

Engineers Comments Regarding Surface Water Drainage

Application Reference:	BE/141/25/DOC	Reviewer Reference:	ADC/EXT4b
Planning Officer:	Emma Shephard	Date of Review:	07/01/2026
Site Name:	Land at Oldlands Farm Newlands Road Bognor Regis PO22 9NN		
Application Description:	Approval of details reserved by condition imposed under BE/150/22/OUT relating to condition 22-surface water drainage scheme.		
Assessment Number:	1 of 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	Condition 22: Objection
-----------------	--------------------------------

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The NsTS have been superseded by the National Standards for Sustainable Drainage Systems [NSfS] from 19 June 2025.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	Insufficient	Objection
2. Interception drainage	Insufficient	Objection
3. Extreme Rainfall and Flooding	Insufficient	Objection
4. Water Quality	Insufficient	Objection
5. Amenity	Insufficient	No objection
6. Biodiversity	Insufficient	Objection
7. Construction, operation, maintenance, decommissioning and structural integrity	Insufficient	Objection

Reviewed Plans

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

-DRAINAGE DOCUMENTATION, uploaded in 4 parts via the public planning portal

Condition wording

Condition 22 is worded as follows:

"Development shall not commence, other than works of site survey and investigation, until full details of the proposed surface water drainage scheme have been 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. No building / No part of the extended building shall be occupied until the complete surface water drainage system serving the property has been implemented in accordance with the agreed details and the details so agreed shall be maintained in good working order in perpetuity.

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. This is required to be a precommencement condition because it is necessary to implement the surface water drainage system prior to commencing any building works"

Consultation comments to the planning officer

1. Please see the attached comment tracker for detailed comments relating to the submission.
2. Serious concerns were raised regarding the deliverability of a compliant SuDS design when the applications for both outline planning permission and reserved matters were made. The submission does not adequately deal with those concerns and as such a redesign may be required.
3. The design relies upon alterations to existing drainage infrastructure that is **outside the red line boundary for the site**. Critically an existing flow control in the highway limiting discharge rate from the access road to 5l/s will be replaced with one that restricts the rate to 16l/s. This is to allow for the existing rate of 5l/s plus the rate of 11l/s from this site. The concept of connecting to the existing highway drainage was proposed in the outline application, BE/150/22/OUT. However, the proposed discharge rate from the existing drainage network was 12.5l/s at that time. This was suggested to be the greenfield runoff rate QBAR for both the site and the access road. It is noted that the FRA was never listed as approved and as such the principle of discharging even at the lower rate of 12.5l/s at the outfall has not been agreed.
4. When the FRA for the outline application was assessed by our engineers further information was requested, with the implication that the submitted information was insufficient to recommend approval (or avoid objection). The latest consultation response is attached for ease of reference.
5. The same consultation response notes that the natural drainage of the site would not all drain to the northeastern corner as proposed. **The flood risk implications of draining the full site to this discharge point, and increasing the discharge rate at the outfall have not been adequately assessed**, now or in the outline application. The receiving watercourse forms part of a watercourse network which regularly floods. Therefore, it is inappropriate to consider the merits of the detailed surface water drainage proposals until it has been demonstrated that the principles of the design will not increase flood risk (downstream of the outfall, to the site, or to other sites which may rely on the access).
6. It is requested that any further submissions are administered and organised to enable ease of review, with plans separated from supporting documents and modelling.

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) – LLFA – major development and risk management authority for ordinary watercourse**
- ☐ Other: Specify
- ☐ None

Application Reference: BE/141/25/DOC Site Name: Land at Oldlands Farm Newlands Road Bognor Regis PO22 9NN	Initial Issue Date: 07/01/2026 Issue Date: Reviewer Reference: ADC/EXT4b
--	---

Summary and Recommendation:

Condition 22: **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			
Date:	07/01/2026				
Condition Number: 22					
Comment Number					
1.	Please provide evidence that the flood risk implications of the proposed combined discharge rate of 16l/s at the outfall to the watercourse have been appropriately assessed. The suggested discharge rate is higher than the one initially proposed in the FRA for the outline application. It is noted that the FRA was never approved and that ADC engineers questioned the flood risk implications of the full site draining to this point with a combined flow rate restriction of 12.5l/s at the time.				
2.	The proposed connection rate to the ordinary watercourse north of EX MH7 has been increased from 5l/s to 16l/s. Please submit written evidence that the risk management authority agrees to this increase in flow rate.				

3.	The proposed discharge rate of 11l/s from the development is acceptable with regards to NSfS 3.19. However, the designer has not demonstrated that all this flow would naturally go to the receiving watercourse, and the rate may need to be reduced due to other factors (see comments 7 and 11) if a connection to the existing network on the highway is pursued.				
4.	No survey data for the existing highway network has been submitted. The condition of the network and the size of manholes have not been demonstrated.				
5.	The outfall has been modelled with a surcharged depth of 0.5m – what is the justification for this depth? Surcharge level should be based on watercourse modelling for the 1% AEP + CCA event or the top of the bank if that modelling is not available. See Standard 3 - Management of extreme rainfall and flooding Arun District Council				
6.	Existing highway is modelled to flood 263.4803m ³ at node 6 on the critical 3.33% AEP + CCA event. This demonstrates that without adjustments to the existing network (with an increase in discharge rate at the outfall), the existing network does not have spare capacity for the additional flow generated by this development.				

7.	Insufficient information and detail have been submitted regarding the proposed rainwater harvesting. Please submit evidence (including calculations) that demonstrates that the rainwater harvesting has been designed in accordance with BS EN 16941-1:2024 Rainwater Harvesting Systems. Please refer to the Environment Agency's Rainwater harvesting: regulatory position statement.				
8.	Please submit construction details for the rainwater harvesting tanks and more detail regarding their connection to the wider network.				
9.	The submitted groundwater monitoring demonstrates that groundwater levels in the same boreholes were higher in the winter of 2022-2023 than 2024-2025. Infiltration is not viable in the north and east of the site as 1m due to high groundwater levels (BH301 and BH303). However, at BH(WS)302 groundwater levels peaked at approximately 1.35m below ground level. This may allow for shallow infiltration which the submitted design precludes. No groundwater monitoring has been submitted for the centre of the site and the contours that have been submitted in insert				

	12.2 are based on winter 2024-2025 when groundwater levels were lower. Understanding the groundwater levels in the centre of the site is important to understand the infiltration potential – which may be critical for interception.				
10.	Infiltration testing was completed in December 2023 broadly in accordance with BRE DG 365 (the pits were undersized, but not significantly so). Test depths were 0.5m below ground level which is likely to be too deep when groundwater levels are considered. The testing was also more centrally located than the groundwater monitoring boreholes. Groundwater levels in these locations are unknown. The infiltration rates, whilst not usable for the detailed design for extreme events, demonstrate that parts of the site have reasonable infiltration potential at shallow depth. This may be critical to help achieve interception drainage, however, further information regarding groundwater levels will be necessary (see point 3). The designer has proposed the use of filter drains to allow some shallow infiltration. However, some of these are in the areas where groundwater has been demonstrated to be too high to allow for infiltration.				

	The use of shallow infiltration should be prioritised and coordinated with the ground investigations to ensure a compliant design.				
11.	No interception assessment has been submitted. Please refer to our guidance at https://www.arun.gov.uk/interception-drainage-guidance-note for information about how to demonstrate compliance with interception drainage standards.				
12.	The network floods on the critical 3.33% AEP event (both onsite and offsite). This is unacceptable. Please redesign so that the system does not flood for this event. It is not agreed that the loading docks are designated to hold or convey water as part of the design. The docks are clearly shown as holding a flooded volume within the network model.				
13.	The temporary flooding of the loading docks for the 1% AEP +CCA event may be acceptable. However, the risk and impact of the proposed flooding has not been adequately assessed.				
14.	Rehabilitation following a flood event has not been adequately detailed.				
15.	It has not been demonstrated that the temporary flooding within highways following development will be shallow, slow flowing and represent a low hazard.				

16.	Water treatment has not been adequately demonstrated and is unlikely to meet national standards for suds. The design relies heavily upon the use of bypass and retention separators to treat water. Source control features are not prioritised.				
17.	The water quality assessment should consider each treatment train individually. This should be for frequent events (ie. not relying on the system surcharging to achieve water treatment from upstream features).				
18.	The simple index assessment incorrectly states that surface water from non-residential roofs requires no treatment.				
19.	The SuDS Manual pollution hazard index of 0.6 (as opposed to 0.8) for metals in the delivery yards has not been adequately justified.				
20.	As runoff is proposed to be collected within rainwater harvesting features, the design should incorporate the treatment required for the proposed use. See comment 7.				
21.	Amenity benefits offered by the SuDS design are limited. Some of the areas that are designed to flood in the critical 1% AEP + CCA event will provide multifunctional benefit, as they are used for both flood storage and for vehicle docking. However, the <u>surface water drainage design</u> does little to contribute towards placemaking and				

	environmental enhancement. Water is not kept at or close to the surface and the design is of a conventional subterranean piped network with tanks forming the bulk of the storage. A 'pond' has been included but this has no connection to the network and appears to only drain itself (with no overflow). It also has the potential to conflict with a storage tank that is beneath it (with less than 300mm depth between the two). The 'open features' and depression areas will only provide additional storage in high intensity events therefore their infiltration and amenity potential are extremely limited. The designer refers to coordination with landscaping, however, the landscaping is what delivers the amenity, rather than the drainage of the development.				
22.	No biodiversity risk and opportunity assessment has been submitted or referred to.				
23.	Please submit evidence that demonstrates that NSfS standard 6.7 has been complied with.				
24.	An impermeable liner has been specified (Lotrak 300) in both the construction details and the construction method statement. This will be acceptable where infiltration is				

	not viable, but the strategy implies that filter drains will infiltrate. Please clarify.				
25.	The construction method statement does not include detailed information about the construction of the tanks and prevention of groundwater ingress.				
26.	The construction method statement does not include detailed information regarding how high groundwater levels will be managed (if encountered).				
27.	The construction method statement does not include detail of how silt will be managed during construction.				
28.	Please submit raw FEH 22 point data for the site confidentially to land.drainage@arun.gov.uk in accordance with clause 5.1.7 of the FEH Web Service terms of use.				
29.	Please submit buoyancy calculations.				
30.	The planning officer is alerted to ground level variations in excess of 300mm. It is unclear if these changes will affect surface water flow paths as topographical information has not been submitted for the neighbouring site.				
31.	The cover level of SW50 does not appear to correlate with the finished levels plan. Cover level on the drainage layout and modelling is 3.341 and the levels in this				

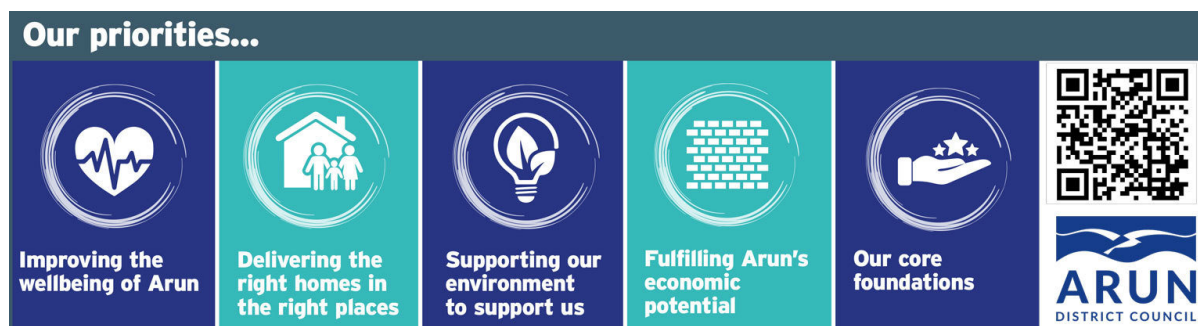
	area are shown to drop from 3.251 in the centre of the access to 3.080 at the north of the bell mouth. Not all cover levels have been checked due to anticipated design changes, however, please make sure that they correspond between the layout, model and finished levels drawing.				
32.	Please submit long and cross sections for any open drainage features.				
33.	The SuDS Overview Plan shows an indicative pipe on section b, from the depression in the land (open land drainage feature) to the filter drain. This is not shown on the drainage layout.				
34.	Please submit construction details and specifications for all bypass and retention separator units.				
35.	Please detail venting on attenuation tanks.				
36.	Please submit detail for the channel drains in the loading dock.				

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
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>



Connect with us: [Facebook](#) | [X](#) | [Instagram](#)

From: Paul Cann <Paul.Cann@arun.gov.uk>

Sent: 09 January 2026 09:59

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

Cc: Land Drainage <Land.Drainage@arun.gov.uk>; Emma Sheppard <Emma.Sheppard@arun.gov.uk>

Subject: RE: Planning Consultation on: BE/141/25/DOC

Please find enclosed our external consultants response. Please note that there are currently serious concerns over the proposals and the potential to increase flood risk.

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: 17 December 2025 13:49

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

Subject: Planning Consultation on: BE/141/25/DOC

To: **Engineers (Drainage)**

NOTIFICATION FROM ARUN DISTRICT COUNCIL

TOWN AND COUNTRY PLANNING ACT 1990

Application No: BE/141/25/DOC

Registered: 16th December 2025

Site Address: Land at Oldlands Farm Newlands Road Bognor Regis PO22 9NN

Description of Works: Approval of details reserved by condition imposed under BE/150/22/OUT relating to condition 22-surface water drainage scheme.

The Council have received the above application to discharge conditions. I shall be pleased to receive any observations you may wish to make in respect of those conditions relating to your field of expertise.

[Click here to view the Discharge of Condition application and view the 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.

[Click here to view the original application and decision notice](#)

Should you wish to make any comments click on the link and click into ?Enter Comment? or if this is not possible email your response to planning.responses@arun.gov.uk by **3rd January 2026**.

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.

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

Yours sincerely

Emma Sheppard

Planning Case Officer- Arun District Council

Telephone:

Email: emma.sheppard@arun.gov.uk

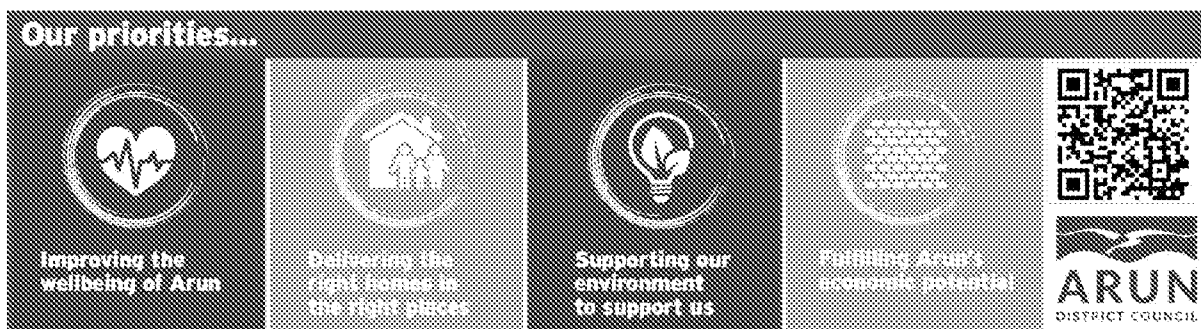
PLCONDOC (ODB) 2020

From: Hebe Smith on behalf of Planning.Responses
Sent: 09 August 2023 11:52
To: Planning Scanning
Subject: FW: Planning Consultation on: BE/150/22/OUT
Attachments: BE-150-22-OUT- Consultation.docx; BE-150-22-OUT-Comments.docx

Hebe Smith (she/her)
Planner (Degree Apprentice), Planning

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 [Planning application finder \(arun.gov.uk\)](http://www.arun.gov.uk/planning-application-finder).



From: Paul Cann [REDACTED]
Sent: Wednesday, August 9, 2023 11:05 AM
To: Planning.Responses [REDACTED]
Cc: Karl Mclaughlin <Karl.Mclaughlin@arun.gov.uk>
Subject: RE: Planning Consultation on: BE/150/22/OUT

Please find enclosed our external consultants response requiring further information.

Regards

Paul Cann
Principal Drainage Engineer, Coastal Engineers and Flood Prevention



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



From: Planning.Responses [REDACTED]
Sent: Tuesday, May 2, 2023 11:03:40 AM (UTC+00:00) Monrovia, Reykjavik
To: Land Drainage [REDACTED]
Subject: Planning Consultation on: BE/150/22/OUT

To: **Engineers (Drainage)**

NOTIFICATION FROM ARUN DISTRICT COUNCIL

TOWN AND COUNTRY PLANNING ACT 1990

Application No: BE/150/22/OUT
Registered: 16th December 2022
Site Address: Land at Oldlands Farm Newlands Road Bognor Regis PO22 9NN
Grid Reference: 494177 101453
Category: Plan Applicat'n
Description of Works: Outline planning application with all matters reserved except access for the demolition of existing derelict building and erection of up to 18,580sqm of new industrial/warehouse (Use Class B2/B8) and ancillary offices (Use Class E (g)) floorspace.

I am able to inform you that I have received an amendment to the above application dated 28th April 2023 relating to:- Response to ADC engineers and Environmental Noise Impact Assessment.

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

If you should wish to make further representations as a result of this amendment you should click the link below and then click on 'Enter comment'.

[Click here to make further comments](#)

Please make any further comment by **24th May 2023**.

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 D Easton

Planning Case Officer- Arun District Council

[REDACTED]

[REDACTED]

PLRECON (ODS) 2018

Application Reference: BE/150/22/OUT Site Name: Land at Oldlands Farm Newlands Road Bognor Regis PO22 9NN			Initial Issue Date: 07/03/2023 Issue Date: 08/082023 Reviewer Reference: ADC/EXT1a		
Summary and Recommendation:					
	ADC Drainage Comments (initial)	Designer Response	ADC Drainage Comments (08/08/2023)		
Date					
Condition Number:					
1.	The infiltration testing provided in Appendix 8 of the report indicate trial pit depths between 1.7m to 2.2m deep. The applicant should explore opportunities for shallow infiltration techniques and the use of permeable paving in the parking areas to reduce the overall volume of surface water run-off leaving the site. Shallow infiltration testing to BRE 365 should be carried out to explore this further. Reducing the overall volume of runoff leaving the site by encouraging infiltration could result in benefits to the downstream flooding issues.	The FRA&DS says “According to the site investigation report, due to the presence of high groundwater within the site, infiltration drainage will not be possible. Attenuation drainage will be provided on the site in 3 accordance with planning and drainage policy requirements. Evidence to support this was presented in Appendix 8 including soakage test results.” The Hydrock report says: The results showed: TP40 – No result TP34 – No result TP26A – No result TP15 – No result TP17 – No result	This does not address the comments made in the initial review. We have requested that shallow infiltration techniques are investigated as well. The current investigations only support more “traditional” soakaway drainage and does not explore the opportunities for permeable paving or shallow infiltration swales, basins etc..		
2.	The climate change allowance used in the calculations do not comply with the DEFRA updated requirements published in May 2022. The development site lies within the Arun and Western Streams Management Catchment area and as such and a climate change allowance of 45% not 40% should be used in the calculation of the peak flows for the 1 in 100 year design storm simulation. This is important to ensure that the proposed onsite surface water drainage strategy will have sufficient attenuation to prevent and increase in flooding downstream nor increase the risk onsite.	The calculations were carried out with 45% climate change allowance. These are in Appendix 4 of the FRA&DS	Thank you for confirming this. The Flood Risk and Drainage Statement report (dated December 2022) should be updated with the correct reference to the 45% climate change factor and reissued, to ensure this is correctly adhered to and that there are no contradictions.		
3.	It’s not entirely clear on the applicant’s intention for restricting the discharge at a point further downstream on the existing surface water network which is located beyond the redline planning boundary. Please provide further explanation on the reason for this and in addition, if this is being proposed then further information is required on what other developments and areas drain to this tank sewer to ensure this restriction on the existing network does not inadvertently cause flooding to another parcel once the flows surcharge and back up in the pipes.	The drawings show the site drainage and the estate road drainage being attenuated together. This is also shown in the report at 5.2 - 5.7 and in particular 5.3-“Attenuation will be provided by restricting the discharge from the surface water system using a hydrobrake designed to attenuate flows from the proposed development and the estate road.” The 2014 road drainage plans (Appendix 8) show the extent of the surface water catchment area. This area was included in t he calculations in Appendix 4 for the combined site and access road drainage.	The extent of road run-off being proposed for attenuation including the construction of the new hydrobrake chamber would then fall outside of the redline boundary. Again it is not clear why the application is seeking to place an hydrobrake so far downstream of the extent of the redline site boundary. Clarification needs to be provided		

4.	It is also noted in page 7 of the report that only part of the existing greenfield run-off appears to drain to the north eastern corner with the remainder of the site draining to the south east. Further details on the existing surface water network should be provided to demonstrate where the existing surface water leads and discharges to as well as to demonstrate that the network is capable of accepting the additional run-off volume, which previously drained into the south eastern corner, without increasing the risk of flooding further downstream.	<i>The site is relatively flat Ultimately all of the existing surface water drains to the Lidsey Rife, east of the railway</i>	Unfortunately, this doesn't address the initial comments. The existing baseline hydrology plan provided, whilst the applicant assumes that all the runoff will eventually end up to the Lidsey Rife this doesn't take into account the current impact to the existing infrastructure in place to convey the flows to this position. By directing the bulk of the run-off from the site to the northeast this could impact on the existing downstream infrastructure and cause flooding. As we have noted previously further details on the existing downstream surface water network should be provided to demonstrate the proposals will be acceptable. If this cannot be provided, then the applicant should consider re-calculating the greenfield run-off and associated storage to account for the actual greenfield allowance leaving the existing site in the northeast		

Engineers Comments Regarding Surface Water Drainage

Application Reference:	BE/150/22/OUT	Reviewer Reference:	ADC/EXT1a
Planning Officer:	Mr D Easton	Date of Review:	08/08/2023
Site Name:	Land at Oldlands Farm Newlands Road Bognor Regis PO22 9NN		
Application Description:	Outline planning application with all matters reserved except access for the demolition of existing derelict building and erection of up to 18,580sqm of new industrial/warehouse (Use Class B2/B8) and ancillary offices (Use Class E (g) floorspace		
Assessment Number:	2 of 2		

Policy and Guidance Information

Arun District Council Surface Water Drainage Guidance - <https://www.arun.gov.uk/surfacewater>

WSCC Policy for the Management of Surface Water-

https://www.westsussex.gov.uk/media/12230/ws_llfa_policy_for_management_of_surface_water.pdf

Land Drainage Consent - <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>

Response

Request for further information

Comments

At this stage there are still further comments they should be addressed to ensure there are no contradiction in the information provided in the Flood Risk Statement as well as clarification in the surface water drainage strategy. The comments are presented in the Comment Tracker. These are not new comments but are further comments provided upon review of the responses provided by the Applicants Agent which have not addressed the initial comments.

If you are minded to approve the application please apply the following conditions to ensure that the development is adequately drained and does not increase flood risk elsewhere.

PCENG1

1. Development shall not commence, other than works of site survey and investigation, until full details of the proposed surface water drainage scheme have been 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 guidance provided by 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. No building / No part of the extended building shall be occupied until the complete surface water drainage system serving the property has been implemented in accordance

with the agreed details and the details so agreed shall be maintained in good working order in perpetuity.

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. This is required to be a precommencement condition because it is necessary to implement the surface water drainage system prior to commencing any building works.

INFORMD

INFORMATIVE:

"Infiltration rates for soakage structures are to be based on percolation tests undertaken in the winter period and at the location and depth of the proposed structures. The infiltration tests must be carried out in accordance with BRE365, CIRIA R156 or a similar approved method. All design storms must include a climate change allowance, as per <https://www.gov.uk/guidance/flood-riskassessments-climate-change-allowances>, on stored volumes or rainfall intensity. Infiltration structures must cater for the critical 1 in 10 year storm event, (plus 40%) between the invert of the entry pipe to the soakaway and the base of the structure. All surface water drainage designs must also have provision to ensure there is capacity in the system to contain the critical 1 in 100 year storm event (plus 45%). Freeboard is to be provided between the base of the infiltration structure and the highest recorded groundwater level identified in that location. Ideally this should be 1 metre where possible, as stated in the CIRIA Suds Manual guidance. However, on the coastal plain in particular, where geology dictates and where shallow perched/tidally influenced water tables are often present, this is unlikely to be achievable. Irrespective of this, infiltration must still be fully considered. Therefore, to maximise this potential and avoid utilising other less favourable methods of surface water disposal, the bases of infiltration structures are permitted to be immediately above the peak recorded groundwater levels where it is deemed necessary.

In areas where an aquifer is to be protected (subject to guidance from the Environment Agency) then a minimum 1 metre freeboard must be provided.

Suitable water treatment is required upstream to the point of discharge in all circumstances to minimise any groundwater pollution risk or detriment to the drainage network

Any SuDS or soakaway design must include adequate groundwater monitoring data to determine the highest groundwater table in support of the design. The applicant is advised to discuss the extend of ground water monitoring with the council's engineers.

Supplementary guidance notes regarding surface water drainage are located at <https://www.arun.gov.uk/drainage-planning-consultations> on Arun District Council's website. A surface water drainage checklist is available on Arun District Council's website, this should be submitted with a Discharge of Conditions Application. Reference should also be made to the 'West Sussex LLFA Policy for the Management of Surface Water'.

PCENG3

2. The development shall not proceed until details have been 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.

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. It is considered necessary for this to be a pre-commencement condition to protect existing watercourses prior to the construction commencing

INFORMD2

INFORMATIVE: Under Section 23 of the Land Drainage Act 1991 Land Drainage Consent must be sought from the Lead Local Flood Authority (West Sussex County Council), or its agent (Arun District Council land.drainage@arun.gov.uk), prior to starting any works (temporary or permanent) that affect the flow of water in an ordinary watercourse. Such works may include culverting, channel diversion, discharge of flows, connections, headwalls and the installation of trash screens. The development layout must take account of any existing watercourses (open or culverted) to ensure that future access for maintenance is not restricted. No development is permitted within 3m of the bank of an ordinary watercourse, or 3m of a culverted ordinary watercourse.

PCENG4

3. Development shall not commence until full details of the maintenance and management of the surface water drainage system is 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. It is considered necessary for this to be a pre-commencement condition to ensure that the future maintenance and funding arrangements for the surface water disposal scheme are agreed before construction commences

INFORMD3

INFORMATIVE: If during construction works, it becomes apparent that implementation cannot be carried in accordance with previously agreed details any resubmission of the drainage design must be accompanied by an updated copy of the management manual.

ENG4

4. Immediately following implementation of the approved surface water drainage system and prior to occupation of any part of the development, the developer/applicant shall provide the local planning authority with as-built drawings of the implemented scheme together with a completion report prepared by an independent engineer that confirms that the scheme was built in accordance with the approved drawing/s and is fit for purpose. The scheme shall thereafter be maintained in perpetuity.

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.

INFORMD4

INFORMATIVE: A surface water drainage verification condition guidance note is available at <https://www.arun.gov.uk/drainage-planning-consultations>, this clearly sets out our requirements for discharging this condition