

## 5C: Water, drainage & flooding

6 responses

## Response counts

Section

Count

6

Comments received

## **Comments received**

(R57/session 60900; The Aquifer Partnership (TAP)) Created **August 2nd 2022** 

We would like to ensure that plans address groundwater pollution prevention, and would like to see: - That this development proposes no additional risk to the aquifer in terms of water guality, and no extra flood risk from hard surfaces or buildings - Good guality Sustainable Drainage (SuDS or Rainscapes) included in the site specification and followed through the design and construction process, including provision for ongoing maintenance and management to ensure performance. - Groundwater pollution risk assessed before the design is finalised, and recommendations followed through to construction and operation phase. As part of a drainage focus we would like to see: - A commitment to pollution prevention and an integrated sustainable drainage system. We note the proposal of attenuation and soakaways. We would prefer the use of landscape- led SuDS which achieve multiple benefits and are easier to maintain. - Early consideration of the whole life of the drainage system, including design, construction, operation, management and maintenance of the drainage system based on an understanding of the sensitivity of the aquifer to pollution, in the context of appropriate ground investigation survey work -Provide confidence that the final proposed drainage system will be able to cope with both winter and summer storms for a full range of events and storm durations. - A full consideration and justification for the suggestion of locating 'highly vulnerable' development in the Riverside location, despite flood modelling suggesting a risk to this area (though I note that flood defences on the Adur are considered to mitigate this risk).

(R14/session 60849; Environment Agency Chichester) Created August 2nd 2022

Potential impacts on water quality in the River Adur must be considered. The proposal should consider impacts on the wider Adur and Ouse catchment as far as reasonably practicable, including how it links/contributes to the objectives in the South East River Basin Management Plan and Adur & Ouse Catchment Management Plan. We know from modelling of Natural Flood Management opportunities in the area that the best way to reduce flood risk and increase resilience to climate change and biodiversity is by restoring natural processes in the tidal floodplain. Blue habitats, such as saltmarsh, also provide carbon sinks. As such, this development could link into adaptive management partnership projects. We would welcome further discussion about opportunities with any applicant

and/or the authority as plans progress. The site is located on the chalk aquifer, which is designated as a Principal Aquifer. This designation highlights its importance as a strategic water resource and the need for it to be protected from contamination. The area is not within a Source Protection Zone but there are two current licenced abstractions associated with the cement works (licence 10/41/311002), and the River Adur runs along the western boundary of the site. Therefore, controlled waters need to be protected. Section 5C includes consideration of surface water drainage, and while we would encourage the use of SuDS where ground conditions are suitable, it will need to be demonstrated that it does not increase the risk of contamination being mobilised to impact controlled waters. We would like to direct you and any applicant to the CIRIA SuDs manual C753 where industry best practice is provided. It provides further information and guidance on risk assessment and the likely level of treatment needed for such sites. This can be found at http://www.susdrain.org/. Foul water drainage is included in Section 5C, where it states there is currently no mains foul sewer connection in this location. For a development of this size, the discharge of foul water is an important consideration. Government guidance contained within the National Planning Practice Guidance (Water supply, wastewater and water quality – considerations for planning applications, paragraph 020) sets out a hierarchy of drainage options that must be considered and discounted in the following order: 1. Connection to the public sewer. 2. Package sewage treatment plant (adopted in due course by the sewerage company or owned and operated under a new appointment or variation). 3. Septic Tank. Foul drainage should be connected to the main sewer. Where this is not possible, under the Environmental Permitting (England and Wales) Regulations 2016, any discharge of sewage or trade effluent made to either surface water or groundwater will need to be registered as an exempt discharge activity, or hold a permit issued by the Environment Agency. An environmental permit is separate to the need for planning permission. The granting of planning permission does not necessarily lead to the granting of a permit. We would encourage early consideration of how foul water will be managed for the proposed development and if necessary, early engagement with us if a permit is likely to be required. We note that all foul water drainage will go to the lowest point (Riverside). The impacts on the receiving waterbody (the River Adur) must be considered. The area around the River Adur and Shoreham is popular for recreation including angling and kayaking. It is also stated in the AAP (Section 5.42, page 41) "It is likely that the Riverside is suitable for housing or commercial/retail development. It may be the preferred location for the WTW or pumping station." Any works will need consideration for eel. Should a pumping station be installed, this will require eel screening to prevent eel from being drawn into the pumping station itself. Eel screening requirements will also be required for any works where pumping, land drainage or desilting activities are likely to be completed immediately in the area surrounding the River Adur. We consider the site to be at very low risk of flooding from rivers and the sea with all but the western fringes of site A in Flood Zone 1. Provided development is located in Flood Zone 1, and current allowances for climate change are considered, we believe fluvial and tidal flood risk can be managed appropriately. Please note that we are currently updating our flood modelling on the Adur and expect the Flood Zones to be updated to reflect the new modelling during 2022. We would recommend that any applicant preparing their planning application seeks up-to-date data from us to inform their assessments. Such data can be obtained by emailing our Customers & Engagement team at SSDEnquiries@environment-agency.gov.uk. We note the AAP comments that (Section 5.36, page 40) "The flood defences along the River Adur reduce flood risk to the site, so the 'actual risk' is less than indicated by the Flood Zone modelling." It should be noted that the assessment of flood risk should be based on an undefended scenario i.e., the flood risk situation without defences in place.

(R15/session 60850; Environment Agency Arun and Adur) Created **August 2nd 2022** 

Do the plans have these failings in consideration for an upgrade or maintenance to maintain the flood defence and erosion on these parts.

(R38/session 60879; member of public) Created **August 2nd 2022** 

We all know that water supply and waste water disposal are not up to an acceptable standard and that, as far as can be judged by the experts, any further increase in housing and population in the area would put an impossible strain on the infrastructure. And then there's Climate Change. Need I go on?

(R51/session 60894; Shoreham District Ornithological Society) Created **August 2nd 2022** 

Impacts related to Water, Drainage and Flooding Section 5C: Water, drainage, and flooding From our perspective the higher level of discharges from new residences and facilities raises significant concerns about pollution in the river, particularly if treatment capacity is exceeded or fails. The likely higher flows from outfalls into the river Adur could impact riverside foraging habitat and the mudbank profile. We recommend that consideration be given to avoid detrimental effects on sensitive areas, for example to the low-lying river cliff habitat where Common Sandpipers are regularly recorded and to the riverbanks and mudflats further downstream that are of high ornithological value.

(R66/session 60910; West Sussex County Council (WSCC)) Created **August 2nd 2022** 

The site is, predominantly, at 'very low risk from surface water flooding. Localised Surface Water flood risk, associated management will need to be considered in detail within the specific development areas. The South Downs National Park Updated Level 1 and Level 2 SFRA identifies Shoreham Cement Works as being in an area susceptible to groundwater flooding due to the underlying geology (Alluvium deposits overlying Chalk) and its proximity to the River Adur which could result in tidal locking preventing the drainage of groundwater. The LLFA concurs with the statement in the Drainage and Flood Risk Report that "The SFRA identifies that risk of groundwater flooding at the site is deemed to be 'low' overall, however, it is recommended that further investigation is carried out into the likelihood of groundwater flooding, particularly where basement development is proposed". The LLFA also concurs with the recommendations regarding groundwater flooding to the site now and into the future is fluvial and tidal mechanisms. The Environment Agency lead on these aspects with respect to flooding and should be consulted upon key stages of any development proposed.