



LAND EAST OF CALNE ROAD, LYNEHAM

Ecological Impact Assessment

Ashflame Properties Ltd

2489428-D04 (00)

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EXPERTS IN ECOLOGY

General Notes

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Where field investigations have been carried out, these have been restricted to a level of detail required to achieve the stated objectives of the work.

This work has been undertaken in accordance with the quality management system of RSK Biocensus.

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Executive Summary

RSK Biocensus was commissioned by Ashflame Properties Ltd to produce an Ecological Impact Assessment (EclA) in relation to the proposed residential development east of Calne Road, Lyneham, Wiltshire.

The c.8.76 ha Site comprises two sheep grazed modified grassland fields. To the west of the fields and field boundaries is the road verge of the A3102, an area of other neutral grassland. The Site is bordered to the north by a Ministry of Defence Base; to the south and east by pastoral and arable fields and agricultural buildings; and to the west by the A3102, a residential development and RAF Lyneham.

This EclA report presents the scope of the assessment, the results of the bat activity surveys and wintering bird surveys, the results of the evaluation of what may be affected, assessment and characterisation of impacts, and the identification of significant effects in the absence of mitigation. The EclA then goes on to consider alternatives, minimise, mitigate and compensate impacts, and identify significant residual ecological effects.

This assessment has been informed by data presented in the following reports:

- 2489428-D01 (00) – Land off A3102, Lyneham Preliminary Ecological Appraisal (RSK Biocensus, 2025a)
- 2489428-D02 (00) – Land off A3102, Lyneham Biodiversity Net Gain Baseline Report (RSK Biocensus, 2025b)
- 2489428-D03 (00) – Land off A3102, Lyneham Biodiversity Net Gain Design Stage Report (RSK Biocensus, 2025c)

Ecological features scoped into assessment are: other neutral grassland, native hedgerow, great crested newts, reptiles, birds and bats.

Ecological features scoped out of assessment are: non-statutory designated sites; modified grassland, invertebrates, hazel dormouse, badgers, fish, otter and water vole.

In the presence of mitigation, including the production and implementation of a Construction Environmental Management Plan (CEMP) or equivalent, detailing proposed additional mitigation measures, Ecological Clerk of Works (ECoW) provision where necessary and the implementation of a Habitat Management and Monitoring Plan and Landscape Strategy, it is considered that the effects of the development on the sensitive ecological features would be not significant.

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1 Introduction

1.1 Purpose of this report

- 1.1.1 RSK Biocensus was commissioned by Ashflame Properties Ltd to produce an Ecological Impact Assessment (EclA) in relation to the proposed residential development east of Calne Road, Lyneham, Wiltshire (Ordnance Survey [OS] grid reference SU 02045 77727) (hereafter referred to as the 'Site') (see Figure 1).
- 1.1.2 This EclA report presents the scope of the assessment, the results of the evaluation of ecological features that may be affected, assessment and characterisation of impacts, and the identification of significant effects in the absence of mitigation. The EclA then goes on to consider measures to minimise, mitigate and compensate impacts, and identify significant residual ecological effects.
- 1.1.3 The aims of this report are to:
- identify the ecological features that may be impacted by the Proposed Development;
 - describe the criteria used to evaluate the ecological baseline;
 - identify the potential significant impacts and effects from the Proposed Development on ecological features including potential impacts during the construction and operation phases, both in isolation and in combination with other development proposals;
 - identify mitigation and enhancement and compensation measures to minimise the potential for impacts from the Proposed Development on ecological features and deliver Biodiversity Net Gain (BNG);
 - identify legal and policy implications; and
 - provide an assessment of the significance of any residual effects.
- 1.1.4 Prior to this EclA, a preliminary ecological appraisal (PEA) was completed; the results of which were used to help scope future survey requirements to inform the impact assessment. In addition, this assessment has been informed by data presented in the following reports:
- 2489428-D01 (00) – Land off A3102, Lyneham Preliminary Ecological Appraisal (RSK Biocensus, 2025a)
 - 2489428-D02 (00) – Land off A3102, Lyneham Biodiversity Net Gain Baseline Report (RSK Biocensus, 2025b)
 - 2489428-D03 (00) – Land off A3102, Lyneham Biodiversity Net Gain Design Stage Report (RSK Biocensus, 2025c)

1.2 Site overview

- 1.2.1 The c.8.76 ha Site is comprised of two sheep grazed modified grassland fields (hereafter referred to as the 'northern field' and the 'southern field'), as well as two extensions (for utility connections) that run to the east and north-east of the Site, which cover another five fields of modified grassland and three native hedgerows. A native hedgerow is present along the western border of the northern field, a fence with young trees is present along the western border of the southern field. To the west of the fields and field boundaries is the road verge of the A3102, an area of other neutral grassland. All other field boundaries are fenced. The Site is bordered to the north by an Ministry of Defence

base; to the south and east by pastoral and arable fields and agricultural buildings; and to the west by the A3102, a residential development and RAF Lyneham. The surrounding land comprises agricultural land and buildings, and an un-named watercourse 550 m north-east of the site associated with a strip of woodland.

- 1.2.2 The Site (red line in Figure 1) shows the extent of the Proposed Development.
- 1.2.3 The Survey Areas (blue line in Figures 3 and 4) show the extent of bat activity and wintering bird surveys undertaken in 2025. The Survey Areas extend beyond the Site boundary in order to consider indirect effects from the Proposed Development.

1.3 Development proposals

- 1.3.1 The EclA is to inform outline planning submission for a proposed residential development comprising up to 200 dwellings, associated development, and public open space provision (hereafter known as the 'Proposed Development').
- 1.3.2 The plans for the Proposed Development are summarised in the following documents:
 - TD.00.160 - 1001 – Lyneham, Wiltshire - Illustrative Masterplan; and
 - TD.00.160 – PP-01B – Land East of Calne Road Lyneham, Wiltshire – Parameters Plan.
- 1.3.3 Impacts from the Proposed Development would include the loss of sections of other neutral grassland for the footway and main entrance, a section of native hedgerow for the main entrance and the sheep grazed modified grassland. There will be temporary impacts on the hedgerows and modified grassland along the sewerage connection routes.
- 1.3.4 A Biodiversity Net Gain (BNG) Design Stage Report has been produced which details habitat creation and enhancement measures that aim to deliver a minimum of 10% net gain (RSK Biocensus, 2025c).
- 1.3.5 Details regarding the construction, operational and decommissioning phases and their timescales have not been finalised at this stage.

1.4 Legislation, policy and guidance

- 1.4.1 This EclA has been prepared with reference to the legislation and guidance provided in Table 1.

Table 1: Legislation and guidance relevant to biodiversity

Document	Summary
Legislation	
The Conservation of Habitats and Species Regulations 2017 (as amended)	Transposes elements of the Habitats Directive (Council Directive 92/43/EEC) and the Wild Birds Directive (Directive 2009/147/EC)(known as the Nature Directives) into domestic legislation. Provides the highest levels of protection under UK legislation for the species and habitats listed. It provides for the notification and confirmation of Special Areas of Conservation (SAC) and Special Protection Areas (SPA) in England and Wales.
The Wildlife and Countryside Act (WCA) 1981 (as amended)	The WCA provides protection for species listed in Schedules 1 (birds), 5 (other animals) and 8 (plants) of the Act. It provides for the notification and confirmation of Sites of Special Scientific Interest (SSSIs) in England and Wales. It also sets out, in other schedules, important and invasive species which are legally protected or require management.

Document	Summary
The Environment Act 2021	The Environment Act sets out plans and targets for environmental welfare across a number of criteria, including biodiversity and species abundance. The Act mandates Biodiversity Net Gain across England.
The Natural Environment and Rural Communities (NERC) Act 2006	Section 40 requires that any public body or statutory undertaker in England must have regard to the purpose of conservation of biological diversity in a manner that is consistent with the exercise of their normal functions.
The Hedgerows Regulations 1997	The Hedgerows Regulations 1997 provide protection for 'important' hedgerows for which replanting is not a substitute. The regulations deem it an offence to remove an 'important hedgerow' without prior notification to the relevant local planning authority.
The Countryside and Rights of Way Act 2000	The Countryside and Rights of Way (CRoW) Act 2000 provides for public access on foot to certain land types, amends the law for public rights of way, increases protection for SSSIs, and strengthens wildlife enforcement legislation.
The Protection of Badgers Act 1992	This act protects badgers and their setts from damage and disturbance. Derogation licences may be obtained from Natural England under Section 10 of the Act for the purpose of development, to permit activities which would otherwise be unlawful.
The Invasive Alien Species (Enforcement and Permitting) Order 2019	It lists species of concern which cannot be imported, kept, bred/grown, transported, sold, used, allowed to reproduce, or released into the environment. This Order replaces some elements relating to invasive species in the Wildlife and Countryside Act 1981 (as amended).
Planning Policy	
National Planning Policy Framework (NPPF)	The National Planning Policy Framework (NPPF) sets out the Government's planning policy in England at the national level. Section 15 (paragraphs 174-188) of the NPPF specifies the requirements for conserving and enhancing the natural environment through the planning and development process to minimise impacts on habitats and biodiversity.
Wiltshire Biodiversity Action Plan	The adopted core strategy 2015-2026 (Wiltshire Council, 2015) contains Core Policy 50 which states ' <i>All development proposals shall incorporate appropriate measures to avoid and reduce disturbance of sensitive wildlife species and habitats throughout the lifetime of the development</i> ' and ' <i>All development should seek opportunities to enhance biodiversity. Major development in particular must include measures to deliver biodiversity gains through opportunities to restore, enhance and create valuable habitats, ecological networks and ecosystem services</i> '.
Guidance	
Chartered Institute of Ecology and Environmental Management (CIEEM) Guidance for Ecological Impact Assessment in the UK and Ireland	This document was created with the intention of standardising approaches towards Ecological Impact Assessments, as well as promoting good practice across the industry.
Biodiversity policy is set out in the England Biodiversity Strategy (Biodiversity 2020)	This identifies the approach to delivering targets for priority habitat and species that were formerly in the UK Biodiversity Action Plan (UKBAP).

2 Assessment approach and methodology

2.1 Scope of the assessment

- 2.1.1 This section provides details of the scope and methodology of the field surveys and assessment, taking into consideration consultation with stakeholders/ consultees where necessary. It also defines the Site boundary, zone of influence (Zol), study area and survey areas used when scoping and undertaking the baseline surveys and subsequent assessment.

Site boundary

- 2.1.2 The Site and Survey Area boundaries are shown in Figure 1. The Site layout and context in the landscape is described in Section 1.2.

Determining the Zone of Influence

- 2.1.3 The ecological baseline information described in this report focusses on the Survey Area (Figure 1) where the Site is located. The Zone of Influence (Zol) is defined as ‘the area over which ecological features may be affected by biophysical changes as a result of the proposed project and associated activities’ (CIEEM, 2018). The Zol will encompass different areas in respect of each ecological feature depending on its location and sensitivity, and the spatial extent of the relevant biophysical change. These biophysical changes will also differ depending on the stage of the development (construction and operational) and their associated activities and subsequent impacts.
- 2.1.4 To predict the Zol, the spatial and temporal extent of biophysical changes likely to be generated by the different phases of the Proposed Development with the potential to lead to effects upon ecological features were predicted. The Proposed Development activities were deemed unlikely to have a significant effect beyond the Site boundary during the construction and operational phases, due to the small scale of the Proposed Development and a lack of hydrological pathways linking it to the wider landscape. The Zol is therefore indicated by the red line boundary of the Proposed Development, as shown on Figure 1.

Study area and survey area

- 2.1.5 The study area is the land within the Site boundary and Zol of the Proposed Development. This includes desk-study data and primary survey data. The study area will differ depending on the type of data and the data sets being considered.
- 2.1.6 The Survey Area is defined as ‘the geographical extent over which a particular field survey activity took place’.
- 2.1.7 To facilitate a broad review of potential ecological constraints, a Background Data Search (BDS) was undertaken to identify relevant designated sites of conservation interest and records of protected and notable species. The study was conducted in August 2025.
- 2.1.8 A list of the information obtained for the desk study, data sources and search areas is provided in Table 2.

Table 2: Data sources

Information obtained	Source	Search area
Locations/ citations of statutory designated sites of European and/or international importance for nature conservation: Special Areas of Conservation (SAC), Special Protection Areas (SPA) and Ramsar sites - hereafter collectively referred to as 'European sites' ¹ .	Joint Nature Conservation Committee (JNCC) website. MAGIC (the Multi-Agency Geographic Information website) www.magic.gov.uk	10 km
Locations/ citations of statutory designated sites of national importance for nature conservation: Sites of Special Scientific Interest (SSSIs) (including consideration of SSSI risk zones), National Nature Reserves (NNRs), and Local Nature Reserves (LNRs).	Natural England website. MAGIC www.magic.gov.uk	2 km
Non-statutory designated sites of importance for nature conservation: Local wildlife sites (LWSs)	Wiltshire and Swindon Biological Records Centre	2 km
Records of protected and notable species of plants and animals (including invasive non-native species (INNS).	Wiltshire and Swindon Biological Records Centre	2 km
Records of European Protected Species (EPS) mitigation licences granted (in England only). Great crested newt licence return information (in England only).	MAGIC www.magic.gov.uk Last updated 2025	2 km
Priority habitats and ancient woodland.	MAGIC www.magic.gov.uk	1 km
Local planning guidance and policies.	Wiltshire Council website/ Wiltshire biodiversity action plan	N/A
Details of species and habitats listed on the	Wiltshire Biodiversity Action Plan	N/A
Areas/habitats of strategic Significance	National Habitat Networks (https://www.data.gov.uk/dataset/0ef2ed26-2f04-4e0f-9493-ffbdbfaeb159/habitat-networks-england) National Priority Focus Areas (https://www.data.gov.uk/dataset/c20a40c5-c975-43e1-9abd-d1257aa58432/natural-england-national-priority-focus-areas)	1 km

2.1.9 The search areas used have taken into account the potential distance/ area over which an impact could occur as a result of the proposed works. A 10 km search area was used for European sites to take account of mobile species (such as bats, birds, fish and otters)

¹ SACs and SPAs were formerly part of the Natura 2000 network; post-'Brexit', they are now considered part of the UK's 'national site network'. Ramsar sites are sites of international importance. Note that SPAs, SACs and Ramsar sites are also underpinned by SSSI designations which may have slightly different citations/ boundaries.

which may migrate, travel long distances or are known to use areas outside of designated sites.

2.2 Field surveys

2.2.1 Baseline information was collected by RSK Biocensus during a series of ecological surveys conducted during 2025. A summary of these is provided in Table 3.

Table 3: Summary of ecological surveys undertaken

Survey type	Details of surveys	Survey Area	Date completed	Methods/ Results location
Preliminary Ecological Appraisal	UK Hab survey undertaken to identify and map broad habitat types and habitat suitability appraisal for protected species.	Red line boundary as shown in Figure 1	August 2025 (main site) and December 2025 (extensions for utility connections)	Preliminary Ecological Appraisal Report (RSK Biocensus 2025a) (August survey) and EclA baseline section (December survey)
Wintering Bird surveys	Wintering bird surveys comprising one transect once per month in November and December 2025.	Transects as shown in Figure 3	November - December 2025	EclA
Bat surveys	Activity surveys comprising of one Nighttime Bat Walkover (NBW) and deployment of three static bat detectors over a 5-day period in October 2025.	Static deployment and walkover route as shown in Figure 4	October 2025	EclA
Biodiversity Net Gain Assessment	Determine the biodiversity value of habitats pre-and-post development using the Statutory Biodiversity Metric.	Red line boundary as shown in Figure 1	December 2025	Biodiversity Net Gain Design Stage Report (RSK Biocensus 2025c)

2.3 Wintering bird surveys

Nomenclature

2.3.1 The bird species names used in this report follow the English vernacular published in the 10th edition of 'The British List' (British Ornithologists' Union 2022). Tables and lists of species are presented in the order in which they appear in The British List.

2.3.2 Desk study

2.3.3 A search was made for statutory designated sites within 10 km of the Site that were designated for their ornithological interest, such as Special Protection Areas (SPAs), Ramsar sites, and Sites of Special Scientific Interest (SSSIs).

2.3.4 Field surveys

- 2.3.5 The field surveys for wintering birds were undertaken from November 2025 to December 2025 inclusive and comprised two surveys, during which a suitably experienced RSK Biocensus ornithologist walked a pre-determined transect route throughout the Site (as illustrated in Figure 3), recording all bird species encountered within 100m of the Site (excluding areas to the west of the A3102). Birds were detected either visually or through their vocalisations and were recorded onto GIS Field Maps software using standard British Trust for Ornithology (BTO) species codes and behaviour notation (Marchant, 1983). The behaviours birds were exhibiting during the visit were recorded, such as feeding (including foraging behaviour), singing, calling, perching, roosting, and loafing (displaying relaxed behaviour not related to foraging, breeding, or predator evasion).
- 2.3.6 The recording area was extended to include the MOD base to the north, Farm and Cottages to the east, as well as the hedgerow along the southern boundary of the southern field (hereby referred to as the 'southern boundary hedgerow'). This was done to assess whether birds associated with nearby farmland/scrub within the 100m buffer could be disturbed by any increase in light levels or increase in noise caused by the development.
- 2.3.7 The transect route included all field margins within the Site, with all habitats within the Site approached within 100m. The transect route was interspersed with stops, during which the ornithologist scanned for birds using optical equipment. The direction in which the transect route was walked by the ornithologist was alternated between survey visits.
- 2.3.8 Surveys were undertaken in suitable weather conditions, avoiding extreme temperatures, heavy rain, snow, or fog during which bird activity may be atypical and/or surveying may be impractical. The dates, timings, and weather conditions for the four survey visits are indicated in Table 4.

Table 4: Survey dates and weather conditions

Survey visit	Date	Timing	Temperature (°C)	Weather conditions
1	10/11/2025	14:30-16:30	11	Cloud 6/8, heavy showers, gentle breeze, excellent visibility
2	08/12/2025	08:30-10:30	12	Cloud 6/8, light showers, gentle breeze, excellent visibility

Interpretation of survey results

Conservation status

- 2.3.9 The assessment of the importance of the wintering bird populations recorded took into consideration the conservation statuses of the species recorded. Species afforded special statutory protection or included on lists of species of conservation interest were evaluated. These included:
- Wildlife and Countryside Act 1981 (as amended) Schedule 1 species;
 - EC Birds Directive (2009/147/EC) Annex 1 species;
 - NERC Act 2006 Section 41 Species of Principal Importance;
 - BoCC (Birds of Conservation Concern) Red and Amber list species; and
 - priority species cited within the Wiltshire BAP.

Species diversity

- 2.3.10 The importance of the wintering bird assemblage recorded within the Site was assessed according to its level of species diversity, in reference to the criteria described by Fuller (1980), as indicated in Table 5.
- 2.3.11 It should be recognised that many species have undergone widespread decline since these criteria were devised. As such, the qualifying number of species for a given importance category proposed by Fuller (1980) is now considered to be relatively high. This disparity is taken into account within the adapted importance criteria indicated in Table 5.

Table 5: Bird assemblage importance criteria

Bird assemblage importance category	Number of bird species recorded	
	Fuller (1980) criteria	Adapted criteria
National	More than 85	More than 85
Regional	70-84	70-84
County	50-69	50-69
District	-	25-49
Local	25-49	Fewer than 25

Quality assurance

- 2.3.12 The surveys and reporting were undertaken by RSK Biocensus ornithologists who are experienced in conducting ornithology work in relevant habitats. These ornithologists are CIEEM members at the appropriate level and follow their code of professional conduct when undertaking ecological work.

2.4 Bat surveys

Bat static detector surveys

- 2.4.1 Full spectrum Wildlife Acoustics Song Meter 4 (SM4) detectors were deployed at three locations across the Site within suitable commuting or foraging habitats, with methodology following the Bat Conservation Trust's "Bat Surveys for Professional Ecologists Good Practice Guidelines 4th edition" (Collins, 2023). The detectors were placed along hedgerows to catch bats commuting along the linear features between roost sites and foraging grounds. The microphone pointed out, away from the hedge to maximise the number of calls detected and fixed to branches 2 meters high to limit the chances of insects and foliage triggering the detector.
- 2.4.2 Detectors were set to record 30 minutes before sunset to 30 minutes after sunrise, they were deployed during suitable weather conditions.
- 2.4.3 The detectors were deployed for five consecutive nights from the 7th October to the 12th October 2025, during appropriate weather conditions. The weather was over 8° C, wind below 5m/s and light or no precipitation. Weather conditions are shown in Table 6.

Table 6: Weather Conditions during static deployment

Date	Sunset and Sunrise	Nighttime Temperature (°C)	Wind speed (miles per hour)	Humidity (%)	General weather
07/10/2025 – 08/10/2025	18:29 - 07:19	12 - 15°C	1 – 6 mph	77 - 94%	No Overnight Rain
08/10/2025 – 09/10/2025	18:27 - 07:20	6 - 14 °C	1 – 7 mph	77 - 94%	No Overnight Rain
09/10/2025 – 10/10/2025	18:25 - 07:22	13 - 14 °C	2 – 6 mph	77 - 82%	No Overnight Rain
10/10/2025 – 11/10/2025	18:23 - 07:24	8 - 13 °C	1 – 3 mph	77 - 94%	No Overnight Rain
11/10/2025 – 12/10/2025	18:20 - 07:26	4 - 13 °C	0 – 6 mph	77 - 100%	Limited snow 06:20 Fog 02:20 – 07:20

Bat call analysis

- 2.4.4 The British Trust for Ornithology's (BTO) Acoustic Pipeline auto-identification software was used with additional manual auditing applied as necessary. This software is highly efficient at identifying bat calls due to the extensive library of bat calls stored within the software. It is also currently the only system that considers the sound identification of bat social calls, bat feeding buzzes, and many bird, mammal and insect calls reducing the risk of misidentification.
- 2.4.5 The BTO AP recommends that recordings with probabilities lower than 0.5, as discussed by Barré *et al.* (2019) are discarded and such calls are therefore not included within this report. Between 5% and 100% of high confidence records were manually checked for each species, depending on the species' level of conservation value, to create an error rate.
- 2.4.6 Kaleidoscope Lite (version 5.7.0) was used for the manual auditing, and BatSound software Pettersson Elektronik (version 4.1.2) was used for more accurate measurements as needed (for the Bechstein's and Nathusius's pipistrelle calls).
- 2.4.7 Echolocation calls were identified to species level at all points possible, however it is not always possible and reliable to complete identification past genus level. Due to the extremely similar nature of their frequency-modulated calls, *Myotis* bat species cannot always be reliably separated, and in instances in which separation was deemed impossible, the instance was labelled as "*Myotis* species". The same was completed for *Nyctalus* species, for the same reason.
- 2.4.8 The brown long-eared bat (*Plecotus auritus*), is notoriously quiet in echolocation, with calls becoming faint or inaudible at distances as low as a few meters. As such, it may have been under-recorded, as detection hardware tends to succeed in picking up louder instances, and struggle to record faint calls.
- 2.4.9 Species with recorded instances with over 90% confidence by BTO acoustic pipeline are considered to be present on Site.

Nighttime bat walkovers

- 2.4.10 Night Bat Walkover (NBW) methodology followed protocol as set out in the Bat Conservation Trust's "Bat Surveys for Professional Ecologists Good Practice Guidelines 4th edition" (Collins, 2023).
- 2.4.11 The NBW commenced at 17:59, 15 minutes prior to sunset at 18:14. Surveyors remained in a static position at the western corner of the northern field for an hour, prior to beginning the walked portion of the survey at 18:59, the route taken is shown in Figure 4. Surveyors completed a clockwise 0.73km circuit of the northern field, pausing to investigate any relevant bat activity. Surveyors then travelled to the southern field, and completed a clockwise 1.1km circuit, starting from the access point at the midpoint of the field's southern boundary, again stopping to investigate any relevant bat activity.
- 2.4.12 Surveyors were equipped with Elekon Batlogger M2, which were used to identify and record any bat activity in the area. One of the surveyors additionally carried a Hikmicro falcon series thermal scope which was regularly used to check the Site for bat activity, both when bat detectors indicated nearby activity, and at regular intervals when activity was absent.
- 2.4.13 All results were verified manually using the Elekon Batexplorer software, with all echolocation calls identified to species level.
- 2.4.14 All data was analysed by ED18, a senior ecological consultant for RSK Biocensus. ED18 has over 15 years' experience undertaking bat surveys and analysis.

2.5 Assessment

- 2.5.1 The first stage of the assessment is determining value of ecological features or 'receptors'. Ecological features are valued with regard to the guidance provided in the CIEEM Guidelines (CIEEM, 2018). Value is assessed through consideration of attributes including rarity, legal status, population size, distribution and connectivity, and natural range. These values are applied to the receptors within a defined geographical context. The evaluation criteria for these scales of importance are provided in Table 7 below.

Table 7: Ecological features evaluation criteria.

Value of ecological features	Example criteria
International importance	An internationally designated site or candidate/proposed site Special Area of Conservation (SAC), candidate SAC and/or Ramsar site. A sustainable area of a habitat listed in Annex I of the Habitats Directive or smaller areas of such habitat which are essential to maintain the viability of the larger whole. Sustainable population of an internationally important species or site supporting such a species (or supplying a critical element of their habitat requirement) i.e. International Union for Conservation of Nature (IUCN) Red List species that is listed as critically endangered, endangered, or vulnerable; or Species listed in Annex IV of the Habitats Directive; or Sites that support 1% or more of a biogeographic population of a species.

Value of ecological features	Example criteria
National importance	Nationally designated sites Sustainable population of a nationally important species or site supporting such a species (or supplying a critical element of their habitat requirement), i.e. Refuge for fauna and flora protected under the Wildlife and Countryside Act 1981 (as amended). Resident or regularly occurring populations (assessed to be important in an Irish context) of the following: - Species protected under the Wildlife and Countryside Act 1981 (as amended); and/or - Species listed on the relevant Red Data list. - Sites supporting 1% or more of a national population.
Regional importance	Sites/populations which exceed the County or District level designations but fall short of SSSI selection guidelines, including the following: - Sustainable areas of key habitat identified in the Regional BAP or smaller areas of such habitat, which are essential to maintain the viability of the whole; - Population of a species listed as being nationally scarce which occurs in 16-100 10 km squares in the UK; - Population of a species listed in UK BAP or relevant Natural Area on account of its regional rarity or localisation; or - Sites supporting 1% or more of a regional population.
County/district importance	Locally important populations of priority species or habitats or natural heritage features identified in the Local BAP. Resident or regularly occurring populations (assessed to be important at the County level) of the following: - Species of animal and plants listed in Annex II and/or IV of the Habitats Directive; - Species protected under the Wildlife and Countryside Act 1981 (as amended); and/or - Species listed on the relevant Red Data list.
Local importance	Sites containing small areas of semi-natural habitat that are of some local importance for wildlife; and/or Sites or features containing non-native species that are of some importance in maintaining habitat links.
Negligible (Not significant)	Features assessed of being of lower than Local importance

2.5.2 The scoping followed a precautionary approach and as such, any receptor which is assessed as being of 'Local' importance or higher has been subject to impact assessment, unless it can be proven without any reasonable scientific doubt that impacts would be 'Negligible'. Features assessed as being of less than Local importance were generally scoped out of the detailed assessment of effects, since these would not be a material consideration for planning. However, some features of lower (i.e., within the Zone of Influence) importance may be carried forward where there is legislative protection afforded to these features and their value is not necessarily associated with their ecological value.

Assessment scenarios

- 2.5.3 The terrestrial ecology assessment has considered two scenarios: construction and operation.

Characterisation of effects

- 2.5.4 In line with CIEEM guidelines (CIEEM, 2018), the EclA aims to predict and characterise the likely change and impact on the ecological features identified, as a result of the Proposed Development. It is necessary to consider all of the following parameters:
- the sensitivity of affected features, on a scale of 'High', 'Medium', 'Low' or 'Negligible';
 - the extent of the area subject to a predicted impact;
 - the magnitude or severity of the change and whether the change is positive or negative;
 - the duration the impact is expected to last prior to recovery or replacement of the resource or feature;
 - the timing and frequency of the impact, i.e., conflicting with critical seasons or increasing impact through repetition; and
 - whether the impacts are reversible, with recovery through natural or spontaneous regeneration, or through the implementation of mitigation measures or irreversible, when no recovery is possible within a reasonable timescale or there is no intention to reverse the impact.

Significance of effects

- 2.5.5 Following the classification of an effect, a clear statement is made as to whether the effect is 'significant' or 'not significant'. Under the CIEEM guidelines (CIEEM, 2018) the significance of an effect on the ecological features will be determined based on the analysis of the factors that characterise the impact.
- 2.5.6 A significant effect is defined as "an effect that either supports or undermines biodiversity conservation objectives for the ecological feature or for biodiversity in general". The assessment considers whether an effect has the potential to affect the integrity of a habitat or the conservation status of a species. Integrity of a habitat or site is defined as "the coherence of its ecological structure and function, across its whole area, that enables it to sustain the habitat, complex of habitats and/or the levels of populations of the species for which it was classified". The conservation status of a species is, "the sum of the influences acting on it which may affect its long-term distribution and abundance, within the geographical area of interest". Conservation status is considered to be favourable under the following circumstances:
- population dynamics indicate that the species is maintaining itself on a long-term basis as a viable component of its habitats;
 - the natural range of the species is not being reduced, nor is it likely to be reduced for the foreseeable future; and
 - there is (and probably will continue to be) a sufficiently large habitat to maintain its population on a long-term basis.
- 2.5.7 Using CIEEM guidelines (CIEEM, 2018) and approach, significant effects are identified with regard to an appropriate geographical scale, using the following terms:
- significant at the international level;

- significant at the national level;
- significant at the regional level;
- significant at the county level;
- significant at the local level; and
- not significant.

2.5.8 Mitigation hierarchy

2.5.9 A sequential process has been adopted to avoid, mitigate, and compensate for negative ecological impacts and effects, otherwise known as the 'mitigation hierarchy'. Appropriate avoidance, mitigation, compensation, and enhancement measures have been identified as part of the impact assessment process. The principles underpinning an EclA are as follows:

- **Avoidance:** seek options that avoid harm to ecological features (for example, by locating on an alternative site);
- **Mitigation:** negative effects should be avoided or minimised through mitigation measures, either through the design of the project or subsequent measures that can be guaranteed – for example, through a condition or planning obligation;
- **Offsetting:** where there are significant residual negative ecological effects despite the mitigation proposed, these should be offset by appropriate compensatory measures; and
- **Enhancement:** seek to provide benefits for biodiversity over and above requirements for avoidance, mitigation, or offsetting.

2.5.10 Wherever possible, strategies of avoidance have been implemented to minimise any impacts to ecological features. If avoidance is not possible, mitigation and offsetting measures will be required.

2.6 Assumptions and limitations

2.6.1 Desk study data is useful in providing supplementary ecological information for the Site; however, it should be acknowledged that these data rely on voluntary submissions of records to the relevant organisation. An absence of records of a particular species from an area, therefore, does not necessarily mean that the species is absent. Similarly, past records of a particular species do not necessarily mean that the species is still present within the Site and/or wider search area.

2.6.2 It should be noted that ecological features can be transient, and the distributions of habitats and species may change over time. As such, in line with CIEEM guidance (CIEEM, 2018), the ecological survey data presented in this report is likely to be valid for at least 18 months, after which time a professional ecologist should carry out an updated desk study for new species records, and a Site visit to review the validity of the existing report (CIEEM, 2019).

Bat survey limitations

2.6.3 Only one static deployment and one nighttime bat walkover survey were conducted at the Site. This deviates from the guidance outlined in the Bat Survey Good Practice Guidelines (Collins, 2023), however, due to the limited suitable habitat on Site and the proposed embedded and secondary mitigation it is thought that further surveys would not change the assessment or alter the proposed mitigation.

- 2.6.4 Quality assurance of 200 calls per static location and species was carried out for common and soprano pipistrelles. This was done because it was identified that there was a high error rate at locations 2 and 3. It appears that a mechanical noise was mistaken for all three species by the software, which was particularly high in occurrence at these two locations. This issue did not seem to affect other species to the same degree.
- 2.6.5 Echolocation calls collected from bat statics could not always be reliably identified past genus level, specifically in recorded instances of *Myotis* species due to the similarity of calls between species. This is not considered a major constraint however, as overall bat activity on the site could still be thoroughly assessed.
- 2.6.6 It is possible that brown long-eared bats may be under-recorded on this site, due to their notoriously quiet echolocation resulting in fewer detections from distance.

PEA limitations

- 2.6.7 The two utilities corridors were surveyed in December, which is not an optimal time of year for carrying out UK Hab. However, the habitats present on Site allowed for confident completion of condition assessments, especially as consistent with habitats surveyed in August within main Site.

Wintering bird limitations

- 2.6.8 Heavy showers during visit 1 reduced the number of birds able to be picked up by sound only.
- 2.6.9 Poor visibility to the west of the A3102 meant that not all areas within 100m to the west of the Site boundary were visible and so some of the birds present here may not have been detected. This was primarily due to trees and houses around Melsome Road making viewing more difficult.
- 2.6.10 Only two wintering bird surveys were conducted at the Site. This deviates from guidance offered by the Bird Survey and Assessment Steering Group (2025), which recommend that four monthly visits are carried out from November to February. However, the habitats present, location of the Site away from any waterbodies or known sites of interest for birds, and the low number of birds recorded foraging within the boundary during the two visits, means the survey effort is considered sufficient to inform the assessment.
- 2.6.11 The addition of the two utilities corridors into the red line boundary in late November meant that these two areas were not surveyed fully on the first visit in early November. However, as the Survey Areas included all viewable land within 100m of the initial red line boundary, these areas were partially included, and given close proximity and presence of same habitat types, results are not expected to differ.

3 Ecological baseline

3.1 Designated sites

Statutory designated sites - European sites of importance for nature conservation

- 3.1.1 There are no European sites of importance for nature conservation within 10 km of the Site boundary.

Statutory designated sites - National importance for nature conservation

- 3.1.2 There are no designated sites of national importance for nature conservation within 2 km of the Site boundary.
- 3.1.3 The Site is not within any Sites of Special Scientific Interest (SSSI) impact risk zones. At the proposed Site location, a development is unlikely to have a harmful effect on terrestrial SSSIs.

Non-statutory designated sites of importance for nature conservation

- 3.1.4 There are ten non-statutory designated sites of local importance for nature conservation within 2 km of the Site boundary. These sites are listed in Table 8.

Table 8: Non-statutory sites of importance for nature conservation within 2 km of the Site

Site name	Reasons for designation	Approximate distance/direction from Site	
The Strings LWS	Narrow strips of ancient semi-natural broadleaved woodland on the steep sides of a shallow valley with damp neutral grassland, scrub and tall-herb vegetation in between.	485	E
Upper Littlecot Farm Meadows LWS	Dry grassland slope with wet flushes and pond leading down to a stream known as The Moors	895	SE
Haygrove Wood LWS	A small stand of ancient semi-natural broad-leaved woodland with a stream running through it.	985	SW
Beacon Hill Brow Wood LWS	A narrow strip of elm woodland on steep bank with ash and hazel coppice at northern end.	985	SW
Ashen Copse LWS	An ancient woodland site, extensively replanted with Sycamore (long abandoned coppice) with wet woodland.	985	SE
Catcomb Wood LWS	A large ancient semi-natural broadleaved woodland site on a south-facing slope.	1340	W
Wood Farm Meadows LWS	A series of neutral and calcareous meadows with unimproved, semi improved and restored grassland on a south-facing coral rag and clay slope.	1670	W

Site name	Reasons for designation	Approximate distance/direction from Site	
Bailey's Hill, Lyneham LWS	A low chalky hill with unimproved calcareous grassland on steeper slopes. The site also includes a small brook and areas of wet neutral grassland.	1880	N
Waite Hill Farm Meadow LWS	Pasture grassland on a north facing slope, with a diverse mosaic of grassland types.	1925	N
Stockham Marsh Verge LWS	A narrow strip of roadside grassland with a species-rich, unimproved sward, managed as hay meadow.	1980	W

3.2 Habitats and plants

Habitats

- 3.2.1 The desk study returned records of five areas of ancient woodland within 1 km of the Site, the closest is the Strings LWS, a semi-natural ancient woodland that is approximately 485 m east of the site boundary. Three habitats of principal importance were identified within 1 km of the Site. These comprised traditional orchards, deciduous woodland, and ancient woodland the closest of which is deciduous woodland 20m west of the western boundary of the Site, across the A3102.
- 3.2.2 Five waterbodies were identified within 500 m of the Site. These comprised two ditches, two streams and a pond. The closest are two ditches either side of the A3102 to the west of the Site, however, these were dry at the time of the survey. The closest pond is 30 m east of the southern utilities connection corridor.

Main Site

- 3.2.3 The main Site comprised five fields of modified grassland, one native hedgerow, and a road verge of other neutral grassland with a dry ditch and rural trees. The habitats recorded during the PEA (RSK Biocensus, 2025a) are shown in Figure 2.

g4 102 – Sheep grazed modified grassland – in poor condition

- 3.2.4 The northern and southern field were both modified grassland used for grazing in poor condition. Both fields were recently grazed and the grasses were scorched by the recent prolonged hot and dry weather making species identification of the grasses difficult. Herbaceous species included *Trifolium repens* (White Clover), *Cirsium arvense* (Creeping Thistle), *Convolvulus arvensis* (Field Bindweed), and *Vicia sepium* (Bush Vetch) (Figure 2).

g3c 50 - Other neutral grassland with dry ditch and line of trees – in moderate condition

- 3.2.5 To the west of the fields and field boundaries was the road verge of the A3102, an area of other neutral grassland in moderate condition with a dry ditch running parallel to the road. Species included *Clematis vitalba* (Traveller's-joy), *Rubus fruticosus* agg (Bramble),

Cirsium arvense, *Convolvulus arvensis*, *Plantago lanceolata* (Ribwort Plantain), *Vicia sepium*, *Galium verum* (Lady's Bedstraw), *Achillea millefolium* (Yarrow), *Urtica dioica* (Common Nettle), *Taraxacum* sp. (Dandelion), *Ballota nigra* (Black Horehound), *Jacobaea vulgaris* (Common Ragwort) (Figure 2).

h2a6 11– Other (not species rich) native hedgerow with trees– in moderate condition

- 3.2.6 A native hedgerow in moderate condition was present along the western border of the northern field. The hedgerow was species-poor with *Fraxinus excelsior* (Ash), *Crataegus monogyna* (Hawthorn), *Fagus sylvatica* (Beech) and *Ulmus procera* (English Elm). It was c.2 m tall and c.1.5 m wide and a dry ditch ran along its length on the western side of the hedgerow. (Figure 2).

Utility connection corridors

- 3.2.7 Due to a site boundary change a second PEA was conducted on the 8th December 2025 to survey the two proposed corridors for utility connections to the site. Both corridors are 10 m wide. The northern corridor is c.350 m long and comprised modified grassland, a species-rich native hedgerow and a native hedgerow. The southern corridor is c.240 m long and comprised modified grassland, developed land with a sealed surface, a wet ditch and a species-rich native hedgerow.

g4– Modified grassland – in poor condition

- 3.2.8 The field at the eastern end of the southern corridor was modified grassland in poor condition. Species included *Ranunculus repens* (Creeping Buttercup), *Trifolium repens*, *Dactylis glomerata* (Cock's-foot), *Lolium perenne* (Perennial Rye-grass), *Fescue* sp., *Geranium molle* (Dove's-foot Crane's-bill), *Urtica dioica*, *Senecio vulgaris* (Groundsel) and *Taraxacum* sp. (Dandelion sp.) (Figure 2).

g4– Modified grassland – in moderate condition

- 3.2.9 The field in the centre of the southern corridor route and the field at the northern end of the northern corridor route were modified grassland in moderate condition. Species included *Trifolium repens*, *Geranium molle*, *Ranunculus repens*, *Taraxacum* sp., *Cirsium* sp., *Capsella bursa-pastoris* (Shepherd's-purse), *Galium aparine* (Cleavers), *Senecio vulgaris*, *Stellaria media* (Common Chickweed), *Lolium perenne*, *Dactylis glomerata*, *Fescue* sp. and *Cynosurus cristatus* (Crested Dog's-tail) (Figure 2).

g4– Modified grassland – in good condition

- 3.2.10 The field to the western end of both corridor routes, and the field in the centre of the northern corridor route were modified grassland in good condition. Species comprised *Dactylis glomerata*, *Rubus fruticosus* agg, *Anthriscus sylvestris* (Cow Parsley), *Lolium perenne*, *Geranium molle*, *Fescue* sp., *Bellis perennis* (Daisy), *Taraxacum* sp., *Trifolium repens*, *Ranunculus repens*, *Cirsium vulgare* (Spear Thistle), *Achillea millefolium* and *Plantago lanceolata* (Figure 2).

h2a5 - Species-rich native hedgerow

- 3.2.11 The species-rich native hedgerow at the northern end of the northern corridor route was in good condition. Species comprised *Prunus spinosa*, *Cornus sanguinea*, *Sambucus nigra*, *Rubus fruticosus*, *Rosa canina*, *Hedera helix*, *Corylus avellana* and *Ligustrum vulgare*.

h3h – Mixed scrub

- 3.2.12 There was scattered mixed scrub along the fenceline at the southern end of the northern corridor route. The scrub was in poor condition. The only species present was *Rosa canina*.

h2a 191 - Native hedgerow with wet ditch

- 3.2.13 The native hedgerow at the eastern end of the southern route corridor was in good condition. Species comprised *Prunus spinosa*, *Rosa canina*, *Rubus fruticosus*, *Carpinus betulus*, *Sambucus nigra* and *Crataegus monogyna*.
- 3.2.14 The ditch associated with this hedgerow appears to only be seasonally wet. It was c. 50 cm wide and species included *Nasturtium officinale* agg. (Water-cresses), *Urtica dioica* and *Galium aparine*.

Habitats of principal importance

- 3.2.15 The hedgerows were the only habitat of principal importance on the Site.

Plants

- 3.2.16 The desk study returned records of 19 protected or otherwise notable plant species within 2 km of the Site. The majority of these species are largely associated with calcareous grassland and ancient woodland habitats and are unlikely to occur within the habitats on Site. Those which could potentially occur within the Site comprised *Cuscuta epithymum* (Dodder) and *Euphorbia exigua* (Dwarf Spurge).
- 3.2.17 No protected or otherwise notable plant species were recorded during the survey.

3.3 Protected and priority animals

- 3.3.1 The summary below takes into consideration the findings of the BDS and the PEA survey undertaken in August 2025 and further protected species surveys described in Table 3: Summary of ecological surveys undertaken. Relevant target notes are indicated in Figure 3.
- 3.3.2 Aquatic invertebrates, fish, otter and water vole have been scoped out of this assessment as there are no suitable watercourses or waterbodies on the site, and there are no anticipated indirect effects on these receptors. The ditch to the east of the southern utilities connection corridor contained little water at the time of the survey, after a period of heavy rain. The ditch is likely only seasonally wet, and even when wet it is likely not deep enough to support populations of otter and water vole.

Terrestrial Invertebrates

- 3.3.3 The desk study returned records of two protected or otherwise notable terrestrial invertebrate species within 2 km of the Site, the small heath butterfly (*Coenonympha*

pamphilus) and the white admiral butterfly (*Limenitis camilla*). It is possible small heath could be found on the Site along the hedgerow, but this is unlikely as this habitat is poor quality.

- 3.3.4 The Site was considered likely to support an assemblage of widespread invertebrate species, typical of the modified grassland and species-poor hedgerow present on the Site. The invertebrate assemblage on Site is therefore considered to be of **Negligible importance**.

Amphibians

- 3.3.5 The desk study returned nine records of great crested newts (GCN) within 2 km of the Site boundary. The closest of these was approximately 580 m north of the Site and was from 2014. The desk study identified one GCN mitigation licence record within 2km, this was granted in 2018 and was 1100 m north of the site. There were no ponds or wet ditches present on Site which could provide suitable breeding habitat. The ditch to the east of the southern utilities connection corridor is likely only seasonally wet, and would not be suitable to support populations of GCN in the spring and summer months. There is a pond 30m east of the southern utilities connection corridor which may support GCN, however, the majority of site is more than 100m from the pond and there is limited suitable habitat on site, if GCN are present in the pond then habitats on site likely to be of no more than **Local importance** to population.
- 3.3.6 There were also desk study records of common frog (*Rana temporaria*), and common toad (*Bufo bufo*) within 2 km of the Site. The Site was assessed as sub-optimal to support other amphibian species due to the lack of suitable and aquatic habitats, being mainly short cropped grass, however it is possible that amphibians could use the hedgerow and edge habitats. The Site is linked to scrub, rough grassland, watercourses and waterbodies which provide suitable habitat in the wider landscape, however, there is higher quality habitat closer to these features which would be preferentially chosen. The amphibian assemblage is therefore considered to be of no more than **Local importance**.

Reptiles

- 3.3.7 The desk study returned records of slow-worm (*Anguis fragilis*) and grass snake (*Natrix helvetica*) within 2 km of the Site. The closest of these was approximately 570 m north of the Site and was from 2014.
- 3.3.8 The Site was assessed as sub-optimal to support reptiles due to the lack of suitable habitats, being mainly short cropped grass, however it is possible that reptiles could use the hedgerow and edge habitats. The Site is linked to scrub, rough grassland, watercourses and waterbodies which provide suitable habitat in the wider landscape, however, there is higher quality habitats closer to these features which would be preferentially chosen. The reptile assemblage is therefore considered to be of no more than **Local importance**.

Hazel dormice

- 3.3.9 The desk study did not return any records of dormice within 2 km of the Site.
- 3.3.10 The desk study did not identify any granted EPS licences relating to dormice within 2 km of the Site. The Site is within the species known range. The hedgerow lacked the

structural diversity to support dormice and moreover it was limited in extent and isolated from other suitable Hazel dormouse habitat in the wider landscape.

- 3.3.11 This species is considered to be of **Negligible importance** in the context of the Proposed Development.

Badgers

- 3.3.12 The desk study returned 29 records of badgers within 2 km of the Site, with the closest being a record 400 m south of the Site, recorded in 2014.
- 3.3.13 No badger setts or other signs of badger activity were noted during the surveys completed on the Site.
- 3.3.14 The grassland was considered suitable foraging habitat for badgers within the Site and surrounding area.
- 3.3.15 As no evidence of badgers on Site, they are considered to be of **Negligible importance** in the context of the Proposed Development.

Other protected or otherwise notable species

- 3.3.16 No other protected or otherwise notable species that could be a material consideration for planning are likely to be present within the Zol of the Proposed Development. Therefore, the other protected or otherwise notable species are considered to be of **Negligible importance** in the context of the Proposed Development.

3.4 Birds

- 3.4.1 The desk study returned records of seven bird species protected under Schedule 1 of the Wildlife and Countryside Act 1981, however, none of these have the potential to nest on site.
- 3.4.2 The desk study also returned records of 36 species listed as Red or Amber in the Birds of Conservation Concern (Stanbury *et al.*, 2021). These records were largely associated with wetland and woodland habitats and are unlikely to occur within the habitats on Site. Those which could potentially occur within the Site included skylark (*Alauda arvensis*), woodpigeon (*Columba palumbus*), yellowhammer (*Emberiza citrinella*), linnet (*Linaria cannabina*), wren (*Troglodytes troglodytes*), starling (*Sturnus vulgaris*), and dunnoek (*Prunella modularis*).
- 3.4.3 The hedgerows and trees within the Site provided suitable nesting and foraging opportunities for breeding birds. The short cropped grassland makes it sub-optimal for ground nesting birds. Disused nests were seen along the hedgerow and within the trees. The Site was considered suitable to support a range of species typical of urban fringe and farmland habitats. Therefore, the breeding bird assemblage is considered to be of no more than **Local importance**.

Wintering birds

- 3.4.4 A total of 35 bird species were recorded during the field surveys of the Site from November to December 2025 inclusive.

- 3.4.5 Most records were of birds seen in flight, comprising 11 BoCC amber/red-list species. These were black-headed gull, (*Chroicocephalus ridibundus*), common gull (*Larus canus*), herring gull (*Larus argentatus*), lesser black-backed gull (*Larus fuscus*), starling (*Sturnus vulgaris*), fieldfare (*Turdus pilaris*), grey wagtail (*Motacilla cinerea*), meadow pipit (*Anthus pratensis*), greenfinch (*Chloris chloris*), linnet (*Linaria cannabina*), lesser redpoll (*Acanthis cabaret*) and reed bunting (*Emberiza schoeniclus*).
- 3.4.6 Little activity was recorded in the fields within the Site boundary itself. The only species recorded here were woodpigeon and rook, both of which are amber-listed under the BoCC.
- 3.4.7 The southern boundary hedgerow was used by woodpigeon, blue tit, great tit, wren, song thrush, blackbird, robin, dunnoek, house sparrow and corn bunting. Of these, corn bunting is most notable as it is BoCC red-listed and listed as S41 under the NERC Act (2006).
- 3.4.8 The area of trees adjacent to Freegrove Farm (120m east of Site boundary) was used by magpie, raven, jackdaw, goldcrest, redwing and chaffinch. The line of trees along the track next to Freegrove Cottages (170m south-east of Site boundary) was also used by buzzard and long-tailed tit. These areas are both in close proximity to where the southern utility corridor route will run through.
- 3.4.9 Additional records of corn bunting and yellowhammer were noted along a line of trees south of Freegrove Cottages, However, this was 190m outside of the red line boundary and so impacts from the development are likely to be reduced.
- 3.4.10 Full wintering bird survey data from November to December 2025 inclusive are provided in Appendix B.

3.5 Bats

- 3.5.1 The desk study returned records of eight bat species as summarised in Table 9. The closest record to the site was from 1999 and was a brown long-eared bat (*Plecotus auratus*) roost 430 m south-west of the site.
- 3.5.2 There were 19 bat roosts identified within 2 km, the closest was the same record detailed above.
- 3.5.3 The desk study did not identify any granted EPS licences relating to bats located within 2 km of the Site.

Table 9: Summary of bat desk study records

Species	Records
Noctule (<i>Nyctalus noctule</i>)	4 records
Common pipistrelle (<i>Pipistrellus pipistrellus</i>)	11 records
Soprano pipistrelle (<i>Pipistrellus pygmaeus</i>)	5 records
Natterer's bat (<i>Myotis nattereri</i>)	2 records
Serotine (<i>Cnephaeus serotinus</i>)	6 records
Barbastelle (<i>Barbastella barbastellus</i>)	1 record, located 1500 m north of the Site
Brown long-eared bat (<i>Plecotus auratus</i>)	7 records

Species	Records
Lesser horseshoe bat (<i>Rhinolophus hipposideros</i>)	1 record, located 1500 m north of the Site

- 3.5.4 The majority of the site lacks linear vegetation with the boundaries formed of post and wire fences. The western boundary is formed of a hedgerow and tree line which could support commuting bats. It links to other hedges to the north and south.
- 3.5.5 The grassland is predominantly short cropped by sheep grazing, limiting the insect populations in the Site. However, the Site will support invertebrate populations that may encourage foraging bats, including dung species.
- 3.5.6 There were no buildings within the Site. No trees were identified as having potential to support roosting bats.

Static bat detector surveys

- 3.5.7 Appendix C shows static data recorded at each monitoring point; Figure 7 shows the locations of the three monitoring points across the Site.
- 3.5.8 Over the course of the survey, 3,177 'high confidence' registrations were recorded over three monitoring points. Nine species and two genus (*Myotis* and *Nyctalus*) of bat were recorded on the Site. The quality assurance process focused on ensuring that the calls fitted the profile of a *Myotis* or *Nyctalus* species call and did not attempt to verify the species, as results can often prove unreliable.
- 3.5.9 Quality assurance of 200 calls per static location and species was carried out for common and soprano pipistrelles. This was done because it was identified that there was a high error rate at locations 2 and 3. It appears that a mechanical noise was mistaken for all three species by the software, which was particularly high in occurrence at these two locations. This issue did not seem to affect other species to the same degree.
- 3.5.10 The Bechstein's call (the only call recorded) and two of the Nathusius' pipistrelle calls (out of three) were deemed to fit the description of echolocation calls for the species similar to those featured in Russ (2021). The error rates of the BTO identification and the Quality Assurance process are shown in Appendix C, Table 19.
- 3.5.11 Common pipistrelles were the most recorded species, in line with expected results, making up 64.2% of all registrations. Soprano pipistrelles and lesser horseshoes had a high number of recordings relative to other species (excluding common pipistrelle), making up 12.1% and 11.1% of all recordings respectively. Brown long-eared bats had a low level of recordings (2.3% of all recordings), which may be because there were fewer individuals using the Site, or due to their comparatively quieter calls not being consistently recorded at monitoring points. *Myotis* species, *Nyctalus* species, and serotines also had a low level of recording, and there were very few recordings from barbastelle, Nathusius' pipistrelle, greater horseshoe and Bechstein's.
- 3.5.12 The summary counts of all species and the percentage of total registrations each make up are shown in Table 10. Importantly, the count has been included, and percentage of total and RPN calculated following removal of calls assessed as incorrectly identified.

Table 10: Summary Count, Percentage of total registrations, and Registrations Per Night (RPN), after error rates applied

Count/RPN = registrations/night	October		
Species	Count following removal of incorrect identifications	Percentage of total registrations (rounded)	RPN (5 nights)
Common pipistrelle	1423	64.21	284.7
Soprano pipistrelle	269	12.14	53.8
Lesser horseshoe	247	11.15	49.4
Myotis species	80	3.61	16.0
Serotine	66	2.98	13.2
Nyctalus species	56	2.53	11.2
Brown long-eared	50	2.26	10.0
Barbastelle	21	0.95	4.2
Nathusius' pipistrelle	2	0.09	0.4
Greater horseshoe	1	0.04	0.2
Bechstein's	1	0.04	0.2
TOTAL	2,216	100.00	443.3

- 3.5.13 None of the Myotis or Nyctalus bats recorded in the static detectors or Nighttime Bat Walkover surveys were QA'd to species level, however Natterer's bat were recorded in the background data search. Additionally, BTO acoustic pipeline identified Brandt's bat, noctule, Leisler's, and Daubenton's with over 90% confidence rate, and as such they are assumed to be present on Site.

Night-time bat walkover

- 3.5.14 Low levels of activity were identified during the NBW, with a total of 4 bat contacts during the survey. One common pipistrelle was identified foraging at the western corner of the northern field, and one common pipistrelle was identified foraging along the southern boundary of the southern field, Figure 8 shows the route of the survey.
- 3.5.15 Two additional bats were seen by surveyors using thermal detection equipment, neither of which could be recorded by bat detection equipment. One individual was seen foraging over the MOD base to the east of the site, and the other was seen foraging over the eastern boundary of the southern field
- 3.5.16 The site is bordered to the west by the A3102, which contains no streetlights that may affect bat activity on the Site. Residential land further west does contain streetlights, and these lights are visible from the Site. This did not appear to have a significant effect on bat activity, as foraging activity was recorded at the western boundary of the site using thermal imaging technology, however may have had an impact on activity of light sensitive species. The MOD complex to the north of the site was notably lit during the entirety of the NBW, with both streetlights and lighting affixed to building exteriors present. This did not appear to affect bat activity of light tolerant species, as a common pipistrelle was first heard, and subsequently seen foraging in the vicinity of this lighting, however, it may have had an effect on light sensitive species.

Site appraisal

- 3.5.17 The importance of the bat assemblage recorded within the Site was assessed by reviewing the species recorded by static detectors, and during Nighttime Bat Walkover surveys, in comparison to expected regional distributions.
- 3.5.18 Table 11 shows a rarity classification as determined in *UK Bat Mitigation Guidelines: a guide to impact assessment, mitigation and compensation for developments affecting bats* (Reason and Wray, 2025). Distribution for each species has been used to assess the geographic importance of the Survey Area for bats. The Proposed Development is located in Wiltshire which has a maximum regional score of 41. Based on Table 11, the total score of the Survey Area is 33.
- 3.5.19 The method for valuing the species present in the *UK Bat Mitigation Guidelines* (Reason & Wray, 2023) indicates that the assemblage meets the threshold for national importance. The site achieved this score due to the presence of barbastelle, Bechstein's and greater and lesser horseshoes, all Annex II species.
- 3.5.20 This calculation only includes species that received a 90% or higher confidence level during BTO acoustic pipeline identification, or species that were identified manually during QA. It is possible that more species were present on the site (specifically other myotis species), but were not recorded reliably enough to be considered present in these calculations and results.

Table 11: Ecological Value of the Survey area

Rarity category [points/species] South- West England	Species present	Discussion of accuracy of species id. Sound registrations only.	Scores
Widespread all geographies [score 1]	Common pipistrelle Soprano pipistrelle Brown long- eared	This is likely to be accurate as all species are common and widespread in the area.	3
Widespread in many geographies, but not as abundant in all [score 2]	Brandt's Daubenton's Noctule	Only Myotis species' with over 90% confidence rate according to BTO acoustic pipeline, or those that were manually QA'd have been included. Other Myotis species may be present, but cannot be confirmed.	6
Rarer or restricted distribution [score 3]	Lesser Horseshoe Serotine Leisler's	It can be difficult to identify Leisler's from echolocation calls and only two registrations were made.	12

	Nathusius' pipistrelle		
Rarest Annex II species and very rare [score 4]	Greater Horseshoe Bechstein's Barbastelle	It can be difficult to identify Bechstein's from echolocation calls and only one registration was made.	12
County/Regional/National importance Score County 18 / Regional 23 / National 29 (threshold: 45%/55%/70%)	Score 33/41 (max possible)		33

3.6 Future baseline

- 3.6.1 The future baseline describes the ecological features as they would be in the opening year/year of operation, in the absence of the Proposed Development. They are influenced by future developments and factors that have a high degree of uncertainty, such as future land management and climate change. Where information exists on planned future developments, this has been taken into consideration during the assessment.
- 3.6.2 Long-term climatic predictions suggest that warmer, wetter, winters and drier summers will become more frequent, with more extreme weather events likely. Combined with changes in land management, increased urbanisation and increased biotic pressures, climate change may lead to an increase in the population and distribution of some species in the UK, but a decrease in other species. However, such changes are unlikely to be material during the intervening period between the time when the field surveys were undertaken to inform this assessment and the opening year of operation of the Proposed Development.
- 3.6.3 There are no committed or forecasted changes in land management proposals within the Site that will likely materially alter the baseline conditions in the absence of the Proposed Development. It is therefore assumed that the future baseline will, in general, be relatively similar to the current baseline, and the value of the ecological features that are relevant to the Proposed Development would be consistent with that of the existing baseline conditions described above.

4 Evaluation of ecological features

- 4.1.1 Following a review of the known baseline (outlined in Section 3 above), Table 12 outlines the importance of each of the ecological features identified within the ZOI of the Proposed Development. Features of Negligible importance, and those to which impacts can be categorically ruled out, are scoped out for further assessment and not considered further.
- 4.1.2 A precautionary approach has been taken in determining which features are taken forward for further assessment, based upon their conservation status, population trends and likely importance to designated sites. All scoped-in features are considered and the Important Ecological Features (IEFs) are taken forward for assessment.

Table 12: Assessment of ecological importance

Ecological feature	Conservation status	Evaluation rationale	Importance	Scoped in/out of assessment
Non-statutory Designated Sites				
The Strings LWS	Identified sites in Wiltshire Local Plan	All local wildlife sites are located more than 485 m from the Site boundary. Due to the distance from the Site and lack of hydrological links adverse effects as a result of the proposed development on the designated site are considered unlikely.	County	Out
Upper Littlecot Farm Meadows LWS				
Haygrove Wood LWS				
Beacon Hill Brow Wood LWS				
Ashen Copse LWS				
Catcomb Wood LWS				
Wood Farm Meadows LWS				
Bailey's Hill, Lyneham LWS				
Waite Hill Farm Meadow LWS				
Stockham Marsh Verge LWS				
Habitats				
Sheep grazed modified grassland (g4 102)	N/A	Modified grassland used for grazing in poor condition. A large portion of the modified grassland is to be removed to accommodate the Proposed Development, however, due to its low ecological value it has been scoped out of the impact assessment.	Site	Out
Other neutral grassland with dry ditch and line of trees (g3c 50)	N/A	Other neutral grassland road verge in moderate condition with a dry ditch running parallel to the road. Sections of the other neutral grassland are to be removed to accommodate the Proposed Development, therefore this habitat is scoped into the impact assessment.	Local	In

Ecological feature	Conservation status	Evaluation rationale	Importance	Scoped in/out of assessment
Hedgerows	Priority habitat under Section 41 of the NERC Act 2006	A native hedgerow in moderate condition was present along the western border of the northern field. Hedgerows are of ecological value to several species including bats, nesting birds, and reptiles. A section of the hedgerow will need to be removed to accommodate the Proposed Development, therefore this habitat is scoped in to the impact assessment.	Local	In
Fauna				
Invertebrates	Schedule 5 of the Wildlife and Countryside Act 1981 (as amended). Section 41 of the NERC Act 2006	The habitats present were considered likely to support only a common assemblage of invertebrate species, typical of hedgerows and modified grassland. An assessment of effects is therefore not deemed necessary as hedges are being retained	Negligible	Out
GCN	Protected by the WCA 1981 (as amended). Section 41 of the NERC Act 2006 The Conservation of Habitats and Species Regulations 2017 (as amended).	There is suboptimal habitat for GCN on Site limited only to the hedgerows and a pond within 30m of the southern utility corridor. The proposed works include clearance of small sections of hedgerows which could lead to an offence if GCN are killed or injured. As such, an assessment of effects is required.	Local	In
Reptiles and Amphibians (excluding GCN)	Protected by the WCA 1981 (as amended). Section 41 of the NERC Act 2006	The Site was assessed as sub-optimal to support reptiles and amphibians due to the lack of suitable habitats, being mainly short cropped grass, however, it is possible that reptiles and amphibians could use the hedgerow, ditch and edge habitats. As such, an assessment of effects is required.	Local	In
Birds	Protected by the WCA 1981 (as amended). Section 41 of the NERC Act 2006	Habitats on site offer suitable habitat for nesting birds and wintering birds. The proposed works include clearance of a small section of hedgerow which could lead to damage or disturbance of a nest. The proposed works also involve the loss of modified grassland which could cause a loss of habitat for wintering birds. As such, an assessment of effects is required.	Local	In

Ecological feature	Conservation status	Evaluation rationale	Importance	Scoped in/out of assessment
Bats	Listed on Schedule 5 of the WCA 1981 (as amended). Section 41 of the NERC Act 2006 The Conservation of Habitats and Species Regulations 2017 (as amended).	As part of the proposals, a small section of hedgerow will be removed. There will likely also be lighting impacts during the construction and operational phases. Bats are using the Site boundary features (particularly the hedgerow) to commute. As such, an assessment of effects is required.	District	In
Hazel dormouse	Protected by the WCA 1981 (as amended). Section 41 of the NERC Act 2006 The Conservation of Habitats and Species Regulations 2017 (as amended).	The hedgerows lacked the structural diversity to support dormice and moreover it was limited in extent and isolated from other suitable Hazel dormouse habitat in the wider landscape. Hazel dormice are likely absent from the Site so an assessment of effects is therefore not deemed necessary.	Negligible	Out
Otter and water vole	Protected by the WCA 1981 (as amended). Section 41 of the NERC Act 2006 The Conservation of Habitats and Species Regulations 2017 (as amended).	The ditch to the east of the southern utilities connection corridor contained little water at the time of the survey, after a period of heavy rain. The ditch is likely only seasonally wet, and even when wet it is likely not deep enough to support populations of otter and water vole.	Negligible	Out
Badgers	Protected by the Protection of Badgers Act 1992	No badger setts or other signs of badger activity were noted during the surveys completed to date. An assessment of effects is therefore not deemed necessary.	Negligible	Out

4.1.3 In summary, the receptors to be taken forward to assessment are:

- Other neutral grassland with dry ditch and line of trees (g3c 50);
- Hedgerows;
- GCN
- Reptiles and amphibians (excluding GCN);
- Birds; and
- Bats.

4.2 Embedded mitigation

4.2.1 In order to ensure a proportionate approach to the assessment, the assessment of likely significant effects of the Proposed Development assumes that certain mitigation measures that are embedded as part of the design of the Proposed Development or for which would be implemented as good construction practices would be in place. These measures are identified below, with a summary provided on how the measures contribute to the mitigation and management of potentially significant ecological effects.

Habitat mitigation and creation

4.2.2 At the Outline stage the Proposed Development plans involve removal of large areas of modified grassland, small areas of other neutral grassland, and a small section of native hedgerow. A Biodiversity Net Gain (BNG) Design Stage Report has been produced which details habitat creation and enhancement measures to be implemented post-construction (RSK Biocensus, 2025c), in accordance with relevant legislation and local planning policy. The development would result in a 31.09% net gain in biodiversity for area habitats and a 510.09% net gain in hedgerow habitats.

4.2.3 The implementation and creation of habitats post-development will be outlined in a Landscape Ecological Management Plan (LEMP) and a Habitat Management and Monitoring Plan (HMMP) (at reserved matters). These will include detailed drawings, management proposals and timetables, as well as a plan to define who is responsible for activities.

5 Evaluation and impact assessment

5.1 Scope of assessment

- 5.1.1 Potential effects on ecological features from the Proposed Development during its construction and operation are described in this section. The assessment methodology is described in Section 2. This assessment takes into consideration embedded mitigation within the Proposed Development design. Where embedded mitigation measures are insufficient to avoid potentially significant effects on features, further mitigation measures will be required.

Construction

- 5.1.2 Potential effects identified through the construction phase are as follows:
- Direct habitat loss and fragmentation: permanent and temporary reductions to the extent, quality, and connectivity of the habitats present on Site;
 - Disturbance and displacement: disturbance of protected and/or priority species from additional noise, dust, light, vibration, and human activity, with the possibility of causing displacement;
 - Direct mortality of individuals; and
 - Pollution of habitats through construction related activities such as pollutant sedimentation and the use, assembly and storage of machines and materials (risk of chemical and fuel spills).

Operation

- 5.1.3 Potential effects identified through the operational phase are as follows:
- Disturbance and displacement: disturbance of habitats through increased recreational pressure / human activity; and
 - Increased lighting.

5.2 Modified Grassland (Poor Condition)

- 5.2.1 The Proposed Development will result in the permanent loss of all modified grassland within the Site. This habitat is of Site importance but of low ecological value, being species-poor and supporting only limited generalist invertebrate and bird foraging.
- 5.2.2 Embedded mitigation includes the creation of species-rich neutral grassland within new green infrastructure areas, representing an ecological enhancement relative to the baseline. These areas are integral to the BNG design and will be managed to achieve target condition as detailed in a LEMP, likely to be conditioned as part of detailed design. Given the low value of the baseline habitat and the delivery of higher-value grassland post-development, the loss of modified grassland is assessed as **not significant**.

5.3 Other Neutral Grassland, Dry Ditch and Individual Trees (g3c)

- 5.3.1 The Proposed Development will result in the permanent loss of 0.09 ha of other neutral grassland, sections of dry ditch where needed for access, and a small number of

individual rural trees. These features are of at most Local importance, providing limited foraging resources and minor connective function along the western boundary.

- 5.3.2 Compensation will be delivered through the creation of species-rich neutral grassland, new tree planting, and SuDS habitats (pond and swales), which collectively deliver a clear uplift in biodiversity units as set out in the BNG Design Stage Report. A future LEMP, likely to be conditioned as part of detailed design, will ensure appropriate establishment and management to achieve target habitat condition. With this embedded mitigation in place, the loss of these features is assessed as **not significant**.

5.4 Hedgerows

- 5.4.1 The Proposed Development will require the removal of approximately 30 m of native hedgerow with trees along the Site's western edge. This hedgerow is of Local importance, functioning as nesting habitat for birds and providing minor connective function for small mammals and bats.
- 5.4.2 There will be a temporary impact on the hedgerows along the utility corridors, the impacted sections of hedge will be replaced like for like.
- 5.4.3 Embedded mitigation includes the creation of new species-rich native hedgerows—with and without hedgerow trees—located along the Site boundaries and within internal green corridors. The total length and quality of hedgerow habitat post-development significantly exceeds the baseline, delivering a substantial net gain in hedgerow biodiversity units and habitat connectivity. With this compensation and long-term management secured through a future LEMP, likely to be conditioned as part of detailed design, the loss of hedgerow habitat is considered **not significant**.

5.5 GCN

- 5.5.1 Only one waterbody suitable for GCN was identified within 500m, a pond 30m east of the southern utilities connection corridor. There were nine records of GCN returned within 2 km of the Site, but these were all at least 580m from Site and separated by urban conurbation. The habitats on Site are generally sup-optimal (short, sheep grazed grassland), however, there is some suitability in the hedgerows and margins, although these are limited in extent. The ditch to the east of the southern utility corridor is unlikely to be wet in the breeding season, and as such is unsuitable for GCN. The majority of the development will be at least 100m from the nearby pond, however the southern utility connection corridor will come within 30m of the pond to the east of Site.
- 5.5.2 Proposed development includes small scale removal of hedgerow, expected to be up to 20m within 250m of the pond, and temporary construction within 100m for utility connections.
- 5.5.3 GCN are not known to be present for this assessment, but even if they are present impacts to suitable habitats are likely to be temporary (construction of utility connection) and site is of no more than **local importance** to GCN population.
- 5.5.4 There will be no permanent loss of suitable habitat within 100m of the pond, however there is a risk of injury, killing or disturbance to GCN whilst in place of rest. This would be **moderate adverse impact at local level**, which would be **significant**.

- 5.5.5 The majority of hedgerows, and a buffer around them, are due to be retained, and will be protected during construction. GCN could be mitigated through a District Level Licence (DLL). Natural England operate the DLL scheme in Wiltshire. DLL is an alternative approach to traditional mitigation licences to develop sites which could affect great crested newts. It aims to increase numbers of great crested newts by providing new or better habitats in targeted areas to benefit their wider population. Any impacts from the project will be assessed and off-set through commensurate conservation payments as part of this scheme to fund this wider habitat creation and management.
- 5.5.6 Alternatively, environmental DNA (eDNA) surveys could be conducted on the pond identified 30m from site to confirm whether the DLL is required prior to submitting the licence application. The results of these eDNA surveys would inform the approach for a reserved matters discharge.
- 5.5.7 With mitigation, it is considered that the Proposed Development will have a **neutral impact** at a **Local level**.
- 5.5.8 Overall the residual impact is considered to be **not significant**.

5.6 Reptiles and amphibians

- 5.6.1 The desk study returned records of slow-worm and grass snake within 2 km of the Site, and there is potential for small numbers of widespread species of reptiles and amphibians to be present on the Site. Any populations of reptiles or amphibians present is considered to be of at most **Local importance**.
- 5.6.2 The Proposed Development will result in a reduction in grassland habitat, and could result in killing or injury of individuals during works.
- 5.6.3 Without mitigation, this would constitute a **slight adverse impact** at a **Local level**.
- 5.6.4 The majority of hedgerows, and a buffer around them, are due to be retained, and will be protected during construction. Due to the sub-optimal habitat, and the existing management regime of the grassland habitat (sheep-grazed), further reptile surveys are not considered necessary as the results of these surveys would not change the proposed mitigation. It is recommended the site boundaries are protected, and a buffer put in place to protect the retained hedgerows and edge habitat. Any required vegetation clearance within suitable reptile or amphibian habitat will follow a precautionary method of working to avoid killing or injuring reptiles or amphibians. Post development there will be an increase in suitable habitat on the Site including long grassland and a SuDS swale.
- 5.6.5 With mitigation, it is considered that the Proposed Development will have a **slight positive impact** at a **Local level**.
- 5.6.6 Overall the residual impact is considered to be **not significant**.

5.7 Birds

- 5.7.1 Wintering bird surveys were undertaken in November and December 2025. A total of 35 species were recorded during the surveys, comprising of mostly widespread and common across various habitat types in the UK, comprising woodland, scrub, grassland and farmland. The presence of 19 corn buntings on visit 2 was significant as this species is absent from large parts of the U.K. and is a NERC 41/red-listed under the BoCC.

However, (as described in Section 3.4) most of the species, including the corn buntings, were not using the fields that are covered by any of the proposed developments, including the proposed utilities lines, so the area is considered to be of **local value** for wintering birds.

- 5.7.2 The BDS returned records of mostly common and widespread species. The breeding bird assemblage overall is of **local value**.
- 5.7.3 In the absence of mitigation vegetation clearance during the nesting bird period (March to August inclusive) may cause damage/ or disturb an active nest and loss of habitats could impact breeding and wintering birds year round. This would constitute a **slight adverse impact** at the **local level**.
- 5.7.4 The majority of the species identified during wintering bird surveys and in the BDS were associated with the hedgerows. Hedgerows will be retained and protected where possible and additional hedgerow will be planted. The Proposed Development will result in the loss of grassland habitats. No ground nesting species were identified during the surveys within the Site.
- 5.7.5 With mitigation, it is considered that there will be a **neutral impact** at a **Site level**.
- 5.7.6 With mitigation, the operational phase is considered to have a **neutral to slight positive impact** at a **Site level**. This is primarily due to the addition of new hedgerows, SuDS, and grassland habitat which will provide additional high value foraging resources, whilst bird boxes included as enhancement will provide additional nesting habitat.
- 5.7.7 Overall the residual impact is considered to be **not significant**.

5.8 Bats

- 5.8.1 The Site is predominantly modified grassland with a hedgerow along the western boundary. Landscape features of importance for bats are the linear features like hedgerows which provide commuting routes as well as creating habitats for invertebrates for the bats to prey on. Removal of hedgerows or creating gaps in the hedgerows will limit the connectivity of the landscape for the bats. Additionally, some species of bats will not readily cross gaps between hedgerows where they are more exposed to predators. As there are limited linear features with the Site, each of these features are of increased importance in order to maintain connectivity and provide foraging areas.
- 5.8.2 The nighttime bat walkover in November identified one species of bat. The site currently has artificial light spill from the MOD north of the Site. There is also limited artificial lighting from the housing estate to the west of the site.
- 5.8.3 Up to thirteen different species of bat were recorded using the hedgerows and treelines on the boundaries of the survey area. For the purpose of the assessment, Myotis species and Nyctalus species have been grouped together.
- 5.8.4 Only one season worth of activity surveys were conducted on the Site, which is fewer than the guideline recommendations (Collins, 2023). The Site is not near any designated sites for bats, and it is on edge of existing urban area. The Site was assessed as having low suitability for bats, and therefore seasonal surveys would have been suggested within the best practice guidelines. However, initial surveys identified most species that are likely to be present in Wiltshire are present on the Site, and the proposed project design has

included significant buffers, which means further surveys are not considered necessary to inform the assessment or mitigation plans.

Ecological Value of the Survey area

- 5.8.5 The method for valuing the species present in the UK Bat Mitigation Guidelines (Reason & Wray, 2023) indicates that the assemblage could, in theory, meet the threshold for national level importance. However, whilst there is a good diversity in recorded species, the number of registrations for most species was generally low, with *Nathusius pipistrelle* only registered on two occasions and greater horseshoe and Bechstein's only registered on one occasion. Removing *Nathusius*, greater horseshoe and Bechstein's from the mix brings the value down to regional importance. The very low contribution from several species, and the very high predominance of common pipistrelle, as well as the survey area's small size, would indicate that the survey area would be more appropriately designated as being of **District value**.
- 5.8.6 Lesser horseshoe was the third most recorded species within the Site. Lesser horseshoe are a light intolerant species.
- 5.8.7 No trees with identified PRF's are to be removed as part of existing plans.
- 5.8.8 The primary impacts from the construction phase are considered to be loss of foraging habitat, potential impacts on linear features and trees with PRF's, and construction phase lighting which could displace foraging or commuting bats.
- 5.8.9 In the absence of mitigation, the proposed works could have a **moderate adverse impact** at a **District level**.
- 5.8.10 Mitigation includes retention of most trees, hedgerow and linear features, with appropriate buffers. Foraging resources included in the landscaping post-construction (new grassland, SUDs, trees and hedgerow) and a sensitive lighting design during construction. These mitigation features could provide a significant increase in the connectivity of the Site and improve commuting corridors between the Site and other high quality habitat in the local area due to 890m of new hedgerows.
- 5.8.11 With mitigation, it is considered that construction phase could be a **neutral impact** at a **Site level** on bats.
- 5.8.12 Operational phase impacts are primarily new lighting on the site, which could displace foraging or commuting bats. This is considered the largest potential impact of the development on bats.
- 5.8.13 In the absence of mitigation, the operational phase could have a **moderate adverse impact** at a **District level**.
- 5.8.14 With mitigation, including a sensitive lighting plan, it is considered that the operational phase could cause a **neutral impact** at a **Site level** on bats.
- 5.8.15 Overall the residual impact is considered to be **not significant**.

5.9 Cumulative effects

- 5.9.1 Given the small-scale nature of the Proposed Development and that the ZOI is considered to be only within the Site boundary, no significant negative cumulative effects are anticipated.

6 Mitigation, compensation and enhancement

6.1 Overview

- 6.1.1 The assessment of likely significant effects of the Proposed Development assumes that primary and tertiary mitigation measures are in place. These measures are identified below.
- 6.1.2 A construction environmental management plan (CEMP), or equivalent, will be developed prior to construction commencement detailing embedded and additional mitigation measures to be implemented for each ecological feature during the construction phase of the Proposed Development. This should include measures to address any potential environmental constraints, such as Pollution Prevention Guidance, and measures to reduce disturbance from dust, noise, vibrations and lighting.
- 6.1.3 A landscape ecological management plan (LEMP), or equivalent, will also be required as part of detailed design, and should contain information on how the habitats and features identified for mitigation and enhancement will be created, managed and monitored post-development.
- 6.1.4 As this report is for outline mitigation, in some cases updated surveys may be required to inform any changes to plans, or should the validity of the species surveys be in doubt (generally species surveys require a re-assessment after 12-18 months).
- 6.1.5 The mitigation hierarchy has been implemented as below.

6.2 Avoidance

- 6.2.1 The following avoidance measures will be implemented:
 - Existing vegetation will be retained where possible, this includes the majority of existing hedgerow, trees and other neutral grassland where removal is not required for access.

6.3 Mitigation

- 6.3.1 The following mitigation measures will be implemented during construction:
 - Fenced buffers will be installed in front of retained hedgerows and trees during construction. Buffer zones to take into account root protection areas, and should not be less than 2m from outside edge of hedges, or 5m for trees. This is to prevent direct impacts on these features, and limit disturbance to any protected species using them. Fencing should be Herras fencing with acoustic hoarding barriers on them (such as Echo acoustic barrier). The acoustic hoarding acts as a physical barrier to prevent construction activities and lighting causing disturbance of protected species using the hedgerows (bats) as well as dampening noise.
 - Sensitive lighting design during construction following BCT and ILP Guidance Note 08/23 (2023) – no night time working during construction. Where lights are needed

during winter months in the morning or afternoon, these must be faced away from hedges;

- Precautionary working method statement (PWMS) to outline protection measures for reptiles and amphibians on Site during construction;
- Clearance of suitable bird nesting habitat outside the nesting bird season (nesting season generally taken to be March to August, but influenced by climatic conditions and species), or a check within 24 hours or starting by ECoW; and,
- To prevent animals becoming trapped in any pipes or trenches during works, trenches must be covered overnight or a wooden plank placed in them at an angle so animals can escape, and pipes capped.

6.3.2 The following mitigation measures will be implemented during operation:

- A sensitive lighting scheme will be designed and implemented with input from a suitably experienced lighting engineer. Lighting design will follow ILP guidance note 08/23 or equivalent. An 8m wide 'dark corridor', measured from inside edge of existing or proposed hedgerows is proposed around all development boundaries. Within this corridor light spill must not exceed 0.5lux, or no higher than baseline levels, as informed by baseline surveys in accordance with the ILP guidance. This corridor will be vegetated (hedgerow / tree/s grassland); and,
- Roadside drainage gulleys are a significant cause of entrapment and death in amphibians and small mammals. The drainage scheme must incorporate suitable measures to remove or minimise risk of death in these animals. This can include dropped kerbs around drainage pots, offsetting drainage pots away from kerbs (so animals following the kerb don't fall in) and installing animal ladders within drainage pots.

6.4 Compensation

6.4.1 The following compensation measures will be incorporated:

- 890 m of new native hedgerow will be planted;
- 8.13 ha of poor condition other modified grassland to be lost, only of Site significance, to be replaced with 2.35ha of other neutral grassland (suitable for reptiles and amphibians), as well as scattered trees;
- Additional native hedgerow planting along boundaries;
- SuDs should be seasonally wet, surrounded with marshy/damp grassland and fenced off; and,
- All compensatory planting outside the new urban area within the Site (e.g. boundary hedges, grassland, swale) to only use native species of local provenance.

6.5 Enhancement

6.5.1 The following compensation measures will be incorporated:

- Installation of integrated bat boxes in buildings. One box per four new buildings (25% ratio);
- Installation of integrated bird boxes in buildings. One box per four new buildings (25% ratio);
- Boxes in buildings must be built in, not free hanging, to increase longevity and prevent damage. Bird or bat boxes may be replaced with alternative access feature suitable

to the species / group, such as under access tiles for bats, or open eave access for birds;

- All planting and seeding must use native species, preferably of local provenance; and
- Where possible log piles and hibernacula for a range of species should be created.

6.6 Licensing

- 6.6.1 Whilst the risk is low, GCN may be present on Site. A District Level Licence (DLL) may be required from Natural England prior to any works. The requirement for this licence could be determined by appropriately timed environmental DNA surveys. The results of these eDNA surveys would inform the approach for a reserved matters discharge.

7 Residual Effects

Table 13: Residual effects

Receptor	Impact	Embedded mitigation	Assessment of effect	Additional Mitigation	Residual effects
Other neutral grassland	Construction phase – Permanent loss of of other neutral grassland resulting in a loss of suitable habitat for bats and invertebrates.	None	Not significant	Trees and shrubs will be planted and hedgerows extended to ensure compensation of lost habitat, in addition to creation of grassland and SuDS. There will be an 8m buffer between the development parcel and retained hedgerows. The LEMP and HMMP (to be produced at detailed design) will provide further details about species mixes, timescales and management methods to ensure this newly created habitat establishes properly on Site. These measures will increase the biodiversity value of the Site and provide habitats for a range of protected and notable species.	Not significant
Hedgerows	Construction phase – Permanent loss of 20m of hedgerow resulting in a loss of suitable habitat for birds,		Not significant		Not significant
GCN	Construction phase – Temporary loss of terrestrial habitat within 100m of suitable	None	Moderate adverse impact	Any impacts will be assessed and off-set through commensurate conservation	Not significant

Receptor	Impact	Embedded mitigation	Assessment of effect	Additional Mitigation	Residual effects
	pond. Risk of injury, killing or disturbance while in a place or rest.			payments as part of the DLL scheme to fund this wider habitat creation and management.	
	Operational Phase – no anticipated impacts.	Habitat creation and enhancement would provide overall gains for biodiversity and would increase the amount of suitable habitat of value to GCN.	Not significant	None required	Not significant
Reptiles and amphibians (excluding GCN)	Construction phase – Permanent minor loss of small sections of existing other neutral grassland and hedgerows.	None	Slight adverse	Precautionary working method statement (PWMS) to outline protection measures for reptiles and amphibians on Site during construction	Not significant
	Operational Phase – no anticipated impacts	Habitat creation and enhancement would provide overall gains for biodiversity and would increase the amount of suitable habitat of value to GCN.	Not significant	None required	Not significant
Birds	Construction phase – Permanent minor loss of	Works should avoid the bird breeding season (March – August	Slight adverse	None required	Not significant

Receptor	Impact	Embedded mitigation	Assessment of effect	Additional Mitigation	Residual effects
	existing nesting bird habitat in hedgerows,	inclusive). If not possible, a suitably experience ecologist will carry out a nesting bird check prior to works. This will ensure no nesting birds are impacted and establish appropriate buffer zones around any nests identified.			
	Operational Phase – increased disturbance and predation from human presence and domestic pets.	Habitat creation and enhancement would provide overall gains for biodiversity and would increase the amount of suitable habitat of value to birds. This will offset any likely increased disturbance or risk of predation during the operational phase.	Not significant	None required	Not significant
Bats	Construction Phase- Loss or damage to commuting and foraging habitat through hedgerow removal. Lighting during construction has the potential to disturb commuting routes.	Trees and shrubs will be planted and hedgerows extended which will improve the commuting and foraging potential on Site.	Moderate adverse	There will be a 8m buffer between the western hedgerow and the Proposed Development. The Proposed Development has been designed in a way that minimises the impacts of cars	Not significant

Receptor	Impact	Embedded mitigation	Assessment of effect	Additional Mitigation	Residual effects
	Operational Phase – Increased lighting could result in landscape fragmentation.	The Lighting Strategy for the Site will aim to reduce overall lighting levels and avoid direct and ambient lighting of important bat features such as the hedgerow habitat, by considering a range of options in terms of the type of light used, lighting levels (including dimming street lighting which would alter lighting levels based upon usage), light placement, column height and luminaire design to minimise light spill and skyglow.		to the boundary, and parking will be located more centrally within the development parcels. The grassland planting and SuDS creation has the potential to attract invertebrates and increase the foraging potential of the Site for bats. Best practice measures will be followed with regards to lighting which will mitigate any impacts with regards to light disturbance during the works. Bat boxes will be inbuilt into the new properties at a ratio of one new box for every four new buildings (25%). Lighting strategy to be reviewed and developed in line with bat ecologist.	

8 Conclusions

- 8.1.1 Several habitats and species of ecological value were identified on Site and within the Survey Area, including native hedgerow, other neutral grassland, bats, reptiles GCN, and birds.
- 8.1.2 A number of ecologically significant direct and indirect impacts arising from the current proposals were identified in relation to habitat loss, disturbance to protected species, lighting during construction and operational phase, and noise pollution.
- 8.1.3 A variety of mitigation, compensation and enhancement measures should be implemented in order to address the identified impacts. These measures include but are not limited to:
- Implementation of best practice construction methods and consideration of ecological features as part of these;
 - Directional and limited lighting throughout the construction and operational phases;
 - Following best practice pollution guidance;
 - Fenced buffers will be installed in front of retained hedgerows;
 - Enhancing habitat for invertebrates, amphibians, reptiles, birds and bats through additional hedgerow planting along boundaries, planting of other neutral grasslands and a swale;
 - Creation of log piles and hibernacula for a range of species where possible;
 - Planting of native species which are fruit, pollen and berry rich for birds and insects; and,
 - Installation of integrated bat and bird boxes on buildings (built in). One box per four new buildings (25% ratio).
- 8.1.4 There are expected to be no residual impacts and therefore no cumulative impacts due to the proposals.

9 References

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Figures

Figure 1 – Site Location Plan

Figure 2 – UKHab Habitats Map

Figure 3 – Schedule 1 and Red List Species Flight Paths

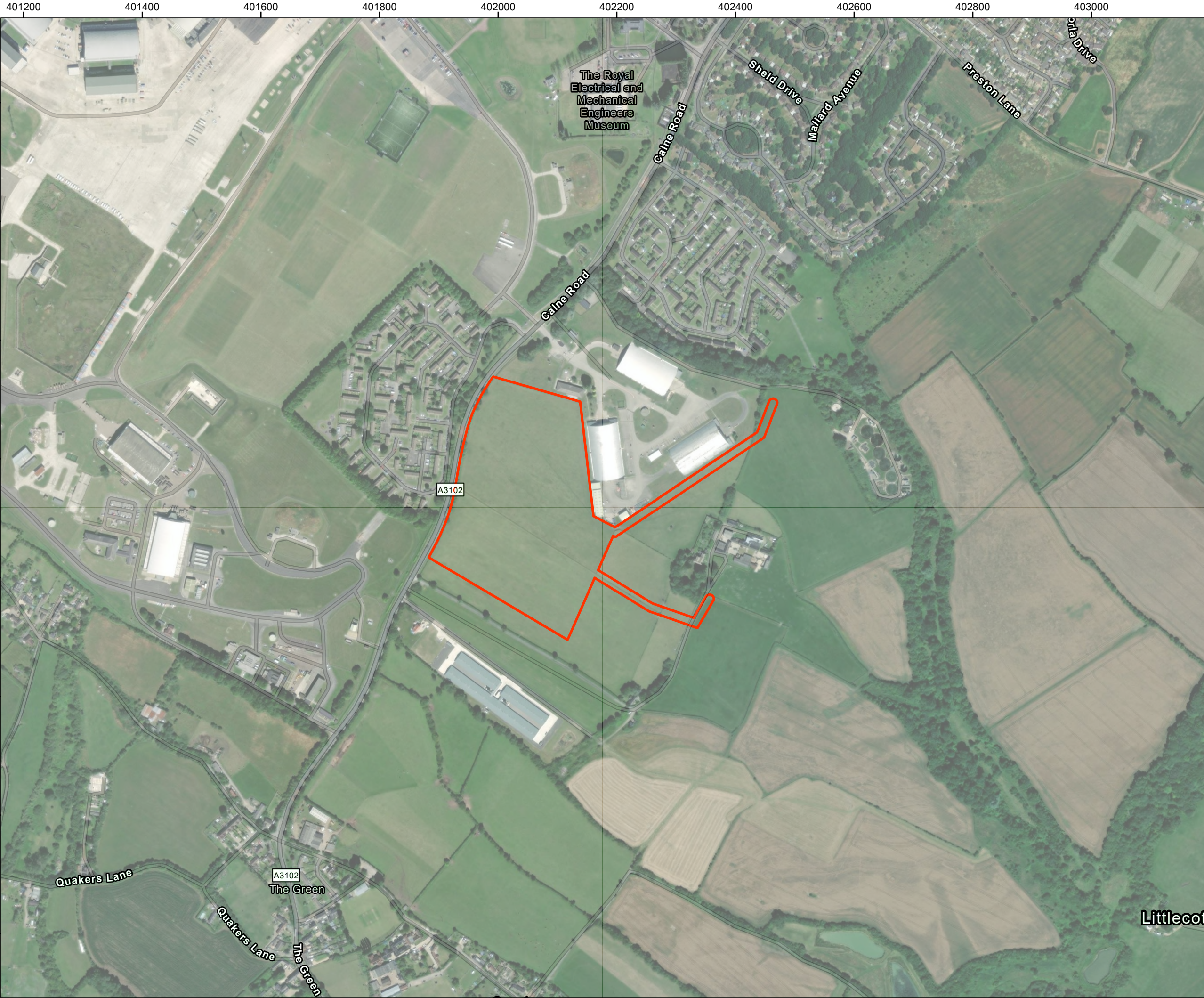
Figure 4 – Schedule 1 and Red List Species Points

Figure 5 – Amber List Species Flight Paths

Figure 6 – Amber List Species Points

Figure 7 – Bat static monitoring points

Figure 8 – Bat night-time walkover survey



Legend:

Site boundary

01	15/12/2025	2489428	RS	RG	CSR
Rev	Date	Project Code	Drn	Chk	App

PEA BNG Lyneham

RSK

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EXPERTS IN ECOLOGY

TITLE: Figure 1:
Site Location Plan

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Metres

SCALE: 1:6,000 @ A3

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Legend:

- Site boundary
- UKHab Classification
 - Other neutral grassland
 - Modified grassland
- Developed land; sealed surface
- Native hedgerow
- Native hedgerow with ditch
- Species-rich native hedgerow
- Species-rich native hedgerow with ditch
- Ditch
- Dry ditch
- Built linear features
- Fence
- Tree
- Secondary code

Secondary Code	Description
50	Ditch
100	Grazed
102	Sheep grazed

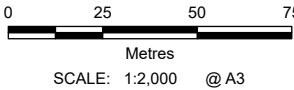


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Rev	Date	Project Code	Drn	Chk	App

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TITLE: Figure 2:
Habitat Survey



REV 00



Legend:

Site boundary

Bird Activity

→ Flying over

Visit Number

● 1

● 2

Code	Common name
CB	Corn Bunting
CM	Common Gull
FF	Fieldfare
GR	Greenfinch
HG	Herring Gull
HS	House Sparrow
RE	Redwing
S.	Skylark
SG	Starling
Y.	Yellowhammer

00	10/12/2025	2489428	LB	XX	MH
Rev	Date	Project Code	Drm	Chk	App

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EXPERTS IN ECOLOGY

TITLE: Figure 3:
Schedule 1 and Red List Species Paths
Page 1 of 2

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Legend:

Site boundary

Bird Activity

→ Flying over

Visit Number

● 1

● 2

Code	Common name
CB	Corn Bunting
CM	Common Gull
FF	Fieldfare
GR	Greenfinch
HG	Herring Gull
HS	House Sparrow
RE	Redwing
S.	Skylark
SG	Starling
Y.	Yellowhammer

00	10/12/2025	2489428	LB	XX	MH
Rev	Date	Project Code	Drn	Chk	App

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EXPERTS IN ECOLOGY

TITLE: Figure 3:
Schedule 1 and Red List Species Paths
Page 2 of 2

0255075

Metres

SCALE: 1:2,000 @ A3

REV 00



Legend:

Site boundary

Activity

Calling

Visit Number

● 1

● 2

Code	Common name
CL	Cirl Bunting
CM	Common Gull
FF	Fieldfare
GR	Greenfinch
HG	Herring Gull
HS	House Sparrow
LI	Linnet
RE	Redwing
S.	Skylark
SG	Starling
Y.	Yellowhammer

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Rev	Date	Project Code	Drn	Chk	App

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EXPERTS IN ECOLOGY

TITLE: Figure 4:

Schedule 1 and Red List Species
Points Page 1 of 2

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Metres

SCALE: 1:2,000 @ A3

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Legend:

Site boundary

Activity

Calling

Visit Number

● 1

● 2

Code	Common name
CL	Cirl Bunting
CM	Common Gull
FF	Fieldfare
GR	Greenfinch
HG	Herring Gull
HS	House Sparrow
LI	Linnet
RE	Redwing
S.	Skylark
SG	Starling
Y.	Yellowhammer

00	10/12/2025	2489428	LB	XX	MH
Rev	Date	Project Code	Drn	Chk	App

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EXPERTS IN ECOLOGY

TITLE: Figure 4:

Schedule 1 and Red List Species
Points Page 2 of 2

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Metres

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Document Path: C:\OneDrive\OneDrive - RSK Group\RSK Biocensus - 2489428 - PEA BNG Lyneham\08 GIS - 2489428 - APRX\2489428 - PEA BNG Lyneham - Figure 4 - Schedule 1 and Red List Species Points.aprx



Legend:

Site boundary

Bird Activity

→ Flying over

Visit Number

● 1

● 2

Code	Common name
BH	Black-headed Gull
D.	Dunnock
GL	Grey Wagtail
LB	Lesser Black-backed Gull
MP	Meadow Pipit
RB	Reed Bunting
ST	Song Thrush
WR	Wren

00	10/12/2025	2489428	LB	RG	MH
Rev	Date	Project Code	Drn	Chk	App

PEA BNG Lyneham

TITLE: Figure 5:

Amber List Species Flight Paths

Page 1 of 2

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Metres

SCALE: 1:2,000 @ A3

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Legend:

Site boundary

Bird Activity

→ Flying over

Visit Number

● 1

● 2

Code	Common name
BH	Black-headed Gull
D.	Dunnock
GL	Grey Wagtail
LB	Lesser Black-backed Gull
MP	Meadow Pipit
RB	Reed Bunting
ST	Song Thrush
WR	Wren

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Rev	Date	Project Code	Drn	Chk	App

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EXPERTS IN ECOLOGY

TITLE: Figure 5:
Amber List Species Flight Paths
Page 2 of 2

0255075

Metres

SCALE: 1:2,000 @ A3

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Legend:

Site boundary

Activity

Alarm call

Visit Number

● 1

● 2

Code	Common name
BH	Black-headed Gull
D.	Dunnock
GL	Grey Wagtail
LB	Lesser Black-backed Gull
MP	Meadow Pipit
RB	Reed Bunting
RO	Rook
ST	Song Thrush
WP	Woodpigeon
WR	Wren

00	10/12/2025	2489428	LB	RG	MH
Rev	Date	Project Code	Drn	Chk	App

PEA BNG Lyneham

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biocensus
EXPERTS IN ECOLOGY

TITLE: Figure 6:
Amber List Species Points
Page 1 of 2

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Metres

SCALE: 1:2,000 @ A3

REV 00



Legend:

Site boundary

Activity

Alarm call

Calling

Visit Number

● 1

● 2

Code	Common name
BH	Black-headed Gull
D.	Dunnock
GL	Grey Wagtail
LB	Lesser Black-backed Gull
MP	Meadow Pipit
RB	Reed Bunting
RO	Rook
ST	Song Thrush
WP	Woodpigeon
WR	Wren

00	10/12/2025	2489428	LB	RG	MH
Rev	Date	Project Code	Drm	Chk	App

PEA BNG Lyneham

RSK
biocensus
EXPERTS IN ECOLOGY

TITLE: Figure 6:

Amber List Species Points
Page 2 of 2

0255075

Metres

SCALE: 1:2,000 @ A3

REV 00



Legend:

Site boundary

Static detector

00	15/12/2025	2489428	RS	RG	CSR
Rev	Date	Project Code	Drn	Chk	App

PEA BNG Lyneham

EXPERTS IN ECOLOGY

TITLE: Figure 7:

Bat Static Monitoring Points
October 2025

0306090

Metres

SCALE: 1:3,000 @ A3

REV 00



- Legend:
- Site boundary
 - Bat walkover transect
 - Transect start/end point
 - Survey static position
 - Common pipistrelle
 - Observed using thermal imaging - unknown species
 - Tree with potential roosting feature



00	18/12/2025	2489428	RS	RG	MP
Rev	Date	Project Code	Drm	Chk	App

PEA BNG Lyneham



TITLE: Figure 8:
Bat Night-time Walkover Survey

0306090

Metres

SCALE: 1:2,500 @ A3

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Appendix A – Species records

The following tables present records of protected and notable species within 2 km of the Site boundary. These species records were obtained from Wiltshire and Swindon Biological Records Centre. The scientific and common names for species are given, as well as their level of designation. Where a species is not listed, this does not indicate absence, but that the Record Centre does not currently hold records from the search area.

Table 14: Protected species records within 2 km of the Site boundary

Scientific name	Common name	Designation	Most Recent	Any records within 100m
Amphibians				
<i>Triturus cristatus</i>	great crested newt	EPS(Sch2), WCA5, S41	2021	
Birds				
<i>Alcedo atthis</i>	kingfisher	WCA1.1	2019	
<i>Falco peregrinus</i>	peregrine	WCA1.1	2020	
<i>Falco subbuteo</i>	hobby	WCA1.1	2020	
<i>Milvus milvus</i>	red kite	WCA1.1	2021	☒
<i>Turdus iliacus</i>	redwing	WCA1.1, Amber, GB RDB(CR)	2023	
<i>Turdus pilaris</i>	fieldfare	WCA1.1, Red, GB RDB(CR)	2022	☒
<i>Tyto alba</i>	barn owl	WCA1.1	2023	
Mammals				
<i>Arvicola amphibius</i>	water vole	WCA5, S41, GB RDB(EN)	2016	
<i>Barbastella barbastellus</i>	barbastelle	EPS(Sch2), WCA5, S41, GB RDB(VU)	2015	
<i>Chiroptera</i>	bat	EPS(Sch2)	2015	
<i>Eptesicus serotinus</i>	serotine	EPS(Sch2), WCA5, GB RDB(VU)	2023	
<i>Lutra lutra</i>	otter	EPS(Sch2), WCA5, S41	2020	
<i>Meles meles</i>	badger	BA	2022	
<i>Myotis</i>	myotis bat species	EPS(Sch2), WCA5	2023	
<i>Myotis nattereri</i>	natterer's bat	EPS(Sch2), WCA5	2012	
<i>Nyctalus noctula</i>	noctule	EPS(Sch2), WCA5, S41	2023	
<i>Pipistrellus</i>	pipistrelle bat species	EPS(Sch2), WCA5	2015	
<i>Pipistrellus pipistrellus</i>	common pipistrelle	EPS(Sch2), WCA5	2017	
<i>Pipistrellus pygmaeus</i>	soprano pipistrelle	EPS(Sch2), WCA5, S41	2023	
<i>Plecotus auritus</i>	brown long-eared bat	EPS(Sch2), WCA5, S41	2019	
<i>Rhinolophus hipposideros</i>	lesser horseshoe bat	EPS(Sch2), WCA5, S41	2015	
Reptiles				
<i>Anguis fragilis</i>	slow-worm	WCA5, S41	2022	
<i>Natrix helvetica</i>	grass snake	WCA5, S41	2021	

Table 15: Notable species records within 2 km of the Site boundary

Scientific name	Common name	Designation
Amphibians		
<i>Bufo bufo</i>	common toad	WCA5, S41
<i>Rana temporaria</i>	common frog	WCA5
Birds		
<i>Accipiter nisus</i>	sparrowhawk	Amber
<i>Alauda arvensis</i>	skylark	S41, Red
<i>Anthus pratensis</i>	meadow pipit	Amber
<i>Apus apus</i>	swift	Red, GB RDB(EN)
<i>Asio flammeus</i>	short-eared owl	Amber, GB RDB(EN)
<i>Chloris chloris</i>	greenfinch	Red, GB RDB(EN)
<i>Columba oenas</i>	stock dove	Amber
<i>Columba palumbus</i>	woodpigeon	Amber
<i>Corvus frugilegus</i>	rook	Amber
<i>Curruca communis</i>	whitethroat	Amber
<i>Delichon urbicum</i>	house martin	Red, GB RDB(VU)
<i>Emberiza calandra</i>	corn bunting	S41, Red
<i>Emberiza citrinella</i>	yellowhammer	S41, Red
<i>Emberiza schoeniclus</i>	reed bunting	S41, Amber
<i>Falco tinnunculus</i>	kestrel	Amber, GB RDB(VU)
<i>Gallinago gallinago</i>	snipe	Amber
<i>Haematopus ostralegus</i>	oystercatcher	Amber
<i>Larus argentatus</i>	herring gull	S41, Red, GB RDB(EN)
<i>Linaria cannabina</i>	linnet	S41, Red
<i>Luscinia megarhynchos</i>	nightingale	Red, GB RDB(VU)
<i>Motacilla cinerea</i>	grey wagtail	Amber
<i>Motacilla flava flavissima</i>	yellow wagtail	S41, Red
<i>Muscicapa striata</i>	spotted flycatcher	S41, Red
<i>Numenius arquata</i>	curlew	S41, Red, GB RDB(EN)
<i>Oenanthe oenanthe</i>	wheatear	Amber
<i>Passer domesticus</i>	house sparrow	S41, Red
<i>Phylloscopus trochilus</i>	willow warbler	Amber
<i>Prunella modularis</i>	dunnock	S41, Amber
<i>Pyrrhula pyrrhula</i>	bullfinch	S41, Amber
<i>Scolopax rusticola</i>	woodcock	Red, GB RDB(VU)
<i>Strix aluco</i>	tawny owl	Amber
<i>Sturnus vulgaris</i>	starling	S41, Red, GB RDB(VU)
<i>Troglodytes troglodytes</i>	wren	Amber
<i>Turdus philomelos</i>	song thrush	S41, Amber
<i>Turdus viscivorus</i>	mistle thrush	Red, GB RDB(VU)
<i>Vanellus vanellus</i>	lapwing	S41, Red, GB RDB(EN)
Invertebrates		
<i>Coenonympha pamphilus</i>	small heath	S41
<i>Limenitis camilla</i>	white admiral	S41, GB RDB(VU)
Mammals		
<i>Erinaceus europaeus</i>	hedgehog	S41, GB RDB(VU)
<i>Lepus europaeus</i>	brown hare	S41
<i>Micromys minutus</i>	harvest mouse	S41

Scientific name	Common name	Designation
<i>Mustela putorius</i>	polecat	S41
Plants		
<i>Aconitum napellus</i> <i>subsp. napellus</i>	flowering plant	NS
<i>Buxus sempervirens</i>	box	NR
<i>Euphorbia exigua</i>	dwarf spurge	GB RDB(VU), ENG BSBI RDB(VU)
<i>Hyacinthoides non-scripta</i>	bluebell	WCA8
<i>Neottia nidus-avis</i>	bird's-nest orchid	GB RDB(VU), ENG BSBI RDB(VU)
<i>Pinus sylvestris</i>	scots pine	NS
<i>Rorippa islandica</i>	northern yellow-cress	NS
<i>Scandix pecten-veneris</i>	shepherd's-needle	S41, GB RDB(CR), ENG BSBI RDB(EN)

Appendix B – Wintering bird survey data

Table 16: Summary of species recorded during the 2025 surveys

Common Name	Scientific Name	Peak Count	Behaviour and Distribution
Woodpigeon	<i>Columba palumbus</i>	61	Single flock of 45 in flight high over both fields on visit 1, as well as a few smaller flocks over.
Black-headed Gull	<i>Chroicocephalus ridibundus</i>	18	Flock of 18 in flight over southern field on visit 1.
Common Gull	<i>Larus canus</i>	3	One in flight over both fields on visit 2.
Herring Gull	<i>Larus argentatus</i>	83	Some large flocks in flight over on both visits, including a flock of 36 on visit 1 and a flock of 58 on visit 2.
Lesser Black-backed Gull	<i>Larus fuscus</i>	8	Eight in flight over both fields on visit 1 (mostly juveniles/sub-adults picked out from herring gull flocks). Only one on visit 2.
Cormorant	<i>Phalacrocorax carbo</i>	1	One in flight over northern field on visit 1. Seen at least 100m above ground level so unlikely to be impacted by proposed development.
Green Woodpecker	<i>Picus viridis</i>	1	One in flight low over northern field on visit 2.
Magpie	<i>Pica pica</i>	4	Three in field south of Freegrove Farm on visit 2. Four individual present in trees on western side of A3102.
Jackdaw	<i>Coloeus monedula</i>	51	Flock of 10 perched in trees adjacent to Freegrove Farm on visit 1 and separate flock of 7 feeding in southern field on visit 2 but in area not covered by Site boundary. Pre-roosting flock of 37 in flight over both fields on visit 1.
Carrion Crow	<i>Corvus corone</i>	1	One in trees next to Freegrove Farm on visit 1.
Rook	<i>Corvus frugilegus</i>	62	Feeding flock of 20-22 birds present in southern field on both visits. Another flock of 39 present in northern field, but only on visit 2. Flock of 20 in trees adjacent to Freegrove Farm on visit 1.
Raven	<i>Corvus corax</i>	2	Two perched in area of trees adjacent to Freegrove Farm on visit 2.
Blue Tit	<i>Cyanistes caeruleus</i>	8	Most records along southern boundary hedgerow, with most notable being a flock of five towards Freegrove Cottage on visit 2. Two individuals also heard from within RAF base on northern boundary of Site.
Great Tit	<i>Parus major</i>	2	Two in hedgerow along southern boundary hedgerow on visit 2.
Skylark	<i>Alauda arvensis</i>	1	One heard in flight to SE of Site (likely outside of 100m buffer so not a constraint).
Long-tailed Tit	<i>Aegithalos caudatus</i>	2	Two present in line of trees adjacent to Freegrove Cottages on visit 1, with at least one still present on visit 2.
Goldcrest	<i>Regulus regulus</i>	2	Present in trees adjacent to Freegrove Farm on visit 1 and in line of trees adjacent to Freegrove Cottages on both visits. Another heard calling from Leylandii within RAF base to north of Site on visit 2.

Common Name	Scientific Name	Peak Count	Behaviour and Distribution
Wren	<i>Troglodytes troglodytes</i>	3	One along hedgerow next to northern field on visit 1, just outside Site boundary. Two in southern boundary hedgerow and another in hedgerow on eastern boundary of Site on visit 2.
Starling	<i>Sturnus vulgaris</i>	13	Flock of nine over northern field and flock of four over southern field on visit 1.
Redwing	<i>Turdus iliacus</i>	3	Three around trees adjacent to Freegrove Farm on visit 1, and another in flight over Freegrove Cottages on visit 2.
Song Thrush	<i>Turdus philomelos</i>	1	One in southern boundary hedgerow on visit 2.
Blackbird	<i>Turdus merula</i>	1	One in southern boundary hedgerow on both visits.
Fieldfare	<i>Turdus pilaris</i>	9	Flock of nine in flight over trees adjacent to Freegrove Farm on visit 1. Two seen in flight south of Freegrove Cottages on visit 2 but it wasn't clear whether these flew over Site boundary.
Robin	<i>Erithacus rubecula</i>	10	Widespread along southern boundary hedgerow and in area of trees adjacent to Freegrove Farm. One record in NW corner of Site next to A3102.
Dunnock	<i>Prunella modularis</i>	2	One in southern boundary hedgerow on both visits and another on western boundary hedgerow next to A3102 on visit 1.
Grey Wagtail	<i>Motacilla cinerea</i>	1	One in flight over north and south fields on visit 2.
Pied Wagtail	<i>Motacilla alba</i>	3	Two perched on building within RAF base along Site border on visit 1.
Meadow Pipit	<i>Anthus pratensis</i>	3	Two in flight over southern field on both visits and another in flight over northern field on visit 2.
Chaffinch	<i>Fringilla coelebs</i>	3	Two in line of trees next to Freegrove Cottages and another in flight over southern boundary hedgerow on visit 2.
Greenfinch	<i>Chloris chloris</i>	5	Flock of five in flight over southern field on visit 1.
Linnet	<i>Linaria cannabina</i>	1	One in flight over trees adjacent to Freegrove Farm on visit 1.
Lesser Redpoll	<i>Acanthis cabaret</i>	1	One heard in flight over southern boundary hedgerow on visit 1. Seen during autumn migration period in mid-November, so likely just a migrant.
Corn Bunting	<i>Emberiza calandra</i>	19	Flock of 16 seen in line of trees south of Freegrove Cottages, with a further three seen perched in southern boundary hedgerow and seen in flight over area covered by red line boundary on visit 2.
Yellowhammer	<i>Emberiza citrinella</i>	1	One heard calling along lines of trees south of Freegrove Cottages on visit 2. This was outside of 100m buffer so not a constraint to the development.
Reed Bunting	<i>Emberiza schoeniclus</i>	1	One heard in flight over northern field on visit 2.

Table 17: Full data for wintering bird surveys undertaken between November and December 2025

Common name	Scientific name	BTO Code	SPA/Ramsar site	Annex 1	Sch. 1	NERC S41	BoCC	V1	V2
Wood pigeon	<i>Columba palumbus</i>	WP					Amber	62	9
Black-headed Gull	<i>Chroicocephalus ridibundus</i>	BH					Amber	18	1
Common Gull	<i>Larus canus</i>	CM					Red	0	1
Herring Gull	<i>Larus argentatus</i>	HG				✓	Red	46	83
Lesser Black-backed Gull	<i>Larus fuscus</i>	LB					Amber	8	1
Cormorant	<i>Phalacrocorax carbo</i>	CA					Green	1	0
Buzzard	<i>Buteo buteo</i>	BZ					Green	0	1
Green Woodpecker	<i>Picus viridis</i>	G.					Green	1	0
Magpie	<i>Pica pica</i>	MG					Green	0	4
Jackdaw	<i>Coloeus monedula</i>	JD					Green	51	7
Rook	<i>Corvus frugilegus</i>	RO					Amber	41	64
Carrion crow	<i>Corvus corone</i>	R					Green	1	0
Raven	<i>Corvus corax</i>	RN					Green	0	2
Blue tit	<i>Cyanistes caeruleus</i>	BT					Green	3	8
Great tit	<i>Parus major</i>	GT					Green	0	2
Skylark	<i>Alauda arvensis</i>	S.				✓	Red	1	0
Long-tailed tit	<i>Aegithalos caudatus</i>	LT					Green	2	1
Goldcrest	<i>Regulus regulus</i>	GC					Green	2	1
Wren	<i>Troglodytes troglodytes</i>	WR					Amber	1	3
Starling	<i>Sturnus vulgaris</i>	SG				✓	Red	13	2
Song thrush	<i>Turdus philomelos</i>	ST				✓	Amber	0	2
Redwing	<i>Turdus iliacus</i>	RE			✓		Amber	3	2
Blackbird	<i>Turdus merula</i>	B.					Green	1	1
Fieldfare	<i>Turdus pilaris</i>	FF			✓		Red	9	2
Robin	<i>Erithacus rubecula</i>	R.					Green	3	10
House Sparrow	<i>Passer domesticus</i>	HS				✓	Red	0	3
Dunnock	<i>Prunella modularis</i>	D.				✓	Amber	2	1
Grey Wagtail	<i>Motacilla cinerea</i>	GL					Amber	0	1
Pied/white wagtail	<i>Motacilla alba</i>	PW					Amber	3	2
Meadow pipit	<i>Anthus pratensis</i>	MP					Amber	2	3
Chaffinch	<i>Fringilla coelebs</i>	CH					Green	1	3
Greenfinch	<i>Chloris chloris</i>	GR					Red	5	0
Linnet	<i>Linaria cannabina</i>	LI				✓	Red	1	0
Lesser Redpoll	<i>Acanthis cabaret</i>	LR					Green	1	0
Goldfinch	<i>Carduelis carduelis</i>	GO					Green	0	3

Common name	Scientific name	BTO Code	SPA/Ramsar site	Annex 1	Sch. 1	NERC S41	BoCC	V1	V2
Corn Bunting	<i>Emberiza calandra</i>	CB				✓	Red	0	19
Yellowhammer	<i>Emberiza citrinella</i>	Y.				✓	Red	0	1
Reed Bunting	<i>Emberiza schoeniclus</i>	RB				✓	Amber	0	1

Appendix C – Bat static data

Table 18: Bat Species 'Registrations' High Confidence Calls (BTO AP confidence >50%). October 2025 – pre-quality assurance.

October 2025												
	Com pip	Sop pip	Myo sp.	Nyc sp.	Ser	Nath pip	BLE	Barb	LHS	GHS	Bech	Total Passes (All species)
L1	1,026	205	26	34	0	0	13	2	243	1	1	1,551
L2	878	112	26	8	46	2	33	16	50	0	0	1,171
L3	231	80	38	14	20	1	4	3	64*	0	0	455
Total (Per species)	2,135	397	90	56	66	3	50	21	357	1	1	3,177

*100% of the LHS bat calls were wrong for this static.

Table 19: Error Rates following Quality Assurance

Species	Total calls	Files checked	Percentage QA'd	Incorrect	Percentage of files incorrect
Common pipistrelle	2,135	375	18%	125	33.3%
Soprano pipistrelle	397	397	100%	128	32.3%
Lesser horseshoe	357	357	100%	110	30.8%
Myotis species	90	9	10%	1	11.1%
Serotine	66	7	10%	0	0%
Nyctalus species	56	6	10%	0	0%
Brown long-eared	50	5	10%	0	0%
Barbastelle	21	21	100%	0	0%
Nathusius' pipistrelle	3	3	100%	1	33.3%
Greater horseshoe	1	1	100%	0	0%
Bechstein's	1	1	100%	0	0%
TOTAL	3,177	1,116	N/A	365	32.6%

For statics where less than 25 high confidence calls were recorded, 100% of these calls were QA'd.

As only 10% of Myotis calls were checked, finding 1 incorrectly analysed call, data was extrapolated to find a likely 10 incorrect calls across all Myotis recordings. This data was used to calculate results throughout the report. The same was completed for common pipistrelle.



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