

Engineers Comments Regarding Surface Water Drainage

Application Reference:	AB/122/25/OUT	Reviewer Reference:	ADC/SB
Planning Officer:	Harry Chalk	Date of Review:	25/11/2025
Site Name:	Land at London Road and Land West of and adjoining Anne Howard Gardens Arundel		
Application Description:	Outline application with all matters reserved except access for the erection of up to 6 No dwellings with associated access, parking and landscaping. This application may affect the setting of listed buildings, may affect the character and appearance of the Arundel Conservation Area and is a Departure from the Development Plan.		
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 in principle
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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The NsTS have been superseded by the National Standards for Sustainable Drainage Systems [NSfS] from 19 June 2025.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 OUTLINE surface water drainage design checklist (linked above). A failure to address these will result in an objection to any OUTLINE planning application.

Where the quantum of development is not being approved, an objection to an outline application is only made where:

- a viable runoff disposal location has not been evidenced,
- flood risk may be impacted by the proposal,
- surface water drainage may impact the proposed development scale and layout, or;
- a significant impact upon existing watercourses or natural drainage features is identified

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 in principle
2. Interception drainage	Not applicable (OUTLINE application)	No objection subject to conditions
3. Extreme Rainfall and Flooding	Insufficient	Objection
4. Water Quality	Not applicable (OUTLINE application)	No objection subject to conditions
5. Amenity	Not applicable (OUTLINE application)	No objection subject to conditions
6. Biodiversity	Not applicable (OUTLINE application)	No objection subject to conditions
7. Construction, operation, maintenance, decommissioning and structural integrity	Not applicable (OUTLINE application)	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, reference 13686, first issue, dated 25 June 2025. Referred to as the **FRA**.
- PROPOSED SITE PLAN 693580_205C
- Design and Access Statement, reference 718406, planning issue, dated 15 September 2025.

Consultation comments to the planning officer

0. General

0.1. The applicant has not demonstrated that the surface water drainage design will not increase flood risk and therefore I object to the application.

1. Runoff destination

1.1. The applicant proposes to discharge surface water into the ground via infiltration. Water reuse is not proposed but should be, in accordance with the hierarchy for sustainable drainage as there is a contributing catchment and the potential demand for non-potable water, there may also be a need for landscape irrigation.

1.2. Even if water reuse is proposed, this is unlikely to provide a full surface water solution. Therefore, progression through the hierarchy is inevitable. The use of infiltration as the next highest priority disposal method is supported. However, insufficient evidence has been submitted to demonstrate that infiltration is viable. **This is critical as the applicant has not identified any alternative means of draining surface water from the site.**

1.3. Where infiltration is the only disposal option available or suggested, it is expected that the applicant demonstrates that the strategy is achievable. This would be supported with ground investigations (groundwater monitoring and infiltration testing) which inform the design. The investigations that have been submitted are not adequate for these purposes.

1.4. This is because we have no indication of the expected groundwater level. This is critical as 1m of unsaturated ground to the groundwater must be achieved for a compliant infiltration design. Groundwater levels are extremely variable in the district and therefore it is inappropriate to assume the groundwater levels will be low without supporting evidence of this.

1.5. Infiltration testing has been completed, this was at a single depth and will need to be supplemented by testing at a shallower depth appropriate for the permeable paving. It is noted that only a 2-page excerpt of the ground investigation report has been submitted as an appendix to the FRA (appendix D). It is unclear why the full report was not submitted. As a result I am unable to offer a full critique of the infiltration testing or any other findings of that report.

1.6. There is a significant slope on the site – from 19.6mAOD at the northern boundary, to 14.67mAOD at the southwest boundary. In the proposed rear gardens, the existing ground level drops by approximately a metre. It is expected that without alterations to the levels, the slope on the site will exceed 3% to 5%. Therefore, the impact of using infiltration on the site should be assessed by a competent geotechnical engineer or engineering geologist. It is possible that infiltrating water may cause seepages out of the slope at a lower level, which could cause flooding or instability.

1.7. If infiltration is later found not to be viable, either due to high groundwater or due to the sloping site, it is unclear how the applicant may drain surface water from the site. In the absence of any submitted information to demonstrate an alternative disposal location, I have assessed our records and summarise my findings as follows:

- Water reuse – not proposed, will not provide a full solution, can be secured via condition.
- Infiltration – proposed but unproven. Risk that it may not be viable due to sloping site and unknown groundwater levels.
- Watercourse – none mapped nearby.
- Surface water sewer – none mapped nearby.
- Other piped surface water networks – highway drainage on London Road. Applicant has no right of connection and connections are generally resisted by the Highway authority. Connection would also require draining surface water uphill which would likely need an unsustainable pumped solution.
- Combined sewer – none mapped nearby.

- 1.1. As no viable alternative runoff destination has been suggested, and the proposed destination is inadequately substantiated, I **object in principle** to the application.
- 1.2. The risks of allowing outline planning consent without the runoff destination being established are increased flood risk, a potentially unimplementable planning consent, or a less sustainable solution being required which was not presented at outline planning stage.

2. Interception drainage

- 2.1. This standard cannot be fully assessed when the scale and layout of the development is not being submitted for approval. Therefore, it is not a reason for objection and can be assessed when an application for reserved matters is made.
- 2.2. Consideration of interception drainage is critical to the conceptual design of the site in determining the scale and layout of the development. Interception drainage ensures that rainfall from regular rainfall events does not leave the site. This replicates greenfield conditions and goes hand in hand with the management of extreme rainfall events to ensure that development does not increase flood risk.
- 2.3. Where infiltration has not been proven to be viable (as here) and there is a risk that interception drainage may only be delivered by water reuse and evapotranspiration, this can have significant impact on the scale and layout of the proposed development.

3. Extreme rainfall and flooding

- 3.1. As it is unclear if infiltration is viable on the site (see section 1), it is expected that an alternative surface water drainage design is submitted which would involve discharging surface water elsewhere. To assess if this method would increase flood risk we would need to also assess the greenfield runoff characteristics. The applicant has not submitted any greenfield runoff calculations for assessment.
- 3.2. It is understood that the scale and layout of the development are not determined by this outline application. However, a preliminary layout and drainage layout have been submitted for assessment. It is assumed that these are submitted to offer comfort that the proposed quantum of development is achievable. However, the supporting SuDS calculations (in appendix F of the FRA) need to be revised to comply with national standards for SuDS and our guidance. Revisions include:
 - Submitting the simulation settings for all features (only plot 1 submitted),

- Using a CV value of 1 for all soakaways (both summer and winter storms),
- Applying the design infiltration rate to the sides of soakaways only.
- Applying the design infiltration rate to the base of permeable paving only – once calculations and supporting ground investigations are submitted for this.

3.3. Once revised, **the storage needed for surface water may increase**. This is a heavily constrained site, due to the neighbouring property, slopes and existing trees. Therefore, it is unclear where additional storage may be provided. Indeed, the submitted drainage layout already shows the soakaways for plots 4 to 6 very close to the southern boundary which does not represent best practice. If these soakaways must increase in size, it is unclear where they can be accommodated.

3.4. There are no mapped flood risks on the site that need to be accounted for by the SuDS design.

3.5. Despite this, due to the uncertainty regarding the disposal location and in the absence of greenfield runoff calculations, I **object** to the application.

4. Water quality

4.1. This standard cannot be fully assessed when the scale and layout of the development is not being submitted for approval. Therefore, it is not a reason for objection and can be fully assessed when an application for reserved matters is made.

4.2. The later submitted water quality and proposed treatment assessment must assess each sub-catchment and their treatment methods where different parts of the site receive different treatment regimes. The designer should aim to treat all rainwater as close to source as possible. **Open features which aid water treatment can impact the scale and layout.**

5. Amenity, Biodiversity, Construction and Maintenance

5.1. These standards cannot be fully assessed when the scale and layout of the development is not being submitted for approval. Therefore, they are not a reason for objection and can be assessed when an application for reserved matters is made.

5.2. Each of these standards can impact the scale and layout of the proposed development and the applicant and design team are encouraged to familiarise themselves with our guidance and checklists to avoid objection when a reserved matters application is made.

6. Suggested conditions / Overcoming the objection

6.1. 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.

6.2. 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.

6.3. 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: Nicola Oktay on behalf of Planning.Responses
Sent: 26 November 2025 11:52
To: Planning Scanning
Subject: FW: Planning Consultation on: AB/122/25/OUT
Attachments: AB-122-25-OUT - London Road.docx

Drainage Engineers response

Nikki Oktay
Planning Receptionist, Planning Department

T: 01903 737965
E: Nicola.Oktay@arun.gov.uk

Arun District Council, Civic Centre, Maltravers Rd
Littlehampton, West Sussex, BN17 5LF

www.arun.gov.uk

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Our priorities...



From: Sarah Burrow <Sarah.Burrow@arun.gov.uk>
Sent: 25 November 2025 12:41
To: Planning.Responses <Planning.Responses@arun.gov.uk>; Land Drainage <Land.Drainage@arun.gov.uk>
Cc: Harry Chalk <Harry.Chalk@arun.gov.uk>; Paul Cann <Paul.Cann@arun.gov.uk>
Subject: RE: Planning Consultation on: AB/122/25/OUT

Hi Harry,

Find my consultation – an objection in principle – attached. Apologies for the delay in response.

Kind regards

Sarah Burrow
Flood Risk and Drainage Engineer, Coastal Engineers and Flood Prevention

T: 01903 737815
E: sarah.burrow@arun.gov.uk

Arun District Council, Civic Centre, Maltravers Rd
Littlehampton, West Sussex, BN17 5LF

www.arun.gov.uk



Our priorities...



From: Planning.Responses <Planning.Responses@arun.gov.uk>

Sent: 26 September 2025 10:33

To: Land Drainage <Land.Drainage@arun.gov.uk>

Subject: Planning Consultation on: AB/122/25/OUT

To: **Engineers (Drainage)**

NOTIFICATION FROM ARUN DISTRICT COUNCIL

Town & Country Planning Act 1990 (as amended)

Town & Country Planning (Development Management Procedure) (England) Order 2015 - Article 5

Outline Consent

Application No: **AB/122/25/OUT**

Registered: 25th September 2025

Site Address: Land at London Road and Land West of and adjoining Anne Howard Gardens Arundel

Grid Reference: 501256 107307

Description of Works: Outline application with all matters reserved except access for the erection of up to 6 No dwellings with associated access, parking and landscaping. This application affects the setting of listed buildings, affects the character and appearance of the Arundel Conservation Area and is a Departure from the Development Plan.

The Council have received the above application.

[Click here to view the application and documents](#) The website is updated once a day in the evening, so you may need to wait until the day after this notification to view the documents.

Should you have any comments to make, these should be sent by replying to this email by 30th October 2025 . You can also monitor the progress of this application through the Council web site:

<https://www.arun.gov.uk/planning-application-search>

The application will be determined having regard to the development plan policies (if any are relevant) and other material considerations. The development plan can be accessed via the website <https://www.arun.gov.uk/development-plan> as can information on what comments we can consider

<https://www.arun.gov.uk/planning-application-comments>

Please be aware that any comments you may make will be available on our website so please do not insert personal details or signatures on your reply.

Should the application go to appeal the Planning Inspectorate will publish any comments made to the Council on their website:<https://acp.planninginspectorate.gov.uk/> but they will protect personal details.

In the absence of a reply within the period stated, I shall assume that you have no observations to make.

Yours sincerely

Harry Chalk

Planning Officer- Arun District Council

Telephone: 01903 737577

Email: harry.chalk@arun.gov.uk

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