
10669 Land at Bicester Road, Kidlington

Technical Note 9 Rv1: Drainage Response to Council Comments

9th June 2022

1 Introduction

- 1.1 This technical note reviews the comments provided by Oxfordshire County Council (11th May 2022) and Cherwell District Council (6th April 2022) on the Flood Risk Assessment and Drainage Strategy Plan submitted for outline planning.
- 1.2 The comments proved by the drainage officers are noted in *italics* with Brookbanks response noted in blue.

2 Oxfordshire County Council's Drainage Comments

- 2.1 *Oxfordshire's objection comments were provided by Kabier Salam, LLFA Engineer on the 11th May 2022. The reasons for objection are in italics with Brookbanks response in blue.*
- 2.2 *Phasing plan to be provided which the reserved matter application will follow, clearly stating the boundary of each phases. Each phase should consider flood risk and should have its own drainage strategy in place without relying on the other phases. It's understood so far that there will be two phases however this will need to be made clear on the phasing plan to ensure its followed during the reserved matter applications.*
- 2.3 No phasing of the site has been determined as the application is still at outline planning stage. Any phasing of the site will accommodate the proposed drainage strategy to ensure that the appropriate drainage is constructed and operational before occupation. This ultimately can be controlled through condition.
- 2.4 The order of the construction of the drainage network will be clearly identified and followed at reserved matters as outlined within the Construction Environmental Management Plan which would be within a condition.
- 2.5 *Existing watercourse capacity to be confirmed and whether it can take the proposed surface water discharge rates. Ownership details needs to be provided and consent to make the proposed drainage connection.*
- 2.6 The watercourse which surface water will discharge into currently drains the site at greenfield runoff rates (2.10l/s for the 1 in 1 year and 7.89l/s for the 1 in 100 year) and does not have an associated flood zone. This shows that the watercourse has capacity for the existing flows and volume of surface water draining into it.
- 2.7 The SuDS proposed for the site have been designed to discharge at QBAR (2.47l/s), a significant reduction on the current 100 year runoff rate. By restricting flows and retaining surface water within the basins the volume of water discharge is controlled and will therefore will not overwhelm the watercourse.

- 2.8 As the watercourse lies within the site ownership, consent is not required to discharge into the network, however a license would be applied for any new structure with the LLFA at the time of detailed design submission.

3 Cherwell District County Council's Drainage Comments

- 3.1 Cherwell's comments were provided by Tony Brummell on the 6th April 2022. The reasons for objection are in *italics* with Brookbanks response in blue.
- 3.2 *Flood Risk Assessment Fluvial Impact Table 5.1. The potential for fluvial impact is said to be none but the commentary suggests that there is potential. I assume this is a typo but please clarify.*
- 3.3 The site does lie entirely within Flood Zone 1, therefore there is no risk of fluvial flooding. The flood extent from the River Cherwell is adjacent to the site boundary, but does not impact the site. The word potential can be removed so that the sentence will say 'the River Cherwell is located approximately 550m north east of the site and its associated flood zone lies outside of the proposed development'.
- 3.4 *Flood Risk Assessment Para 5.4. Small areas of the site are shown to be at surface water flood risk. Local mitigation is required to relieve this.*
- 3.5 The proposed SuDS network will attenuate all surface water runoff from the development site. This will remove the low risk of surface water flooding along the eastern boundary of the site and relocate the volume of ponding into the SuDS basin.
- 3.6 *Flood Risk Assessment Section 7. It is noted that the site is necessarily divided into two sub-catchments. The plan at Appendix A shows two single point attenuation basins, one for each sub-catchment. Whilst this is technically acceptable it is not in compliance with Oxfordshire Local Policy which seeks linear attenuation in preference.*
- 3.7 Basin A has been designed to fit into the topography of the site. If the basin were to become a more linear feature along the eastern boundary, it will require unnecessary and extensive earthworks and negatively impact the development area.
- 3.8 Basin B could be elongated in some form along the eastern boundary where the proposed swale feature is currently illustrated. This can be explored in greater detail through the reserved matters submissions, after the outline permission is granted. There will be a condition attached to any grant of outline planning permission which will require submission of a detailed drainage scheme for approval.
- 3.9 Both Basins A and B cannot become linear features that run parallel to the onsite watercourse as this would impact the location of where the spine road would be able to cross the watercourse and connect the two residential parcels. The road is currently located in the east of the development site in order to fulfil the Council's now approved Development Brief.
- 3.10 *The Council will be seeking to achieve as much open channel surface water drainage as is practical to reduce the extent of piped surface water sewerage. The Council will be further seeking to have these linear corridors within suitably wide open spaces so that they can be readily maintained and the open space adopting*

Authority will become the riparian owner. If single point attenuation basins are accepted, notwithstanding the above comment, these too should be located in adoptable open spaces so that they can be readily maintained by the adopting Authority.

- 3.11** A main conveyance channel has been proposed within Catchment B, to provide some additional open channel drainage. At reserved matters additional conveyance features can be included within the design, where possible to reduce the piped network, with over the edge drainage where roads are not fronted on both sides.