Elite Ecology

Passionate about Ecology

Longford House,

Kirk Langley



Bat Emergence Survey Report

July 2026

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0. Executive Summary

0.1 This report has been prepared at the request of Mrs. Jessica Cooper (Architect) on behalf of Mr. Jamie Caple (Car Quay Limited). It relates to the potential presence of bats and birds at the proposed re-development site located at Longford House, Church Lane, Kirk Langley, Ashbourne, Derbyshire, DE6 4NG (Central Grid Refrence Number: SK2822638931 To fulfil this brief, Elite Ecology undertook both a desktop study and a field survey.

0.2 The current proposals are for the existing structure to be re-developed into a residential dwelling. This will result in both the permanent and temporary loss and/or alteration of some of the habitats located on the proposed re-development site.

0.3 Due to the amount of potential ingress/egress points and suitable roosting features, the structure of **B1** at Longford House, Kirk Langley was deemed as having **low** bat roosting potential and **negligible** bird nesting potential. a minimum of one bat emergence survey was to be undertaken during optimal survey months of mid-May to August (inclusive). This survey was carried out in May 2026. A total of two survey positions were deemed sufficient to cover all elevations of the buildings.

0.4 Summary

Bat Presence/Absence

From the survey visit undertaken on the site, it can be concluded that **Longford House** contains **no bat roosts**. However, foraging and commuting common pipistrelle (*Pipistrellus pipistrellus*) bats are present within the local landscape.

Bird Presence/Absence

From the survey visit undertaken on the site, it can be concluded that the surveyed structure contains no bird nests. However, the surrounding landscape provides all of the necessary habitat elements that birds require, and their presence can be assumed.

Ecological Value of Building Units

The ecological value of **B1** for bats is deemed as **negligible** due to the absence of active bat roosts. The ecological value of the barn for birds is deemed as **negligible** due to the absence of nesting birds inside

0.5 Recommendations

The recommendations for Longford House, Kirk Langley can be summarised as follows (please refer to **Section 5 – Recommendations** for a more in-depth description):

- **Optional:** Install a variety of bat boxes around the site post development to enhance the site for the local bat populations. Some suitable examples are shown in **Section 5**.
- **Optional:** Install a variety of bird boxes around the site post development to enhance the site for the local bird populations. Some suitable examples are shown in **Section 5**.

Contents

0. Executive Summary 3
1. Introduction 5
1.1 Report Rationale 5
1.2 Site Description 5
1.3 Proposed Works 5
1.4 Aims of Surveys 6
2. Survey Methodology 7
2.1 Desktop Survey Methodology 7
2.2 Field Survey Methodology 7
2.3 Surveyors Information 10
2.4 Field Surveys 11
3. Results 12
3.1 Desktop Survey Results 12
3.2 Field Surveys 13
4. Impact Assessment 17
4.1 Constraints 17
4.2 Potential Impacts of the Re-development 17
5. Recommendations 18
5.1 Bats 18
5.2 Birds 19
6. Summary 20
6.1 Bat Presence/Absence 20
6.2 Bird Presence/Absence 20
6.3 Ecological Value of Building Units 20
6.4 Recommendations 20
7. References 21
8. Appendices 22
Appendix A: Site Plans 23
Appendix B: The Ecological Data Map 24
Appendix C: Artificial Lighting and Bats 25
Appendix D: Photographic Records 26
Appendix E: The Annual Bat Year (BCT) 29
Appendix F: Legislation and Policy 30
Appendix G: Night-Vision Aid (NVA) Screenshots 31
9. Notice to Readers: Conditions of this Report 32

1. Introduction

1.1 Report Rationale

This report has been prepared at the request of Mrs. Jessica Cooper (Architect) on behalf of Mr. Jamie Caple (Car Quay Limited). It relates to the potential presence of bats and birds at the proposed re-development site located at Longford House, Church Lane, Kirk Langley, Ashbourne, Derbyshire, DE6 4NG (Central Grid Reference Number: SK 28226 38931. To fulfil this brief, Elite Ecology undertook both a desktop study and a field survey.

1.2 Site Description

The site is located in a rural setting, approximately 0.66km to the west of the Derbyshire village of Kirk Langley and 7.50km to the north-west of the centre of the city of Derby. The site contains a limited number of habitats, in the form of developed land, existing buildings, and vegetated garden. The building of interest measures approximately 50m^2. Therefore, the site is considered to contain potential to support the local bat and bird populations by offering roosting/nesting, commuting, and foraging opportunities.

Figure 1: Aerial photograph showing the outline of the surveyed buildings (red outline) at Longford House, Kirk Langley.



1.3 Proposed Works

The current proposals are for the existing structure to be re-developed into a residential dwelling. This will result in both the permanent and temporary loss and/or alteration of some of the habitats located on the proposed re-development site.

1.4 Aims of Surveys

The aims of the surveys were to undertake an assessment of the building(s), vegetation and surrounding area to establish whether any bats may be present and, if so, in what way they are using the site. The actions of the surveyors on the site and during the production of this report were conducted in accordance with Bat Conservation Trust (BCT) guidelines (4th edition).

1.4.1 This survey effort considered the potential for all **bat and bird species (including barn owls)** onsite:

- To establish the possibility of bat roosts and bird nests being present at the proposed development site.
- To assess any roost/nest status (i.e. what type and numbers of individuals).
- To assess suitable food, resources, and habitat requirements on site and in the local landscape.

1.4.2 The information will subsequently be used in conjunction with the knowledge of the proposed works at the site to determine the potential need for further survey effort, the impacts of the proposed scheme of works, to establish whether a Natural England Development Licence is required along with species-specific mitigation and compensation. This is done in order to keep any protected species at a favourable conservation status on site.

2. Survey Methodology

2.1 Desktop Survey Methodology

2.1.1 A variety of resources were independently consulted to assess the known local records within the nearby area and the importance of the site within the local landscape from an ecological perspective. The resources used were the Local Records Centre, www.naturalengland.org.uk, www.ordnancesurvey.co.uk, Google Maps, Google Earth, and Bing Maps. A search of other relevant nature conservation information was made through the use of the Multi-Agency Geographic Information for the Countryside (MAGIC) database.

2.1.2 The local records centre was contacted to provide data on all bat and bird species within 2km of the proposed development site. Derbyshire Bat Group (DBG) were the relevant local record centre for this project.

2.2 Field Survey Methodology

2.2.1 Initial Site Survey

This is done by assessing the site by visually inspecting all building/s/structures and any trees/vegetation to be impacted by the proposed works. This is done to assess the resource availability for protected species on site and in the immediate area. Particular reference is made to:

- The presence or absence of bats and birds onsite.
- Any evidence of potential bat roosts and bird nests onsite.
- Whether any additional survey effort will be required.

During the initial survey, an internal and external inspection of the building(s) is undertaken to look for signs of bat activity. This is done in accordance with BCT guidelines for the assessment of building(s) and built structures.

2.2.2 External Inspection

This survey method is used to locate potential ingress and egress points around the structures that both bats and birds could use to gain access into the building. It also aims to identify any areas where cracks and crevices are present to be used as roosting/nesting features. This visual inspection is carried out in full daylight using binoculars, endoscopes, torches, and ladders. This will allow for the determination of the following information:

- The type of building(s) surveyed.
- The approximate age of building(s) surveyed.
- The construction type and materials used.
- The presence of potential roost features (e.g. missing roof tiles, raised ridge tiles, air vents, cracks, and crevices within the mortar).
- The presence of suitable ingress and egress points (e.g. missing windows and doors, missing mortar, lifted tiles).
- The location of any anecdotal evidence for the presence of protected species (e.g. nests, droppings, or food remains).

2.2.3 Internal Inspection

This survey method aims to locate and examine areas which potentially provide suitable environmental conditions for bats. This visual inspection was undertaken by using binoculars, endoscopes, torches, ladders, and bat detectors to inspect internal features of the building(s).

This will allow for the determination of the following information:

- The presence of warm areas, dark areas, joints, crevices, beams, and cavities that could be used for roosting and nesting purposes by bats and birds.
- To locate possible bat roost and bird nest sites.
- To listen for social calling bats.
- To locate any evidence of bat and bird presence through the identification of live or dead specimens, grease marks, droppings, food remnants, urine stains, and/or the characteristic smell of bats.

2.2.4 Building/Vegetation Classification

A building/vegetation classification will be assigned to each surveyed feature that is proposed to be impacted by the scheme of works. This classification is based on the features potential to support roosting bats. The rating is also influenced by the location of the structure(s) in the local landscape, along with the number of suitable alternative roosting features, the type of features present in the landscape and the surveyor's experience. For example:

A structure that has a high level of anthropogenic disturbance with limited opportunities for access by bats, that is also situated within an urbanised area with few, or no mature trees, parkland, woodland, or wetland would generally equate to having **negligible**/**low** potential.

Conversely, an older structure (e.g. pre 20th century or early 20th century) with multiple features suitable for use by bats that is close to optimal foraging habitat would equate to having **high** potential.

The amount of additional survey effort required for each feature will depend on its rating:

- **None/Negligible** – No further survey effort is required.
- **Low** – One further emergence survey is required (structures only).
- **Moderate** – Two further emergence surveys are required.
- **High** – Three further emergence surveys are required.

2.2.5 Roost Categories

Any structures with evidence of bats will be further evaluated to assess which of the following roost categories may be present onsite:

- **Day Roost:**

  A place where individual bats, or small groups of males, rest or shelter during the daytime. These bats are rarely found at night at these sites.

- **Feeding Roost:**

  A place where individual bats rest or feed during the night but are rarely present in the day.

- **Hibernation Roost:**

  A place where bats may be found either individually or together during the winter months. These roosts often have a constant cool temperature and high humidity.

- **Maternity Roost:**

  A place where female bats give birth and raise their young to independence.

- **Mating Roost:**

  A place where mating/copulation takes place between male and female bats. These can continue through the winter months.

- **Night Roost:**

  A place where bats rest and/or shelter during the night but will rarely be found here during the day. These can be used colonially or individually by the bats.

- **Satellite Roost:**

  These are alternative roosting sites that are found within close proximity to the main nursery colony within the maternity roost. These are used throughout the breeding season by individual or small groups of female bats.

- **Swarming Site:**

  A place where large numbers of bats come together during the latter summer months through until autumn. These sites are classed as being important mating areas.

- **Transitional/Occasional Roost:**

  A place that is used by individuals or small groups of bats for a small period of time. These are used by the bats prior to hibernation and/or shortly after hibernation.

2.2.6 **Bat Detector Survey (presence/absence survey)**

If required, the object for this survey method is to detect any bats leaving or returning to their roost sites within the surveyed features. This is achieved by undertaking dusk emergence surveys under the following protocol:

- Commencing the survey fifteen minutes before sunset (dusk survey).
- Listening for any social calls at potential roost sites using bat detectors.
- Standing at different survey points around the building(s) and/or vegetation using bat detectors to hear the bat echolocation.
- The survey will attempt to witness the first bats emerging (dusk) from their roosts.
- Standing at different transect points at foraging/commuting areas around the site.
- Carrying out this survey methodology for up to two hours after sunset (dusk). This will cover the emergence of the bats at the potential roost site, for some bat species.

2.2.7 In order to comply with the required legislation, the results from the surveys will be collated to establish whether a European Protected Species (EPS) development licence will be required. If required, project appropriate species-specific compensation and mitigation measures will be devised to ensure the species remains at a favourable conservation status at the impacted site.

2.3 Surveyors Information

2.3.1 The survey was undertaken by licensed bat ecologist/s, members of the Chartered Institute of Ecology & Environmental Management (CIEEM) and/or Elite Ecology staff members:

Mr. Matthew Cotterill: PGDip, BSc (Hons), Senior Ecologist, Natural England Bat Survey Licence Number: 2025-86155-CL17-BAT Bat Survey Level 1.

Miss. Emily Baughn: MSc, Assistant Ecologist.

Miss. Katherine Ward: MSc, Assistant Ecologist.

Mr. Adam Ousby: BSc (Hons), Assistant Ecologist

2.4 Field Surveys

2.4.1 Site Surveys

Elite Ecology have not been made aware of any previous site surveys.

2.4.2 Roost Surveys

The building at Longford House, Kirk Langley was externally and internally inspected for the presence of bats with the use of various types of equipment (including binoculars, torches, endoscopes, and ladders) in full daylight.

The subsequent emergence surveys use a variety of bat detectors that include Bat Box Duet, SSF Bat2, EchoMeter Touch, EcoObs Batcorder, and night vision aids in the forms of Nightfox ARC infrared lights, Ordro 4K infrared camcorders, and XB10 infrared torches.

The following table outlines the environmental variables from the survey visits:

Environmental variables	PRA of the Building – 11th of June 2025. Daytime.	Emergence Survey 1 of the Building – 20th of May 2026. Dusk.
Temp Start:	10°C	15°C
Temp Finish:	10°C	13°C
Humidity Start:	78%	74%
Humidity Finish:	28%	84%
Cloud Cover Start:	100%	100%
Cloud Cover Finish:	100%	100%
Wind Speed Average:	Low	Low
Precipitation:	None	None

3. Results

3.1 Desktop Survey Results

The ecological data search provided by Derbyshire Bat Group revealed multiple species within the 2km search radius of the building at Longford House, Kirk Langley.

3.1.1 Bats

Within the ecological data search provided by Derbyshire Bat Group, seven known species of bat were revealed within the 2km search radius.

The UKBAP species recorded in the search were brown long-eared (*Plecotus auratus*), noctule (*Nyctalus noctula*), and soprano pipistrelle (*Pipistrellus pygmaeus*) bats. The non-BAP species recorded in the search were Brant's (*Myotis brandti*) common pipistrelle (*Pipistrellus pipistrellus*), Daubenton's (*Myotis daubentonii*), and Natterer's (*Myotis nattereri*) bats. In addition to this, some records of unidentified bat (Chiroptera indet.), unidentified myotis (*Myotis* sp.) and unidentified pipistrelle (*Pipistrellus* sp.). were revealed.

The closest record to the survey site was of an unidentified bat found approximately 717m from the survey site.

3.1.2 Birds

Derbyshire Bat Group was not commissioned to carry out an ecological data search for protected bird species. All birds in the UK can be split into three categories of conservation importance (red, amber and green – please refer to the RSPB for more information).

Please note: Any records may not truly represent the current species on site. The maps provided by Derbyshire Bat Group showing the locations of the records obtained through the ecological data search can be found in **Appendix B**.

3.1.3 Designated Sites

As the current proposals remain within the site boundary, it was not necessary to obtain any further information regarding both Statutory and Non-Statutory Nature Conservation Designations. This is due to the proposed works not altering any of the landscape surrounding the site.

3.2 Field Surveys

3.2.1 Habitat Description

The site is located in a rural setting, approximately 0.66km to the west of the Derbyshire village of Kirk Langley and 7.50km to the north-west of the centre of the city of Derby. The site contains a limited number of habitats, in the form of developed land, existing buildings, and vegetated gardens. The building of interest measures approximately 50m^2. Within the wider landscape further habitats are present. These come in the form of agricultural and pastureland, hedgerows, residential dwellings (and their associated gardens/yards), scattered trees, and standing and running waterbodies.

Therefore, the habitats that are present in and around the site contains all of the elements that are considered to be critical in both bat and bird life cycles.

Figure 2: An aerial map showing the site at Longford House, Kirk Langley (as shown by the yellow star) in relation to some of the local landscape.

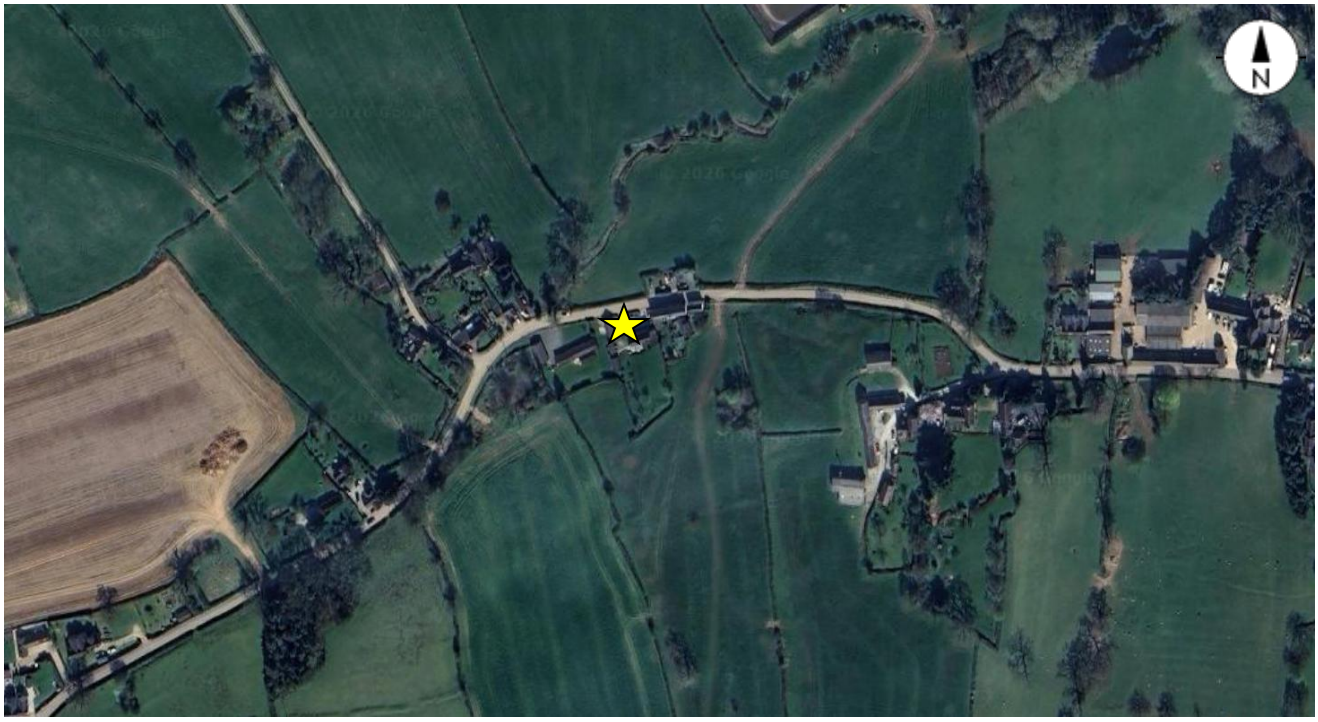

Figure 3: An OS map obtained from Bing showing the location of Longford House, Kirk Langley (as shown by the yellow star).



3.2.2 Building Surveys

One building is present within the survey area. This is the barn (**B1**).

B1

External Inspection

The structure is a two storey barn currently in use as a garage. It is constructed with solid brick walls and gabled roof consisting of clay tiles and clay ridge tiles. Lifted tiles have been noted on the eastern elevation of the structure along with four lifted roof tiles, which can be utilised by bats as a potential ingress and egress point to roost within the barn. Cracks in the brickwork are present on the southern, eastern, and northern aspects with substantial gaps that can be used as access points. The windows are constructed with wooden frames with all glass panes intact, and gaps are present around the window on the northern elevation allowing for further access opportunities.

The doors are constructed with wood and are intact. Gaps can be seen around the frame of the first-floor door providing further access points into the building. Ivy (*Hedera helix*) can be found growing on the western elevation. However, this ivy looks to be in its juvenile stage with a thin density of leaf coverage and is therefore not considered to be suitable for roosting bats and nesting birds. No evidence of bats or birds has been found externally.

Internal Inspection

The roof of the structure is supported by timber beams, timber rafters, timber collar beams, and a single timber ridge beam. The roof is lined with bitumen felt and looks to be in good condition. Cracks in the brick work can be seen internally; these cracks line up with the external cracks with additional cracks present that may be utilised as roosting features by bats. There are gaps between the gable end apex and the roof of the structure providing suitable roosting opportunities. Natural light can be seen from within the roof space coming through the window and artificial lighting has been installed. Cobwebs are present throughout the entire roof space between the collar beam up to the ridge. No evidence of bat or bird presence was recorded internally.

3.2.3 Summary of the Building Inspections

Due to the amount of potential ingress/egress points and suitable roosting features, the structure of **B1** at Longford House, Kirk Langley was deemed as having the following bat and bird potentials, and will need further surveys as detailed:

Table 1: The potentials of the buildings **B1** to support roosting bats and nesting birds, at Longford House, Kirk Langley.

Building Reference	Bat Potential	Bird Potential	Number of bat emergence surveys required	Number of survey positions required
B1	**Low**	**Negligible**	One	Two

Therefore, a minimum of one bat emergence survey was required to be undertaken during optimal survey months of mid-May to August. This was carried out in May 2026.

Table 2: Low/Moderate/High potential building(s) survey recommendations. The full guidance can be found in the Bat Conservation Trust Good Practice Survey Guidelines. These guidelines are what all local authorities abide by.

Bat Conservation Trust

Table 7.3 Recommended minimum number of survey visits for presence/absence surveys to give confidence in a negative result for structures (also recommended for trees but unlikely to give confidence in a negative result).

Low roost suitability	Moderate roost suitability	High roost suitability
One survey visit. One dusk emergence or dawn re-entry survey[a] (structures). No further surveys required (trees).	Two separate survey visits. One dusk emergence and a separate dawn re-entry survey.[b]	Three separate survey visits. At least one dusk emergence and a separate dawn re-entry survey. The third visit could be either dusk or dawn.[b]

[a] Structures that have been categorised as low potential can be problematic and the number of surveys required should be judged on a case-by-case basis (see Section 5.2.9). If there is a possibility that quiet calling, late-emerging species are present then a dawn survey may be more appropriate, providing weather conditions are suitable. In some cases, more than one survey may be needed, particularly where there are several buildings in this category.
[b] Multiple survey visits should be spread out to sample as much of the recommended survey period (see Table 7.1) as possible; it is recommended that surveys are spaced at least two weeks apart, preferably more. A dawn survey immediately after a dusk one is considered only one visit.

3.2.4 DNA Results

No bat droppings were identified in the building, and as such, no DNA analysis was carried out.

3.2.5 Emergence Surveys

One bat emergence survey was carried out on the 20th of May 2026

Emergence Survey 1 – 20th of May 2026

This emergence survey was undertaken at dusk with sunset recorded at 20:51.

During this survey, no bats were seen to emerge from the structure.

In addition to this, common pipistrelle (*Pipistrellus pipistrellus*) bats were identified using the site for foraging and commuting.

Figure 3: An aerial photograph of the surveyed building (red outline), the survey positions (yellow stars). The common bat flight paths are shown by the dashed blue lines.



Summary

In summary, the structure at Land adjacent to Longford House, Kirk Langley was found to contain no bat roosts. In addition to this, common pipistrelle bats were identified utilising the area for foraging and commuting.

4. Impact Assessment

4.1 Constraints

Constraints on:	Survey Information	Equipment Used
Constraint (Yes or No):	No	No
Explanation of Constraints:	N/A	N/A
Action Taken:	N/A	N/A

4.2 Potential Impacts of the Re-development

The current proposals are for the existing structure to be re-developed. This will include a complete strip-out of the existing structure. The potential impacts of these works have been identified as follows:

4.2.1 Designated Sites

As the proposed works are due to remain within the site boundary, the presence of any designated sites nearby is not applicable to this project. This, therefore, means that any building works would be of no detriment to the surrounding habitats and landscape.

4.2.2 Bat Roosts

	Short-term Impacts: Disturbance	Long-term Impacts: Roost Modification	Long-term Impacts: Roost Loss
Classification:	**Negligible**	**Negligible**	**Negligible**
Justification:	The surveyed building has been identified to contain **no bat roosts**.	The surveyed building has been identified to contain **no bat roosts**.	The surveyed building has been identified to contain **no bat roosts**.
Any further action:	No further compulsory action is required. Optional enhancements are outlined in **Section 5** of this report.	No further compulsory action is required. Optional enhancements are outlined in **Section 5** of this report.	No further compulsory action is required. Optional enhancements are outlined in **Section 5** of this report.

4.2.3 Bird Nests

Due to the absence of bird nests in relation to the surveyed structure, the proposed scheme of works will be of a **negligible** effect to the local bird populations.

4.2.4 Bat Foraging and Commuting Habitat

It is considered that the re-development of the site would have a **negligible** effect on potential foraging and commuting habitat. The site itself offers little quality foraging habitat, with the adjacent land containing better opportunities for bats to use. Post development, all foraging and commuting habitats will be maintained, thus not negatively affecting the local landscape.

5. Recommendations

5.1 Bats

From the site survey, it has been established that Longford House, Kirk Langley has **no bat roosts**. Despite this, common pipistrelle (*Pipistrellus pipistrellus*) bats were identified using the site for foraging and commuting. Therefore, no further compulsory action is required for the site.

Bat Enhancements

To provide potential roosting areas at the completion of the works, it is recommended that one Eco Bat Box is included in the scheme of the work. This is to be placed as high as possible, on the south-eastern elevation of the new barn.

In addition to this, the site can be enhanced by introducing a bat friendly planting scheme in the soft landscaping plan. The table below outlines species recommended by the Bat Conservation Trust, all of which could be incorporated into the site post development.

Flowers for borders	Trees, shrubs & climbers
Aubretia	Bramble
Candytuft	Common alder
Cherry pie	Dogrose
Corncockle	Elder
Corn marigold	English oak
Corn poppy	Gorse
Echniacea	Guelder rose
English bluebell	Hawthorn
Evening primrose	Hazel
Field poppies	Honeysuckle (native)
Honesty	Hornbeam
Ice plant ‘pink lady’	Ivy
Knapweed	Jasmine
Mallow	Pussy willow
Mexican aster	Rowan
Michaelmas daisy	Silver birch
Night-scented stock	**Herbs**
Ox-eye daisy	Angelica
Phacelia	Bergamot
Poached egg plant	Borage
Primrose	Coriander
Red campion	English marigolds
Red valerian	Fennel
Scabious	Feverfew
St. John’s Wort	Hyssop

5.2 Birds

The building **B1** at Longford House, Kirk Langley has been identified as containing no bird nests, either active or historic. Therefore, there are no compulsory recommendations for nesting birds at the site.

Bird Site Enhancements

As an optional site enhancement, additional bird boxes can be installed on site to enhance nesting opportunities for birds in the local area. The following models are recommended but similar alternatives are also acceptable.

- Two Manthorpe Swift Bricks.
- One Sparrow Terrace Nest Box.
- One Apex Bird Box.

6. Summary

6.1 Bat Presence/Absence

From the survey visit undertaken on the site, it can be concluded that **Longford House** contains **no bat roosts**. However, foraging and commuting common pipistrelle (*Pipistrellus pipistrellus*) bats are present within the local landscape.

6.2 Bird Presence/Absence

The surveyed structure contains no bird nests, either active or historic. However, the surrounding landscape contains all the habitats that birds require, and as such, their presence in the local area can be assumed.

6.3 Ecological Value of Building Units

The ecological value of **B1** has been deemed as **negligible** due to the absence of active bat roosts.

The ecological value of the building to birds has been deemed **negligible** due to the absence of active or historic bird nests in relation to the buildings.

6.4 Recommendations

The recommendations for Longford House, Kirk Langley can be summarised as follows (please refer to **Section 5 – Recommendations** for a more in-depth description):

- **Optional:** Install a variety of bat boxes around the site post development to enhance the site for the local bat populations. Some suitable examples are shown in **Section 5**.
- **Optional:** Install a variety of bird boxes around the site post development to enhance the site for the local bird populations. Some suitable examples are shown in **Section 5**.

7. References

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8. Appendices

Appendix A: Site Plans

Appendix B: Eco Data Table

Appendix C: Artificial Light and Bats

Appendix D: Photographic Records

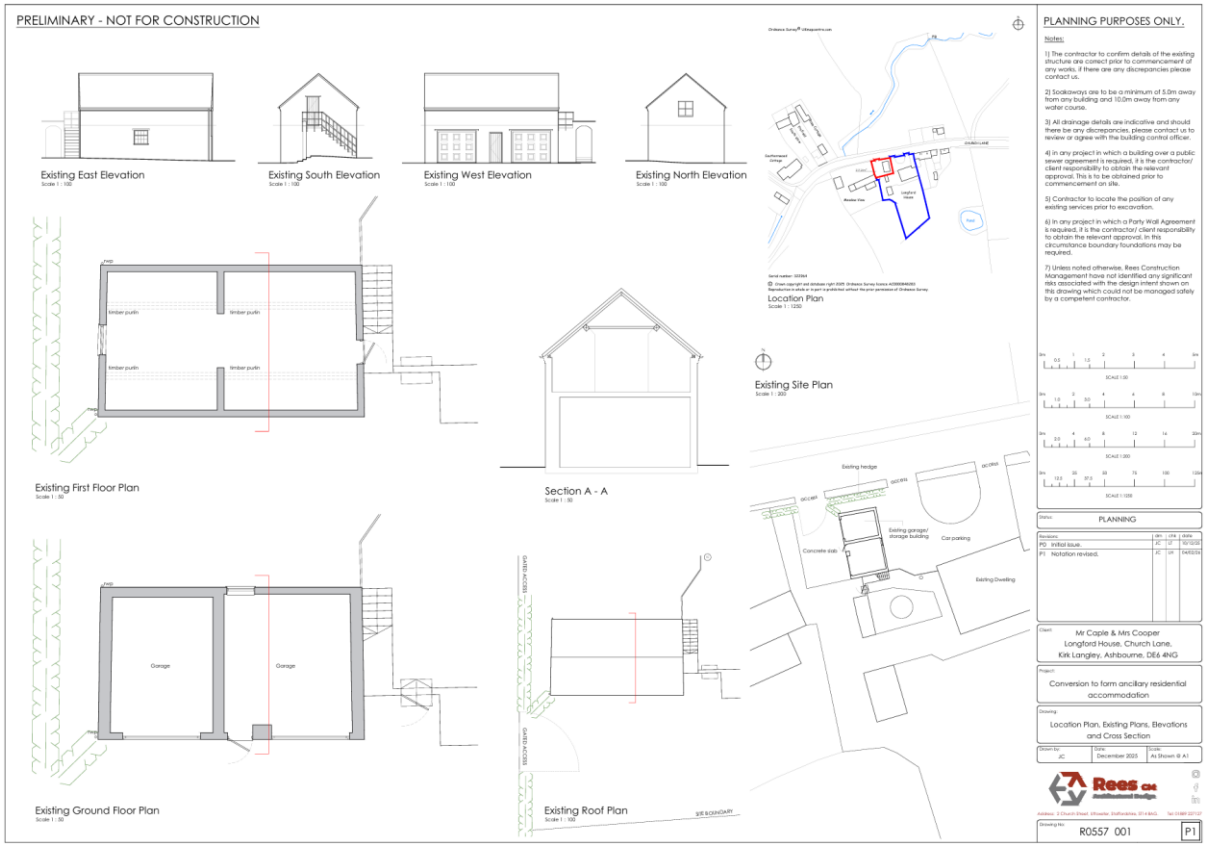
Appendix E: The Annual Bat Year (BCT)

Appendix F: Legislation

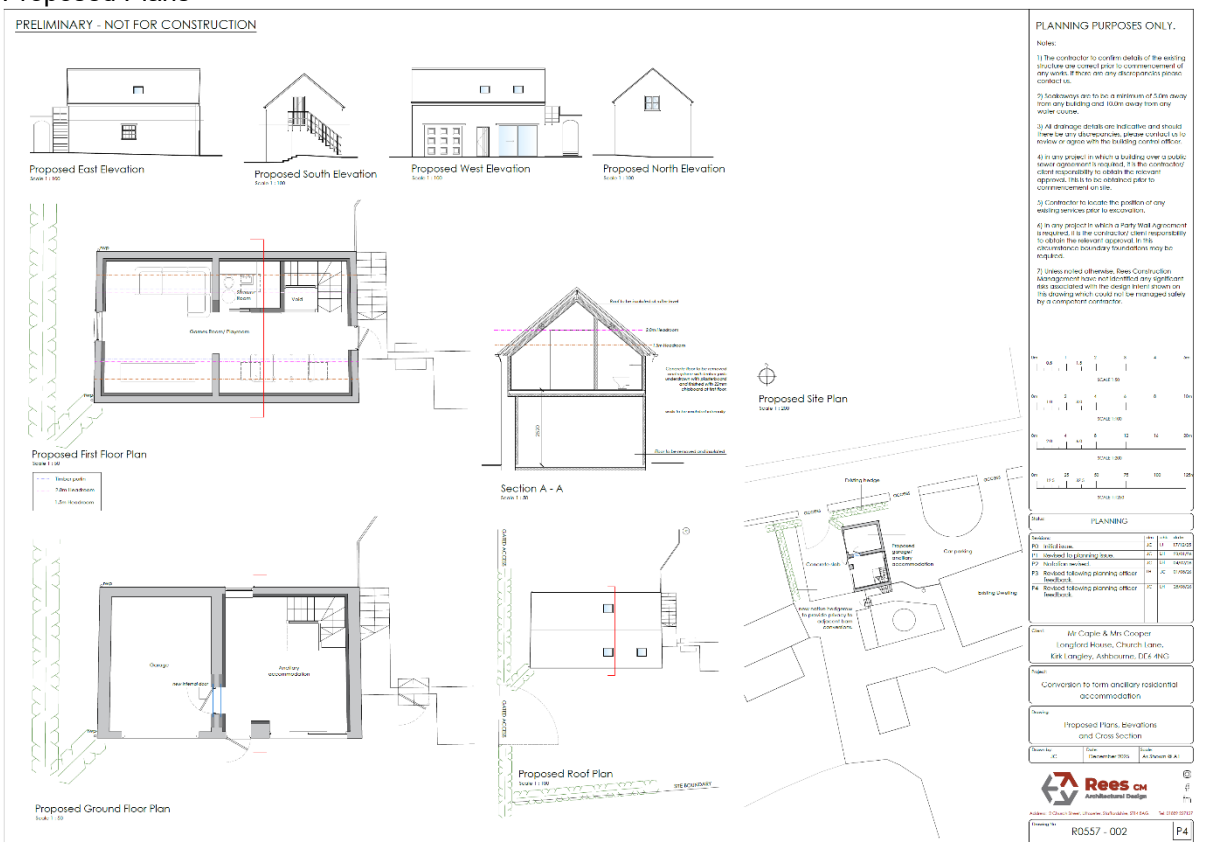
Appendix G: Night-Vision Aid (NVA) Screenshots

Appendix A: Site Plans

Existing Plans



Proposed Plans



Appendix B: The Ecological Data Map

No desktop study maps have been provided by Derbyshire Bat Group.

Appendix C: Artificial Lighting and Bats

Artificial lighting is known to affect bat's roosting and foraging behaviour, with lighting resulting in a range of impacts that includes roost desertion (BCT, 2009), delayed emergence of roosting bats (Downs et al., 2003), increased activity of some bat species and decreased activity by others (Stone et al., 2012).

An experimental approach using LED units, demonstrated that relatively fast-flying bat species, including the common pipistrelle, showed no significant impacts as a result of new artificial lighting, even when lighting was set at relatively high levels close to 50 lux.

In contrast, slow flying bats such as the myotis bats (*Myotis* spp.) showed sharp reductions in presence, even at low light levels of 3.6 lux (Stone et al., 2012).

Current recommendations for all bat species specifies that no bat roost should be directly illuminated.

Due to the impacts of lighting, mitigation and sensitive lighting design schemes are required for projects where bats are present. These should include bat friendly lighting plans that should aim to avoid lighting wherever possible. If this is not possible, then the minimisation of any lighting impacts is required by adopting the following measures:

- To introduce lighting curfews or use of PIR sensors.

  Lighting curfews can be an effective way of avoiding impacts on bats. These curfews may involve either turning off lighting or dimming light units at specific times of the night, dimming units at key times of the year, providing the luminaire allows for this option via a control unit. Lighting to be triggered by PIR sensors can be expected to be illuminated only when required and for a low proportion of time.

- To consider no lighting solutions where possible.

  Options such as white lining, good signage and LED cats eyes should be considered as preferable. Reflective fittings may help make use of headlights to provide any necessary illumination in some areas.

- To use only high pressure sodium or warm white LED lamps where possible.

  High pressure sodium and warm white LED lamps emit lower proportions of insect attracting UV light than mercury, metal halide lamps and white LED lighting. Generally, lamps should have a lower proportion of white or blue wavelengths, with a colour temperature <4200 kelvin recommended (BCT, 2014).

- To minimise the spread of light.

  The light spread should be kept at or near horizontal to ensure that only the task area is lit. Flat cut-off lanterns or accessories should be used to shield or direct light to where it is required. Baffles, hoods, louvres and shields should be used where necessary to reduce light spill.

- To consider the height of the lighting column.

  While downward facing bollard lighting is often preferable, it should be noted that a lower mounting height does not automatically reduce impacts to bats as bollard lighting can often be designed to provide up-lighting. Where bollard lighting is considered to be the most appropriate system, bollard spacing or unit density should be kept to a minimum and units should be fitted with the appropriate hoods/deflectors to reduce any up-lighting.

- To avoid reflective surfaces below lights.

  The polarisation of light by shiny surfaces attracts insects increasing bat activity (BCT, 2012). Consequently, surface materials around lighting require consideration.

Appendix D: Photographic Records

Plate 1: A photograph of the north elevation of the surveyed structure.



Plate 2: An image showing the east elevation of the surveyed structure.



Plate 3: A photograph of the west elevation of the surveyed structure.



Plate 4: A photograph of the south elevation of the surveyed structure.



Plate 5: An internal image of the structure.



Appendix E: The Annual Bat Year (BCT)

A Year in the Life of a Bat			
January		**February**	
	Hibernating; using up fat reserves.		Still hibernating; few fat reserves left.
March		**April**	
	Some activity; occasional bat seen feeding.		Awake and feeding at night.
May		**June**	
	Females looking for nursery sites.		Young born, usually only one.
July		**August**	
	Young still suckling.		Young start catching insects; females leave nursery to find males.
September		**October**	
	Mating season begins; start building fat reserves for hibernation.		Search for suitable hibernation site.
November		**December**	
	Hibernation begins although still some activity in warm weather.		Hibernating.

Appendix F: Legislation and Policy

All species of bat are fully protected under a variety of domestic, European and international legislation and conventions. These include:

- Bern Convention (Appendix II)
- Bonn Convention (Appendix II)
- Conservation Regulations (Northern Ireland) 1995
- Conservation of Habitats and Species Regulations 2017
- Countryside Rights of Way Act 2000
- Eurobats Agreement
- Habitats Directive (Annexes IV and II)
- Habitats Regulations 1994 (as amended) Scotland
- NERC Act 2006
- Wildlife and Countryside Act 1981 (as amended)
- Wild Mammals Protection Act

In addition to this, some species have additional protection by being listed on the UK Biodiversity Action Plan (UKBAP).

The legislation afforded to bats makes it illegal to possess or control any live or dead specimens, to damage, destroy or obstruct access to any structure or place used for shelter, protection or breeding, and to intentionally disturb a bat while it is occupying a structure or place which it uses for that purpose.

All nesting birds are protected under the Wildlife and Countryside Act 1981 (as amended), which protects birds, nests, eggs and nestlings from harm. In addition to this, some rarer species, such as barn owls are afforded extra protection.

National Planning Policy Framework, Section 15:

In early 2012, the National Planning Policy Framework (NPPF) replaced much previous planning policy guidance, including Planning Policy Statement 9: Biological and Geological Conservation. The government circular 06/05: Biodiversity and Geological Conservation - Statutory Obligations and Their Impact within the Planning System, which accompanied PPS9, still remains valid. A presumption towards sustainable development is at the heart of the NPPF. This presumption does not apply however where developments require appropriate assessment under the Birds or Habitats Directives. The latest National Planning Policy Framework was updated in December 2024, with the section in relation to conserving the natural environment being located within section 15.

Section 15, on conserving and enhancing the natural environment, sets out how the planning system should contribute to and enhance the natural and local environment by minimising impacts on biodiversity and, where possible, provide net gains in biodiversity. Opportunities to incorporate biodiversity gains into a development should be encouraged.

Biodiversity 2020:

This sets out to halt overall biodiversity loss and support healthy well-functioning ecosystems by establishing coherent ecological networks, with more and better places for nature, to the benefit of wildlife and people. The government's policy is aimed at individuals, communities, local authorities, charities, business and government, which all have a role to play in delivering Biodiversity 2020.

Appendix G: Night-Vision Aid (NVA) Screenshots

Plate 1: The NVA screenshot of the darkest point for the camera located at the rear of the property during the bat emergence survey on the 20th of May 2026.



Plate 2: The NVA screenshot of the darkest point for the camera located at the front of the property during the bat emergence survey on the 20th of May 2026.



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Elite Ecology agrees to supply ecological consulting services and advice of a preliminary or thorough nature as advised or commissioned. Upon commissioning Elite Ecology to undertake the work, the client(s) grant access to the site upon the agreed date. If no site access is available upon this date, Elite Ecology holds the right to charge the client(s) for lost staffing time and additional travel costs.

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The latest good practice guidelines put in place by Natural England or the relevant statutory conservation bodies have been followed by the surveyors on site. If those methodologies fail to identify a protected species during the survey efforts, no responsibility can be attributed to Elite Ecology. If any of these guidelines are adapted between the date(s) of the surveys being undertaken and the submission of this report, then Elite Ecology takes no responsibility for this.

Should any equipment be damaged or lost on site at the fault of the client(s), then Elite Ecology withholds the right to charge 100% above the current market value for that exact product or the nearest similar product.

The survey results purport the current status of the site and its potential for protected species utilisation at the time of surveying. It should not be viewed as a complete list of the possible flora and fauna species that could be using the site at different times of the year.

Elite Ecology has been provided with full payment for this report and thus the product has been released to the client(s) for the purpose of their planning application. If any part of the report is lost or altered without the written permission of Elite Ecology, then the entire report becomes invalid. Due to the potential for continual change within the natural world, this report is valid for **2 years only** from the date of the last survey visit. If this report is submitted after the 2 year deadline, then a further updated inspection will be required to ascertain whether the site remains in the same condition as it was when initially inspected.

No reliance should be made on any such comments in relation to the structural integrity of the features located on the surveyed site. All information within the report is based solely on evidence that has been found on site during the service provided. No individual opinion or inference will be made other than that of the suitably qualified ecologist appointed to the project.