

LAND NORTH OF RAILWAY HOUSE STATION ROAD NORTON

RESPONSE TO OBJECTION BY BERKSHIRE, BUCKINGHAMSHIRE AND OXFORDSHIRE WILDLIFE TRUST

1. Introduction

- 1.1. The Wildlife Trust has a concern about the potential indirect impacts on the nature conservation interest of the Cradle and Grounds Farm Banks Local Wildlife Site (LWS) and the River Swere, due to the possible changes to the hydrology (*water quality in particular, and water quantity*).
- 1.2. This concern relates both to the construction phase of the development and the long term operational phase and is due to the close proximity of the LWS in a downstream direction from the proposed development (*some 800m downstream*).
- 1.3. The consultation response goes on to indicate that the design of the SUDS scheme must take into account the need for ensuring that there is no change in either water quality or water quantity leaving the site and that the scheme will be maintained and replaced so that such benefits remain in perpetuity.
- 1.4. This note has therefore been produced to address this concern. It has been prepared jointly by Graham Eves BSc CEng MICE MCIHT, a Consultant with PFA Consulting specialising, inter alia, in drainage and flood risk matters and Dr Holly Smith MCIEEM a Director of Harris Lamb's Environmental Team specialising, inter alia, in ecological and biodiversity impact assessments.

Location of the proposed development, and potential hydrological pathways between the development and the LWS.

- 1.5. The site lies at a level of approximately 153 AOD with the majority of the site falling to the north east towards a small watercourse which is approximately 150m north east of the site. This small watercourse is a tributary of the River Swere.
- 1.6. Part of the site also falls in a south easterly direction to a further watercourse some 250m from the site which is also a tributary of the River Swere.
- 1.7. These two watercourses join a short distance west of the LWS and then flow in a south-easterly direction, forming the boundary of the LWS, before joining the River Swere some 1.2km southeast of the site.
- 1.8. The Flood Risk Assessment which supports the planning application identifies that a SuDS arrangement utilising infiltration (*soakaways and permeable paving*) provides a suitable means of disposing of all surface water from the site and the introduction of this SUDS system within the site will intercept overland exceedance flows Accordingly, as at present, there will be no direct surface hydrological pathway between the site and these tributaries of the River Swere.

- 1.9. The Flood Risk Assessment goes on to identify that the underlying bedrock geology is Marlstone rock formation which is a sandy shell-fragmented and ooidal limestone interbedded with sandstone. Any sub-surface pathways through this bedrock will not alter as a result of the development

Water Quantity

- 1.10. The quantity of rainwater which presently falls on the site will not change as a result of the development and the use of infiltration features ensure that there is no change in water quantity leaving the site either via surface or sub-surface pathways.

Water Quality

- 1.11. The site is presently arable land where the fertilisers and pesticides are regularly used as part of existing standard agricultural practices. The development of the site for residential purposes will result in a significant reduction in the use of pesticides and agricultural fertilisers.
- 1.12. Rain water falling on roofs will flow directly to soakaways and will therefore be “clean” water. The Flood Risk Assessment identifies that permeable paving will be used for roads and private driveway surfaces. This will provide “source control” removing any potential pollutants which may be present on the road and private driveway surfaces. On this basis it is clear that the proposed development of the site for residential purposes will represent a potential improvement in water quality generally.

Construction Phase

- 1.13. It is accepted that, during the construction phase, activities will take place which may have the potential to have an adverse impact on water quality in particular – such as spillages, and sediments being tracked out onto the adjacent highway (*and then finding their way into a drainage system which might discharge to these watercourses*).
- 1.14. This is not an issue unique to this particular site and its downstream sensitivities, and can adequately be addressed by a requirement for a Construction Management Plan to be submitted and approved prior to development commencing with such a CMP identifying measures to prevent any pollution or run off from the site during construction activities.

Long Term Maintenance

- 1.15. CIRIA publication C753, The SuDS Manual, sets out the principles of maintaining SuDS systems with the objective of managing both water quantity and water quality. There will be “common” SuDS features within the development (such as permeable paving access roads and an infiltration basin) and SuDS features which are specific to individual properties (permeable paving driveways, roof soakaways. A Management Company will be responsible for the maintenance of the common features whilst the individual householders will be responsible for the property specific features.
- 1.16. As this is an outline planning application, a planning condition requiring details of the SuDS arrangements to be submitted and approved by the LPA prior to development commencing, would be an appropriate condition. It would therefore also be appropriate for such a condition to require details of a maintenance regime to be included in accordance with the principles set out in the SuDS Manual.

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