

F/22/93194 THE AGEAS BOWL, MARSHALL DRIVE, WEST END, SOUTHAMPTON, SO30 3XH

Full planning application for the erection of 172 dwellings, a 71-bedroom care home (Use Class C2), a 142-bedroom hotel (Use Class C1), a well-being centre (Use Class E / F2), improvements to existing stadium, new vehicular access, car parking, pedestrian circulation, together with associated tree planting, landscaping, SuDS and biodiversity enhancements (Amended description)

Ecology Comments on Drainage 11.1.24

Please note that in the applicant's response to previous points raised, some of EBC Ecology's comments have been attributed to the LLFA.

Although several of our outstanding comments can be addressed by condition and some positive modifications have been proposed, there is still **insufficient information** to demonstrate that the water quality of the ground water will be protected in the proposed overflow car park and to provide certainty that the required level of treatment of surface water runoff from the care home and canopy will be received.

Overflow Car Park

Discharge by infiltration is proposed in the proposed overflow car park which is currently predominantly a golf course with a small area of existing parking. The change of use of this land increases the pollution hazard to underlying ground water and connected surface water. However, site investigation tests have not been carried out to establish infiltration rates or the groundwater level to ensure there is a sufficient depth of unsaturated substrate present for the treatment of the surface water. Additionally, substrate analysis has not been carried out to assess if the substrate meets the required treatment design specifications for infiltration (pollutant attenuation potential and depth). Therefore, other currently unidentified and potentially undeliverable treatment measures may be required to mitigate the pollution hazard level and there remains an unacceptable level of uncertainty regarding this.

Care Home and Canopy

The applicant has stated that the existing 600mm diameter pipeline to which surface water enters from the care home and the canopy currently drains into the lakes (it is not clear if the inlet is to the first lake or the second). This is good news, especially if the inlet is to the first lake thus providing two additional stages of filtration but it is not shown on any plan. Plans only showing areas of the application site with proposed development have been provided. Therefore, the alignment of the existing drain, and the full length of the section to be diverted, are not shown on any plan as they are outside of the active development areas. The inlet of the 600mm diameter pipe to the lake however should be apparent on the drainage plans showing the lakes (e.g. on drainage strategy sheet 8) but is not. This needs to be shown to demonstrate that the surface water from the care home and canopy does indeed drain into the lake and therefore will receive the required level of treatment. For certainty, to ensure the runoff from these areas passes through the required level of filtration, this information should be provided prior to any permission being granted. The applicant has proposed rain gardens be incorporated into the care home building design which is welcomed.

Other comments

The following can be dealt with by condition as we believe the required changes/ level of detail can be accommodated within the existing layout of the scheme. However, any approved plans must not preclude the required changes and the relevant condition on any permission granted must reflect this.

The LLFA has previously recommended a condition (Appendix H) that satisfies the LLFA's requirements. Please note, EBC requires additional forms of filtration to protect water quality (beyond the SuDS manual requirements) as outlined in policy DM6. These requirements must therefore also be satisfied within a conditioned detailed surface water drainage scheme. The design of the lakes is essential to meet this requirement as these must be considered two forms of filtration to satisfy DM6. The applicant has confirmed that modifications to the existing lakes will take place, however their design must meet the design standards set out in the CIRIA SuDS manual to qualify as two forms of filtration and the relevant information including cross-sections and long-sections must be submitted to demonstrate this. Please note, the required modifications may be more significant than currently proposed such as dividing the lakes into zones to increase pollutant removal pathways and reducing hydraulic short circuiting.

Silt traps have been proposed within the manholes upstream of Basins 1 and 2 to address the lack of surface water treatment at source and limit silt entering the basins. However, the silt traps used within these traditional gully and pipe drainage systems can trap fauna such as amphibians (present in the area). Our preference would therefore be to have an open silt trap as forebays in Basins 1 and 2, to give any fauna which has fallen into the drainage system, some chance to escape. Ecological enhancements have been proposed within the basins in the latest submissions which are welcomed.

Summary

Therefore in summary we currently object to the drainage strategy, based on insufficient information to determine that the water quality of the ground water will be protected in the proposed overflow car park. Additionally, we cannot be certain that surface water runoff from the care home and canopy has the potential to receive the required level of filtration.

Sarah Boyd

Ecologist