

Drawings

The following drawings are attached to support this report:

Drawing No. 17029-A-PL-01-RevA	Location Plan
Drawing No. 14001-A-PL-01-RevA	Exiting Site Layout
Drawing No. 17029-A-PL-02S-RevA	Proposed Site Layout with Surface Water Drainage

Flood Risk

The site is indicated on the attached Location Plan and is shown to lie in Flood Zone 1 on the Environment Agency's flood map. It is therefore at low risk from both tidal and fluvial flooding. There is a low risk of flooding from all other external sources and the concern with the development of the site is to ensure that adequate foul and surface water drainage systems are provided to protect the site itself from flooding and to ensure that they do not increase the risk of flooding elsewhere.

Foul Water Drainage

There is a private foul water sewerage system serving The Vinery to which a connection could be made but it is not proposed to provide separate foul drainage facilities to the new building.

Surface Water Drainage

At present all surface water drains off-site to local watercourses which flow south to Decoy Ponds, Black Ditch and the River Arun but percolation testing to BRE 365 was undertaken in late October 2015 to determine whether SuDS solutions incorporating infiltration could be used on this site for the new impermeable areas that will be formed. The local geology comprises Head Deposits over River Terrace and these strata can be a mixture of sand, silt and clay with some gravel and can be very variable in their proportions and ability to accept infiltration. Percolation rates were found to vary from 2.054×10^{-6} up to 1.010×10^{-5} m/s. No groundwater was encountered but the soil became quite damp at 1.65m below ground level.

The proposed development comprises a large new commercial/ industrial building with associated access and parking, together with a replacement office/workshop building. A system of concrete ring soakaways linked to geocells has been designed with access and parking on permeable surfaces. This will cater for a 1 in 100-year rainfall event including an addition for climate change as indicated on the attached MicroDrainage results. Should it be decided to hard surface the gravel parking at a later date, then additional concrete ring soakaways or geocells could be added to the system.

1640-R1

Draft 1

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