

Engineers Comments Regarding Surface Water Drainage

Application Reference:	FG/101/25/PL	Reviewer Reference:	ADC/KW/PC
Planning Officer:	Harry Chalk	Date of Review:	07/01/2025
Site Name:	4 South Drive, Ferring, BN12 5QS		
Application Description:	Erection of replacement dwelling together with reprofiling of the site and installation of new boundary to front of site.		
Assessment Number:	2 of 2		

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 The NsTS have been superseded by the National Standards for Sustainable Drainage Systems [NSfS] from 19 June 2025.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

- **Flood Risk Assessment and Surface Water Drainage Strategy ADG7845_BN12_Ferring_01**
- **Supporting letter by aegaea date 12/12/2025**

Consultation comments to the planning officer

0. General

- 0.1. The designer suggests that there are no options for the disposal of surface water except for the public foul sewer. They claim that part of the site drains to the foul sewer under the existing arrangements to justify a new connection with the proposed redevelopment of this site. Instances of historic connections of surface water draining to foul sewer is irrelevant and does not represent justification from a departure from national standards and guidance. Surface water should not be discharged into the foul sewer. The foul sewer is not a recognised disposal location in the NSfS, the SuDS Manual, Approved Document H, or the NPPG [Flood risk and Coastal Change].

0.2. The planning officer is alerted to Southern Water's surface water management policy DS001 v0.3, dated 1 July 2024 and available at <https://www.southernwater.co.uk/media/l23dbon0/surface-water-management-policy-120724.pdf>. Within this policy it is clarified that when previously developed (brownfield) sites are redeveloped, no historic right of connection will exist, and any sewer connections will be treated as new. They state in the new applications policy, that they will "refuse any request for a connection for surface water into [their] foul only sewer network".

0.3. This was reiterated in a communication sent to developers and LPAs on the 15 January 2025. This communication clarified that they would refuse to permit connection of surface water to the public foul only sewer network, including "where the surface water hierarchy has been followed and all alternative options have been exhausted." On this basis it must be assumed that Southern Water will refuse the proposed connection of surface water to the foul sewer.

1. Runoff destination

- 1.1. Following review of the additional information provided, **we maintain our objection in principle to the proposed drainage strategy for the following reasons.**
- 1.2. The proposal to discharge surface water to the foul sewer via attenuation remains unacceptable. The NSfS do not recognise the foul sewer as a priority discharge destination. Surface water should not be discharged into the foul sewer as this can result in flooding to other properties and contribute to pollution issues. **All higher-priority options in the SuDS hierarchy must be robustly assessed and demonstrably ruled out. This has not occurred.**
- 1.3. Winter infiltration testing has been undertaken; however, this testing has not been carried out in accordance with BRE365, and the 'results' have been extrapolated, making them unreliable. No winter groundwater monitoring has been undertaken, meaning design parameters cannot be confirmed. A minimum of 1 metre of unsaturated ground should be maintained between the base of the soakaway or infiltration structure and the peak groundwater level.
- 1.4. The existing site is reported to positively drain to the foul sewer, and with appropriate attenuation and restricted discharge rates, the proposal is stated to represent a betterment of the current situation. A CCTV survey has now been provided. It would be expected that any future submission would include further details including a drainage layout plan and video files of the survey. As such, and given the non-compliance with the SuDS hierarchy, this information has not been fully reviewed at this time.
- 1.5. Infiltration testing must be undertaken at the location and depth proposed for SuDS features, whilst maintaining 1m of unsaturated ground. This is acknowledged by Ashdown Site Investigations, and no justification has been provided for failing to accord with this requirement.
- 1.6. It is also noted that the claimed risk of dissolution features is based solely on a desktop study and remains unproven. Soil analysis from infiltration pits to 2.10m below ground level (bgl) and boreholes drilled to between 3 – 4m bgl did not encounter chalk. The full geotechnical assessment has not been provided. It is the applicant's responsibility to submit complete reports; without them, assertions cannot be verified.
- 1.7. The applicant must justify why the SuDS hierarchy has not been adhered to. Each discharge destination must be considered in strict priority order, with higher-priority options fully explored and

discounted with robust evidence before progressing to lower-priority alternatives. This has not been demonstrated. Winter groundwater monitoring is required to confirm that a minimum of one metre of unsaturated ground can be maintained between the base of any infiltration structure and peak groundwater level. Groundwater in this location may be influenced by spring tides, and this must be accounted for in monitoring. Further details of our testing requirements for both groundwater monitoring and infiltration testing can be found at www.arun.gov.uk/surfacewater.

- 1.8. If discharge to the foul sewer is pursued, despite our objections, hydraulic capacity checks and written permission from Southern Water for the proposed connection must be provided. This deviation from the NSfS would also need to be agreed with the LPA, which we are highly unlikely to agree to. Failure to secure permission or demonstrate capacity could affect the viability of the development or increase flood risk.
- 1.9. Any further restriction on discharge rates by Southern Water may also impact site layout and scale. The proposed run-off rate of 1.2 litres per second (l/s) is based on an incorrect contributing area, as the garage roof and driveway have been excluded. Also, under the NSfS, any discharge is to be restricted to greenfield run off rates (as well as acknowledging the requirement to identify an acceptable disposal location/system). No calculation of the greenfield run-off rate has been provided. If the greenfield run off rate cannot be achieved, evidence will need to be provided as to why it cannot be achieved and this will be subject to further consideration/discussion.
- 1.10. If infiltration is ultimately found to be unviable, no compliant alternative discharge destination has been submitted. This is a fundamental omission. The proposed strategy does not comply with the NSfS and fails to demonstrate adherence to the SuDS hierarchy. Robust evidence is required to discount higher-priority options. Until this is provided, **we object in principle to the proposal**. Submission of the required evidence may have implications for site layout and scale.

2. Interception drainage

- 2.1. No interception assessment has been submitted with the application and interception drainage is not discussed at all within the drainage strategy. Water butts have been proposed but these will not deliver full design solution. As infiltration is still not proposed on the site interception can only be delivered by water reuse or evapotranspiration.
- 2.2. It is acknowledged that opportunities to achieve interception will be limited within the confines of the site whilst also meeting our requirements for SuDS in Flood Areas. However, opportunities to intercept the first 5mm of rainfall for the majority of rainfall events should be maximised. Some SuDS features, like green roofs, which assist in meeting this standard cannot be agreed and secured via condition as their late introduction would contradict approved site plans and elevations. It is therefore important that interception is properly considered at this stage of the planning process.
- 2.3. 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.

2.4. 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. No further details have been submitted for assessment, as such our advice remains unchanged.

3.2. The site is currently located within Flood Risk Zone 3a, indicating a high probability of flooding. Flood Zone 3b is defined as the extent of flooding in the 3.33% AEP event, and typically referred to as the function flood plain. At the time of writing modelling data for this event has not been published to cover this area. The models that are available, are for the 1.3% AEP (less likely) and the 5% AEP (more likely) events. The site is within the extents of the 1.3% AEP flood event, which is the more conservative and therefore arguably more appropriate model to assess in the absence of the correct one. This is important as there is a risk that the site may be at risk in the 3.33% AEP event and therefore should not be developed unless it is essential infrastructure or water compatible development.

3.3. The submitted Flood Risk Assessment (FRA) has not, and likely cannot provide robust or accurate hydraulic modelling to demonstrate the site's flood risk during the 3.3% AEP event. Furthermore, the FRA assumes that the site is at risk of tidal flooding, yet this assumption has not been substantiated with appropriate evidence. Should it be demonstrated that the site is solely at risk of tidal flooding, the implementation of SuDS would remain a viable design option.

3.4. In relation to surface water drainage, the submitted strategy includes the existing brownfield runoff rates and proposes a discharge rate of 1.2l/s from the site. However, Standard 3 of the NSfS does not require a comparison with the existing brownfield rate. Instead, it stipulates that the proposed discharge rate is restricted to the greenfield 50% AEP equivalent (QBAR) or a minimum of 3l/s/h; whichever is greater. Where a site has been previously developed a relaxation factor of up to 5 times may be applied to this rate. As a greenfield runoff analysis or a compliant calculation based on 3l/s/ha has not been submitted, compliance with this standard cannot be determined. On this basis, an objection to the proposal is raised.

3.5. This risk of flooding will need to be accounted for by the surface water drainage design. For further guidance, please refer to our *SuDS in Flood Areas* document available online at www.arun.gov.uk/surfacewater.

3.6. At present insufficient detail has been included on the drainage plans submitted for engineering assessment. In the absence this evidence, and without accurate understanding of the existing site drainage, we cannot assess if flood risk will be increased by the surface water drainage of the proposed development. Therefore, **this application does not accord with the NPPF** as set out above and **we object** to the proposal.

3.7. The submitted modelling has not been fully assessed due to the critical and fundamental objection relating to the disposal location.

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:

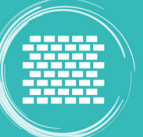
- ☐ Landscaping officer (proposed trees and landscaping)
- ☐ Tree officer (existing trees)
- ☐ Environment Agency (main rivers and fluvial/tidal flood risk, River Arun internal drainage board, groundwater source protection zones)
- ☒ Southern Water (foul drainage and surface water disposal to public 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

PL- Consultation- Engineers response

Arun District Council, Civic Centre, Maltravers Rd
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From: Kathryn Welch <Kathryn.Welch@arun.gov.uk>

Sent: 07 January 2026 17:00

To: Planning.Responses <Planning.Responses@arun.gov.uk>; Harry Chalk <Harry.Chalk@arun.gov.uk>

Cc: Paul Cann <Paul.Cann@arun.gov.uk>

Subject: FG/101/25/PL

Please find attached our re-consultation response maintaining 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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