

Engineers Comments Regarding Surface Water Drainage

Application Reference:	Y/9/25/DOC	Reviewer Reference:	ADC/EXT5/AF
Planning Officer:	Amber Willard	Date of Review:	29/12/2025
Site Name:	Fleurie Nursery Lake Lane Barnham PO22 0AL		
Application Description:	Approval of details reserved by condition imposed under reference Y/26/24/PL relating to condition number 4 - surface water drainage scheme, condition number 5 - discharge flows to watercourses, condition number 6 - maintenance and management of the surface water drainage system and condition number 10 - Biodiversity Enhancement Layout.		
Assessment Number:	4		

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	Condition 4 : No objection Condition 5: No objection Condition 6: No 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 The NsTS have been superseded by the National Standards for Sustainable Drainage Systems [NSfS] from 19 June 2025.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 result in an **objection** to any application to discharge a surface water drainage design condition.

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.

All relevant items on the checklist are expected to be met before an application to discharge an application to discharge a SuDS design condition is supported.

Our response and requirements are elaborated upon or condensed within an attached comment tracker where necessary. If a comment tracker is provided a 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.

Standard	Assessment	Response
1. Runoff destination	Compliant	No objection
2. Interception drainage	Compliant	No objection
3. Extreme Rainfall and Flooding	Compliant	No objection
4. Water Quality	Compliant	No objection
5. Amenity	N/A	No objection
6. Biodiversity	N/A	No objection
7. Construction, operation, maintenance, decommissioning and structural integrity	Compliant	No objection

Reviewed Plans

The following documents have been submitted and reviewed to inform this consultation with reference to surface water drainage:

- SW Drainage Surcharged Outlet 14.08.25
- SW Drainage Surcharged Outlet Sections 14.08.25
- Proposed Drainage Strategy C2904 P 101 Rev.P5 (SW and FW Drainage Plan)
- Surface Water Drainage and Flood Risk Report P5
- Drainage Report Appendices C2904 P5
- Maintenance Schedule MS_C2904 P4
- Method Statement for SUDS System P2
- LANDSCAPE & ECOLOGICAL MANAGEMENT PLAN - BIODIVERSITY ENHANCEMENT LAYOUT 15.1.25

Condition wording

Condition 4 is worded as follows:

"Within 12 months of the date of this permission, full details of the proposed surface water drainage scheme shall be submitted to and approved in writing by the Local Planning Authority. The design should follow the hierarchy of preference for different types of surface water drainage disposal systems as set out in Approved Document H of the Building Regulations, and the recommendations of the SuDS Manual produced by CIRIA. Design considerations must take full account of the 'Supplementary Requirements for Surface Water Drainage Proposals' produced by Arun District Council and are an overriding factor in terms of requirements. Winter groundwater monitoring to establish highest annual ground water levels and winter percolation testing to BRE 365, or similar approved, will be required to support the design of any infiltration drainage. The approved details shall be implemented within 3 months of their approval.

Reason: To ensure that the proposed development is satisfactorily drained in accordance with policies W SP1, W DM1, W DM2 and W DM3 of the Arun Local Plan. As the development is already in situ for 6 months of the year, it is not reasonable for this to be a pre-commencement condition"

Condition 5 is worded as follows:

"Within 12 months of the date of this permission details shall be submitted to and approved in writing by the Local Planning Authority for any proposals: to discharge flows to watercourses; or for the culverting, diversion, infilling, or obstruction of any watercourse on or adjacent to the site. Any discharge to a watercourse must be at a rate no greater than the pre-development run-off values and in accordance with current policies. No construction is permitted, which will restrict current and future landowners from undertaking their riparian maintenance responsibilities in respect to any watercourse or culvert on or adjacent to the site. The approved details shall be implemented within 3 months following the date of the discharge of condition decision.

Reason: To ensure that the proposed development is satisfactorily drained in accordance with policies W DM1, W DM2 and W DM3 of the Arun Local Plan. And to ensure that the duties and responsibilities, as required under the Land Drainage Act 1991, and amended by the Flood and Water Management Act 2010 can be fulfilled without additional impediment following the development completion. As the development is already in situ for 6 months of the year, it is not reasonable for this to be a pre-commencement condition."

Condition 6 is worded as follows:

"Within 12 months of the date of this permission, full details of the maintenance and management of the surface water drainage system shall be set out in a site-specific maintenance manual and submitted to, and approved in writing, by the Local Planning Authority. The manual is to include details of financial management and arrangements for the replacement of major components at the end of the manufacturer's recommended design life. Upon completed construction of the surface water drainage system, the owner or management company shall strictly adhere to and implement the recommendations contained within the manual.

Reason: To ensure that the proposed development is satisfactorily drained in accordance with policies W DM1, W DM2 and W DM3 of the Arun Local Plan. As the development is already in situ for 6 months of the year, it is not reasonable for this to be a pre-commencement condition."

Consultation comments to the planning officer

1. Please see the attached comment tracker for detailed comments relating to the submission.

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

Application Reference: Y/9/25/DOC Site Name: Fleurie Nursery Lake Lane Barnham PO22 0AL	Initial Issue Date: 21/02/2025 Issue Date: 29/12/2025 Reviewer Reference: ADC/EXT5/AF
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Summary and Recommendation:

Condition 4: **No objection**
Condition 5: **No objection**
Condition 6: **No objection**

	ADC Drainage Comments	ADC Drainage Comments	Designers Response	ADC Drainage Comments	ADC Drainage Comments
Date:	21/02/2025	30/06/2025	1/09/2025	17/11/2025	29/12/2025
Condition Number: 4 - surface water drainage scheme					
Comment Number					
1.	Please submit greenfield run off rate calculations. Designers response 26/03/2025 Please find Greenfield Runoff Calculations Attached. As it was confirmed that due to the high groundwater level and low infiltration results, infiltration was ruled out and SOIL type for Greenfield calculations has been updated to Soil Type 5.	It would appear that the calculation has been based upon the entire site area as opposed to just the impermeable/drained area. Nevertheless, the QBAR flow rate is minimal. Comment closed.	COMMENT CLOSED		
2.	Runoff rate must be restricted to QBAR or 2l/s/ha (whichever is higher) unless otherwise agreed. (Linked with comment 1). Please	See also response to comment 1. Restricted discharge of 1 l/s is acceptable in this instance. It is noted that the orifice will	COMMENT CLOSED		

	adjust or submit evidence of agreement to a different rate. Designers response 26/03/2025 The Greenfield runoff calculations with Soil Type 5 indicate a Qbar of 0.162 l/s. However, to avoid any blockages and potential risk of flooding due to the small diameter of the orifice, surface water runoff is to be discharged at 1l/s with 20mm orifice diameter.	be protected from blockage with a mesh filter. Comment closed.			
3.	Please model a surcharged outfall (to the top of the bank if watercourse specific modelling is not available). Otherwise please justify why this is not necessary. Designers response 26/03/2025 Please find the updated calculations attached. Kindly note that the surcharged depth has been set considering the top of the banking along the western side of the ditch, which is slightly lower than at our site.	Noted and accepted. Comment closed.	COMMENT CLOSED		

4.	Please correct discrepancies between cover and invert levels on the plans and the calculations. [It is acknowledged that this is unlikely to affect the design.] Designers response 26/03/2025 Discrepancies are now updated, please find the revised drainage plan and drainage calculations attached.	Cover levels for S3 and S4 differ. Please adjust.	Updated.	Drawing revision C2904 P101 rev P5 acceptable. Comment closed.	COMMENT CLOSED
5.	Please correct the impermeable area contributions in the modelling. Currently less than described on the plan due to rounding down. The southern areas are also shown entering the system at S4 which is an inaccurate representation. If grouped together then they should be showing as entering at S5. Designers response 26/03/2025 Please find the updated drainage calculations attached with impermeable areas being added to drainage nodes.	Noted and accepted. Comment closed.	COMMENT CLOSED		

6.	Please show any relevant easements on the plans. Designers response 26/03/2025 The existing watercourse 3m easement is now indicated on drainage plan	Noted and accepted. Comment closed.	COMMENT CLOSED		
7.	Please demonstrate how any areas of surface water flood risk are accounted for within the design. Designers response 26/03/2025 The proposed access road that is going to be raised in levels is to be graded following the existing site topography with levels being graded towards the existing watercourse. This is to mimic the existing flood water route.	Noted and accepted. Comment closed.	COMMENT CLOSED		
8.	[Water quality and treatment have not been assessed, this is accepted based on the design only draining roof water – The SuDS Manual stipulates that removal of debris and sediment is required which is provided by catch pits in S5, S3 and S2.]	COMMENT CLOSED			
9.	The landscape and ecology management plan refers to a post and rail fence installed	Noted and accepted. Comment closed.	COMMENT CLOSED		

	post-development to protect the rife. Please clearly demark this fence on the plans and ensure that is not within the easement for the watercourse. Designers response 26/03/2025 The proposed post and rail fence is now indicated on the proposed drainage plan. Proposed fence is to be located min. 3m away from the top of the banking (easement).				
10.	The existing access appears to be artificially raised (previous level 8.55, proposed level 9.10). This is also an area of surface water flood risk – see comment 7 – please justify the change in level and demonstrate any impact on flood risk. Designers response 26/03/2025 As per the response to comment 7, access road is to raised to meet the proposed site levels. Access road will be graded following the existing site levels with a slope toward the existing watercourse to mimic the	Noted and accepted. Comment closed.	COMMENT CLOSED		

	existing runoff discharge regime.				
11.	The orifice for S5 is described on the layout as being 500mm diameter. This is assumed to be a typo (confused with the chamber diameter), please correct. Designers response 26/03/2025 Orifice chamber diameter has been updated to 600mm diameter and orifice diameter to 20mm.	Orifice chamber is shown as 900mm diameter. 20mm orifice noted. Comment closed.	COMMENT CLOSED		
12.	The modelling does not include the flap valve. Designers response 26/03/2025 Flap Valve is now included	Noted and accepted. Comment closed.	COMMENT CLOSED		
13.	Please remove the standard (non-site specific) headwall details from C2904-P-501. These contradict the OWC drawings which are more detailed and site specific. Designers response 26/03/2025 Headwall detail has been removed. It should be noted that OWC drawings have been issued	Noted. Comment closed.	COMMENT CLOSED		

	and comments have been received. Drawings are now updated and the updated drawings has been issued for final review.				
14.	Please detail the overflow level of the Sel Controflow 500 Orifice Chamber. Designers response 26/03/2025 Overflow level is now indicated on orifice chamber detail.	It is noted that the overflow level of 9.150 is higher than manhole S3 cover level (9.00) upstream, so in the event of a blockage at the orifice, excess water may overflow from S3 before the formal overflow at S5 operates. Please advise.	Updated. The overflow level has been lowered and is now set at 9.025.	Drawing revision C2904 P101 rev P5 has been adjusted to show an overflow level of 9.025. The construction details drawing should be updated to suit. The construction detail for the attention arrangement should demonstrate how the vent pipe outlet will be above the overflow level, or the overflow level reduced below the cover level for the storage. Designers response 09/12/2025 Updated.	Drawing revision C2904 P101 rev P6 has been adjusted to show a vent pipe position. The construction details drawing C2904 P501 rev P3 has been updated to include the vent pipe, which is above the overflow level. Comment closed.
15.	The orifice for the design is very small, how is risk of blockage mitigated for in the design? Designers response 26/03/2025 All downpipes are to be installed with Leaf	Noted. Comment closed.	COMMENT CLOSED		

	separators. Orifice chamber is to be installed with orifice filter plate.				
16.	There is a risk of a clash between the surface water and foul drainage north of S4 and west of F6. Please adjust the design, if possible, to minimise this risk. Designers response 26/03/2025 Clash has been reviewed and a separate note indicating proposed SW and FW pipes invert levels is now indicated.	Noted. Pipes are close when allowing for pipe thicknesses but achievable. Comment closed.	COMMENT CLOSED		
17.	Please submit a statement detailing how groundwater will be managed during construction. a) To ensure groundwater cannot enter the system. b) To demonstrate that flood risk will not be increased by dewatering excavations. Designers response 26/03/2025 See additional statement attached.	The document will need to specify where any dewatering pumps will discharge, the discharge rate, silt control measures to mitigate pollution and erosion control measures if required. Flow rates to be minimised by appropriate measures. All measures to be specified	Noted and updated.	The revised method statement (Method Statement for SuDS System (Attenuation) Rev – P2) is acceptable. Comment closed.	COMMENT CLOSED

18.	Please submit evidence of the structural/buoyancy calculations to justify the design. Designers response 26/03/2025 Please find buoyancy calculations attached. It should be noted that concrete slab weight has been excluded from floatation calculations.	Noted. Floatation risk rests with the designer. Comment closed.	COMMENT CLOSED		
19.	Please propose water reuse or justify why not. Designers response 26/03/2025 1000litres harvesting tank is now proposed to be installed for each caravan building.	Notes, however, please detail how the inlet to butt/outlet from butt to surface water drainage system, will be arranged ie. RWP flow diverter kit.	Updated. RWPs will connect to the waterbutt via a flow diverter kit, which directs the first flush to SW system and diverts subsequent rainfall into the butt. Any overflow from the butt will discharge safely back to the proposed SW system.	Details / product information should be provided for the rainwater harvesting tanks including connection to the drainage system. Designers response 09/12/2025 The paragraph has been expanded in the report and drawings. Detailed information regarding the rainwater harvesting tanks, including their connection to the drainage system, has been provided. Installation details and the installation manual have also been attached to the report.	Sufficient details are now provided. Comment closed.

20.	Evidence how interception drainage is provided – links with point 19. Designer response 26/03/2025 Surface water runoff is to be re-used either for harvesting or toilet flushing subject to buildings internal plumbing design. Each caravan building is to be constructed with 1000 litres above ground tank.	Noted. Comment closed.	COMMENT CLOSED		
Condition Number: 5 - discharge flows to watercourses					
Comment Number					
1.	Please submit evidence of ordinary watercourse consent and supporting approved plans and drawings. Designer Response 26/03/2025 First set of comments has been received and the updated drawings have been issued for a final review and approval.	Please provide copy of consent and approved drawings when available. Please note that if the 'Lead Local Flood Authority' deem that 'Ordinary Watercourse Consent' is no longer required (due to a change of stance in requirements) then consent will be required under Arun District Councils Land Drainage Byelaws 2004 – evidence of approval will be required.	Noted. I confirm that this was submitted 02.04.2025 under reference WSCC-702039306. Copies of all relevant approvals and confirmations will be provided once available.	Evidence of OWC / LDB consent is awaited. Designers response 09/12/2025 The OWC application has been approved. We attach the approved OWC consent as evidence.	OWC noted. Comment closed.

Condition Number: 6 - maintenance and management of the surface water drainage system					
Comment Number					
1.	It is not appropriate to approve the maintenance manual until it has been appended with the approved plans to discharge condition 4. Designer Response 26/03/2025 Maintenance and Management statement has been updated taking into account checklist comments.	All (revised/approved) drawings will need to be appended to the maintenance manual.	Noted and updated.	Drawings will need to be updated, see comments above. Designers response 09/12/2025 Updated.	Comment closed.
2.	See checklist for additional items required. Designer Response 26/03/2025	The manual needs to explain how the Suds system is designed to operate. Clarification needs to be included in terms of how the maintenance and replacement of components is funded ie. owner and/or occupants of dwellings. Remove foul treatment plant section as not applicable to the Suds. Include a specific section on the flow control chamber (including mesh filter) as this is one of the most critical elements.	The manual has been updated to include the requested information and clarification on how the SuDS system is designed to operate. The section relating to the foul water treatment plant has been removed. Regarding the funding of maintenance and replacement of components (i.e., whether by the owner and/or occupants), this will be confirmed by the client. Once this information becomes available, confirmation	The revised Maintenance Schedule Rev – P3) is acceptable in respect to all points except ownership and management / maintenance responsibilities. Updated management and maintenance plan awaited. Designers response 09/12/2025 Updated. The client has confirmed that Fleurie Nursery Ltd will be responsible for the ownership, as well as the management and maintenance obligations	Accepted. Comment closed.

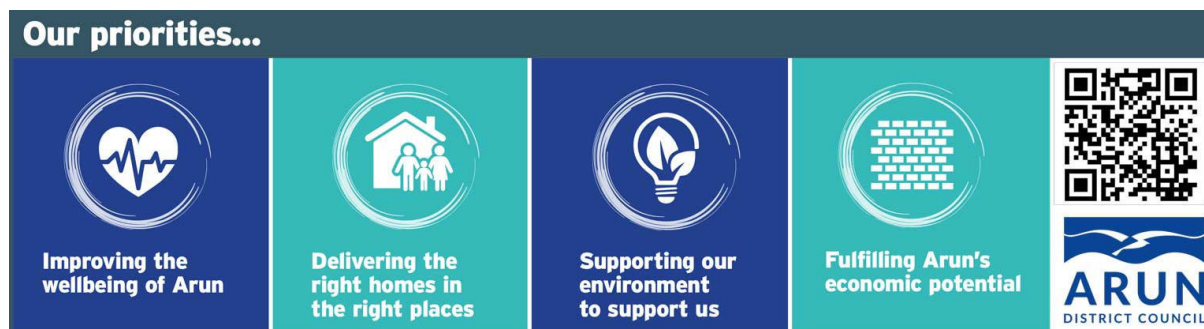
			will be provided immediately.	referred to in the comment.	

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.

PL- Consultation- Engineers response

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

Sent: 02 January 2026 10:16

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

Cc: Land Drainage <Land.Drainage@arun.gov.uk>; Amber Willard <Amber.Willard@arun.gov.uk>

Subject: RE: Planning Re-Consultation on: Y/9/25/DOC

Please find enclosed our consultants response, recommending discharge of conditions 4, 5 and 6.

Regards

Paul Cann

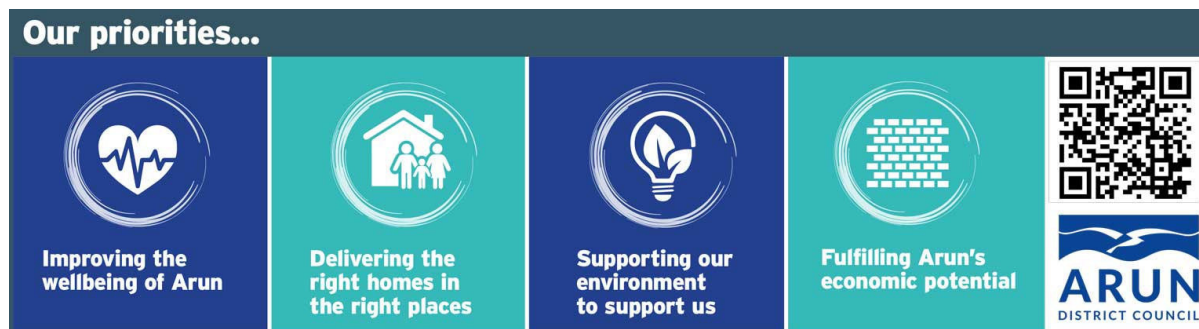
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From: Planning.Responses <Planning.Responses@arun.gov.uk>

Sent: Monday, September 1, 2025 2:18:41 PM (UTC+00:00) Monrovia, Reykjavik

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

Subject: Planning Re-Consultation on: Y/9/25/DOC

To: **Engineers (Drainage)**

NOTIFICATION FROM ARUN DISTRICT COUNCIL

TOWN AND COUNTRY PLANNING ACT 1990

Application No: Y/9/25/DOC
Registered: 24th January 2025
Site Address: Fleurie Nursery Lake Lane Barnham PO22 0AL
Grid Reference: 497622 104682
Category: Discharge of Condi
Description of Works: Approval of details reserved by condition imposed under reference Y/26/24/PL relating to condition number 4 - surface water drainage scheme, condition number 5 - discharge flows to watercourses, condition number 6 - maintenance and management of the surface water drainage system and condition number 10 - Biodiversity Enhancement Layout.

I am able to inform you that I have received an amendment to the above application dated 1st September 2025 relating to: Substitute Plans and Documents. Supplementary Plans and Documents.

If you should wish to make further representations as a result of this amendment, please make any further comment by **15th September 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

Amber Willard

Planning Case Officer-Arun District Council

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