

Engineers Comments Regarding Surface Water Drainage

Application Reference:	M/20/26/PL	Reviewer Reference:	ADC/KW/PC
Planning Officer:	Harry Chalk	Date of Review:	24/04/2026
Site Name:	86 Ancton Way Elmer PO22 6JP		
Application Description:	Demolition of existing bungalow and construction of replacement dwelling (resubmission following M/58/25/PL).		
Assessment Number:	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	Further details requested
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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 The NsTS have been superseded by the National Standards for Sustainable Drainage Systems [NSfS] from 19 June 2025.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	No objection subject to conditions
2. Interception drainage	Insufficient	No objection subject to conditions
3. Extreme Rainfall and Flooding	Insufficient	Further information required.
4. Water Quality	Insufficient	Support
5. Amenity	Insufficient	Support
6. Biodiversity	Insufficient	Support
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:

- **Proposed Surface Water Drainage 006 PL3**
- **Flood Risk Assessment**
- **Management of Surface Water Run-off March 2026**

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. The designer proposes to drain the roof area of the new dwelling into two rain gardens running alongside both side boundaries via rainwater butts. All other hard surfaces, including the driveway, are to be of permeable construction. We are supportive of the use of infiltration as the second-highest priority disposal option (after water reuse). Two shallow infiltration test pits have been tested in accordance with industry guidance; these are shown on plan and positioned in the front and rear gardens. The slowest infiltration rate calculated was $2.9 \times 10^{-5} \text{ m/s}$. This is the rate that has been used to inform the SuDS design.
- 1.2. The design positions the permeable paving to the rear and the rain gardens at no lower than 9.425 m AOD, and the drive to the front at no lower than 9.440 m AOD. This is above the minimum allowable level of **9.370 m AOD**, as evidenced during the compliant groundwater monitoring undertaken in 2024/25. This is acceptable.
- 1.3. The stated porosity of the proposed rain gardens appears to be excessively high. A void ratio of approximately 95% would typically be associated with a proprietary crate or modular attenuation system. However, the proposed rain garden incorporates a soil or substrate growing media, which would be expected to have a significantly lower void ratio. A site-specific porosity value should therefore be applied, taking account of the characteristics of the proposed planting media and the anticipated reduction in available storage volume over time as the planter becomes established and matures. The applicant is recommended to contact the ADC Engineers to discuss a suitable value prior to re-submitting further information for consultation.
- 1.4. It has been satisfactorily demonstrated that infiltration to the ground is a viable means of discharging surface water falling on the proposed building. Further detail is required regarding the porosity of the SuDS feature; however, this will be discussed in connection with Standard 3 below. Standard 1 of the NSfS has been met, we have **no objection subject to securing details via condition**.

2. Interception drainage

Water butts, permeable paving and rain gardens are proposed. As infiltration has been proven viable these are considered acceptable to accept extreme rainfall conditions.

- 2.1. Subject to securing details by condition **the proposal accords** with Standard 2 of the NSfS.

3. Extreme rainfall and flooding

- 3.1. The site is entirely within Flood Zone 3a. It is now proven by Product 4 data that the site is only affected by tidal flooding. SuDS are compatible in such areas. Further guidance on designing SuDS in tidal areas can be found at www.arun.gov.uk/surfacewater.
- 3.2. As noted in Standard 1, it is considered the potential porosity of the raingardens has been over estimated, further details would be required to demonstrate that sufficient storage is provided within the proposed SuDS features.

3.3. In addition to the above, preliminary calculations have been provided. These apply an urban creep allowance of 10% and use a CV value of 1. The calculations also incorporate the correct rainfall data. For the purposes of an application, these are acceptable.

3.4. To fully accord with Standard 3 of the NSfS **further details are requested.**

4. Water quality

4.1. Adequate information regarding water quality has been provided and Standard 4 of the NSfS has been met.

4.2. Rainwater from the roof and hard surfaces such as the drive, have a low pollution hazard level and the site does not sit within a water sensitive area. It has been shown that SuDS mitigation indices for each of the pollutants are equal to or greater than the sums of the pollution hazard indices. The proposal accords with Standard 4 of the NSfS.

5. Amenity

5.1. It is proposed to include bioretention planters within the scheme, this is positively viewed and accords with Standard 5 of the NSfS. Accordingly, we support the proposal on these grounds, subject to a condition securing details of amenity benefits.

6. Biodiversity

6.1. It is proposed to include bioretention planters within the scheme, this is positively viewed and accords with Standard 5 of the NSfS. Accordingly, we support the proposal on these grounds, subject to a condition securing details of amenity benefits.

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

7.1. Information has been provided outlining the operational and maintenance requirements of the main components of the SuDS. It should be clarified what steps will be taken to ensure that future occupants are aware of their responsibilities regarding the open storage features proposed on site.

7.2. The submission of the additional information will not impact the size and scale of development. Accordingly, we do not object to the proposal on these grounds, subject to a condition securing the detailed surface water drainage design.

8. Suggested conditions / 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

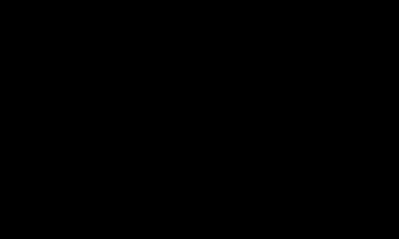
This application has been assessed with regards to surface water drainage design only, together with land drainage aspects if deemed necessary.

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



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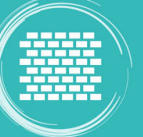
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From: Kathryn Welch <Kathryn.Welch@arun.gov.uk>
Sent: 29 April 2026 10:12
To: Planning.Responses <Planning.Responses@arun.gov.uk>; Harry Chalk <Harry.Chalk@arun.gov.uk>
Cc: Paul Cann <Paul.Cann@arun.gov.uk>; Joe Dixon <Joe.Dixon@arun.gov.uk>
Subject: M/20/26/PL

Hi,

Please find the engineers response attached; further information requested.

Many thanks,

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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