

My ref: FR/22-000248
Your ref: 22/02771/OUT
Date: 20/04/2023
Doc no: 201109015
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Fiona Bradley
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Cambourne Business Park
CB23 6EA

New Shire Hall
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Enterprise Campus
Alconbury Weald
PE28 4YE

Proposal: A hybrid planning application for:

a) An outline application (all matters reserved apart from access and landscaping) for the construction of: three new residential blocks providing for up to 425 residential units and providing flexible Class E and Class F uses on the ground floor (excluding Class E (g) (iii)); and two commercial buildings for Use Classes E(g) i (offices), ii (research and development) providing flexible Class E and Class F uses on the ground floor (excluding Class E (g) (iii)), together with the construction of basements for parking and building services, car and cycle parking and infrastructure works. b) A full application for the construction of three commercial buildings for Use Classes E(g) i (offices) ii (research and development), providing flexible Class E and Class F uses on the ground floor (excluding Class E (g) (iii)) with associated car and cycle parking, the construction of a multi storey car and cycle park building, together with the construction of basements for parking and building services, car and cycle parking and associated landscaping, infrastructure works and demolition of existing structures.

Land North Of Cambridge North Station Milton Avenue Cambridge Cambridgeshire

Comments from Lead Local Flood Authority (LLFA)

Dear Fiona,

Thank you for your re-consultation.

We have reviewed the following documents:

- Flood Risk Assessment and Drainage Strategy, PJA Civil Engineering Ltd, Ref: 05425-R-03-C-FRA Rev C, Dated: 6 June 2022
- Technical Note, PJA Civil Engineering Ltd, Ref:05425 Version E, Dated: 17 April 2023

Based on these, and following discussion with the applicant, as Lead Local Flood Authority (LLFA) we can **remove our objection** to the proposed development.

The above documents demonstrate that surface water from the proposed development can be managed through the use of green roofs on all flat roof areas and areas of permeable paving

provided in some areas of pedestrian access. A swale is proposed within the eastern part of the site and a proposed attenuation basin to the north. A rainwater harvesting tank is proposed in the north as well to assist in water management in parts of the site. Water will be discharged at the agreed rates of 2 l/s/ha from the site into the overflow from the first public drain, which carries water to the east towards the River Cam.

In further submissions, in the form of the Technical Note, it has been demonstrated that the system can be designed to accommodate the full 40% uplift for climate change allowances in the 1% Annual Exceedance Probability storm. This has increased attenuation areas, which can be accommodated within the constraints within the site.

We request the following conditions are imposed:

Condition

No laying of services, creation of hard surfaces or erection of a building shall commence until a detailed design of the surface water drainage of the site has been submitted to and approved in writing by the Local Planning Authority. Those elements of the surface water drainage system not adopted by a statutory undertaker shall thereafter be maintained and managed in accordance with the approved management and maintenance plan.

The scheme shall be based upon the principles within the agreed:

- Flood Risk Assessment and Drainage Strategy, PJA Civil Engineering Ltd, Ref: 05425-R-03-C-FRA Rev C, Dated: 6 June 2022
- Technical Note, PJA Civil Engineering Ltd, Ref:05425 Version E, Dated: 17 April 2023

and shall also include:

- a) Full results of the proposed drainage system modelling in the Q_{BAR} , 3.3% Annual Exceedance Probability (AEP) (1 in 30) and 1% AEP (1 in 100) storm events (as well as 1% AEP plus climate change), inclusive of all collection, conveyance, storage, flow control and disposal elements and including an allowance for urban creep, together with an assessment of system performance;*
- b) Detailed drawings of the entire proposed surface water drainage system, attenuation and flow control measures, including levels, gradients, dimensions and pipe reference numbers, designed to accord with the CIRIA C753 SuDS Manual (or any equivalent guidance that may supersede or replace it);*
- c) Full detail on SuDS proposals (including location, type, size, depths, side slopes and cross sections);*
- d) Details of overland flood flow routes in the event of system exceedance, with demonstration that such flows can be appropriately managed on site without increasing flood risk to occupants;*
- e) Demonstration that the surface water drainage of the site is in accordance with DEFRA non-statutory technical standards for sustainable drainage systems;*
- f) Full details of the maintenance/adoption of the surface water drainage system;*
- g) Permissions to connect to a receiving watercourse or sewer;*

- h) CCTV survey and assessment of the downstream network to demonstrate sufficient capacity to receive additional volumes of surface water;*
- i) Measures taken to prevent pollution of the receiving groundwater and/or surface water*

Reason

To ensure that the proposed development can be adequately drained and to ensure that there is no increased flood risk on or off site resulting from the proposed development and to ensure that the principles of sustainable drainage can be incorporated into the development, noting that initial preparatory and/or construction works may compromise the ability to mitigate harmful impacts.

Condition

No development, including preparatory works, shall commence until details of measures indicating how additional surface water run-off from the site will be avoided during the construction works have been submitted to and approved in writing by the Local Planning Authority. The applicant may be required to provide collection, balancing and/or settlement systems for these flows. The approved measures and systems shall be brought into operation before any works to create buildings or hard surfaces commence.

Reason

To ensure surface water is managed appropriately during the construction phase of the development, so as not to increase the flood risk to adjacent land/properties or occupied properties within the development itself; recognising that initial works to prepare the site could bring about unacceptable impacts.

Condition

Upon completion of the surface water drainage system, including any attenuation ponds and swales, and prior to their adoption by a statutory undertaker or management company; a survey and report from an independent surveyor shall be submitted to and approved in writing by the Local Planning Authority. The survey and report shall be carried out by an appropriately qualified Chartered Surveyor or Chartered Engineer and demonstrate that the surface water drainage system has been constructed in accordance with the details approved under the planning permission. Where necessary, details of corrective works to be carried out along with a timetable for their completion, shall be included for approval in writing by the Local Planning Authority. Any corrective works required shall be carried out in accordance with the approved timetable and subsequently re-surveyed by an independent surveyor, with their findings submitted to and approved in writing by the Local Planning Authority.

Reason

To ensure the effective operation of the surface water drainage scheme following construction of the development.

Informatives**CCTV Surveys**

A CCTV survey of the surface water drainage system, into which it is proposed to drain surface water from the site is required. The purpose of the survey is to:

- Survey all of the relevant pipework, opens section of watercourse and associated chambers and features, downstream to the confluence with the River Cam.
- Report on all defects, damage and deficiencies in respect of the elements of the system that it is possible to survey.
- Indicate any reasons why the survey could not be fully carried out.
- Provide recommendations for repair or improvement to the sections of the system surveyed.
- Produce a plan and preferably a video of the sections surveyed that indicates the date, time, location and distances surveyed and any significant observations with respect to flood risk.

Should it be found that the proposed discharge location was unsuitable, remedial action should be taken to ensure that the system is of suitable condition to receive the flows, or a viable alternative would be required.

OW Consent

Constructions or alterations within an ordinary watercourse (temporary or permanent) require consent from the Lead Local Flood Authority under the Land Drainage Act 1991. Ordinary watercourses include every river, drain, stream, ditch, dyke, sewer (other than public sewer) and passage through which water flows that do not form part of Main Rivers (Main Rivers are regulated by the Environment Agency). The applicant should refer to Cambridgeshire County Council's Culvert Policy for further guidance:

<https://www.cambridgeshire.gov.uk/business/planning-and-development/water-minerals-and-waste/watercourse-management/>

Please note the council does not regulate ordinary watercourses in Internal Drainage Board areas.

Green Roofs

All green roofs should be designed, constructed and maintained in line with the CIRIA SuDS Manual (C753) and the Green Roof Code (GRO).

Pollution Control

Surface water and groundwater bodies are highly vulnerable to pollution and the impact of construction activities. It is essential that the risk of pollution (particularly during the construction phase) is considered and mitigated appropriately. It is important to remember that flow within the watercourse is likely to vary by season and it could be dry at certain times throughout the year. Dry watercourses should not be overlooked as these watercourses may flow or even flood following heavy rainfall.

Yours sincerely,



Hilary Tandy
Flood Risk Business Manager

If you have any queries regarding this application please contact the Officer named at the top of this letter (contact details are above).

Please note: We are reliant on the accuracy and completeness of the reports in undertaking our review, and can take no responsibility for incorrect data or interpretation made by the authors.