



SOMERTON FARMYARD FRITWELL ROAD

ECOLOGICAL IMPACT ASSESSMENT (EcIA)



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QUALITY ASSURANCE

This report has been prepared in accordance with the Chartered Institute of Ecology and Environmental Management (CIEEM) Guidelines for Ecological Report Writing (2nd Edition, December 2017).

The facts stated in this report are true to the best of our knowledge and belief, and any opinions expressed are held genuinely and in accordance with the accepted standards of the profession. ACD Environmental Ltd is a CIEEM Registered Practice.

Client:	Laxton Properties
Site/job:	Somerton Farmyard, Fritwell Road
Author:	Charlene Watts
Technical review:	John Constable



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1 EXECUTIVE SUMMARY

Purpose of report	<p>To assess the ecological impacts of the proposed development at an area of land known as Somerton Farmyard, Fritwell Road, Somerton, Oxfordshire identifying any 'significant effects' on important ecological features (including designated sites or protected species), identifying mitigation and/or compensation measures required, and to outline how these could be secured.</p> <p>The report also outlines how the proposed development will achieve Biodiversity Net Gain.</p>
Description of proposed development	<p>The proposed development is for the demolition of existing barns and erection of 10 new residential dwellings with associated landscaping and open space.</p> <p>Areas of land extending east and west of the main farmyard are also included in the red line boundary, providing footpaths and an allotment.</p> <p>A parcel of land to the south-west of the Application Site will provide Public Open Space.</p>
Brief description of the Site	<p>The Application Site is approximately 1.3ha. The main farmyard comprises predominantly hardstanding and bare ground lined with gravel and supports six agricultural barns with small patches of modified grassland, treelines, a native hedgerow, and scattered trees.</p> <p>The area extending east supports predominantly bare ground and tall ruderal vegetation; the area extending west comprises modified grassland.</p> <p>The south-western parcel supports modified grassland and a native hedgerow.</p>
Designated nature conservation sites	<p>The Application Site falls within the Zone of Influence of Bestmoor SSSI and Ardley Cutting and Quarry SSSI, both of which are statutory designated sites.</p> <p>The Application Site is within 2km of one Local Wildlife Site known as Meadow west of Bestmoor.</p>
Key habitats	<p>Key habitats within the Application Site are the scattered trees, treelines, and native hedgerows.</p>
Key species	<p>The Application Site has potential to support individual or low numbers of amphibians, badger and hedgehog, bats, and birds.</p>
Key Impacts	<p>The proposed development will result in the loss of a broadleaved treeline (total 12 trees), a mixed treeline (total three trees lost with one retained), and the loss of three scattered trees.</p> <p>Other habitats lost are of low or negligible ecological value, including patches of modified grassland, bare ground, tall ruderal and developed land.</p>
Mitigation	<p>Trees have been retained wherever possible. Also included in proposals are areas of wildflower grassland and species-rich native hedgerow to mitigate for the loss of modified grassland and treelines.</p>

Compensation	Extensive tree planting is proposed which will compensate for the loss of trees required to facilitate the proposed development.
Enhancements	The proposed development will incorporate a minimum of 10 bird boxes, a minimum of five bat boxes, bee bricks, hedgehog highways and a log pile within the grassland open space.
Conclusion	The proposed development will comply with Paragraph 187-195 of the NPPF, and Policy ESD 10 of the Cherwell District Local Plan.

2 INTRODUCTION

2.1. This report provides an assessment of the ecological effects of the proposed development at a parcel of land known as Somerton Farmyard, Fritwell Road, Somerton, Oxfordshire, hereafter referred to as the 'Application Site' (see **Image 1**). The principal author of this report is Charlene Watts. The client is Laxton Properties.

Background

- 2.2. The Application Site is approximately 1.3ha in size and is located in the village of Somerton, within the Cherwell district of the county of Oxfordshire. The Ordnance Survey Grid Reference for the centre of the site is SP 50167 28686.
- 2.3. The Application Site (**Image 1**) currently functions as an active farmyard which supports six agricultural barns used for outdoor storage of produce, livestock, and machinery. There are patches of modified grassland and bare ground scattered with gravel and ruderal vegetation throughout, a native hedgerow with trees, a bank of broadleaved deciduous trees and lines of coniferous and mixed trees throughout the Application Site.
- 2.4. The red line boundary was extended during the design stage of the proposed development to incorporate land extending to the east and west of the main farmyard. The land to the east of the main farmyard comprises a bare ground and gravel track which opens up onto a storage yard; the yard is largely bare ground and haybale storage. This is gifted land for allotments.
- 2.5. The land to the west of the main farmyard is a strip of modified grassland, this forms the proposed footpath into the village of Somerton.
- 2.6. The parcel of land to the south-west of the Application Site comprises modified grassland and supports a native hedgerow. This parcel will function as Public Open Space for new and existing local residents and is intended to be gifted to Cherwell District Council following completion of the works.
- 2.7. The client intends to submit a planning application, which this report will accompany, for the demolition of existing barns and erection of 10 new residential dwellings with associated landscaping and open space.

Competence

- 2.8. This report has been written by Charlene Watts, Ecologist at ACD Environmental Ltd. Charlene has undertaken various surveys, ranging from Extended Phase 1 Habitat Surveys to Phase 2 surveys for protected species, including bats and reptiles. Charlene has written various reports, including Ecological Impact Assessments (EclAs), Bat Technical Notes, and Landscape and Ecological Management Plans (LEMPs). Charlene is a Qualifying Member of the Chartered Institute of Ecology and Environmental Management (CIEEM).
- 2.9. A Technical Review of this report has been undertaken in line with ACD Environmental Ltd's Quality Assurance procedures. The review was carried out by John Constable, Managing Director of ACD Environmental Ltd.

Purpose of the report

- 2.10. The purpose of this Ecological Impact Assessment (EclA) is as follows:
- To identify and describe all potentially significant ecological effects associated with the proposed development
 - To set out the mitigation measures required to ensure compliance with nature conservation legislation and relevant planning policy, and to address any potentially significant ecological effects
 - To identify how mitigation measures will/could be secured
 - To identify any significant residual ecological effects and set out any compensation measures proposed to address these
 - To identify appropriate enhancement measures in order to achieve Biodiversity Net Gain
 - To set out the requirements for post-construction monitoring

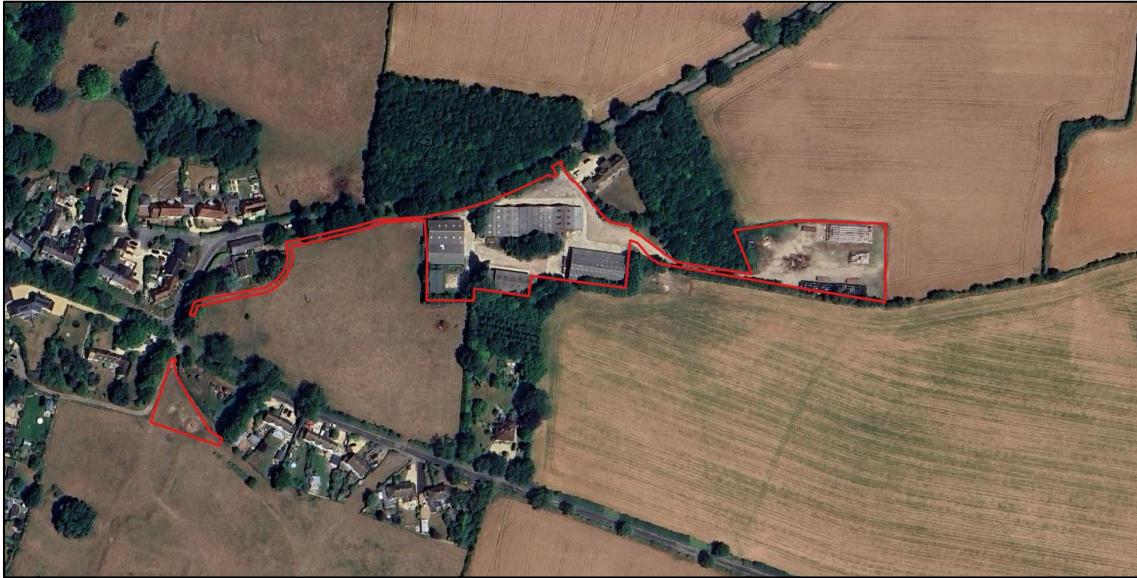


Image 1: Application Site location and approximate site boundary shown in red. Map data (2024): QGIS.

3 PLANNING POLICY AND LEGISLATION

Legislation

3.1. The following pieces of legislation are of specific relevance to this assessment:

- The Environment Act 2021¹. This piece of legislation is of relevance because all planning permissions granted in England are mandated to deliver at least 10% Biodiversity Net Gain from 12th February 2024 (unless exemptions apply and small sites were mandated on 2nd April 2024, neither of which are applicable to the Application Site).
- The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019². This piece of legislation is of relevance because the Application Site has potential to support European Protected Species.
- Wildlife and Countryside Act 1981³ (as amended, including by the Countryside and Rights of Way Act 2000). This piece of legislation is relevant because the Application Site is within the zone of influence of Sites of Special Scientific Interest (SSSI), which are protected in England under this Act.
- Natural Environment and Rural Communities (NERC) Act 2006⁴. Section 41 includes lists of habitats and species recognised as of 'principal importance' for the conservation of biodiversity. Section 40 of the NERC Act 2006 requires all public bodies to have regard for biodiversity conservation when carrying out their function. This is commonly referred to as the 'biodiversity duty'.

3.2. The following pieces of legislation have been considered, but are not considered to be of specific relevance in this case:

- Protection of Badgers Act 1992 (no badger setts are present within the Application Site or sufficiently close to be affected)
- Hedgerows Regulations 1997. This piece of legislation is irrelevant because the

¹ Great Britain. Environmental Act 2021 [online]. Available from: <https://www.legislation.gov.uk/ukpga/2021/30/contents>

² Great Britain. *The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019* No.579 [online]. Available from: <https://www.legislation.gov.uk/ukdsi/2019/9780111179512/contents>

³ Great Britain. *Wildlife and Countryside Act 1981* [online]. Available from: <http://www.legislation.gov.uk/ukpga/1981/69/contents>

⁴ Great Britain. *Natural Environment and Rural Communities Act 2006* [online]. Available from: <http://www.legislation.gov.uk/ukpga/2006/16/contents>

Regulations do not apply to the hedgerows in this context.

- Water Framework Directive 2000. There are no water features onsite and/or considerations in terms of groundwater.

Environment Act 2021

- 3.3. In accordance with the Environment Act 2021, mandatory Biodiversity Net Gain (BNG) will apply from January 2024 for developments in the Town and Country Planning Act 1990, unless exempt. It will apply to small sites from April 2024.
- 3.4. Schedule 7A of the Act makes provision for grants of planning permission in England to be subject to a condition, to secure that the 'biodiversity gain objective' is met.
- 3.5. The 'biodiversity gain objective' is met in relation to development for which planning permission is granted if the biodiversity value attributable to the development exceeds the pre-development biodiversity value of the onsite habitat by at least the relevant percentage.
- 3.6. The biodiversity value attributable to the development is the total of:
- (a) the post-development biodiversity value of the onsite habitat.
 - (b) the biodiversity value, in relation to the development, of any registered offsite biodiversity gain allocated to the development.
 - (c) the biodiversity value of any biodiversity credits purchased for the development.
- 3.7. The relevant percentage is 10%, but the Secretary of State may by regulations amend this paragraph so as to change the relevant percentage.
- 3.8. The biodiversity value of any habitat or habitat enhancement are to its value as calculated in accordance with the 'Biodiversity Metric'.
- 3.9. Every planning permission granted for the development of land in England shall be deemed to have been granted subject to the condition in sub-paragraph (2), which states that the development may not be begun unless:
- (a) a biodiversity gain plan has been submitted to the planning authority.
 - (b) the planning authority has approved the plan.
- 3.10. Local Planning Authorities (LPAs) will have to approve a biodiversity net gain plan for development work before it can start.

Planning policy

National Planning Policy Framework 2024⁵

3.11. Paragraphs 187-191 of the NPPF relate to 'Conserving and enhancing the natural environment' and Paragraphs 192-195 relate to 'Habitats and Biodiversity'.

3.12. Paragraph 187 of the NPPF states the following:

"Planning policies and decisions should contribute to and enhance the natural and local environment by:

a) protecting and enhancing valued landscapes, sites of biodiversity or geological value and soils (in a manner commensurate with their statutory status or identified quality in the development plan);

b) recognising the intrinsic character and beauty of the countryside, and the wider benefits from natural capital and ecosystem services – including the economic and other benefits of the best and most versatile agricultural land, and of trees and woodland;

c) maintaining the character of the undeveloped coast, while improving public access to it where appropriate;

d) minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures and incorporating features which support priority or threatened species such as swifts, bats and hedgehogs;

e) preventing new and existing development from contributing to, being put at unacceptable risk from, or being adversely affected by, unacceptable levels of soil, air, water or noise pollution or land instability. Development should, wherever possible, help to improve local environmental conditions such as air and water quality, taking into account relevant information such as river basin management plans; and

f) remediating and mitigating despoiled, degraded, derelict, contaminated and unstable land, where appropriate."

3.13. Paragraph 193 of the NPPF states the following:

⁵ HM Government. *National Planning Policy Framework December 2024*. Available at: <https://assets.publishing.service.gov.uk/media/675abd214cbda57cacd3476e/NPPF-December-2024.pdf>

“When determining planning applications, local planning authorities should apply the following principles:

“a) if significant harm to biodiversity resulting from a development cannot be avoided (through locating on an alternative site with less harmful impacts), adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused;

b) development on land within or outside a Site of Special Scientific Interest, and which is likely to have an adverse effect on it (either individually or in combination with other developments), should not normally be permitted. The only exception is where the benefits of the development in the location proposed clearly outweigh both its likely impact on the features of the site that make it of special scientific interest, and any broader impacts on the national network of Sites of Special Scientific Interest;

c) development resulting in the loss or deterioration of irreplaceable habitats (such as ancient woodland and ancient or veteran trees) should be refused, unless there are wholly exceptional reasons and a suitable compensation strategy exists; and

d) development whose primary objective is to conserve or enhance biodiversity should be supported; while opportunities to improve biodiversity in and around developments should be integrated as part of their design, especially where this can secure measurable net gains for biodiversity or enhance public access to nature where this is appropriate.”

Cherwell District Local Plan 2011-2031⁶

3.14. Policy ESD 10 (Protection and Enhancement of Biodiversity and the Natural Environment) states the following:

“Protection and enhancement of biodiversity and the natural environment will be achieved by the following:

- In considering proposals for development, a net gain in biodiversity will be sought by protecting, managing, enhancing and extending existing resources, and by creating new resources*
- The protection of trees will be encouraged, with an aim to increase the number of trees in the District*
- The reuse of soils will be sought*

⁶ Cherwell District Council North Oxfordshire (2015). *The Cherwell Local Plan 2011 – 2031*. Adopted 20 July 2015 (incorporating Policy Bicester 13 re-adopted on 19 December 2016).

- *If significant harm resulting from a development cannot be avoided (through locating on an alternative site with less harmful impacts), adequately mitigated, or as a last resort, compensated for, then development will not be permitted.*
- *Development proposals will be expected to incorporate features to encourage biodiversity, and retain and where possible enhance existing features of nature conservation value within the site. Existing ecological networks should be identified and maintained to avoid habitat fragmentation, and ecological corridors should form an essential component of green infrastructure provision in association with new development to ensure habitat connectivity*
- *Relevant habitat and species surveys and associated reports will be required to accompany planning applications which may affect a site, habitat or species of known or potential ecological value*
- *Planning conditions/obligations will be used to secure net gains in biodiversity by helping to deliver Biodiversity Action Plan targets and/or meeting the aims of Conservation Target Areas. Developments for which these are the principal aims will be viewed favourably*
- *A monitoring and management plan will be required for biodiversity features on site to ensure their long term suitable management.”*

4 METHODOLOGY

Scope of assessment

- 4.1. The EclA focuses on ‘important ecological features’, i.e. those that are considered to be of relevance to the decision-making process and could be affected by the proposed development. Important ecological features include protected species, habitats/species of ‘principal importance’ for biodiversity conservation (i.e. Section 41 habitats/species⁷), birds of conservation concern⁸, invasive non-native plant species⁹, and habitats and species identified as priorities for conservation in the Oxfordshire Biodiversity Action Plan (BAP)¹⁰.

Zone of influence

- 4.2. The ‘zone of influence’ (ZOI) is the area over which important ecological features (on-site or off-site) may be affected as a result of the proposed development and associated activities. The ZOI can vary for different ecological features, depending on their sensitivity to environmental change.
- 4.3. The ZOI for statutory designated sites has been informed by Natural England’s Sites of Special Scientific Interest (SSSIs) Impact Risk Zones¹¹ (IRZs). IRZs define zones around each SSSI which reflect the particular sensitivities of the features for which it is notified and indicate the types of development proposal which could potentially have adverse impacts. This has been determined as part of the desk study, as discussed below. In this case, it is clear that the Application Site is within the IRZ of Bestmoor SSSI and Ardley Cutting and Quarry SSSI.

Desk Study

- 4.4. The following information was requested from Thames Valley Environmental Records Centre (TVERC) for a search area of 2km around the central grid reference of the Application Site:

⁷ Section 41 (41) of the Natural Environment and Rural Communities (NERC) Act, which came into force on 1st October 2006, requires the Secretary of State to publish a list of habitats and species which are of principle importance for the conservation of biodiversity in England.

⁸ Red list species are those that are globally threatened, whose population or range has declined rapidly in recent years (i.e. by more than 50% in 25 years), or which have declined historically and not recovered. Amber list species are those whose population or range has declined moderately in recent years (by more than 25% but less than 50% in 25 years), those whose population has declined historically but recovered recently, rare species (<300 breeding pairs or <900 wintering individuals), those with internationally important populations in the UK, those with localised populations, and those with an unfavourable conservation status in Europe. Species that meet none of these criteria are Green-listed.

⁹ Invasive non-native plants (Section 14) on Schedule 9 of the Wildlife & Countryside Act 1981 (as amended).

¹⁰ Wild Oxfordshire (2022). Available at: <https://www.wildoxfordshire.org.uk/>.

¹¹ Natural England (June 2019). Natural England’s Impact Risk Zones for Sites of Special Scientific Interest (For use by Local Planning Authorities to assess planning applications for likely impacts on SSSIs/SACs/SPAs & Ramsar sites and determine when to consult Natural England).

- Legally protected/notable species records.
- Invasive/non-native species records.
- Statutory and non-statutory designated sites.

4.5. The data was requested and received on 9th August 2024.

4.6. The MAGIC website¹² was used to carry out a 5km data search for SSSIs, Special Protection Areas (SPAs) and Special Areas of Conservation (SACs) with an IRZ that falls within the Application Site, in September 2024 and November 2025.

Field surveys

4.7. A summary of ecological field surveys is provided in **Table 1**. Descriptions of full survey methods are provided in **Appendix 6**.

Table 1: Field surveys

Survey	Surveyor/s	Survey date/s	Study Area	Relevant guidelines
Extended UK Habitat Classification Surveys	Charlene Watts	14 th August 2024	Main farmyard	UKHab Ltd (2023) ¹³
Ground level tree assessment and update site walkover	Charlene Watts and Madison Sellar	21 st May 2025	Main farmyard	Bat Survey Good Practice Guidelines ¹⁴ UKHab Ltd (2023)
Potential Roost Feature (PRF) aerial inspection survey	Brian Hicks and Simon Newman	4 th July 2025	Trees T33 & T34	Bat Survey Good Practice Guidelines

¹² Multi Agency Geographic Information for the Countryside [online]. Available at: <https://magic.defra.gov.uk/>

¹³ UKHab Ltd (2023). UK Habitat Classification Version 2.0 (at <http://www.ukhab.org>)

¹⁴ Collins J. (ed.) (2023) *Bat Surveys for Professional Ecologists: Good Practice Guidelines (4th edn)*. The Bat Conservation Trust, London.

Extended UK Habitat Classification Survey	Charlene Watts	11 th September 2025	Extended red line boundary (proposed allotment and footpath)	UKHab Ltd (2023)
Extended UK Habitat Classification Survey	Daniel Bardey	20 th October 2025	Extended red line boundary to the south- west (Public Open Space)	UKHab Ltd (2023)

4.8. Incidental records of fauna were made during UKHab surveys. This ‘extended’ survey technique allows habitats to be evaluated for their potential to support legally protected species and other species of conservation concern, including species listed on the UK Post-2010 Biodiversity Framework (which supersedes UK Biodiversity Action Plan), and mammals assessed as being of conservation concern.

Limitations

4.9. The UK Habitat Classifications Surveys undertaken during September and October following extensions of the red line boundary took place during sub-optimal months for vegetation surveys. However, the habitats present were readily apparent/easily distinguished and there was limited potential for incorrect habitat classification. Therefore, this is not considered to be a significant limitation.

Assessment methodology

4.10. The habitats and species evaluations and likely effects are made with reference to the Chartered Institute of Ecology and Environmental Management (CIEEM) Guidelines for Ecological Impact Assessment¹⁵.

4.11. The importance of ecological features has been assessed by carrying out a suite of specialist surveys (**Table 1**) to determine whether protected species/habitats, and/or species/habitats of conservation concern are present in the Application Site or its ZOI, then comparing their status at the international/national/county/regional/local scale, through the use of available contextual

¹⁵ CIEEM (2019). Guidelines for Ecological Impact Assessment in the UK and Ireland. Terrestrial, Freshwater and Coastal, Version 1.3. updated September 2024. Chartered Institute of Ecology and Environmental Management, Winchester.

information, to establish the importance of those features in a geographical context.

- 4.12. The overall effect of the proposed development on a given feature has been predicted, considering the baseline data collected through desk study and field survey, and the various impacts expected to occur. An assessment has then been made as to whether the effect on each important ecological feature is likely to be significant or not.
- 4.13. Significance is the weight that should be attached to effects when decisions are made. For the purpose of EclA, a likely significant effect is an effect that either supports or undermines biodiversity conservation objectives for important ecological features (which could be species populations/groups of species, habitats, or a designated site), or for biodiversity in general. Effects have been considered significant at a wide range of scales, from national to local.
- 4.14. A sequential process has been adopted to avoid/mitigate, and if required, compensate for significant negative ecological effects. This is referred to as the 'Mitigation Hierarchy'. Avoidance includes measures to change the design of the proposed development to avoid an impact occurring. Mitigation includes measures to avoid or reduce the negative impacts of the proposed development. Compensation addresses significant negative residual effects (those likely to occur after avoidance and mitigation have been considered). It is this objective of compensation, and not its location, that distinguishes compensation from 'mitigation'.
- 4.15. In EclA, it is only essential to assess and report significant residual effects that remain after mitigation measures have been taken into account. However, the potential significant effects without mitigation as well as the residual significant effects following mitigation have been presented where the mitigation proposed is experimental, unproven or controversial and/or to demonstrate the importance of securing the measures proposed through planning conditions or obligations.

Valuation

- 4.16. The value of important ecological features (sites, habitats and species) is assigned according to their scale of importance using the following terms:
- International importance – ecological features of international importance such as SPAs and SACs, and/or sites that support internationally-important populations of species.
 - National importance – ecological features of national importance such as SSSIs, features which meet the criteria for designation as a SSSI, and/or sites that support nationally-important populations of certain species.

- Regional importance – ecological features of regional importance, such as a species population that is of importance at a scale greater than the County, but does not meet the criteria for National Importance
- County importance – ecological features of county-scale importance, including features that have been designated as local wildlife sites, or meet the criteria for designation as a local wildlife site, and/or county-important populations of species
- Local importance – ecological features of local importance, including habitats or species populations listed as being of nature conservation importance (e.g. S41, local BAP, or listed in local planning policy) which are not considered to be of County importance by virtue of the quality, size/number, rarity, the extent to which they are threatened throughout their range, or to their rate of decline.

Precautionary principle

- 4.17. The evaluation of significant effects is based on the results of the ecological surveys carried out in the Application Site and other available evidence. In cases of reasonable doubt, where it is not possible to robustly justify a conclusion of no significant effect, a significant effect is assumed. Where uncertainty exists, it has been duly acknowledged.

5 BASELINE ECOLOGICAL CONDITIONS

Context

- 5.1. The Application Site is located along Fritwell Road in the village of Somerton, 10.4km north-east of the village of Bicester. The Application Site is surrounded by arable fields to the north, east, and south, and the village of Somerton and residential housing located to the west. There are pockets of broadleaved woodland immediately adjacent to sections of the Application Site's northern and southern red line boundaries. No woodlands immediately adjacent to the Application Site are classified as priority deciduous woodland.

Designated Sites

- 5.2. SSSIs, SACs and SPAs with IRZs within the boundary of Application Site are shown in **Table 2**.

Table 2: Statutory designated sites with an IRZ within the Application Site.

Name of statutory designated sites	Approximate distance and direction from Application Site	Reason for designation	Scale of importance
Bestmoor SSSI	1km north-west	Semi-improved floodplain meadow that contains one of the largest known British populations of narrow-leaved water-dropwort <i>Oenanthe silaifolia</i> and other plant species associated with unimproved meadows.	National
Ardley Cutting and Quarry SSSI	1.1km east and south-east	Lowland calcareous grassland, scrub, ancient woodland and wetland habitats, and supports population of national scarce Duke of Burgundy <i>Hamearis lucina</i> butterfly. Geological Interest also.	National

- 5.3. With reference to Natural England guidance, consultation will be required for developments that meet criteria of 'rural residential' i.e. '*Any residential development of 50 or more units*

outside existing settlements/urban areas'. Other criteria included 'residential' (i.e. 100 units or more), rural non-residential, infrastructure, minerals, oil and gas, air pollution, combustion, waste, compost, discharge, and water supply. The proposed development is for the demolition of existing agricultural barns and creation of 10 new residential dwellings with associated landscaping. Therefore, consultation with Natural England is not required for the current scheme.

- 5.4. Moreover, it is considered unlikely that the proposed development will significantly impact surrounding statutory designated sites due to the small scale of the proposed development and distance between the Application Site and surrounding statutory sites.
- 5.5. Horsehay Quarries SSSI and Ardley Trackways SSSI are within 5km of the Application Site but IRZs do not occur within the Application Site. These statutory designated sites do not require further consideration as they are designated for geological interests which is beyond the scope of this ecological assessment.
- 5.6. There is one Local Wildlife Site (non-statutory) within 2km of the Application Site as shown in **Table 3**.

Table 3: Local wildlife sites within 2km of the Application Site

Name of Local Wildlife Site	Approximate distance and direction from the Application Site	Nature Conservation Interest	Scale of importance
Meadow west of Bestmoor LWS	1.4km north-east	Species-rich hay meadow with up to 60% herbs and has one pair of breeding curlew <i>Numenius arquata</i> , as well as yellowhammer <i>Emberiza citrinella</i> and skylark <i>Alauda arvensis</i> .	County

- 5.7. It is considered unlikely that the proposed development will significantly impact the Meadow west of Bestmoor LWS due to the small scale of the proposed development.

Habitats

- 5.8. Habitats are listed below in alphabetical order. All features described below are shown on the UK Habitat Classification Plan in **Appendix 1**.

Bare ground

- 5.9. An area of bare ground was observed in the north-west corner of the main farmyard, at the entrance to the connecting footpath, and within the proposed allotment. There were scattered

ruderal plants including dock *Rumex* sp., and greater plantain *Plantago major*. All bare ground habitats were assessed as poor condition and are considered to be of **Site** value.

Barns, hardstanding and unvegetated/ gravel surface

- 5.10. Majority of the Application Site comprises of hard landscaping in the form of concrete, unvegetated ground with gravel, and farm buildings/ barns.
- 5.11. There are six barns in total within the Application Site used for storage of farmyard goods, livestock, and agricultural machinery and vehicles. The barns comprised a mixture of corrugated metal sheeting and corrugated asbestos sheet roofing, with walls comprising a mixture of concrete and cinderblock bases, corrugated metal and wooden cladding.
- 5.12. Buildings and hardstanding are allocated a pre-determined fixed condition of N/A – Other, therefore a condition assessment could not be undertaken. The barns, hardstanding, and unvegetated surfaces are considered to be of **Negligible** value, though are discussed further in relation to protected species below.

Line of trees

- 5.13. The Application Site contains an embankment that supports 12 deciduous broadleaved trees comprising beech *Fagus sylvatica*, field maple *Acer campestre*, apple *Malus* sp., wild cherry *Prunus avium*, Norway maple *Acer platanoides* and walnut *Juglans regia*. Norway maple is not listed on Schedule 9 of the Wildlife and Countryside Act (1981), although can be considered to be invasive in the absence of management.
- 5.14. The earth bank itself is within the interior of the Application Site and is isolated from other habitats as it is surrounded by hardstanding and sits immediately south of a large barn (barn B6), therefore connectivity to other habitats is poor. The ground flora beneath the trees comprised modified grassland and ruderal vegetation including cocksfoot grass *Dactylis glomerata* and dense, dominant stands of cow parsley *Anthriscus sylvestris*.
- 5.15. Other vegetation occasionally recorded in this area included ivy *Hedera helix*, bramble *Rubus fruticosus* agg., cleavers *Galium aparine*, white dead nettle *Lamium album*, garlic mustard *Alliaria petiolata*, and hedge woundwort *Stachys sylvatica*.
- 5.16. In addition to the broadleaved treeline, there are three Leyland cypress *Cupressus x leylandii* treelines within the red line boundary of the Application Site as a result of previous plantation.
- 5.17. Each tree line has been allocated a reference number for the purpose of their condition assessments which ranged from moderate (L1) to poor (L2 – L4). Locations of the treelines

can be seen in **Appendix 1**.

- 5.18. The lines of trees within the Application Site are considered to be of **Site** value.
- 5.19. The proposed development will result in the loss of the broadleaved treeline comprising 12 trees, therefore compensation measures are discussed in **Section 7**.

Modified grassland

- 5.20. There are patches of modified grassland throughout the Application Site, typically amongst the boundaries and around the barns. Species recorded include annual meadow *Poa annua*, perennial rye-grass *Lolium perenne*, common couch *Elytrigia repens*, and cocksfoot. Other species recorded across all patches of grassland included common nettles *Urtica dioica*, greater plantain, dandelion *Taraxacum* sp., dog rose *Rosa canina*, cow parsley, white clover *Trifolium repens*, ragwort *Jacobaea vulgaris*, black medick *Medicago lupulina*, oxeye daisy *Leucanthemum vulgare*, pineappleweed *Matricaria discoidea*, dock, thistle *Cirsium* sp., willowherb *Epilobium* sp., and redshank *Persicaria maculosa*.
- 5.21. The area of proposed connecting footpath extending west of the main farmyard comprised heavily managed and mown modified grassland. This grassland was dominated by perennial rye-grass. Other species recorded included cocks foot, white clover, dandelion, greater plantain, yarrow *Achillea millefolium*, and cow parsley.
- 5.22. The modified grassland habitats are predominantly small and scattered patches, which lack connectivity to other habitats, typically adjacent to hardstanding and barns. Each parcel of modified grassland has undergone their own condition assessment which can be viewed in the separate Condition Assessment excel document.
- 5.23. Given the small size and limited connectivity and species diversity, the modified grassland habitats within the Application Site are considered to be of **Site** value.

Native hedgerow / with trees

- 5.24. The Application Site contains a native hedgerow with trees (Hedgerow H1) situated to the east of Barn B3 and a native hedgerow (Hedgerow H2) along the north-eastern boundary of the parcel of land to the south-west of the main farmyard. The hedgerows and their corresponding numbers are shown in **Appendix 1**.
- 5.25. Species recorded in Hedgerow H1 comprised a mixture of native and non-native species including hawthorn *Crataegus monogyna*, elm *Ulmus* sp., blackthorn *Prunus spinosa*, Lombardy poplar *Populus nigra* 'Italica', and hybrid black poplar *Populus X canadensis*.

- 5.26. Ground flora below the hedgerow consisted of ruderal species, such as cleavers, common nettle, dock *Rumex* sp., and greater plantain, as well as cocksfoot grass, dandelion *Taraxicum* sp., bindweed, herb Robert *Geranium robertianum*, pineappleweed, ragwort, and woodland indicator species wood avens *Geum urbanum* and lords and ladies *Arum maculatum*. A single dead tree was also present within the hedgerow, the species of which could not be identified.
- 5.27. Hedgerow H2 was dominated by bramble and ground flora at the base of the hedgerow was dominated by common nettle.
- 5.28. Hedgerows H1 and H2 were assessed as moderate and good condition respectively and are considered to be of **Site** value.

Scattered trees

- 5.29. The Application Site supports a total of seven individual scattered trees comprising three sycamore (G56¹⁶), one hornbeam *Carpinus betulus* (T116), two elder *Sambucus nigra* (T113 and T115) and one ash *Fraxinus excelsior* (T114).
- 5.30. The three sycamore trees are situated to the rear of Barn B2 and are considered a result of self-seeding. Four trees comprising hornbeam, elder and ash are located within the proposed allotment site.
- 5.31. All trees within the proposed allotment site will be retained, however the three self-seeded sycamore trees to the rear of Barn B2 will be removed for the proposed development.
- 5.32. The trees have undergone individual condition assessments as can be seen in the separate Condition Assessment excel document. All trees are considered to be of **Site** value. Their importance in relation to protected species is discussed below.

Urban - ruderal/ ephemeral

- 5.33. A large parcel of ruderal vegetation was recorded within the proposed allotment area which has been utilised as farm/ machinery storage.
- 5.34. The vegetation included perennial rye-grass, knotgrass *Polygonum aviculare*, common nettle, bramble, thistle *Cirsium* sp., mugwort *Artemisia vulgaris*, scentless mayweed *Tripleurospermum inodorum*, hedge bindweed *Calystegia sepium*, greater plantain, and broadleaved dock *Rumex obtusifolius*. Deadwood logs and stumps were also recorded

¹⁶ Please note arboricultural references have been provided for clarity. Refer to the Tree Protection Plan (PRI24625-01A) for location details.

amongst the ruderal vegetation.

- 5.35. The ruderal vegetation was unmanaged and dense, and likely affords shelter for various species with both rabbit and deer droppings observed in this area
- 5.36. The ruderal vegetation was assessed as good condition and considered to be of **Site** value.
- 5.37. A parcel of dense and unmanaged tall ruderal vegetation was also recorded to the rear of Barn B2. The area abuts a small patch of off-site broadleaved woodland. The vegetation was largely dominated by dense stands of nettles and bramble.
- 5.38. The tall ruderal habitat to the rear of Barn B2 was assessed as good condition and considered to be of **Site** value.
- 5.39. In addition, patches of sparsely vegetated land with scattered early pioneering vegetation was observed immediately south of Barns B2, B3 and B5.
- 5.40. B2 and B3 - Vegetation was observed as sparse and scattered, and was limited to cow parsley, common nettle, and speedwell *Veronica* sp.
- 5.41. B5 – The area south of Barn B5 was more heavily vegetated, though species were typically stress tolerant including bramble, hogweed *Heracleum sphondylium*, common nettle, white clover, willowherb, and sycamore saplings.
- 5.42. The ruderal vegetation habitats situated behind barns B2, B3 and B5 were assessed as poor condition and considered to be of **Site** value.

Fauna

Invertebrates

- 5.43. There are numerous records of invertebrates within 2km of the Application Site, including six records of small heath butterfly *Coenonympha pamphilus* within the last five years, which are a Section 41 species of principal importance under the NERC Act.
- 5.44. Although a large number of invertebrate records were returned in the data search, the majority were recorded within the wider landscape that supports a diversity of habitat types capable of supporting a diverse assemblage of species. This habitat diversity is not evident in the Application Site, which supports extensive hard landscape and habitats with species considered common and widespread in the local area.
- 5.45. As such, the invertebrate assemblage is considered to be of importance within the red line

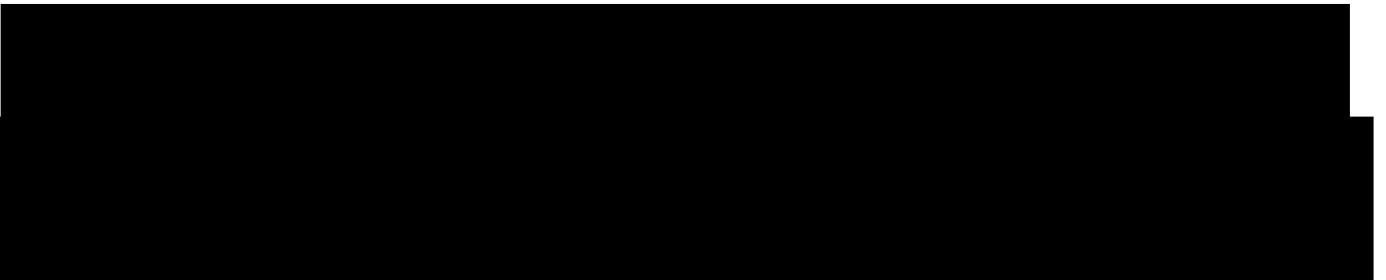
boundary only.

Amphibians

- 5.46. The data search returned 12 records of great crested newt *Triturus cristatus* within 2km of the Application Site between 2001 and 2017. The data search also returned two records of common frog *Rana temporaria* within 2km of the Application Site from 1998 and 2016.
- 5.47. No EPS licences for great crested newt have been granted within 2km of the Application Site. A population of great crested newt was confirmed as present in a pond situated 1.9km south-east of the Application Site (OS grid ref: SP520280), however these records date back to 2014, and the distance of 1.9km from the Application Site exceeds the typical dispersal range of 250m for this species¹⁷.
- 5.48. The Application Site supports no ponds or other waterbodies suitable for supporting breeding great crested newts or other amphibians, and none are present within the immediate vicinity which would be impacted by the proposed development. Breeding amphibians are therefore not a constraint to development.
- 5.49. A search on MAGIC maps established a total of nine waterbodies within 500m of the Application Site, two of which occur within the great crested newt typical dispersal range of 250m; these ponds are situated approximately 67m and 249m north-west of the Application Site (**Appendix 3**).
- 5.50. There are roads between the Application Site and surrounding ponds which act as dispersal barriers, therefore none of the ponds have direct connectivity to the Application Site. Moreover, the Application Site contains mostly unsuitable habitat for great crested newt and other amphibians due to the dominance of hard landscape and lack of waterbodies.
- 5.51. There are patches of modified grassland which provide suboptimal habitats for great crested newts; therefore, the Application Site is considered to be of **low** importance to great crested newts.
- 5.52. Given the proximity of the closest pond, there is a low risk that individuals may enter the Application Site on occasion. Precautionary working methods are provided in **Section 6** to ensure no great crested newts or other amphibians are harmed during the construction phase of the proposed development.

¹⁷ Langton, T.E.S., Beckett, C.L., and Foster, J.P. (2001). *Great Crested Newt Conservation Handbook*. Froglife, Halesworth.

Badger and hedgehog



5.58. Precautionary measures are provided in **Section 6** to protect badger and hedgehog and any other mammals that may enter the Application Site during construction.

Bats

5.59. The data search returned 19 records of bats within 2km of the Application Site between 2015 and 2019. Species identified are as follows: common pipistrelle *Pipistrellus pipistrellus*, soprano pipistrelle *Pipistrellus pygmaeus*, long-eared *Plecotus sp.*, noctule *Nyctalus noctula*, and *Myotis sp.*

5.60. A search of EPS licence records identified one licence granted within 2km of the Application Site (EPSM2012-4597). This licence allowed destruction of a breeding and resting site for common pipistrelle, soprano pipistrelle, and brown long-eared *Plecotus auritus* bats at a site 1.6km south-west of the Application Site.

Preliminary Roost Assessment - Buildings

5.61. All barns within the Application Site were considered for suitability to support roosting bats. During the preliminary roost assessment, no bats or evidence of bats were found. All barns were openly constructed, typically with only three exterior walls and large openings,

constructed by steel beams, corrugated metal sheeting, and spaced wooden cladding, rendering the barns well-lit and draughty. There were also transparent corrugated sheets in place on the roof, thereby increasing interior light levels even further.

- 5.62. There were timber beams running across the roofs which provide suitability for free-hanging day roosting bats, such as horseshoe *Rhinolophus* species, however, the barns would be well-lit during the day and significantly fluctuate in temperature due to their open construction.
- 5.63. No suitable crevices were observed in the barns due to their construction by metal sheeting which not only lacks grip, but would also fluctuate significantly in temperature, rendering these spaces unsuitable for crevice dwelling species.
- 5.64. Therefore, all barns were assessed as having **negligible** suitability to support roosting bats.

Preliminary Roost Assessment – Trees

- 5.65. Four trees within the Application Site were identified to support bat potential roosting features including a callus roll, limb scars, cavities and dense ivy. Details of trees with bat roost potential can be seen in **Table 4** and their locations can be seen in **Appendix 2**.

Table 4: Trees with bat roost potential

Tree number	Species	Features present	Bat potential	Aerial Inspection results
T33	Norway maple	Cavity on north side approx. 1m high. Extends up into stem approx. 10cm. Split limb scar on south side approx. 3m. No gap present.	Medium	No evidence of bats. Recommended pre-felling check.
T34	Wild cherry	Callus roll on branch on south side approx. 3m. Gap extends into branch approx. 5cm.	Medium	No evidence of bats. Recommended pre-felling check.
T60	Hybrid black poplar	Dense ivy	Low	N/A – retained

G62	Lombardy poplar	Dense ivy	Low	N/A - retained
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Commuting and foraging bats

- 5.66. The Application Site is dominated by hard landscaping which offers negligible potential for commuting and foraging bats, however the various tree lines within the Application Site and the nearby woodlands surrounding the Application Site provide some suitability for commuting and foraging bats.
- 5.67. Therefore, it is possible that low numbers of foraging and commuting bats will occur within the Application Site due the proximity to suitable habitats off-site.
- 5.68. Overall, the site offers low potential for bats, considered to be of **site-level** importance only. Given that bats are a European Protected Species, they have been brought forward for consideration in **Section 6**.

Birds

- 5.69. The data search with TVERC returned numerous records of birds within 2km of the Application Site, including species classified as ‘Amber’ and ‘Red’ in the UK Red List for birds¹⁸. Amber and Red Listed species present with potential to be supported by habitats on the Application Site included bullfinch *Pyrrhula pyrrhula*, dunnock *Prunella modularis*, fieldfare *Turdus pilaris*, greenfinch *Chloris chloris*, house sparrow *Passer domesticus*, linnet *Linaria cannabina*, mistle thrush *Turdus viscivorus*, rook *Corvus frugilegus*, song thrush *Turdus philomelos*, spotted flycatcher *Muscicapa striata*, starling *Sturnus vulgaris*, swift *Apus apus*, tree sparrow *Passer montanus*, whitethroat *Curruca communis*, woodpigeon *Columba palumbus*, wren *Troglodytes troglodytes*, and yellowhammer *Emberiza citrinella*.
- 5.70. Many of the birds within 2km of the Application Site are also classified as a species of principal importance under the NERC Act, including bullfinch, dunnock, house sparrow, linnet, song thrush, spotted flycatcher, starling, tree sparrow, yellow wagtail, and yellowhammer.
- 5.71. The data search also returned five records of barn owl *Tyto alba* within 2km of the Application Site between 2008 and 2018.
- 5.72. No barn owls or evidence of barn owls were found during the survey.

¹⁸ Stanbury, A., Eaton, M., Aebischer, N., Balmer, D., Brown, A., Douse, A., Lindley, P., McCulloch, N., Noble, D., and Win I. 2021. *The status of our bird populations: the fifth Birds of Conservation Concern in the United Kingdom, Channel Islands and Isle of Man and second IUCN Red List assessment of extinction risk for Great Britain*. British Birds 114: 723-747. Available online at <https://britishbirds.co.uk/content/status-our-bird-populations>.

- 5.73. Barn owls are known to perch atop wooden beams, however the beams within barns of the Application Site do not provide sufficient space for barn owl to do this since they run directly adjacent to or underneath the metal sheeting. The wooden and metal beams also do not provide optimal width for barn owls to build their nests upon.
- 5.74. Therefore, the barns are considered to provide limited suitability for nesting barn owls, due to the lack of space atop wooden beams within their interiors. The roof voids are also highly exposed. Typically, barn owls prefer to roost in elevated and hidden spaces.
- 5.75. Whilst the barns provide limited suitable roosting habitat for barn owl, the surrounding mixed farmland habitat provides suitable foraging habitat for them. Therefore, although the barns provide suboptimal roosting habitat, it is not considered impossible, and they could appear in the time between the survey and demolition/ construction.
- 5.76. Overall, all barns were assessed as having **low** suitability to support nesting barn owls.
- 5.77. In contrast, the barns provide high suitability for other nesting birds, such as woodpigeon, and woodpigeon nests were identified in all barn buildings during the 2024 baseline survey, some of which appeared to be active. It is also highly likely that nesting birds will be present in the hedgerow and trees within the Application Site, with a bird nest observed in the hedgerow adjacent to Barn B3 during the ground level tree assessment in May 2025.
- 5.78. Mitigation measures are provided in **Section 6** to protect nesting birds during the proposed development and to mitigate the loss of bird nesting habitat due to the loss treeline L1.

Hazel Dormouse

- 5.79. No observations of hazel dormouse *Muscardinus avellanarius* were returned in the data search.
- 5.80. Whilst the Application Site supports tree lines and hedgerows, there is a lack of connectivity to suitable off-site woodlands and/or hedgerow networks with capacity to support hazel dormouse populations.
- 5.81. Hazel dormice require continuous shrub and woodland layers to sustain viable population sizes as a largely arboreal species and are unlikely to cross terrestrial areas where there is no woodland or shrub cover.
- 5.82. Therefore, this species is considered to be likely absent from the Application Site due to the lack of continuous woodland and shrubs and the presence of extensive hardstanding that is unsuitable for hazel dormouse.

Other mammals

- 5.83. The data search returned 79 records of otter *Lutra lutra* between 2005 and 2023, and two records of water vole *Arvicola amphibius* in 2022 and 2023, within 2km of the Application Site. Records were derived from the Cherwell River and Oxford Canal, both of which run alongside one another. The water vole observations were both recorded in the Oxford Canal, approximately 597m north-west of the Application Site.
- 5.84. The Application Site does not contain suitable habitats for water vole or otter. In addition, it is situated over 500m away from a suitable watercourse. Although there are bridges, the Application Site is also separated from the Oxford Canal and Cherwell River by a railway line.
- 5.85. Therefore, these species are considered to be likely absent and are not considered further in this EclA.

Reptiles

- 5.86. The data search returned nine records of common lizard *Zootoca vivipara* within 2km of the Application Site. There were no other reptiles recorded within 2km.
- 5.87. The Application Site is situated in a largely arable context typically unsuitable for reptiles. The pockets of modified grassland and ruderal vegetation have some potential to support foraging and commuting reptiles should they be present in the local area, however the opportunities available to reptiles within the Application Site are limited and isolated by large areas of hardstanding. Therefore, reptiles are considered to be likely absent from the Application Site.
- 5.88. Although reptiles have been scoped out of further assessment, the precautionary measures provided in **Section 6** regarding great crested newt will also protect any reptiles should they be present.

6 ASSESSMENT OF EFFECTS AND MITIGATION MEASURES

- 6.1. In accordance with CIEEM guidelines, the following important ecological features have been identified with the potential to be affected by the proposed development and carried forward for further assessment:

Table 5: Important ecological features brought forward for impact assessment

Statutory sites	None.
Local Wildlife sites	None.
Habitats	Native hedgerow, scattered trees, tree lines.
Species and species groups	Amphibians, badger and hedgehog, bats, nesting birds.

- 6.2. The following ecological features have been scoped out of the ecological impact assessment, owing to the conclusion that no significant effects are predicted:

Table 6: Ecological features scoped out of the impact assessment

Statutory sites	Bestmoor SSSI, Ardley Cutting and Quarry SSSI.
Non-statutory sites	None.
Habitats	Buildings and hardstanding, modified grassland.
Species and species groups	Invertebrates, hazel dormouse, other mammals, reptiles.

Habitats

Potential impacts

- 6.3. In order to facilitate the proposed development, the removal of 18 trees (including those within tree lines) across the Application Site is anticipated. This habitat clearance will result in a net loss in biodiversity in the absence of compensation measures (i.e. replacement planting).
- 6.4. Moreover, there is potential for retained hedgerows and trees to be accidentally damaged during construction activities (e.g., due to compaction within root protection zones, accidental loss of limbs),

where no protective measures are put in place.

Mitigation

- 6.5. Mitigation included retention of trees wherever possible. Measures to address the loss of trees includes extensive planting of new native trees throughout the Application Site POS. Various native trees have also been planted in the gardens and front curtilage of new houses; however, it should be noted that, where trees are proposed within new residential gardens and curtilage, biodiversity net gains cannot be legally secured, and these trees have subsequently been omitted from the statutory biodiversity metric calculations.
- 6.6. Compensation measures are further discussed in **Section 8**.
- 6.7. All retained hedgerows and trees, and their corresponding root protection zones identified in the Tree Protection Plan¹⁹ will be protected with use of Heras fencing (or similar) and in accordance with the Arboricultural Impact Assessment & Method Statement²⁰ within which no construction work can take place. This will ensure all hedgerows and trees being retained will be buffered from development and protected during construction in line with BS 5837:2012 Trees in relation to design, demolition and construction – Recommendations²¹.
- 6.8. With the implementation of the above measures, the effect of the proposed development on retained habitats will be minor negative at the site scale.

Fauna

General Measures

- 6.9. Care must be taken during clearance/groundworks to ensure wildlife is not harmed. In the event any protected species are found when the ecologist is not in attendance, works must stop, the animal must not be handled and ACD Environmental Ltd contacted.
- 6.10. In order to minimise the potential for harm to local wildlife, the following general measures must be adhered to:
- Heras fencing will be installed around the site boundaries and to protect RPZs, which will deter larger wildlife e.g. deer from entering the construction site.
 - There will be fencing and signage to contain vehicle movements.
 - Any excavations (e.g. trenches/pits) would be covered when works are not taking place to

¹⁹ ACD Environmental Ltd. (2025). *Tree Protection Plan*. Drawing ref: PRI24625-01A.

²⁰ ACD Environmental Ltd. (2025). *Arboricultural Impact Assessment & Method Statement*. Report ref: PRI24625aia_ams.

²¹ British Standards Institution. (2012). *Trees in Relation to Design, Demolition and Construction: Recommendations*. BSI. London.

ensure that they do not fill with water and to prevent wildlife to become trapped.

- Any temporary exposed pipes must be capped to prevent wildlife gaining access during the night.
- If any excavations are left open, then there must be a means of escape should wildlife enter. This could simply be in the form of a wide and roughened plank of wood placed in the excavation as a ramp to the surface. This is particularly important if the excavation fills with water.
- Any excavations would be inspected each morning to ensure no wildlife has become trapped overnight. If a badger becomes trapped, then it is likely to attempt to dig itself into the side of the excavation and form a temporary sett. If a trapped badger is encountered, the advice of an ecologist would be sought.
- The storage of topsoil or other 'soft' building materials within the construction site would be given careful consideration. Badgers could readily adopt such mounds as setts. To avoid the adoption of any mounds by badgers, mounds would be kept to a minimum and any essential mounds subject to daily inspections.
- Storage of sharp objects/machinery will be undertaken safely to minimise potential harm to any roaming wildlife.
- Food and litter are not to be left within the working area overnight.
- The storage of any chemicals within the construction site must be contained in such a way that they cannot be accessed or knocked over by any roaming larger wildlife.

6.11. Specific mitigation has also been detailed below for those species of relevance to the Application Site.

Amphibians

Potential impacts

6.12. The Application Site is largely unsuitable for amphibians; however, the patches of grassland have low potential to support occasional individuals given their presence in the local area. Although unlikely, there is potential for individual/ low numbers of commuting and/or foraging great crested newts to occur within the Application Site.

Mitigation

6.13. Where areas of grassland are to be removed, clearance should incorporate a phased approach

whereby the grassland is first cut to 15cm in a directional manner, starting at the centre and moving outwards. This area should then be left for 24 hours to allow any amphibians that may be present to move out of the area into surrounding habitats. The grassland can then be cut down to ground level, again using directional cutting, and removed.

- 6.14. There are deadwood piles, rock/rubble piles, and corrugated metal sheeting on site. It is recommended that they are removed by hand so that any animals can disperse safely.
- 6.15. This is best carried out in great crested newts' active season, between February and October while temperatures are above 10°C and should avoid prolonged periods of hot dry weather when newt activity is reduced.
- 6.16. For the protection of great crested newt, retained and offsite areas can be fenced using appropriate Heras fencing or similar, to ensure vehicles, pedestrians and storage of materials may be excluded from these areas.
- 6.17. With the implementation of the above measures, the effect of the proposed development on amphibians will be **negligible**.

Badger and hedgehog

Potential impacts

- 6.18. Although no active badger evidence was recorded, there is potential for commuting/ foraging individuals to occur within the Application Site given its arable context and proximity to off-site woodlands.
- 6.19. Without mitigation, the proposed development would result in the loss of commuting/ foraging habitat for badger and hedgehog, including the small loss of 0.1ha modified grassland.

Mitigation

- 6.20. Although no badger setts were identified within the Application Site, badger are confirmed to be present within the local area. As badgers can create setts at any time of year, it is recommended that a pre-commencement badger check is carried out within the Application Site and 30m buffer zone. This should be no more than three months prior to commencement to account for the dynamic nature of sett excavation.
- 6.21. To mitigate for the minor loss of badger and hedgehog foraging habitat, new planting will include 0.26ha of Emorsgate EM3 Special General Purpose Meadow Mixture and various new berry/ fruit trees. These measures are considered to ecologically enhance the Application Site for badger and hedgehog given the limited extent of suitable habitats at the baseline.

Bats

Lighting – potential impacts

6.22. New artificial lighting has the potential to disturb bats within the Application Site and surrounding area during the construction and operational phases of the proposed development. This can be detrimental for bat species and could disrupt their flight paths. However, many bat species recorded within the local area, as identified within the data search, are known to exploit feeding opportunities around artificial light sources and are likely to be fairly resilient to limited changes in new artificial lighting.

Mitigation – construction phase

6.23. Notwithstanding the above, where lighting is required during the construction phase, the following measures will be followed:

- There are limits on working hours where construction activities are permitted to daylight hours, which will inherently minimise the requirement for lighting;
- Temporary lighting during the construction phase will be minimised to task related lighting only and must only be used if absolutely required;
- Any lighting must be directed within the construction site to minimise light spill on adjacent habitats;
- Where security lighting is required, it is recommended that these are motion-activated with hooded luminaires, and these must be directed away from vegetated boundaries and trees;
- Use lights that have a focused luminance on their target area preventing light pollution into other areas, for example using directional downlights, illuminating below the horizontal plane; using the lowest necessary lighting column and ideally achieve beneath 1 lux at 2m above ground level.
- Avoid the use of high-pressure sodium lights, white LED broad spectrum lights and short wavelength 'blue' white sources throughout the Application Site. 'Warm white' light (~2700-3000K, >550nm peak wavelength) with no UV component should be used to avoid the most disruptive wavelengths to bats;
- Any lighting must not be left on permanently outside of normal working hours; and
- If the schedule of works needs to be amended to include the use of lighting that is not in line with the recommendations above, then an ecologist will be consulted prior to lighting being installed on-site.

Mitigation – operational phase

- 6.24. A bat sensitive lighting scheme will be implemented in accordance with the Bats and Artificial Lighting at Night Guidance Note²² for the operational phase of the development. Suitable lighting mitigation during the operational phase of the development includes the following:
- Luminaires are to be directed away from ecological receptors e.g. boundary tree lines, adjacent offsite woodland;
 - Only luminaires with an upward light ratio of 0% will be used, and low-level bollard lighting will be used where feasible to retain darkness above the luminaire;
 - All external luminaires used on site will lack UV elements and will be warm-white coloured (ideally <2700 Kelvin) to reduce blue-light components;
 - LED luminaries will be used due to their sharp cut-off, lower intensity, good colour retention and dimming capability;
 - Where security lighting is installed this should be motion-activated; and
 - Lights will not be directed at boundary vegetation or onto bat and bird boxes. Where required, lights can be fitted with hoods, baffles or louvres to reduce back-spill.
- 6.25. The implementation of sensitive lighting designs will protect bats as well as other nocturnal wildlife, including barn owl, badger and hedgehog.

Roosting bats – potential impacts

- 6.26. A total of four trees have been assessed to provide low and moderate potential to support roosting bats following the ground level tree assessment. The removal of two moderate potential trees (T33 & T34) is anticipated to facilitate the proposed development; therefore, an aerial tree inspection was undertaken on these trees which recorded no evidence of bats.
- 6.27. Although no evidence of bats was observed during the aerial inspection of trees T33 and T34, there is potential for roosting bats to be harmed and/or killed during removal of these trees in the absence of mitigation since bats may utilise these features between the time of the survey and commencement of works.

²² Bat Conservation Trust and the Institute of Lighting Professionals (2023). *Bats and artificial lighting at night*. Guidance Note GN08/23.

Mitigation

- 6.28. Trees T33 and T34 will be subject to a pre-felling endoscope survey undertaken by a Level 2 licenced bat Ecological Clerk of Works (ECoW). Provided no bats or evidence of bats are found within the trees, works will take place within 24 hours under supervision by the ECoW, using soft-felling techniques where possible.
- 6.29. In the unlikely event that a bat is found, or evidence of bats is observed during the pre-felling checks, works will cease, and a European Protected Species Mitigation Licence (EPSML) will be secured.
- 6.30. With the implementation of the above measures, the effect of the proposed development on roosting bats will be **negligible**.

Commuting and foraging bats – potential impacts

- 6.31. Although the Application Site is considered suboptimal for bats, it is possible that low numbers or individual bats may occur within the Application Site due to the proximity to suitable off-site habitats e.g. woodlands, and the presence of scattered and lines of trees within the Application Site.
- 6.32. The proposed development will result in the loss of the broadleaved treeline comprising 12 trees within the interior of the Application Site, six scattered trees, and patches of modified grassland. Therefore, without mitigation, there would be a net loss of foraging resources.

Mitigation

- 6.33. The proposals have incorporated a total of 0.23km of species rich native hedgerow within the POS, 53 trees, and 0.26ha of wildflower grassland. These measures will mitigate the loss of small quantities of suboptimal habitat and will overall enhance the Application Site for commuting and foraging bats.
- 6.34. With the implementation of the above measures, the effect of the proposed development on commuting and foraging bats will be **negligible**.

Nesting birds

Potential impacts - barns

- 6.35. Although no evidence of barn owl was recorded during the ecological walkover, the barns provide low potential, and, although unlikely, it is possible that they may appear between the time of the survey and construction.
- 6.36. Barn owls and other bird species are most likely to be nesting during the breeding bird season which runs from March-August inclusive. However, it must be noted that barn owls can nest at any time of year.

Mitigation

- 6.37. As such, pre-commencement checks of all barns must be undertaken prior to any construction works by a suitably qualified ecologist, and these checks will be required year-round.
- 6.38. Provided no barn owls or other nesting birds are found; works must begin within 24 hours. If a barn owl is confirmed to be roosting within the building, it should be allowed to disperse of its own accord before works commence.
- 6.39. If a barn owl roost site is found at any point during works, works must stop immediately, and an ecologist contacted for advice.
- 6.40. The year-round nesting bird checks recommended above will also mitigate impacts on other nesting birds, such as woodpigeon, which were confirmed to have nested in each barn. If a nest is identified, the Ecological Clerk of Works (ECoW) will establish a suitably sized buffer around the nest with high visibility tape (usually 5m dependent on species). No works will be permitted within the buffer, which must remain in place and undisturbed until the ECoW has confirmed that the young have fledged and that the nest is no longer in use.

Potential impacts - tree removals

- 6.41. The proposed works will require the clearance various trees within the Application Site. Without mitigation, there is a potential for nesting birds to be killed, injured or disturbed during tree clearance works. The loss of the trees (and barns) would result in a net loss of bird nesting habitat in the absence of mitigation.
- 6.42. Moreover, new artificial lighting during the operational phase has potential to impact on breeding birds and territorial behaviour.

Mitigation

- 6.43. Given the protection afforded to all nesting birds, removal of trees should ideally be carried out during September to February to avoid the main bird breeding season. If this timing is not possible, then an ecologist is required to carry out a nesting bird check prior to these works.
- 6.44. If any active bird's nests are found works must stop in the area and an appropriate buffer zone (as determined by the ecologist) must be established around the nest. The buffer must remain intact until it has been confirmed that the young have fledged and the nest is no longer in use.
- 6.45. To mitigate for the loss of suitable nesting bird habitats, native and ornamental planting will be incorporated. All tree and hedgerow planting will incorporate native species including fruit/ berry bearing species to provide valuable foraging resources to birds.

7 COMPENSATION

- 7.1. In order to compensate for the loss of trees, a total of 47 new native trees (from a total of 53 new trees) will be planted within the Application Site.
- 7.2. New native tree species will include whitebeam *Sorbus aria*, silver birch *Betula pendula*, crab apple *Malus sylvestris*, and rowan *Sorbus aucuparia*.
- 7.3. As mentioned in **Section 6**, where trees are proposed within new residential curtilage, biodiversity net gains cannot be legally secured and therefore these trees have been omitted from the statutory biodiversity metric calculations.

8 BIODIVERSITY NET GAIN

Biodiversity metric

- 8.1. The Statutory Biodiversity Metric has been completed for the Application Site. This has been calculated using baseline habitat and species information collected during the UK Habitat Classification Surveys and using the latest post-development landscape proposals. A full methodology is provided in **Appendix 7**. A completed version of the Metric has been submitted in full as a separate Excel document.

Table 7: A summary of the results of the Statutory Biodiversity Metric. River units have not been included as these are not applicable to the Application Site.

On-site baseline	Habitat units	3.74
	Hedgerow units	0.83
On-site post-intervention	Habitat units	4.42
	Hedgerow units	2.37
Total net unit change	Habitat units	0.68
	Hedgerow units	1.54
Total net % change	Habitat units	18.19%
	Hedgerow units	185.53%

- 8.2. The results of the Statutory Biodiversity Metric indicate that development of the Application Site will lead to an 18.19% net gain in habitats and 185.53% in hedgerows. However, due to the loss of existing trees (total -1.53 units) the trading requirements have not been met, despite the plantation of 53 new small trees (total 0.65 units). This is likely due to the fact that replanted trees may not reach an equivalent condition or size within 30 years.
- 8.3. As such, 0.88 individual tree units will need to be offset through Cherwell District Council and/or a third party for biodiversity net gains to be claimed in line with the Department for Environment Food and Rural Affairs (Defra) Statutory Biodiversity Metric User Guide²³.
- 8.4. The following habitat and hedgerow creation measures have been incorporated within the soft landscape proposals and are included within the Statutory Biodiversity Metric calculations. For details on locations of these habitats please refer to the habitat creation plan which is presented within **Appendix 4**.
- A total of 0.26ha EM3 Special General Purpose Meadow Mixture within the street

²³ Department for Environment Food & Rural Affairs (2024). The Statutory Biodiversity Metric User Guide. Available at: <https://www.gov.uk/government/publications/statutory-biodiversity-metric-tools-and-guides>.

scene Public Open Space (POS) to create new 'Other neutral grassland' habitat.

- Planting of 53 new trees within all POS. Majority of the new trees will be native (47) and include English oak *Quercus robur*, hornbeam, crab apple and wild cherry.
- Planting of 239m hedgerow including a minimum of five woody species to create 'species-rich native hedgerow'. The species-rich native hedgerow will comprise nut and fruit bearing species as follows: hazel, field maple, spindle, guelder rose, and dogwood.

8.5. At its baseline, the Application Site offers limited ecological value and opportunities for protected species. With the implementation of the above habitat and hedgerow creation measures, the proposed development will provide a net gain in the area of wildflower grassland, quantity of trees and species-rich native hedgerows, all of which will enhance the Application Site for a variety of species including invertebrates, birds, and bats.

8.6. In addition to these measures, habitats within the POS of the Application Site will be managed by a management company during the operational phase of the development. Management prescriptions will be included within a post-consent LEMP and will be designed to ensure long-term maintenance and enhancement of ecologically valuable habitats within the development.

Additional enhancements

8.7. It is important to note that the Biodiversity Metric does not explicitly deal with fauna. Instead, it uses habitat types as a proxy for the biodiversity 'value' of the species communities that make up those different habitats, and its results must be considered in conjunction with other measures.

8.8. The EM3 mixture contains a wide range of grass and wildflower species including fine grasses red fescue *Festuca rubra*, smooth-stalked meadow grass *Poa pratensis*, and common bent *Argrostis capillaris*, all of which are food sources for the heath butterfly at their larval stage. Heath butterflies are present in the local area as identified in the desk study, therefore the incorporation of EM3 wildflower grasslands is considered to be a significant enhancement to the Application Site for this species as well as other invertebrates.

8.9. Laxton Properties have signed up to the Homes for Nature Initiative²⁴ developed by the Future Homes Hub's On-Site Nature Measures Working Group. This initiative seeks to support local wildlife through incorporation of wildlife enhancements within new developments and is in addition to the Biodiversity Net Gain regulations.

²⁴ Future Homes Hub (2025). *Homes for Nature*. Available at: <https://www.futurehomes.org.uk/homes-for-nature>.

8.10. Homes for Nature Initiative commitments are as follows:

<i>“Mandatory Measures</i>	<i>Recommended Measures</i>
<i>Integral universal nest bricks at a ratio of 1 per plot</i>	<i>Nature-friendly SuDs design</i>
<i>A beneficial hedgehog route on all developments</i>	<i>Insect bricks</i>
<i>Planting to support pollinators and provide structural diversity</i>	<i>Bat roosting tiles, boxes and bricks”</i>
<i>Annual reporting of installations made</i>	

8.11. As such, and in addition to the habitat and hedgerow creation measures outlined above which have contributed to the Application Site’s Statutory Biodiversity Metric score, the following enhancements will be included to provide new opportunities for wildlife:

- A minimum of five Vivara Pro UK Build-in WoodStone Bat Boxes (or similar and approved), to be installed in the masonry of new dwellings. Bat boxes should be installed at a minimum height of 3m above ground level, away from artificial light, prevailing weather and out of reach of cats.
- Installation of PRO UK Rendered Build-In Swift Boxes (or similar and approved) at a ratio of one per dwelling (minimum 10 swift boxes). Swift boxes must be installed at a minimum height of 5m and ideally under the eaves for shelter. They should also be installed away from artificial light, prevailing weather and out of reach of cats.
- Installation of integrated bee bricks within garage buildings associated with new dwellings. Bee bricks should be installed at a minimum height of 1m above ground and facing south to attain sufficient sunlight. The entrance holes must not be obstructed by vegetation as they will not be used where this occurs.
- The development will contain a number of new gardens, which will provide habitats for hedgehogs which are a UK BAP priority species²⁵. To ensure hedgehogs are able to utilise the new garden habitats, closed board fencing will include a small hole (13cm x 13cm) cut into the base of the panel to facilitate hedgehog movement by creating a ‘hedgehog highway’. This size gap is too small for most pets to fit through; but to encourage residents not to block holes signs can be placed above the gaps to illustrate their purpose.

²⁵ Biodiversity Reporting and Information Group. (2007). *Report on the Species and Habitat Review*. Available at: <https://hub.jncc.gov.uk/assets/bdd8ad64-c247-4b69-ab33-19c2e0d63736> [Accessed 28 November 2022]

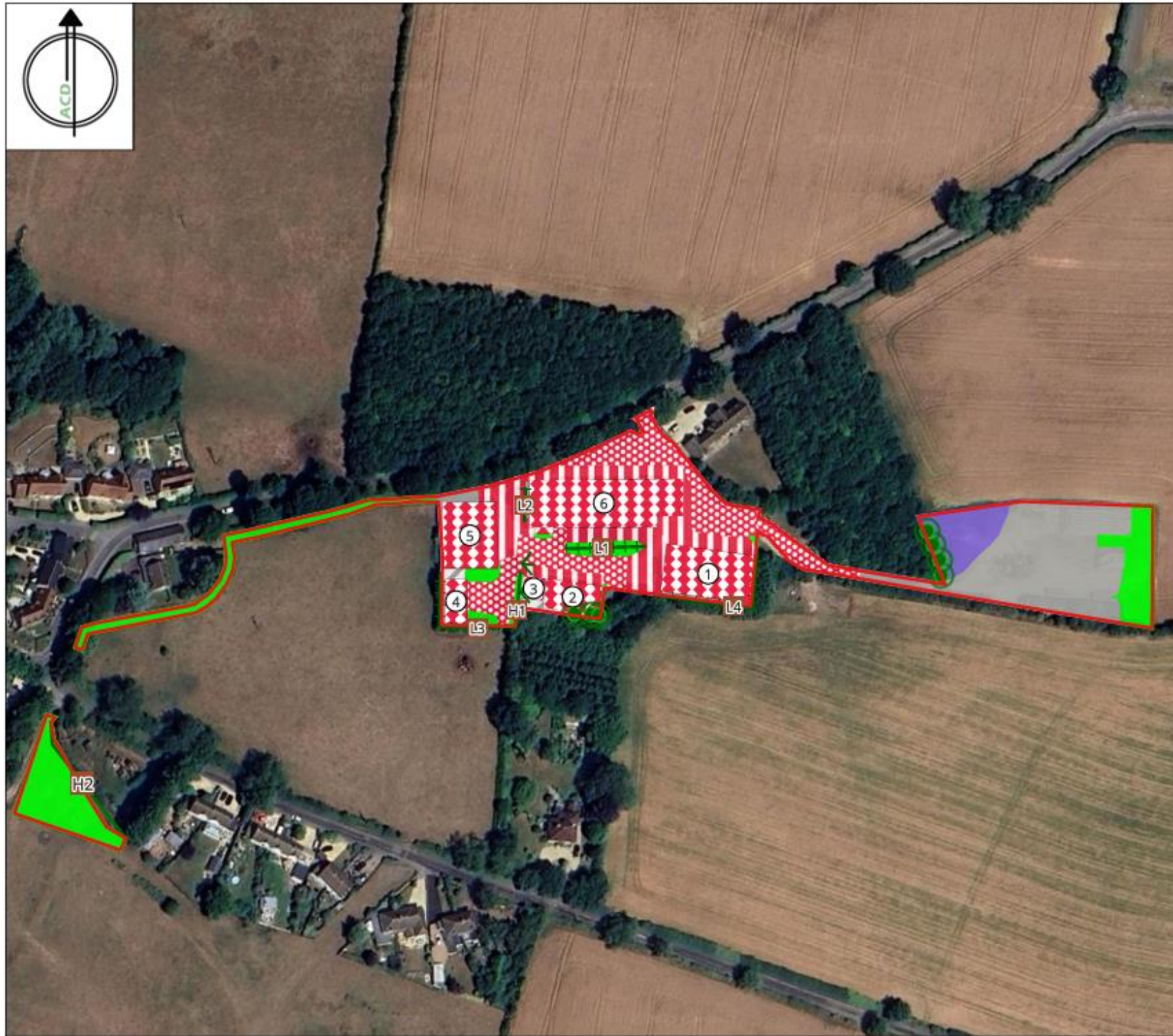
-
- A log pile will be created within the northernmost POS using wood from felled trees within Application Site to provide habitat for invertebrates and amphibians.

8.12. The above measures are considered to be a significant contribution to the overall biodiversity value of the Application Site. If the above enhancements were delivered, the proposed development at Somerton Farmyard, Fritwell Road, Oxfordshire would deliver net biodiversity gains.

9 CONCLUSIONS

- 9.1. The proposed development forms a full application comprising for the demolition of existing barns and erection of 10 new residential dwellings with associated landscaping and open space.
- 9.2. The Application Site has potential to support individual/ low numbers of amphibians, badger and hedgehog, roosting bats, commuting and foraging bats and nesting birds. Mitigation measures and general precautions have been provided to avoid accidental injury, harm or killing to these species.
- 9.3. The proposed development will incorporate extensive trees planting of predominantly trees, species-rich native hedgerows, native and ornamental shrubs, and wildflower grasslands.
- 9.4. Enhancement measures including a net gain in the quantity of trees and hedgerow, the installation of bat, bird and insect boxes, and planting of pollinator-friendly wildflowers and shrubs have been incorporated to enhance the Application Site in line with the Homes for Nature Initiative.
- 9.5. The results of the Statutory Biodiversity Metric indicate that the Application Site will lead to an 18.19% net gain in habitats and 185.53% net gain in hedgerow units. However, trading rules have not been satisfied due to the loss of baseline tree units, therefore offsetting of 0.88 individual tree units will be required in order for biodiversity net gains to be claimed.
- 9.6. Providing offsetting can be secured to satisfy trading rules, and habitat creation/management prescriptions are secured through a Landscape and Ecological Management Plan, the proposed development will be in accordance with the NPPF and Local Policies.

APPENDIX 1: UK HABITAT CLASSIFICATION PLAN



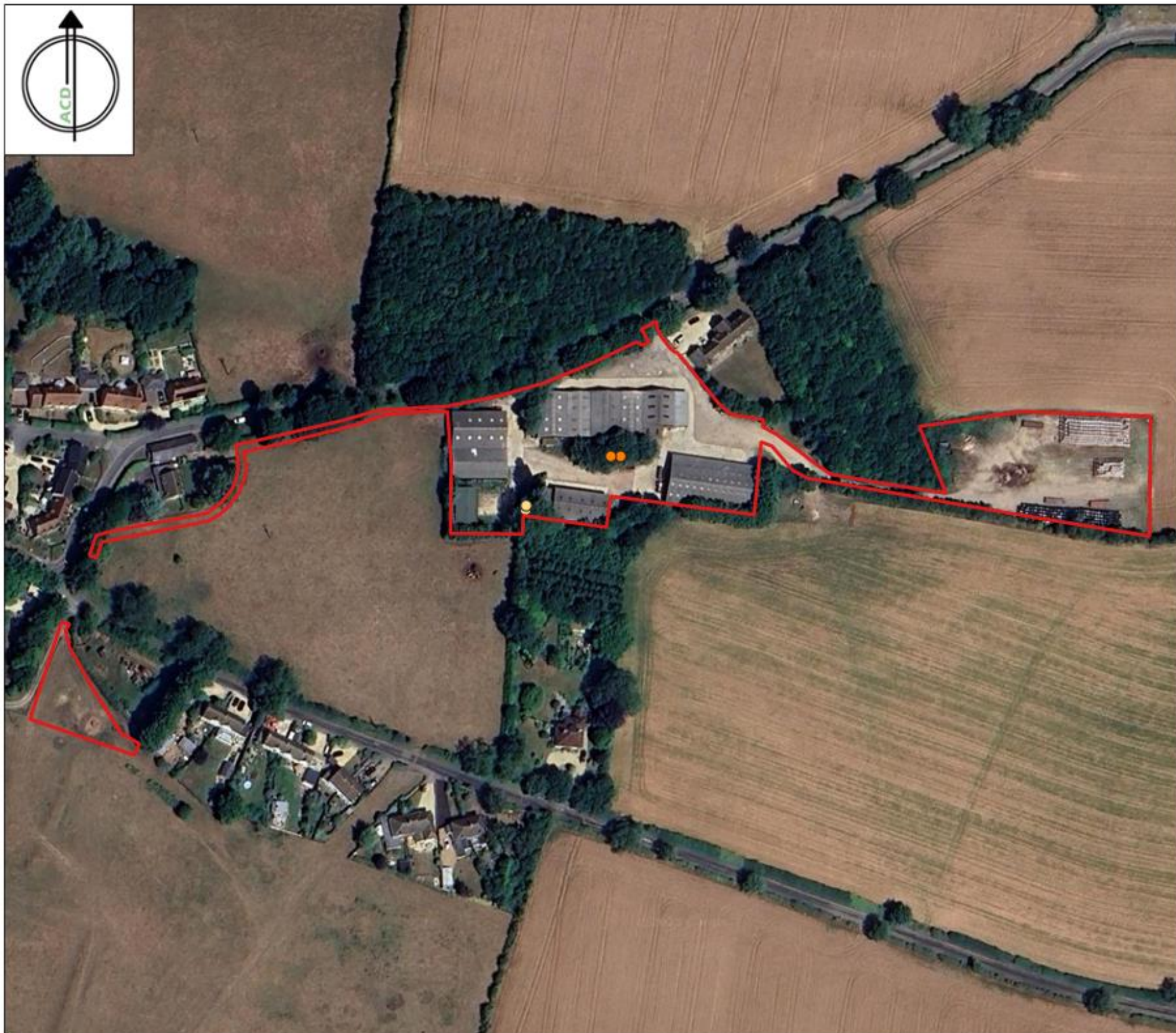
LEGEND

- Red Line
- Native hedgerow with trees (H1)
- Treelines
- Native hedgerow (H2)
- Tree
- Farm buildings/ barns
- Modified grassland
- Tall ruderal
- Bramble scrub
- Hardstanding
- Bare ground lined with gravel
- Bare ground
- Sparsely vegetated - ruderal/ ephemeral



scheme: Somerton Farmyard, Somerton, Oxfordshire
 client: Laxton Properties
 drawing: PRI24625
 date: 16.12.25
 scale: NTS@A3
 drawing: UK Habitat Classification Rev A
 drawn: CW

APPENDIX 2: BAT PRF TREE LOCATIONS



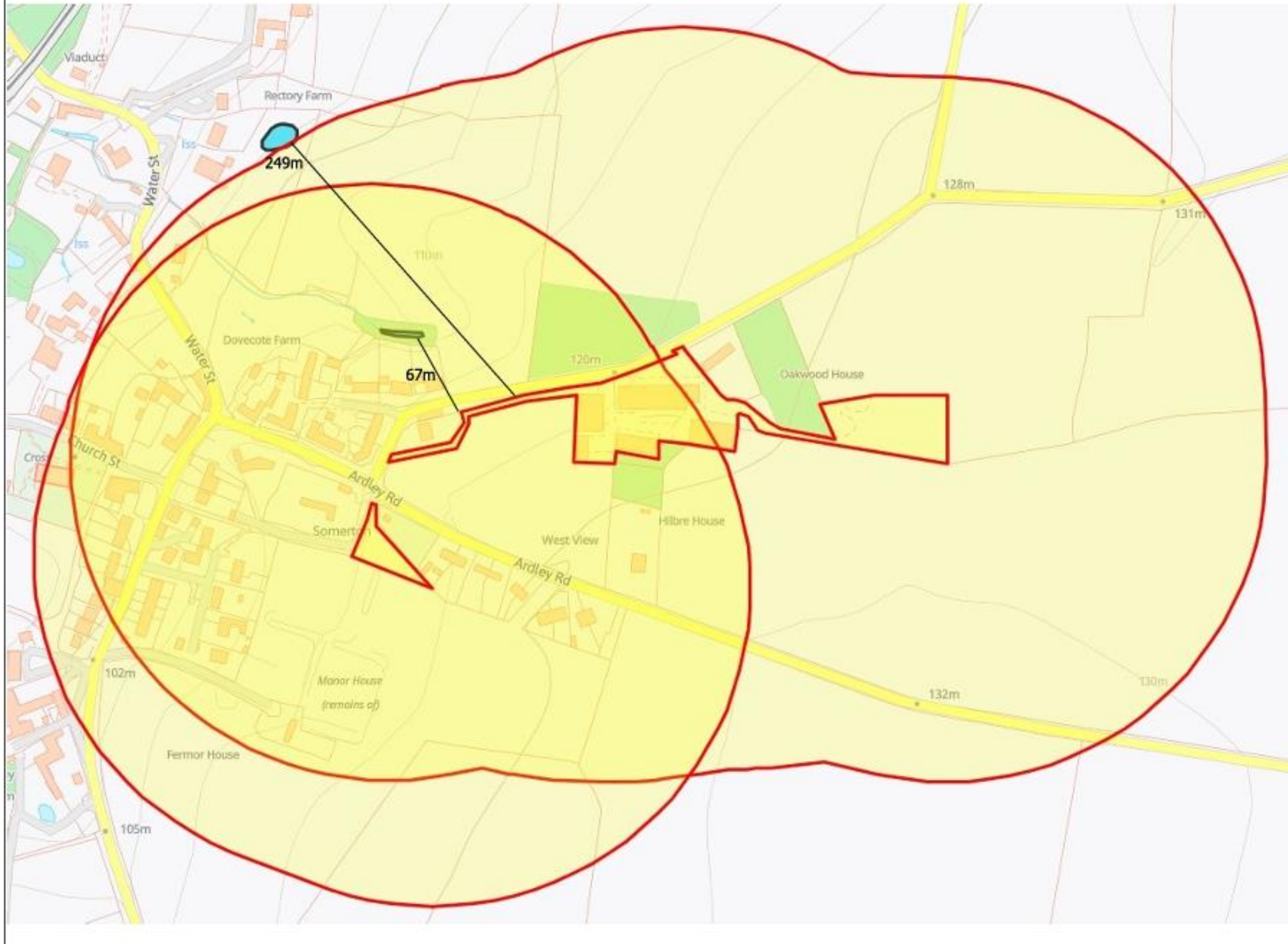
- Red line boundary
- Bat potential roost trees
 - Low potential
 - Moderate potential



scheme: Somerton Farmyard, Somerton, Oxfordshire
client: Laxton Properties
drawing: Bat potential trees
date: 19.12.25
scale: NTS@A3
drawing: PRI24625
drawn: CW

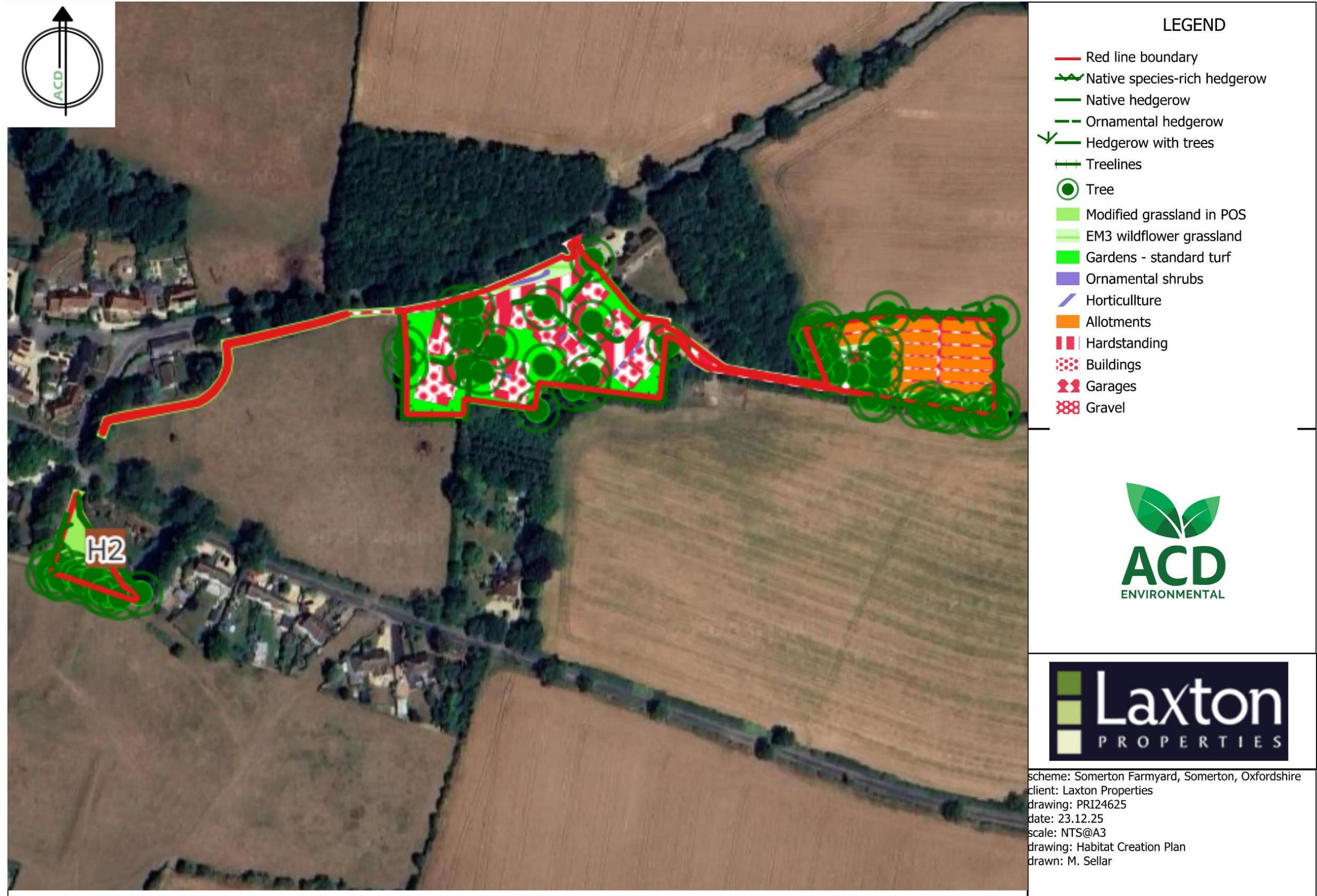
APPENDIX 3: POND LOCATION PLAN

Ponds within
250m of the
Application Site



scheme: Somerton Farmyard, Somerton, Oxfordshire
client: Laxton Properties
drawing: Pond plan
date: 21.12.25
scale: NTS@A3
drawing: PRI24625
drawn: CW

APPENDIX 4: HABITAT CREATION PLAN



APPENDIX 5: SITE PHOTOGRAPHS



Photograph 1: Gap on north side of Norway maple T33 approximately 1m high. Image taken 15th July 2025 by Brian Hicks.



Photograph 2: Split limb scar on south side of Norway maple T33 approximately 3m high. Image taken 15th July 2025 by Brian Hicks.



Photograph 3: Callus roll on branch of T34 approx. 3m high. Image taken 15th July 2025 by Brian Hicks.



Photograph 4: Hedgerow H1. Image taken 14th August 2024 by Charlene Watts.



Photograph 8: Tall ruderal in proposed allotment site. Image taken 11th September 2025 by Charlene Watts.



Photograph 6: Hedgerow H2 and modified grassland of south-western POS. Image taken 22nd October 2025 by Daniel Bardey.



Photograph 7: Bank supporting broadleaved treeline L1. Image taken 14th August 2024 by Charlene Watts.



Photograph 5: Dead tree amongst hedgerow H1. Image taken 14th August 2024 by Charlene Watts.



Photograph 9: Bare ground with gravel (foreground) and hardstanding (background). Image taken 14th August 2024 by Charlene Watts.



Photograph 10: Barn B1 north elevation. Image taken 14th August 2024 by Charlene Watts.

APPENDIX 6: FIELD SURVEY METHODOLOGY

Extended Phase 1 Habitat Survey/UK Habitat Classification Survey

The UK Habitat Classification Plan is shown in **Appendix 1**.

The Phase 1 Habitat Survey methodology²⁶ was used to classify the Application Site into habitat types, as listed in the Phase 1 Manual, and habitats were classified in accordance with the UK Habitat Classification System²⁷. Where appropriate, dominant species codes within habitat types were recorded. Descriptive target notes were used for particular areas of interest.

Incidental records of fauna were made during this survey and the habitats identified were evaluated for their potential to support legally protected species and species of Principal Importance.

Limitations

There were no limitations associated with this survey.

Badger field signs survey

Badger field signs surveys were carried out during the UKHabitat Classifications Surveys and update walkovers on 14th August 2024, 22nd May 2025, 11th September 2025 and 20th October 2025 by ACD Environmental Ltd.

Badger field signs surveys comprised walking the perimeter and interior boundaries of the Site, searching for evidence of badgers, in accordance with Harris et al²⁸ (1989) and Scottish Natural Heritage²⁹ (2018).

Where badger setts were found, they were described using the following criteria:

- Number of well-used holes - one or more of the features: well-worn entrance; freshly excavated soil; bedding material
- Number of partially-used holes - leaves or twigs in entrance and/or mosses and other plants growing in or around entrance)
- Number of disused holes - partially or completely blocked, with considerable amount of excavation required for reoccupation

Where feasible, badger setts are classified into the following:

²⁶ JNCC, (2010), *Handbook for Phase 1 habitat survey - a technique for environmental audit*. JNCC, Peterborough.

²⁷ *The UK Habitat Classification User Manual*. Version 1.1.

²⁸ Harris, S., Cresswell, P., and Jefferies, D. (1989). *Surveying Badgers*. Mammal Society.

²⁹ Scottish Badgers (2018). *Surveying for Badgers: Good Practice Guidelines*. Version 1.

- Main sett - continuously used, breeding and over-wintering sett for a social group of badgers. Only one main sett will exist in each social groups territory, and will be relatively centrally located within the group's range
- Annexe sett - annexe of the main sett, linked by well-used paths to the main sett (but not connected underground). Not continuously used
- Subsidiary sett - distant from the main sett. Several entrances, but with no well-used paths connecting to the main sett, and only used seasonally
- Outlier sett - distant from the main sett. Small, with only one of two entrances only. Used for short periods sporadically, with no obvious, well-used paths connecting to other setts

Limitations

There were no limitations associated with the badger field signs survey.

Preliminary Bat Roost Assessment

A Preliminary Roost Assessment (PRA) was carried out. This is an external and internal inspection survey, the purpose of which is to search for bats/evidence of bats and assess the likelihood of bats being present and the need for further survey and/or mitigation.

A systematic search was made of the barns and the ground, especially below potential access points where present. Such features include walls, eaves, behind surfacing materials and under tiles, and other cracks and crevices that provide protection from the elements. Such features are known to be used by roosting bats.

The internal inspection included searching for the following evidence of roosting bats:

- Roosting bats within crevices or free-hanging
- Bat corpses e.g. on the floor, in uncovered water (header) tanks or other containers in roof voids
- Bat droppings beneath roosting features
- Feeding remains e.g. moth/butterfly *Lepidoptera* spp. wings and beetle *Coleoptera* spp. wing casings
- Scratch marks and characteristic staining from urine and/or fur oil beneath roosting features e.g. on roofing timbers and walls within roof voids
- 'Clean' gaps associated with bat roosts

- Bat-fly *Nycteribiid* spp. pupal cases
- Droppings, corpses, feeding remains and/or bat-fly pupal cases beneath roof insulation, which indicates use by bats before the insulation was installed
- Clean swept floors, which may indicate evidence has been removed

The internal inspection included searching for the following features:

- Gaps within the structure of the roof e.g. mortise joints and junctions between roof timbers and between timbers and walls, and between the roof lining and roof covering
- Gaps within the structure of walls and potential access points to cavity or rubble-filled walls
- Suitable locations for free-hanging bats and/or night/feeding perches e.g. timber beams
- Gaps between lintels above windows or doors
- Light gaps in the roof indicating access points to the outside
- Cool areas suitable for torpor or hibernation e.g. cellars.

The following equipment was used for the bat survey:

- Binoculars
- Powerful torch to illuminate dark corners from the ground
- Ladder
- Collection pots and labels for corpses and droppings;
- Camera to record evidence and potential roosting sites; and
- Personal protective equipment (e.g. boots, gloves, helmet, mobile telephone).

In addition to the buildings, the trees were also searched for bats/evidence of bats and assessed for their potential to support roosting bats. The evidence of roosting bats searched for is detailed above with regard to buildings (e.g. bat droppings and feeding remains). The features of bats were searched for on the trees with reference to the three broad categories of Potential Roost Features (PRFs) and sub-categories of PRFs from the Bat Tree Habitat Key³⁰. These are as follows:

³⁰ Bat Tree Habitat Key 2018. *Bat Roosts in Trees – A Guide to Identification and Assessment for Tree-care and Ecology professionals*. Exeter: Pelagic Publishing.

- Disease and decay PRFs:
 - Woodpecker and squirrel holes;
 - Knot holes;
 - Pruning-cuts;
 - Tear outs;
 - Compression forks;
 - Wounds;
 - Cankers; and
 - Butt rots.

- Association PRFs:
 - Fluting; and
 - Ivy.

- Damage PRFs:
 - Hazard beams;
 - Frost cracks;
 - Subsidence/shearing and helical splits;
 - Lightning strikes;
 - Desiccation fissures;
 - Transverse snaps;
 - Welds; and
 - Lifting bark.

Limitations

There were no limitations to the Preliminary Roost Assessment.

Potential Roost Feature (PRF) aerial inspection survey

A Potential Roost Feature (PRF) aerial inspection survey took place on 4th July 2025 to assess T33 and T34 for bats and/or evidence of bats as well as to assess the suitability of each feature.

The survey covered all features which could be safely accessed whereby features are viewed using an endoscope.

Limitations

There were no limitations to the PRF aerial inspection survey.

Bird nesting

Evidence of nesting birds recorded during the PRA and any incidental bird observations/birds heard were noted.

The assessment included searching for the following with regard to barn owl:

- Birds present - roosting or nesting within buildings/trees;
- Birds present - corpses;
- Pellets - undigested feeding remains;
- Nests - formed on layers of degraded pellets;
- Droppings or 'liming' - often present on/below roosts such as roof timbers;
- Eggs - intact/broken or within nest/below nest; and
- Feathers - adult or natal down.

The internal inspection of the buildings included searching for the following features with regard to barn owl:

- Suitable access points (e.g. open doorways);
- Suitable ledges for nesting; and
- Suitable timbers for roosting.

Limitations

There were no limitations to the nesting bird checks.

APPENDIX 7: BIODIVERSITY METRIC METHODOLOGY

Assessment Framework

For the purposes of this assessment, the Statutory Biodiversity Metric has been utilised. The Statutory Biodiversity Metric is accompanied by a 'Calculation Tool'. This was used to calculate the biodiversity units for the Application Site before and after development. The assessment was conducted using the criteria set out within the Natural England guidance document.

Habitat Measurements

- Baseline habitat measurements were carried out in line with the results of the UKHab survey. Measurements were calculated using QGIS mapping software.
- Proposed habitat measurements were calculated from the soft landscape plans prepared.
- Measurements were entered to the nearest 0.001ha in area.

Habitats - Linear Features

- Linear features (hedgerows) have been measured in metres and the height and condition of the habitats were recorded during the habitat survey.
- Measurements were entered to the nearest 0.001km in length.

Distinction Assessments

Habitats are assigned to distinctiveness bands automatically within the Metric. These are based on an assessment of the distinguishing features of a habitat or linear feature, including the consideration of species richness, rarity (at local, regional, national and international scales), and the degree to which a habitat supports species rarely found in other habitats.

The distinctiveness band of each habitat is preassigned in the Statutory Biodiversity Metric. The bands are based upon the UK habitat classification system. A combination of simple rules and professional judgement have been used to assign each habitat type to the appropriate distinctiveness band. The distinctiveness categories used are tailored to habitat type.

Distinctiveness Assessments are assigned according to **Table 8**.

Table 8: Distinctiveness Assessment

Category	Scores	Multiplier
Very High	8	Priority habitats as defined in Section 41 of the Natural Environment and Rural Communities (NERC) Act that are highly threatened, internationally scarce and require conservation action e.g. blanket bog
High	6	Priority habitats as defined in Section 41 of the NERC Act requiring conservation action e.g. lowland fens
Medium	4	Semi-natural habitats not classed as a Priority Habitat
Low	2	Habitat of low biodiversity value. Temporary grass and clover ley; intensive orchard; rhododendron scrub
Very Low	0	Little or no biodiversity value e.g. hard standing or sealed surface

Condition Assessments

Condition assessments for existing habitats can be found in a separate excel document.

Strategic significance

The spatial location of a habitat is treated as a component of the quality of a habitat parcel in the same way as distinctiveness or condition. Strategic significance is used to determine whether the habitat is of increased importance due to its location.

Risk Factors

As part of any proposed habitat creation and restoration, risk factors must be taken into account to correct for disparity, delay or risk. These values are preassigned within the Statutory Biodiversity Metric and take into consideration the following factors:

- Temporal risk; and
- Difficulty of creation and restoration.

Advance/delay in habitat creation takes into account any significant time difference in the creation of a habitat type. This time is measured in full years and is entered by the assessor.

Habitat creation in advance is rewarded by reducing the difficulty and temporal risk multipliers applied. This reflects the lower delivery risk - there is less risk of failure when a habitat is already making progress towards its target condition.

Any significant delay in the creation of a habitat type relative to loss of on-site habitats (e.g. due to phased developments and developments that temporarily require parts of the development site for construction purposes) is added to the pre-populated time to target condition and increases the effect of the risk multiplier accordingly.

Limitations

Although the Statutory Biodiversity Metric is a valuable tool underpinned by ecological evidence, there are certain limitations that must be considered when applying the metric. The key principles and rules for the use of the Statutory Biodiversity Metric have been followed at all times, in line with these limitations. Further detail is available within the Statutory Biodiversity Metric User Guide.

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