

Consultant Response to Drainage Comments

D1623 - FORMER CHANDLERS BMW, WATER LANE, ANGMERING

Engineers Comments Regarding Surface Water Drainage:

A large proportion of the site is located within flood zone 3A. The Environment Agency should be consulted on this matter.

Consultant Response to Engineers Comments:

Initial consultation with the Environment Agency was undertaken to receive Product 4 information and to clarify predicted flood levels.

The site is also at risk of surface water flooding. Proposed attenuation or infiltrating structures must be located outside of the predicted fluvial and pluvial extents.

The proposed drainage strategy has considered modelled flood levels and the design flood level in accordance with the existing and proposed site layout and the recorded topographic levels in order to design the attenuation features outside of the flood extents, or above the design flood level via blue roofs. The proposed development would be levelled so that drainage measures were above the design flood level, as demonstrated in DWGs PL301 and PL400, to be refined at detailed design stage.

The submitted FRA details that some of the existing drainage arrangement will be utilised. Given the high risk of flooding in the area we would be looking to obtain improvement from the proposals, in line with WSCC policy we require proposed discharge rates to be as close to greenfield QBar as possible. Any proposals to alter or provide additional connections to the culverted main river would require a flood risk activity permit from the Environment Agency.

The proposed strategy has provided attenuation as far as possible outside of the flood extents via a variety of sustainable drainage measures, in order to reduce discharge into the watercourse. The existing site is hardstanding, with no SuDS and direct uncontrolled flow into the watercourse. The proposals dramatically reduce runoff to the watercourse in all areas as demonstrated in the report and the calculations provided, other than Building 'A' (as labelled on DWG PL400) where no sustainable drainage measures are deemed appropriate.

It is not clear from the detail submitted if the attenuated volume can be contained on site outside of the predicted flood extents. I.e. it has not been demonstrated that the proposals will not increase flood risk and the development can be adequately drained. A layout plan of the proposed surface water drainage scheme needs to be submitted, with further refined calculations. This information needs to be submitted before determination of the application. **Therefore, I currently object to the proposal.** Once further detail has been supplied by the applicant please re-consult.

The provided report, drawings and calculations clearly demonstrate the required volume to be attenuated on site and the proposals for ensuring this occurs at a minimal discharge rate without flooding to the site up to the design flood event. DWG PL400 demonstrates a layout plan of the proposed surface water drainage scheme, and Appendix G demonstrates clear calculations showing Qbar and flood mitigation up to the design flood event.

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.

Full details to be set out under imposed conditions at full application, including groundwater monitoring results, and percolation results.

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.

All proposed watercourse connections, existing and new, to be fully established, designed and applied for under imposed conditions at full application.

PCENG D4

“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.

Full management and maintenance details to be provided under imposed conditions at full application.