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Flood and Water Management

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Our Ref: GBC/2022/092288
Date: 1 November 2022

Application No: 20221091

Location: Ascot Arms , Central Avenue, Gravesend, Kent DA12 5AW

Proposal: Application for approval of condition 3, 7, 8 and 12 attached to planning permission reference number 20220207 relating to a comprehensive Code of Construction Practice/Construction Management Plan covering all environmental impacts of this development, the implementation of archaeological field evaluation works, a detailed sustainable surface water drainage scheme and full details of any proposed earthworks or changes to ground levels

Thank you for your consultation on the above referenced planning application.

We have reviewed the Summary Drainage Report (prepared by Arc Engineers 04 October 2022). The drainage strategy proposes to discharge surface water via infiltration, using permeable paving and a geo-cellular soakaway.

Kent County Council as Lead Local Flood Authority have the following comments:

1. We have no objections to the proposed drainage in principle however additional ground investigation is required to support the use of infiltration. The infiltration rates calculated in the initial ground investigation report (4.22×10^{-6} m/s and 1.45×10^{-5} m/s) are within the typical infiltration rates provided in the CIRIA SuDS Manual (Table 25.1) for chalk (structureless), however the design infiltration rate of 9.36×10^{-6} m/s is outside of this range. It is recommended that soakage tests be compliant with BRE 365, notably the requirement to fill the test pit several times. The design should utilise a modified infiltrate rate and demonstrate that any soakaway will have an appropriate half drain time.

2. The half drain time has not been calculated as the structure is too full. Whilst not a requirement for those in association with the 1:100 year event to achieve half drained within 24 hours, KCC would expect for the time to be as close to this as possible. If it is not possible to achieve a half drain time of under 24 hours, KCC requests a further 10 year event to be run consecutively to the 1:100 in order to demonstrate the operational functionality of the features and possible issues of exceedance.

3. The exceedance plans show some flows directed away from the development site boundary. All exceedance must be contained within the site boundary to ensure that

there is no increase in flood risk elsewhere. We expect that optimisation could be made to the drainage networks to reduce exceedance volumes where it is necessary to do so.

This response has been provided using the best knowledge and information submitted as part of the planning application at the time of responding and is reliant on the accuracy of that information.

Yours faithfully,

Nicole Boakye

Flood Risk Project Officer
Flood and Water Management

Gravesham Borough Council