 connection.

It is anticipated that all new sewer applications will need to have an approved Section 104 application ahead of a Section 106 connection.

Encroachment

Anglian Water operates a risk based approach to development encroachment on our above and below ground infrastructure and assets.

Locating our assets

Maps detailing the location of our water and used water infrastructure including both underground assets and above ground assets such as pumping stations and recycling centres are available from digdat.

All requests from members of the public or non-statutory bodies for maps showing the location of our assets will be subject to an appropriate administrative charge.

We have more information on our website

Charging arrangements

Our charging arrangements and summary for this year's water and used water connection and infrastructure charges can be found on our website [Charges](#)

Environmental Incentives

Following regulatory guidance and changes to the charging rules the Infrastructure Charge for connections to our water network will no longer attract an income offset discount after 31st March 2025. This will be replaced with a new Environmental Incentive Scheme (EIS) aimed at promoting water efficiency and sustainability.

Anglian Water's EIS has been developed in accordance with the Environmental Incentive Common Framework (EICF), which was released by Ofwat in December 2024. For this charging year, 2025-26, and in accordance with Ofwat guidance, only household properties will be eligible for our EIS. We will continue to reassess this for future charging years.

There are two elements to our EIS;

Water Environmental Incentive

The applicant must demonstrate the newly connected property is designed to achieve consumption of 90 litres per person per day (pppd) or less.

Post property connection, we will conduct compliance audits on the first connected property and 10% of the remaining properties on a random basis.

Sewerage Environmental Incentive

Post property connection for redeveloped brownfield sites we will complete a site inspection to confirm the removal of surface water flows.

Environmental Component

This charge is used solely to fund the Environmental Incentive and is uniformly applied upon connection of each developed property; this includes connections which do not qualify for the Environmental Incentive.

Environmental Incentives	Charge per property
Water Environmental Incentive	-500
Environmental Incentive Component Charge Water	100
Additional Water EIS Audit (per premises)	84
Sewerage Environmental Incentive (50% of Sewerage Infra)	-202
Environmental Incentive Component Charge Sewerage	0

Our EIS will be available between 1st April 2025 and 31st March 2030 and during this period, we reserve the right to make any amendments to the EIS as we may see fit, including amendments to the value of both Environmental Incentives and the Component Charges. The EIS may close on 31st March 2030, therefore, to qualify for the Environmental Incentives, your plot must be connected to our network and validated by us. Please refer to our Developer Charging [Arrangements](#) for full details. To learn more or apply for our environmental incentive scheme please visit our website [Water Environmental Incentive Scheme](#)

Section 4 - Disclaimer

The information provided in this report is based on data currently held by Anglian Water Services Limited ('Anglian Water') or provided by a third party. Accordingly, the information in this report is provided with no guarantee of accuracy, timeliness, completeness and is without indemnity or warranty of any kind (express or implied).

This report should not be considered in isolation and does not nullify the need for the enquirer to make additional appropriate searches, inspections and enquiries. Anglian Water supports the plan led approach to sustainable development that is set out in the National Planning Policy Framework ('NPPF') and any infrastructure needs identified in this report must be considered in the context of current, adopted and/or emerging local plans. Where local plans are absent, silent or have expired these needs should be considered against the definition of sustainability holistically as set out in the NPPF.

Whilst the information in this report is based on the presumption that proposed development obtains planning permission, nothing in this report confirms that planning permission will be granted or that Anglian Water will be bound to carry out the works/proposals contained within this report.

No liability whatsoever, including liability for negligence is accepted by Anglian Water or its partners, employees or agents, for any error or omission, or for the results obtained from the use of this report and/or its content.

Furthermore, in no event will any of those parties be liable to the applicant or any third party for any decision made or action taken as a result of reliance on this report.

This report is valid from the date issued and the enquirer is advised to resubmit their request for an up to date report should there be a delay in submitting any subsequent application for water supply/sewer connection(s). Our pre-planning reports are valid for 12 months. Please note Anglian Water cannot reserve capacity and available capacity in our network can be reduced at any time due to increased requirements from existing businesses and houses as well as from new housing and new commercial developments.