

Engineers Comments Regarding Surface Water Drainage

Application Reference:	AL/20/26/PL	Reviewer Reference:	ADC/EXT5/AF
Planning Officer:	Simon Davis	Date of Review:	29/05/2026
Site Name:	Land at West Barn Old Dairy Lane Norton PO20 3AF		
Application Description:	Demolition of existing tennis court and erection of a commercial building (within Use Class E(g), parking, landscaping and other associated works (resubmission following AL/107/25/PL). This application is a Departure from the Development Plan, may affect the character and appearance of the Norton Lane, Norton Conservation Area and is in CIL Zone 3 (Zero Rated) as other development.		
Assessment Number:	2		

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
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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 The NsTS have been superseded by the National Standards for Sustainable Drainage Systems [NSfS] from 19 June 2025.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	Objection
2. Interception drainage	Compliant Subject to Confirmation of Runoff Destination.	More Information
3. Extreme Rainfall and Flooding	Insufficient	Objection
4. Water Quality	Compliant Subject to Confirmation of Runoff Destination.	More Information
5. Amenity	Insufficient	No Objection
6. Biodiversity	Insufficient	No Objection
7. Construction, operation, maintenance, commissioning and structural integrity	Compliant Subject to Confirmation of Runoff Destination.	More Information

Reviewed Plans

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

- APPENDIX A TOPOGRAPHICAL SURVEY SITE PLAN 0825/204/01
- APPENDIX A TOPOGRAPHICAL SURVEY SITE PLAN 0825/204/01
- APPENDIX B PROPOSED SITE PLAN 03 REVH
- APPENDIX C PROPOSED DRAINAGE DETAILS SHEET 1 OF 2 LWR/XX/XX/DR/C/7503
REVP01
- APPENDIX C PROPOSED DRAINAGE DETAILS SHEET 2 OF 2 LWR/XX/XX/DR/C/7504
REVP01
- APPENDIX C PROPOSED DRAINAGE LAYOUT SHEET 1 OF 2 LWR/XX/XX/DR/C/7501
REVP02
- APPENDIX C PROPOSED DRAINAGE LAYOUT SHEET 2 OF 2 LWR/XX/XX/DR/C/7502
REVP03
- APPENDIX C PROPOSED EXTERNAL FINISHES SHEET 1 OF 2 LWR/XX/XX/DER/C/7703
REVP03
- APPENDIX C PROPOSED EXTERNAL LEVELS PLAN SHEET 1 OF 2 LWR/XX/XX/DR/C/7704
REVP02

-APPENDIX C PROPOSED EXTERNAL LEVELS PLAN SHEET 1 OF 2 LWR/XX/XX/DR/C/7701 REVP02
 -APPENDIX C PROPOSED EXTERNAL LEVELS PLAN SHEET 2 OF 2 LWR/XX/XX/DR/C/7702 REVP02
 -APPENDIX C EXTERNAL WORKS DETAILS SHEET 1 OF 1 LWR/XX/XX/DR/C/7705 REVP02
 -APPENDIX G EXCEEDENCE ROUTING PLAN SHEET 1 OF 1 LRW/XX/XX/DR/C/7505 REVP01
 -PROPOSED FLOOR PLANS AND ROOF PLAN 01 REVD
 -PROPOSED ELEVATIONS 02 REVD
 -PROPOSED SITE PLAN 03 REVH
 -LOCATION AND BLOCK PLANS 04 REVG
 -APPENDIX D HYDRAULIC CALCULATIONS
 -APPENDIX E BOREHOLE LOGS
 -APPENDIX F SOAKAGE TESTING SHEET 1-3
 -APPENDIX H GROUNDWATER MONITORING REPORT
 -APPENDIX I ADC EMAIL
 -DRAINAGE MANAGEMENT PLAN-03
 -FRA/DRAINAGE STATEMENT/FOUL DRAINAGE IMPACT ASSESSMENT
 -TECHNICAL NOTE
 -WSCC Flood Risk response
 - **Proposed Drainage Layout Sheet 2 of 2 P27002-LRW-XX-XX-DR-C-7502-P04**
 - **Impermeable Areas Plan P27002-LRW-XX-XX-DR-C-7506-P01**
 - **Appendix D Hydraulic Calculations 30/04/26**

Plans/Documents to be listed as approved

The following plans/documents should be listed as approved:

N/A

Consultation comments to the planning officer

0. General

- 0.1. We note the previous refused application AL/107/25/PL and our comments dated 8 December 2025.
- 0.2. We note the WSCC LLFA comments dated 20 April 2026 stating no objection subject to conditions.
- 0.3. We note the comparison provided of the existing and proposed paved / drained areas and on the basis that the nett paved / drained area is either a very small increase or possibly a reduction (when accounting for the previous hardstanding to the south of the proposed building converted to soft landscaping as shown on the landscaping layout) we can accept the ground investigation and groundwater monitoring provided with a precautionary buffer.
- 0.4. Please note that from a drainage assessment perspective there is no distinction between permeable surfaces and surfaces drained to soakaways in terms of drained area. Permeable surfaces effectively act as individual infiltration blankets. They are not omitted from designs and calculations and they require their own storage to replicate the absorption function provided by topsoil in soft landscaped areas or 'greenfield' use. Therefore the removal of the permeable courts is removal of a drained area and is offset from the proposed drained areas when comparing before and after drained area. Similarly the existing stone paved area produces runoff even if not positively drained.

1. Runoff destination

- 1.1. We concur that rainwater harvesting is not required at this development on the basis of limited demand for non-potable water.
- 1.2. The drainage strategy is to discharge to ground via a modular crate storage soakaway.
- 1.3. A ground investigation has been provided which includes winter groundwater monitoring up to the end of January 2026 and it is stated in the ground investigation report that groundwater levels are increasing up to a likely seasonal maximum in March. The current scope of the groundwater monitoring was previously agreed with ADC as part of pre-application enquiry.
- 1.4. The proposed soakaway has been adjusted to be larger in plan and less deep to mitigate the risk of high ground water. The highest groundwater level for the current data is 2.2m below ground level. The proposed soakaway is approximately 0.8-0.9m below existing ground levels. The base therefore has a margin of buffer before the 1m vertical offset which is acceptable on a precautionary basis to mitigate the possibility that the annual peak had not been fully reached at the end of the groundwater monitoring.
- 1.5. However, the infiltration testing was carried out at 2.2m bgl with a starting head of 0.9m at the trial pit logs show different stratum (Harwich Formation) at that depth to the Head material at 1 metre depth. It therefore cannot be applied to the design infiltration rate as representative of the receiving subsoil at 0.8m bgl and above.
- 1.6. We are therefore not satisfied that the design is sufficiently robust and feasible. No alternative method of disposal is proposed should infiltration not be viable and the development is reliant upon the currently drainage strategy which must therefore be demonstrated to be viable at planning stage.
- 1.7. The design is not currently in accordance with the requirements of the NSfS (Standard 1). Therefore, we **object** to the application.

2. Interception drainage

- 2.1. The design achieves interception drainage through infiltration to ground.
- 2.2. Please note this will need to be reviewed if the design changes due to the comments above relating to runoff destination.

3. Extreme rainfall and flooding

- 3.1. An impermeable areas plan is now provided. There are some areas of hard paving omitted between the parking bays and adjacent to the building which do not appear to be soft landscaping on the submitted landscape architecture layout. However, these areas are a relatively small proportion and are balanced by the additional allowance of 350 square metres added to the model as set out in the drawing note.
- 3.2. A suitable factor of safety is now applied to the soakaway but the infiltration coefficient is applied to the sides and the base, which is not in accordance with Arun DC design standards.
- 3.3. The calculations for extreme rainfall may need to be revised in addressing the infiltration testing concern in 1.5 above.
- 3.4. Further information is required to confirm the design is in accordance with the requirements of the NSfS (Standard 3). Therefore, we **object** to the application.

4. Water quality

- 4.1. The mitigation provided by the permeable paving and vortex separator is sufficient to mitigate the risk of pollution from the development.

5. Amenity

- 5.1. No mitigation or specific design is proposed for amenity / multifunctionality and no assessment is provided on the amenity aspect for the sustainable drainage system.
- 5.2. The increase in hardstanding area is small and a small sites exception is applicable. Therefore multifunctional design to improve Amenity is not required.

6. Biodiversity

- 6.1. No mitigation or specific design is proposed for biodiversity and no assessment is provided on the biodiversity aspect for the sustainable drainage system.
- 6.2. The increase in hardstanding area is small and a small sites exception is applicable. Therefore multifunctional design to improve Biodiversity is not required.

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

- 7.1. An outline Management and Maintenance Plan is provided with the planning application which is acceptable for the current design for planning stage.
- 7.2. Please note this will need to be reviewed if the design changes due to the comments above relating to runoff destination.

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

Arun District Council, Civic Centre, Maltravers Rd
Littlehampton, West Sussex, BN17 5LF
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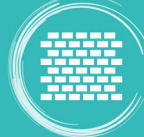
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Supporting our environment to support us



Fulfilling Arun's economic potential



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From: Paul Cann <Paul.Cann@arun.gov.uk>
Sent: 29 May 2026 16:04
To: Planning.Responses <Planning.Responses@arun.gov.uk>
Cc: Land Drainage <Land.Drainage@arun.gov.uk>; Simon Davis <Simon.Davis@arun.gov.uk>
Subject: RE: Planning Consultation on: AL/20/26/PL

Sorry, slight revised version to replace the other just sent.

Paul Cann
Principal Drainage Engineer, Coastal Engineers and Flood Prevention

T: 01903 737819
E: paul.cann@arun.gov.uk

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Delivering the right homes in the right places



Supporting our environment to support us



Fulfilling Arun's economic potential



From: Paul Cann
Sent: 29 May 2026 15:58
To: Planning.Responses <Planning.Responses@arun.gov.uk>
Cc: Land Drainage <Land.Drainage@arun.gov.uk>; Simon Davis <Simon.Davis@arun.gov.uk>
Subject: RE: Planning Consultation on: AL/20/26/PL

Please find enclosed our consultants response, an objection.

Regards

Paul Cann
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Our priorities...



Improving the wellbeing of Arun



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Supporting our environment to support us



Fulfilling Arun's economic potential



From: Planning.Responses <Planning.Responses@arun.gov.uk>
Sent: 06 May 2026 12:19
To: Land Drainage <Land.Drainage@arun.gov.uk>
Subject: Planning Consultation on: AL/20/26/PL

To: **Engineers (Drainage)**

NOTIFICATION FROM ARUN DISTRICT COUNCIL

TOWN AND COUNTRY PLANNING ACT 1990

Application No:	AL/20/26/PL
Registered:	30th March 2026
Site Address:	Land at West Barn Old Dairy Lane Norton PO20 3AF
Grid Reference:	492782 106456
Category:	Plan Applicat'n
Description of Works:	Demolition of existing tennis court and erection of a commercial building (within Use Class E(g), parking, landscaping and other associated works (resubmission following AL/107/25/PL). This application is a Departure from the Development Plan, may affect the character and appearance of the Norton Lane, Norton Conservation Area and is in CIL Zone 3 (Zero Rated) as other development.

I am able to inform you that I have received an amendment to the above application dated 1st May 2026 relating to:- Response to Objection

If you should wish to make further representations as a result of this amendment, please make any further comment by **21st May 2026**.

[Click here to view the application, documents and make further comments](#)

Please be aware that Planning Services operate an 'open file' policy and will publish your comments including your name and address on the website. We will aim to redact signatures, telephone numbers and email addresses but please help us by not incorporating them in the body of your text. Please make sure that you only include information that you are happy will be published in this way. If you supply information belonging to a third party, you must make sure you have their permission to do so.

Yours sincerely

Mr S Davis

Planning Case Officer- Arun District Council

Telephone: 01903 737874

Email: Simon.Davis@arun.gov.uk

PLRECON (ODB) 2018