



Engineers Comments Regarding Surface Water Drainage

The following points are noted for the applicant's consideration:

1. A full winter's (November to March inclusive) groundwater monitoring will need to be completed on the site in order to establish peak groundwater. The results up to December are noted, it may be that the peak was captured in December but we would like to see the full results including a map of the location of the monitoring points (so that this can be compared with topographical levels).
2. Further infiltration testing will need to be completed in accordance with BRE365 to a depth above the highest recorded groundwater. For a development of this size we would expect a minimum of 3 further trial pits, evenly distributed across the width and length of the plot. The infiltration tests that have been completed are not sufficient in number or to an appropriate depth.
3. The surface water drainage strategy for the site will be dictated by the results of the testing and the hierarchy of preference for different types of surface water drainage disposal systems as per condition **PCENG D2** below. Therefore if infiltration is viable to a shallow depth then this shall be prioritised over attenuation.
4. If necessary the council will consider a hybrid solution to maximise infiltration potential.
5. Not mentioned within this iteration but worth noting: We do not support pumping as it is not a sustainable solution, therefore every effort will have to be made to establish a gravity solution if attenuation and discharge is used.
6. Depending on the results of the groundwater monitoring it may be necessary to provide a counter to buoyancy in any attenuation solution.
7. The applicant is reminded that all houses, fences and walls must be kept at least 3m from the top of the bank of the watercourse on the northern boundary of the site.

If the applicant would like any more information, then guidance notes regarding surface water drainage are located here <https://www.arun.gov.uk/surfacewater> on Arun District Councils website. A surface water drainage checklist is available here <https://www.arun.gov.uk/drainagechecklist> on Arun District Councils website, this should be submitted with a Discharge of Conditions Application.

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. (As per Laura's previous correspondence).

PCENG D2

"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. 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 pre-commencement condition because it is necessary to implement the surface water drainage system prior to commencing any building works.

And the accompanying informative:

INFORMD

"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 percolation tests must be carried out in accordance with BRE365, CIRIA R156 or a similar approved method and cater for the 1 in 10 year storm between the invert of the entry pipe to the soakaway, and the base of the structure. It must also have provision to ensure that there is capacity in the system to contain below ground level the 1 in 100 year event plus 40% on stored volumes, as an allowance for climate change. Adequate freeboard must be provided between the base of the soakaway structure and the highest recorded annual groundwater level identified in that location. Any SuDS or soakaway design must include adequate groundwater monitoring data to determine the highest winter groundwater table in support of the design. The applicant is advised to discuss the extent of groundwater monitoring with the Council's Engineers.

Supplementary guidance notes regarding surface water drainage are located here

<https://www.arun.gov.uk/surfacewater> on Arun District Councils website. A surface water drainage checklist is available here <https://www.arun.gov.uk/drainagechecklist> on Arun District Councils website, this should be submitted with a Discharge of Conditions Application."

PCENG3

"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. No construction is permitted, which will restrict current and future land owners 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.

And the accompanying informative:

INFORMD2

"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."

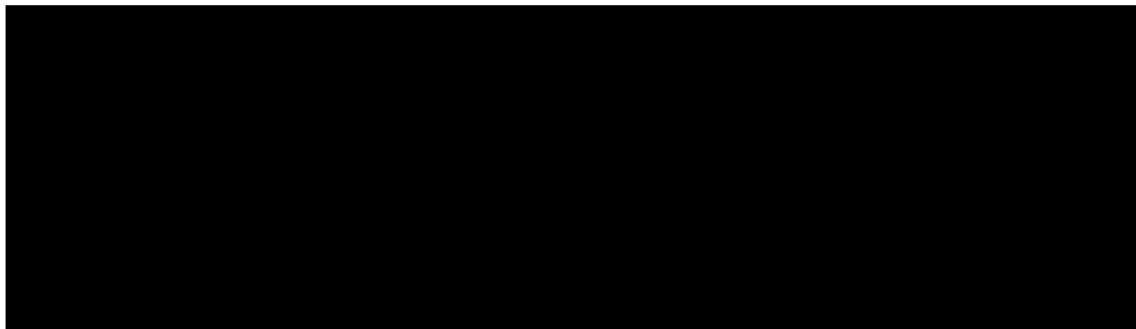
PCENG4

"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."

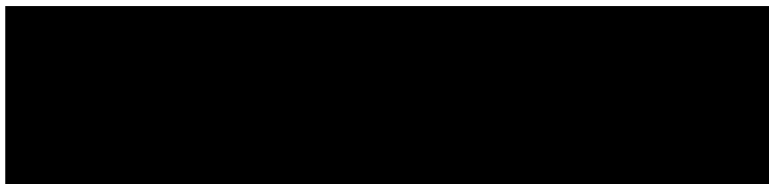
Reason: To ensure that the proposed development is satisfactorily drained in accordance with policies W DM1, W DM2 and W DM3 of the Arun Local Plan. It is considered necessary for this to be a pre-commencement condition to ensure that the future maintenance and funding arrangements for the surface water disposal scheme are agreed before construction commences.

Kind Regards

Sarah Burrow



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To: Engineers (Drainage)

**NOTIFICATION FROM ARUN DISTRICT COUNCIL
Town & Country Planning Act 1990 (as amended)
Town and Country Planning (Development Management Procedure) (England) Order 2015
Planning Permission**

APPLICATION NO: AL/27/20/PL

Registered: 20th April
2020

Site Address: Springfield Hook Lane Aldingbourne PO20 3TE

Grid Reference: 493480 104546

Description of Works: Demolition of the existing dwelling & construction of 2 No. 2-bed, 3 No. 3-bed & 4 No. 4 bed houses including access, landscaping & associated works (resubmission following AL/51/19/PL).

The Council have received the above application. I shall be pleased to receive any observations you may wish to make.

[Click here to view the application details](#)

Should you have any comments to make, these should be sent by [replying to this email](#) by 22-MAY-20.

You can also monitor the progress of this application through the Council web site:

www.arun.gov.uk/planning

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.

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 as can the leaflet which deals with material planning considerations.

Should the application go to appeal the Planning Inspectorate will publish any comments made to the Council on their website: www.planningportal.gov.uk/planning/appeals/ but they will protect personal details.

The officer dealing with this application is Mr S Davis who can be contacted on telephone number [REDACTED]

Regards
Planning Officer

consultee_email
