Planning Consultation Response (Planning Applications)



Responding Officer:	Rachel Veysey Sustainable Drainage Engineer
Date:	27/09/2022
Planning Ref No:	22/02771/OUT
Description of Development:	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

Cross one:

	The development proposed is acceptable subject to the imposition of the condition(s) outlined below.
х	The development proposed is unacceptable and should be refused for the reason(s) set out below.
	It is not possible to comment on the proposed development and the additional information set out below will be required in order to provide comments.

Comments

The following documents have been reviewed in assessing this application:

Environmental Statement Volume 1 Main Report, Section 10 Flood Risk and Drainage (June 2022)

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Appendix 10.1 Cambridge North Development Flood Risk Assessment and Drainage Strategy (June 2022)

1 Surface Water Drainage

Overall there are a number of deficiencies which need to be addressed by the applicant to ensure the development is policy compliant.

1.1 First Public Drain

Section 10.64 of the Environmental statement states that details of the First Public Drain Overflow downstream of the site were not available.

Previous investigations detailed that the culvert where it passes under the railway line would likely need some repairs. It must be shown at application stage that the discharge point is suitable by undertaking a condition survey of the downstream network or that there is an alternative viable discharge point.

There are proposals for a new alignment to part of the First Public Drain overflow where it passes under the development site. The alignment introduces a number of 90 degree bends. This is not satisfactory and has previously been raised in the pre applications stages as being unacceptable. It will likely impact on culvert capacity and increase the risk of blockage as well as likely speed up the rate of degradation to the existing culvert by introducing additional turbulence in the culvert under the railway line.

1.2 Climate change allowances

Reference is made to the use of a lower climate change allowance for some buildings. Whilst we recognise commercial buildings will be constructed with a shorter design life, following Eurocodes the design life will be at least 50 years, this means that it will be necessary to design for the building to still be in use up to year 2075. Commercial use buildings are now entering the 2070 climate change period (from 2061 onwards) and should use the relevant climate change allowances, there is not a scenario where it will be appropriate to use the lower 20% or 25% climate change allowance for modelling the 1% or 3.3% annual exceedance events. Additionally the 3.3% annual exceedance event must be incorporated into the surface water drainage scheme.

1.3 Discharge Rates

It is proposed that the majority of catchments discharge at 2l/s/ha with the exception of existing catchment area 5 which is set to 3.3l/s/ha. This is acceptable and in line with current policy.

We would encourage the applicant to consider if any changes are proposed to catchment 5 that opportunities for betterment to the discharge rate must be provided.

1.4 SuDS

The design of the SuDS do not go far enough, this is a high density development therefore there should be a big emphasis on using interception storage wherever possible close to where rain falls. We see no reason why green roofs are not used more widely along with rain

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gardens and permeable paving which overall are lacking. There is still a large reliance of tanks, these appear very constrained and we are concerned with the deliverability of them without impacting on wider landscape proposals or SuDS measures. The need to use the site efficiently for sustainable drainage purposes should also be driving the building and landscape designs to some degree.

The approach to SuDS should seek to improve water quality before it goes into the First Public Drain which ultimately outfalls into the River Cam. The application will need to demonstrate using the CIRIA SuDS Manual Simple Index Assessment Method for water quality that all discharges will meet the minimum water quality mitigation requirements.