CD8.6

Ecology Comments

Proposal: Outline application for the erection of up to 215 dwellings with public open space, structural planting and landscaping, surface water flood mitigation and attenuation and vehicular access point from Hempsted Lane. All matters reserved except for means of vehicular access.

Location: Land At Hill Farm, Hempsted Lane, Gloucester

Additional information submitted

- Biodiversity Net Gain Assessment and metric July 2022
- Precautionary Working Method Statement Great Crested Newt July 2022
- Ecological Impact Assessment March 2020 (Updated June 2022)

Policy and Legislation

National Planning Policy Framework (NPPF) Para 170 – 182 (Conserving and Enhancing the Natural Environment),

Cheltenham and Tewkesbury Joint Core Strategy 2011 - 2031) (adopted December 2017)) Context:

· SD9 Biodiversity and Geobiodiversity

· INF3 Green Infrastructure

· Wildlife and Countryside Act 1981 (as amended)

· Conservation of Habitats and Species Regulations 2017

· Natural Environment and Rural Communities (NERC) Act 2006

· Protection of Badgers Act 1992

Comments

Ecology Background

The 12.22Ha site comprises three arable fields that are bordered by hedgerows, treelines, dry ditches and scrub. A drainage pond is located within the southern extent of the site. The site is also bordered by a stream to the south.

A Preliminary Ecological Appraisal (PEA) was produced by Wardell Armstrong LLP (WA) in September 2019 followed by further surveys for badger, bats and GCN have been undertaken. An updated walkover survey was undertaken by WA in April 2022. Updated badger and GCN assessments were undertaken in April 2022. Updated surveys for bats and are being undertaken in 2022 and the report will be updated on

completion. The bat surveys in 2019 identified that the site is used for foraging and commuting by at least eleven species of bat. Pond scoping surveys in 2019 for GCN identified twelve waterbodies within 500m of the site which have potential to support GCN. Pond 6 within the red line boundary was assessed as offering suitable habitat for GCN in April 2022 but was found to be dry in early-May. An EcIA, BNG report and PWMS were also subsequently prepared. A CEMP and LEMP are to be prepared.

The EcIA has identified that the proposed development is likely to have a significant adverse effect on the Cotswold Beechwoods Special Area of Conservation (SAC) from an increase in recreational pressure, however this can be mitigated for by the provision of greenspace within the proposed development. No significant adverse effects are anticipated on the Severn Estuary SAC/SPA/Ramsar as a result of the proposed development.

The non-statutory sites of nature conservation concern: Netheridge Reserve & Black Ditch U, The Rea, Hempsted U; are both located downstream and adjacent or in close proximity to the site and therefore could be adversely affected during the construction works and operational phases as a result of pollution entering the stream along the south-western boundary of the site. A best practice dust mitigation plan will be implemented during construction to prevent dust soling effects on these designations. Best practice guidelines as outlined in the CIRIA SuDS Manual 2015 will be followed to prevent damage and pollution to the retained waterbodies/courses on site and thus the designations. These will be delivered via a CEMP for the site. During operation, water quality will be treated prior to discharge and the proposed development will implement a surface water drainage system which provides sustainable drainage measures. No footpaths will be created within 10m of the stream along the south-western boundary of the site which will avoid damage and limit disturbance to this habitat. A LEMP will be developed for the site which will set out management prescriptions for the areas of public open space and ensure that appropriate measures are undertaken during implementation to safeguard the stream and any water voles which may be present.

Without mitigation measures, the proposed development is considered to result in a number of significant adverse effects on important ecological features. These include the permanent loss of some species-rich hedgerows from the site, potential damage to adjacent habitats within the site from machinery and dust arising from construction and potential pollution to the stream along the south-western boundary. The drainage pond will be retained.

Habitat loss within the site will be mitigated by a range of habitat creation (including hedgerow planting) and enhancement measures as part of the Public Open Spaces being created within the site. A LEMP will be prepared to ensure that all habitat measures are implemented and managed appropriately in future. A range of other enhancement measures undertaken for wildlife will deliver a net gain for species including bats, common reptiles, common amphibians and hedgehogs. Potential effects as a result of dust and pollution will be mitigated for by best construction practices delivered through a CEMP.

Without mitigation, significant adverse effects on birds, bats, badger, great crested newt, hedgehog, common reptiles, otter and water vole, European eel, Atlantic salmon and white clawed crayfish are anticipated. Mitigation measures have been designed to avoid impacts on and contravening the relevant legislation for each protected species considered to be an important ecological feature relevant to the site.

Habitat loss within the site will be mitigated by a range of habitat creation and enhancement measures as part of the Public Open Spaces being created within the site. A LEMP will be prepared to ensure that all habitat measures are implemented and managed appropriately in future. A range of other enhancement measures undertaken for wildlife will deliver a net gain for species including bats, common reptiles, common amphibians and hedgehogs.

Mitigation includes the implementation of a PWMS for protected species during vegetation clearance; minimising noise, dust and light emissions during construction; preventing damage to retained habitats during construction; habitat creation and enhancements; a sensitive lighting scheme; and appropriate management of retained and created habitats post-construction. Additionally, the proposed development will provide new habitats and enhancements for species that will overall have a beneficial effect on biodiversity and contribute towards a net gain as stated in the NPPF.

Ecology Issues

Further to my previous letters regarding the ecological aspects of this planning application, I have outlined ecological points of particular note below:

The badger report details badger usage of the site and mitigation methods, should the badger sett remain in use and therefore need closing under licence to Natural England. Further monitoring of the badger sett will be required to assess badger usage and if found to be in use, this will inform a licence application. Mitigation measures as outlined in the badger report should be added to the Construction Ecological Management Plan (CEMP) and should include placing ramps into any pits/trenches excavated to ensure that badgers can escape. Should the sett appear to fall into disuse, a careful method of closing the sett is still necessary as a precaution and badger monitoring results plus proposed sett closure methodology (even if it seems disused) should be included in the CEMP. Should the outlying sett be in use and hence a Natural England licence to disturb/destroy a sett be required, then the LPA would need to see a copy of the licence prior to commencement of works.

It is noted that access was not granted to re-assess the other ponds for suitability for GCN within 500m of the site, therefore only Pond 6 (on site) has been subject to update Habitat Suitability Index (HSI) assessment in 2022. Pond 6 was found to have dried out by early May, therefore making it less suitable for GCN than the ‘average’ HSI value would suggest and making it not possible to complete a dedicated GCN survey. Although the majority of the site comprises arable, which is not suitable for amphibians, the hedgerow habitats around the edge do provide

suitable habitat and therefore works would need to proceed in accordance with the Precautionary Working Methods Statement (to include consideration of common toads (NERC Priority Species) and reptiles) that can form part of the CEMP.

Regarding the GCN PWMS, it should state that the ECOW will be a GCN licensed ecologist or accredited agent. Although this document mentions that 'Common toad are also listed as a Priority Species of Principal Importance, under Section 41 of the Natural Environment and Rural Communities Act 2006 (England)' in the Appendix, this fact should be stated after the legislation information on GCN nearer the front of the report to highlight the legal importance of giving due consideration to common toads within the mitigation.

The bat activity surveys revealed highest activity levels along western and central field boundaries (coinciding with the most ecologically valuable hedgerows) plus use of the site by particularly light sensitive species comprising greater and lesser horseshoe bats, barbastelle bats, brown long-eared bats and Myotis species. These results will be refined through further bat activity surveys in 2022, which will inform the lighting plans for the site and these lighting plans should form part of the CEMP.

Should the mature trees with bat roost potential located in hedgerows 6 and 7 need tree surgery/removal then further bat surveys will be required to confirm presence/absence of roosting bats (the results of which should be submitted to the LPA and could be added to the CEMP). Should an EPS mitigation licence for bats be required, then the LPA would need to see a copy of the licence prior to commencement of works. As it is likely that these trees will be retained, particular attention to avoid any illumination around these trees and preservation of their root protection zones along with those of retained hedgerows is necessary as outlined in the EcIA.

Water voles and otters could be present in the stream along the south-western boundary, and it is welcomed that this area and a large buffer along it will be retained and enhanced for wildlife as part of public open space plans. However, care will need to be taken during landscaping works to create public open space, to avoid damaging the stream habitat. It is advised that the footpath is located at least 10m from the stream as recommended in the ECIA. Suitably designed SUDS will be necessary to ensure that this valuable watercourse (that links to Netheridge Nature Reserve where water voles are present) will remain unpolluted during both construction and operational phases.

Consideration of nesting birds and their habitats as outlined in the ECIA is to be included in the CEMP.

I have reviewed the Biodiversity Net Gain (BNG) report (which includes habitat descriptions and condition assessments and uses the current DEFRA metric), which identifies a biodiversity unit gain of 3.43 habitat units (13.84% net gain) following completion of baseline and on-site post intervention calculations. Creation and ecological enhancement of existing hedgerows has resulted in a gain of 3.92 hedgerow units (31.81% net gain). [The BNG metric spreadsheet notes 2.09 hedgerow units, so this discrepancy between metric and report needs clarification,

although it is not expected to significantly affect the positive BNG results.] Therefore, the development has achieved positive biodiversity net gain and landscaping recommendations should be supported in the Landscape and Ecological Management Plan, which is to be prepared to support the BNG assessment and ecological enhancements outlined in the ECIA.

Habitat Regulations Assessment

The shadow Habitat Regulations Assessment (HRA) of Wardell Armstrong LLP concluded that there would be no direct impacts on European sites, and due to distance, no impacts from noise or lighting and these were scoped out from assessment in the report. The Stage 1 assessment screened out likely significant effects (LSEs) as a result of changes to air quality, water quality and levels and recreational impacts to Walmore Common SPA and the Severn Estuary SAC/SPA/Ramsar site. However, the shadow HRA did not consider the functional linkage between Alney Island LNR and Severn Estuary SPA, and it is possible that any qualifying (avian) species of Severn Estuary SPA residing at Alney Island LNR could be subject to increased recreational pressures, as this site does lies relatively near to the proposed development. Thus a pathway for LSEs has been identified for Cotswold 3 Beechwoods SAC and Severn Estuary SPA (via its link to Alney Island LNR), because of an increase in recreational pressures in-combination with the site allocations set out in the emerging Gloucester City Plan (GCP) and neighbouring authorities' emerging and current Local Development Plans.

Mitigation will comprise the provision of public open and green spaces within the project area which can be used by the new residents (in addition to existing residents in surrounding residential areas) on a regular day to day basis. In addition, Homeowner Information Packs (HIP) should be given to all residents of the proposed development. These packs must contain information to make new residents aware of the sensitivities of nearby sites of nature conservation concern including Netheridge Reserve, Alney Island LNR, Cotswold Beechwoods SAC and Severn Estuary SPA, SAC, RAMSAR and how to act responsibly to avoid disturbing wildlife (including: residents should be advised to keep dogs on leads at the aforementioned sites and recommendation to keep cats in at night to reduce hunting pressure on wildlife). In addition, a map of alternative public open spaces including those in the development and their foot/cycleway links plus public transport links needs to be included along with guidelines on wildlife gardening and leaving the pre-cut 13x13cm hedgehog tunnels in fences to allow their movement across the estate. Following the implementation of these mitigation measures, it is anticipated that there will be no adverse effects on the integrity of the European sites from an increase in recreational pressure as a result of the proposed development.

Conclusion

The development and landscaping has been designed to achieve positive BNG and ensure that protected species mitigation is complied with to avoid contravening the aforementioned wildlife legislation, providing the conditions set out below are complied with prior to commencement.

Conditions required

1. Construction Ecological Management Plan to be submitted to the LPA, to include consideration of retained stream (including SUDS to avoid polluting the stream), pond, hedgerows and trees, nesting birds, bats (including bat sensitive lighting plan showing lux levels), badgers, GCN and common toads, hedgehogs, water voles and otters.

A copy of the approved CEMP needs to be given to the contractors on site to ensure that everyone involved is aware of the requirements to protect wildlife and habitats.

(It is noted that the PWMS for GCN along with some mitigation details for other protected species/habitats have been submitted as part of the ECIA and this can be added to the CEMP for completeness, so all information re mitigation is in one document for ease of reference to site staff.)

2. Any protected species licences required (i.e. for badgers/bats) must be submitted to the LPA prior to commencement.

3. Final BNG hedgerow values in BNG report and BNG metric spreadsheet differ and this needs clarification, although it is not expected to significantly affect the positive BNG result.

4. The ecological enhancement measures outlined in the latest ECIA (Section 7) should be expanded on in the form of a Landscape Ecological Management Plan (LEMP) with should be applicable for a minimum period of 10 years and include monitoring regime to ensure habitats establish well and animal shelters remain in good state.

• Responsible person/organisation needs to be stated and method by which protection of created habitats/open spaces will be secured.

• The LEMP needs to include water vole enhancements (e.g. suitable planting around pond for water vole and ensuring stream vegetation managed to be suitable for water vole), enhancements of landscape for bats (e.g. promote retention of oak tree for bats, retention of hedgerows and planting of native hedgerows with more mature specimens to native shrubs and trees to enable quicker establishment), birds, reptiles, amphibians and hedgehogs (e.g. bat & bird boxes to be installed on retained trees and buildings, reptile &

amphibian shelters (log piles/hibernacula), separate hedgehog shelters (log/leaf piles)). LEMP to include specification of hedgehog passes (13x13cm gaps at base of fences) to be cut into fencing across the site to make development more permeable to this species.

• The LEMP should support the BNG calculations outlined in the BNG report.

• The LEMP needs to be submitted to the local planning authority for approval prior to determination.

5. Homeowner Information Packs must be given to all residents at the proposed development as outlined above. A sample HIP must be submitted to the Local Planning Authority to review, and approval be obtained prior to first occupation and delivery to new residents of the development.

Dated 08/08/2022