

Engineers Comments Regarding Surface Water Drainage

Application Reference:	Y/15/25/PL	Reviewer Reference:	ADC/PC
Planning Officer:	Amber Willard	Date of Review:	23/06/2025
Site Name:	Stakers Farm North End Road Yapton BN18 0DU		
Application Description:	Conversion of and alterations to existing barns to create 3 No dwellings, erection of car barn, demolition of existing buildings and associated landscaping and parking and erection of new garage/workshop for Stakers Farmhouse and upgrading of access track. This application affects the character and appearance of the Main Road/Church Road, Yapton Conservation Area and is in CIL Zone 2 and is CIL Liable as new dwellings.		
Assessment Number:	1 of 1		

Policy and Guidance Information

Arun District Council Surface Water Drainage Guidance - <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/>
and
<https://www.arun.gov.uk/land-drainage-consent/>

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

The SuDs Manual [C753] by CIRIA

Sustainable drainage systems: non-statutory technical standards’
<https://assets.publishing.service.gov.uk/media/5a815646ed915d74e6231b43/sustainable-drainage-technical-standards.pdf>

Response	Objection
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Critical Items for Surface Water Drainage Design Conditions

The failure to adequately address the following items will result in an objection to a surface water drainage design.

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.

Critical Item	Reason	Status
Winter groundwater monitoring data.	Adequate winter groundwater monitoring data must be supplied to evidence that infiltration designs have sufficient freeboard from the base of structures and the peak groundwater level.	Sufficient

	The same data is necessary to ensure that the potential for buoyancy has been adequately considered in attenuation designs.	
Winter infiltration testing data.	<p>Adequate winter infiltration testing must be supplied to justify the proposed discharge method and design infiltration rates.</p> <p>Infiltration tests must be completed strictly in accordance with BRE DG 365, CIRIA R156 or a similar approved method. Testing depths must account for peak groundwater levels and correspond with the location and depth of proposed infiltration features.</p> <p>Designs must be based upon the <u>slowest</u> infiltration rate evidenced closest to a proposed infiltration feature. Average design rates will not be accepted.</p> <p>The results of incomplete tests should not be extrapolated to obtain design values for infiltration rates.</p>	Not required – deemed not to be possible to infiltrate.
The hierarchy for sustainable drainage.	<p>The proposed discharge method must accord with the SuDS hierarchy as given below. Evidence must be supplied to justify the proposed discharge method.</p> <ol style="list-style-type: none"> 1. Rainwater reuse where possible. 2. Complete discharge into the ground (infiltration). 3. Hybrid infiltration and restricted discharge to an appropriate water body or surface water sewer. 4. Restricted discharge to an appropriate water body. 5. Restricted discharge to a surface water sewer. 6. Restricted discharge to a combined sewer. <p>A water body may be defined as a river, watercourse, ditch, culverted watercourse, reservoir, wetland or the sea.</p> <p>Engineers cannot support any proposed connection of surface water to the foul sewer. This is reinforced by the new 'National Standards for Sustainable Drainage Systems' National standards for sustainable drainage systems - GOV.UK</p>	Insufficient

<p>Calculations</p>	<p>Calculations for pre-development run off rates must be based upon the positively drained area only.</p> <p>Proposed discharge rates must not increase flood risk on site or elsewhere. Discharge rates must be restricted to QBAR or 2 l/s/ha, depending on whichever is higher.</p>	<p>Sufficient</p>
	<p>Designs must be based on the most recently available rainfall data at the time of conditions being applied. <u>FSR rainfall data will not be accepted.</u> FEH rainfall data is based upon more recent records and continues to be updated.</p>	<p>Compliant</p>
	<p>Designs must use the correct climate change allowances at the time of determination of the outline or full planning application.</p> <p>CV values for all events must be set to 1. This includes summer, winter, design, and simulation events.</p> <p>The correct allowance for urban creep must be applied.</p> <p>Additional storage must be set to zero unless it can be evidenced where this is provided.</p> <p>Infiltration half-drain times must be less than 24 hours.</p> <p>Infiltration design rates must be applied to the sides of soakaways, or to the base of infiltration blankets. Design rates must not be applied to both the base and sides of infiltration structures.</p> <p>A surcharged outfall must be modelled.</p>	<p>Insufficient – not assessed due to proposed connection to the foul sewer</p>
<p>Natural catchments design.</p>	<p>The submission must define the natural drainage characteristics within, and hydraulically linked to, the site and demonstrate that the drainage proposals will integrate with and not compromise the function of the natural and existing drainage systems.</p> <p>The condition, performance (including capacity where appropriate) and ownership of any existing site surface water drainage infrastructure must be accurately reported.</p>	<p>Insufficient – proposed connection to the foul sewer</p>

	<p>Appropriate easements to watercourses and other services must be shown on all plans.</p> <p>Where there are areas of flood risk from any source on the site, it must be shown how a sustainable surface water drainage design can be accommodated on the site without conflicting with those areas of flood risk.</p> <p>Designs must replicate the natural drainage catchments of the site. All surface water drainage designs must therefore drain via gravity to corresponding points of discharge. The use of pumps for surface water drainage is not sustainable and will not be supported.</p>	
Plans	Plan areas, depths and levels of drainage infrastructure must accurately correspond with the supporting calculations.	To be determined
Water quality benefits.	An assessment of water quality is necessary to evidence that the proposed design provides adequate treatment of surface water.	Compliant
Biodiversity and amenity benefits.	The surface water drainage design must provide biodiversity and amenity benefits.	Not supplied
Trees and planting	<p>There should be no conflict between surface water drainage infrastructure and existing or proposed trees or planting.</p> <p>The design must consider the potential growth of proposed trees and adequate mitigation must be provided to protect drainage infrastructure where conflict cannot be avoided.</p>	Not supplied – it is important that a landscaping proposal is provided to ensure no conflict.

Drainage Impact on Other Planning Matters

This application has been assessed with regards to surface water drainage design only.

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, groundwater source protection zones)
- Southern Water (foul drainage and surface water disposal to public sewer network)
- Portsmouth Water (groundwater source protection zones)
- Lead local flood authority (all other sources of flooding, SuDS on major development and ordinary watercourses)
- Other:
- None

Additional comments to the planning officer

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' 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.

This consultation has been primarily informed by The SuDS Manual.

Proposed disposal location

Disposal options for surface water are extremely limited on this site and may be summarised as follows:

1. Infiltration – Ruled out.
2. To a watercourse – none available in close proximity.
3. To a surface water sewer – none available.
4. To a highway drainage system – Permission required from West Sussex County Council Highways.
5. To a combined sewer – none available.

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.

Whilst it is acknowledged that Southern Water have agreed to a 1 l/s surface water discharge to the foul sewer in principle, however, **Surface water must not be discharged into the foul sewer**, irrespective of whether it is considered to be betterment. The foul sewer is not a recognised disposal location in the SuDS Manual, Approved Document H, or the NPPG [**Flood risk and coastal change para 056**]. This is now reinforced by the new 'National Standards for Sustainable Drainage Systems' [National standards for sustainable drainage systems - GOV.UK](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/612222/national_standards_for_sustainable_drainage_systems.pdf). It is important to recognise that the foul and combined sewer networks are defined by the public sewer records held by Southern Water Services Ltd.

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/123dbon0/surface-water-management-policy-120724.pdf>. A copy of which is attached to this consultation. The presence of this policy is noted in correspondence between the applicants engineers and Southern Water.

The planning officer is strongly advised to **reconsult Southern Water**, with reference to this consultation response, to obtain a formal response to this application.

If the applicant can retain permission from Southern Water to make the proposed connection - despite this going against their policy - then we will continue to oppose the proposed connection based on it not being allowed for within the PPG, The SuDS Manual or Approved Document H.

In the absence of a viable disposal location the applicant has not been able to evidence that flood risk will not be increased by the proposed development.

The planning officers attention is drawn to a site with similar issues (R/143/24/PL) which is being appealed. The outcome of the appeal may influence this consultation.

It is recognised that infiltration on this site is not possible due to the high groundwater levels found to be present, and thus an inability to provide one metre freeboard between peak groundwater levels and the bases of infiltration structures.

Whilst the applicants engineers have engaged with West Sussex County Council (WSSC) Highways in terms of seeking a connection to the Public Highway drainage system, this was on the basis of discharging 2 l/s as opposed the now reduced rate of 1 l/s. WSSC did not rule out a connection but stated that offsite improvements would be required. However, the applicants engineers have not provided WSSC with a proposal in this respect or approached them on the further reduction of flows, and therefore it is not known if an arrangement acceptable to both parties can be agreed. A reduction in the extent of potential offsite improvements may be a possibility, on the basis of the revised/reduced flow rate?

In addition, it would appear that surface water runoff from some areas of the site currently discharge onto the Public Highway (North End Road) and thereby ultimately enter the Public Highway drainage system. Some of these areas are proposed to be reconstructed and water collected into the onsite Suds system, whilst other areas are proposed to remain 'as existing'. There may be opportunities for the applicant to revisit those 'remain as existing' areas and perhaps consider collecting the water within the Suds system, and thereby provide storage, and allow discharge in a controlled manner. This may assist in further discussions with WSSC as it is likely to be considered an improvement.

The applicant will also need to investigate the existing Public Highway drain in terms of levels, etc, to ensure that a gravity connection can be achieved. The presence/level of existing third party utilities/services infrastructure may also need to be verified to ensure no potential conflict with any proposed pipework.

It is also noted that the applicants engineers approached an adjoining developer with a view to connecting to their onsite surface water infiltration drainage system (flows would need to be pumped to enable connection). This proposal was refused by the developer.

All further comments are considered advisory and complimentary to the fundamental and primary objection to the proposed surface water disposal location.

The onsite drainage design has not been further assessed at this stage due to the fact that a discharge location has not yet been agreed.

However, the applicants attention is drawn to items 7.1.2 and 7.2.7 of the Civil Engineering Practice Drainage Statement Revision 1.1, in which there appears to be discrepancies between the proposed impermeable/drained areas. This will need clarification and adjustment as necessary.

The design will need to be supported by all the relevant information specified in the applicable checklist discussed below, including hydraulic calculations and supporting impermeable area plans.

The WSCC policy for the Management of Surface Water is quoted in item 2.3.2. It is our understanding that this document has now been withdrawn.

Overcoming our objection

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.

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.

If the planning officer is 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 submit further documents without prior discussion with the planning officer as to whether it will be possible for these to be assessed or influence their determination.

Checklist



A surface water design checklist is available on our website at <https://www.arun.gov.uk/surfacewater/>. **If the design is amended/resubmitted following receipt of our consultation the designer may need to refer to this checklist to ensure that the design meets our requirements.**

Arun District Council, Civic Centre, Maltravers Rd
Littlehampton, West Sussex, BN17 5LF
www.arun.gov.uk

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



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 <p>Improving the wellbeing of Arun</p>	 <p>Delivering the right homes in the right places</p>	 <p>Supporting our environment to support us</p>	 <p>Fulfilling Arun's economic potential</p>	 
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From: Paul Cann <Paul.Cann@arun.gov.uk>
Sent: 23 June 2025 14:39
To: Planning.Responses <Planning.Responses@arun.gov.uk>
Cc: Sarah Burrow <Sarah.Burrow@arun.gov.uk>; Amber Willard <Amber.Willard@arun.gov.uk>
Subject: RE: Planning Consultation on: Y/15/25/PL

Please find enclosed my consultation, an objection.

Regards

Paul Cann

Principal Drainage Engineer, Coastal Engineers and Flood Prevention

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

Sent: Tuesday, March 11, 2025 10:33:28 AM (UTC+00:00) Monrovia, Reykjavik

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

Subject: Planning Consultation on: Y/15/25/PL

To: **Engineers (Drainage)**

NOTIFICATION FROM ARUN DISTRICT COUNCIL

Town & Country Planning Act 1990 (as amended)

Town and Country Planning (Development Management Procedure) (England) Order 2015

Planning Permission

Application No: Y/15/25/PL

Registered: 6th March 2025

Site Address: Stakers Farm North End Road Yapton BN18 0DU

Grid Reference: 497693 103492

Description of Works: Conversion of and alterations to existing barns to create 3 No dwellings, erection of car barn, demolition of existing buildings and associated landscaping and parking and erection of new garage/workshop for Stakers Farmhouse and upgrading of access track. This application affects the character and appearance of the Main Road/Church Road, Yapton Conservation Area and is in CIL Zone 2 and is CIL Liable as new dwellings.

The Council have received the above application.

[Click here to view the application and documents](#)

Should you have any comments to make, these should be sent by replying to this email by 10th April 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

Amber Willard

Planning Officer- Arun District Council

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Email: amber.willard@arun.gov.uk

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