

DRAINAGE STRATEGY STATEMENT

Proposed Dwelling – 2 Snailswell Lane, Ickleford, Hitchin, Herts

Project: 2 Snailswell Lane, Ickleford, Hitchin, Herts

Prepared by: MTC Engineering

Date: 25 February 2026

Reference: MTC 3671-03

1. Introduction

This Drainage Strategy Statement outlines the proposed foul water and surface water drainage arrangements for the residential development on land 2 Snailswell Lane, Ickleford, Hitchin, Herts.

The strategy has been prepared in accordance with the following guidance:

- National Planning Policy Framework (NPPF)
- Building Regulations Approved Document H
- CIRIA C753 – *The SuDS Manual*
- National Standards for Sustainable Drainage Systems (SuDS), 30 July 2025
- Local Lead Flood Authority (LLFA) guidance

The drainage design applies to the entire development and is supported by the Detailed Drainage Layout Drawing (Ref: MTC 3671-03). All drainage infrastructure will remain privately owned and maintained throughout the lifetime of the development.

2. Foul Water Drainage Strategy

2.1 Existing Site Conditions

The site is currently undeveloped (greenfield) and is not connected to the public foul sewer network. No existing foul drainage infrastructure is present within the site.

2.2 Proposed Foul Water Disposal Arrangement

Foul effluent from the proposed 2 three-bedroom dwelling will be conveyed via a gravity drainage system to an existing Anglian Water foul sewer network with prior to S106 approval. Anglian Water have confirmed present of available capacity for the anticipated foul flows connection subjected to

S106 approval.

3. Surface Water Drainage Strategy

(Planning Condition 6)

3.1 Drainage Philosophy and SuDS Hierarchy

Surface water drainage follows the SuDS hierarchy, with infiltration to ground identified as the most sustainable method. The strategy aims to:

- Replicate greenfield runoff conditions
- Ensure no increase in flood risk on or off site
- Manage surface water entirely within the site

Connection to public sewer, watercourse, or highway drainage is not available; therefore, infiltration is the most feasible option.

3.2 Infiltration Testing

Testing undertaken in February 2026 at ~1.2 m depth recorded:

- 0.05222 m/hr
- 0.03352 m/hr
- 0.04106 m/hr

A conservative design rate of **0.03352 m/hr** has been adopted.

3.3 Proposed Impermeable Areas

- Dwelling and garage roofs: ~120 m²
- Parking areas: ~70 m²
- Access areas: ~140 m²
- Main access areas: ~28 m²

3.4 Attenuation and Storage Requirements

The system is designed for the 1 in 100-year rainfall event + 40% climate change allowance:

- Required attenuation storage: **8.93 m³**

- Roof water: discharged to rainwater harvesting system; overflow to geocellular soakaway
- Hardstanding: drained via permeable paving
- System safely manages all design storm events on site

3.5 Exceedance and Flood Risk Management

Exceedance flows beyond the design storm will be managed within the site:

- Overland flow routes direct water away from buildings
- Adjacent land and third-party property protected from flooding

3.6 Pollution Prevention and Construction Phase Measures

During construction, the following measures will be implemented:

- Temporary protection of infiltration features
- Silt and sediment control measures
- Compliance with good construction practices

3.7 Maintenance and Management

All surface water infrastructure will remain privately owned and maintained.

A **Surface Water Drainage Management and Maintenance Plan** is provided in Appendix A, detailing inspection frequencies, maintenance activities, and responsibilities.

4. Conclusion

The proposed drainage strategy for the development on land 2 Snailswell Lane, Ickleford, Hitchin provides a **robust, sustainable, and policy-compliant** solution for foul and surface water management.

Key points:

- Complies with Building Regulations Approved Document H
- Aligns with national and local SuDS guidance
- Ensures no increase in flood risk on or off site
- Protects groundwater and environmental quality

The proposed drainage arrangements are therefore suitable to support **planning approval** and discharge of the relevant planning condition.

Appendix A – Drainage Maintenance and Management Plan

Proposed Development – 2 Snailswell Lane, Ickleford Hitchin, Herts

A1. Introduction

This Drainage Maintenance and Management Plan forms an integral part of the Drainage Strategy for the proposed development on land 2 Snailswell Lane, Ickleford Hitchin, Herts.

The purpose of this appendix is to demonstrate that appropriate arrangements are in place for the **long-term inspection, maintenance, and management** of all foul water and surface water drainage infrastructure, ensuring continued performance for the lifetime of the development and compliance with relevant guidance.

This plan has been prepared in accordance with:

- Building Regulations Approved Document H
 - CIRIA C753 – The SuDS Manual
 - DEFRA Non-Statutory Technical Standards for Sustainable Drainage Systems
 - Local Lead Flood Authority (LLFA) guidance
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A2. Ownership and Responsibility

All foul water and surface water drainage infrastructure will remain **privately owned**.

Responsibility for inspection and maintenance will rest with:

- The **property owner**, or
- A future appointed **management company** acting on behalf of the owner

There will be **no adoption** of drainage infrastructure by the Local Authority, Water Company, or LLFA.

A4. Surface Water Drainage – Maintenance Requirements

A4.1 Permeable Paving

Permeable paving areas will be maintained to prevent clogging and to preserve infiltration capacity.

Maintenance activities will include:

- Removal of silt, debris, and organic matter

- Vacuum sweeping to restore permeability
- Replacement of damaged units or jointing material where required

Maintenance frequency:

- Visual inspection: **Twice per year**
 - Vacuum sweeping: **At least once per year**
 - Additional inspections following heavy rainfall events
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A4.2 Geocellular Soakaway System

The geocellular soakaway system will be provided with inspection and monitoring points to allow ongoing assessment of performance.

Maintenance activities will include:

- Inspection of access points and chambers
- Monitoring water levels following rainfall
- Identification of siltation or reduced infiltration rates

Maintenance frequency:

- Routine inspection: **Annually**
- Additional inspection following extreme rainfall events

Where reduced performance is identified, appropriate remedial measures will be implemented.

A4.3 Surface Water Pipework and Chambers

All surface water pipework and inspection chambers will be maintained to ensure unobstructed flow.

Maintenance activities will include:

- Visual inspection of chambers and pipework
- Removal of debris or sediment build-up
- Jetting or rodding where blockages occur

Maintenance frequency:

- Visual inspection: **Annually**
 - Jetting or rodding: **As required**
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A4.4 Exceedance Flow Routes

Exceedance flow routes will be kept free from obstruction to allow the safe passage of surface water during extreme rainfall events.

Maintenance activities will include:

- Inspection for blockages, erosion, or damage
- Remedial works where erosion or obstruction is identified

Inspection frequency:

- **Annually**
 - After extreme rainfall events
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A5. Pollution Prevention

All maintenance activities will be undertaken in a manner that prevents pollution of groundwater and surface water, including:

- Appropriate collection and disposal of silt, debris, and waste materials
- Avoidance of chemical, fuel, or oil spills
- Use of competent and suitably qualified contractors where specialist maintenance is required

All works will be carried out in accordance with relevant environmental legislation and best practice guidance.

A6. Record Keeping and Review

Records will be retained for:

- All inspections and maintenance activities
- Desludging operations
- Any remedial works undertaken

The drainage systems will be reviewed periodically to ensure continued compliance with LLFA guidance, Building Regulations, and best practice.

A7. Conclusion

This Drainage Maintenance and Management Plan demonstrates that clear, proportionate, and effective arrangements are in place to ensure the **long-term performance** of the foul water and surface water drainage systems serving the development on land 2 Snailswell Lane Ickleford Hitchin, Herts.

Defined ownership, clear maintenance responsibilities, and routine inspection regimes ensure that the drainage systems will continue to operate safely, sustainably, and without increasing flood or pollution risk for the lifetime of the development.