

Engineers Comments Regarding Surface Water Drainage

Application Reference:	BN/66/26/HH	Reviewer Reference:	ADC/KW/PC
Planning Officer:	Jonny Cooper	Date of Review:	25/06/2026
Site Name:	Kingarth, Lake Lane, Barnham, PO22 0JA		
Application Description:	Installation of PVCU conservatory to north eastern elevation of property.		
Assessment Number:	1 of 1		

Policy and Guidance Information

Arun District Council Surface Water Drainage Guidance (including design checklists) - <https://www.arun.gov.uk/surfacewater>

Land Drainage Consent – <https://www.westsussex.gov.uk/fire-emergencies-and-crime/dealing-with-extreme-weather/flooding/flood-risk-management/ordinary-watercourse-land-drainage-consent/>

Arun District Council Land Drainage Byelaws - <https://www.arun.gov.uk/byelaws/>

Arun District Council surface water pre-commencement conditions - <https://www.arun.gov.uk/planning-pre-commencement-conditions>

The National Standards for SuDS - <https://www.gov.uk/government/publications/national-standards-for-sustainable-drainage-systems/national-standards-for-sustainable-drainage-systems-suds>

The SuDs Manual [C753] by CIRIA

Response	Objection
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References

The NPPF states that when determining any planning application, local planning authorities should ensure that flood risk is not increased elsewhere (paragraph 181, 182 and 187e). The PPG guides local planning authorities to refer to 'Sustainable drainage systems: non-statutory technical standards' [NsTS] and detailed industry guidance like The SuDS Manual [C753] by CIRIA to guide decisions about the design, maintenance, and operation of sustainable drainage systems for non-major development.

The NsTS have been superseded by the National Standards for Sustainable Drainage Systems [NSfS] from 19 June 2025.

This consultation has been primarily informed by the NSfS and The SuDS Manual.

Summary

This summary highlights if critical items aligning with each of the standards have been met. Critical items are highlighted in **bold** on our surface water drainage design checklist (linked above). A failure to address these will likely result in an **objection** to an objection to a full or reserved matters planning application.

If any of these items are inadequately addressed by the submission, then their correction may result in a redesign of the surface water drainage scheme. A redesign is likely to have site wide implications such as the potential for storage structures to increase in volume or plan area, or the provision of other important infrastructure to satisfy the NSfS set out below.

A full written explanation of the assessment and response is given in the consultation comments to the planning officer.

Standard	Assessment	Response
1. Runoff destination	Insufficient	Objection
2. Interception drainage	Insufficient	No objection subject to conditions
3. Extreme Rainfall and Flooding	Insufficient	Objection
4. Water Quality	Insufficient	No objection subject to conditions
5. Amenity	Insufficient	No objection subject to conditions
6. Biodiversity	Insufficient	No objection subject to conditions
7. Construction, operation, maintenance, decommissioning and structural integrity	Insufficient	No objection subject to conditions

Reviewed Plans

The following documents have been submitted and reviewed to inform this consultation with reference to surface water drainage:

Lidsey Drainage Statement

Flood Risk Assessment

Consultation comments to the planning officer

0. General

0.1. Insufficient information regarding surface water drainage has been submitted to evidence that flood risk will not be increased as due to the proposed development.

1. Runoff destination

1.1. No information has been provided regarding the proposed point of discharge for surface water runoff, as required by Standard 1 of the NSfS. The submitted Flood Risk Assessment states that surface water will be discharged to the existing surface water drainage network; however, no details

have been provided regarding the nature, location, condition, ownership, or available capacity of this system.

- 1.2. As insufficient evidence has been submitted to demonstrate how the applicant intends to drain surface water, we are unable to assess whether the proposed development would increase flood risk. It is the responsibility of the applicant or their drainage designer to provide this evidence. For this reason, we **object to the proposal**, as the submission of such evidence may affect the scale and layout of the development.
- 1.3. To support an infiltration-based design, winter groundwater monitoring must be undertaken to confirm that a minimum of one metre of unsaturated ground can be maintained between the base of the soakaway or infiltration structure and the peak groundwater level. Ground conditions and infiltration potential in Barnham are highly variable. While infiltration may be feasible in some areas, others experience high groundwater levels or poor infiltration rates that render it unviable. This must be robustly demonstrated by the applicant.
- 1.4. If infiltration is not viable, then alternative sustainable means of draining the site are summarised as follows:
 1. Water reuse – not proposed but will not provide a full design solution and can be secured via condition.
 2. Infiltration – not investigated.
 2. To a watercourse – Barnham Rife, a culverted main river runs approx. 100m to the west and crosses Barnham Road.
 3. To a surface water sewer – none available.
 4. To a highway drainage system – a highway drain can be found in Lake Lane outside the property.
 5. To a combined sewer – none available.
- 1.5. It is essential that each discharge destination is considered in strict priority order, with higher priority options fully explored and demonstrably exhausted before progressing to lower priority alternatives. Robust evidence must be provided to discount a higher priority destination.
- 1.6. In this case, ADC has identified a potential alternative (if infiltration proves unviable); a Barnham Rife (main river) crossing Barnham Lane. It is the designer's responsibility to fully investigate this option, where necessary, and provide clear evidence of permission from the Environment Agency to discharge into the system and ensure that a gravity lead solution was feasible as the use of pumps is highly discouraged.
- 1.7. There is also a highway drain in Lake Lane. This are controlled by West Sussex County Council and permission to connect would be required from them (but permission often resisted). No evidence or permission has been provided to confirm whether discharge to these highway drainage systems would be permitted, or whether the drains have sufficient hydraulic capacity and the applicant has not provided any further information on how they may drain the site if infiltration is later found to be unviable or whether the connection to the highway drainage system can be achieved.
- 1.8. **Surface water must not be discharged into the foul sewer.** The foul sewer is not a recognised disposal location in the Standard 1 of the NSfS. It is important to recognise that combined sewers

are intentionally designed to take both foul and surface water runoff. Even if the foul sewer has the capacity to accommodate additional flows or has an element of surface water already in it, it is not considered combined.

1.9. The application site is in the Lidsey Wastewater Treatment Catchment Area. This catchment is the subject of a surface water management plan due in part to the recognised history of foul sewer flooding. The site is within a local flood risk zone identified within the surface water management plan [LFRZ_006]. The plan states that flood risk from fluvial flooding and public sewers is high. It states that flood risk of the rife occurs in the 1% event which is especially felt upstream of the railway line.

2. Interception drainage

2.1. Interception features should be included within the SuDS design, as no details have been provided then we are unable to assess this information. However, in recognition that the National Planning Policy Framework states that SuDS should be proportionate to the nature and scale of the proposal we are willing to accept that the following interception features can demonstrate compliance without further detailed assessment.

- Infiltration features designed to meet extreme rainfall standards.
- Water butts or other means of reuse that are not designed for regular daily demand attached to all new downpipes.
- Raingardens and bioretention features attached to all new downpipes.
- Permeable surfacing.

2.2. These features will not affect the scale or layout of development and as such can be secured by condition.

3. Extreme rainfall and flooding

3.1. The site is partially located in the current day Flood Zone 2, it is in Flood Zone 3a in the future indicating that it is at high risk.

3.2. The submitted Flood Risk Assessment (FRA) has not provided robust or accurate hydraulic modelling to demonstrate the site's flood risk during these events. It is not supported by product 4 data for the site which can be requested from the Environment Agency. It is important that this information is submitted as it will demonstrate accurately the flood risk on the site and its source. SuDS features should not be located in fluvial flood zones. (Please see our guidance relating to this at www.arun.gov.uk/surfacewater). Without an accurate understanding of the flood risk on the site, we cannot assess if the proposed drainage strategy is compliant. Therefore, I **object to the application**.

4. Water quality

4.1. Insufficient evidence of water quality benefits has been provided, and as such, Standard 4 of the NSfS has not been met. However, the submission of this evidence is unlikely to affect the scale or layout of the development. Therefore, we do not object to the proposal on these grounds, subject to a condition securing the provision of details demonstrating water quality benefits.

5. Amenity

5.1. Insufficient amenity benefits arising from the proposed SuDS have been identified, and therefore Standard 5 of the Systems NSfS has not been met. However, the submission of such evidence is unlikely to affect the scale or layout of the development. Accordingly, we do not object to the proposal on these grounds, subject to a condition securing details of amenity benefits.

6. Biodiversity

6.1. Insufficient biodiversity benefits arising from the proposed SuDS have been identified, and therefore Standard 6 of the Systems NSfS has not been met. However, the submission of such evidence is unlikely to affect the scale or layout of the development. Accordingly, we do not object to the proposal on these grounds, subject to a condition securing details of biodiversity benefits.

7. Construction, operation, maintenance, decommissioning and structural integrity

7.1. Insufficient information regarding the construction, operation and maintenance of the SuDS system, and therefore Standard 8 of the Systems NSfS. However, in the absence of significant existing trees which could impact the scale and layout and location of SuDS features, most elements of this standard can normally be secured via condition. The submission of a Management and Maintenance Plan is unlikely to affect the scale or layout of the development. Accordingly, we do not object to the proposal on these grounds, subject to a condition securing the detailed surface water drainage design.

8. Overcoming the objection

8.1. As this is not a holding objection or a request for further information, requested conditions are not listed. If you are minded to approve this application, please reconsult engineers for a list of suggested conditions to ensure that the development is adequately drained and does not increase flood risk elsewhere.

8.2. The imposition of conditions at this stage rather than overcoming the objection could result in a circumstance where the condition cannot be discharged. In the event of attaching a condition that cannot be discharged, permission may be invalid or that condition could be deemed to be unreasonable.

8.3. If you are minded to allow the applicant additional time to submit further documents to support this application, then further evidence may overcome our objection. Please do not allow the applicant to submit further documents without prior discussion as to whether it will be possible for these to be assessed or influence your determination.

Drainage Impact on Other Planning Matters

This application has been assessed with regards to surface water drainage design only, together with land drainage aspects if deemed necessary.

Other planning matters occasionally effect the surface water drainage design. If plans relating to other matters have been assessed for their impact on the proposed drainage, then it must not be assumed that they have been assessed for any other purpose. The planning officer is advised to check for conflicts with any existing approved plans and to consult any relevant consultees as appropriate.

It has been identified that the following consultees may have comments about the plans that have been submitted and reviewed for this application:

- ☐ Landscaping officer (proposed trees and landscaping)
- ☐ Tree officer (existing trees)
- ☒ Environment Agency (main rivers and fluvial/tidal flood risk, River Arun internal drainage board, groundwater source protection zones)
- ☐ Southern Water (foul drainage and surface water disposal to public sewer network/groundwater source protection zones)
- ☐ Portsmouth Water (groundwater source protection zones)
- ☐ Lead local flood authority (all other sources of flooding and ordinary watercourses)
- ☐ Other: Specify
- ☐ None



From: Daun Johnson on behalf of Planning.Responses
Sent: 29 June 2026 14:25
To: Planning Scanning
Subject: FW: BN/66/26/HH Kingarth
Attachments: BN-66-26-HH Kingarth.docx

Please upload attachment to bN/66/26/HH, planning, consultee response, END

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To register to receive notification of planning applications in your area please go to
<https://www1.arun.gov.uk/planning-application-finder>



From: Kathryn Welch <Kathryn.Welch@arun.gov.uk>
Sent: 29 June 2026 14:16
To: Planning.Responses <Planning.Responses@arun.gov.uk>; Jonny Cooper <Jonny.Cooper@arun.gov.uk>
Cc: Paul Cann <Paul.Cann@arun.gov.uk>; Joe Dixon <Joe.Dixon@arun.gov.uk>
Subject: BN/66/26/HH Kingarth

Please find attached the engineers response, an objection.

Kind regards,

Kathryn Welch
Senior Planning Officer, Planning Department

Please note: My working hours are currently split between Development Management and ADC Engineers, which may result in extended response times. **Development Management:** Tuesdays and Thursdays **ADC Engineers:** Mondays, Wednesdays, and Fridays

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