

To: Development Management

From: Drainage Team Rohit Singh

Planning App Ref PL/2025/00795

Service Ref: LLFA

Date: 27/05/2026

PROPOSAL

Cond 27 to S/2012/0814 relating to the public open space site (considered under PL/2025/00795) at Land to the North West of Fugglestone Red and Bemerton Heath, Salisbury

SITE LOCATION

The application site is located within an area that appears to fall within Flood Zone 1, with no direct indication of fluvial flood risk from Flood Zones 2 or 3 and no immediately adjacent Main River constraints. However, the site forms part of a wider greenfield catchment and functions as a topographic low point and overland flow corridor receiving runoff from surrounding development parcels. The proposed open space corridor therefore acts as a strategic drainage route, increasing sensitivity to surface water (pluvial) flood risk. In addition, while no main watercourses are shown within the immediate site boundary, the wider area is likely to drain to ordinary watercourses and field drainage systems, meaning there remains a potential for downstream impacts if runoff is not properly managed.

A key site-specific constraint is the underlying chalk geology, which introduces both opportunity and risk. While infiltration-based SuDS are appropriate in principle, their performance is highly dependent on local ground conditions, which can be variable and have already shown evidence of failure elsewhere on site. The chalk substrate also represents a principal aquifer, increasing sensitivity to groundwater contamination and requiring robust water quality treatment. Furthermore, the reliance on infiltration basins within publicly accessible open space introduces additional risk where exceedance flows could interact with amenity areas such as play spaces and allotments.

SUMMARY OF THE CONSULTEE POSITION

Object	
Holding Objection: Further information required	X
Support	
No comment	
No objection	
No objection subject to conditions	

Consultation not required	
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APPLICATION DOCUMENTS REVIEWED

- *Application Form*
- *Covering Letter*
- *Decision Notice (Outline Consent S/2012/0814)*
- *Drainage Statement – Part 1*
- *Drainage Statement – Part 2*
- *Drainage Statement – Part 3*
- *Drainage Statement – Part 4*
- *Engineering Drawings – Infiltration Pond 2*
- *Engineering Drawings – Infiltration Pond 3*
- *Open Space Proposals Plan – Sheet 5*
- *Planning, Design and Access Statement*
- *Site Location / Context Plan (submitted plan image)*

RELEVANT PLANNING POLICY & GUIDANCE

National Planning Policy Framework (NPPF) [NPPF December 2024 Link](#)
Planning and Flood Risk (Paras 170–182)

Wiltshire Core Strategy – Adopted January 2015 [Wiltshire Core Strategy Link](#)
Core Policy 67 requires that all new development must address flood risk from all sources and not increase flood risk elsewhere. It supports the use of Sustainable Drainage Systems (SuDS) and requires that developments demonstrate how surface water will be managed sustainably.

Wiltshire Local Plan (emerging) [Local Plan Review Link](#)
Development must avoid high flood risk areas using the sequential approach. Proposals require a Flood Risk Assessment, Surface Water Drainage Strategy, and Groundwater Assessment where relevant. All schemes must include Sustainable Drainage Systems (SuDS), with major developments achieving a 30% reduction in runoff compared to greenfield rates, following the surface water discharge hierarchy.

Culverting and building over watercourses is discouraged, and natural drainage features should be retained or restored. Drainage strategies must ensure safety during extreme flood events (1-in-100-year + climate change) and provide safe access/egress. SuDS should also deliver biodiversity, amenity, and water quality benefits.

Supplementary Planning Documents

Wiltshire Council Drainage Betterment Strategy (2024) [SPD Link](#)
This technical guidance outlines expectations for surface water discharge hierarchy, attenuation, exceedance routes, water quality, and post-development monitoring.

Wiltshire Design Guide (March 2024) [SPD Link](#)

Includes principles of good design, including integration of SuDS and flood resilience.

Other Relevant Policies and Guidance

Planning Practice Guidance (PPG) – Flood Risk and Drainage [Guidance Link](#)

Covers detailed expectations for flood risk assessments, SuDS design, discharge hierarchy, sequential testing and climate change allowances.

Wiltshire SFRA (2024) [SFRA Link](#)

This document underpins the Sequential and Exception Test application and provides site screening evidence.

Section 19 Flood Investigation Reports [Section 19 Reports Link](#)

These documents summarise investigations into significant local flood incidents and establish what caused the flooding, how authorities responded, and actions needed to prevent future floods.

National Standards for Sustainable Drainage Systems (SuDS) June 2025

[Guidance Link](#)

Establishes mandatory criteria for runoff destination hierarchy, interception, flood resilience, water quality, amenity, biodiversity, and long-term maintenance for all new developments in England.

SuDS Manual (CIRIA C753)

This document set outs design principles, especially where attenuation, exceedance routing, and water quality are discussed.

Infiltration drainage design must be supported by ground investigations, including infiltration testing in accordance with *British Research Establishment (BRE) Digest 365 – Soakaway Design*, and groundwater level monitoring that accounts for seasonal variation.

ASSESSMENT OF THE PROPOSAL

Context

In planning terms, flood risk refers to the potential for development to increase the likelihood or severity of flooding on-site or elsewhere, while drainage considerations relate to the capacity of the site and surrounding infrastructure to manage surface water runoff in a sustainable and effective manner.

The local planning authority must be satisfied that the proposed development will not increase flood risk, either on-site or elsewhere, and that surface water will be managed in a sustainable and coordinated manner.

Where necessary, planning conditions or legal agreements may be used to secure the implementation, maintenance, and monitoring of SuDS and other drainage infrastructure.

Assessment

1. General Overview

The Lead Local Flood Authority (LLFA) has reviewed the submitted documentation in relation to surface water drainage and flood risk. The proposals are supported by a series of drainage statements, engineering drawings, and layout plans which broadly confirm that the drainage strategy is intended to follow the approved outline approach (S/2012/0814), with surface water managed primarily through infiltration-based SuDS features located within the public open space.

While the continuation of an infiltration-led strategy is supported in principle and aligns with the SuDS hierarchy, the Reserved Matters submission must demonstrate that the detailed drainage design is technically sound, fully evidenced, and compliant with national standards and Wiltshire Council's SuDS Validation Checklist. In this respect, the submission is significantly deficient.

2. Flood Risk Assessment

2.1 Fluvial Flood Risk

The site is understood to lie within Flood Zone 1 and is therefore at low risk of fluvial flooding. The principle of development is acceptable in this regard and the Sequential and Exception Tests are not considered applicable at this stage.

2.2 Surface Water Flood Risk

The site forms a topographic low point within the wider catchment and is intended to function as a drainage corridor receiving runoff from surrounding development parcels. This creates an elevated sensitivity to surface water (pluvial) flood risk, particularly where flows are routed through publicly accessible open space.

No detailed assessment of surface water flood risk or confirmatory modelling has been provided to demonstrate that runoff can be safely managed across the site during extreme events.

3. Surface Water Drainage Strategy

3.1 Drainage Hierarchy

The application adopts an infiltration-based strategy, which is supported in principle. However:

- No robust evidence has been submitted to demonstrate that infiltration is feasible across all proposed locations
- No justification is provided where infiltration feasibility is uncertain (notably where previous testing failed)

3.2 Runoff Rates and Catchments

The submission does not include:

- Existing catchment plans
- Greenfield runoff calculations (FEH or IH124)
- Proposed discharge rates

As such, it is not possible to verify compliance with Wiltshire Council's discharge rate policy or confirm that runoff is being appropriately controlled.

4. Infiltration Feasibility (Critical Issue)

The drainage strategy is wholly reliant on infiltration. However, the submission fails to provide:

BRE365 infiltration testing results at the location and depth of proposed basins
Groundwater level information
Chalk dissolution risk assessment
Infiltration design calculations (including factor of safety and drain-down performance)
This is a fundamental omission. At Reserved Matters stage, full confirmation of infiltration feasibility is required to demonstrate that the proposed system will function as intended over the lifetime of the development.

5. Hydraulic Modelling and Drainage Sizing

The submission does not include detailed hydraulic calculations. Specifically, there is no evidence to demonstrate:

Storage volumes required versus provided

Performance of the system during:

- 1 in 1 year events
- 1 in 30 year + climate change events
- 1 in 100 year + climate change events

That there will be no flooding of the site in the 1 in 30 year event

That exceedance flooding in the 1 in 100 year + climate change event will be safely managed

Without this information, the LLFA cannot confirm that the drainage system has been appropriately designed or sized.

6. Exceedance and Overland Flow Routing

No exceedance routing plan has been provided.

Given that:

- The site functions as a drainage corridor
- SuDS features are integrated into public open space.

There is a clear need to demonstrate how flows exceeding the design standard will be safely conveyed through the site without impacting:

- Play areas
- Allotments
- Pedestrian routes
- Adjacent residential areas

The absence of this information represents a significant risk to public safety and flood resilience.

7. Ground Conditions and Groundwater Protection

The site is underlain by chalk, which is a principal aquifer. This introduces several important constraints:

- Infiltration performance may be highly variable
- There is an increased risk of groundwater contamination
- There may be a risk of dissolution features affecting stability

The submission does not include:

- Ground investigation findings
- Groundwater level confirmation
- Water quality treatment design

No evidence has been provided of a SuDS treatment train to ensure adequate water quality prior to infiltration.

8. Drainage Layout and Integration

Drainage drawings demonstrate the location and geometry of proposed infiltration basins (Pond 2 and Pond 3) and associated pipework. However:

- There is no clear linkage between drawings and hydraulic modelling
- No confirmation of storage capacity or critical water levels
- No verification of freeboard (minimum 300mm above design storm level)
- No confirmation of basin performance or drain-down times

The relocation and consolidation of flows into Pond 3 increases reliance on a single feature, with no supporting evidence to demonstrate its adequacy.

9. Construction and Maintenance

9.1 Construction Phase

No Construction Environmental Management Plan (CEMP) has been provided outlining:

- Surface water control during construction
- Sediment management
- Pollution prevention measures

9.2 Maintenance

The submission does not adequately demonstrate:

- Long-term ownership and responsibility
- Maintenance schedules
- Access requirements and funding arrangements

Given the reliance on infiltration SuDS, long-term maintenance is critical to ensure functionality and prevent clogging or failure.

10. Legal and Deliverability Considerations

No evidence has been provided to confirm:

- Deliverability of the drainage strategy
- Any third-party land or discharge constraints
- Consenting requirements (e.g. ordinary watercourse consents where applicable)

11. Policy Compliance

The submission does not demonstrate compliance with:

- National Planning Policy Framework (NPPF) – flood risk and drainage
- National SuDS Standards
- CIRIA SuDS Manual (C753)
- Wiltshire Council SuDS Validation Checklist (Reserved Matters requirements)
- In particular, the lack of detailed design and supporting calculations is contrary to the requirement to fully validate drainage performance at Reserved Matters stage.

12. Conclusion

While the use of infiltration SuDS and integration within public open space is supported in principle, the application fails to provide sufficient technical evidence to demonstrate that the proposed drainage strategy is:

- Feasible

- Appropriately designed
- Adequately sized
- Safe for its lifetime

Key information is missing, including infiltration testing, hydraulic modelling, storage calculations, exceedance routing, and water quality treatment design.

RECOMMENDATION

Holding Objection as further information required

At this stage, a full assessment cannot be completed due to insufficient information. The submitted details do not demonstrate compliance with Condition 27 of outline consent S/2012/0814 (as referenced under PL/2026/01801), which requires a detailed drainage design incorporating sustainable drainage principles and an assessment of the hydrological and hydrogeological context of the development.

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1. BRE365 infiltration test results at the proposed basin locations and depths – Required to confirm that infiltration is viable across the site, particularly given known variability in chalk and evidence of previous failed testing.
2. Infiltration design calculations (storage vs infiltration rate) – Required to demonstrate that proposed basin volumes will drain effectively based on tested infiltration rates.
3. Drain-down time assessment – Required to confirm compliance with acceptable emptying criteria (typically <24–48 hours) and ensure no long-term ponding or system failure.
4. Ground investigation report (including groundwater levels and seasonal variation) – Necessary to confirm separation between basin base and groundwater and to assess risk of groundwater emergence or saturation.
5. Catchment plan and contributing impermeable area schedule – Required to verify flows directed to each infiltration feature, particularly given reliance on shared basins across multiple parcels.
6. Water balance assessment for infiltration basins – Required to demonstrate that inflow volumes can be sustainably managed through infiltration alone without reliance on uncontrolled overflow.
7. Exceedance flow routing plan – Required to show how flows will be safely managed if infiltration capacity is exceeded or temporarily reduced (e.g. during high groundwater conditions or clogging).
8. Structural and geotechnical assessment of basin formation in chalk – Required to confirm stability of basin side slopes and base, and to address potential dissolution or subsidence risks.
9. SuDS water quality treatment strategy (CIRIA C753 compliant) – Required due to direct discharge to ground (principal aquifer) to ensure adequate pollution removal prior to infiltration.
10. Phasing plan for drainage delivery – Required to confirm that infiltration features are operational prior to the connection of upstream catchments, given dependency on Pond 3 serving multiple phases.

11. Maintenance and clogging risk management plan for infiltration systems – Required to demonstrate long-term performance, including sediment control, vegetation management, and inspection regimes.
12. Construction phase drainage strategy (CEMP – drainage section) – Required to prevent compaction of infiltration surfaces and ensure that ground conditions are not degraded prior to operation.

Informatives

The LLFA recognises that the proposed strategy is based on infiltration SuDS within a chalk geological setting, which is appropriate in principle for this location. To assist the applicant in progressing the application toward a favourable recommendation, the following points are highlighted:

- The drainage approach would benefit from being clearly reframed around a **hydrogeological design basis**, demonstrating how infiltration performance, groundwater interaction, and drainage behaviour have been integrated into the design from the outset rather than relying on standard attenuation-based principles.
- Given the reliance on infiltration basins within areas of public open space, early consideration should be given to **multi-functional design**, ensuring that exceedance flows are safely conveyed while maintaining usability of recreational areas.
- The redistribution of flows into a smaller number of infiltration features (particularly Pond 3) introduces **increased dependency and system sensitivity**. The applicant is encouraged to review whether additional distributed infiltration features or contingency measures could improve system resilience.
- Due to the chalk aquifer setting, it would be beneficial to demonstrate a **robust SuDS treatment train**, even where infiltration is proposed, to provide assurance regarding protection of groundwater quality.
- Consideration should also be given to **long-term performance**, including the risk of clogging of infiltration surfaces. Early integration of maintainability into the design (e.g. sediment forebays, accessible inlets, defined maintenance zones) will support adoption and long-term functionality.
- The applicant is advised to ensure that **construction practices do not compromise infiltration performance**, particularly through avoidance of compaction in basin areas and careful management of soils during construction.
- Finally, the LLFA would welcome a **clear, consolidated drainage design pack** bringing together all relevant calculations, testing results, drawings, and supporting evidence into a coordinated submission. This will significantly assist the review process and reduce the likelihood of further delays.

These points are provided to assist the applicant in addressing current deficiencies and progressing toward a fully compliant and robust drainage solution.