Engineers Comments Regarding Surface Water Drainage

Application Reference:	BE/112/25/OUT	**Reviewer Reference:**	ADC/KW and SB
Planning Officer:	Simon Davis	**Date of Review:**	11/11/2025
Site Name:	Land at Heath Place, Bersted, PO22 9SL		
Application Description:	Outline application with some matters reserved (except access, layout and scale) for 3 No class E light industrial units and associated landscaping.		
Assessment Number:	1 of 1		

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**

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The NsTS have been superseded by the National Standards for Sustainable Drainage Systems [NSfS] from 19 June 2025.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 OUTLINE surface water drainage design checklist (linked above). A failure to address these will result in an **objection** to any OUTLINE planning application.

Where the quantum of development is not being approved, an objection to an outline application is only made where:

- a viable runoff disposal location has not been evidenced,
- flood risk may be impacted by the proposal,
- surface water drainage may impact the proposed development scale and layout, or;
- a significant impact upon existing watercourses or natural drainage features is identified

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	Insufficient	**Objection**
3. Extreme Rainfall and Flooding	Insufficient	**Objection**
4. Water Quality	Insufficient	**Objection**
5. Amenity	Insufficient	**Objection**
6. Biodiversity	Insufficient	**Objection**
7. Construction, operation, maintenance, decommissioning and structural integrity	Not applicable (OUTLINE application)	**No objection subject to conditions**

Reviewed Plans

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

- Flood Risk Assessment AEG8874_PO22_Bersted_07, issue 2, dated 22/10/2025, referred to as the **FRA.**

Consultation comments to the planning officer

0. General

0.1. Insufficient information regarding surface water drainage has been submitted to evidence that flood risk will not be increased as due to the proposed development.

0.2. It is noted that the scale and layout, as well as the access are to be decided by the outline application, with only detailed design matters reserved. This impacts the consultation response compared to most outline applications which do not determine scale and layout.

1. Runoff destination

1.1. Due to high groundwater, the applicant proposes discharging to a private surface water drainage network. This connects to a tributary of the Aldingbourne Rife, located immediately north of the site. The groundwater monitoring report that is appended to the FRA is sufficient evidence to rule out infiltration.

1.2. Water reuse is the highest priority disposal location and is not proposed. This does not accord with the national standards for SuDS (NSfS). However, water reuse rarely provides a total solution as an overflow to an alternative disposal location is required. This means that water reuse can be secured via condition as appropriate.

1.3. The proposed final discharge location of the watercourse north of the site, is the next priority discharge location on the hierarchy and as such we support the connection should permission be granted. However, the connection as proposed, via an existing drainage network may not be acceptable. The existing network's capacity is unknown and the asset owner's permission in principle has not been submitted.

1.4. The Environment Agency (EA) is the risk management authority for the rife as it is designated Main River. No evidence has been submitted to demonstrate that the proposed discharge rates, volumes or flow parameters have been agreed with them. This is an expectation of the NSfS. A flood risk activity permit may also be required from the EA if the existing network cannot be used. If they do not agree to the principle of discharging to the rife then it is unclear how the applicant may drain surface water from the site.

1.5. In the absence of confirmation of an acceptable discharge location we **object** to the application.

2. Interception drainage

2.1. Consideration of interception drainage is critical to the conceptual design of the site in determining the scale and layout of the development. Interception drainage ensures that rainfall from regular rainfall events does not leave the site. This replicates greenfield conditions and goes hand in hand with the management of extreme rainfall events to ensure that development does not increase flood risk.

2.2. Where infiltration is not viable (as here) and there is a risk that interception drainage may only be delivered by evapotranspiration this can have significant impact on the scale and layout of the proposed development.

2.3. No details of interception features have been proposed. Water butts have been mooted for use, however there is no committed design which includes these features. Even if proposed, water butts that are not designed for regular supply are not deemed to deliver interception drainage.

2.4. No SuDS features which allow evapotranspiration are proposed. No departure from the national standards from SuDS has been requested. As it is unclear where interception features may be included within the proposed scale and layout we **object** on these grounds.

3. Extreme rainfall and flooding

3.1. The site is currently located within Flood Risk Zone 3a, indicating a high probability of flooding. Flood Zone 3b is defined as the extent of flooding in the 3.33% AEP event, and typically referred to as the functional flood plain. At the time of writing modelling data for this event has not been published to cover this area. The model that is available is for the 5% AEP event. The site is within the extents of the 5% AEP flood event. This is important as there is a risk that the site may be at risk in the 3.33% AEP event and therefore should not be developed unless it is essential infrastructure or water compatible development.

3.2. The FRA claims that the site is not in Flood Zone 3b as a recent topographic survey demonstrates that the surveyed levels are higher than the predicted flood levels for the 3.33%AEP event. However, the existing site is the subject of 2 enforcement notices which relate (in part) to potential ground raising on the site, which includes raised bunds. The topographical survey is dated 18/06/2024, after the date of the enforcement notices (November 2022 and November 2023). This calls in to question the reliability of the survey to inform the FRA.

3.3. The planning officer and the EA are alerted to historic topographic surveys, submitted for previous planning applications which demonstrate the difference in levels on the site. These are appended to our consultation. The Ground Management report in Appendix C of the FRA also demonstrates that there is made ground to a depth of 0.9m which aligns with expected pre-application ground raising on the site.

3.4. The same historic topographic surveys and ordinance survey maps demonstrate that there was, or should be a watercourse running through the centre of this site. It is apparent from this submission that the watercourse has been infilled. It is unclear if the site owner had consent for this action which is expected to have increased flood risk.

3.5. The planning officer and the Environment Agency should consider this in their response.

3.6. Aside from the debate of whether the site is, was, or should be in functional flood plain (Flood Zone 3b), it is entirely within Flood Zone 3a. The source of flooding is fluvial and surface water. SuDS should not be located in flood areas and the FRA does not adequately consider how SuDS may be accommodated on the site within the flood risk classifications.

3.7. This risk of flooding will need to be accounted for by the surface water drainage design. For further guidance, please refer to our SuDS in Flood Areas document available online at www.arun.gov.uk/surfacewater.

3.8. The greenfield runoff rate has been calculated using a method which is not supported by the NSfS (the IH124 method). QBAR should be calculated using an FEH methodology and the FEH 22 point descriptors for the site should be submitted confidentially to ensure that the calculations reflect the data for the site. The calculations use a soil value of 0.47 which is artificially high thus increasing the calculated rate of runoff.

3.9. The NSfS states that the proposed discharge rate for the site should be restricted to QBAR or 3l/s/ha (whichever is higher) to ensure that flood risk is not increased. 3l/s/ha for the site

area of 0.661ha is 1.983l/s. The proposed discharge rate is 15.2l/s – significantly higher. **This discharge rate will increase flood risk.**

3.10. When the discharge rate is further restricted, then the space for storage will need to increase. The applicant has not demonstrated accurately what space is needed for surface water storage and we cannot be certain that the SuDS design will not impact the deliverable scale and layout of the development. Indeed, the FRA acknowledges that there are level constraints on the site which impact the available plan area for storage features.

3.11. The modelling also does not appear to account for a surcharged outfall. As the site is already located in a Flood Zone the risk of the outfall being surcharged is realistic and should be assessed when determining the storage that is needed to ensure that the site does not flood.

3.12. The application does not meet multiple elements of this standard and therefore we object to it. The applicant has not demonstrated that flood risk is not increased by the proposed surface water drainage of the site, nor by pre-application activities which appear to have altered the natural drainage characteristics of the site.

4. Water quality

4.1. No water quality assessment has been submitted. No features which provide water treatment have been included in the design and therefore the applicant has not demonstrated that the proposed development will not adversely impact water quality in the receiving watercourse.

4.2. The FRA implies that permeable paving which is beneficial to water treatment cannot be used on the site. It is unclear how the necessary level of water treatment will be provided without impacting the scale and layout of the proposed development. Therefore, I **object** to the application.

4.3. The later submitted water quality and proposed treatment assessment must assess each sub-catchment and their treatment methods where different parts of the site receive different treatment regimes. The designer should aim to treat all rainwater as close to source as possible. **Open features which aid water treatment can impact the scale and layout.**

5. Amenity

5.1. No assessment of amenity benefit has been submitted. The drainage system offers no multifunctional benefit, visual amenity, landscape character, health, wellbeing, education or safety benefit. It is unclear how any amenity benefit could be achieved within the proposed scale and layout of the site as many features which may provide amenity benefit need to be planned for at the conceptual stage.

5.2. Insufficient amenity benefits arising from the proposed SuDS have been identified, and therefore Standard 5 of the Systems NSfS has not been met and we **object** to the proposal.

6. Biodiversity

6.1. No biodiversity benefits have been identified arising from the proposed surface water drainage system, and therefore Standard 6 of the Systems NSfS has not been met. As such we **object** to the proposal.

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

7.1. Insufficient information regarding the construction, operation and maintenance of the SuDS system, and therefore Standard 8 of the Systems NSfS. However, in the absence of significant existing trees which could impact the scale and layout and location of SuDS features, most elements of this standard can normally be secured via condition. The submission of a Management and Maintenance Plan is unlikely to affect the scale or layout of the development. Accordingly, we do not object to the proposal on these grounds, subject to a condition securing the detailed surface water drainage design.

7.2. The management and maintenance plan for the site will have to better consider the flood risk on the site and the remediation actions necessary after a flood event.

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:

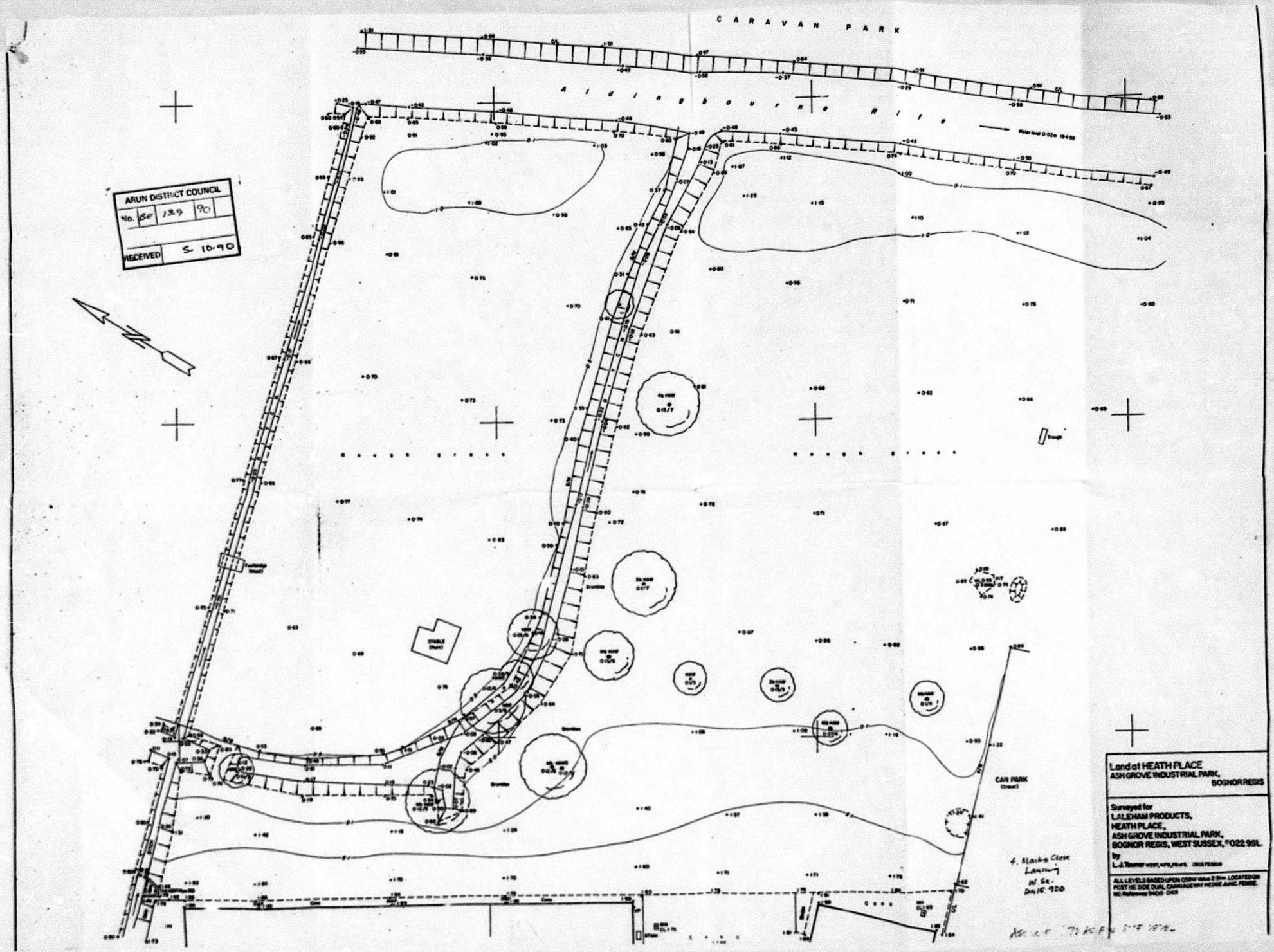
☐ Landscaping officer (proposed trees and landscaping)
☐ Tree officer (existing trees)
☒ **Environment Agency (main rivers and fluvial/tidal flood risk, River Arun internal drainage board, groundwater source protection zones)**
☐ Southern Water (foul drainage and surface water disposal to public sewer network/groundwater source protection zones)

☐ Portsmouth Water (groundwater source protection zones)

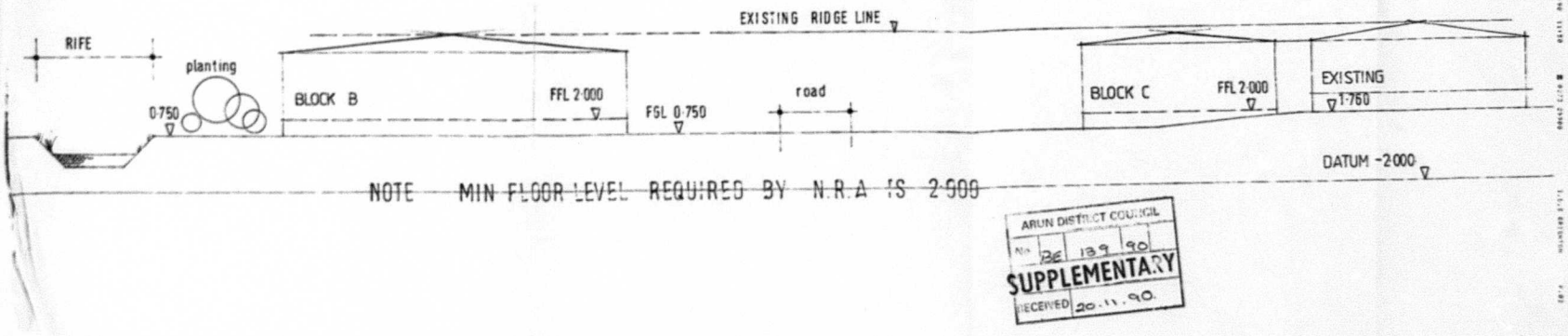
☒ **Lead local flood authority (all other sources of flooding and ordinary watercourses)**

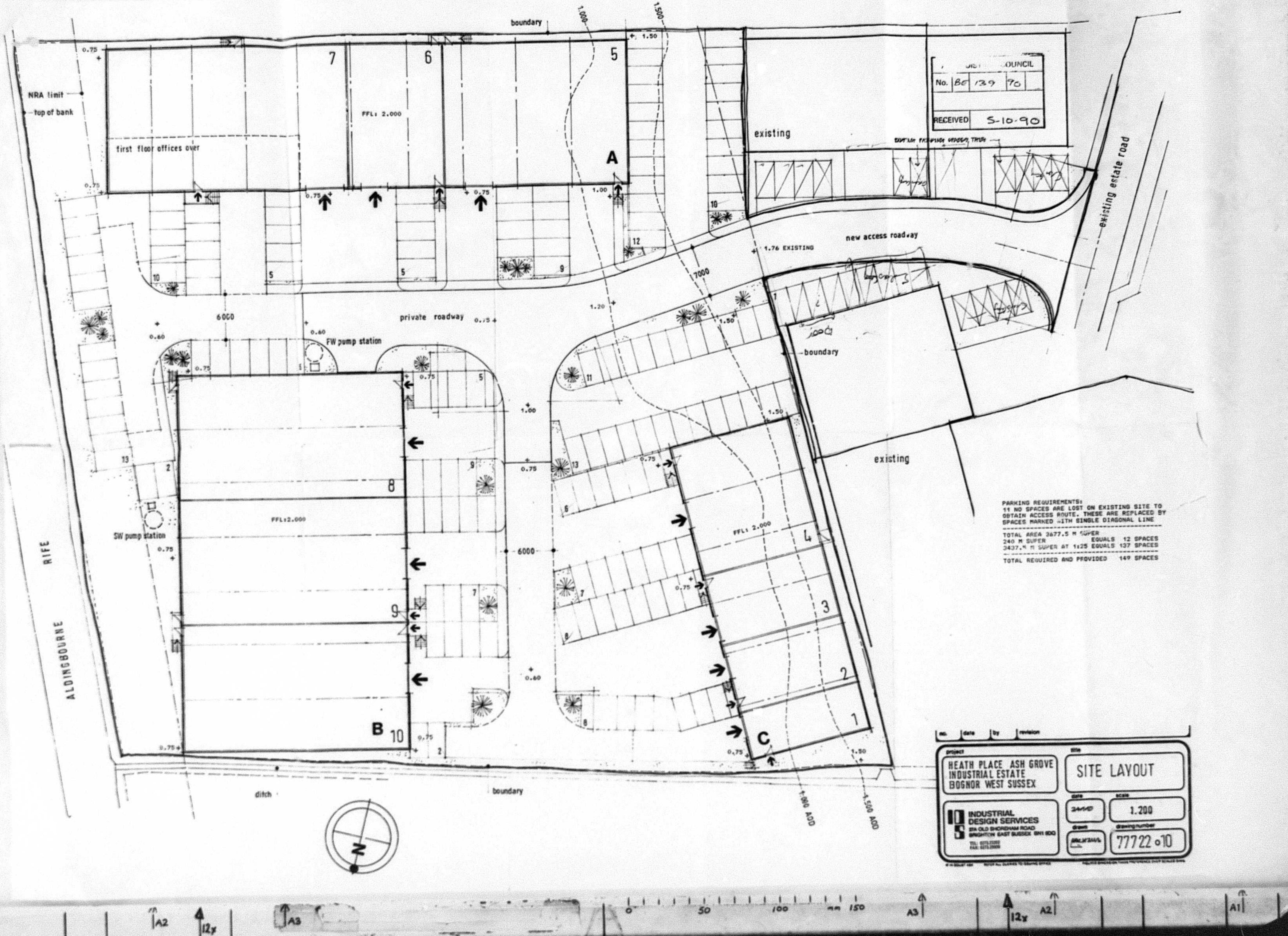
☐ Other: Specify ……

☐ None


CARAVAN PARK
Aldingbourne Rife
ARUN DISTRICT COUNCIL
No. BE 139 90
RECEIVED 5 10 90
CAR PARK
Land at HEATH PLACE
ASH GROVE INDUSTRIAL PARK,
BOGNOR REGIS
Surveyed for
LALEHAM PRODUCTS,
HEATH PLACE,
ASH GROVE INDUSTRIAL PARK,
BOGNOR REGIS, WEST SUSSEX, PO22 9SL.
by
ALL LEVELS BASED UPON OSBM Value 2.0m LOCATED ON POST NE SIDE DUAL CARRIAGEWAY HEDGE JUNC. FENCE.
NE Reference 9400 0165
4 Hawks Close
Lancing
W Sx.
BN15 9DD
0 50 100 mm 150
A3
A2
A1

139




boundary
1.000
1.500
NRA limit
top of bank
7
6
5
FFL: 2.000
first floor offices over
A
existing
No. BE 139 90
RECEIVED 5-10-90
existing estate road
new access roadway
1.76 EXISTING
7000
private roadway
6000
FW pump station
SW pump station
boundary
existing
8
9
B
10
FFL:2.000
4
3
2
1
C
FFL: 2.000
RIFE
ALDINGBOURNE
ditch
boundary
1.000 AOD
1.500 AOD
PARKING REQUIREMENTS:
11 NO SPACES ARE LOST ON EXISTING SITE TO OBTAIN ACCESS ROUTE. THESE ARE REPLACED BY SPACES MARKED WITH SINGLE DIAGONAL LINE
TOTAL AREA 3677.5 M SUPER
240 M SUPER EQUALS 12 SPACES
3437.5 M SUPER AT 1:25 EQUALS 137 SPACES
TOTAL REQUIRED AND PROVIDED 149 SPACES
no. date by revision
project
HEATH PLACE ASH GROVE
INDUSTRIAL ESTATE
BOGNOR WEST SUSSEX
title
SITE LAYOUT
INDUSTRIAL
DESIGN SERVICES
date
scale
1.200
drawn
drawing number
77722 o10
0 50 100 mm 150
A1 A2 12x A3

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

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

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

From: Sarah Burrow <Sarah.Burrow@arun.gov.uk>
Sent: 11 November 2025 15:20
To: Planning.Responses <Planning.Responses@arun.gov.uk>
Cc: Paul Cann <Paul.Cann@arun.gov.uk>; Kathryn Welch <Kathryn.Welch@arun.gov.uk>; Simon Davis <Simon.Davis@arun.gov.uk>
Subject: RE: Planning Consultation on: BE/112/25/OUT

Hi Simon,

Please see my consultation – an objection – attached. Please can you ensure that the EA and WSCC as LLFA are aware of our comments and concerns.

Apologies for the delay in response.

Kind regards

Sarah Burrow
Flood Risk and Drainage Engineer, Coastal Engineers and Flood Prevention

T: 01903 737815
E: sarah.burrow@arun.gov.uk
[redacted]

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: 26 September 2025 10:19
To: Land Drainage <Land.Drainage@arun.gov.uk>
Subject: Planning Consultation on: BE/112/25/OUT

To: **Engineers (Drainage)**

NOTIFICATION FROM ARUN DISTRICT COUNCIL

Town & Country Planning Act 1990 (as amended)
Town & Country Planning (Development Management Procedure) (England) Order 2015 - Article 5

Outline Consent

Application No:	**BE/112/25/OUT**
Registered:	26th September 2025
Site Address:	Land at Heath Place Bersted PO22 9SL
Grid Reference:	493522 101064

Description of Works: Outline application with some matters reserved (except access, layout and scale) for 3 No class E light industrial units and associated landscaping. This application is in CIL Zone 4 (Zero Rated) as other development.

The Council have received the above application.

Click here to view the application and 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.

Should you have any comments to make, these should be sent by replying to this email by 30th October 2025 . You can also monitor the progress of this application through the Council web site:

https://www.arun.gov.uk/planning-application-search

The application will be determined having regard to the development plan policies (if any are relevant) and other material considerations. The development plan can be accessed via the website https://www.arun.gov.uk/development-plan as can information on what comments we can consider https://www.arun.gov.uk/planning-application-comments

Please be aware that any comments you may make will be available on our website so please do not insert personal details or signatures on your reply.

Should the application go to appeal the Planning Inspectorate will publish any comments made to the Council on their website:https://acp.planninginspectorate.gov.uk/ but they will protect personal details.

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

Yours sincerely

Mr S Davis

Planning Officer- Arun District Council

Telephone: 01903 737874

Email: Simon.Davis@arun.gov.uk

PLCONSULT (ODB) 2020