



Alison Webster
Gravesham Borough Council
Civic Centre
Windmill Street
Gravesend
Kent
DA12 1AU

Flood and Water Management
Invicta House
Maidstone
Kent
ME14 1XX
Website: www.kent.gov.uk/flooding
Email: suds@kent.gov.uk
Tel: 03000 41 41 41
Our Ref: GBC/2024/100644
Date: 10 June 2024

Application No: 20240402

Location: Huggens College , College Road, Northfleet, Gravesend Kent

Proposal: Demolition of existing buildings and erection of retirement living apartments (Use Class C3), together with the extension of the existing chapel and the provision of associated communal facilities and external amenity space, lodge keepers and guest accommodation, back-of-house facilities, parking, bicycle/mobility scooter parking, and associated works including the creation of a secondary, emergency access from College Road.

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

Kent County Council as Lead Local Flood Authority have reviewed the Flood Risk Assessment and Drainage Strategy prepared by AFP Structural and Civil Engineering Consultants dated April 2024 and have the following comments:

It is understood from the report that the surface water is to be managed through the use of raingardens, filter drains, permeable surfacing, geo-cellular soakaways and an infiltration basin.

1. Whilst we have no objections to the proposed drainage in principle at this stage we would emphasize that as part of the detailed design stage emphasize that additional ground investigation will be required to support the use of infiltration. It is recommended that soakage tests be compliant with BRE 365 within the location and at the proposed depths of the soakaway features. Detailed design should utilise a modified infiltrate rate and demonstrate that any soakaway will have an appropriate half drain time.
2. Further to this, we note that the ground water level in this area is close to the surface and that whilst the applicant has acknowledged that a minimum of 1m separation is required from the base of any infiltration feature and the ground water level we would expect for further information to be provided as part of a detailed design submission demonstrating the levels in this area.

3. As part of the detailed design stage we would expect to see final full network calculations and model details to demonstrate the drainage system's operation and performance.
4. We note that the site is located in a groundwater Source Protection Zone. Consultation with the Environment Agency early in the planning process is recommended to identify any constraints or specific requirements in this area that may impact the proposed SuDs methods.

Should the LPA be minded to grant permission, we would recommend the following conditions attached:

Condition:

Development shall not begin in any phase until a detailed sustainable surface water drainage scheme for the site has been submitted to (and approved in writing by) the local planning authority. The detailed drainage scheme shall be based upon the Flood Risk Assessment and Drainage Strategy prepared by AFP Structural and Civil Engineering Consultants dated April 2024 and shall demonstrate that the surface water generated by this development (for all rainfall durations and intensities up to and including the climate change adjusted critical 100 year storm) can be accommodated and disposed of within the curtilage of the site without increase to flood risk on or off-site.

The drainage scheme shall also demonstrate (with reference to published guidance):

- that silt and pollutants resulting from the site use can be adequately managed to ensure there is no pollution risk to receiving waters.
- appropriate operational, maintenance and access requirements for each drainage feature or SuDS component are adequately considered, including any proposed arrangements for future adoption by any public body or statutory undertaker.

The drainage scheme shall be implemented in accordance with the approved details.

Reason:

To ensure the development is served by satisfactory arrangements for the disposal of surface water and to ensure that the development does not exacerbate the risk of on/off site flooding. These details and accompanying calculations are required prior to the commencement of the development as they form an intrinsic part of the proposal, the approval of which cannot be disaggregated from the carrying out of the rest of the development.

Condition:

No building on any phase (or within an agreed implementation schedule) of the development hereby permitted shall be occupied until a Verification Report, pertaining to the surface water drainage system and prepared by a suitably competent person, has been submitted to and approved by the Local Planning Authority. The Report shall demonstrate that the drainage system constructed is consistent with that which was approved. The Report shall contain information and evidence (including photographs) of details and locations of inlets, outlets and control structures; landscape plans; full as built drawings; information pertinent to the installation of those items identified on the

critical drainage assets drawing; and, the submission of an operation and maintenance manual for the sustainable drainage scheme as constructed.

Reason:

To ensure that flood risks from development to the future users of the land and neighbouring land are minimised, together with those risks to controlled waters, property and ecological systems, and to ensure that the development as constructed is compliant with and subsequently maintained pursuant to the requirements of paragraph 175 of the National Planning Policy Framework.

Condition:

Where infiltration is to be used to manage the surface water from the development hereby permitted, it will only be allowed within those parts of the site where information is submitted to demonstrate to the Local Planning Authority's satisfaction that there is no resultant unacceptable risk to controlled waters and/or ground stability. The development shall only then be carried out in accordance with the approved details.

Reason:

To protect vulnerable groundwater resources and ensure compliance with the National Planning Policy Framework.

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,

Emily Neale

Graduate Flood Risk Officer
Flood and Water Management