Preliminary Ecological Appraisal
The Coach House, Wyton
Mr Griffiths
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[1] https://cieem.net/wp-content/uploads/2019/04/Advice-Note.pdf

Purpose of Report

The Preliminary Ecological Appraisal Report (PEAR) was written to identify ecological constraints to the proposed project and recommend further surveys, where required, to inform a detailed impact assessment. Where no further surveys are required, the report makes recommendations for avoidance measures or proportional mitigation and compensation measures required to avoid potential impacts from the proposals.

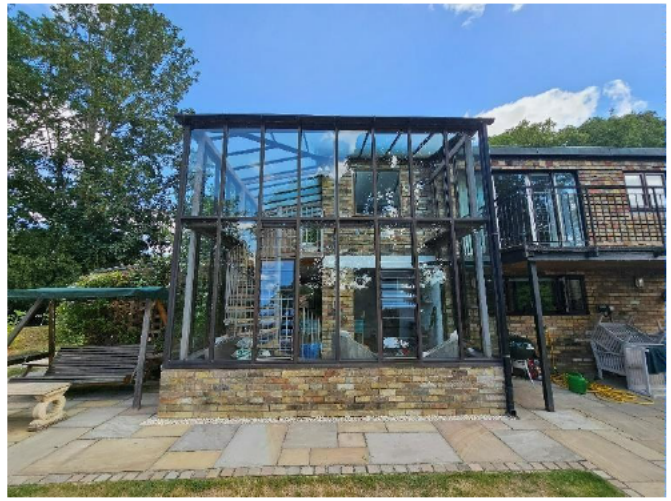
Enhancement measures are outlined to meet the aims and objectives set out in national policies.

Method

The report is written in accordance with CIEEM's Guidelines for Preliminary Ecological Appraisal and includes

- A Desk Study:
- Habitat survey
- Preliminary habitat suitability assessments for notable and protected species.

The Site



Description of the Scheme

The Client is applying to replace a double-storey conservatory, including shire piles to reinforce the foundations.

Important Ecological Features	Further surveys	Impact before mitigation or compensation	Avoidance Possible	Mitigation Required	Enhancement
Nesting birds	None	Nesting birds may be disturbed during the work.	Start work outside of nesting bird season.	Carry out nesting bird checks if sensitive timings are not possible.	Attach at least 3 swift boxes to the highest point on the residential property.
Foraging and commuting bats	None	None, lighting levels will not change significantly above the baseline.			None

Important Ecological Features	Further surveys	Impact before mitigation or compensation	Avoidance Possible	Mitigation Required	Enhancement
Roosting bats	None	None			Attach a bat box to a tree in the garden.
Hedgehog	None	Hedgehogs may be disturbed, injured, or killed during the construction works of the proposed development.		All excavations are to be covered at night. Daily checks of excavations for the presence of trapped hedgehogs.	Install a hedgehog dome.

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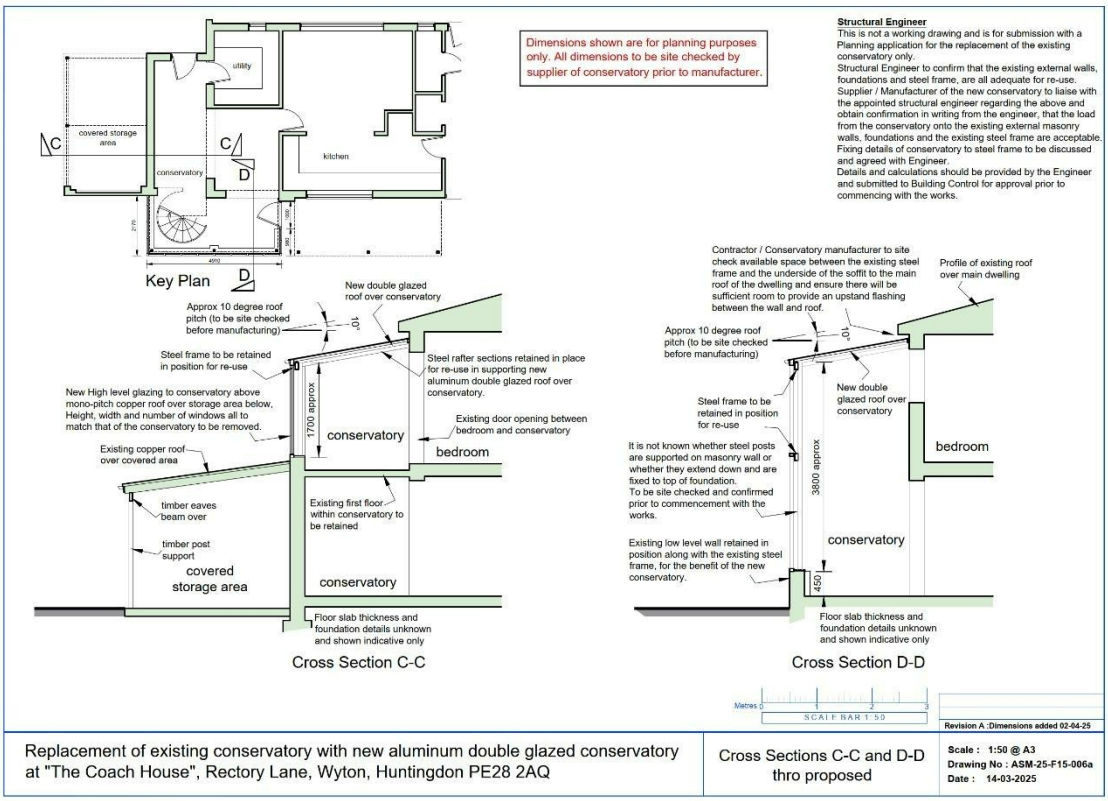
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1 Introduction

1.1.1.1 Samsara Ecology Ltd was commissioned by Mr Griffiths (the Client) in June 2025 to undertake a Preliminary Ecological Appraisal (PEA) at the Coach House, Rectory Lane, Wyton, Huntingdon, PE28 2AQ (the Site) [Ordnance Survey (OS) grid reference TL 27686 72212].

1.1.1.2 The Client is applying to replace a double-storey conservatory, including shire piles to reinforce the foundations. Cross sections of the plans are presented in Figure 1.

Figure 1 Proposed Works



1.1.1.3 The proposed works only affect a glass conservatory and hardstanding and therefore are exempt from requiring a BNG assessment.

1.1.1.4 The PEA survey was undertaken on the 08th of July 2025.

1.2 Purpose of the Report

1.2.1.1 This report has been written in accordance with the Chartered Institute for Ecological and Environmental Management's (CIEEM) guidelines for PEA and aims to:

- Identify key ecological constraints to the proposed development.
- Identify any requirements for further surveys and set out the time frame in which they can be completed.
- Inform the Client of where any significant ecological effects can be avoided or minimised, where possible, in line with legal and policy implications.
- Make recommendations for enhancement where there are opportunities for the project to achieve a net gain in biodiversity in accordance with local and national policies.

1.2.1.2 All relevant planning policies and legislation are presented in **Appendix 1**.

1.3 Suitably Qualified Ecologist (SQE)

1.3.1.1 The report has been written by Hayley Farnell, BSc, MSc (Hons), an SQE with over 20 years of professional experience in environmental consultancy. Hayley is a full member of the Chartered Institute of Ecological and Environmental Management (CIEEM) and holds a Class 2 survey licence for bats [Licence Number: 2015 -15896-CLS-CLS] and a Class 1 survey licence for great crested newts [Licence Number: 2017-27675-CLS-CLS].

2 Methodology

2.1 Study Area

2.1.1.1 The 'Study Area' is the area in which data has been collected in order to complete this assessment. This includes the habitats within the Site boundary, guideline search areas for species and the 'standard' desk study area, which is based on the size and type of the proposed development but typically ranges from 500 m to 2 km.

2.1.1.2 The area used for the desk study is given in section 2.2, and search areas for each species considered within the survey are presented in **Appendix 2**.

2.2 Desk Study

2.2.1.1 An online desk study has been undertaken using tools within the Multi-Agency Geographical Information Centre (MAGIC)[2]. This has allowed for the identification of the location and designation information of nationally and internationally designated wildlife conservation Sites within 1 km of the Site's boundaries.

2.2.1.2 Information regarding the location of Protected Species Licences (PSL) granted by Natural England within 1 km of the Site has also been obtained using the tools within MAGIC.

2.2.1.3 Aerial mapping has been used to provide the context of surrounding habitats.

2.2.1.4 This level of desk study is considered to be proportionate to the proposed development, for which potential impacts are likely to be confined within the Site's boundaries.

[2] https://magic.defra.gov.uk/MagicMap.aspx [Accessed 01/08/2025]

2.3 Habitat Surveys

2.3.1 Habitat Survey

2.3.1.1 The habitats have been classified and mapped in accordance with the UK habitat classification system[3]. The classifications used within this system are those used within Defra's statutory biodiversity metric[4].

2.3.1.2 The habitat survey has been carried out within the Site's boundaries.

2.4 Suitable Habitat Assessments for Notable and Protected Species

2.4.1.1 In addition to the habitat survey, initial assessments have been undertaken to identify if the Site's habitats are suitable to support Species of Principal Importance (SPI) or other notable or legally protected species.

2.4.1.2 During the survey, the surveyor searched for and recorded suitable features within the Site's habitats which can be used for breeding, foraging and/or create links to suitable habitats within the wider landscape for wildlife, in particular:

- Terrestrial Invertebrate
- Great Crested Newt (GCN) (*Triturus cristatus*)
- Reptiles
- Nesting birds and/or other notable or protected bird species
- Bats
- Water vole (*Arvicola amphibius*)
- Otter (*Lutra lutra*)
- Dormouse (*Muscardinus avellanarius*)
- Badger (*Meles meles*)
- Hedgehog (*Erinaceus europaeus*)

2.4.1.3 Although evidence of the presence of protected or notable species may be found during the initial survey (i.e., droppings, species in situ, nests, dens, or feeding remains, etc.), it is not guaranteed. Therefore, further surveys are recommended where suitable habitats are identified, and there is a requirement to establish the presence or likely absence of such species in order to complete an impact assessment.

2.4.1.4 In some cases, a worst-case scenario will be established to identify potential impacts from the proposed development where there are suitable habitats to support protected or notable species.

2.4.1.5 The field survey for all species was carried out within the Site's boundaries, and this area has been extended beyond the boundaries for great crested newt, badger, water vole, otter and hedgehog when there is likely impact to them from the proposed development and where access outside the Site boundaries was available.

[3] UKHab Ltd (2023). *UK Habitat Classification Version 2.0* (at http://www.ukhab.org)
[4] Defra (2024) The Statutory Biodiversity Metric

2.4.1.6 Details of the methodologies of initial surveys undertaken and habitat requirements for each of the species listed are presented in **Appendix 2** and summarised in Table 1 below.

Table 1 – Summary of Habitats and Survey Areas

Ecological Feature	Legal Status	Typical Suitable Habitats[a]	Survey Area[b]
Terrestrial invertebrate	• Approximately 400 species are SPI	• Grassland • Woodland Rides • Woodland Edges • Ponds • Riverbanks • Hedgerows	Within the site's boundaries.
Great crested newt	• EPS • WCA 1981 Sch 2	• Ponds • Rough grassland • Scrub • Hedgerows • Woodland • Rubble or Stockpiles	Within the Site's boundaries and up to 500 m beyond.
Reptiles	• WCA 1981 Sch 2 and Sch 5	• Rough grassland • Woodland edges • Embankments • Scrub • Hedgerows • Heathland	Within the site's boundaries.
Birds	• WCA 1981 Sch 5, and some are listed in Sch 1	• Buildings • Brownfield sites • Trees • Woodland • Grassland • Amenity and residential open space • Rivers • Estuaries • Costal • Heathland • Arable • Pasture	Within the site's boundaries.
Bats	• EPS • WCA 1981 Sch 2	**Roosting** • Built structures. • Trees **Foraging and Commuting** • Woodland • Hedgerows • Pasture • Grassland • Arable • Rivers, streams, and ponds	Within the site's boundaries.

Ecological Feature	Legal Status	Typical Suitable Habitats[a]	Survey Area[b]
Water vole	• WCA 1981 Sch 2	• Rivers • Streams • Ditches • Ponds • Lakes	Within the Site's boundaries and up to 50 m beyond.
Otter	• EPS • WCA 1981 Sections 9 and 11	• Clean rivers	Within the Site's boundaries and up to 50 m beyond.
Dormouse	• EPS • WCA 1981 Sch 5	• Hedgerows with connections to woodlands and foraging resources	Within the Site's boundaries and up to 1 km beyond.
Badger	• Protection of Badgers Act 1992	• Embankments • Woodlands • Grassland • Hedgerows • Scrub • Arable	Within the Site's boundaries and up to 30 m beyond
Hedgehog	• SPI	• Grassland • Gardens • Woodland • Pasture • Arable	Within the Site's boundaries and up to 500 m beyond.

Notes:

a – These are a list of the typical habitats these faunas are known to use. The surveyor has also checked for evidence of the species within the Site. So, there may be incidents when the animals are found in different habitats to those listed.

b – The search for the areas beyond the Site's boundaries has only been conducted where suitable habitats are present for the species within the Site and where access is available.

SPI – Species of Principal Importance

EPS – European Protected Species

WCA – the Wildlife and Countryside Act 1981

2.5 Preliminary Ecological Assessment

2.5.1.1 Data from the survey will be analysed to provide recommendations for further surveys, avoidance measures, mitigation and/or compensation required for the ecological constraints identified within the Study Area.

2.5.1.2 Under the National Planning Policy Framework (NPPF)[5] and the 25-year environmental plan[6] (see **Appendix 1**), the government has set out policies. It aims to deliver a net gain in biodiversity through improved green infrastructure and increased opportunities for wildlife. In accordance with these policies, enhancement measures are recommended for inclusion in the proposed development.

2.6 Limitations to the Surveys

2.6.1.1 Any ecology assessment must be considered a 'snapshot' of the site conditions during the survey. Ecological constraints will change over time. Therefore, the findings of this report are valid for one year, after which the report should be reviewed to assess whether the survey should be updated.

2.6.1.2 There were no access constraints for the survey.

[5] MHCLG (Revision July 2021), National Planning Policy Framework, HM Government

[6] Defra (2019), A Green Future: Our 25 Year Plan to Improve the Environment, HM Government

3 Baseline Ecological Conditions

3.1 Weather conditions

3.1.1.1 The survey was undertaken on the 08th of July 2025; the weather conditions are presented in Table 2.

Table 2 - Weather Conditions

Temperature	Cloud cover	Precipitation	Wind speed (Beaufort)
20°c	<10%	0	0

3.2 Desk Study

3.2.1.1 There is one designated site for wildlife conservation within 1 km of the Site, which is described in Table 3.

Table 3 – Designated Wildlife Sites

Site Name	Designation	Distance and Location from the Site	Habitat and Species included in the designation
Godmanchester Eastside Common	SSSI	0.64 km southwest	• Calcareous loam and clay pastures. • Ridge and Furrow. • Ponds

3.2.1.2 Natural England has not granted Protected Species Licences within 1 km of the Site.

3.3 Habitats

3.3.1.1 The Site is located on the southwest corner of Wyton. The River Great Ouse is located 0.2 km south of the Site, and there are large waterbodies throughout the surrounding habitat, which is a mix of arable fields and small residential areas. The Site is shown in the context of the surrounding habitat in Figure 2.

Figure 2 Surrounding Habitat



3.3.1.2 The Site is a double-storey glazed conservatory on a seven-course brick plinth and a steel frame attached to the end of the house. A concrete paved patio wraps around the house and extends beyond the conservatory.

3.3.1.3 A lean-to is attached to the western end of the property, which has a lead roof supported by timber posts and will not be changed or modified with the proposed works.

3.3.1.4 Photographs of the Site are presented in Appendix 3.

3.4 Species

3.4.1.1 Species for which there are suitable habitats within the Site or study areas defined in Section 2.4 are discussed in this chapter and include:

- Nesting birds
- Bats
- Hedgehog

3.4.1.2 Species for which suitable habitats are absent within the Site or study areas have been scoped out and are not discussed further in this report.

3.4.1.3 The proposed works only affect built structures and hardstanding, and therefore, the potential impacts are limited.

3.4.2 Nesting Birds

3.4.2.1 There are no suitable features on the conservatory; however, an old (now unused) swallow's nest was found in the lean-to.

3.4.2.2 There is a low risk of disturbance during the works.

3.4.3 Bats

3.4.3.1 There are no suitable features on or within the conservatory or lean-to, and no evidence of bats was found during the survey.

3.4.3.2 Bats will likely forage and commute around and through the gardens of the property.

3.4.4 Hedgehog

3.4.4.1 Hedgehogs many move through the Site at night as part of a wider home range.

4 Ecological Constraints and Opportunities

4.1.1.1 The development will impact none of the designated sites identified in Section 3.2.

4.1.1.2 The habitats and species identified in Section 3.4, which may be impacted by the proposed development without mitigation or best practice, include.

- Nesting Birds
- Bats

4.1.1.3 The constraints, mitigation and potential further survey recommendations for these species are discussed in this section.

4.1.1.4 In addition, enhancement opportunities are presented for the following species based on the opportunities provided by the proposed development.

- Nesting birds
- Bats
- Hedgehogs

4.2 Nesting Birds

4.2.1.1 The works may cause disturbance if undertaken during the nesting season. Avoidance through the application of sensitive timings or mitigation in the form of supervised clearance should be applied to minimise the risk.

4.2.1.2 If possible, the works should be undertaken outside of the main breeding season between October and March.

4.2.1.3 If sensitive timings are not possible, a check for nesting birds should be undertaken immediately prior to works by a suitably experienced ecologist. If the latter approach is taken and nesting is encountered, there is a risk of delay since an 'exclusion zone' may need to be set up around nests until the young have fledged**.**

4.2.1.4 The replacement of the conservatory will result in a negligible impact on nesting birds if sensitive timings or nesting bird checks are applied.

4.2.2 Enhancement opportunities

4.2.2.1 Enhancement for nesting birds will be via the provision of installing swift boxes on the tallest gable end of the residential property. An example of the type of box that can be used is presented in Table 4.

Table 4 – Example of Bird Box

Description of Box	Example Dimensions	Example Image
A single-chambered box with access for swifts in the bottom corner. The box is designed to fit under the eaves of a property. The entrance hole size and position have been designed to prevent sparrows and starlings from occupying the box.	Width: 430 mm Height: 210 mm Depth: 210 mm Weight: 2.8 kg	 Photo courtesy of Nestbox company

4.2.2.2 Swift boxes should be in groups of at least three boxes and at a height of at least 5 m from the ground.

4.2.2.3 Bird boxes should ideally be located away from windows or doors to prevent droppings from causing future conflict.

4.3 Bats

4.3.1.1 The proposed works will have a negligible impact on bats. There are no suitable features for roosting or hibernation on or within the conservatory or lean-to. In addition, the lighting will not change from the current levels and therefore bats will continue to use the gardens for foraging and commuting.

4.3.2 Enhancement opportunities

4.3.2.1 A bat box should be attached to a mature tree in the garden of the property. An example of the type of box that can be used is presented in Table 5.

Table 5 – Example of Bat Box

Description of Box	Example Dimensions	Example Image
This type of box is a suitable design for bat species that typically roost in woodland environments. It has two entrances at the rear and front and a domed top to allow bats to roost in clusters. Due to the open bottom, the box does not require cleaning or maintenance, and the design is effective against small predators and excludes drafts.	Height: 360 mm Diameter: 160 mm Weight: 4.3 kg	 Photo courtesy of Schwegler

4.3.2.2 Bat boxes should be located at least 4 m from the ground and have a clear 'drop zone' of approximately 2 m underneath, free of branches and dense vegetation.

4.4 Hedgehogs

4.4.1.1 Hedgehogs may be disturbed, injured or killed during the construction works of the proposed development.

4.4.1.2 All excavations should be covered at night or when not in use to prevent hedgehogs from being trapped during construction. Any arisings from the clearance should be removed carefully by hand to check for sheltering hedgehogs. The animals should be left to move away on their own accord if found.

4.4.1.3 The clearance of any arising from clearance should be undertaken before the hibernation period for hedgehogs (which is typically between October and March). All construction materials should be kept off the ground on pallets or stored away to prevent them from becoming suitable for use by sheltering or hibernating hedgehogs.

4.4.1.4 Following the application of best practice, the impact of the development on hedgehogs will likely be negligible.

4.4.2 Enhancement opportunities

4.4.2.1 An opportunity can be created to allow hedgehogs to shelter and breed on the Site by providing a hedgehog dome. An example of which is presented in Table 6.

Table 6 – Example of Hedgehog Enhancement

Description	Dimensions	Image
A hedgehog dome will provide a safe place to hibernate or shelter. It can be constructed of natural materials such as wicker or long-lasting materials such as Woodcrete®. The shelter should provide insulation against extreme weather conditions.	Diameter: 480 mm Weight: 17.5 kg	 Photo courtesy of Schwegler

5 Long Term Management

5.1.1.1 Swift boxes do not need clearing out or maintenance, and are too high to be accessible once installed.

5.1.1.2 The style of bat box recommended for installation within this development is made from long-lasting material and has an open bottom to allow droppings to fall out. The box will last for up to 25 years. If the boxes need to be removed or changed at any time, then advice should be sought from a licensed bat ecologist.

5.1.1.3 Hedgehog domes should be left alone to prevent hedgehogs from being disturbed. Hedgehogs will clear out old bedding themselves as and when necessary.

6 Conclusions

6.1.1.1 On the 08th of July 2025, Samsara Ecology completed a PEA at the Coach House, Wyton. The survey identified a site of negligible ecological value.

6.1.1.2 No further surveys will be required. However, recommendations for sensitively timed works or nest checks and best practice have been made to minimise any residual risk to nesting birds or hedgehogs.

6.1.1.3 Enhancement opportunities have been recommended in accordance with national policies for biodiversity net gain (See Appendix 1).

Table 7 - Summary of Ecological Mitigation, Compensation and Enhancement Strategy

Stage of works (Timing)	Important Ecological Features to be Considered	Mitigation/Enhancement Required	Responsibility
Clearance and Construction	• Nesting birds • Hedgehogs • Bats	• Nesting bird check if works are carried out between March and October. • All excavations are to be covered at night. • Daily checks by site personnel of excavations for the presence of trapped badgers or hedgehogs. • Attach at least 3 swift boxes to the highest point on the gable end of the property. • Attach a bat box to a tree. • Install a hedgehog dome.	• The contractor is to engage an ecologist (if required).

Appendix 1 Legislation and Policy

Many active pieces of legislation aim to protect the UK's wildlife and habitats. These are summarised in Table 8

Table 8 – Summary of Primary Legislation in the UK

Legislation or Species	Description
The Wildlife and Countryside Act (WCA) 1981	The WCA is the primary piece of legislation relating to nature conservation in Great Britain. The Act is supplemented by provisions in the CRoW Act 2000 and the NERC Act 2006. It provides for the notification and confirmation of Sites of Special Scientific Interest by Natural England. It also sets out, in schedules, important and invasive species which are legally protected or require active management. The WCA consolidates and amends existing national legislation to implement the Convention on the Conservation of European Wildlife and Natural Habitats (Bern Convention) and Council Directive 79/409/EEC on the conservation of wild birds (Birds Directive) in Great Britain (NB Council Directive 79/409/EEC has now been replaced by Directive 2009/147/EC of the European Parliament and of the Council of 30th November 2009 on the conservation of wild birds (codified version)).
The Conservation of Habitats and Species Regulations 2017	The Conservation of Habitats and Species Regulations 2017 consolidate the Conservation of Habitats and Species Regulations 2010 with subsequent amendments. The Regulations transpose Council Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora (EC Habitats Directive) into national law. They also transpose elements of the EU Wild Birds Directive in England and Wales. The Regulations came into force on 30th November 2017 and extend to England and Wales (including the adjacent territorial sea) and, to a limited extent, in Scotland (reserved matters) and Northern Ireland (excepted matters). The draft Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019 were laid before Parliament on 28th January 2019. The draft Regulations ensure that the habitat and species protection and standards derived from EU law will continue to apply after the UK has left the European Union. This draft came into force on exit day (31st January 2020).
The Countryside and Rights of Way (CRoW) Act 2000	The CRoW applies to England and Wales only and received Royal Assent on 30th November 2000, with the provisions it contains being brought into force in incremental steps over subsequent years. Containing five Parts and 16 Schedules, the Act provides for public access on foot to certain types of land, amends the law relating to public rights of way, increases measures for the management and protection of Sites of Special Scientific Interest (SSSI) and strengthens wildlife enforcement legislation, and provides for better management of Areas of Outstanding Natural Beauty (AONB). The Act is compliant with the provisions of the European Convention on Human Rights, requiring consultation where the rights of the individual may be affected by these measures.
The Environment Act 2021	The Environment Act 2021 is legislation concerning environmental conservation in the United Kingdom. Serving as a comprehensive framework, it builds upon existing laws while introducing crucial amendments to further protect and enhance the natural environment. The Act addresses a wide range of environmental concerns, including biodiversity conservation, pollution reduction, and climate change mitigation. It consolidates and updates previous legislation, ensuring alignment with international agreements such as the

Legislation or Species	Description
	Convention on the Conservation of European Wildlife and Natural Habitats (Bern Convention) and Directive 2009/147/EC on the conservation of wild birds (Birds Directive). The Environment Act 2021 empowers relevant authorities to take proactive measures in safeguarding designated areas of ecological importance, such as Sites of Special Scientific Interest (SSSIs). It establishes mechanisms for the identification, notification, and confirmation of such sites, entrusting bodies like Natural England with the responsibility of managing and protecting them. Additionally, the Act includes provisions regarding the management of important and invasive species, ensuring legal protection and active management where necessary to maintain ecological balance and biodiversity.
Natural Environment & Rural Communities (NERC) Act 2006	The NERC places a duty on authorities to have due regard for biodiversity and nature conservation during the course of their operations. The NERC Act requires the Secretary of State to publish a list of habitats and species which are of principal importance for the conservation of biodiversity in England. The list replaces the UK Biodiversity Action Plans (UKBAP) and has been drawn up in consultation with Natural England, as required by the Act. The S41 list is used to guide decision-makers, such as public bodies, including local and regional authorities, in implementing their duty under section 40 of the NERC Act to have regard to the conservation of biodiversity in England when carrying out their normal functions. Fifty-six habitats of principal importance (HPI) are included on the S41 list. These are all the habitats in England that were identified as requiring action in the UK Biodiversity Action Plan (UK BAP) and continue to be regarded as conservation priorities in the subsequent UK Post-2010 Biodiversity Framework. Of most relevance to the Site, they include ponds, open mosaic habitats on previously developed land and lowland heathland. There are 943 species of principal importance (SPI) included on the S41 list. These are the species found in England which were identified as requiring action under the UK BAP and which continue to be regarded as conservation priorities under the UK Post-2010 Biodiversity Framework.
Non-native species	Certain non-native plants and animals are recognised as invasive. The WCA makes it an offence to: • Release or allow to escape into the wild any animal which is not ordinarily resident in Great Britain and is not a regular visitor to Great Britain in a wild state, or is listed in Schedule 9 to the Act. • Plant or otherwise cause to grow in the wild any plant listed in Schedule 9 to the Act. • Sell, offer, or expose for sale, or possess or transport for the purposes of sale, non-native species that are listed in Schedule 9. Species control agreements and orders can be made by environmental authorities to ensure that landowners take action on invasive non-native species. The NERC Act allows the Secretary of State to issue or approve codes of practice on invasive species. The codes alone cannot be used to prosecute, but must be taken into account by a court in any case in which they appear to the court to be relevant.
Great Crested Newts	Great crested newts are protected under the Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019, making them a protected species. The Regulations state that:

Legislation or Species	Description
	(1) A person who— (a) deliberately captures, injures, or kills any wild animal of a European-protected species (b) deliberately disturbs wild animals of any such species (c) deliberately takes or destroys the eggs of such an animal (d) damages or destroys a breeding site or resting place of such an animal, is guilty of an offence. (2) For the purposes of paragraph (1)(b), disturbance of animals includes, in particular, any disturbance which is likely— (a) to impair their ability— (i) to survive, to breed or reproduce, or to rear or nurture their young, or (ii) in the case of animals of a hibernating or migratory species, to hibernate or migrate, or (b) to affect significantly the local distribution or abundance of the species to which they belong. Offences under the Habitats Regulations can be licensed by Natural England for a number of purposes, including 'imperative reasons of overriding public interest', which can include development. Licences can only be issued where full survey data is available, where there is no satisfactory alternative and where the action authorised will not adversely affect the favourable conservation status of the species involved.
Reptiles	All UK native reptile species are protected by law. The Wildlife & Countryside Act 1981 (and later amendments) provides the legal framework for this protection, which makes it an offence to intentionally (or recklessly, in Scottish law) kill or injure a reptile. Sand lizard and smooth snake, and their places of shelter, have the greatest level of legal protection under Schedule 2 of the Conservation of Habitats and Species Regulations.
Nesting Birds	All wild bird nests are protected under The Wildlife and Countryside Act 1981 (as amended), making it an offence to: • Intentionally kill, injure, or take any wild bird or their eggs or nests (with certain exceptions). • • Disturb any bird species listed under Schedule 1 to the Act or its dependent young while it is nesting. • Nests of the golden eagle, white-tailed eagle and osprey are protected year-round.
Bats	All species of bat in Britain are protected species under the Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019 and the Wildlife and Countryside Act 1981, as amended by the Countryside & Rights of Way Act 2000. These pieces of legislation combine to give substantial protection to bats and their habitats, making it an offence to: • Deliberately capture, injure, or kill a bat. • Intentionally or recklessly disturb a bat in its roost or deliberately disturb a group of bats. • Damage or destroy a bat roosting place (even if bats are not occupying the roost at the time). • Possess or advertise/sell/exchange a bat (dead or alive) or any part of a bat. • Intentionally or recklessly obstruct access to a bat roost.

Legislation or Species	Description
	The Natural Environment & Rural Communities (NERC) Act 2006 places a duty on authorities to have due regard for biodiversity and nature conservation during the course of their operations.
Water vole	The water vole is fully protected under Schedule 5 of the Wildlife and Countryside Act 1981 and is a priority conservation species, making it an offence to: • intentionally capture, kill, or injure water voles. • damage, destroy or block access to their places of shelter or protection (on purpose or by not taking enough care) • disturb them in a place of shelter or protection (on purpose or by not taking enough care) • possess, sell, control, or transport live or dead water voles or parts of them (not water voles bred in captivity)
Otters	The Eurasian otter is the only native UK otter species. It's a protected species under the Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019 and is also protected under sections 9 and 11 of the Wildlife and Countryside Act 1981, making it an offence to: • capture, kill, disturb, or injure otters (on purpose or by not taking enough care) • damage or destroy a breeding or resting place (deliberately or by not taking enough care) • obstruct access to their resting or sheltering places (deliberately or by not taking enough care) • possess, sell, control or transport live or dead otters or parts of otters
Hazel Dormice	Hazel dormice, their breeding sites and resting places are fully protected under the Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019 and under Schedule 5 of the Wildlife and Countryside Act 1981, making it an offence to: • deliberately capture, injure, or kill hazel dormice. • damage or destroy a dormouse resting place or breeding site. • deliberately or recklessly disturb a hazel dormouse while it's in a structure or place of shelter or protection. • block access to structures or places of shelter or protection • possess, sell, control, or transport live or dead hazel dormice or parts of hazel dormice
Badgers	Badgers are protected, and so are the setts (burrows) they live in. Under the Protection of Badgers Act 1992, in England and Wales (the law is different in Scotland), it is an offence to: • Wilfully kill, injure, or take a badger (or attempt to do so). • Cruelly ill-treat a badger. • Dig for a badger. • Intentionally or recklessly damage or destroy a badger sett or obstruct access to it. • Cause a dog to enter a badger sett. • Disturb a badger when it is occupying a sett.
Hedgehogs	Hedgehogs are protected in England, Scotland and Wales under the Wildlife and Countryside Act 1981, Schedule 6 and in Northern Ireland under the Wildlife (NI) Order 1985, Schedules 6&7. This means they are protected

Legislation or Species	Description
	from being killed or taken by certain methods under Section 11(1) of the Wildlife and Countryside Act 1981. Hedgehogs are also a Species of Principal Importance (SPI) included on the S41 list (See NERC above).

Policy

National Planning Policy Framework (NPPF) (Revised – December 2023)

Chapter 15 of the National Planning Policy Framework (NPPF) aims to conserve and enhance the natural environment. It states that planning policies and decisions should contribute to and enhance the natural and local environment. In terms of biodiversity, this should be achieved by:

- protecting and enhancing valued landscapes, sites of biodiversity or geological value and soils,
- recognising the intrinsic character and beauty of the countryside, and wider benefits from natural capital and ecosystem services, and
- minimising impacts on and providing net gains for biodiversity by establishing coherent ecological networks that are more resilient to current and future pressures.

The NPPF states that to protect and enhance biodiversity, [local] plans should:

- identify and safeguard components of wildlife-rich habitats and wider ecological networks, and
- promote the conservation and enhancement of priority habitats and ecological networks and the protection and recovery of priority species, and pursue opportunities for securing measurable net gains for biodiversity.

The NPPF states that when determining planning applications, local planning authorities should refuse applications which:

- cause significant harm to biodiversity which cannot be avoided, adequately mitigated or, as a last resort, compensated for,
- plan to develop on land within or outside of a Site of Special Scientific Interest (SSSI) and which is likely to have an adverse effect on it (either individually or in combination with other developments) and/or
- result in the loss or deterioration of irreplaceable habitats (such as ancient woodland and ancient or veteran trees) unless there are wholly exceptional reasons and where a suitable compensation strategy exists.

The local planning authority should support developments whose primary objective is to conserve or enhance biodiversity, while opportunities to improve biodiversity in and around developments should be integrated as part of their design, especially where this can secure measurable net gains for biodiversity or enhance public access to nature where this is appropriate.

HM Government – 25-Year Environment Plan

The 25-year plan to improve the environment sets out what the government intends to do to increase biodiversity, reduce climate change and secure ecosystem services. It aims to deliver cleaner air and water, protect threatened species, and provide richer wildlife habitats.

Appendix 2 Preliminary Species Survey Methodologies

Terrestrial Invertebrates

Approximately 400 species of terrestrial invertebrates are Species of Principal Importance within the UK (see Table 8).

Ecological ranges and requirements can vary greatly for different invertebrates from a micro to macro scale. Habitats need to provide resources to support the entire lifecycle within a species' range, e.g., some butterflies require a matrix of grasses and flowers for developing larvae and nectar-filled flowers to feed the adults. A diverse variety of terrestrial invertebrates are found in areas that contain ecotones. These are defined as "a region of transition between two biological communities," i.e., a woodland edge, where a grassland meets a hedgerow or other mosaics of habitats. Other indicators for potentially important invertebrate sites include those with less common habitats, such as heathland or dead wood.

The preliminary survey will identify suitable habitats, ecological ecotones, and/or connectivity to suitable habitats within the wider landscape to support a diverse range of terrestrial invertebrates.

The survey was carried out within the site's boundaries.

Great Crested Newts (GCN)

Great Crested Newts (GCN) *Triturus cristatus* require aquatic habitats for breeding and terrestrial habitats for foraging, sheltering and hibernation. Breeding occurs in the spring (typically between March and June), with much of the newt's lifecycle spent within the terrestrial habitats. Juvenile newts normally take 2 to 4 years to reach sexual maturity and so spend most of their time in terrestrial habitats.

GCN are known to travel up to 500 m from breeding ponds and require terrestrial habitats that allow them to shelter from excessive heat, dryness, and predators whilst foraging prey species. GCN hibernate during the winter months underground or under a structure that protects against frost, flooding, and predators. This is typically logs, vegetation piles, rocks/stones, etc. Optimal habitats generally include grassland, scrub, woodland, hedgerows, and waste ground with some green connections to ponds within approximately 500 m.

Natural England provides a risk matrix that uses the distance of ponds from a site and the area of a proposed development site to determine if an offence is likely. The distance bands used in the matrix are:

- Pond Onsite
- Land within 100 m from ponds
- Land within 100-250 m from ponds
- Land >250 m from ponds

Aerial and OS mapping will be used to identify ponds' presence and location within 500 m of the Site. Natural England's risk matrix will then be used to identify if an offence is likely and at what distance to the Site. For the purpose of this exercise, all ponds identified are assumed to be breeding ponds.

Any ponds within the distance bands in which an offence is likely and for which there is access will be subject to a Habitat Suitability Index (HSI) assessment.

The assessment involves putting parameters about the pond's habitats (size of the pond, percentage of vegetation cover, water quality, etc. into a calculator to get an HSI value. The calculated HSI for a pond provides a score between 0 and 1. The pond's HSI can then be

compared to the ranges of pond suitability, as shown in Table 9. An inference can then be made between the HSI of the pond and the likelihood of great crested newt presence.

Table 9 – Habitat Suitability Scores

HSI Score	Classification
<0.5	Poor
0.5-0.59	Below Average
0.6-0.69	Average
0.7-0.79	Good
>0.8	Excellent

Reptiles

Britain has four relatively widespread native species of reptiles: adder *Vipera berus*, grass snake *Natrix helvetica*, slow worm *Anguis fragilis,* and common lizard *Zootoca vivipara*. These species are protected from intentional killing or injury (but their habitat is not specially protected).

These species can be found in a broad range of habitats, including grassland, open woodland, grassy scrub and, in the case of grass snakes, wetland. Reptiles require open areas to bask, sheltered areas to hide from excessive heat and predators and protected areas for hibernation. A typical habitat considered suitable for reptiles will comprise a matrix of structures that allow for some or all the reptiles' requirements, i.e., grassland with patches of scrub.

The habitats within the Site's boundaries were assessed for their suitability to support reptiles.

Nesting Birds

All birds and their active nests are protected in the UK (including feral pigeons). Some species are included on Schedule 1 of the WCA 1981 and are afforded greater protection.

Birds will create nests in a variety of habitats depending on the species. Most require sheltered areas such as vegetation or voids and crevices within human-made structures. Others will nest on flat surfaces, whilst some prefer specific habitats such as barn swallow *Hirundo rustica* or barn owl *Tyto alba*.

The habitats within the Site's boundaries were investigated for the presence of active or old nests. An appraisal was also made of habitats' suitability to support nesting birds, and which species or group are most likely to be found within the Site's habitats.

Bats

A preliminary survey for bats identifies if there are habitats and/or structures present within the Site which have suitable features that can be used for roosting, foraging and/or commuting bats. An assessment was made as to whether a development will directly or indirectly impact a roost.

Preliminary Roost Appraisal

A Preliminary Roost Appraisal (PRA) for bats was undertaken in accordance with the Bat Conservation Trust's bat survey guidelines. The PRA was undertaken on all buildings and trees within the site's boundaries.

The PRA identified the type and number of features within the structures which are suitable for use by roosting bats. A suitable feature will be a sheltered void or crevice in which individual bats can roost or in which several bats can gather. The structures have been categorised in accordance with the criteria set out within the guidelines and recreated in Table 10 for reference.

Table 10 – Bat Roost Suitability Categories

Suitability Categorisation	Description of Roosting Habitat
None	No habitat features on-site are likely to be used by any roosting bats at any time of the year (i.e. a complete absence of crevices/suitable shelter at all ground/underground levels).
Negligible	No obvious habitat features on-site are likely to be used by roosting bats; however, a small element of uncertainty remains, as bats can use small and apparently unsuitable features on occasion.
Low (PR-I -Trees)	A structure with one or more potential roost sites that could be used by individual bats opportunistically at any time of the year. However, these potential roost sites do not provide enough space, shelter, protection, appropriate conditions and/or suitable surrounding habitat to be used on a regular basis or by larger numbers of bats (i.e. unlikely to be suitable for maternity and not a classic cool/stable hibernation site, but could be used by individual hibernating bats). A tree in which a PRF is only suitable for individual bats or very small numbers of bats, either due to size or lack of suitable surrounding habitats.
Moderate	A structure with one or more potential roost sites that could be used by bats due to their size, shelter, protection, conditions and surrounding habitat but unlikely to support a roost of high conservation status (with respect to roost type only, such as maternity and hibernation – the categorisation described in this table is made irrespective of species conservation status, which is established after presence is confirmed).
High (PR-M – Trees)	A structure with one or more potential roost sites that are obviously suitable for use by larger numbers of bats on a more regular basis and potentially for longer periods of time due to their size, shelter, protection, conditions and surrounding habitat. These structures have the potential to support high conservation status roosts, e.g. maternity classic cool/stable hibernation sites. A tree where a PRF is suitable for multiple bats and may, therefore, be used by a maternity colony.

Evidence, such as bats in situ, droppings, and staining from urine or oils from the bat's fur, was also searched for during the preliminary survey. However, during a preliminary survey, bats can roost in areas inaccessible, such as between roof tiles and the lining. Therefore, this evidence may not always be found.

The number of further surveys and timings (if required) are based on the categorisation of the suitability of a structure to support roosting bats.

Foraging and Commuting

In accordance with the guidelines, the Site's habitats were evaluated for their suitability to be used for foraging and commuting bats. The categorisations are based on the criteria set out in the guidance and recreated in Table 11.

Table 11 – Bat Foraging and Commuting Suitability Categories

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

The preliminary bat surveys were carried out within the site's boundaries, except when the proposed development adversely affects neighbouring structures. In which case, these structures were also assessed where access was possible.

Water voles and Otters

Water voles and otters require riverine habitats to support breeding, foraging, and sheltering.

The water vole lives along rivers, streams, and ditches, around ponds and lakes, and in marshes, reedbeds and areas of wet moorland. The otter requires clean rivers with an abundant source of food and plenty of vegetation to hide their secluded holts.

Evidence of water vole will be investigated and include the presence of burrows along the banks, feeding remains and droppings. The survey area included the length of the suitable habitat within the Site's boundaries and up to 50 m outside of the boundaries if access was possible.

Evidence of otter will include the presence of holts, footprints, or spraints. The survey area included the length of the river within the Site's boundaries and up to 50 m beyond if access was available.

Dormice

Dormice live in deciduous woodland, hedgerows, and dense scrub and spend most of the spring and summer up in the branches, rarely coming down to the ground. It eats buds, hazelnuts, berries, and insects. Hazel dormice build nests out of grasses, stripped honeysuckle bark and fresh hazel leaves, in which the female will give birth to up to seven young. They hibernate during the winter months, either on the ground (under logs, leaves, in grass tussocks and at the base of trees) or just beneath the ground, where the temperature is more constant.

The habitats within the Site's boundaries and connectivity to suitable habitats in the wider landscape have been evaluated to determine the Site's suitability to support dormice.

Badgers

Badgers are found across the UK, with the highest numbers in southern England. The ideal badger habitat is a mixture of woodland and open country.

The species lives in a network of underground burrows and tunnels known as a sett. Each badger territory will include a main sett and several smaller outlying setts. The main sett is the group's headquarters, where they spend most of their time and rear their young. Outlying setts are smaller and provide a safe place to retreat if needed when badgers are out foraging. Setts tend to be located in the shelter of woodland, with the badgers emerging at night to forage in fields and meadows.

Though not as common as urban foxes, badgers can also survive in towns and cities, provided there is suitable cover in which to dig their setts and nearby gardens and parks where they can hunt for food.

The presence of setts has been investigated during the survey within the Site and up to 30 m from the Site's boundaries (where access was available). In addition, evidence of badgers has been searched for, including foraging holes, latrines, scratch posts and hairs.

Hedgehogs

Hedgehogs travel around one mile every night through parks and gardens, foraging for food and looking for mates. Grassland, hedgerows, and shrubs are considered to provide suitable foraging habitat. Compost, log piles, and hedgerows are suitable for nesting and hibernating hedgehogs.

The habitats within the Site's boundaries and connectivity to suitable habitats in the wider landscape have been assessed for their suitability to support hedgehogs.

Appendix 3 Photographs



Photo 1 – The Coach House



Photo 2 – The Conservatory Viewed from the Southwest Corner



Photo 3 – The Conservatory and Leanto Viewed from the Northwest corner



Photo 4 – The Site Viewed from the West looking East



Photo 5 – Inside the Conservatory Top Floor



Photo 6 – An Old Bird's Nest in the Leanto

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