



**Winsley Road
Bradford on Avon
BA15 2HL**

**Preliminary Ecological
Appraisal**

Luscinia Ecology
On behalf of
Mr. & Mrs. Dustan



Document Properties

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LUS24269 PEA	Draft	23/05/2025	Mel Granato	Greg Nightingale
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Chapter 1: Summary

- 1.1 This report will be submitted alongside a planning application for the existing field to seek permission for a change of use to a dog walking field, with an associated small shelter at Winsley Road, Bradford on Avon, BA15 2HL.
- 1.2 This report sets out a Preliminary Ecological Appraisal of the Proposed Development at the Site.
- 1.3 A data search and ecological surveys have been completed to determine the Proposed Development's impact, inform the Proposed Development's iterative design, (including implementation of the Mitigation Hierarchy), and to ensure the required ecological mitigation and compensation is embedded into the Proposed Development's design, or can be delivered via suitably worded planning conditions.
- 1.4 The Proposed Development limits the loss of habitats of ecological importance as the Site will only remove 0.09ha of grassland and retain all other green infrastructure. New landscaping and structural planting are proposed, and this includes new native species hedgerow and a re-wilding wildflower strip. These measures will increase the overall species diversity at the Site
- 1.5 The ecological impacts, and associated mitigation and compensation, associated with the Proposed Development is as follows:
 - The implementation of precautionary measures at construction to protect badgers, bat flight-paths and foraging habitat, and hedgehogs.
- 1.6 The following enhancements will be provided within the Site:
 - 2 x log piles.
 - 2 x HH7 Hogilo Hedgehog boxes
- 1.7 The Applicant is aware of, and has committed to, all the mitigation, compensation, and enhancement measures set out within this report.
- 1.8 Based on the results from the survey, context of the Site, and overall low ecological importance of the Site, this report is valid for a period of 18 months (i.e., the 01/10/2026).



Chapter 2: Introduction

- 2.1 This report will be submitted alongside a planning application for an existing field to seek permission for a change of use to a dog walking field, with an associated smaller shelter at Winsley Road, Bradford on Avon, BA15 2HL. This report sets out a Preliminary Ecological Appraisal of the Proposed Development at the Site.

Site Description

- 2.2 The Site consists of an existing field and associated access. The Site is approximately 1.04ha in size and located at National Grid Reference: ST 81128 61301. The Site includes a soft landscape track which provides access from Winsley Road to the south. The Site is immediately surrounded by existing areas of farmland, along with scattered areas of residential and commercial development. The wider landscape is largely formed of farmland (**Figure 1**).



Figure 1: Aerial image – Site boundary in red line¹

Proposed Development

- 2.3 This report will be submitted alongside a planning application for the existing field to seek permission for a change of use to a dog walking field, with an associated small shelter (referred to as the 'Proposed Development' throughout this report). Access will be via a track, which leads to Winsley Road to the south. The Proposed Development

¹ Image used under licence (©2024 Google): Accessed: 06/05/2025.



will result in the removal of the habitats within the Site and replacement with buildings, hardstanding. **Figure 2** shows the Proposed Development.

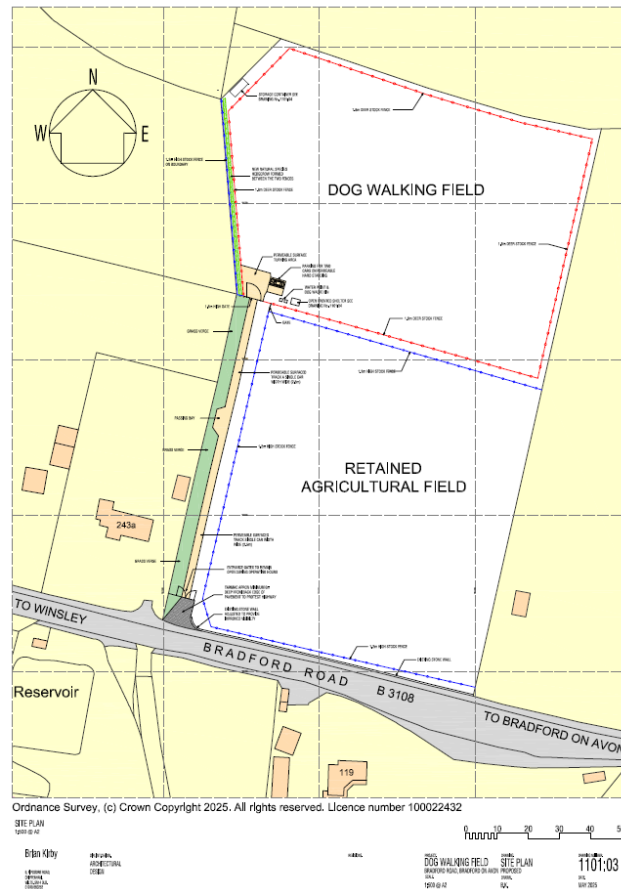


Figure 2: The Proposed Development

Purpose of this report

2.4 The purpose of this Preliminary Ecological Appraisal (PEA) is to provide sufficient information for the Local Planning Authority to fully assess and understand the ecological outcomes of the Proposed Development. The key objectives of this PEA are to:

- Outline the planning, legal, and landscape context of the Site.
- Ascertain the ecological importance of the Site by identifying and assessing the main habitats and plant communities within the Site and determining the presence/likely absence of protected species within the Site.
- Characterise and assess the ecological impacts/likely ecological impacts of the Proposed Development on the ecological importance of the Site.
- Follow the Mitigation Hierarchy to:
 - Demonstrate how the design of the Proposed Development has been shaped and revised since inception to minimise ecological impacts/likely ecological impacts (avoidance).



- Demonstrate the Proposed Development's commitment to mitigation, compensation, offsetting, and enhancement in relation to protected and priority habitats and protected, priority and notable species.
- Outline the requirements for future monitoring of ecological receptors, impacted/likely impacted by the Proposed Development.



Chapter 3: Method

- 3.1 This report was written with regard to the CIEEM Guidelines on: Ecological Report Writing², Preliminary Ecological Appraisal³, and Ecological Impact Assessment⁴, as well as the British Standard on the Biodiversity Code of Practice for Planning and Development Biodiversity⁵ and Writing Effective Ecological Reports⁶.

Zone of Influence

- 3.2 The ecological impacts / likely ecological impacts of the Proposed Development will be largely confined to the construction zone within the Site itself and would include the loss, degradation, and fragmentation of habitats, along with ecological impacts (e.g., killing and injury) on protected, priority and notable species, including the loss of ecological functions such as (commuting, hibernation, breeding opportunities). In addition, consideration has been given to the following potential impacts, which may spread beyond the Site:
- Disruption to species and habitats within receiving range of dust, light, noise and pollution during demolition, construction, and occupation of the Proposed Development.
- 3.3 The surveys of the Site and search buffers used within the data search are sufficient to capture the full extent of the Zone of Influence (Zoi) of the Proposed Development.

² CIEEM (2015). *Guidelines on Ecological Report Writing*. Chartered Institute for Ecology and Environmental Management, Winchester.

³ CIEEM (2017). *Guidelines for Preliminary Ecological Appraisal. 2nd Edition*. Chartered Institute for Ecology and Environmental Management, Winchester.

⁴ CIEEM (2018). *Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater, and Coastal and Marine*. Chartered Institute for Ecology and Environmental Management, Winchester.

⁵ BSI (2013). BS 42020:2013: *Biodiversity: Code of Practice for Planning and Development*. British Standards Institution, Bristol.

⁶ Dean M. (2021). *Writing Effective Ecological Reports: A Guide to Principles and Practice*. Pelagic Publishing, Exeter.



Data Search

- 3.4 A review of existing ecological knowledge of the Site and its surrounding area was undertaken on 06/05/2025. The data search included the following:
- A 5km radius around the Site for statutory designated nature conservation sites⁷.
 - A 1km radius around the Site for granted European Protected Species Licences (EPSL), great crested newt class survey licence returns, and great crested newt pond surveys 2017 - 2019⁷,
 - A 1km data search from Wiltshire and Swindon Biological Records Centre (WSBRC) for protected and notable species and non-statutory sites⁸.
 - A 1km review of the habitats within the local landscape, habitat designations, and their suitability to support protected and notable species using aerial imagery⁹.

Field Surveys

- 3.5 The following surveys were undertaken at the Site:
- Extended UK Habitat Classification Survey¹⁰
 - Bats: Preliminary Roost Assessment (PRA)¹¹
 - Bats: Ground Level Tree Assessment (GLTA)¹¹
 - Consideration of suitability for protected and notable species
 - Incidental observations
- 3.6 The surveys were completed on 01/04/2025 by Jenn Senft and Lorna Roberts. A detailed method for each of the surveys listed above is presented within that **Appendix A**.

Assessing Ecological Importance

- 3.7 The assessment of the importance of sites, habitats and species are made in line with good practice guidelines⁴. These guidelines provide consistency in the approach to evaluating the importance of the ecological features within a site and the effects or impacts the Proposed Development will have on them.
- 3.8 Firstly, the Site's habitats and species are assessed using a framework which assigns a level of geographical importance to ecological features. This framework incorporates a wide range of legislation and governmental guidance in assessing each feature's importance.

⁷ Multi-Agency Geographic Information for the Countryside (MAGIC) maps For England and Wales. Available online at: <https://magic.defra.gov.uk/home.htm>

⁸ Wiltshire and Swindon Biological Records Centre (WSBRC), received 19/02/2025.

⁹ Google Earth. Available online at: <https://earth.google.com/web/>

¹⁰ UKHab Ltd (2023). *UK Habitat Classification Version 2.0*. UKHab Ltd, Stockport.

¹¹ Collins, J. (2023). *Bat Surveys for Professional Ecologists: Good Practice Guidelines (4th Edition)*. The Bat Conservation Trust, London.



- 3.9 Next, the effects/likely effects of the Proposed Development are predicted, considering different stages and activities within the development process. These effects/likely effects are then assessed for their significance, based upon the importance of the Site, habitat or species being assessed. The assessment of the significance of an effect/likely effect is considered before and after the proposed mitigation to give an overall indication of significance.
- 3.10 The importance of specific ecological receptors (sites, habitats, or species) is assigned according to their level of importance using the following terms:
- International
 - National
 - Regional
 - County
 - Local
 - Site

Assessing Ecological Significance

- 3.11 The following factors are considered when assessing the significance of ecological impacts and effects: extent, magnitude, duration, reversibility, timing and frequency and cumulative effects.
- 3.12 An effect is considered significant if it either supports or undermines biodiversity conservation objectives for 'important ecological features' or for biodiversity in general. Conservation objectives may be specific (e.g., for a designated site) or broad (e.g., national/local nature conservation policy) or more wide-ranging (enhancement of biodiversity). Effects can be considered significant at a wide range of scales from international to local. Non-significant effects (referred to as 'negligible') are those changes which do not cause an effect (adverse or positive) on the conservation objectives for 'important ecological features' or for biodiversity in general.
- 3.13 Significant ecological effects are qualified with reference to an appropriate geographic scale. However, the scale of significance of an effect may not be the same as the geographic context in which the feature is considered important.
- 3.14 In determining if an effect is ecologically significant, the following is considered:
- For designated sites, the effect of the Proposed Development on the conservation objectives of the designated site and the conservation status of species or habitats for which the Site is designated is assessed.
 - For ecosystems, the effect of the Proposed Development on ecosystem structure and function is assessed.
 - For habitats and species, the effect of the Proposed Development on the conservation status is assessed as well as the effects of impacts on individual habitats and species.



Contributor information

3.15 The surveys and assessments were designed and led by Jenn Senft and Lorna Roberts. The PEA was written by Mel Granato. Technical review of this assessment was undertaken by Greg Nightingale. **Table 1** outlines the relevant experience of the assessment contributors.

Contributor	Experience
Greg Nightingale BSc (Hons) MCIEEM	Greg is the Director of Luscinia Ecology (A CIEEM Registered Practice) with over 11 years of experience in ecology and environmental management in the private sector. Greg has worked extensively within the planning system, undertaking protected species surveys, habitat surveys and Ecological Impact Assessments as well as providing advice on habitat management and mitigation and enhancement design. He has a comprehensive understanding of environmental policy and the current and emerging challenges facing the environment and how these challenges are managed within the planning sector. Through an understanding of good practice, planning policy, the ecology of protected habitats and species, and environmental impact pathways, Greg provides robust ecological advice that is cognisant of wider planning and legal requirements. He is experienced in UKHabs Classification system and the Phase 1 Habitat classification. He has designed, undertaken, and reported on numerous habitat and protected species surveys (including badger surveys, bat emergence/re-entry surveys, bat activity surveys, and hazel dormouse surveys), including bespoke survey design and the implementation of numerous protected species mitigation strategies. Greg is a full member of the Chartered Institute of Ecology and Environmental Management (CIEEM). He holds a level two Bat Licence, a level one Great Crested Newt Licence, and a NPTC (CS38) Tree Climbing and Aerial Rescue qualification. In addition, he has been named on badger mitigation licences and has completed courses in barn owls, botany, breeding birds, and hazel dormouse.
Lorna Roberts BSc (Hons) MSc ACIEEM	Lorna is Associate Director at Luscinia Ecology. A passionate ecologist with over 13 years' experience, Lorna brings a range of ecological expertise and a pragmatic approach to client relationships and project management. Lorna's experience within the planning system ranges from initial identification of ecological constraints and opportunities, through to design and master planning, management of large-scale ecological impact assessments, stakeholder consultation, and design and implementation of post-planning management and monitoring strategies. Lorna is an accomplished field surveyor, experienced in a wide range of habitat/botanical and protected species surveys, and holds Natural England survey licences for bats and great crested newts. Lorna is particularly experienced in Habitats Regulations Assessment and has a proven track record of successful project delivery in the presence of often complex ecological constraints.
Jenn Senft BSc (Hons)	Jenn is an Assistant Ecologist at Luscinia Ecology, having graduated in 2023 with a 1st class degree in Biology. Jenn has theoretical knowledge and practical experience with bat and great crested newt surveys, the



Qualifying member of CIEEM	UK Habitat classification system, report writing, and wildlife legislation. She has a deep understanding of current and emerging challenges facing the environment, the impacts this has on people, and how these may be mitigated to suit both the client and the planet. With this knowledge and experience, Jenn provides a supporting role to offer robust ecological advice. Jenn is a Qualifying member of the Chartered Institute of Ecology and Environmental Management (CIEEM), working towards Qualifying status. She is also currently working towards gaining level 2 bat licence, and level 1 great crested newt licence. She has also completed online Field Studies Council and CIEEM courses in badgers, otters, tracks and signs, and winter tree identification.
Mel Granato BSc (Hons) MSc Qualifying member of CIEEM	Mel is an Assistant Ecologist at Luscinia Ecology, having graduated in 2023 in Conservation Ecology. Mel has two publications, one of which can be found in the Journal the Journal Insects (Granato <i>et al.</i>, 2024), and one in the Journal World (Granato <i>et al.</i>, 2025). Mel has practical experience and theoretical knowledge with bat, reptile, great crested newt, breeding bird surveys, technical report writing, UK Hab classification systems, biodiversity net gain metrics and QGIS. Mel is a Qualifying Member of the Charted Institute of Ecology and Environmental Management. (CIEEM). Mel is actively working towards gaining a level 2 bat licence and level 1 great crested newt licence.

Table 1: Contributor experience

Assumptions, Clarifications, and Limitations

Assumptions

3.16 None.

Clarifications

3.17 None.

Limitations

3.18 The limitations associated with the survey work, data analysis, and reporting are set out within **Table 2**, along with an analysis of the effect of the limitation on the validity and robustness of the decision making within this report.



Limitation	Analysis of effect
The desk study does not produce a comprehensive list of plants and animals as this is limited by factors that influence their presence (e.g., activity and dormancy periods), along with varied recording effort across the landscape.	The species records of the desk study reflect survey effort and therefore the data returned from each request is variable across the UK. As a result, the data search data has not been used to rule out the presence of protected species and habitats within and adjacent to the Site.
Measurements within this report are approximate – The mapping of baseline habitats and Proposed Development plans has relied upon the georeferencing of plans provided by the client.	The mapping of baseline habitats and Proposed Development plans has relied upon the georeferencing of plans provided by the project team. The process of georeferencing and mapping of polygon habitats at a fine scale may result in minor deviations from actual and proposed measurements. This has been controlled for via the use of advanced digitising tools and given the scale of the proposals any deviations in spatial areas or point locations are sufficiently minor to be inconsequential and will be subsumed within precautionary rounding.

Table 2: Summary of limitations and their effect



Chapter 4: Results and Assessment

Data Search

The Local Landscape Context

- 4.1 The Site is immediately surrounded by existing areas of farmland, along with scattered areas of residential and commercial development. The wider landscape is largely formed of farmland. The key green infrastructure within the local landscape includes arable fields and a hedgerow network. The key blue infrastructure includes the River Avon located 0.9km to the south of the Site.

Statutory Designated Sites

- 4.2 Statutory designated sites are the most significant ecological receptors and include Special Protection Areas (SPAs), Special Areas of Conservation (SACs) and Ramsar sites, which are all of **International Importance**, and Special Scientific Interest (SSSIs) and National Nature Reserves (NNRs), which are of **National Importance**.
- 4.3 Local Nature Reserves (LNRs) are notified under Section 21 of the National Parks and Access to the Countryside Act 1949 (as amended) by local authorities and are of **Local Importance**. They are intended for public appreciation and enjoyment of wildlife. The LNR designation does not afford special protection; however, LNRs are protected under legislation and planning policy.
- 4.4 The statutory designated sites within returned by the desk study are shown in **Table 3**¹². There was one SSSI returned by the data search, which was designated for its earth heritage and have therefore been omitted from the results.

¹² Any SSSIs solely designated for their earth heritage or geological value are not shown within this table.



Site Name	Reason for designation	Distance and direction
Winsley Mines SSSI	The site is designated for supporting inland rock. Condition: favourable.	1.5km west
Inwood Warleigh SSSI	The site is designated for supporting lowland broadleaved, mixed and yew woodland. Condition: declining	1.7km north
Iford Manor SSSI	The site is designated for supporting built up areas and gardens. Condition: favourable	2.4km south
Midford Valley Woods SSSI	The site is designated for supporting lowland broadleaved, mixed and yew woodland. Condition: Unit 1 & 3 – 9 are declining. Unit 2 is favourable.	3.1km west
Browns Folly SSSI	The site is designated for supporting lowland calcareous grassland. Condition: unit 1 unfavourable – recovering. Unit 2 – 7 favourable.	4.2km northwest
Combe Down and Bathampton Down Mines – Unit 9 SSSI	The site is designated for supporting inland rock. Condition: unit 9 – favourable.	4.9km northwest
Bath & Bradford on Avon Bats SAC	The site is designated for supporting Annex II species including the Bechstein's bat <i>Myotis bechsteinii</i> , greater horseshoe bat <i>Rhinolophus ferrumequinum</i> and the lesser horseshoe bat <i>Rhinolophus hipposideros</i> .	1.5km west
Bath & Bradford on Avon Bats SAC	The site is designated for supporting Annex II species including the Bechstein's bat <i>Myotis bechsteinii</i> , greater horseshoe bat <i>Rhinolophus ferrumequinum</i> and the lesser horseshoe bat <i>Rhinolophus hipposideros</i> .	4.2km northwest

Table 3: Summary of statutory designated sites returned by the desk study

Non-Statutory Designated Sites

- 4.5 In Wiltshire, Local Wildlife Sites (LWSs) and Protected Road Verges (PRVs) are designated. LWSs and PRVs are of **Local Importance**. The non-statutory designated sites within returned by the desk study are shown in **Table 4**.



Site Name	Reason for designation	Distance and direction
Winsley Reservoir LWS	The site is designated for supporting a limestone grassland on top of a water reservoir with large populations of Green-winged and pyramid orchids.	25m south
Belcombe Court Wood LWS	The site is designated for supporting an ancient woodland site, the woodland is situated in a steep-sided bowl with a low south edge. Once a Victorian woodland garden several lovely stone archways remain. Spring water rising in the centre of the site flows via a stream to a man-made pond.	0.2km southeast
Cottles Lane Meadow LWS	The site is designated for supporting a small steep east-facing meadow supporting unimproved calcareous grassland.	0.4km southwest
Belcombe Meadow LWS	The site is designated for a small area of very species rich unimproved lowland calcareous grassland with anthills, part now planted with young trees and shrubs and ungrazed, on the Belcombe Court Estate.	0.4km southeast
Electricity Station Meadow LWS	The site is designated for supporting an area of pasture around an electricity sub-station on a north-facing slope supporting calcareous grassland on the steepest banks and neutral grassland elsewhere.	0.4km south
Still Meadow LWS	The site is designated for supporting a small calcareous meadow forming part of the garden of a large house.	0.7km west
Bristol Avon River LWS	The site is designated for supporting one of the main river systems draining north-west Wiltshire.	0.7km south
Kenet & Avon Canal LWS	The site is designated for supporting a restored canal much used for recreation.	0.7km south

Table 4: Summary of non-statutory designated sites returned by the desk study

Protected and Notable Species

- 4.6 The relevant protected species records from the data search are incorporated into the Protected and Notable Species section, below.

Habitat Survey

- 4.7 The Site supported the following habitats:

- **Grassland:** Other neutral grassland
- **Sparsely vegetated land:** Ruderal/ephemeral

- 4.8 All the habitats and features described are shown on the Extended UK Habitat Classification Plan at **Appendix B**.

Grassland: Other neutral grassland

- 4.9 The Site was predominantly made up of other neutral grassland (**Photographs 1 and 2**). The sward height was primarily homogeneous with scattered tussock areas, likely a result of the field used for grazing. Species recorded were dominated in cocks foot grass



Dactylis glomerata, perennial rye grass *Lolium perenne* and Yorkshire fog grass *Holcus lanatus*. Other species recorded included: a allium species. *Allium* sp., bramble *Rubus fruticosus*, broadleaved plantain *Plantago major*, cleavers *Galium aparine*, common hogweed *Heracleum sphondylium*, common mouse ear *Cerastium fontanum*, common ragwort *Jacobaea vulgaris*, cow parsley *Anthriscus sylvestris*, cranesbill sp. *Geranium* sp., creeping bent grass *Agrostis stolonifera*, creeping buttercup *Ranunculus repens*, dandelion sp. *Taraxacum* sp., dead red nettle *Lamium purpureum*, dogs' mercury *Mercurialis perennis*, hairy bittercress *Cardamine hirsute*, lords and ladies *Arum maculatum*, meadow buttercup *Ranunculus acris*, red clover *Trifolium pratense*, spear thistle *Cirsium vulgare* and yarrow *Achillea millefolium*. The **other neutral grassland** was of **Site Importance**.



Photograph 1. Other neutral grassland





Photograph 2. Other neutral grassland

Sparsely vegetated land: Ruderal/ephemeral

- 4.10 There was a small area of ruderal/ephemeral along the northern boundary (**Photograph 3**). Species recorded was dominant in common nettle *Urtica dioica*. Other species recorded included: bramble, common hogweed, cow parsley and dog mercury *Mercurialis perennis*. The **ruderal/ephemeral** was of **Negligible Importance**.





Photograph 3. Ruderal/ephemeral

Protected and Notable Species

4.11 Based upon the nature, location, and characteristics of the Site and adjoining landscape, the suitability of the Site to support the following species/species groups is outlined below:

- Amphibians, including great crested newt *Triturus cristatus*
- Badgers *Meles meles*
- Bats
- Birds
- Hedgehog *Erinaceus europaeus*
- Reptiles

4.12 If a species or species group is not listed above, then it has been scoped out of this assessment based upon the nature, location, and characteristics of the Site and adjoining landscape.

Amphibians

4.13 There were no granted great crested newt EPSLs, within 1km of the Site. There were no positive great crested newt pond surveys (2017 – 2019) or great crested newt class survey licence returns within 1km of the Site.

4.14 WSBRC returned 43 records of amphibians including 15 common toad *Bufo bufo*, 21 common frog *Rana temporaria* and six great crested newt. The closest of these was a



common frog located in a residential area northwest of Winsley Road, 0.4km to the west of the Site (Grid reference: ST 80695 61311). The records indicate a population of great crested newts that span east of Belcombe Meadow to the west of Sandy Leaze, 0.8km to the northeast of the Site.

4.15 A review of aerial photography and OS Mapping confirmed that there was one pond within 250m of the Site and two ponds within 500m of the Site. The ponds within the local landscape included:

- **P1**, located in a garden of a residential property, 150m to the north of the Site (Grid reference: ST 81321 61190).
- **P2**, located within a field to the southwest of Ashley Road, 360m to the northeast of the Site (Grid references: ST 81622 61528).
- **P3**, located within Belcombe Meadow, 430m to the southeast of the Site (Grid reference: ST 81624 60806).

4.16 There were no breeding opportunities for amphibians on and adjacent to the Site. Although the Site is located within a commuting pathway between a network of ponds, the Site itself has low habitat suitability for great crested newts in their terrestrial phase. The likelihood of amphibians being present within the local landscape or within the Site is low.

4.17 A rapid risk assessment was carried out which determined an offence to great crested newts within the Site was highly unlikely (**Table 5**).

Great crested newt breeding pond(s)	No effect	0
Land within 100m of any breeding pond(s)	No effect	0
Land 100-250m from any breeding pond(s)	0.1 - 0.5 ha lost or damaged	0.1
Land >250m from any breeding pond(s)	0.1 - 0.5 ha lost or damaged	0.005
Individual great crested newts	No effect	0
		Maximum:
		0.1
Rapid risk assessment result:		GREEN: OFFENCE HIGHLY UNLIKELY

Table 5: Results of the Rapid Risk Assessment

4.18 The **amphibian interest** was of **Negligible Importance** and amphibians will not be discussed further within this report.

Badgers

4.19 WSBRC returned 29 records of badger. The closest of these was located in a residential garden 150m to the east of the Site. The records indicated a high population of badgers to the south of the Site, spanning from Murhill to New Town Road.

4.20 WSBRC returned one record of badger sett, further information in relation to location and sett type are sensitive and not supplied by the WSBRC.

4.21 There was no direct evidence of badgers (setts, hairs, prints, latrines, etc.) within the Site. The wider 30m adjacent to the Site was also searched. No evidence of badgers was found within these areas. There were no mammal paths leading into or from the Site. It is expected that badgers are present within the wider landscape, likely using



the farmland to the south, and therefore badgers could enter the Site in the future. Given the Site is predominantly grassland, it is considered unlikely that a badger sett would be established within the Site.

4.22 The **badger interest** was of **Site Importance**.

Bats

Data search

4.23 There were no granted EPSL for bats within 1km of the Site. WSBRC returned 216 records of bat including:

- Three barbastelle *Barbastella barbastellus*
- Six Bechstein's *Myotis bechsteinii*
- One Brandt's *Myotis brandtii*
- Five brown long-eared *Plecotus auritus*
- 14 common pipistrelle *Pipistrellus pipistrellus*
- 56 Daubenton's bat *Myotis daubentonii*
- 27 greater horseshoe *Rhinolophus ferrumequinum*
- 47 lesser horseshoe *Rhinolophus hipposideros*
- One Nathusius's pipistrelle *Pipistrellus nathusii*
- 10 Natterer's bat *Myotis nattereri*
- Five noctule *Nyctalus noctula*
- 14 serotine *Eptesicus serotinus*
- Seven soprano pipistrelle *Pipistrellus pygmaeus*
- One whiskered *Myotis mystacinus*

4.24 WSBRC returned 69 roosts records including one common pipistrelle maternity roost, four greater horseshoe and 17 lesser horseshoe hibernation roosts: location of roosts was not supplied by WSBRC due to sensitivity.

Preliminary Roost Assessment

4.25 There were no buildings within the Site.

Ground Level Tree Assessment

4.26 There were no mature trees within the Site.



Flight-paths and Foraging Habitat

4.27 The Site supports a simple habitat structure formed of poor-quality habitats, with limited connectivity. The Site is immediately surrounded by existing areas of farmland, along with scattered areas of residential and commercial development. The wider landscape is largely formed of farmland. The key green infrastructure within the local landscape includes arable fields and a hedgerow network. The key blue infrastructure includes the River Avon located 0.9km to the south of the Site.

4.28 The wider landscape broadly aligns with Moderate Suitability Flight-path and Foraging Habitat:

“Moderate Suitability habitat:

“Continuous habitat connected to the wider landscape that could be used by bats for flight-paths such as lines of trees and scrub or linked back gardens.

Habitat that is connected to the wider landscape that could be used by bats for foraging such as trees, scrub, grassland or water.”

4.29 It is expected that the bat assemblage uses the hedgerow network as a key flight-path and as a key foraging habitat. However, the Site itself is not expected to be a key flight-path or a key foraging habitat.

4.30 The habitat within the Site was assessed to be of **Low Suitability** for bat flight paths and foraging habitat.

Nesting birds

4.31 WSBRC returned 911 records of birds including:

- 11 Cetti's warbler *Cettia cetti*
- One common scoter *Melanitta nigra*
- 10 fieldfare *Turdus pilaris*
- Three firecrest *Regulus ignicapilla*
- 12 hobby *Falco Subbuteo*
- 53 kingfisher *Alcedo atthis*
- Five osprey *Pandion haliaetus*
- 26 peregrine *Falco peregrinus*
- Three pintail *Anas acuta*
- Ten red kite *Milvus milvus*
- 13 redwing *Turdus iliacus*
- Broad locations of the records span from Winsley to west to Bradford-On-Avon to the east.



4.32 The Site supported areas of low value vegetation for nesting birds, which comprised of other neutral grassland and ephemeral habitat. The small areas of offsite bramble scrub were suitable for nesting birds.

4.33 The **nesting bird interest** was of **Site Importance**.

Hedgehog

4.34 WSBRC returned 150 records of hedgehog. The closest of these was located in Hill View Farm, 0.2km to the southwest of the Site. The records indicate a large population of hedgehogs are located within the residential areas of Winsley and Bradford-On-Avon.

4.35 It is expected that hedgehogs could be present within the local area and may occasionally enter the Site to commute, forage, and rest. The ground was considered to provide insufficient cover or features for hedgehogs to use to hibernate.

4.36 The **hedgehog interest** was of **Site Importance**.

Reptiles

4.37 WSBRC returned 32 reptile records including: four adder *Vipera berus*, five common lizard *Zootoca vivipara*, 13 grass snake *Natrix Helvetica* and ten slow worm *Anguis fragilis*. The closest of these was a grass snake located west of Ashley Lane 0.4km to the west of the Site. The records indicate the highest concentration of reptiles is located on Bradford-On-Avon residential western boundary located 0.6km to the east of the Site.

4.38 The Site itself is predominantly formed of areas of regularly managed greenspace. It is not expected that a population of reptiles is present within or immediately adjacent to the Site.

4.39 The **reptile interest** was of **Negligible Importance** reptiles will not be discussed further within this report.

Results Conclusion

4.40 A summary of the results in presented in **Table 6**. Where further consideration is required, this is addressed and resolved in the following chapters of this report.



Ecological Feature	Ecological Importance / Suitability*	Further consideration required?
Winsley Mines SSSI	National	Yes
Inwood Warleigh SSSI		
Iford Manor SSSI		
Midford Valley Woods SSSI		
Browns Folly SSSI		
Combe Down and Bathampton Down Mines – Unit 9 SSSI		
Bath & Bradford on Avon Bats SAC		
Bath & Bradford on Avon Bats SAC		
Winsley Reservoir LWS	Local	
Belcombe Court Wood LWS		
Cottles Lane Meadow LWS		
Belcombe Meadow LWS		
Electricity Station Meadow LWS		
Still Meadow LWS		
Bristol Avon River LWS		
Kennet & Avon Canal LWS		
Grassland: Other neutral grassland	Site	Yes
Sparsely vegetated land: Ruderal/ephemeral	Negligible	No
Amphibians, including great crested newt	Negligible	No
Badgers <i>Meles meles</i>	Site	Yes
Bats roost buildings	No/None*	No
Bat roost: trees		
Bat flight paths and foraging habitat	Low*	Yes
Birds	Site	
Hedgehog		
Reptiles	Negligible	

Table 6: Summary of Results



Chapter 5: Discussion

- 5.1 The report follows the mitigation hierarchy. The avoidance measures and the embedded mitigation are set out. Followed by additional mitigation measures to minimise impacts further and then compensation to address any remaining impacts. Lastly, ecological enhancements are provided.
- 5.2 The following discussion and assessment have been provided to ensure full compliance with legislation and both local and national planning policy set out in **Appendix C**.
- 5.3 This report is valid provided the plans shown in **Figure 2** do not change.
- 5.4 All details set out in this Chapter are deliverable with the Proposed Development and have been approved by the Applicant.

Embedded Mitigation

- 5.5 Using the design principles and layout within **Figure 2**, this section considers the embedded mitigation associated with the Proposed Development.
- 5.6 The selection of the Site for Proposed Development has inherently limited impacts on ecology and biodiversity as the Site will only remove 0.09ha of grassland and retain all other green infrastructure.

Effects of the Proposed Development

- 5.7 Using the design principles and layout within **Figure 2**, this section concerns an assessment of ecological effects resulting from the Proposed Development. The following effects have been identified:
 - The removal of 0.09ha of grassland
 - Construction of a small parking space with associated access
 - Construction of a small shelter
 - The clearance of the Site and construction process potential to kill/injure badgers and hedgehogs.
 - There will be increases in light spill during construction
 - There will be pollution during construction in the form of dust, noise, chemical, and litter.

Site Wide Mitigation

- 5.8 Care will be taken during clearance/groundworks to ensure wildlife is not harmed. In the event a protected species is found when an ecologist is not in attendance, works will stop, and an ecologist will be contacted.



5.9 The construction phase is likely to be limited given the small scale of the Proposed Development. The Proposed Development will implement standard and well-rehearsed pollution control measures throughout construction. Given the scope of the development, the following actions will be implemented during construction:

- Take measures to minimise and prevent erosion and run-off, including minimising adjacent land disturbance.
- Control dust through fine water sprays used to dampen down the Site.
- Screen the edge of the Construction Zone by placing a fine mesh screening close to any dust sources.
- Cover skips and trucks loaded with construction materials and continually damp down with low levels of water.
- Cover piles of building materials like cement, sand and other fine materials and powders, regularly inspect for spillages, and locate them where they will not be washed into waterways or drainage areas.
- Use non-toxic paints, solvents and other hazardous materials wherever possible.
- Segregate, tightly cover, and monitor toxic substances to prevent spills and possible site contamination.
- Cover up and protect all drains within and adjacent to the construction footprint.
- Collect, control, and avoid wastewater generated from construction activities, screen, discharge the clean water, and dispose of remaining sludge according to environmental regulations.
- No burning of materials.
- Reduce noise pollution through careful handling of materials; modern, quiet power tools, equipment and generators; and low impact technologies.

5.10 Lighting during construction and occupation has the potential to disrupt / modify the behaviour of wildlife. A Sensitive Lighting Strategy will be implemented. This strategy will include consideration of the following principles:

- Lighting within the Site will be reduced as far as practicable.
- Luminaires will be positioned and directed away from ecological receptors.
- Column heights will be reduced as far as practicably possible to reduce light spill along with the consideration of low-level bollard lighting.
- White light will be avoided, and warm colours preferably used. Preferable colours are 3000°k to 2700°k (where feasible) with peak wavelengths greater than 550nm.
- 0% upward light output and no tilting of the light head.
- Use vegetation, fencing and walls as a light buffers.
- Motion sensors for security lighting.



- For street lighting, the consideration of part night lighting and dimming (the latter viable with LED's only).
- As a last resort, the incorporation of shields, baffles and cowls fitted to the luminaires.

Designated Sites

Statutory Designated Sites

- 5.11 The statutory sites are spatially isolated from the Proposed Development as to avoid impacts in relation to habitat loss, habitat fragmentation, habitat degradation, noise, light, dust, and pollution.
- 5.12 This is supported by the SSSI and SAC Impact Risk Zones¹³ that the Site lies within, which are not indicating that a development of this scale and nature in this area would result in likely impacts on internationally or nationally protected Sites.
- 5.13 Statutory designated sites are not discussed further within this report.

Non-statutory

- 5.14 The non-statutory sites are spatially isolated from the Proposed Development as to avoid impacts in relation to habitat loss, habitat fragmentation, habitat degradation, noise, light, dust, and pollution. Non-statutory designated sites are not discussed further within this report.

Habitats

- 5.15 The Proposed Development avoids the loss of habitats of ecological importance as the removal of a small area of grassland is not considered significant.
- 5.16 New landscaping and structural planting are proposed, and this includes new native species hedgerow and a re-wilding wildflower strip. These measures will increase the level of greenspace within the Site, along with overall species diversity at the Site. In time, the greenspace and new tree planting will provide an increase in opportunities for wildlife, as well as an overall increase in the permeability of the Site for wildlife. The overall impact on habitats from the Proposed Development will be a minor positive.
- 5.17 The landscaping and habitat provision should be secured by a suitably worded planning condition for a Soft Landscape Plan (or similar).

¹³ The Impact Risk Zones for Sites of Special Scientific Interest (SSSI IRZs) are for local planning authorities (LPAs) to determine if a proposed development is likely to affect a terrestrial SSSI and when to consult Natural England.



Protected and Notable Species

Badgers

5.18 There is a low risk of badgers entering the Site during construction. To avoid impacts on badgers during construction, the following precautionary measures will be implemented:

- A Toolbox talk will be given to contractors prior to works commencing and as part of the induction process for new teams entering the construction site. The Toolbox talk will include details on:
 - The known presence of badgers in the area.
 - The protected status of badgers.
 - What to look for when working in areas known to support badgers.
 - The agreed safe working practices in relation to badgers.
 - What to do when unsure or in the event that a badger or large hole / excavations is discovered on Site.
 - The contact details of the Ecologist in the event a badger or possible badger sett is discovered within/adjacent to the Site.
- Any excavations (e.g., trenches / pits) will be covered when works are not taking place to ensure that they do not fill with water and to prevent wildlife, including badgers, from becoming trapped within the excavation.
- If any excavations must be left open overnight, then they will be provided with a means of escape should a badger or any other wildlife enter. This could simply be in the form of a roughened plank of wood placed in the excavation as a ramp to the surface.
- Any temporary exposed pipes will be capped to prevent badgers gaining access during the night.
- Any excavations and pipes will be inspected each morning to ensure no badgers have 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 trapped badger is encountered, the advice of an ecologist will be sought.
- The storage of topsoil or other 'soft' building materials within the clearance/construction site will be given careful consideration. Badgers could readily adopt such mounds as setts. To avoid the adoption of any mounds by badgers, mounds will be kept to a minimum and any essential mounds subject to daily inspections.
- The storage of any chemicals within the clearance/construction site will be contained in such a way that they cannot be accessed or knocked over by any roaming badgers.

5.19 With the above mitigation, the risk of harm to badgers will be mitigated and the overall residual impact neutral.



Bats

- 5.20 The Site was assessed to be of Low Suitability in relation to bat flight-paths and foraging habitat.
- 5.21 The Proposed Development will not significantly alter the landscape or modify / sever habitats of high importance to bat flight-paths or foraging habitat. It is highly likely that the replacement of the existing habitats within the Site with hardstanding and a garden will result in an undetectable change in the use of the Site by the local bat assemblage.
- 5.22 As set out above, a Sensitive Lighting Strategy will be implemented during construction and occupation. In addition, it is expected that any new light sources from the Proposed Development will be minor, low-level, similar to existing light sources, and will not significantly illuminate adjacent habitats.
- 5.23 In line with the limited predicted degree of risk and proportionality principle¹⁴, no bat activity surveys were undertaken. This was reasoned as follows:
- The Site and Proposed Development were small in scale with a limited ZOI.
 - The Site contained a simple habitat structure / connectivity (adjacent to suitable habitats only).
 - The Site itself supported habitats of Low Suitability.
 - Impacts (modification, fragmentation, and severance) on commuting and foraging habitats were avoided by embedded mitigation.
 - The Proposed Development will introduce new structural planting and increase canopy cover over time.
- 5.24 With the above mitigation, there will be a negligible impact on bat flight-paths and foraging habitat, with the overall residual impact neutral.

Birds

- 5.25 No vegetation that is suitable for nesting birds will be removed. No further consideration is required.

Hedgehog

- 5.26 There is the low risk that hedgehog may enter the Site during construction and be killed/injured.
- 5.27 The above measures in relation to badger will protect commuting and foraging hedgehogs.
- 5.28 Hedgehogs will continue to be able to access habitats within and adjacent to the Site to commute, forage, and rest.

¹⁴ See sections 8.2.7, 2.2.2 and 2.2.5 of the Bat Survey Guidelines, reference 12.



- 5.29 With the above mitigation, the risk of harm to hedgehogs will be mitigated and the overall residual impact on hedgehogs will be neutral.



Assessment Conclusion

5.30 A summary of the assessment outcomes is presented in **Table 7**.

Ecological Feature	Ecological Importance / Suitability*	Assessment Outcome
Winsley Mines SSSI	National	No Impact / Impact Avoided
Inwood Warleigh SSSI		
Iford Manor SSSI		
Midford ValleyWoods SSSI		
Browns Folly SSSI		
Combe Down and Bathampton Down Mines – Unit 9 SSSI		
Bath & Bradford on Avon Bats SAC		
Bath & Bradford on Avon Bats SAC		
Winsley Reservoir LWS	Local	
Belcombe Court Wood LWS		
Cottles Lane Meadow LWS		
Belcombe Meadow LWS		
Electricity Station Meadow LWS		
Still Meadow LWS		
Bristol Avon River LWS		
Kennet & Avon Canal LWS		
Grassland: Other neutral grassland	Site	Losses compensated for
Badgers	Site	Reasonable Avoidance Measures included within this report
Bat flight paths and foraging habitat	Low	No Impact / Impact Avoided
Birds	Site	No Impact / Impact Avoided
Hedgehog	Site	Reasonable Avoidance Measures included within this report

Table 7: Summary of assessment outcomes

5.31 Based on the results from the survey, context of the Site, and overall low ecological importance of the Site, this report is valid for a period of 18 months (i.e., the 01/10/2025). It is reasoned that there would be no material change on Site within this time period. This is reasoned in line with good practice guidelines¹⁵.

¹⁵ CIEEM (2019). Advice Note: *On the Lifespan of Ecological Reports and Surveys*. Chartered Institute for Ecology and Environmental Management, Winchester



Enhancement

5.32 The National Planning Policy Framework encourages development to provide gains in biodiversity. The following ecological and biodiversity enhancements will be provided within the Site:

- Two log piles will be provided along the northern boundary vegetation. Covering the logs with brash will further enhance the benefit of the log piles. Log piles will be at least 1m wide and 0.5m high. This will benefit fauna such as small mammals, reptiles and invertebrates.
- Two HH7 Hogilo Hedgehog boxes will be provided along the base of the bramble scrub in the north eastern corner of the Site. The houses should be located within cover, close to vegetation piles and out of the prevailing wind.



Appendix A: Survey Methods

Extended UK Habitat Classification Survey

- A. 1 The Site was surveyed using the UK Habitat Classification Survey method. The method classified the Site into areas of similar botanical community types with a representative sample of those species present at the time of the survey being described. The vegetation present was clearly visible and allowed an accurate assessment to be made. Any subsequent visits to the Site were used as an opportunity to update the results and classifications of the UK Habitat Survey.
- A. 2 Grasslands within the Site were subject to quadrat surveys. Quadrat surveys included five 1m² quadrats with locations assigned using a Judgemental Stratified Survey Strategy¹⁶. The DAFOR scale was then used to assign the relative abundances of the species recorded within each of the quadrats. The DAFOR scale is as follows:
- D – Dominant (51 – 100%).
 - A – Abundance (31 – 50%).
 - F – Frequent (15 – 30).
 - O – Occasional (6 – 15%).
 - R – Rare (1 – 5%).
- A. 3 The survey was 'extended' to look for evidence of protected and notable species of flora or fauna¹⁷ and to assess the suitability of the Site to support these flora or fauna. In the context of this report, rare, protected, and notable species of flora or fauna were those considered to meet any of the following criteria:
- Species protected by UK or European legislation.
 - UK Post 2010 UK Biodiversity Framework priority species or Local Biodiversity Action Plan (LBAP) species.
 - Nationally rare or nationally scarce species.
 - Species of Conservation Concern (e.g., JNCC Red List, RSPB/BTO Red or Amber Lists).
- A. 4 The Wildlife and Countryside Act (1981) as amended, makes it an offence to release or allow to escape into the wild any animal, plant, or micro-organism not ordinarily resident in the UK (as listed in Schedule 9 of the Act). Plant species listed in Schedule 9 were searched for during the survey. However, many invasive species can be cryptic

¹⁶ Areas within the grassland were divided unequally into sub-areas based on visual cues at the Site and professional judgement, this allowed sub-areas of interest to be surveyed separately. Then sampling locations in the survey area were chosen at relatively equal distances but subjectively. This strategy avoids using a 'Random' strategy which may conflate the results of known sub-areas, thereby creating noise within the results, as well as avoiding a 'Systematic' survey which may conflate known sub-areas and/or miss sub-areas entirely.

¹⁷ Suitability was determined using respective good practice guidance for each species/species group.



and therefore this survey does not provide a guarantee that an invasive species is not present and shouldn't be relied upon to rule out absence of an invasive species¹⁸.

- A. 5 An Extended UK Habitat Plan was produced (**Appendix B**), incorporating Target Notes (TNs) used to highlight features of ecological interest.

Hedgerow Survey

- A. 6 The Hedgerow Regulations (1997) contain detailed instructions of how hedgerows should be assessed (hereafter referred to as 'The Regulations'). The Regulations apply to:

"Any hedgerow that is growing in, or adjacent to, protected land, or land used for agriculture, forestry or the breeding or keeping of horses, ponies or donkeys, if-

(a) It has a continuous length of, or exceeding, 20 metres: or

(b) It has a continuous length of less than 20 metres and, at each end, meets (whether by intersection or junction) another hedgerow".

- A. 7 Importantly, the Hedgerow Regulations give specific instructions on how to measure hedgerows and these are set out at Regulation 3:

"A hedgerow which meets (whether by intersection or junction) another hedgerow is to be treated as ending at the point of intersection or junction".

- A. 8 These measurement instructions must be followed exactly to ensure that the Regulations are applied correctly. The Regulations also make specific mention of gaps:

"For the purposes of ascertaining the length of any hedgerow -

(a) any gap resulting from a contravention of these Regulations; and

(b) any gap not exceeding 20 metres"

shall be treated as part of the hedgerow".

- A. 9 Once the length of a hedgerow has been determined, the importance of a hedgerow is assessed through the application of a number of criteria, which are referenced under Regulation 4. Regulation 4 sets out that:

"For the purposes of section 97 (hedgerows) of the Environment Act 1995 and these Regulations, a hedgerow is "important" if it, or the hedgerow of which it is a stretch, -

(a) Has existed for 30 years or more; and

(b) Satisfies at least one of the criteria listed in part II of Schedule 1".

¹⁸ Invasive species can be cryptic and can rapidly spread from adjacent land. Luscinia Ecology cannot be held liable for invasive species found within the Site after the date of the UK Habitat Survey.



- A. 10 The criteria listed in Part II of Schedule 1 are divided into two main sections, namely 'Archaeology and History' and 'Wildlife and Landscape'. If a hedgerow meets any one of each of the criteria listed, it qualifies as important. The majority of these criteria are split into parts, with sub-criteria to be applied in turn to each hedgerow. With this survey being an ecological survey, the hedgerows within the Site have not been assessed against the Archaeological and Historical criteria.
- A. 11 Criteria by which the importance of a hedgerow is judged in 'Wildlife and Landscape' terms are set out at criteria 6-8 of Schedule 1 Part II of the Regulations. Criterion 6 refers to the presence of rare, notable or protected species within a hedgerow. Criterion 7 sets out the specific types, numbers and/or associated features that a hedgerow must contain for it to qualify as important.
- A. 12 Considering criterion 7 of The Regulations and relevant to the location of the Site, for a hedgerow within the Site to qualify as important, it must include one of the following:
- (i) *At least 7 woody species;*
 - (ii) *At least 6 woody species and be associated with at least three of the features specified below;*
 - (iii) *At least 6 woody species, including one of the following:*
 - *Black-poplar tree (Populus nigra spp betulifolia);*
 - *Large-leaved lime (Tilia platyphyllos);*
 - *Small-leaved-lime (Tilia cordata);*
 - *Wild Service Tree (Sorbus torminalis).*
 - (iv) *At least 5 woody species and be associated with at least four of the features specified below.*
- A. 13 The associated features of the hedgerow, as referred to above, are:
- (a) *A bank or wall that supports the hedgerow along at least one half of its length;*
 - (b) *Gaps which in aggregate do not exceed 10% of the length of the hedgerow;*
 - (c) *Where the length of the hedgerow does not exceed 50 metres, at least one standard tree;*
 - (d) *Where the length of the hedgerow exceeds 50 metres but does not exceed 100 metres, at least 2 standard trees;*
 - (e) *Where the length of the hedgerow exceeds 100 metres, such number of standard trees (within any part of its length) as would when averaged over its total length amount to at least one for each 50 metres;*



- (f) *At least 3 woodland species (as listed on Schedule 2 of the Regulations) within one metre, in any direction, of the outermost edges of the hedgerow;*
- (g) *A ditch along at least one half of the length of the hedgerow;*
- (h) *Connections scoring 4 points or more in accordance with the following paragraph below;*
- (i) *A parallel hedge within 15 metres of the hedgerow.*

- A. 14 Regarding point h) above, a connection with another hedgerow scores 1 point and a connection with a pond or a woodland in which the majority of trees are broadleaved trees scores 2 points; and a hedgerow is connected with something not only if it meets it but also if it has a point within 10 metres of it and would meet it if the line of the hedgerow continued.
- A. 15 Criterion 8 sets out that when a hedgerow is located adjacent to a public right of way, bridleway or footpath, four woody species and two associated features are required for it to qualify as important.
- A. 16 The woody species referred to above are set out on Schedule 3 of the Regulations¹⁹.

Badgers

- A. 17 The Site was systematically surveyed for evidence of badgers, in the form of:
- Setts: comprising either single isolated holes or a series of holes, which may be link to each other underground.
 - Faeces: badgers deposit faeces in characteristic excavated pits, concentrations of which (latrine sites) are typically found at home range boundaries, field boundaries and around setts.
 - Paths: worn paths used by badger, often linked to setts or foraging grounds.
 - Scratching posts: typically at the base of tree trunks.
 - Snuffle holes: scrapes where badgers have searched for food.

¹⁹ Alder (*Alnus glutinosa*), Apple, crab (*Malus sylvestris*), Ash (*Fraxinus excelsior*), Aspen (*Populus tremula*), Beech (*Fagus sylvatica*), Birch, downy (*Betula pubescens*), Birch, silver (*Betula pendula*), Black-poplar (*Populus nigra* sub-species *betulifolia*), Blackthorn (*Prunus spinosa*), Box (*Buxus sempervirens*), Broom (*Cytisus scoparius*), Buckthorn (*Rhamnus cathartica*), Buckthorn, alder (*Frangula alnus*), Butcher's-broom (*Ruscus aculeatus*), Cherry, bird (*Prunus padus*), Cherry, wild (*Prunus avium*), Cotoneaster, wild (*Cotoneaster integerrimus*), Currant, downy (*Ribes spicatum*), Currant, mountain (*Ribes alpinum*), Dogwood (*Cornus sanguinea*), Elder (*Sambucus nigra*), Elm (*Ulmus* species), Gooseberry (*Ribes uva-crispa*), Gorse (*Ulex europaeus*), Gorse, dwarf (*Ulex minor*), Gorse, western (*Ulex gallii*), Guelder rose (*Viburnum opulus*), Hawthorn (*Crataegus monogyna*), Hawthorn, midland (*Crataegus laevigata*), Hazel (*Corylus avellana*), Holly (*Ilex aquifolium*), Hornbeam (*Carpinus betulus*), Juniper, common (*Juniperus communis*), Lime, large-leaved (*Tilia platyphyllos*), Lime, small-leaved (*Tilia cordata*), Maple, field (*Acer campestre*), Mezereum (*Daphne mezereum*), Oak, pedunculate (*Quercus robur*), Oak, sessile (*Quercus petraea*), Osier (*Salix viminalis*), Pear, Plymouth (*Pyrus cordata*), Pear, wild (*Pyrus pyraister*), Poplar, grey (*Populus x canescens*), Poplar, white (*Populus alba*), Privet, wild (*Ligustrum vulgare*), Rose (*Rosa* species), Rowan (*Sorbus aucuparia*) Sea-buckthorn (*Hippophae rhamnoides*) Service-tree, wild (*Sorbus torminalis*) Spindle (*Euonymus europaeus*) Spurge-laurel (*Daphne laureola*) Walnut (*Juglans regia*) Wayfaring-tree (*Viburnum lantana*) Whitebeam (*Sorbus* species) Willow (*Salix* species), and Yew (*Taxus baccata*).



- Day nests: bundles of grass and other vegetation where badgers may sleep above ground.
- Hairs: usually found outside setts or caught under fencing.

Bat Surveys

Preliminary Roost Assessment

- A. 18 The structures within the Site were subject to a Preliminary Roost Assessment (PRA) following good practice guidelines. 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. 19 Prior to the external inspection, each structures' age, design, location, construction materials, state of repair, and current use, were assessed. These were then related to the likelihood of a bat roost being present, along with consideration of which species of bat are most likely to use the building. The external inspection included searching for the following features to determine if suitable exit/entry points were present:
- Holes, gaps, cracks, and damage to masonry/walls.
 - Lifted, missing, slipped, and damaged tiles, including tiles at the ridge, hip and across the roof.
 - Lifted, slipped and missing areas of hanging tiles, weatherboarding, and cladding.
 - Gaps/holes/damaged to soffits and facias.
 - Lifted flashing around air vents, chimneys, roof joints.
 - Interfaces of different materials and roof designs, where construction and/or damage can cause gaps.
- A. 20 If suitable exit/entry points were observed during the external inspection, the following evidence of roosting bats was carefully searched for on the exterior of the building:
- Droppings (down the wall, on the floor, caught in spiderwebs, on windowsills).
 - Staining and/or clean/smoothed areas, indicative of exit/entry.
 - Feeding remains, including moth/butterfly wings and beetle wing casings.
- A. 21 Prior to the internal inspection, the roof/loft design, likely levels of disturbance, and any likely recent changes to the roof/loft were assessed. These were then related to the likelihood of a bat roost being present, along with consideration of which species of bat are most likely to use the roof/loft space. The internal inspection included searching for the following evidence of roosting bats within the roof/loft space:
- Roosting bats within crevices or free hanging.
 - Bat corpses (on the floor, in uncovered water tanks or other containers).
 - Bat droppings, including beneath likely roosting areas.



- Feeding remains, including moth/butterfly wings and beetle wing casings.
- Scratch marks, staining and/or clean/smoothed areas, indicative of regular use.
- Bat-fly Nycteribiid spp. pupal cases.
- Gaps within the structure of the building, including:
 - Light ingress in the roof indicating access points to the outside.
 - Between the roof lining and roof covering.
 - Within the structure of walls and suitable access points to cavity or rubble-filled walls.
- Around the structure of chimneys or within disused chimney.
- Around lintels.
- Evidence beneath roof insulation, which indicates use by bats before the insulation was installed.
- Clean swept floors, which may indicate evidence has been removed.

A. 22 The following equipment was used for the Preliminary Roost Assessment:

- Elevation and baseline drawings of the building or structure.
- Binoculars (Pentax Papilio II 6.5 x 21 Close focusing).
- Powerful torch to illuminate dark corners from the ground.
- A ladder.
- Camera to record evidence.

A. 23 The assessment of the suitability of the buildings within the Site was assessed against Table 4.1 of the Bat Survey Guidelines. A redacted version of the table is set out in **Table 8** below, with additional information as noted.



Potential Suitability	Description of roosting habitats
None	No habitat features on site likely to be used by any roosting bats at any time of the year (i.e., a complete absence of crevices/suitable shelter at all ground/underground levels).
Negligible	No obvious habitat features on site likely to be used by roosting bats; however, a small element of uncertainty remains as bats can use small and apparently unsuitable features on occasion.
Low	A structure with one or more potential roost sites that could be used by individual bats opportunistically at any time of the year. However, these potential roost sites do not provide enough space, shelter, protection, appropriate conditions and/or suitable surrounding habitat to be used on a regular basis or by larger numbers of bats (i.e., unlikely to be suitable for maternity and not a classic cool/stable hibernation site but could be used by individual hibernating bats).
Moderate	A structure with one or more potential roost sites that could be used by bats due to their size, shelter, protection, conditions, and surrounding habitat but unlikely to support a roost of high conservation status (with respect to roost type only, such as maternity and hibernation – the categorisation described in this table is made irrespective of species conservation status, which is established after presence is confirmed).
High	A structure with one or more potential roost sites that are obviously suitable for use by larger numbers of bats on a more regular basis and potentially for longer periods of time due to their size, shelter, protection, conditions, and surrounding habitat. These structures have the potential to support high conservation status roosts, e.g., maternity, or classic cool/stable hibernation site.
Confirmed*	Evidence of bats has been confirmed within the structure. A temporal scale of recent use can also be applied based upon the type of evidence found and its condition. If a roost is found it may be assigned to the following: - Confirmed, active. - Confirmed, likely active. - Confirmed, unknown if active.
*This is an addition to Table 4.1 within the Bat Survey Guidelines but is based upon assertions and reasoning within the Bat Survey Guidelines.	

Table 8: Guidelines for assessing the potential suitability of proposed development sites for bats, based on the presence of habitat features within the landscape, to be applied using professional judgement – redacted and with additions

Ground Level Tree Assessment

- A. 24 The trees within the Site were subject to a Ground Level Assessment (GLTA) following good practice guidelines. 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. 25 The features suitable to support bat roosts were searched for on the trees with reference to the Bat Tree Habitat Key²⁰. These features are as follows:

²⁰ Andrews H. (2018). *Bat Roosts in Trees - A Guide to Identification and Assessment for Tree-care and Ecology professionals: Bat Tree Habitat Key*. Pelagic Publishing, Exeter.



- Longitudinal splits.
- Crevices.
- Rot-hollows.
- Transverse cracks.
- Loose bark.
- Ivy.

A. 26 The following equipment was used for the Ground Level Assessment:

- Binoculars (Pentax Papilio II 6.5 x 21 Close focusing).
- Powerful torch to illuminate dark features from the ground.
- A ladder.
- Camera to record evidence.

A. 27 The assessment of the suitability of the trees within the Site was assessed against Table 4.1 of the Bat Survey Guidelines. The table is set out in **Table 9** below.

Suitability	Description
PRF-I	PRF is only suitable for individual bats or very small numbers of bats either due to size or lack of suitable surrounding habitats.
PRF-M	PRF is suitable for multiple bats and may therefore be used by a maternity colony.

Table 9: Guidelines for categorising the potential suitability of PRFs on a proposed development site for bats, to be applied using professional judgement.

Flight-path and Foraging Habitat Assessment

A. 28 The assessment of the suitability of the bat flight-paths and foraging habitat of the Site was determined using Table 4.1 of the Bat Survey Guidelines. A redacted version of the table is set out in **Table 10** below.



Potential suitability	Description of flight-path and foraging habitats
None	No habitat features on site likely to be used by any commuting or foraging bats at any time of the year (i.e., no habitats that provide continuous lines of shade/protection for flight-paths or generate/shelter insect populations available to foraging bats).
Negligible	No obvious habitat features on site likely to be used as flight-paths or by foraging bats; however, a small element of uncertainty remains in order to account for non-standard bat behaviour.
Low	Habitat that could be used by small numbers of bats as flight-paths such as a gappy hedgerow or unvegetated stream, but isolated, i.e. not very well connected to the surrounding landscape by other habitat. Suitable, but isolated habitat that could be used by small numbers of foraging bats such as a lone tree (not in a parkland situation) or a patch of scrub.
Moderate	Continuous habitat connected to the wider landscape that could be used by bats for flight-paths such as lines of trees and scrub or linked back gardens. Habitat that is connected to the wider landscape that could be used by bats for foraging such as trees, scrub, grassland, or water.
High	Continuous, high-quality habitat that is well connected to the wider landscape that is likely to be used regularly by bats for flight-paths such as river valleys, streams, hedgerows, lines of trees and woodland edge. High-quality habitat that is well connected to the wider landscape that is likely to be used regularly by foraging bats such as broadleaved woodland, tree-lined watercourses, and grazed parkland. Site is close to and connected to known roosts.

Table 10: Guidelines for assessing the potential suitability of proposed development sites for bats, based on the presence of habitat features within the landscape, to be applied using professional judgement – redacted.



Appendix B: UK Habitat Classification Plan



Appendix C: Legislation and Planning Policy

- C. 1 The following local policy, national planning policy and legislation relating to nature conservation and biodiversity status, are considered of relevance to the current proposal.

Planning and Biodiversity

- C. 2 Local Authorities have a requirement to consider biodiversity conservation issues when determining planning applications.
- C. 3 The following ecological and environmental policies from the Wiltshire Core Strategy are of relevance to the Site:
- Core Policy 50: Biodiversity and Geodiversity
 - Core Policy 51: Landscape
 - Core Policy 52: Green Infrastructure
- C. 4 Chapter 15, Conserving and Enhancing the Natural Environment of the National Planning Policy Framework (NPPF)²¹ includes the following:

“187 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

²¹ MHCLG (2025). National Planning Policy Framework. February 2025. Ministry of Housing, Communities and Local Government, London.



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.

188. Plans should: distinguish between the hierarchy of international, national and locally designated sites; allocate land with the least environmental or amenity value, where consistent with other policies in this Framework⁶⁵; take a strategic approach to maintaining and enhancing networks of habitats and green infrastructure; and plan for the enhancement of natural capital at a catchment or landscape scale across local authority boundaries.

...

Habitats and biodiversity

192. To protect and enhance biodiversity and geodiversity, plans should:

a) Identify, map and safeguard components of local wildlife-rich habitats and wider ecological networks, including the hierarchy of international, national and locally designated sites of importance for biodiversity⁶⁸; wildlife corridors and stepping stones that connect them; and areas identified by national and local partnerships for habitat management, enhancement, restoration or creation⁶⁹; and

b) promote the conservation, restoration and enhancement of priority habitats, ecological networks and the protection and recovery of priority species; and identify and pursue opportunities for securing measurable net gains for biodiversity.

193. 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 reasons⁷⁰ 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.

194. The following should be given the same protection as habitats sites:

a) potential Special Protection Areas and possible Special Areas of Conservation;

b) listed or proposed Ramsar sites⁷¹; and

c) sites identified, or required, as compensatory measures for adverse effects on habitats sites, potential Special Protection Areas, possible Special Areas of Conservation, and listed or proposed Ramsar sites.

195. The presumption in favour of sustainable development does not apply where the plan or project is likely to have a significant effect on a habitats site (either alone or in combination with other plans or projects), unless an appropriate assessment has concluded that the plan or project will not adversely affect the integrity of the habitats site."

Legislation and biodiversity

C. 5 Certain species of animals and plants found in the wild in the UK are legally protected from being harmed or disturbed. These species are listed in the Wildlife and Countryside Act 1981 (as amended) or are named as European Protected Species (EPS) in The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019 (as amended). These two main pieces of legislation have been consulted when writing this report and are therefore described in detail within this section.

C. 6 Other relevant legislation and policy documents that have been consulted include:

- Protection of Badgers Act (1992)
- The Countryside and Rights of Way Act 2000
- The Hedgerow Regulations 1997
- Biodiversity Action Plans, both UK-wide (UKBAP), Local plans (LBAPs) and similar nature partnership plans.

Wildlife & Countryside Act 1981 (as amended)

C. 7 The Wildlife & Countryside Act 1981 (as amended; WCA) is the primary legislation for England and Wales for the protection of flora, fauna and the countryside. Part I within the Act outlines the protection of wildlife.

C. 8 Most offences are now covered under The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019 (as amended), but some 'intentional' acts are still covered under the WCA, such as obstructing access to a bat roost.



- C. 9 The provisions relating to animals in the WCA only apply to 'wild animals'; these are defined as those that are living wild or were living wild before being captured or killed. It does not apply to captive bred animals being held in captivity.
- C. 10 There are 'defences' provided by the WCA. These are cases where acts that would otherwise be prohibited by the legislation are permitted, such as the incidental result of a lawful operation which could not be reasonably avoided, or actions within the living areas of a dwelling house.
- C. 11 Certain prohibited actions under the WCA may be undertaken under licence by the proper authority. For example, scientific study that requires capturing or disturbing protected animals can be allowed by obtaining a licence.

Natural Environment and Rural Communities (NERC) Act

- C. 12 The UK Post-2010 Biodiversity Framework, which supersedes UK Biodiversity Action Plan (UK BAP) priority habitats and species, provides the 'broad enabling structure for action across the UK', which in England is interpreted into Biodiversity 2020: A strategy for England's wildlife and ecosystem services; however, some authorities do still refer to BAPs. Protecting habitats and species listed on Section 41 (S41) of the Natural Environment and Rural Communities (NERC) Act 2006 is an outcome of this strategy. The lists of priority habitats and species in England required under S41 were published by Natural England in May 2014. These measures are given due acknowledgement where relevant.

The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019 (as amended)

- C. 13 The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019 (as amended; The Regulations), which are the principal means by which the EC Habitats Directive is transposed in England and Wales update the legislation and consolidate all the many amendments which have been made since they were first made in 1994.
- C. 14 The Regulations provide for the:
- Protection of European Protected Species (EPS; animals and plants listed in Annex IV Habitats Directive which are resident in the wild in Great Britain), including: bats, hazel dormice, great crested newts, otters, sand lizard, and smooth snake.
 - Designation and protection of domestic and European Sites (e.g., Site of Special Scientific Interest (SSSI), Special Area of Conservation (SAC), Special Protected Areas (SPA).
 - Adaptation of planning controls for the protection of such sites and species.
- C. 15 Public bodies (including the Local Planning Authority) have a duty to have regard to the requirements of the Habitats Directive in exercising their function (e.g., when determining a planning application).



- C. 16 There is no defence that an act was the incidental and unavoidable result of a lawful activity.
- C. 17 It is possible for actions which would otherwise be an offence under The Regulations to be undertaken under licence issued by the proper authority. For example, where an EPS has been identified and the development risks deliberately affecting an EPS, then a 'development licence' may be required.

Species Protection

- C. 18 The following protected species information is relevant to this report. Legislation is only discussed in relation to planning and development; other offences may exist.

Amphibians

- C. 19 Common frog, common toad, common newt, and palmate newt receive protection under the Wildlife and Countryside Act 1981 (as amended), making it illegal to sell or trade them.
- C. 20 The great crested newt and Natterjack toad are EPS and fully protected under The Regulations, making it an offence to:
- Deliberately capture, injure, kill, or disturb either species.
 - Intentionally or recklessly obstruct access to any structure/place used for shelter or protection.
 - Damage or destroy a breeding site or resting place.

Badger

- C. 21 Badgers are protected in the UK under the Protection of Badgers Act 1992. Under the act it is an offence to:
- Wilfully kill, injure, take, possess, or cruelly ill-treat a Badger, or attempt to do so
 - To intentionally or recklessly interfere with a sett (this includes disturbing Badgers whilst they are occupying a sett, as well as damaging or destroying a sett or obstructing access to it).
- C. 22 The legislation aims to protect the species from persecution, rather than being a response to an unfavourable conservation status, as the species is in fact common over most of Britain; it is not intended to prevent properly authorised development.

Bats

- C. 23 All British bats are classed as EPS and therefore receive protection under The Regulations, making it an offence to:
- Deliberately kill, injure, or capture a bat.
 - Deliberately disturb bats.



- Damage or destroy a breeding site or resting place of a bat.
- C. 24 In addition, all British bats are also listed under Schedule 5 of the WCA, which contains further provisions making it an offence to intentionally or recklessly:
- Obstruct access to any structure or place which any bat uses for shelter or protection.
 - Disturb any bat while occupying a structure or place which it uses for that purpose.
- C. 25 If proposed development work is likely to destroy or disturb bats or their roosts, then a licence will need to be obtained from Natural England, which would be subject to appropriate measures to safeguard bats.

Birds

- C. 26 In the UK, the provisions of the Birds Directive are implemented through the WCA and The Regulations. All wild birds, their nests and eggs are protected, and it is an offence to:
- Kill, injure, or take any wild bird.
 - Take, damage, or destroy the nest of any such bird whilst it is in use or being built.
 - Take or destroying an egg of any such wild bird.
- C. 27 The law covers all species of wild birds including common, pest or opportunistic species. Special protection against disturbance during the breeding season is also afforded to those species listed on Schedule 1 of the Act.

Brown hare

- C. 28 Brown hare is listed on Schedule 5A of the WCA and it is an offence to intentionally or recklessly kill, injure or take Brown hare during their 'close season' (which is 1st February - 30th September), and sale and possession is an offence for any of these animals taken unlawfully.

Hazel dormouse

- C. 29 The hazel dormouse is classed as a European Protected Species and therefore receive protection under the Conservation of Habitats and Species Regulations 2017 (as amended), making it an offence inter alia to:
- Deliberately capture, injure, or kill hazel dormice
 - Deliberately disturb hazel dormice
 - Damage or destroy a breeding site or resting place of a dormouse
- C. 30 In addition, hazel dormouse is listed under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended) which contains further provisions making it an offence to intentionally or recklessly:



- Obstruct access to any structure or place which a hazel dormouse uses for shelter or protection; or
- Disturb a hazel dormouse while occupying a structure or place which it uses for that shelter or protection.

Hedgehog

C. 31 Hedgehog are protected under sections of the schedule 6 of the Wildlife and Countryside Act 1981 (as amended) making it an offence to:

- It illegal to kill or capture hedgehogs unless they are suffering or need to be rehabilitated then released back into the wild.

Reptiles

C. 32 Adders, slow worms, grass snakes and common lizards are protected against killing and injuring under Schedule 9 of the Wildlife and Countryside Act 1981 (as amended). This legislation makes it illegal to intentionally kill or injure a common reptile.

C. 33 Smooth snakes and sand lizards are European Protected Species under schedule 5 of the Wildlife and Countryside Act 1981 (as amended) and Schedule 2 of the Conservation of Habitats and Species Regulations 2017 (as amended). This makes it illegal to carry out the following activities:

- Deliberately or recklessly disturb, capture or kill these animals.
- Deliberately or recklessly take or destroy eggs of these animals.
- Damage or destroy a breeding site or resting place of such a wild animal.
- Keep, transport, sell or exchange, or offer for sale or exchange, any live or dead animal, or any part of, or anything derived from such a wild animal.

