



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

Sent: 12 January 2021 15:05

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

Cc: Laura Gibbons [REDACTED] Sarah Burrow <Sarah.Burrow@arun.gov.uk>

Subject: RE: Planning Consultation on: BE/148/20/OUT

Engineers comments in respect to surface water and land drainage;

Numerous watercourses pass through the site and around its perimeter. The layout has accounted for these and the applicant will need to ensure that all structures/ponds, etc are kept at least 3 metres from the top of any ditch bank. Modifications will be required to some watercourses in order to facilitate vehicular and pedestrian access crossings. Improvements will also be required to existing ditches and culverts, including the existing culvert in the north west corner of the site. Land Drainage Consent will be required for these works.

Although it is recognised that surface water disposal is going to rely on restricted discharges to watercourses, Infiltration must be utilised where ever possible. It is noted that summer infiltration testing was carried out at variable depths which indicated borderline rates, however, for design purposes shallow winter infiltration (to be carried out January/February) testing is required at depths dictated by the winter groundwater monitoring, ensuring no testing takes place below recorded peak groundwater levels. The testing locations will also need to cover the entire site, not just the pond locations, as previously undertaken, to account for other potential suds features ie. permeable paving/swales, etc. The applicant is urged to discuss these requirements further.

Catchment areas connecting to watercourses must mimic existing catchments. Rates to be restricted to Qbar (based upon the developed impermeable area). Where restricted flow rates are less than 2 litres per second and hence the

flow control device is at greater risk of blockage, there may be the need to reduce the number of proposed outfalls in order to increase the flow control diameter (whilst respecting existing catchments). Alternative measures include upstream filters but these are not the preferred option.

Permeable paving should be specified where ever possible to improve water quality, provide additional storage, increase times of concentration, etc.

All aspects of the SUDS must respect any root protection zones associated with existing trees/proposed trees at maturity.

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.

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:

INFORM D

“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 on Arun District Councils website, this should be submitted with a Discharge of Conditions Application.”

PCENG D3

“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.

ENG1

“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.

Regards,

Paul Cann
Principal Drainage Engineer
Engineering Services

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From: Land Drainage [REDACTED]
Sent: 14 December 2020 09:19
To: Paul Cann <Paul.Cann@arun.gov.uk>
Subject: FW: Planning Consultation on: BE/148/20/OUT

From: Planning.Responses
Sent: Monday, December 14, 2020 9:18:29 AM (UTC+00:00) Monrovia, Reykjavik
To: Land Drainage
Subject: Planning Consultation on: BE/148/20/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/148/20/OUT
Registered:	9th December 2020
Site Address:	Nursery Fields Land to the North of Chalcraft Lane West Bersted PO21 5TS
Grid Reference:	491599 100730
Description of Works:	Outline application with some matters reserved to provide up to 225 residential units with associated infrastructure, open space and vehicular and pedestrian access. This application affects a Public Right of Way.

The Council have received the above application.

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

Should you have any comments to make, these should be sent by replying to this email by 17th January 2021 . You can also monitor the progress of this application through the Council web site:

www.arun.gov.uk/planning

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 the the leaflet how to respond to planning applications

<https://www.arun.gov.uk/planning-application-comments> which deals with material planning considerations.

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://www.planningportal.co.uk/info/200207/appeals> 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

James Cross

Planning Officer- Arun District Council

Telephone: 01903 737784

Email: james.cross@arun.gov.uk

PLCONSULT (ODS) 2020