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Our Ref: DDC/2021/083569
Date: 13 April 2021

Application No: 21/00402

Location: Land South West Of Sandwich Road, Sholden, Kent,

Proposal: Outline application for the erection of up to 117 dwellings with associated parking and means of access (all matters reserved except for access)

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 Revision P02 and Sustainable Drainage Statement prepared by BWB dated 5 March 2021 and agree in principle to the proposed development.

In principle we are satisfied with the drainage design where surface water is proposed to be infiltrated to ground. Desk-based BGS information indicates that the Chalk Bedrock geology is freely draining and highly compatible for infiltration SuDS.

The drainage design is currently based on assumed infiltration rates from soakage testing at the adjacent site. As part of the detailed design, we would recommend that site-specific infiltration testing is undertaken at the location of the proposed infiltration devices. It is recommended that soakage tests be compliant with BRE 365, notably the requirement to fill the test pit several times. Detailed design should utilise a modified infiltrate rate and demonstrate that any infiltration measure will have an appropriate half drain time.

We note that if permeable paving is proposed we would recommend that other underground services, such as foul sewers, are routed outside of areas of permeable paving or cross it in dedicated service corridors, particularly where sewers will be offered for adoption.

Where swales and basins are proposed, they should be designed with side slopes of 1 in 4, or where space is limited the slopes, the slopes should be no greater than 1 in 3. The design of these features should also consider access and maintenance arrangements of these features.

We would recommend the depth of basins/ponds within developments are not considerably deep (greater than 1.2 m deep). Whilst this would limit the amount of storage within the basin, we would recommend consideration of other approaches to

design, for example that geocellular tanks may be installed beneath the basin to provide any additional storage needed.

We would recommend that full consideration is given to the landscaping of the basins and promotion of multi-functional design. The current basin arrangement may not maximise the open space and biodiversity opportunities available.

At detailed design, final full network calculations and model details should be submitted to demonstrate the drainage system's operation and performance for the critical duration 1 year, 30 year, 100 year +20% and 100 year +40% storm intensities.

Should your local authority be minded to grant permission for this development, we would recommend the following conditions:

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 Revision P02 and Sustainable Drainage Statement prepared by BWB dated 5 March 2021 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 165 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,

John Burns

Senior Flood Risk Project Officer
Flood and Water Management