



## Preliminary Roost Assessment

Building B1, Lamyatt Lodge, Lamyatt, Somerset, BA4 6NP

### I & C Developments Ltd.

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### Industry Guidelines and Standards

This report has been written with due consideration to:

- Chartered Institute of Ecology and Environmental Management (2017). Guidelines for Preliminary Ecological Appraisal. 2nd edition. Chartered Institute of Ecology and Environmental Management, Winchester.
- Chartered Institute of Ecology and Environmental Management (2018). Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater, Coastal and Marine. Version 1.1. Chartered Institute of Ecology and Environmental Management, Winchester.
- Chartered Institute of Ecology and Environmental Management (2017). Guidelines on Ecological Report Writing. Chartered Institute of Ecology and Environmental Management, Winchester.
- Chartered Institute of Ecology and Environmental Management (2020). Guidelines for Accessing, Using and Sharing Biodiversity Data in the UK. 2nd Edition. Chartered Institute of Ecology and Environmental Management, Winchester.
- British Standard 42020 (2013). Biodiversity – Code of Practice for Planning and Development.
- British Standard 8683:2021 (2021). Process for Designing and Implementing Biodiversity Net Gain.

### Proportionality

The work involved in preparing and implementing all ecological surveys, impact assessments and measures for avoidance, mitigation, compensation and enhancement should be proportionate to the predicted degree of risk to biodiversity and to the nature and scale of the proposed development. Consequently, the decision-maker should only request supporting information and conservation measures that are relevant, necessary and material to the application in question. Similarly, the decision-maker and their consultees should ensure that any comments and advice made over an application are also proportionate.

This approach is enshrined in Government planning guidance, for example, paragraph 174 of the National Planning Policy Framework for England.

The desk studies and field surveys undertaken to provide a Preliminary Ecological Appraisal (PEA) might in some cases be all that is necessary.

(BS 42020, 2013)

## Executive Summary

Arbtech Consulting Ltd. was instructed by I & C Developments Ltd. to undertake a Preliminary Roost Assessment (PRA) at Lamyatt Lodge, Lamyatt, Somerset, BA4 6NP (hereafter referred to as “the site”). The survey was required to inform a planning application which details the partial demolition and subsequent alteration to an existing courtyard and orangery (hereafter referred to as “the proposed development”).

**The following is work you will need to commission to obtain planning permission and/ or to comply with wildlife legislation and planning policy. Further information, along with opportunities for biodiversity enhancement, are outlined in Table 7 of this report.**

<b>Feature</b>	<b>Foreseen impacts</b>	<b>Recommendations</b> <i>Measures required to adhere to guidance, legislation and planning policies.</i>
<b>Roosting bats</b>	<p>Building B1 is assessed to represent a <b>confirmed bat roost</b>. The proposed development comprises the partial demolition and subsequent alteration to an existing courtyard and orangery. Development works could therefore destroy a bat roost and could cause death or injury to bats.</p>	<p>Current guidance states that buildings assessed to represent a confirmed roost should be subject to further survey to characterise the roost type to inform the planning application and any future Natural England European Protected Species Licence (EPSL) requirements.</p> <p>In line with current guidelines, it is recommended that two dusk emergence surveys and a separate dawn re-entry survey are completed to characterise the roost present. The dusk/ dawn surveys must be undertaken during the active bat season between May and September where at least two of the surveys are completed during the optimal survey period between mid-May and August. The surveys should be separated by a minimum of two weeks.</p> <p>Three surveyors are recommended to provide full coverage of B1, as shown on the plan in <b>Appendix 3</b>.</p> <p>An EPSL application to Natural England may be required, pending further survey results. An EPSL application requires that surveys have been undertaken within the most recent active bat season and planning permission must have been granted and all relevant wildlife-related conditions have been discharged prior to submission.</p> <p>Please note that a Material Changes Check will be required within three months of any EPSL submission if no survey work has been undertaken within that period to inform the EPSL application. Furthermore, bat droppings collected during the PRA will need to be sent for DNA analysis to confirm the bat species present.</p>

<b>Foraging and commuting bats</b>	The proposed development is located within the existing building curtilage only and thus no direct impacts to foraging and commuting bats are anticipated. However, there is potential for significant indirect disturbance to foraging and commuting bats through an increase in artificial light pollution resulting from external lighting installation.	A low impact lighting strategy should be adopted for the site, which should include measures to comply with current guidelines with regards to the impacts of artificial lighting on bats (Bat Conservation Trust and the Institute of Lighting Professionals 2018). Further details are included within <b>Table 7</b> .
<b>Nesting birds</b>	The proposed development comprises the partial demolition and subsequent alteration to an existing courtyard and orangery. The works will not impact the loft space within B1 and thus no impacts to nesting birds are anticipated.	None.
<b>Designated sites</b>	No impacts to designated sites are anticipated as a result of the proposed development. This is due to the small scale of works and separation between the site and nearest designation.	None.

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## 1.0 Introduction and Context

### 1.1 Background

Arbtech Consulting Ltd. was instructed by I & C Developments Ltd. to undertake a Preliminary Roost Assessment (PRA) at Lamyatt Lodge, Lamyatt, Somerset, BA4 6NP (hereafter referred to as “the site”). The survey was required to inform a planning application which details the partial demolition and subsequent alteration to an existing courtyard and orangery (hereafter referred to as “the proposed development”). A proposed development plan is provided in **Appendix 1**.

The aim of the PRA was to determine the presence or evaluate the likelihood of the presence of roosting bats, and to gain an understanding of how bats could use the site for roosting, foraging or commuting. This has been undertaken with due consideration to the “Bat Surveys for Professional Ecologists —Good Practice Guidelines” publication (Collins, 2016).

No previous ecology reports have been produced for this site by Arbtech Consulting Ltd or by any other consultancy to the knowledge of the Author.

### 1.2 Site Context

The site is located at National Grid Reference ST 66109 36521 and has an area of approximately 0.23ha. The site is characterised by a grade II listed Georgian house alongside an associated cottage and outbuildings; this report is focussed on the Georgian house only (hereafter referred to as B1). The site is enclosed by associated gardens to the north and east, and Portway Hill Road and open agricultural land to the south and west. A site location plan is provided in **Appendix 2**.

### 1.3 Scope of the Report

This report provides a description of all features suitable for roosting, foraging, and commuting bats and evaluates those features in the context of the site and wider environment. It further documents any physical evidence collected or recorded during the site survey that establishes the presence of roosting bats. It provides information on possible constraints to the proposed development as a result of bats and summarises the requirements for any further surveys to inform subsequent mitigation proposals, achieve planning or other statutory consent, and to comply with wildlife legislation. To achieve this, the following steps have been taken:

- A desk study has been carried out.
- A field survey has been undertaken including an external survey and internal inspection of built structures to determine the presence or the suitability of any features which bats could use for roosting and to assess the suitability of the site’s bat foraging and commuting habitat.
- An outline of potential impacts on any confirmed or unidentified roosts has been provided, based on the proposed development.
- Recommendations for further surveys and mitigation have been made along with advice on the requirements for a European Protected Species Licence (EPSL) application if appropriate.
- Opportunities for the enhancement of the site for roosting, foraging and commuting bats have been set out.

## 2.0 Methodology

### 2.1 Desk Study

The desk study included a 2km radius review of statutory designated sites with bat qualifying interests, granted EPSL records for bats held on the magic.gov.uk database, and a review of relevant supplementary planning documents pertaining to bats. An assessment of the surrounding landscape structure was also completed using aerial images from Google Earth and OS maps. Furthermore, Biological Records Data (BRD) detailing the location of historic bat records and non-statutory designated sites within 2km was commissioned from the Somerset Environmental Records Centre (SERC).

### 2.2 Field Survey

The survey was undertaken by Jonathan Stuttard BSc (Hons) MSc (Senior Consultant) on 04/07/2022. Jonathan Stuttard holds Natural England Bat Licence **2022-10409-CL17-BAT**. The PRA focussed on a single building that will be affected by the proposed development as well as providing an overview of the wider site and the surrounding landscape for bat roosting, foraging, and commuting habitat.

### 2.3 Suitability Assessment

The PRA comprised an assessment of the building to be impacted by the proposed development for potential to support roosting bats. The survey was led by an experienced ecologist and was based on current best practice guidelines (Collins, 2016). All features that are likely to be impacted by the proposed development were assessed for their potential to support roosting bats. The surveyor systematically surveyed all features suitable for bats and signs of bat activity.

The PRA included a visual inspection (including the use of binoculars and torches where required) of the exterior and interior of the building for evidence of bat use (e.g. droppings, scratch marks, staining and sightings). Factors considered whilst undertaking the PRA comprised internal conditions, presence of features suitable for use by roosting bats, proximity to foraging habitats or cover and potential for disturbance. Notes were made relating to relevant characteristics of features providing potential access points and roosting opportunities for bats. **Table 1** below details the rationale for determining bat roost potential of the building subject to the PRA.

Table 1: Rationale for assigning bat roost potential

<b>Assigned Bat Roosting Potential</b>	<b>Description/ Rationale</b>
Confirmed roost	Evidence of roosting bats within the building.
High	A building with one or more Potential Roost Features (PRFs) 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.
Medium	A building with one or more PRFs 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).



Low	A building with one or more PRF that could be used by individual bats opportunistically. However, these PRFs 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 or hibernation).
Negligible	Negligible features on site likely to be used by roosting bats.

#### ***2.4 Breeding Birds and Other Incidental Observations***

The surveyor also made note of any other ecological constraints observed during the survey, notably the likelihood of presence or signs of breeding birds.

#### ***2.5 Limitations***

It should be noted that whilst every effort has been made to describe the features on site in the context of their suitability for roosting bats, this does not provide a complete characterisation of the site. This survey provides a preliminary view of the likelihood of bats being present. This is based on suitability of the habitats on site and in the local area, the ecology and biology of bats as currently understood, and the known distribution of bats as recovered during the desk study. Bats are highly mobile and switch roost sites regularly and therefore the usage of a site by bats can change over a short period of time.

There are no site-specific limitations.

### 3.0 Results and Evaluation

#### 3.1 Desk Study Results

A summary of relevant desk study results is provided below.

#### **Review of Supplementary Planning Documents**

Due to the location of the site near to the Bath and Bradford on Avon Bats Special Area of Conservation (SAC), Mells valley SAC, and the North Somerset and Mendip Bats SAC, specific guidance relating to bats published by Mendip District Council (Mendip District Council 2019) has been reviewed. In accordance with this document, the site is not located within a bat consultation zone or within a juvenile subsistence zone.

#### **Designated Sites**

The site is not subject to any designations and there are no statutory designated sites within 2km. However, five non-statutory designated sites are located within 2km comprising Local Wildlife Sites (LWS), as detailed in **Table 2** below.

It is noted that the site lies within several Sites of Special Scientific Interest impact risk zones. However, the proposed development type is not listed as a possible high risk with regards to this designation.

*Table 2: Designated sites with bat qualifying interests within 2km radius of the site.*

<b>Designated site name</b>	<b>Distance from site (approx.)</b>	<b>Reasons for notification from Natural Resources Wales</b>
Lamyatt Beacon LWS	0.9km southeast	Semi-natural broadleaved woodland, part Ancient, in three discrete blocks separated by improved grassland.
Green's Combe Farm LWS	1.5km east	Unimproved neutral and calcareous grassland on steep slopes of combe.
Milton Wood LWS	1.6km northeast	Broad-leaved woodland on north-facing slope.
Spargrove Farm LWS	1.7km northeast	Several wet, unfenced fields crossed by small streams with some tufa deposits.

#### **Landscape**

A review of aerial photographs (Google Earth), the magic.gov.uk database, and OS maps has been undertaken. Collated, the potential value of the wider landscape for bats is described below:

The site is located rurally approximately 8.1km southeast of Shepton Mallet. The landscape enclosing the site is dominated by managed agricultural land and associated boundary features including unmanaged field margins, tree lines, and hedgerows. Other notable habitats located within 2km of the site that are likely to represent foraging, commuting, and roosting opportunities for bats include sections of deciduous woodland, ancient and semi-natural woodland, and traditional orchards. These habitats are likely to have good connectivity to the site via continuous vegetated linear features such as tree lines, woodland edge, and hedgerows.

### Historical Records

A search of the magic.gov.uk database for granted EPSLs within a 2km radius of the site has been completed. Displaced bats from licensed sites <1km away from the survey site are likely to find alternative habitat either within the mitigation measures implemented as part of the licence or will relocate to other known roosts sites in close proximity to the licensed site. EPSL records for bats within 2km are summarised in **Table 3**.

Table 3: Granted EPSLs within 2km of the site

EPSL reference	Approx. distance from site	Bat species affected	Licence start date:	Licence end date:	Impacts allowed by licence
2020-48455-EPS-MIT	1.77km east	Brown long eared, common pipistrelle, lesser horseshoe, serotine	01/09/20	01/09/30	Destruction of a resting place and breeding site.

Historic records of bats within 2km of the site returned through the BRD from SERC are detailed within **Table 4** below.

Table 4: Historical records of bats within 2km of the site

Common name	Scientific binomial	Distance to nearest record	Number of records	Number of roost records	Maternity roost records	Hibernation roost records
Common pipistrelle	<i>Pipistrellus pipistrellus</i>	1.8km northeast	3	3	0	0
Lesser Horseshoe	<i>Rhinolophus hipposideros</i>	1.8km northeast	12	5	1	0
Serotine	<i>Eptesicus serotinus</i>	1.8km west	7	0	0	0
Brown long-eared	<i>Plecotus auritus</i>	0.3km south	3	0	0	0
Greater horseshoe	<i>Rhinolophus ferrumequinum</i>	1.8km west	1	0	0	0



### 3.2 Field Survey Results

The PRA focussed on a single building (B1) that will be impacted by the proposed development. The results of the field survey are illustrated in **Appendix 3**. The weather conditions recorded at the time of the survey are shown in **Table 5**. The results of the PRA are shown in **Table 6**.

Table 5: Weather conditions during the survey

<b>Date: 04/07/2022</b>	
Temperature	17.5°C
Humidity	30%
Cloud Cover	10%
Wind	0mph
Rain	None.

Table 6: Preliminary Roost Assessment results

Feature	Description and value to roosting bats	Photographs
<p><b>Building B1 – External</b></p>	<p>Building B1 is a Grade II listed Georgian lodge with a large stone-built extension, single storey extension, and an attached greenhouse and utility room.</p> <p>The Georgian building section is two-storeys with a single-pitched and hipped roof. This building section is stone-built and retains timber framed sash windows and timber framed doors on multiple aspects. An ornate stone Tuscon Portico is present on the southwest aspect. Two chimney stacks protrude from the northern extent of the roof. The roof is clad with slate-tiles and the roof structure is fixed directly to the stonework at the eaves on all aspects.</p> <p>The Georgian building section of B1 appears to be well maintained and in good condition. As a result, there are no significant signs of structural dilapidation and the stonework, windows, doors, and Tuscon Portico do not provide gaps or cavities that may provide access into the building or into an external cavity suitable to support roosting bats. However, although the roof also appears to be in good condition, with no structural subsidence or missing, slipped, or lifted slate tiles, there are gaps in the eaves on the southeast aspect that provide potential access opportunities into the loft space for bats.</p> <p>No evidence indicating the presence of roosting bats was recorded during the external PRA of B1.</p> <p>It is noted that no evidence indicating the presence of nesting birds was recorded during the external PRA. However, access into the Georgian building section of B1 for a small number of birds is present through the gaps in the eaves.</p>	<div style="display: flex; justify-content: space-around;">   </div> <p style="text-align: center;"><b>Figures 1 &amp; 2:</b></p> <p style="text-align: center;"><b>Left</b> – Southwest aspect of B1. The red arrow highlights the location of gaps in the eaves.</p> <p style="text-align: center;"><b>Right</b> – Southeast aspect of B1.</p>

**Building B1 –  
External**

A large two-storey, stone-built extension is present on the north aspect of the Georgian building section. The stone-built extension has a single-pitched, clay-tiled roof. A multitude of timber framed casement windows and timber framed doors are present on the west and east aspects. The roof structure is fixed directly to the stonework at the eaves on all aspects and a narrow timber fascia board is present on the north facing gable end. A single velux style roof light is present in the roof on the east aspect.

The stone-built extension appears to be well maintained and in good condition. As a result, there are no significant signs of structural dilapidation and the stonework, windows, and doors do not provide gaps or cavities that may provide access into the building or into an external cavity suitable to support roosting bats. However, there are a large number of lifted and slipped roof tiles which may provide access into the loft space or into a cavity suitable to support crevice-dwelling bats. Furthermore, there are small gaps underneath the fascia board on the north gable end that may provide additional roosting opportunities for a small number of crevice-dwelling bats.

No evidence indicating the presence of roosting bats was recorded during the external PRA.

It is noted that no evidence indicating the presence of nesting birds was recorded during the external PRA. However, access into the stone-built extension for a small number of birds is present through the gaps in the eaves.



**Figure 3 & 4:**

**Left** – Northwest aspect of B1. The red arrows highlight the approximate locations of lifted, slipped, or missing roof tiles.

**Right** – Northeast aspect of B1. The red arrows highlight the approximate locations of lifted, slipped, or missing roof tiles.



**Building B1 –  
External**

Also present on the north aspect is a single storey extension and a connected outbuilding containing a greenhouse and utility room.

The single storey extension is brick-built with an inverted, slate-tiled roof with a central roof valley. Timber framed casement windows and timber framed doors are present on the north aspect providing access to a small courtyard. Two velux style roof lights are present facing east. The single-storey extension appears well maintained and is good condition. No structural features suitable to support roosting bats were recorded on this building section and there are no nesting opportunities for birds.

The greenhouse and utility room are stone-built with a single pitched roof. A timber framed door is present on the south and east aspect that allow access into the building. A timber casement window is present on the north aspect and the green house has a south facing glass roof. The remainder of the roof is clad with clay tiles. It is noted that there are a number of lifted and slipped roof tiles on the north aspect of the utility room section. Furthermore, there are gaps between the stonework and door lintel over the timber door on the east aspect. These structural features may provide access into the building or into an external cavity suitable to support crevice-dwelling bats.

It is noted that no evidence indicating the presence of nesting birds was recorded during the external PRA of the single-storey extension and greenhouse and utility room. Furthermore, there are no significant nesting opportunities on these building sections.



**Figures 5 & 6:**

**Left** – Close view of single storey extensions to the north aspect.

**Right** – Close view of the green house to the north aspect.

**Building B1 –  
Internal**

Internally, the loft space within the Georgian building section is constructed using a number of timber beams and supports. It is clear that some of the original roof beams have been replaced with modern timber supports indicating that the roof has been renovated in recent years. Notably, an original timber beam has been removed and left within the loft space. Furthermore, a bitumen roof felt has been fitted underneath the tiles throughout. A mineral wool insulations material has also been fitted over all ceiling joists.

The gaps within the eaves recorded externally were visible during the internal inspection confirming that access into this loft space is present through these gaps. However, the remainder of the internal roof structure appeared to be in good condition with no other visible access opportunities for bats. It is noted that there is a hole in the wall on the north aspect that allows internal access into the loft space of the attached stone-built extension.

No evidence indicating the presence of roosting bats was recorded within the loft space of the Georgian building section.

No evidence indicating the presence of nesting birds was recorded. However, there is potential access for a small number of nesting birds into this loft space via the gaps in the eaves.



**Figures 7 and 8:**

**Left** – Internal view of the loft space in the Georgian building section.

**Right** – Internal view of the loft space over the Georgian building section showing gaps in the eaves.



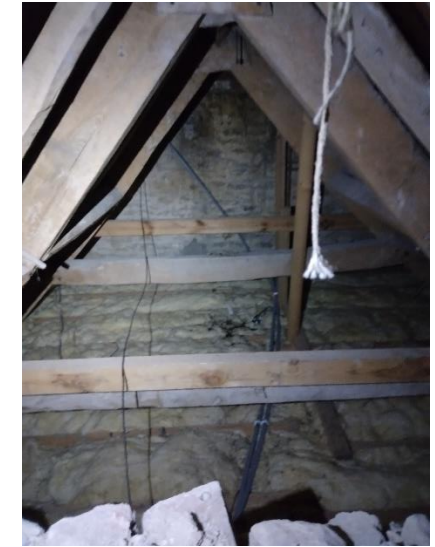
**Building B1 –  
Internal**

Internally, the loft space within the stone-built extension retains two separate structures. The roof appears to have been fully refurbished whereby the original roof tiles and batons have been removed leaving the majority of the original roof structure in-situ and a modern roof structure has been built over the top and re-tiled. A mineral wool insulation material and enclosing plastic sheet has been fitted underneath the new roof tiles. The same insulation material has also been fitted over all ceiling joists. The loft is partially split into three sections where remnant structural walls associated with the redundant roof structure remain in-situ. However, there are gaps between the walls and the new roof structure that allow access throughout the loft.

The insulation and securing plastic sheet fitted underneath the roof tiles is gapless and is likely to limit access opportunities into the loft space from underneath roof tiles. However, the gaps within the eaves recorded externally were visible during the internal inspection confirming that access into this loft space is present through these gaps. It is noted that the remnant timber roof structure located within the loft provides enhance roosting opportunities for bats that may enter the loft as gaps between roof beams and fixtures provide optimal internal roosting features.

Bat droppings were recorded within the loft space in three locations. Further details are provided below.

No evidence indicating the presence of nesting birds was recorded. However, there is potential access for a small number of nesting birds into this loft space via the gaps in the eaves.



**Figures 9 & 10:**

**Left** – Internal view of the loft space over stone-built extension facing south.

**Right** – Internal view of the loft space over stone-built extension facing north.

**Evidence of roosting bats**

Evidence indicating the presence of roosting bats was recorded within the loft space of the stone-built extension (see **Appendix 2**). Three piles of bat droppings, each containing between approximately 50 and 100 droppings were recorded. It is noted that the size and shape of the droppings are indicative of brown long-eared bats *Plecotus auritus*, however this should be confirmed through DNA analysis. Each pile of droppings was recorded underneath a timber bracket associated with the remnant original roof structure; these timber brackets provide an optimal internal roosting space for brown long-eared bats.

Furthermore, a small number of droppings (<10) were recorded on top of a boiler within the utility room. These droppings also did not appear fresh but were in relatively good condition and are likely to have been deposited during the most recent active bat season.



**Figures 11 & 12:**

**Left** – A pile of bat droppings located within the loft space of the stone-built extension.

**Right** – A close view of the internal roosting feature where the majority of bat droppings were located underneath.

## 4.0 Conclusions, Impacts and Recommendations

### 4.1 Informative Guidelines

A summary of the relevant legislation and planning policies is provided in **Appendix 4**.

#### **Bats**

Bats are protected under the Wildlife and Countryside Act and the Conservation of Habitats and Species Regulations 2017 (amended by the Conservation of Habitats and Species Regulations (amendment) (EU Exit) Regulations 2019).

There are three possible outcomes of this survey, each with specific recommendations. These are outlined below:

#### Confirmed bat roost

Best practice survey guidelines (Collins, 2016) recommend additional surveys for confirmed roosts. Three further surveys are required to characterise the bat roost present including species, roost type and access points to inform an EPSL application to Natural England. Surveys must be completed during the active bat season (May – September). At least two of the surveys should be completed during the optimal survey period mid-May to August, and at least one of the surveys should be a dawn re-entry survey.

#### Low, moderate or high likelihood of a bat roost present

Best practice survey guidelines (Collins, 2016) recommend additional surveys for features assessed as having low to high suitability for roosting bats. One, two or three further surveys are required to confirm presence or likely absence of a bat roost, based on a low, medium or high roost likelihood evaluation. Surveys must be completed during the active bat season (May – September). If more than one survey is recommended, at least one of them should be completed during the optimal survey period mid-May to August, and at least one of the surveys should be a dawn re-entry survey. If two or more further surveys are recommended these surveys must be completed during the optimal survey period (mid-May to August). For low and moderate roost likelihood evaluation the survey effort recommended at this stage is iterative and if bats roosts are confirmed in the building, a further survey will be required to provide sufficient information to inform an EPSL application to Natural England.

#### Negligible likelihood of a bat roost present

Buildings assessed as comprising negligible suitability for roosting bats do not normally require further surveys. However, if bats are found during any stage of the development, work should stop immediately, and a suitably qualified ecologist should be contacted for further advice.

#### **Birds**

Legislation protects all wild birds whilst they are breeding, and prohibits the killing, injuring or taking of any wild bird or their nests and eggs. Certain species of bird, including the barn owl, are subject to special provisions; it is an offence to disturb any bird or their young during the breeding season.

#### 4.2 Evaluation

Considering the results of the desk study and field survey, **Table 7** presents an evaluation of the value of the site for bats and details any other ecological constraints identified such as nesting birds in relation to the proposed development.

Table 7: Evaluation of the site for bats and any other ecological constraints

<b>Feature</b>	<b>Survey conclusions</b>	<b>Foreseen impacts</b>	<b>Recommendations</b> <i>Measures required to adhere to guidance, legislation and planning policies.</i>	<b>Biodiversity Enhancements</b> <i>The Local Planning Authority has a duty to ask for enhancements under the NPPF (2021) and Local Planning Policy.</i>
<b>Bats</b>	Evidence indicating the presence of roosting bats was recorded within the loft space of the stone-built extension of B1 in addition to the utility room. As a result, B1 is a <b>confirmed bat roost</b> .	The proposed development comprises the partial demolition and subsequent alteration to an existing courtyard and orangery. Development works could therefore destroy a bat roost and could cause death or injury to bats.	<p>Current guidance states that buildings assessed to represent a confirmed roost should be subject to further survey to characterise the roost type to inform the planning application and any future Natural England European Protected Species Licence (EPSL) requirements.</p> <p>In line with current guidelines, it is recommended that two dusk emergence surveys and a separate dawn re-entry survey are completed to characterise the roost present. The dusk/ dawn surveys must be undertaken during the active bat season between May and September where at least two of the surveys are completed during the optimal survey period between mid-May and August. The surveys should be separated by a minimum of two weeks.</p> <p>Three surveyors are recommended to provide full coverage of B1, as shown on the plan in <b>Appendix 3</b>.</p> <p>An EPSL application to Natural England may be required, pending further survey results. An EPSL application requires that</p>	To be confirmed pending further survey results.

			<p>surveys have been undertaken within the most recent active bat season and planning permission must have been granted and all relevant wildlife-related conditions have been discharged prior to submission.</p> <p>Please note that a Material Changes Check will be required within three months of any EPSL submission if no survey work has been undertaken within that period to inform the EPSL application. Furthermore, bat droppings collected during the PRA will need to be sent for DNA analysis to confirm the bat species present.</p>	
<b>Foraging and commuting bats</b>	<p>Building B1 is located adjacent to managed gardens associated with the site. Habitats within the associated gardens appear to be intensely managed and well maintained. The grassland retains a very short sward &lt;20mm and shrubs and trees show evidence of regular pruning and management. Although these habitats are likely to provide foraging and commuting opportunities for bats, given the presence of extensive optimal habitat locally, on-site habitats are unlikely to represent a significant foraging and commuting resource in the context of the wider landscape.</p>	<p>The proposed development is located within the existing building curtilage only and thus no direct impacts to foraging and commuting bats are anticipated. However, there is potential for significant indirect disturbance to foraging and commuting bats through an increase in artificial light pollution resulting from external lighting installation.</p>	<p>A low impact lighting strategy should be adopted for the site, which should include the following measures as to comply with current guidelines with regards to the impacts or artificial lighting on bats (Bat Conservation Trust and the Institute of Lighting Professionals 2018):</p> <ul style="list-style-type: none"> <li>• Use of narrow spectrum light sources to lower the range of species affected by lighting.</li> <li>• Use of light sources that emit minimal ultra-violet light.</li> <li>• Avoidance of white and blue wavelengths of the light spectrum to reduce insect attraction and where white light sources are required in order to manage the blue shortwave length content they should be of a warm / neutral colour temperature &lt;4,200 kelvin.</li> <li>• Absence of bare bulbs and any light pointing upwards. The spread of light will be kept in line with or below the horizontal.</li> </ul>	<p>To be confirmed pending further survey results.</p>

			<p>Light spill should be reduced via the use of low-level lighting used in conjunction with hoods, cowls, louvers and shields. Lights will also be directional to ensure that light is directed to the intended areas only.</p> <p>External lighting should be on PIR sensors that are sensitive to large objects only (so that they are not triggered by passing bats) and will be set to the shortest time duration to reduce the amount of time the lights are on.</p>	
<b>Nesting birds</b>	<p>Access is available into the loft spaces of B1 via gaps in the eaves for nesting birds. Although no evidence indicating the presence of nesting birds was recorded the future presence of active bird nests cannot be discounted.</p>	<p>The proposed development comprises the partial demolition and subsequent alteration to an existing courtyard and orangery. The works will not impact the loft space within B1 and thus no impacts to nesting bird are anticipated.</p>	None.	<p>The installation of a single bird box or integrated bird brick should be incorporated into the proposed development. recommended bird boxes/ bricks include:</p> <ul style="list-style-type: none"> <li>• Schwegler No 17 Swift Nest Box</li> <li>• Schwegler 1SP Sparrow Terrace</li> <li>• Schwegler 1B Nest Boxes</li> <li>• Schwegler 2H Robin Boxes</li> <li>• Woodstone Nest Box</li> </ul> <p>Bird boxes and bricks should be positioned approximately 3m above ground level where they will be sheltered from prevailing wind, rain and strong sunlight. Small-hole boxes are best placed approximately 1-3m above ground on an area of the tree trunk where foliage will not obscure the entrance hole. Swift and sparrow boxes should be positioned at the eaves of a building and can be incorporated into the</p>

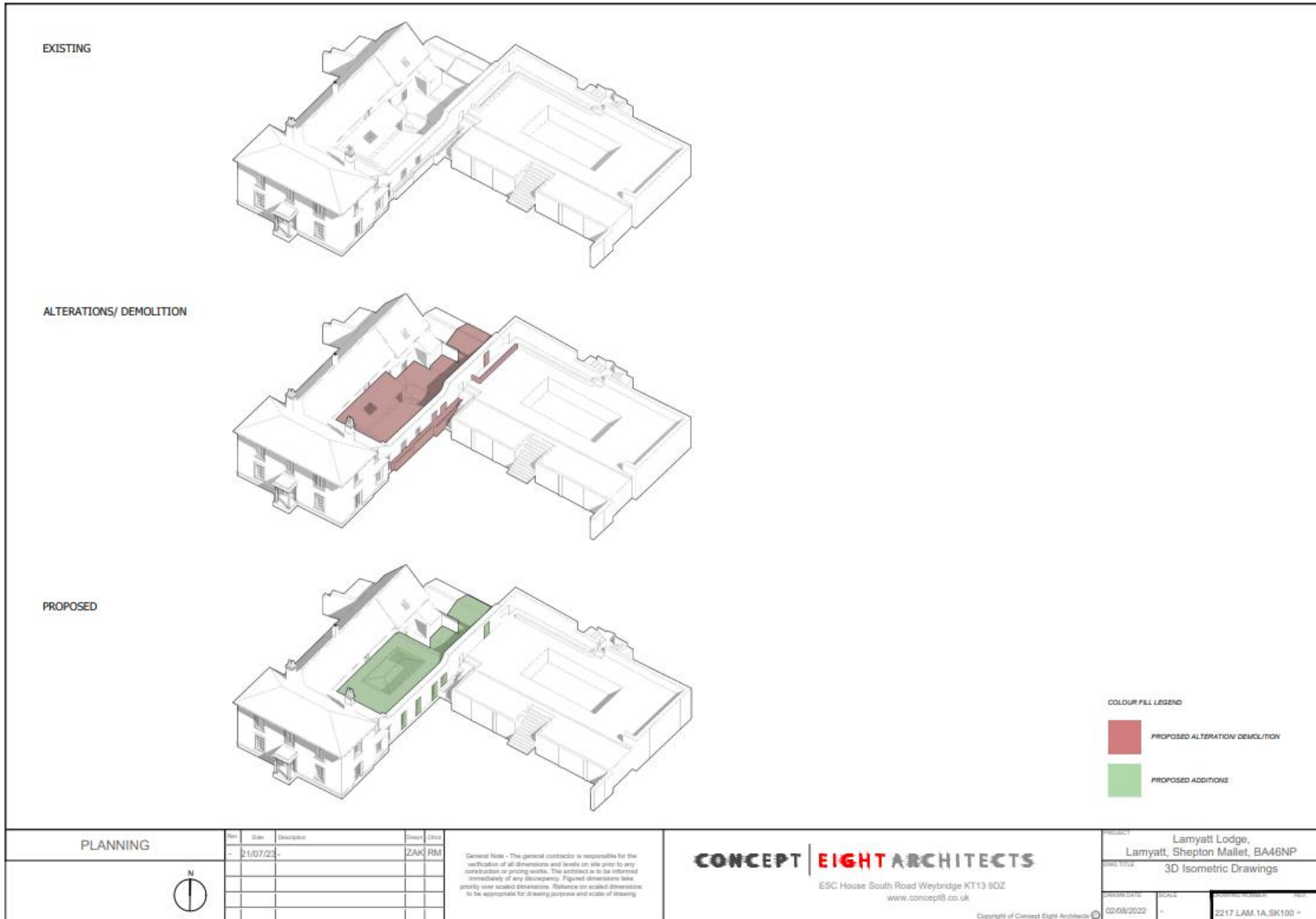
				fabric of the building during construction.
<b>Designated Sites</b>	<p>The site is not subject to any statutory or non-statutory designations.</p> <p>In accordance with supplementary planning guidance (Mendip Council 2019), the site is not located within a bat consultation zone or within a juvenile subsistence zone.</p>	<p>No impacts to designated sites are anticipated as a result of the proposed development. This is due to the small scale of works and separation between the site and nearest designation.</p>	None.	None.

## 5.0 Bibliography

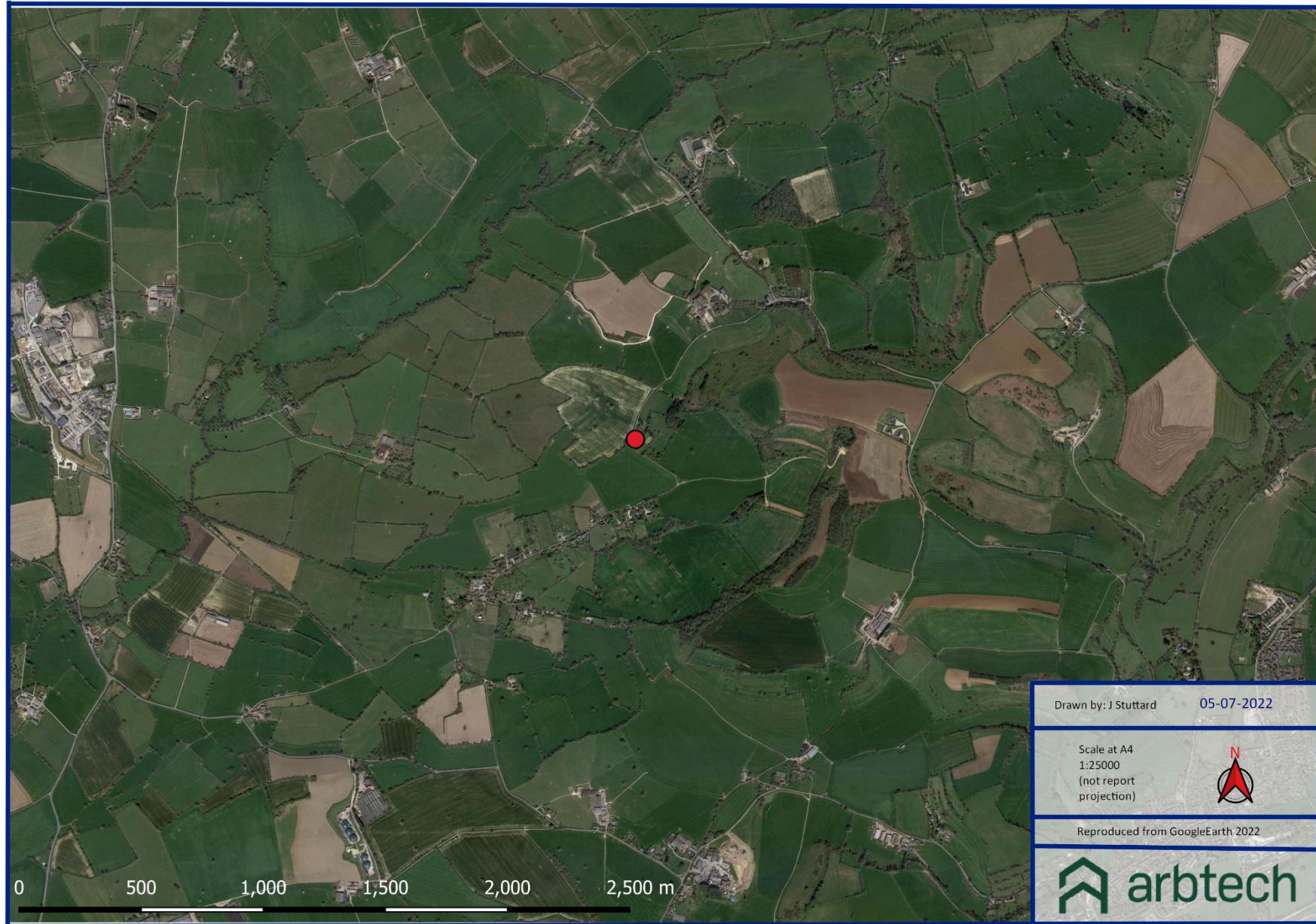
- British Standard 42020 (2013). Biodiversity – Code of Practice for Planning and Development.
- British Standard 8683:2021 (2021). Process for Designing and Implementing Biodiversity Net Gain.
- Chartered Institute of Ecology and Environmental Management (2017). Guidelines for Preliminary Ecological Appraisal. 2nd edition. Chartered Institute of Ecology and Environmental Management, Winchester.
- Chartered Institute of Ecology and Environmental Management (2017). Guidelines on Ecological Report Writing. Chartered Institute of Ecology and Environmental Management, Winchester.
- Chartered Institute of Ecology and Environmental Management (2018). Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater, Coastal and Marine. Version 1.1. Chartered Institute of Ecology and Environmental Management, Winchester.
- Chartered Institute of Ecology and Environmental Management (2020). Guidelines for Accessing, Using and Sharing Biodiversity Data in the UK. 2nd Edition. Chartered Institute of Ecology and Environmental Management, Winchester.
- Collins, J. (2016). Bat Surveys for Professional Ecologists —Good Practice Guidelines, 3<sup>rd</sup> edition, Bat Conservation Trust, London.
- Garland, L. & Markham, S. (2008) Is Important Bat Foraging and Commuting Habitat Legally Protected?  
<http://biodiversitybydesign.co.uk/cmsAdmin/uploads/protection-for-bat-habitat-sep-2007.pdf>
- Google Earth (2020) accessed on 10/08/2023.
- Institution of Lighting Professionals (2018). Guidance Note 08/18 Bats and Artificial Lighting in the UK. Bats and the Built Environment Series Publication: [http://www.bats.org.uk/news.php/406/new\\_guidance\\_on\\_bats\\_and\\_lighting](http://www.bats.org.uk/news.php/406/new_guidance_on_bats_and_lighting).
- Magic database (2020) <http://www.magic.gov.uk/MagicMap.aspx> accessed on 10/08/2023.
- Mitchell-Jones, A.J. (2004). Bat Mitigation Guidelines. English Nature, Peterborough.
- Mendip District Council. (2019). Mells Valley SAC, North Somerset and Mendip Bats SAC, and Bath and Bradford on Avon Bats SAC: Guidance on Development.  
[https://www.mendip.gov.uk/media/22423/Technical-Guidance-Mendip-District-SAC-Bats-v2-1/pdf/Technical\\_Guidance\\_Mendip\\_District\\_SAC\\_Bats\\_v2.1\\_a2.pdf?m=637484770030800000](https://www.mendip.gov.uk/media/22423/Technical-Guidance-Mendip-District-SAC-Bats-v2-1/pdf/Technical_Guidance_Mendip_District_SAC_Bats_v2.1_a2.pdf?m=637484770030800000)
- Mendip District Council. (2014). Local Plan Part I. [https://www.mendip.gov.uk/media/9073/Adopted-Local-Plan-2014/pdf/Adopted\\_Local\\_Plan\\_2014\\_with\\_erratum\\_corrected\\_p40.pdf?m=637822526507470000](https://www.mendip.gov.uk/media/9073/Adopted-Local-Plan-2014/pdf/Adopted_Local_Plan_2014_with_erratum_corrected_p40.pdf?m=637822526507470000)
- National Planning Policy Framework (2021) <https://www.gov.uk/government/publications/national-planning-policy-framework--2>
- Wray, S., Wells, D., Long, E., Mitchell-Jones, T (2010) Valuing Bats in Ecological Impact Assessment. IEEM In-Practice. Number 70 (December 2010). Pp. 23-25.



### Appendix 1: Proposed Development Plan

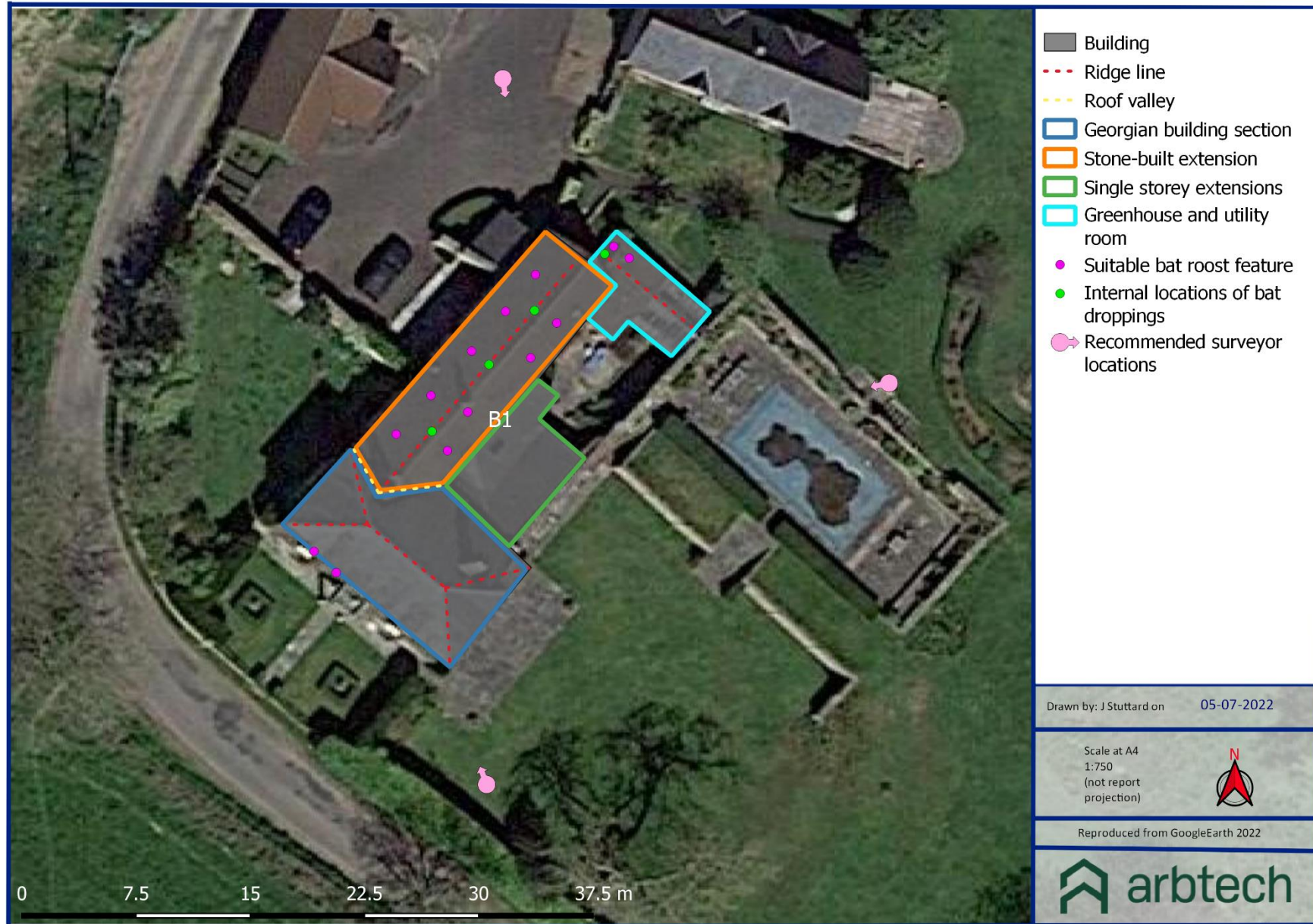


### Appendix 2: Site Location Plan





### Appendix 3: PRA Survey Plan



## Appendix 4: Legislation and Planning Policy Related to Bats

### LEGAL PROTECTION

The ***Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019*** came into force when Britain left the European Union on 31st January 2020. It covered amendments relevant to this survey to:

- Wildlife and Countryside Act 1981: England and Wales (x1 amendment)
- Conservation of Habitats and Species Regulations 2017 (x29 amendments)

All species of bat are fully protected under ***The Conservation of Habitats and Species Regulations 2017*** (amended by the ***Conservation of Habitats and Species Regulations (amendment) (EU Exit) Regulations 2019*** which continue the same provision for European protected species, licensing requirements and protected sites after the UK leaves the EU) through their inclusion on Schedule 2.

#### ***Regulation 43: Protection of certain wild animals - offences***

(1) A person is guilty of an offence if they:

- (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, or
- (d) Damages or destroys a breeding site or resting place of such an animal,

(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.

Bats are also protected under the ***Wildlife and Countryside Act 1981 (as amended)*** through their inclusion on ***Schedule 5***. Under this Act, they are additionally protected from:

- Intentional or reckless disturbance (at any level)
- Intentional or reckless obstruction of access to any place of shelter or protection
- Selling, offering or exposing for sale, possession or transporting for purpose of sale

## **NATIONAL PLANNING POLICY (ENGLAND)**

### ***National Planning Policy Framework 2021***

The National Planning Policy Framework promotes sustainable development. The Framework specifies the need for protection of designated sites and priority habitats and species. An emphasis is also made on the need for ecological infrastructure through protection, restoration and re-creation. The protection and recovery of priority species (considered likely to be those listed as species of principal importance under Section 41 of the Natural Environment and Rural Communities (NERC) Act 2006) is also listed as a requirement of planning policy.

In determining a planning application, planning authorities should aim to conserve and enhance biodiversity by ensuring that: designated sites are protected from harm; there is appropriate mitigation or compensation where significant harm cannot be avoided; measurable gains in biodiversity in and around developments are incorporated; and planning permission is refused for development resulting in the loss or deterioration of irreplaceable habitats including aged or veteran trees and also ancient woodland.

### ***The Natural Environment and Rural Communities Act 2006 and the Biodiversity Duty***

Section 40 of the Natural Environment and Rural Communities (NERC) Act 2006, requires all public bodies to have regard to biodiversity conservation when carrying out their functions. This is commonly referred to as the 'biodiversity duty'.

Section 41 of the Act requires the Secretary of State to publish a list of habitats and species which are of 'principal importance for the conservation of biodiversity'. This list is intended to assist decision makers such as public bodies in implementing their duty under Section 40 of the Act. Under the Act these habitats and species are regarded as a material consideration in determining planning applications. A developer must show that their protection has been adequately addressed within a development proposal.

## **LOCAL PLANNING POLICY**

### ***Mendip District Local Plan Part I***

The Mendip District Local Plan Part I is the key document outlining the long-term spatial vision for the district. The document includes policies which relate to biodiversity and nature conservation which are relevant to this report. Such policies are detailed below:

#### **Part I Policy DP5: “Biodiversity and Ecological Networks” states:**

*“The Council will use the local planning process to protect, enhance and restore Somerset’s Ecological Network within Mendip.*

- 1. All development proposals must ensure the protection, conservation and, where possible, enhancement of internationally, nationally or locally designated natural habitat areas and species.*
- 2. Proposals with the potential to cause adverse impacts on protected and/or priority sites, species or habitats are unlikely to be sustainable and will be resisted.*

*Exceptions will only be made where:*

- a. the impacts cannot be reasonably avoided.*

- b. *offsetting/compensation for the impacts can be secured.*
- c. *other considerations of public interest clearly outweigh the impacts, in line with relevant legislation.*

*Offsets as mitigation or compensation required under criterion b) will be calculated using Somerset County Council's Biodiversity Offsetting methodology."*

**Part I Policy DP6: "Bat Protection" states:**

*"Planning Applications for development on sites within the Bat Consultation Zone will require a 'test of significance' under the Habitats Regulations to be carried out. Applicants must provide, with their application, all necessary information to enable compliance with the Habitats Regulations (or their successor), including any necessary survey work, reports and avoidance / mitigation measures."*

**EFFECT OF LEGISLATION AND POLICY ON DEVELOPMENT WORKS**

A European Protected Species Licence (EPSL) issued by Natural England will be required for works likely to affect a bat roost or for operations likely to result in a level of disturbance which might impair their ability to undertake those activities mentioned above (e.g. survive, breed, rear young and hibernate). The licence is to allow derogation from the relevant legislation but also to enable appropriate mitigation measures to be put in place and their efficiency/success to be monitored. The legislation may also be interpreted such that, in certain circumstances, important foraging areas and/or commuting routes can be regarded as being afforded *de facto* protection, for example, where it can be proven that the continued usage of such areas is crucial to maintaining the integrity and long-term viability of a bat roost (Garland & Markham, 2008).

There are 17 species of bat breeding in England and Natural England issues licences under Regulation 55 of the Habitats Regulations to allow you to work within the law.

Licences are issued for specific purposes stated in the Regulations, if the following three tests are met:

- The purpose of the work meets one of those listed in the Habitats Regulations (see below);
- That there is no satisfactory alternative;
- That the action authorised will not be detrimental to the maintenance of the population of the species concerned at a favourable conservation status (FCS) in their natural range

The Habitats Regulations permits licences to be issued for a specific set of purposes including:

1. ***include preserving public health or public safety or other imperative reasons of over-riding public interest including those of a social or economic nature and beneficial consequences of primary importance for the environment;***
2. scientific and educational purposes,
3. ringing or marking
4. conserving wild animals

Development works fall under the first purpose and Natural England issues bat mitigation licences for developments.

**EUROPEAN PROTECTED SPECIES POLICIES**

In December 2016 Natural England officially introduced the four licensing policies throughout England. The four policies seek to achieve better outcomes for European Protected Species (EPS) and reduce unnecessary costs, delays and uncertainty that can be inherent in the current standard EPS licensing system. The policies are summarised as follows:

- Policy 1; provides greater flexibility in exclusion and relocation activities, where there is investment in habitat provision;
- Policy 2; provides greater flexibility in the location of compensatory habitat;
- Policy 3; provides greater flexibility on exclusion measures where this will allow EPS to use temporary habitat; and,
- Policy 4; provides a reduced survey effort in circumstances where the impacts of development can be confidently predicted.

The four policies have been designed to have a net benefit for EPS by improving populations overall and not just protecting individuals within development sites. Most notably Natural England now recognises that the Habitats Regulations legal framework now applies to 'local populations' of EPS and not individuals/site populations.