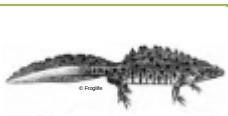


Inspection & Assessment in relation to Bats & Breeding Birds

March 2022

Ty Newydd
School Lane
Overton
LL13 0ES

National Grid Ref: SJ37394192



Document Title	Inspection & Assessment in relation to Bats & Breeding Birds
Issue no.	1.0
Prepared for	Blueprint Architectural Services Ltd
Prepared by	Tyrer Ecological Consultants Ltd

Surveyors	Mr. B. Richards Qualifying CIEEM
Author	Mr. B. Richards Qualifying CIEEM
Survey Date	25/02/2022
Reviewed by	Mr. J. Pescod Qualifying CIEEM
Review date	10/03/2022
Approved by	Mrs. K. Wilding CEnv MIEMA ACIEEM
Date of Issue	10/03/2022

Terms of use:

This report has been prepared by Tyrer Ecological Consultants Ltd with all reasonable skill, care and diligence within the terms of the instruction and permissions granted by the client. The results, conclusions and recommendations of this report are presented in line with the British Standard 42020:2013.

Tyrer Ecological Consultants Ltd have produced this report with all due integrity and adhere to the CIEEM Professional Code of Conduct, with the aim of upholding these objectives and the reputation of the profession.

We disclaim any responsibility to the client and others in respect of any matters outside the scope of the above.

This report is confidential to the client.

This report and contents therein are to be used only in conjunction with the Planning Application for which the report has been produced. It must not be used for any other purpose, copied, re-produced or sent to any other party other than the Local Planning Authority Department without the express permission of Tyrer Ecological Consultants Ltd. Furthermore the data contained herein must not be copied, re-produced or sent to any other party/organisation whatsoever without the express permission of Tyrer Ecological Consultants Ltd.

Tyrer Ecological Consultants Ltd will however consider forwarding data that is collected as part of its reports to the relevant wildlife records centre.

Executive Summary

As part of a proposed planning application at Ty Newydd, Overton, Tyrer Ecological Consultants Ltd carried out a daytime preliminary roost assessment in relation to bats with an inclusive inspection for breeding birds in February 2022. The survey was commissioned by Blueprint Architectural Services Ltd; proposals are understood to involve extension and alterations to the property.

Detailed methods, findings, conclusions and recommendations are presented throughout the report; however, the reader should be aware of the following Key points:

Bats: Each of the buildings at Ty Newydd have been determined to offer '**Moderate**' bat roost potential in accordance with Bat Conservation Trust - Bat Surveys for Professional Ecologists: Good Practice Guidelines, 3rd ed. (2016), and further surveys by way of dusk/dawn surveys are recommended to be carried out to establish if the building supports a bat roost. Based upon this categorisation, this report will recommend two suitably spaced dusk/dawn emergence/re-entry surveys in order to determine if bats are using any of the buildings as a roost.

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.		

Breeding Birds: In relation to common birds, House Sparrows are confirmed to be using the outbuilding B2 for breeding purposes, with at least four breeding pairs observed both on this building and traversing the site.

It is therefore recommended that any demolition and clearance works on site are carried out outside of the breeding bird season (March – August inclusive). For works undertaken within the breeding bird season, building B2, alongside any areas that can support nesting birds, should be checked by a professional Ecologist for nesting birds within 48 hours or less prior to works commencing. If birds are found nesting any works which may affect them would have to be delayed until the young have fledged and the nest has been abandoned naturally.

Biodiversity Enhancement: As a means of enhancement and aiding the design of the scheme in keeping with local and national planning policy considering biodiversity net-gain principles, the proposals may consider incorporating wildlife friendly provisions such as:

- *Native species only when landscaping / tree re-planting,*
- *Bird, bat, and invertebrate provisions, specifically to include a minimum of two Sparrow Terraces to compensate for habitat lost during the conversion of B2.*

Further information is provided within Appendix II.

Table of Contents

- 1. Introduction and Reasons for Survey**
- 2. Protected Species & Their Requirements**
- 3. Protected Species in Wrexham**
- 4. Survey Methodology**
- 5. Limitations**
- 6. Desk Study Results**
- 7. Field Study Results**
- 8. Conclusions & Recommendations**
- 9. Bibliography**

Appendix I: Site Photographs

Appendix II: Biodiversity Enhancement: General Recommendations

1.0 Introduction & Reasons for Survey

- 1.1 As part of a proposed planning application at Ty Newydd, Overton (see Figure 1.1), Tyrer Ecological Consultants Ltd carried out a daytime preliminary roost assessment in relation to bats with an inclusive inspection for breeding birds in February 2022. The survey was commissioned by Blueprint Architectural Services Ltd; proposals are understood to involve extension and alterations to the property.



Figure 1.1 – Proposed site plan and location plan (©Blueprint Architectural Services Ltd)

- 1.2 The aim of the survey was to ascertain if the building was of value to bats, whilst an assessment for birds was also carried out. If any potential roost features (PRF's) were found to be suitable for bats, or signs of use were observed, then more detailed surveys would be recommended i.e. dusk/dawn emergence/re-entry surveys during the main active season of bats which is May – August (extending into September).
- 1.3 If additional surveys are required following the initial site visit this report will outline the details of those further requirements.
- 1.4 If it was determined that bat(s) or their roost/place of rest/shelter will be subsequently impacted by the works then a European Protected Species Mitigation Licence (EPSML) from Natural Resources Wales would be legally required to proceed with the development.
- 1.5 If evidence indicated breeding birds may be impacted by proposals, tailored recommendations would be made accordingly, species pending.
- 1.6 As part of the local authority's planning policies and obligations to the Planning Framework, ecological surveys are generally required prior to planning permission being granted where protected/priority habitats and species are, or may be present, that could be affected by the proposals for which the application seeks consent. Where more detailed surveys are recommended by the ecologist, following an initial daytime investigation, then Local Planning

Authorities (LPA) on the advice of their ecological advisors, will not grant permission until such time that all relevant information is gathered.

- 1.7 In accordance with *Biodiversity Net Gain: Good practice principles for development* (CIEEM *et al*, 2019) the site visit also aims to identify enhancement opportunities for biodiversity in line with national and local planning policy.

2.0 Protected Species & Their Requirements

Bats

- 2.1 All British bats and their **roosts are afforded full protection under the Wildlife & Countryside Act (1981) (as amended) and are listed in Schedule 2 of the Conservation of Habitats and Species Regulations (2019) (EU Exit). When dealing with cases where a European Protected Species (all UK bats) may be affected, a planning authority is a competent authority within the meaning of the Regulation 7 of the Regulations, that has a statutory duty as the local authority to have due regard to the provisions of the Regulations in the exercise of its functions.
- 2.2 The presence of a species protected under European or UK legislation, or under Section 7 of the Environment (Wales) Act 2016 is a material consideration when a planning authority is considering a development proposal which, if carried out, would be likely to result in disturbance or harm to the species or its habitat and to ensure that the range and population of the species is sustained.
- 2.3 Uses of Buildings by Bats
- a) Summer breeding roost (May-August)
 - b) Hibernation roost (October-March)
 - c) Transitional or temporary roost (other months)
- 2.4 Roost selection is often closely correlated to suitable foraging habitat within a reasonable commuting distance from the roost and different sites are used depending upon insect densities and abundance; climatic conditions can also affect their ability to successfully forage. All British bats are insectivorous.

*** The term roost is generically referred to as a place that bat/s use for the any of the above reasons, however it should be noted that under the Conservation of Habitats and Species Regulations (2019) (EU Exit) (Regulation 43 (d) the term roost is not used but refers to "a breeding site or resting place of such an animal" and is afforded legal protection. The roost, breeding site or resting place of bats, which ever terminology is used is legally protected whether or not bats are in occupation.*

Birds

- 2.5 All wild birds, no matter how common, their eggs, young and nests, whilst being built or occupied, are protected under both the Wildlife and Countryside Act (WCA, 1981) and Natural Environment and Rural Communities Act (NERC Act, 2006). Birds listed on Schedule 1 of the WCA 1981, for example Barn Owl (*Tyto alba*), are afforded a greater level of protection protected also from disturbance.
- 2.6 Any work that would damage an occupied nest, eggs or young of breeding birds must be avoided; any damage to nests that may occur as a result of the development should be outside of the main breeding bird season (March-August). On occasions nests can become unoccupied during the breeding season but the status of the nest(s) should be determined by a suitably experienced ecologist before any damage takes place.

Policy

- 2.7 The Welsh Government policy document covering the land use context for using land sustainably is 'Planning Policy Wales, 11th Edition (2021)'. This document supports every strategy published by the Welsh Government and is supplemented by a variety of Technical Advice Notes (TANs) and any relevant circulars.
- 2.8 There are several plans, strategies and national, sub-regional and local policy statements which provide a framework for development in the Plan area. The Planning and Compulsory Purchase Act (2004) makes it a requirement for local planning authorities in Wales to prepare a Local Development Plan (LDP) for their areas.
- Wrexham Borough Council prepared a plan, namely the 'Wrexham Unitary Development Plan (1996 – 2011)', which was formally adopted in February 2005 and supersedes any previous development plans for the area. A new plan, the 'Wrexham Local Development Plan 2 (2013 - 2028)', which will replace the current adopted plan, is currently under review. Until this new plan is adopted, the Wrexham Unitary Development Plan remains in effect.
- 2.9 Planning authorities must therefore follow a step-wise approach to maintain and enhance biodiversity and build resilient ecological networks by ensuring that any adverse environmental effects are firstly avoided, or minimized, or mitigated, and as a last resort compensated for; enhancement must be secured wherever possible.
- 2.10 The priority for planning authorities is, therefore, to avoid damage to biodiversity and ecosystem functioning. Where there may be harmful environmental effects, planning authorities will need to be satisfied that any reasonable alternative sites, which would result in less harm, no harm or pro-gain, have been fully considered.
- 2.11 Planning authorities should ensure that features and elements of biodiversity value are retained on site, and enhanced or created wherever possible, by adopting best practice site design and green infrastructure principles. The provision of up-to-date ecological survey information will assist in this process. Where necessary, planning authorities should seek to modify the development proposal through discussion with the applicant at the earliest possible stage. Biodiversity and green infrastructure modifications should draw on the issues and opportunities identified in a preliminary assessment. In some circumstances, it will be appropriate to attach planning conditions, obligations or advisory notes to a permission to secure biodiversity outcomes.
- 2.12 When all other options have been exhausted, and where modifications, alternative sites, conditions or obligations are not sufficient to secure biodiversity outcomes, offsite compensation for unavoidable damage must be sought. This should normally take the form of habitat creation, or the provision of long-term management arrangements to enhance existing habitats and deliver a net benefit for biodiversity.

Where the adverse effect on the environment clearly outweighs other material considerations, the development should be refused.

- 2.13 The Environment (Wales) Act 2016 ("the Act") - requires local planning authorities to have regard to area statements in the development of Local Development Plans.

Part 1 of the Act promotes sustainable management of natural resources, with Section 6 stating:

"A public authority must seek to maintain and enhance biodiversity in the exercise of functions in relation to Wales, and in so doing promote the resilience of ecosystems, so far as consistent with the proper exercise of those functions."

- 2.14 This national focus on sustainably managing natural resources is echoed in Policy EC6 of the Wrexham Unitary Development Plan, which states:

“Measures to improve the biodiversity value of sites and enhance their natural conservation interest and landscape quality including the establishment of local nature reserves, will be supported.”

- 2.15 Figure 2.1 is a process model that surmises how ecological issues should be dealt with in the context of the planning process.

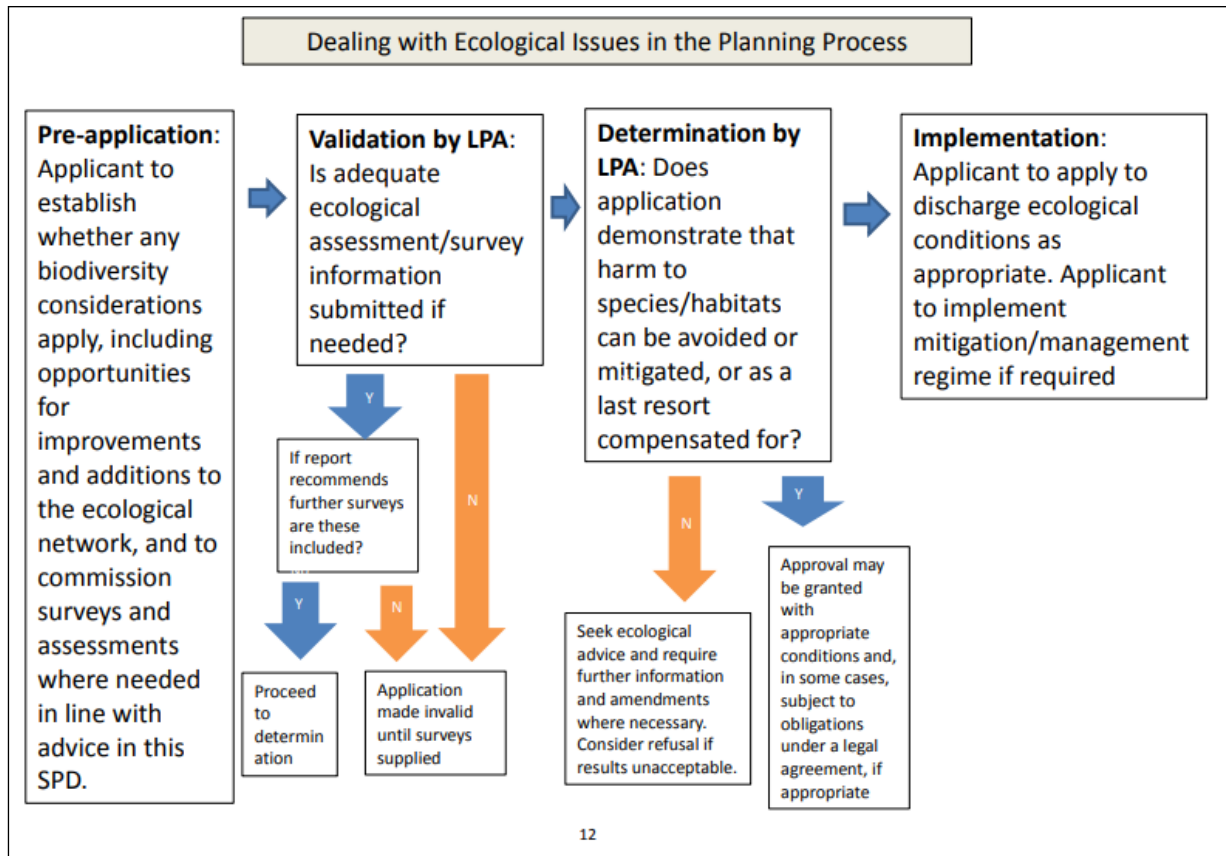


Figure 2.1 - Dealing with ecological issues in the planning process

3.0 Protected Species in Wrexham

- 3.1 Up to eleven bat species have been recorded in Wrexham, many of which use built structures for roosting. A variety of building types and features are utilised by bat species at different times of year ranging from occupied residential dwellings to disused barns and bridges. The most frequently encountered species is the Common Pipistrelle bat (*Pipistrellus pipistrellus*); its abundant status in Wrexham is mirrored throughout the UK.
- 3.2 The number of breeding Barn Owls (*Tyto alba*) within rural parts of Wrexham is moderately high across areas of countryside where suitable environs exist; they are constantly under threat from loss of habitat and nesting opportunities.

4.0 Survey Methodology

- 4.1 As part of the Inspection & Assessment for Bats & Breeding Birds report, a desk-top and field-based study is conducted. Methods for both components of the appraisal are given below.

Desktop Study

- 4.2 Prior to a site visit a desktop study was conducted using online resources to obtain information pertaining to any sites afforded statutory (e.g. SSSI) and non-statutory (e.g. LWS) designations within 2.0km of the site boundary. To do so, the Multi Agency Geographic Information for the Countryside (MAGiC – provided by DEFRA) was accessed to gather such information. This particular interactive mapping service can help to inform conclusions in the context of the study site and the proposed development.
- 4.3 Satellite imagery was reviewed using sources such as Google Earth (© 2021/22) to determine the nature of adjoining and extending habitats; such information aids in the understanding of how the site might interact with its surroundings ecologically and its value in that context, and how the development may impact at a wider scale.
- 4.4 A commercial data request to the Local Environment Records Centre serving the area – COFNOD - has not been sourced and is justified through application of the following recent guidance:

1) The Guidelines for Accessing, Using and Sharing Biodiversity Data in the UK (CIEEM, 2020) states:

“It is generally expected that a desk study, including a data search, will be a key part of the ecological surveys or reports produced to inform a planning application. Freely available web-based sources of data and contextual information should always be used; in some cases, it may be acceptable to not undertake a data search with the LERC or other relevant NSS or local interest groups, for example:

ii) Situations where the data search would be extremely unlikely to provide information needed to inform the assessment, due to the scale and location of the proposed development. The appropriateness of excluding a data search will need to be judged on a case-by-case basis as, in most situations, it will be essential to carry out such a search even if the development is very small or is likely to have a low impact. It can be very difficult to demonstrate that a data search would not have provided relevant information without obtaining and reviewing those data.

*iii) In some cases for Preliminary Roost Assessments of buildings in **low impact / small-scale scenarios**, such as an **extension to a residential property**, loft conversions (full or partial), installation of Velux/dormer windows, single modern agricultural or similar building conversion or demolition; however, it should not be assumed that data searches are never required for such scenarios and this must be judged on a case by case basis and justified accordingly.*

2) The Guidelines for Preliminary Ecological Appraisal (CIEEM, 2017) also states:

*“Very occasionally it might be possible to carry out a robust PEA without obtaining LERC/NBDC/CEDaR data; this will usually only apply to low impact or **small-scale projects** (e.g. by virtue of size, extent, duration of works, magnitude and locality), and should be determined on a case-by-case basis.”*

- 4.5 As exemptions as made **bold** above can be applied at the application site, in good practice, it is considered unnecessary to conduct a commercial data request following the desk study

effort and daytime assessment at this time which offers a proportionate level of survey effort, however, if a data search is considered to be necessary by the Local Authority to inform the ecological impact assessment following any further surveys recommended in this report, a proportionate data search should be commissioned with results interpreted into the conclusions and recommendations of a re-issued/updated report.

Field Survey

- 4.6 In context with the above, a diurnal inspection and assessment of the property, its outbuildings, and its immediate environment in relation to bats and breeding birds was conducted on 25th February 2022 in dry conditions (11°C) wind 1/12 (Beaufort scale), 10% cloud, by Mr. B. Richards Qualifying CIEEM, an Ecologist in training who has received extensive training in conducting Preliminary Roost Assessments and who also holds an MBiolSci in Biological Sciences (Zoology).
- 4.7 Bat Conservation Trust (BCT) - Bat Surveys for Professional Ecologists: Good Practice Guidelines, 3rd ed. (2016) states:
- “The guidelines should be interpreted and adapted on a case-by-case basis according to site-specific factors and the professional judgement of an experienced ecologist. Where examples are used in the guidelines, they are descriptive rather than prescriptive.”*
- 4.8 The bat and breeding bird survey was conducted in tandem; the buildings were inspected for potential places that may be of value to bats or breeding birds, and to determine if evidence of use by either group was present; the interior was assessed with the aid of a high powered torch for evidence of bat use which mainly includes bat droppings and/or prey items, or incidental presence of live or dead animals, for example, and also investigated for evidence of breeding birds which broadly involves a search for nesting materials, presence of pellets or accumulated faeces and/or dead juveniles/hatchlings, for example.
- 4.9 External elevations were investigated with the aid of high-powered torch and close focus binoculars (where necessary) for places that can be used as a roost by bats or as a means of ingress for bats and birds leading to areas of roosting/nesting potential. These features are typically referred to as potential roost features (PRFs) when concerning bats. All external features were able to be surveyed without constraint.
- 4.10 The surrounding habitat was also considered in terms of general suitability for bat and bird species associated with the local habitat types.
- 4.11 Trees on site were inspected for places that may be of value to bats and to determine if evidence of use was present; this typically involves a search for potential roost features along with an investigation of those features using a high-powered torch or close focus binoculars. Potential roost features can include woodpecker holes, rot holes, hazard beams, other vertical or horizontal cracks or splits in stems and branches, partially decayed lifted bark, knot holes, man-made holes, tear-outs, cankers in which cavities have developed, other hollows or cavities, including butt-rots, double-leaders forming compression forks with included bark, gaps between overlapping stems or branches, partially detached Ivy with stem diameters in excess of 50mm or bat/bird boxes. Trees (where present) were also checked for evidence of nesting birds and suitability for relevant species.
- 4.12 Criteria for roost assessment are based upon the determinants given in the Bat Conservation Trust - Bat Surveys for Professional Ecologists: Good Practice Guidelines, 3rd ed. (2016): (see Figure 4.1).

Table 4.1 Guidelines for assessing the potential suitability of proposed development sites for bats, based on the presence of habitat features within the landscape, to be applied using professional judgement.		
Suitability	Description Roosting habitats	Commuting and foraging habitats
Negligible	Negligible habitat features on site likely to be used by roosting bats.	Negligible habitat features on site likely to be used by commuting or foraging bats.
Low	A structure with one or more potential roost sites that could be used by individual bats opportunistically. However, these potential roost sites do not provide enough space, shelter, protection, appropriate conditions ^a 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 ^b). A tree of sufficient size and age to contain PRFs but with none seen from the ground or features seen with only very limited roosting potential. ^c	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 other habitat. Suitable, but isolated habitat that could be used by small numbers of foraging bats such as a lone tree (not in a parkland situation) or a patch of scrub.
Moderate	A structure or tree with one or more potential roost sites that could be used by bats due to their size, shelter, protection, conditions ^a and surrounding habitat but unlikely to support a roost of high conservation status (with respect to roost type only – the assessments in this table are made irrespective of species conservation status, which is established after presence is confirmed).	Continuous habitat connected to the wider landscape that could be used by bats for commuting such as lines of trees and scrub or linked back gardens. Habitat that is connected to the wider landscape that could be used by bats for foraging such as trees, scrub, grassland or water.
High	A structure or tree 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 ^a and surrounding habitat.	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 edge. High-quality habitat that is well connected to the wider landscape that is likely to be used regularly by foraging bats such as broadleaved woodland, tree-lined watercourses and grazed parkland. Site is close to and connected to known roosts.

^a For example, in terms of temperature, humidity, height above ground level, light levels or levels of disturbance.

^b Evidence from the Netherlands shows mass swarming events of common pipistrelle bats in the autumn followed by mass hibernation in a diverse range of building types in urban environments (Korsten et al., 2015). This phenomenon requires some research in the UK but ecologists should be aware of the potential for larger numbers of this species to be present during the autumn and winter in large buildings in highly urbanised environments.

^c This system of categorisation aligns with BS 8596:2015 Surveying for bats in trees and woodland (BSI, 2015).

Figure 4.1 - BCT guidelines extract

4.13 An assessment of the building was conducted when birds are within their breeding season (this is typically March-August inclusive). Elevations were inspected for evidence of birds that show a high dependency upon built structures, many of which are in a state of decline. These might include the following species for example:

- Starling (*Sturnus vulgaris*): Birds of Conservation Concern (BoCC) red status
- House Sparrow (*Passer domesticus*): BoCC red status
- House Martin (*Delichon urbica*): BoCC amber status
- Swift (*Apus apus*): BoCC red status

4.14 Additional to the site's capacity to support common species of bird, the area was subject to an assessment for capacity to support specially protected species such as Barn Owl, a species protected under Schedule 1 of the Wildlife & Countryside Act (1981) (as amended).

4.15 The results, conclusions and recommendations are based on a number of factors i.e.

- Practical experience of surveyor,
- Knowledge of bat/bird species relevant to the site location and geographical range,
- Nature of immediate/surrounding habitat in relation to foraging/commuting,
- Condition of the building,
- Presence/absence of a loft space or cellar and reasonable practicality of use,
- Presence/absence of roost potential,
- Value of roost potential – if present.

- 4.16 All aspects of the field survey were undertaken in line with government and CIEEM (2020) standing guidance during the COVID-19 pandemic.
- 4.17 The results, conclusions and recommendations of this report have been assessed by Mrs. K. Wilding, the Director of Tyrer Ecological Consultants Ltd, and her assessment is consistent with that of Mr. Richards.

5.0 Limitations

- 5.1 The survey was conducted in February 2022 which is outside of the active season of bats (May-September) at a time of year when bats are in hibernation. Whilst evidence of bats can be less apparent in this timeframe, the bat roost potential of buildings/trees and suitability of any potential roost features can be adjudged as conclusively as within the active season of bats, saving time and unnecessary delay to applicants; thus, frequently the assessment can be as conclusive as if carried out within the active season, though applicants should be aware of the risks. Survey timing is therefore not considered a constraint in this instance.
- 5.2 The survey took place outside the breeding bird season (typically March-September), therefore incidental breeding bird behaviour has a lower/negligible probability of being encountered. Suitability for breeding birds is readily identifiable all year round however, and often nesting material can attest to presence of breeding birds at buildings where they have nested. The timing of the survey is again not considered a constraint in this instance.
- 5.3 No access limitations were experienced on site and the surveyor was able to make a conclusive assessment of the bat and bird roost potential following the robust external and internal assessment.; therefore, having considered possible survey constraints, no significant limitations were experienced that might adversely influence the results, conclusions and recommendations of this report.

6.0 Desk Study Results

- 6.1 The existing dwelling Ty Newydd and associated buildings (referred to as “the application site”) is located within the small village of Overton, in close proximity to the A528, and sits approximately 9.3 kilometres south-east of Wrexham town centre (see Figure 6.1).



Figure 6.1 - Location of the application site (red line boundary) within the landscape (Source: Google Earth Pro 2021/22)

- 6.2 The immediate habitat is distinctly semi-rural, with typical associated infrastructure such as schools, pubs, and other local businesses. Immediate natural environs include large expanses of arable fields, semi-natural grassland and an area of broadleaved woodland approximately 200 metres to the west of the site. Also in close proximity are neighbouring residential properties, which come with associated landscaped gardens and hedges.
- 6.3 The extending environment is similar to that of the immediate, with arable agricultural land dominating the surrounding landscape. The closest major inhabited area is the town of Wrexham and Wrexham Industrial Estate to the north, and Ruabon to the west, which are linked to the site by a number of A and B roads. The application site is also surrounded by a variety of semi-natural habitats, with the aforementioned broadleaved woodland linked to the site via hedgerows and other linear features such as the River Dee, which is located approximately 800 metres away flowing from south to north, with typical associated habitats present along this waterway.
- 6.4 Collectively, the immediate and extending ecological features should be considered favourable, well-connected networks for bats and rural associated birds, most notably for the Common Pipistrelle and Brown Long-eared (*Plecotus auritus*) bats, with the variety of semi-rural outbuildings and broadleaved woodland providing an ideal habitat for either of these two species.

NB: *Where quality habitat is present close to buildings then the percentage use of those buildings, by bats, increases given that roost opportunities are available and vice versa.*

6.5 Three statutory designated sites feature within 2.0 kilometres (Table 6.1).

Table 6.1 – Designated sites in proximity to the survey area

Site name	Designation type	Interest features
Afon Dyfrdwy / River Dee 0.75 kilometres west	Site of Special Scientific Interest (SSSI)	This site forms SSSIs in both Wales and England and is notified for its transition through a range of river types from mesotrophic to eutrophic along its' duration, and also for the species it supports, which include Atlantic Salmon (<i>Salmo salar</i>), Otter (<i>Lutra lutra</i>), and Club-tailed Dragonfly (<i>Gomphus vulgatissimus</i>).
Afon Dyfrdwy a Llyn Tegid / River Dee and Bala Lake 0.75 kilometres west	Special Area of Conservation (SAC)	This site consists of broadleaved woodland, improved grassland, inland water bodies, salt marshes and mud flats. An Annex I habitat that is a primary reason for the designation of this site is: Water courses of plain to montane levels with <i>Ranunculus fluitantis</i> and <i>Callitriche-Batrachion</i> vegetation. Annex II species present include: Atlantic Salmon, Floating water-plantain (<i>Luronium natans</i>), Sea lamprey (<i>Petromyzon marinus</i>), Brook lamprey (<i>Lampetra planeri</i>), River lamprey (<i>Lampetra fluviatilis</i>), Bullhead (<i>Cottus gobio</i>) and Otter.
Cloy Brook Pastures 1.8 kilometres east	SSSI	An area of wet pasture on calcareous clay soil, with a variety of rare and nationally scarce flora such as Dyer's Greenweed (<i>Genista tinctoria</i>), Pepper-saxifrage (<i>Silene silaus</i>) and Spiny Restharrow (<i>Ononis spinosa</i>). This type of habitat survives only as isolated habitat in the area.

6.6 The application site falls within the impact zone for the aforementioned statutorily designated sites; it is however considered highly unlikely that the proposed development at will have any impact upon said nearby designated sites or the qualifying species species/habitats for which they have been designated due to the low impact nature of the works.

6.7 A search of LERC submitted records (in this case COFNOD) held by Tyrer Ecological Consultants Ltd revealed an absence of records pertaining to bats within a 2.0 kilometre radius of the site.

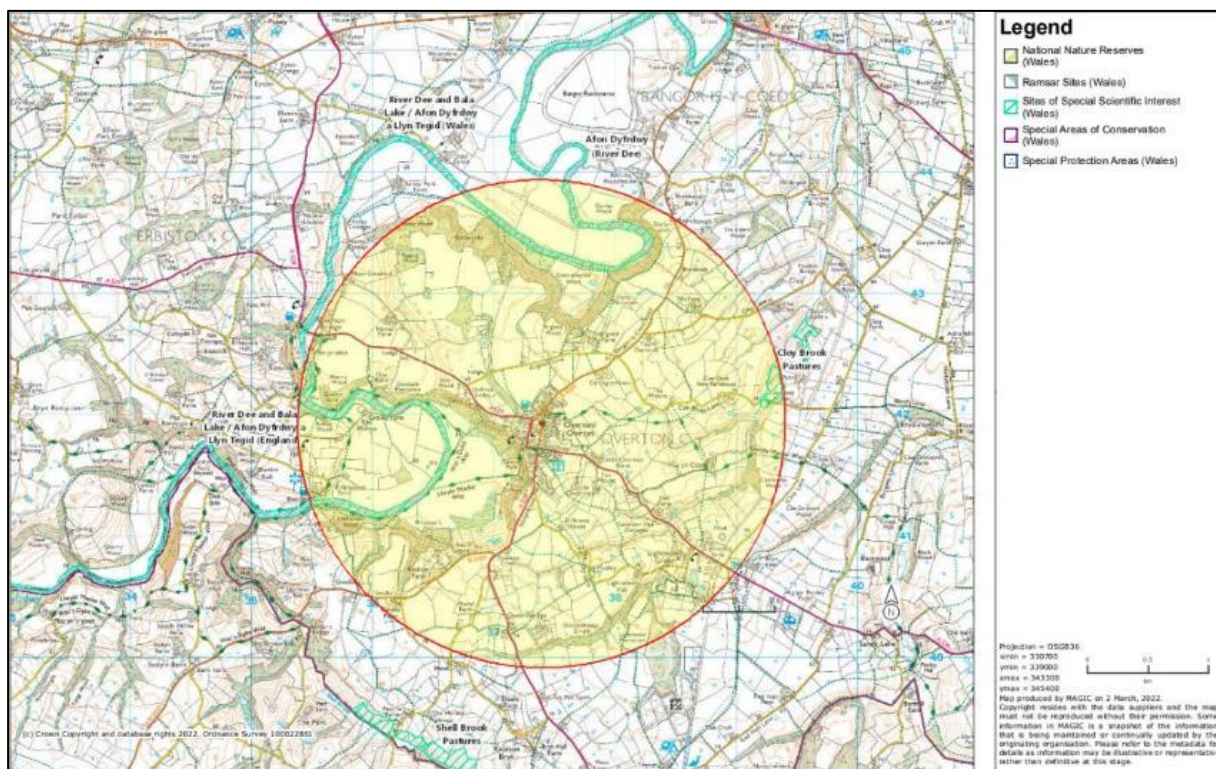


Figure 6.2 – Designated site data for the area within 2.0 kilometres of the application site (MAGiC Maps 2022)

7.0 Field Study Results

Bats

- 7.1 Figure 7.1 shows the respective locations of buildings B1-3 within the application site boundary; Table 7.1 below describes each building in respect to their potential to offer roost features for bats (both internally and externally) and includes further information regarding evidence or lack of evidence of bats where applicable.



Figure 7.1 – Locations of the buildings at Ty Newydd within the red line boundary (Source: adapted Google Earth Pro 2021/22)

Table 7.1 – Building descriptions at the application site with included bat assessments

B1
A detached, brick-built, 2.5 storey dwelling with a slate, pitched roof with a single-storey hipped roof extension on the southern elevation. Collectively, the building features components such as timber barge boards, windows and windowsills with a metal mesh behind a timber fascia. In respect of its condition, the surveyor is not qualified to assess structural state, however the aesthetic condition of the building was adjudged to be excellent. Internally, there is a single loft space present with a 2-metre apex, which encompasses the entire footprint of the building with the exception of the single storey extension. The space is utilised for storage, and is of trussed construction, dark, cold, draughty, and slightly cobwebbed with a few small areas of light ingress. Some areas of the loft space are boarded out, with rockwool insulation present across the entirety of the floor of the loft space. B1 is thus considered unsuitable for the breeding purposes of loft-dwelling species such as Brown Long-eared bats, with the confined space deemed to be incompatible with the behaviour of these bats, which prefer dark, unrestrictive, warm and draught-free loft spaces. No evidence of BLE bats was encountered. Traditional bitumen 1F underfelt is present below the slates, and there are areas where the underfelt has deteriorated slightly; where present this or other such roof linings typically improve a buildings value to bats notably for crevice-dwelling bats of the <i>Pipistrellus</i> genus, whereby the bats

roost between the lining and the roof cover material provided external opportunities exist. No evidence of such bats was found; however, this is often the case due to the crevice-dwelling nature of these species and a number of internal crevices are present within the stonework and in the wall cavities.

Externally there are a number of PRFs on the dwelling, notably at the roof verge level below a slate on the southern elevation, behind the fascia meshing on the southern-western boundary, behind the barge board at the north-western edge of the roof and along the gable on the northern elevation.

B1 is duly categorised as offering '**Moderate**' bat roost suitability based on the climatic conditions, presence of underfelt and the variety of potential roost features identified.

B2

B2 is a detached, brick-built two-storey building with a slate pitched roof. Collectively, this building features components such as a large timber door, timber soffit boxes and timber windows with stone sills. The aesthetic condition of the building was adjudged to be moderate, with slight damage to the brickwork noted as well as some vegetation overgrowth.

Internally, there is no separate loft space present, with the top floor of the building being utilised for storage; the top floor has a height of approximately 3 metres, is of trussed construction, and is naturally illuminated, non-draughty with a mild temperature. Bitumen 1F underfelt is present behind some areas of modern foam insulation, which is in turn covered by wooden planks. The building is therefore considered unsuitable for the breeding requirements of both loft- and crevice-dwelling bats, though the bitumen 1F underfelt provides crevice roosting opportunities, and no evidence of either type of bat was identified.

Externally, there are a variety of PRFs on the structure, with gap behind the soffit box on the northern elevation, at the roof verge on the eastern and western gable elevations, gaps in the brickwork on the western elevation, at the ridge tiles and a lifted tile on the south-western roof elevation. B2 is categorised as offering '**Moderate**' bat roost suitability based on the climatic conditions, presence of underfelt and the variety of potential roost features identified.

B3

B3 is of similar construction to B2, with the exception of having timber fascia rather than soffit boxes on the northern elevation and steel garage doors. The aesthetic condition of the building was adjudged to be poor, with notable gaps in the brickwork.

Internally, the loft space present is being utilised as storage, with a height of approximately 2 metres; the space is trussed, illuminated via a metal skylight and a timber window on the eastern elevation, cold, slightly draughty and slightly cobwebbed. Bitumen 1F underfelt is present beneath a lath and plaster covering on the interior of the roof, with this lath and plaster being in poor condition, with elements falling away from the wall and roof. No evidence of either loft- or crevice-dwelling bats was identified anywhere inside the loft despite a meticulous search.

Externally, there are a range of PRFs, most notably in the centre of the soffit box on the southern elevation, as well as at gaps surrounding the roof timbers on the eastern and western elevation, gaps around the window on the eastern elevation and gaps behind the interface of the northern fascia and the roof timber on the western elevation; B3 is thus categorised as offering '**Moderate**' bat roost suitability.

***NB:** The breeding roosts of Pipistrelle bats are proportionally higher in occupied residential dwellings where the warm, dry conditions favour the requirements of a maternity colony but other structures are also used, especially for hibernation or by male bats which do not need the same conditions as a maternity colony.*

- 7.2 There is a single immature tree within the site boundary, which was found to be absent of potential roost features regarding bats. Trees should be considered valuable to bats in a local context in that they provide valuable foraging/commuting habitat to bats, offering shelter cover and habitat connectivity when in foliage.

Breeding Birds

- 7.3 In relation to WCA Schedule 1 specially protected bird species such as Barn Owl, no evidence was found to suggest any form of site use or historic nesting, and no suitable access points exist at any building; risks to this and all other Schedule 1 bird species can be conclusively ruled out.
- 7.4 In relation to wider breeding birds, direct evidence of breeding by House Sparrows was found in B2, with individuals noted to be entering the property at the western gable end, and constant activity by both males and females around the application site. Within the top floor of B2, evidence of feeding was located, notably butterfly and moth wings on the floor, particularly along the internal western gable end.
- 7.5 The following bird species were encountered during the survey (see Table 7.2).

Table 7.2 - Bird species encountered during the survey

Species	Scientific Name	Status	Context (where relevant)
Jackdaw	<i>Corvus monedula</i>	Green	Heard calling from a neighbouring plot
House sparrow	<i>Passer domesticus</i>	S.41, LBAP, Red	Seen nesting in B2 on site, also utilising the garden and other buildings
Robin	<i>Erithacus rubecula</i>	Green	Commuted across the site
Blackbird	<i>Turdus merula</i>	Green	Seen foraging in the garden area
S.41 - a bird listed on section 41 of the Natural Environment Rural Communities Act 2006 (NERC Act) LBAP - A local biodiversity action plan listed species Q - Qualifying species of nearby SSSI site(s) SPEC - a species of conservation concern, Amber or Red, Red being the highest conservation priority			

8.0 Conclusions & Recommendations

- 8.1 Based upon the findings of the survey, covered through sections 6.0 – 7.0 of the report and supported by Appendix I, Buildings B1-B3 at Ty Newydd have been determined to offer **'Moderate'** bat roost potential in accordance with Bat Conservation Trust - Bat Surveys for Professional Ecologists: Good Practice Guidelines, 3rd ed. (2016), and further surveys by way of dusk/dawn surveys are recommended to be carried out to establish if the buildings support a bat roost.

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.

Figure 8.1 – Bat Conservation Trust extract on roost potential requirements

- 8.2 It is recommended that two dusk and/or dawn emergence/re-entry surveys are conducted at the site during the active season of bats (May - August, extending into September), in order to establish if/how the building is being used by bats, and if so, identify the species present, abundance, roost locations and flight lines around the site following emergence/re-entry. Six surveyors would be required to monitor the potential roost features described at the building, given that each of the three buildings have individual roost features that must be observed.
- 8.3 The Applicant should be aware that, in the event that the presence of roosting bats at the building is initially established, then an additional survey may be required and the granting of a Natural Resources Wales Development Licence (with relevance to European Protected Species) will be required for the development to legally proceed where bat roosts will be destroyed, altered, obstructed or damaged, or if bats will be disturbed or capture/exclusion is required prior to demolition. However, it should be noted that if a breeding roost is discovered then work that will result in any of the above actions cannot take place until after the breeding season, which is broadly May- end of August inclusive.
- 8.4 Natural Resources Wales provide online information and guidance concerning the requirement for EPSDL's and the following extract is included in that guidance:

When would works require a licence?

"A licence is required for anything that would be an offence under the Regulations (covered in section 2.9 of this report). For example, this could include works which would disturb (as defined in the legislation) bats, damage a bat roost, or damage or destroy a breeding site.

NRW can only grant a licence if the following three tests are met:

1) The purpose of the work is for preserving public health or public safety or other imperative reasons of over-riding public interest (IROPI) including those of a social or economic nature and beneficial consequences of primary importance for the environment,

2) There is no satisfactory alternative,

3) 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; this last test might require that the work is modified to avoid or minimise adverse effects (mitigation), or that an alternative breeding site/resting place or habitat is provided instead to safeguard the FCS (compensation). Either way, you will need the advice of an ecological consultant. Along with filling in the licence application form, the ecological consultant will need to write a method statement (within the EPSML) explaining how the work will be done to minimise any detrimental effects.

When might I work without a licence?

There might be situations in which you could continue without a licence. If the work can be organised in such a way that there would be no offences committed (i.e. no damage or destruction of a breeding site/resting place, no capturing, killing or injuring of individuals) then there is no need for a licence. This is a difficult area legally and your ecological consultant will be able to advise you further.

Developers should be aware that if work is held up or modified and there is a possibility that animals will be disturbed, or a breeding site / resting place will be unavailable to them (even if only temporarily), they should apply for a licence in good time.

Example: If a building with a bat roost requires re-roofing or repair work, you would not need a licence if:

- the existing materials are replaced like-for-like (i.e. similar type of roofing slates, similar felt or membrane),
- the same access points are retained and there are no structural changes made to the roost,
- the work is done whilst bats are absent and is completed before they would normally return to the roost.

- 8.5 If the consultant ecologist, on the basis of survey information and specialist knowledge of the species concerned, considers that on balance the proposed activity is reasonably unlikely to result in an offence being committed then no licence is required. However, in these circumstances Natural Resources Wales would urge that reasonable precautions be taken to minimise the effect on European protected species should they be found during the course of the activity. If protected species are found, cease the work until you have assessed whether you can proceed without committing an offence.

NB: Where more detailed bat surveys are recommended, following an initial investigation, then Local Authorities on the advice of their ecological advisors, may not determine the application until such time that all relevant information is gathered, i.e. by conducting dusk/dawn surveys. The advice that is provided by the ecological advisors is also in accordance with the obligations placed upon Local Authorities by way of its duties under the Conservation of Habitats & Species Regulations 2017. Therefore it would be prudent to make enquiries to the relevant departmental Planning Officer before submitting a Planning Application that includes an ecological survey report that recommends more detailed surveys.

- 8.6 Installation of overly harsh artificial lighting as part of any development that exceeds current levels may have a negative impact upon foraging/commuting bats in the landscape, particularly if increased light spillage occurs in areas of that are currently free from illumination. A bat-sensitive lighting plan is therefore recommended in order to avoid potential impacts to bats that may use the surrounding treelines. Several options to consider have been listed below, though the reader is referred to the Bat Conservation Lighting Guidelines for further information.

Appropriate luminaire specifications: Luminaires come in a myriad of different styles, applications and specifications which a lighting professional can help to select. The following should be considered when choosing luminaires.

All luminaires should lack UV elements when manufactured. Metal halide, fluorescent sources should not be used. LED luminaires should be used where possible due to their sharp cut-off, lower intensity, good colour rendition and dimming capability. Lighting should be directed to where it is needed, and light spillage avoided. This can be achieved by the design of the luminaire and by using accessories such as hoods, cowls, louvres and shields to direct the light to the intended area only. Planting can also be used as a barrier or manmade features that are required within the build can be positioned so as to form a barrier.

Predicting where the light cone and light spill will occur: There are lighting design computer programs that are widely in use which produce an image of the site in question, showing how the area will be affected by light spill when all the factors of the lighting components listed above are taken into consideration. This should be a useful tool to inform the mitigation process.

Light levels: The light should be as low as guidelines permit. If lighting is not needed in any particular area, do not light. Numerous software programmes are currently available which can be used inform lighting plans, demonstrating how lighting decisions will illuminate a site.

Please refer to the 'Landscape and urban design for bats and biodiversity' (Gunnell et. al., 2012, Bat Conservation Trust) Guidance Note 8 'Bats and Artificial Lighting' 2018, Bat Conservation Trust for further information.

- 8.7 No impacts are applicable in relation to any Sch.1 (WCA) specially protected bird species such as Barn Owl and no further surveys or recommendations are necessary in relation to specially protected birds at this time.
- 8.8 In relation to common birds, House Sparrows are confirmed to be using the outbuilding B2 for breeding purposes, with at least four breeding pairs observed both on this building and traversing the site. These birds are colonial nesters, preferring to be amongst other individuals of their species, and often remain faithful to their nest and breeding partner for life. The main nesting season is from March – August, usually laying two or three clutches, however they can lay a fourth clutch and therefore extend their breeding season in a good year.
- 8.9 It is therefore recommended that any demolition and clearance works on site are carried out outside of the breeding bird season (March – August inclusive). For works undertaken within the breeding bird season, building B2, alongside any areas that can support nesting birds, should be checked by a professional Ecologist for nesting birds within 48 hours or less prior to works commencing. If birds are found nesting any works which may affect them would have to be delayed until the young have fledged and the nest has been abandoned naturally.
- 8.10 Point 3.24 of the British Standards Publication 42020:2013 defines a professional ecologist as *"a person who has, through relevant education, training or experience, gained recognised qualifications and expertise in the field of ecology and environmental management."*

NB: *All wild birds (with only minor exceptions) and their nests whilst being built or containing eggs or dependant young are protected from destruction, damage and disturbance under the Wildlife & Countryside Act 1981 (as amended). It is a punishable offence to interfere in any way with an active nest.*

8.11 As a means of enhancement and aiding the design of the scheme in keeping with local and national planning policy considering biodiversity net-gain principles, the proposals may consider incorporating wildlife friendly provisions such as:

- Native species only when landscaping / re-planting,
- Bird and invertebrate provisions, specifically to include a minimum of two Sparrow Terraces to compensate for habitat lost during the conversion of B2.

Further information is provided within Appendix II.

9.0 Bibliography

- **Bat Conservation Trust (BCT)**, 2018. *Bats and artificial lighting in the UK: Bats and the Built Environment series*. Available from: www.theilp.org.uk/documents/guidance-note-8-bats-and-artificial-lighting/
- **CIEEM et al**, 2019. *Biodiversity Net Gain: Good practice principles for development*. Available from: www.cieem.net/data/files/Publications/Biodiversity_Net_Gain_Principles.pdf
- **CIEEM**, 2016. *Guidelines for Ecological Impact Assessment in the UK and Ireland*, 2nd edition. Available from: www.cieem.net/data/files/Publications/EcIA_Guidelines_Terrestrial_Freshwater_and_Coastal_Jan_2016.pdf
- **CIEEM**. 2020. *Guidelines for Accessing, Using and Sharing Biodiversity Data in the UK*. 2nd Edition. Chartered Institute of Ecology and Environmental Management. Winchester, UK
- **CIEEM**, 2017. *Guidelines for Preliminary Ecological Appraisal*, 2nd edition. Available from: www.cieem.net/data/files/Publications/Guidelines_for_Preliminary_Ecological_Appraisal_Jan2018_1.pdf
- **Collins, J** (ed.), 2016. *Bat Surveys for Professional Ecologists: Good Practice Guidelines*, 3rd edition. The Bat Conservation Trust, London.
- **Communities & Local Government (C&LG)**, 2018. *National Planning Policy Framework*. Available from: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/6077/2116950.pdf
- **Gunnell, K. Grant, G. and Williams, C.** 2012. 'Landscape and urban design for bats and biodiversity'. Bat Conservation Trust.
- **Magic Maps Application**, 2022. Available from: www.natureonthemap.naturalengland.org.uk/MagicMap.aspx
- **Mitchell-Jones, A.J. and McLeish, A.P.** (Eds) (2004). *Bat Workers' Manual*, Joint Nature Conservation Committee, Peterborough.

Appendix I: Site Photographs



Plate 1 – *Character of the eastern side of the main dwelling B1*



Plate 2 – *Southern aspect showing single storey hipped rooved extension*



Plate 3 – *A gap below the roof tile on the southern elevation*



Plate 4 – *Gap behind the soffit meshing on the southern-western interface*



Plate 5 – West facing elevation



Plate 6 – North facing elevation



Plate 7 – *Gap behind barge boards on the northern elevation*

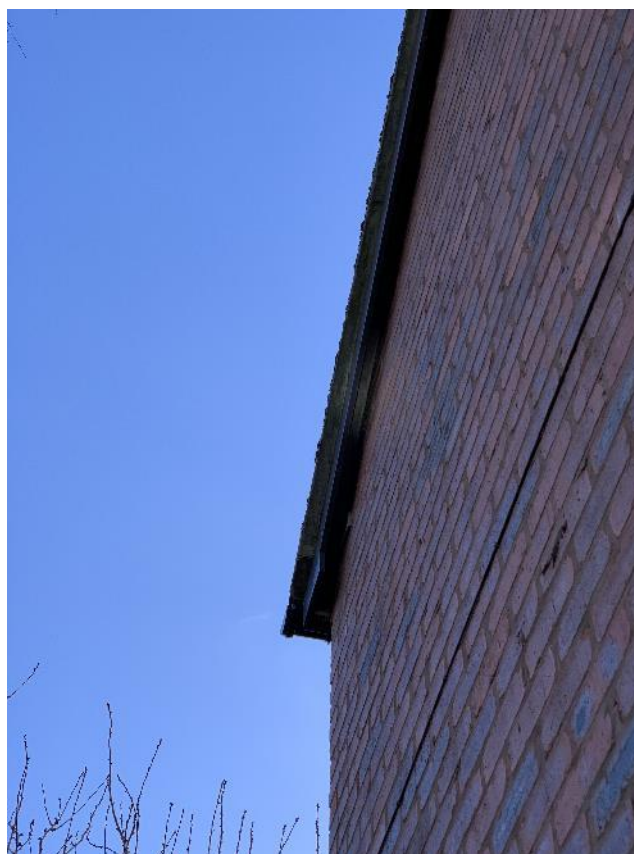


Plate 8 – *Further gap beneath barge board on the northern elevation*



Plate 9 – *Internal character of the loft of B1*



Plate 10 – *Evidence of deterioration in bitumen 1F underfelt*



Plate 11 – *North facing aspect of Building B2*



Plate 12 – *Gap behind soffit on the northern elevation*



Plate 13 – West facing elevation, with a number of indicative entry points along gable



Plate 14 – House sparrow using the site, circled



Plate 15 – *Eastern elevation of B2, with gap behind soffit circled*



Plate 16 – *Southern elevation of B2*

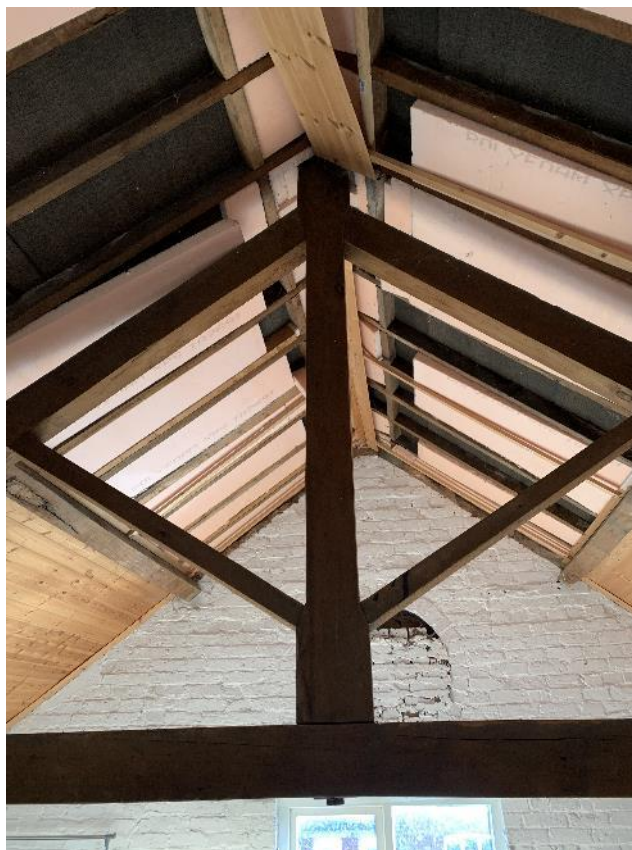


Plate 17 – *Internal character of the 'loft' space in B2*



Plate 18 – *Indicative feeding remains found within B2*



Plate 19 – *Southern elevation of B3, showing steel doors*



Plate 20 – *Gap behind soffit box on southern elevation*



Plate 21 – *Eastern elevation of B3, with entry points in the brickwork, along the gable and surrounding the timbers*



Plate 22 – *Gap above window in the brick lintel*



Plate 23 – *Northern elevation of B3 with ivy present and gaps behind timber fascia*



Plate 24 – *Eastern elevation with potential roost features*



Plate 25 – *Laff and plaster loft space with bitumen 1F present beneath*

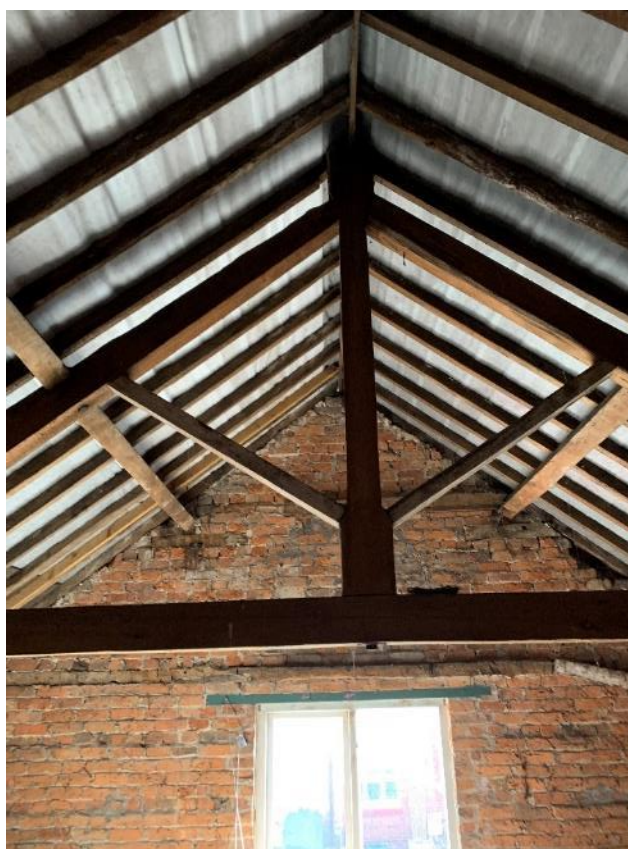


Plate 26 – *Internal character of the loft space in B3*

Appendix II: Biodiversity Enhancement: General Recommendations

Indicative Enhancement

Breeding Bids - House Sparrow

The Sparrow Terrace has been designed to help redress the balance of falling House Sparrow numbers. The current UK population is now half of what it previously was in 1980 and this is widely attributed to habitat destruction and lack of suitable nesting spaces. House Sparrows are social birds and like to nest in company, therefore, this terrace provides ideal nesting opportunities for three families. The terrace can be fixed on to the surface of a suitable wall or incorporated into the wall. It is suitable for all types of buildings.



Breeding Birds - Other

This traditional design has proved to be highly effective in attracting Robins, as well as other small species such as Black Redstart, Spotted Flycatcher and Wren. It is designed to be installed on the walls of houses, barns, garden sheds or other buildings and should be hung so that the entrance is to one side (at an angle of 90° to the wall). The front panel can be easily removed for cleaning.

This type of box should not be made conspicuous on a tree or bush because small predators can enter through the unprotected opening. By hanging on a wall, predators won't be able to reach the box. Alternatively hide the box in Ivy, Honeysuckle or other climbing plants.



Invertebrates - Bee bricks

The Bee Brick can be used in place of a standard brick or block in construction to create habitat for solitary bees. Alternatively, it can be used as a standalone bee house in your garden or wild patch. It will provide much needed nesting space for solitary bee species such as red mason bees and leafcutter bees, both of which are non-aggressive.

Each Bee Brick contains cavities in which solitary bees can lay their eggs before sealing the entrance with mud and chewed-up vegetation. The offspring will emerge the following spring and the cycle will begin again. Each cavity goes part way into the brick, which is solid at the back. Bee Bricks should be placed in a warm sunny spot on a south-facing wall at a minimum height of 1m, with no vegetation obstructing the holes. It is highly recommended that bee-friendly plants should be located nearby so that the bees using the bricks have food, otherwise it is unlikely that the brick will be used.

Available in a choice of four colours: white grey, dark grey, yellow and red.

Specification

- * Material: Concrete
- * Origin: Cornwall, UK
- * Dimensions: W 215mm x D 105mm x H 65mm
- * Weight: 2.9kg
- * Colours: White grey, yellow, dark grey and red



Native Planting and/or Landscaping

New feature landscaping should incorporate native woody plants as opposed to non-native species that are of significantly less benefit to biodiversity. Species such as Blackthorn (*Prunus spinosa*), Honeysuckle (*Lonicera periclymenum*), Rowan (*Sorbus aucuparia*), Guelder-rose (*Viburnum opulus*) and Hawthorn (*Crataegus monogyna*) are native and will provide a valuable resource for a myriad of wildlife as opposed to non-native, exotic species which are generally much less effective, particularly to pollinator groups including bees, butterflies and moths.

Suitable Trees	Suitable Woody Shrubs
English Oak (<i>Quercus robur</i>)	Hawthorn (<i>Crataegus monogyna</i>)
Rowan (<i>Sorbus aucuparia</i>)	Honeysuckle (<i>Lonicera periclymenum</i>)
Wild Service Tree (<i>Sorbus torminalis</i>)	Guelder Rose (<i>Viburnum opulus</i>)
Silver Birch (<i>Betula pendula</i>)	Elder (<i>Sambucus nigra</i>)
Ash (<i>Fraxinus excelsior</i>)	Wild Privet (<i>Ligustrum vulgare</i>)
Goat Willow (<i>Salix caprea</i>)	Blackthorn (<i>Prunus spinosa</i>)
Beech (<i>Fagus sylvatica</i>)	
Wild Cherry (<i>Prunus avium</i>)	