

Engineers Comments Regarding Surface Water Drainage

Application Reference:	AL/6/25/DOC	Reviewer Reference:	ADC/SB & PC
Planning Officer:	Hannah Kersley	Date of Review:	26/08/2025
Site Name:	8 Autumn Gate Hook Lane Aldingbourne PO20 3TE		
Application Description:	Approval of details reserved by condition imposed under reference AL/75/24/HH relating to condition number 4 - surface water drainage scheme.		
Assessment Number:	1 of 2		

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/>

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>

National standards for sustainable drainage systems
[National standards for sustainable drainage systems - GOV.UK](https://www.gov.uk/national-standards-for-sustainable-drainage-systems)

Response	Condition 4: 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. The same data is necessary to ensure that the potential for buoyancy has been adequately considered in attenuation designs.	Compliant

Winter infiltration testing data.	Adequate winter infiltration testing must be supplied to justify the proposed discharge method and design infiltration rates. 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. 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. The results of incomplete tests should not be extrapolated to obtain design values for infiltration rates.	Compliant
The hierarchy for sustainable drainage.	The proposed discharge method must accord with the SuDS hierarchy as given below. Evidence must be supplied to justify the proposed discharge method. 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. A water body may be defined as a river, watercourse, ditch, culverted watercourse, reservoir, wetland or the sea. Engineers cannot support any proposed connection of surface water to the foul sewer.	Compliant in part (rainwater reuse to be re-addressed)
Calculations	Calculations for pre-development run off rates must be based upon the positively drained area only. Proposed discharge rates must not increase flood risk on site or elsewhere. Discharge	Sufficient

	rates must be restricted to QBAR or 2 l/s/ha, depending on whichever is higher.	
	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.	Sufficient
	Designs must use the correct climate change allowances at the time of determination of the outline or full planning application. CV values for all events must be set to 1. This includes summer, winter, design, and simulation events. The correct allowance for urban creep must be applied. Additional storage must be set to zero unless it can be evidenced where this is provided. Infiltration half-drain times must be less than 24 hours. 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. A surcharged outfall must be modelled.	Insufficient
Natural catchments design.	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. The condition, performance (including capacity where appropriate) and ownership of any existing site surface water drainage infrastructure must be accurately reported. Appropriate easements to watercourses and other services must be shown on all plans. 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	Sufficient

	be accommodated on the site without conflicting with those areas of flood risk. 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.	
Plans	Plan areas, depths and levels of drainage infrastructure must accurately correspond with the supporting calculations.	Sufficient
Water quality benefits.	An assessment of water quality is necessary to evidence that the proposed design provides adequate treatment of surface water.	Sufficient
Trees and planting	There should be no conflict between surface water drainage infrastructure and existing or proposed trees or planting. 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.	Compliant

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.

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.

Our requirements and comments are included within a separate comment tracker. The designer is encouraged to refer to this and respond to comments to aid further review. Please request a .docx version of this document to by email to land.drainage@arun.gov.uk if needed.

Application Reference: AL/6/25/DOC Site Name: 8 Autumn Gate Hook Lane Aldingbourne PO20 3TE	Initial Issue Date: 15/07/2025 Issue Date: 26/08/2025 Reviewer Reference: ADC/PC
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Summary and Recommendation:

Condition 4: Objection

Please note: Any DOC application should only have a maximum of two consultation responses. If this is the second response for an open application and there are still comments outstanding, then please object to the application.

	ADC Drainage Comments	Designer Response	ADC Drainage Comments		
Date:	15/07/2025		26/08/2025		
Condition Number: 4					
Comment Number					
1.	The Surface Water Drainage Report (Paragraph 5.3.3) mentions the need for Ordinary Watercourse Consent. This is not required as the connection is not being proposed directly to the open watercourse but connecting to an existing private surface water drain. Please adjust report.	Updated.	Noted. Comment closed.		
2.	The Surface Water Drainage Report (Paragraph 5.3.4) states that the discharge rate needs to be agreed with Southern Water. Unless the pipe being connected to a pipe that has been adopted by Southern Water, then this is not the case. For the record, we are not aware of this pipeline being designated a Public Surface Water Sewer and therefore permission to connect will be required from the owner. Please advise accordingly and adjust the report as required. Provide evidence that the owner has agreed the connection.	Updated. The proposed works are all being conducted within private land. The existing drainage network that the proposed system is connecting into is also private and has not been adopted. Permission from a third party is not required.	Noted. It is the applicants responsibility to ensure any necessary permissions are obtained. Comment closed.		
3.	Where the existing pipe is being connected to, specify an oblique 45 degree junction or new manhole.	Updated. The oblique 45 degree ensured.	Please advise where the drawing has been updated to reflect this.		
4.	Please provide interception drainage to ensure that the first 5mm of rainfall over the proposed impermeable area is not discharged from the site. I.e. rainwater harvesting, etc.	A water butt will be provided to capture the first 5mm of rainfall, in line with the interception drainage requirement.	Water butt proposed to serve part of roof only. However, Standard 2 of the National Standards advises that water butts do not achieve the interception requirements, unless they can be demonstrated to comply. Please review. Full construction details will be required to support any proposal.		
5.	Provide a suitable catchpit upstream of the flow control chamber, ensuring all flows have to pass through this chamber. Include full construction details.	Updated.	Specify sump depth on construction detail.		
6.	Specify orifice diameter on drainage layout plan.	Updated.	Noted. Comment closed.		

7.	Where the threshold drain is being connected to pipeline Re1 to S1, specify an oblique 45 degree junction. Similar comment for the RWP on the SE corner.	Updated.	Clearly indicate that these connections will be made using oblique 45 degree junctions.		
8.	Provide rodding eye construction detail.	Updated.	Noted. Comment closed.		
9.	Sel Contraflow 500 Orifice chamber – specify overflow level at weir.	Updated. Overflow level at weir 9.925	Noted. Comment closed.		
10.	Fully detail the Aco Threshold Drain construction detail ie. fully dimension/specify the channel, dimension bedding.	Updated.	Noted. Comment closed.		
11.	The invert levels of the existing drain being connected to, are the same as the levels on the proposed Cowan Consultancy drawings. Please confirm that these levels have been checked on site. As constructed levels are critical to the scheme and must be specified.	A site visit was conducted and the existing drainage network within the clients ownership has been installed to the depths as proposed by Cowan Consultancy.	Noted. Comment closed.		
12.	Calculations; a) Apply urban creep to all storm simulations (only applied to 1/100 year event). b) Design against a surcharged outfall. Suggest this level is taken as the top of ditch bank. c) Ensure all storm simulations include winter events.	The surface water calculations have been updated. • Urban creep of 10% has been applied to 1 in 100 year event. • The water level at the outfall point is 9.921 m during the 1 in 100 year event plus 45% climate change and 10% urban creep. The top level of the ditch bank at the location of the proposed headwall is 10.000 m • All storm simulations include winter events.	Provide evidence that a surcharged outfall has been modelled. The 1 in 100 year event simulations do not appear to include winter storms?		

If a designer would like a .docx version of this document to aid administration of responses, please request this by email to land.drainage@arun.gov.uk.

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

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



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 Improving the wellbeing of Arun	 Delivering the right homes in the right places	 Supporting our environment to support us	 Fulfilling Arun's economic potential	 
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From: Paul Cann <Paul.Cann@arun.gov.uk>
Sent: 26 August 2025 13:08
To: Planning.Responses <Planning.Responses@arun.gov.uk>
Cc: Sarah Burrow <Sarah.Burrow@arun.gov.uk>; Hannah Kersley <Hannah.Kersley@arun.gov.uk>
Subject: RE: Planning Re-Consultation on: AL/6/25/DOC

Please find enclosed my response, continued objection to the condition being discharged.

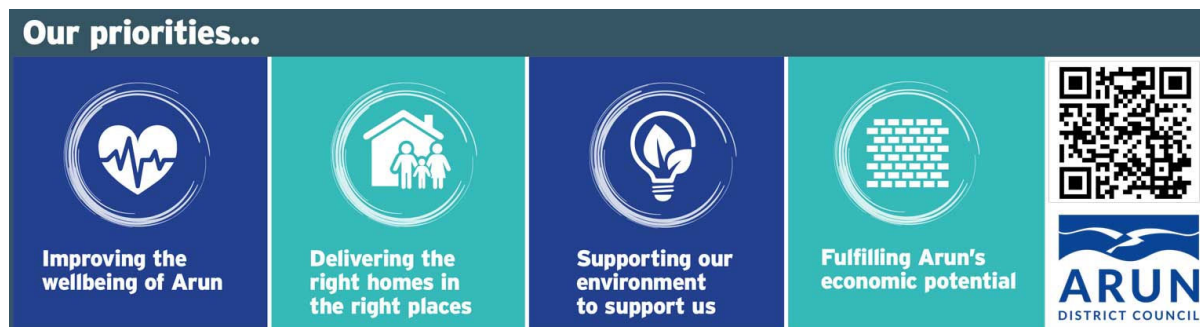
Regards

Paul Cann
Principal Drainage Engineer, Coastal Engineers and Flood Prevention

T: 01903 737819

E: paul.cann@arun.gov.uk

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



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

Sent: Tuesday, July 15, 2025 12:48:29 PM (UTC+00:00) Monrovia, Reykjavik

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

Subject: Planning Re-Consultation on: AL/6/25/DOC

To: **Engineers (Drainage)**

NOTIFICATION FROM ARUN DISTRICT COUNCIL

TOWN AND COUNTRY PLANNING ACT 1990

Application No:	AL/6/25/DOC
Registered:	27th January 2025
Site Address:	8 Autumn Gate Hook Lane Aldingbourne PO20 3TE
Grid Reference:	493572 104563
Category:	Discharge of Condi
Description of Works:	Approval of details reserved by condition imposed under reference AL/75/24/HH relating to condition number 4 - surface water drainage scheme.

I am able to inform you that I have received an amendment to the above application dated 10th April 2025 relating to: Supplementary Plans.

If you should wish to make further representations as a result of this amendment, please make any further comment by **29th July 2025**.

[Click here to view the application, documents and make further 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.

Yours sincerely

Hannah Kersley

Planning Case Officer-Arun District Council

Telephone: 01903 737856

Email: hannah.kersley@arun.gov.uk

PLRECON_DOC (ODB) 2020