



Template Method Statement to be used within a Bat Development Licence Application

This template Method Statement is to be used to form part of your Licence Application for a European Protected Species Development Licence. It will be used to determine the impact of the application on the favourable conservation status of the species concerned (Regulation 55(9) (b) of the Conservation of Habitats and Species Regulations 2017). It must be prepared by a consultant ecologist or other suitably qualified person. You are strongly advised to refer to the Bat Mitigation Guidelines¹, and The Bat Survey Guidelines (3rd Edition). Please submit your Application and supporting Method Statement electronically to the contact details provided below.

Please note as of the 1st March 2018 the declaration box found at the end of this template must be included on any Method Statements submitted in support of a licence application, and must be signed and dated by the applicant and ecologist. Any application containing a Method Statement without this declaration will be rejected.

Contact Details

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Method Statement Title:	1074-The Old Croft, Holt
Method Statement Version Number:	1
Method Statement Issue Date:	20/01/2024
Site Address:	The Old Croft, Green Street, Holt, Wrexham, LL13 9JF

¹ Bat Mitigation Guidelines (IN136) available to download from the Natural England website

Background and Supporting Information

A Executive Summary. No more than one side of A4

Proposals have been put forward for the extension, refurbishment, and re-slating of the original roof at The Old Croft, Holt. The ecological surveys were undertaken by Leigh Ecology Ltd, 12 June 2023 which covers the emergence surveys undertaken on the 9 May and 30 May 2023. The emergence surveys confirmed emergence for 1 Common Pipistrelle and 1 Soprano Pipistrelle. The emergence survey confirmed the access points being used for both individuals. An addendum report was produced by EDC to cover mitigation enhancement Sept 2023.

Prior to stripping the roof, a pre works internal inspection will be undertaken by the retained licensed ecologist. The work force will be inducted and the retained ecologist will be resident on site whilst critical elements are removed.

The proposed works entail the construction of an extension to the rear of the property, refurbishment of the existing structure and removal and replacement of the existing slates, the ridge tiles and abutting lead works, flashings etc. Removal of the plaster tearing and existing battens, repair, and replacement of any decayed elements of the timber structure. On making good of the structure a new slated felt and battened roof is to be installed. The sarking felt membrane will be of the F1 type bitumen BS747. The felt will be laid with a drape between the rafters and the battens will be treated with an approved low mammalian toxicity preservative. The original bat access points are to be detailed and retained.

It is considered that the impacts are short term with no medium to long-term having impacts being identified as negligible and potentially beneficial impact on the favourable conservation status to the species recorded on site.

B Introduction

B.1 Background to activity/development

Include a brief summary of what the proposed activity is and why it is necessary.

The existing building is an existing dwelling with formal gardens to the rear and front. The Old Croft is presently unoccupied. The house is in a single ownership and constructed in solid masonry circa late 1800's. The style and layout are typical of the local vernacular for croft/dwelling of this period.

The proposals are to form a two storey and single storey extension to the rear of the property, undertake a full refurbishment of the existing property including reroofing the original roof structure.

The existing roof has come to the end of its life and is required to be replaced to ensure the integrity of the weatherproofing of the historic building going forward.

To enable these works to be undertaken lawfully a license will be required.

B.2 Full details of proposed works on site that are to be covered by the licence

Please ensure sufficient detail is provided on the proposed works e.g. barn/loft conversion to new dwelling, demolition of buildings, re-pointing of bridges and tunnels, lime kilns etc. Include the current status of planning permission or other consents (if applicable) and any outstanding conditions/reserved matters. Include timescales and order of work.

The proposed works entail removal of the existing slates, clay ridge and flashings etc. Removal of the plaster tearing and existing battens, repair, and replacement of any decayed elements of the timber structure. On making good of the structure a new slated felt and battened roof is to be installed. The sarking felt membrane will be of the F1 type bitumen BS747. The felt will be laid with a drape between the rafters and the battens will be treated with an approved low mammalian toxicity preservative. The replaced ridge tiles will be bedded on lime mortar as original. The original bat access points will be detailed and retained as identified at survey.

B.3 Actions requiring licensing,

Eg disturb, capture, damage or destroy breeding site or resting place. Briefly explain why these actions are necessary.

The works will require the roof structure to be removed to the recorded roost area and essential repair and replacement works will then be undertaken before the roof finishes are reinstated. The reinstatement works will be as the original detailing and finishes. As part of the works, the roost access points will be temporarily lost as well as the roost area being disturbed. The temporary loss and exclusions will need the cover of a license to enable the works to be lawful in accordance with the legislation.

C Survey and site assessment

C.1 Existing information on the bat species at the survey site.

Provide records from local environmental records centres, local bat groups, and previous survey work by the applicant or others. Include records from within 2km (or a larger area depending on the scale of the scheme & the species involved - see Bat Survey Guidelines 3rd Ed)

The initial assessments were undertaken by Leigh Ecology June 2023, the report has been imported to the document within section **K.1** Pre-existing survey reports

Pre survey data is as follows:-

Bat *Chiroptera* – There are no records for this taxon group within 2km of the site.

The following species are recorded at both local and at a county level: -

Pipistrelle *Pipistrellus pipistrellus/pygmaeus*
Brown Long-eared *Plecotus auritus*
Lesser Horseshoe *Rhinolophus hipposideros*
Daubenton's *Myotis daubentonii*
Whiskered/Brandt's *Myotis mystacinus/brandtii*
Natterer's *Myotis nattereri*
Noctule *Nyctalus noctula*
Serotine *Eptesicus serotinus*

C.2 Statutory sites notified for the species (SSSIs or SACs) within 10km

None identified see above inserted report

C.3 Objectives of the survey.

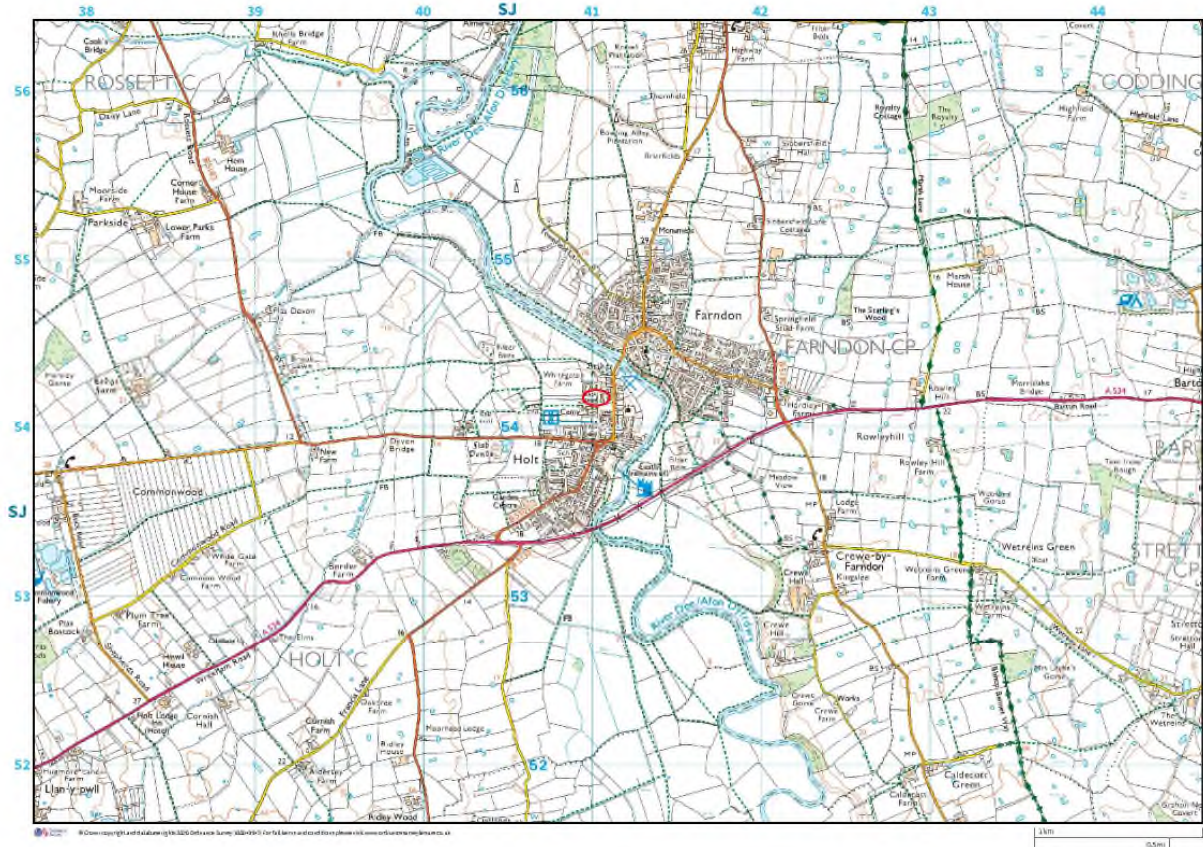
E.g., to determine presence/absence of bats, bat usage of site (e.g., maternity, hibernation, night roosts; foraging, commuting, swarming sites).

Walkover and a building assessment to identify any potential roost or foraging habitat within the survey area. The surveys included an internal inspection of the roof voids to the areas being affected by the work

proposals. The objective of the survey was to categorize the types of roosts, if identified, to enable the correct and proportionate mitigation to be implemented to negate the impacts identified.

C.4 Scaled plan/map of survey area

This should be of appropriate scale and orientation with integral or separate location map at 1:50,000 or 1:25,000 scale and aerial photographs.



Location plan attached 1:25,000

C.5 Site/habitat description (relevant to bats)

This should be based on daytime visits (to include description of roost and habitat relevant to bat commuting/foraging behaviour). Include annotated photographs if applicable and aerial photographs if available (to show habitat connectivity).

See imported survey above section K.1 Pre-existing survey reports

C.6 Field survey(s).

Include survey method (emergence counts, dawn surveys, site inspections), timings (day/evening), weather conditions (wind, rain, temperature – tabulated for multiple survey visits), personnel involved (provide individual licence numbers, if held) and details of experience/competence in this type of work, and equipment used (type of bat detectors and logging equipment). Also include any constraints and justifications for departures from best practice.

A copy of the bat activity report is attached to this document in K.1. The findings of the report was the presennce, emergence of two individual bats, of two species Soprano and Common Pipistrelle. Two emergence surveys were undertaken during the month of May 2023

The mitigation report was undertaken by, by Tim Hodnett (NRW licence number S092529/1)

C.7 Survey Results.

Summarise findings in table form (if appropriate); provide clear, annotated, and cross-referenced maps/plans/photographs to show roost locations, flight lines, access points, dimensions of existing roosts etc.). Raw data must be appended, including samples of sonograms, results of DNA analysis of droppings.

Evidence of use by bats was identified by undertaking emergence surveys May 2023. The emergence points were recorded.

C.8 Interpretation/evaluation of survey results (See Bat Mitigation Guidelines section 5.8 and Bat Survey Guidelines Ch11)

Provide count/estimate of bat numbers, status of site (e.g., hibernation, maternity or feeding roost, swarming site etc), roost significance, constraints on survey (e.g., time of year, cold weather, access problems – justify as necessary).

The results of the survey have been interpreted and the classification of roots is as follows:-

The loft space is classified as a night roost for single Soprano and Common Pipistrelle bats.

The roost is not classed as breeding or major hibernation site.

D Impact assessment – potential impacts in absence of mitigation/compensation. See Bat Mitigation Guidelines (section 6.2) and Wray et al (2010) ²

D.1 Short-term impacts: disturbance

E.g., noise, vibration, dust, lighting, access, or obstruction due to scaffolding and plastic sheeting.

The proposed works will impact on the short-term disturbance for the bat species identified due to temporary loss of access in some cases.

D.2 Long-term impacts: roost modification

E.g., new entrances (including human access e.g. for servicing/maintenance), change in size of roost space, changes in airflow etc., temperature, and humidity. Note that impacts can be positive or negative as this is in absence of mitigation.

On reinstatement the roof void will be returned to its existing layout, access, size etc. no long-term impacts identified.

D.3 Long-term impacts: roost loss.

Impact on different species populations to be taken into account at local, regional, and national level.

N/A

D.4 Long-term impacts: fragmentation and isolation.

E.g., loss of linear features such as hedges, tree lines, increased lighting, severance of flight lines by roads/rail lines.

N/A

D.5 Post-development interference impacts.

E.g., extra street lighting, use of loft space as storage.

² Wray, S., Welss, D., Long, E. & Mitchell-Jones, T. (2010) Valuing bats in ecological impact assessment. In Practice, No 70, Institute of Ecology and Environmental Management

No variation therefore no post interference impacts

D.6 Predicted scale of impact on species status at the site, local county, and regional levels.

Include a scaled plan/s showing location and extent of vegetation to be cleared in the context of the current site, results of the survey information, bat exit points and flight routes etc

The predicted scale of impacts is considered to be negligible during the refurbishment stage. Following the completion of the works the roost will be as recorded pre works proposals going forward resulting in the retention of the favourable conservation status of the species identified at a local and national level.

Delivery Information – Mitigation, compensation, and monitoring

Description of how the impacts will be addressed in order to ensure no detriment to the maintenance of the population at a favourable conservation status.

E Works to be undertaken

Please identify which works will be undertaken or supervised by a licensed ecologist

E.1 Capture and exclusion (if applicable).

Timings, effort, methods to be employed, care of bats, release sites etc. Include diagrams to show capture/exclusion apparatus if non-standard techniques are proposed. The method statement should also include contingency plans for dealing with any bats found during the course of the works.

An internal inspection of the buildings will be undertaken prior to the construction works to ensure no variation to survey. If individual bats are identified at survey the individual bats will be removed and placed in a temporary artificial roost placed adjacent to the works area. i.e., wall mounted bat box. Any work that could disturb bats will be undertaken outside of hibernation and not in periods of cold weather recording average levels below 5 degrees Celsius.

The areas of high potential for use by crevice dwelling bats will be taken apart by careful destructive search methodologies. The works will be overseen by the retained ecologist.

E.2 Bat roosts and habitat

E.2.1 In-situ retention of roost(s)

Provide details of all re-roofing works for example, replacement of tile type, specification of roofing membrane, use of insect guards, timber treatment; also include addition or changes in insulation and any impact on temperature/humidity. Explain how roost entrances will be retained and if purpose-built entrances are required a scaled drawing of their design is required. Any enhancements to the roosts such as crevice provision should also be detailed.

Details have been developed with the client to reflect the bat friendly construction detailing and material usage during the refurbishment works. The work and materials being used define a traditional approach similar to the existing detailing and finishes. The only variation in some cases of the roof works will be the introduction of sarking. The sarking specified will be the approved 1F bitumen roofing felt (BS737) slaters felt. All roofing timbers will be pre treated offsite with proprietary low mammalian toxicity preservatives. All timbers used will have been air dried to ensure no surface wetness prior to use.

E.2.2 Modification of existing roost(s)

Include dimension details, scale drawings of the roost and access points, orientation. State which services will be incorporated in the roost that might require regular servicing, for example, lift winding gear, electrical or plumbing services, gas boilers; partitioning of voids where a large property is being converted to a number of units, etc.

N/A no modification is proposed.

E.2.3 New roost creation (including bat houses and bat boxes)

Include dimension details including access points, location details, materials to be used e.g., timber, sarking felt, etc., aspect, justify variation from the original roost. Diagrams of widely available standard bat box designs are not required; just refer to bat box name and reference number, e.g., FF 1 Schwegler.

N/A

E.2.4 Maintenance &/or modification of new and existing habitat

Include details of measures to ensure that existing bat habitat (e.g., vegetation features close to roosts and/or used as flight lines; foraging habitat) will be retained and not damaged during construction. For new or modified habitat, specify design, habitat type, planting schemes & locations, provenance of imported plants, consideration of biosecurity impacts.

The habitats and the retained access for crevice dwelling bats are to be retained as existing. This is to maintain the diversity of roosts available on the site and to maintain the existing connectivity to and from the site.

E.2.5 Scaled maps/plans

To show proposals/mitigation outlined above in relation to existing and proposed habitat features. A GIS data layer may be included with your application to illustrate locations of roosts and features in E.2.1 to E.2.3.

As identified at survey

E.3 Mechanisms for ensuring delivery of mitigation and compensation measures

Include measures to ensure compliance with this method statement

The initial works and mitigation will be overseen by the ecological consultants for the duration of the works and for the first season monitoring to ensure compliance under the license agreement. The monitoring plan is to be adopted and that it should apply to the next 2 years, (from May 2024) but this should include the site owners or their successor in title or future occupier' in the event that the site management and control of the site is taken over by a third party within the next 3 years.

A compliance audit scheme will be undertaken to demonstrate compliant implementation of the provisions of the Method Statement and derogation license conditions. To facilitate and inform this assessment, specified parameters (performance indicators), which are listed below, will be used to assess component and overall performance of this project. This assessment will then indicate whether performance is satisfactory and in compliance with legal or other requirements or conditions.

No	Requirement	Performance Indicator	Pass (Yes/No)
1	Licence available for inspection by any police constable, employee of the Welsh Assembly Government or employee of the Countryside Council for Wales or authorised persons on demand.	Licence available is available for inspection on site.	
2	Before starting work the licensee will advise NRW Species Officer (Matthew Ellis) of the date the works will start, and maintain liaison throughout the	Written or electronic documentation of notification to NRW of the start date for site works.	

The Conservation of Habitats and Species Regulations 2017

	works.	Document in respect of formal notification is available for inspection	
3	No agent of the licensee shall act under licence unless they are in possession of a letter signed by the licensee appointing them by name as the duly accredited agent of the licensee for the purposes of this licence, and shall carry with them the said letter and a copy of this licence and shall produce them to any police constable or employee of the NRW or other authorised person on demand.	All relevant accredited agents have copies of licence holder's letter of authorization (as written by the license holder). Random check of 3 no. contractors to check completion and distribution of authorisation letters.	
4	A suitably experienced licensed ecologist will be appointed and retained during the life time of this License, to provide on-site advice.	Ecologist adviser retained on site: Evidence to be obtained from licence holder in respect of duration of ecological contracts	
5	Prior to the start of any works on site, all site workers will be inducted by the protected species specialist. This induction will cover the legal status of the species, the method of working, and action to be taken if protected species are encountered.	All contractor or sub-contractors working on site to receive ecological induction. Evidence: Is there evidence available to demonstrate that ecological induction has been completed, e.g., checking induction log books?	
6	Implementation of surveillance or monitoring of schemes, during and post development.	6 (1) Has identified or required implementation of surveillance or monitoring been undertaken during the implementation phase of the project and results submitted to NRW 6 (2) Has identified or required implementation of post project surveillance or monitoring been undertaken and results submitted to NRW, COFNOD and NBN gateway	
	Following completion of mitigation works, a bat specialist to inspect the building to ensure have been carried	Have mitigation works have been carried out as specified in the	

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	out as specified in plans or in the method statements	method statement or plans?	
7	Following completion of each phase of compensation/mitigation works, the bat specialist will inspect the building to confirm bat roost safeguard or Construction; and that that exit points have not been blocked or illuminated of replacement bat roosting sites at each phase of the project	Inspection will aim to confirm that bat exit points are not blocked and not illuminated	
8	Works within bat roosts will not commence until working areas are confirmed to be clear by the bat contractor.	Inspection of log or other documentation to confirm for each phase of development, clearance/avoidance works had been completed prior to the commencement of works	
9	Use of bat friendly timber treatment Chemicals	Inspection of log, receipts or other documentation confirming use of bat friendly timber treatment chemicals	
10	Implementation of works during identified or specified times	Inspection of log, or other documentation confirming works have been undertaken during specified or conditioned times	

E.4 Mitigation contingencies

Describe any contingency proposals including circumstances when the contingencies will be instigated.

Monitoring of seasonal temperatures is to be undertaken, if it is found that adverse weather drops night time temperatures below an average of 8 degrees for greater than 24 hrs, demolition works should cease if bats are present or seem to be in a torpid state. Works will not proceed unless the forecasts show an improving weather condition. The reasoning is to ensure that bats are not disturbed in a deep torpor which could have a longer-term adverse impact on their survival rate.

E.5 Biosecurity risk assessment

Consider presence of non-native species and disease on site and actions to be undertaken that will prevent their spread onto or off the site.

None of the surveys and assessments that have been undertaken have identified any adverse bio security risks on site. No other bio security issues have been identified for this project that could have an adverse effect on the bats.

As part of the exclusion methodologies, it may be a case that individual bats may have to be handled. If this is the case the licensed ecologist is to ensure that bats are handled with a gloved hand in all instances. As a minimum nitrile glove are to be used and changed for each bat handled. If lightweight leather gloves are

to be used these are to be over covered with a nitrate glove and again changed for each individual bat handled. prior to any bats handled.

Any temporary bat boxes used to transfer or used as temporary roost points must be disinfected prior to use and all wetted surfaces allowed to dry before use.

F Post-development site safeguard

F.1 Habitat/site management and maintenance

Include ongoing land management proposals, details of who will be responsible for management and maintenance, on going running costs, site/structure ownership and monitoring development of new habitats.

The land ownership is as per the license holder. There is a material obligation to maintain The Old Croft as a habitable dwelling, this will ensure that the building will be maintained in such a condition to retain the use by the bats in the areas as identified in this application and the report. The building management is to define the management and monitoring responsibilities in both the initial short term site monitoring as defined in the license application and the long-term building management and monitoring to ensure retention as a habitable dwelling.

F.2 Population monitoring, roost usage etc.

Include details of monitoring effort, timing, personnel involved and equipment to be used.

The loft space is to receive an internal inspection to check use of the site by bats as part of the annual monitoring. Internal access and monitoring of the roost sites and the access points are to be undertaken by a suitably experienced bat consultant for the two seasons following the completion of the works. The monitoring is to reflect the existing roost usage with one seasonal roost visits being organised, timing to reflect prevailing climatic conditions. If, however use of the site alters then the monitoring regime should alter to best monitor the site usage.

A minimum 2-year monitoring program is to put into place, in respect to this license application, this is to include the following:-

- Internal inspection of the roosts, reflecting seasonal variation and likely presence annually.
- Single emergence in July

F.3 Post-development mitigation contingencies

Describe the action that you will take if monitoring results are unfavourable.

The initial assessments identified the site as being used by low numbers of Pipistrelle bat species. Recent surveys have recorded a greater seasonal movement for some species including Pipistrelle, with the bats becoming more transient. It is not automatic that crevice dwelling bats will continue to utilise the building as a roost, however the techniques and detailing employed have had good results and the use taken up by bats. The site offers great potential for use by crevice dwelling bats within most areas of the outbuildings and the main house itself. It is therefore considered that if the loft space is not taken up initially there is still sufficient alternative roost area within the adjacent buildings. It is therefore true to say that in this case the non-use or the decline in use of the loft space cannot be quantified as a failure of the mitigation scheme. However, the roosts availability for use by bats must be retained in perpetuity so as to always offer an alternative site locally for this species.

F.4 Mechanism for ensuring delivery of post-development works

As appropriate e.g. Section 106 Agreement, to include details of who will undertake the work and reporting details, other covenants, contractual agreements or wardening schemes.

The Conservation of Habitats and Species Regulations 2017

There is a material obligation to maintain the integrity of the building as a dwelling. This will ensure that the building will be maintained in such a condition to retain the use by the bats in the areas as identified in this application and the report.

G Timetable of works.

Include timings of exclusion operations, demolition and construction works, creation of mitigation measures, timing of other post development works and monitoring.

The roof works will start on the attainment of the license, and after that subject to the findings of the pre-works survey. The work area has a temporary shelter built over the work area, this will protect the site from adverse weather conditions during the works, this structure however will not prevent egress or access by bats to the primary roost areas.

It is anticipated that the EPS license is set to run from February 2024, (or ASAP) to 31 December 2024

License to run from date of issue February 2024 (whichever is the earliest) until 31 December 2024

H Land Ownership – Mitigation Site

H.1 Mitigation Site/Compensation Site Ownership

If mitigation is to be undertaken at a location not owned by the applicant, you must provide the written consent of the relevant land owner(s). You must also provide details of how the mitigation is to be maintained in the long term (e.g. a legal agreement).

The site is in the control of the licensee.

H.2 Mitigation Site/Compensation Ownership post construction

If the ownership of the mitigation site will change after construction please confirm the identity of the prospective owners/occupiers together with timescales associated with transfer of occupancy or other forms of legal interest. You must also provide details of how the mitigation is to be maintained in the long term (e.g. a legal agreement)

The site is in the control of the licensee.

I declare that should a licence be granted, the work as proposed in this Method Statement will be strictly adhered to. I understand that any deviation from the works as proposed in this Method Statement without agreement from NRW would result in a breach of the licence.

NB. Applicants should note that it is an offence under regulation 59 of the Conservation of Habitats and Species Regulations 2017 to knowingly or recklessly provide false information in order to obtain a licence.

Signature of the Applicant	Sue Robson-Catling	Date	20/01/2024
For electronic submissions please insert an electronic signature above or place an x in the box opposite to confirm agreement with the declarations above.			X
Full name in BLOCK LETTERS	SUE ROBSON-CATLING		

The Conservation of Habitats and Species Regulations 2017

Signature of the Ecologist	Mr Tim Hodnett	Date	20/01/2024
<i>For electronic submissions please insert an electronic signature above or place an x in the box opposite to confirm agreement with the declarations above.</i>			X
Full name in BLOCK LETTERS	MR TIMOTHY JOHN HODNETT		

I Declaration

J References

Credits for source information.

Collins, J. (ed.) (2016) Bat Surveys for Professional Ecologists: Good Practice Guidelines (3rd edn). The Bat Conservation Trust, London. ISBN-13 978-1-872745-96-1

Mitchell-Jones, A. J. & McLeish, A. P. (1999). The Bat Workers' Manual (2nd Ed.). JNCC, Peterborough. ISBN 1-86107-462-X. [3rd edition in 2004].

Mitchell-Jones, A. J. (2004). Bat Mitigation Guidelines (1st Ed.). JNCC, Peterborough. ISBN 1 85716 781 3

K Annexes

K.1 Pre-existing survey reports



**The Old Croft,
Green Street,
Holt,
LL13 9JF.**

Bat Activity Survey Report

Report number: TOC/01/2023

Author: R. Leigh ACIEEM

Date: 12th June 2023

Approved: C. Evans, BSc (Hons)

IMPORTANT INFORMATION TO READERS

This report has been prepared in accordance with the terms and conditions of appointment for bat activity surveys. Leigh Ecology Ltd cannot accept any responsibility for the use of or reliance on the content of this report by any third party.

The advice contained in this report is based on the information available and/or collected during the period of study. We cannot completely eliminate the possibility of important ecological features being found through further investigation and/or by survey at different times of the year or in different years.

Surveys and assessments are undertaken on the understanding that nothing in our reports will be omitted, amended or misrepresented by the client or any other interested party.

Please be aware the information contained within this report is valid for a period not exceeding two years. After this time, data contained within will require updating.

This report and its contents remain the property of Leigh Ecology Ltd until payment has been made in full.

Introduction

Leigh Ecology Ltd was commissioned to undertake a series of bat activity surveys on a property known as The Old Croft. The property is a detached brick and slate dwelling located on Green Street, Holt, LL13 9JF.

The objective of the surveys was to identify the presence of roosting bats on site.

Given the objectives, two dusk emergence surveys were undertaken in accordance with the Bat Conservation Trust, Bat Surveys Good Practice Guidelines (2016).

A previous survey undertaken in September 2022 failed to record any bats associated with the target building.

The surveys were led by Roy Leigh ACIEEM, a licensed bat surveyor. All surveyors comply to the knowledge, skills and experience identified within CIEEM's "Competencies for Species Survey: Bats" (2013) or were under the supervision of a surveyor with the required competencies.

For the emergence surveys, 4 surveyor points monitored the building to ensure complete coverage for any emerging bats. The surveys began 25 minutes before the recorded dusk time and continued for 90 minutes after. The surveyors used Wildlife Acoustics Echometer/IPAD 4 and EMT pro bat detectors to record the echolocations of active bats. The surveyors were positioned at each corner of the target building in order to view the elevation and roof, and to gain full coverage simultaneously (see surveyor location plan below).

A floating surveyor, in addition to the 4 surveyors, used a thermal imaging camera to further pick-up bat emergence and foraging activity.

The results of the surveys detected around 2 Common pipistrelle and a single Soprano pipistrelle emerging and foraging around the house.

Noctule Bat activity was recorded overhead on all surveys, although this species is not considered to be roosting within the proposal footprint.

Given the results, one can assume that day roosts of Common Pipistrelle and Soprano Pipistrelle are located within the target building; therefore, it is likely that the roosts will be impacted on during the demolition/conversion works.

Results

Dusk emergence and dawn return activity surveys



Figure 1; Surveyor locations
(Copyright streetmap)

09th May 2023

Start time	End time	Dusk time	Starting temp °	End temp °	Wind	Rain	Cloud %
21.25	23.10	20.53	11	10	0	0	0

21.02	Noctule	Passing N -> E
21.16	Noctule	Heard not seen
21.55	Soprano Pipistrelle	Foraging in area between next door house and Lodge
21.57	Soprano Pipistrelle	Emerging from NE side
21.59	Noctule	Passing NE -> SW
22.03	Soprano Pipistrelle	Foraging west side of building
22.05	Common Pipistrelle	Emerging from West side
22.07-09	Common Pipistrelle	Constant foraging in hedgerow
22.09	Soprano Pipistrelle	X 2 constant foraging around buildings
22.35	Common Pipistrelle	Overhead foraging
22.36	Common Pipistrelle	Heard not seen
22.38-41	Common Pipistrelle	Heard not seen- constant

30th May 2023

Start time	End time	Dusk time	Starting temp °	End temp °	Wind	Rain	Cloud %
20.55	22.35	21.25	14	12	0	0	0

21.16	Noctule	Heard not seen
21.36	Noctule	Heard not seen
21.43	Soprano pipistrelle	Emerging from West side
21.44	Common pipistrelle	Exited and entered open window NE side
21.46	Common pipistrelle	Exited window NE side
21.54	Common pipistrelle	Foraging along hedge
21.55	Common pipistrelle	Foraging in hedgerow
21.57	Noctule	Heard not seen
21.59	Noctule	Foraging above
21.59	Common pipistrelle	Foraging in hedgerow
22.00	Common pipistrelle	Foraging in hedgerow
22.02	Common pipistrelle	Flying from building North side
22.03	Common pipistrelle	Foraging east corner of building
22.06	Common pipistrelle	Foraging over grassland paddocks at rear
22.07	Common pipistrelle	Foraging E -> NW
22.10	Common pipistrelle	Heard not seen
22.11	Noctule	Heard not seen
22.12	Common pipistrelle	Foraging in hedgerow
22.13	Soprano pipistrelle	Foraging in hedgerow
22.15	Noctule	Heard not seen
22.16	Common pipistrelle	Foraging in hedgerow
22.17	Common pipistrelle	Heard not seen
22.18	Soprano pipistrelle	Heard not seen





Photograph 1; (Circled) Indicates emergence point.

Conclusions and Recommendations

The results of the activity surveys indicate that the target building (Old Lodge) holds small Common Pipistrelle and Soprano Pipistrelle day roosts.

The activity surveys indicate that the species recorded emerged from the building and subsequently began foraging throughout the site and within Old Croft Garden and adjacent hedgerows.

All bat roosts are fully protected under the Wildlife and Countryside Act 1981 (and amendments) and The Conservation of Habitats and Species Regulations 2010, which defines these animals as European Protected Species. An offence would be committed if roosts, whether occupied or not, were destroyed, damaged or obstructed, or if bats themselves were harmed or disturbed.

Therefore, given that the roof space of the building is to be affected as part of the proposal, the bat roost will be lost. Consequently, this would result in a negative impact on the local bat population.

As bat roosts have been confirmed within the buildings, a European Protected Species Licence will be required from Natural Resources Wales to permit any works to the building.

Method Statement

The results of the survey indicate that Old Croft holds Common Pipistrelle and Soprano Pipistrelle day roosts.

A detailed mitigation strategy will be required to support the licence application, which will ensure no detrimental impacts on bats from the development works. This will include best practice measures for works and mitigation of roosting provision.

A pre-development internal and external bat survey will be undertaken, within 48 hours of the commencement of works.

A bat box will be erected on an adjacent tree prior to works commencing.

All construction operatives will be given a bat safeguarding toolbox talk at the commencement of the works by the project ecologist, see below.

The acceptance and understanding of the talk will be recorded and filed for audit purposes.

The demolition works on the dwelling will be undertaken following a soft strip methodology and under the supervision of a licensed bat ecologist and undertaken during a period to minimise least disruption for the bats.

The licensed bat ecologist will be in continued contact with the construction operatives through the key periods, in order to ensure conformity to the induction procedure.

It is also suggested that the landscape proposals and the proposed buildings compensate for this by providing a network of landscape features such as trees, water features and scrub areas, and provision of bat roost opportunities within the new build, designed for the species occurring within the immediate area.

Enhancement for bats will be delivered within the new site through the creation of new bat roost habitat.

It is suggested that bat roosting opportunities are provided within the site by provision of several ibstock bat bricks within the external walls of the dwelling.



Appropriate bat mitigation should be added to proposal plans to support the current conditions of the site. Bat Ridge boxes feature lifted roof tiles which lead to a bat box within the roof space.

Bat Toolbox Talk Content

– Given on site with practical demonstration as part of the NRW Licence

Direct Works on Buildings

- It is important that during the dismantling process, the roof and the upper walls are hand stripped, with a high level of care and diligence.
- Works must be undertaken to avoid hibernation periods – between Nov – March.
- If a bat is found during the dismantling process, **ALL WORK MUST STOP**.
- Call in a qualified and licensed bat ecologist.
- If possible, the bat should be left in situ and covered until the bat ecologist arrives.
- If not, it should be placed in a dark ventilated container, with a clean cloth and some water in a small shallow container until the licensed bat ecologist arrives to assess the situation.
- The bat ecologist will assess the situation and transfer the bat to a safe location nearby; a bat box will be erected on an adjacent tree.
- The bat ecologist will then discuss the situation with Natural Resources Wales in order to agree a way forward.

It is also suggested that the landscape proposals and the newbuild compensates by providing a network of landscape features such as trees, water features and scrub areas and provision of bat roost opportunities within the building, designed for the species occurring within the immediate area.

Where lighting is absolutely necessary in areas of tree/shrub planting this will be low wattage, directional, low level and/or shaded to minimise light spill (<1Lux) onto potential flight lines and foraging habitat to ensure that the overall impact caused by lighting the site is negligible.

The lighting scheme will be designed with regard to guidance such as the Bat Conservation Trust Statement on the impact and design of artificial light on bats, and the Institution of Lighting Professionals Guidance Notes, to minimise disturbance to bats and other wildlife due to artificial lighting.

ADDENDUM REPORT – BAT MITIGATION

SITE

The Long Croft
Green Street
Holt
Wrexham
LL13 9JF

CLIENT

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London
SW8 2PB

JOB No.

1074

DATE

Sept 2023

GRID REFERENCE

SJ 41025 54182

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Table of Contents

1.0	INTRODUCTION
2.0	SUMMARY
3.0	SITE
4.0	EXISTING DATA
5.0	SURVEY AREAS
6.0	LEGAL PROTECTION
7.0	LIMITATIONS
8.0	METHODOLOGIES
9.0	RESULTS
10.0	ADDENDUM RECOMMENDATIONS

1.0 INTRODUCTION

EDC has been instructed to produce supplementary information regarding the planning application ref: P/2023/0076 as requested by Wrexham Planning Department. The initial walkover and emergence surveys were undertaken by Leigh Ecology Ltd, report ref: TOC/01/2023. The surveys identified 2 emerging bats, 1 from the western soffit and a second bat emerging through an open window on the north eastern elevation. The species recorded was Common Pipistrelle from the western eaves and Soprano Pipistrelle from the north eastern elevation. At the time of survey, the building was vacant.

The proposed demolition and extension works are located on the western elevation. The extension consists of 2 two-storey extension at 90 degrees to the western elevation, which cut into the existing roof at full height. A flat roof extension is formed on the gable elevation of the larger extension.

The roost point will be lost to the north east as this was an emergence from an unoccupied habitable space and could be classed as an opportunistic roost due to a window being left open.

2.0 SUMMARY

The following main points have been identified on site and are addressed fully in the main text:-

1. The property only recorded none breeding single occupancy roosts at the time of survey.
2. The north eastern roost can be classed as none historical roost, due to a window being left open in an upstairs habitable room.
3. Both roost points will be impacted by the proposals, loss of the north eastern roost point and disturbance to the western roost point.
4. The impacts identified can be negated by offering alternative and retaining access to the loft area.
5. Works to be undertaken in a bat friendly construction methodologies
6. An NRW (Natural Resources Wales) Derogation/Development License is to be applied for on retaining full plans approval and prior to works being undertaken

3.0 SITE

The Old Croft is a brick built two storey long cottage. See Leigh Ecology Report Ref: TOC/01/2023

4.0 EXISTING DATA

As recorded in Leigh Ecology Report Ref: TOC/01/2023

5.0 SURVEY AREAS

As outlined in Leigh Ecology Report Ref: TOC/01/2023

6.0 LEGAL PROTECTION

Under the 1981 Wildlife & Countryside, and the 2000 Countryside Rights Of Way (CROW) Act, it is an offence to “intentionally” or “recklessly” kill, injure or take any legally protected species. In some cases, even the species' habitat and places of shelter are protected.

6.1 *GREAT CRESTED NEWT/BAT/SMOOTH SNAKE/NATTERJACK TOAD/SAND LIZARD:*

Both British and European laws protect the species and its habitat. In Britain it is protected under Section 9 (Schedule 5) of the Wildlife & Countryside Act 1981 (as amended), and by The European Union's “Habitats Directive” (Council Directive 92/43/EEC (a) on the Conservation Of Natural Habitats and of Wild Fauna and Flora. The Habitats Directive is implemented in Britain by the Conservation Regulations 1994. Under this legal protection (and with the minor amendments of the CROW Act 2000 in England & Wales), to be superseded by the introduction of “The Conservation of Habitats and Species Regulations 2010” which came into force on the 1 April 2010, it is an offence to:

- Intentionally or deliberately capture, kill, or injure.
- Intentionally or recklessly disturb them in a place used for shelter or protection.
- Damage or destroy a breeding site or resting place.
- Intentionally or recklessly damage, destroy or obstruct access to a place used for shelter or protection.
- Possess an animal, or any part of it, unless acquired legally.
- Sell, barter, exchange or transport or offer for sale or parts of them.
-

6.2 *BIRDS:*

All British birds, their nests and eggs are protected in law. It is an offence under Part 1 of The Wildlife & Countryside Act 1981 as amended (and with the minor amendments of the CROW Act 2000 in England & Wales) to intentionally or recklessly kill or injure any wild bird or to take, damage, or destroy any nest or egg of any wild bird. However, Schedule 1 of the Act provides an additional tier of protection so that rare species (e.g., barn owl) are specially protected by increased penalties and cannot be intentionally or recklessly disturbed when nesting.

Some native bird species are listed as rare and most threatened species under Section 41 of the Natural Environment and Rural Communities Act (2006). Ref: Environment (Wales) Act 2016, Section 7 list of species. You must have due regard for the conservation of Section 41 species as part of a planning application.

6.3 *MAMMALS:*

All of the British species of bat are protected under the W&C Act 1981 (as amended). This protection is also extended to the otter (*Lutra lutra*), and the water vole (*Arvicola terrestris*). **The badger** (*Meles meles*) is protected under the Protection of Badgers Act 1992. Included in the Act it is an offence to damage any part of a sett or destroy it; obstruct access to any entrance of a sett; or to disturb a badger when it is in its sett.

Some native species are listed as rare and most threatened species under Section 41 of the Natural Environment and Rural Communities Act (2006). Ref: Environment (Wales) Act 2016,

Section 7 list of species. You must have due regard for the conservation of Section 41 species as part of a planning application.

6.4 REPTILES:

All of the British species of reptile are protected under the W&C Act 1981 (as amended). See above for Smooth Snake, Natterjack Toad and Sand Lizard.

- Intentionally or deliberately kill or injure.

All native reptiles are listed as rare and most threatened species under Section 41 of the Natural Environment and Rural Communities Act (2006). You must have due regard for the conservation of Section 41 species as part of a planning application.

7.0 LIMITATIONS

None identified.

8.0 METHODOLOGIES

As defined within Leigh Ecology Report Ref: TOC/01/2023

9.0 RESULTS

As defined within Leigh Ecology Report Ref: TOC/01/2023

10.0 ADDENDUM RECOMMENDATIONS

10.1 BATS:

The survey did identify use by bats within the loft space, however no evidence of breeding was recorded. It is defined that the existing roof void/soffit is being used by a single common pipistrelle as an ancillary individual night roost. The secondary emergence was through a window from a habitable area and can be considered a none historic opportunistic roost.

The existing roof is traditional in finish with an external wall plate onto solid masonry walling and a slate roof finish. The property is circa 1887 – 1897, however the roof has been re-slatted at some period, as slaters felt is present. The property does not appear on the OS Mapping system until after 1887 but before 1897, the ridge line shows deformation suggesting spread etc.

Based on the survey information and the review of the planning application documentation, including NRW consultation response, dated 13 July 2023 (classed as a lower risk for bats) we recommend the following additional recommendations:

- 1 Prior to undertaking the works a European Protected Species Derogation license or equivalent at the time of works is to be applied for to enable the works to be undertaken lawfully.

- 2 An experienced ecologist is to be employed for the duration of the works. The appointed ecologist is to be accredited on the derogation license.

Ecologist : Mr Tim Hodnett/Tobias Hodnett (to be appointed)
EDC, The Cottage, Bodrhyddan Hall, Rhuddlan, Denbighshire, LL18 5SB
Contact: 01745 591208/0778 134930

- 3 Prior to undertaking the works and as part of the methodologies of the derogation license and in accordance with:-

- An internal inspection of the buildings will be undertaken prior to the construction works to ensure no variation to survey. If individual bats are identified at survey the individual bats will be removed and placed in a temporary artificial roost placed adjacent to the works area. Any bats identified/uncovered are to be removed by the retained ecologist and placed in the previously erected wedge type bat box, located on the side wall of the stand-alone garage to the rear of the property.
- The existing ridge tiles, slates adjacent to the flashings to the chimney stacks, the areas identified during the emergence surveys, and any areas identified during the works by the retained ecologist, are to be carefully destructive searched. Any bats identified/uncovered are to be removed by the retained ecologist and placed in the previously erected wedge type bat box, located on the side wall of the stand-alone garage to the rear of the property.
- The destructive searches are to be undertaken in favourable weather conditions for evening emergence by bats. Any work that could disturb bats will be undertaken outside of hibernation and not in periods of cold weather recording average levels below 5 degrees Celsius.

- 4 Ibstock bat bricks are to be built into the new walling at soffit height. The Bat bricks are to be located on all three new elevations constructed, north, west, and south. The bricks will be located as shown on drawing ref:-1074-Bat Bricks-Slates-MIT-01. A total of 6 bricks are to be installed 2 per elevation. None of the bat bricks are to be located above doorways or windows. This is to prevent droppings falling onto threshold, sills etc., and to reduce light spread from internal lighting through the windows during the night time.

- 5 Lead bat slates are to be installed along the replaced roof to the existing building and the new ridges to the extensions. A total of 8 bat slates are to be installed, 2 either side of the ridge line of the existing building, and 1 each on the two rear extension roofs either side of the new ridges, see drawing ref: 1074-Bat Bricks-Slates-MIT-01

- 6 Any treated timbers or timber treatment that is to be used during the works is to be of an NRW approved chemical and have a low mammalian toxicity.

- 7 Any sarking membranes used are to be of a BS 747 F1 bitumised slaters felt type. No breather membranes are to be used in the roofing process.

- 8 All roofing detailing to be as identified on site, any variation to finish to be approved by the retained ecologist, to ensure bat access is retained into the loft space.

- 9 Fascia's to be offset from the walls by a minimum of 22 mm to form access behind the new fascia's. Existing replacement fascias can be set similarly; however, the existing/replaced wall plates will be on the outer face. In these cases when the new wall/replacement wall plates are bedded on, a timber slip, approximately 100 x 150 x 12 mm is to be placed on the wall plate bed. The slip is to be pulled out after the mortar bed is set. This is to form a direct crawl access underneath the wall plate to the inner voids etc.
- 10 No uPVC fascia's/soffits are to be used unless agreed with the retained ecologist. The reasoning is that uPVC does not have a friction able surface for bats to land and crawl on, so careful sighting is required to maintain long term bat access into the building.
- 11 An internal bat baffle board is to be located on the inner face of the new gables. The plywood board should be cut to abut to the undersides of the end rafters/truss. The board is to be set off the wall on 38 x 19 mm vertical battens at max 300mm c/c's.
- 12 In accordance with good practice and as required within the NRW Derogation license methodologies, the initial works and mitigation will be overseen by the ecological consultants for the duration of the works and for the first season monitoring, to ensure compliance under the license agreement. The monitoring plan is to be adopted and that it should apply to the next 2 years, (from May 2024) but this should include the site owners or their successor in title or future occupier' in the event that the site management and control of the site is taken over by a third party within the next 3 years.

A compliance audit scheme will be undertaken to demonstrate compliant implementation of the provisions of the Method Statement and derogation license conditions. To facilitate and inform this assessment, specified parameters (performance indicators), which are listed below, will be used to assess component and overall performance of this project. This assessment will then indicate whether performance is satisfactory and in compliance with legal or other requirements or conditions.

No	Requirement	Performance Indicator	Pass (Yes/No)
1	Licence available for inspection by any police constable, employee of the Welsh Assembly Government or employee of the Countryside Council for Wales or authorised persons on demand.	Licence available is available for inspection on site.	
2	Before starting work the licensee will advise NRW Species Officer (Matthew Ellis) of the date the works will start, and maintain liaison throughout the	Written or electronic documentation of notification to NRW of the start date for site works.	

	works.	Document in respect of formal notification is available for inspection	
3	No agent of the licensee shall act under licence unless they are in possession of a letter signed by the licensee appointing them by name as the duly accredited agent of the licensee for the purposes of this licence, and shall carry with them the said letter and a copy of this licence and shall produce them to any police constable or employee of the NRW or other authorised person on demand.	All relevant accredited agents have copies of licence holder's letter of authorization (as written by the license holder). Random check of 3 no. contractors to check completion and distribution of authorisation letters.	
4	A suitably experienced licensed ecologist will be appointed and retained during the life time of this License, to provide on-site advice.	Ecologist adviser retained on site: Evidence to be obtained from licence holder in respect of duration of ecological contracts	
5	Prior to the start of any works on site, all site workers will be inducted by the protected species specialist. This induction will cover the legal status of the species, the method of working, and action to be taken if protected species are encountered.	All contractor or sub-contractors working on site to receive ecological induction. Evidence: Is there evidence available to demonstrate that ecological induction has been completed, e.g., checking induction log books?	
6	Implementation of surveillance or monitoring of schemes, during	6 (1) Has identified or required implementation of	

	and post development.	surveillance or monitoring been undertaken during the implementation phase of the project and results submitted to NRW 6 (2) Has identified or required implementation of post project surveillance or monitoring been undertaken and results submitted to NRW, COFNOD and NBN gateway	
	Following completion of mitigation works, a bat specialist to inspect the building to ensure have been carried out as specified in plans or in the method statements	Have mitigation works have been carried out as specified in the method statement or plans?	
7	Following completion of each phase of compensation/mitigation works, the bat specialist will inspect the building to confirm bat roost safeguard or Construction; and that that exit points have not been blocked or illuminated of replacement bat roosting sites at each phase of the project	Inspection will aim to confirm that bat exit points are not blocked and not illuminated	
8	Works within bat roosts will not commence until working areas are confirmed to be clear by the bat contractor.	Inspection of log or other documentation to confirm for each phase of development, clearance/avoidance works had been completed prior to the commencement of works	
9	Use of bat friendly timber treatment	Inspection of log, receipts or other documentation	

	Chemicals	confirming use of bat friendly timber treatment chemicals	
10	Implementation of works during identified or specified times	Inspection of log, or other documentation confirming works have been undertaken during specified or conditioned times	

13. It has been noted and several papers have been written, to which Bat Conservation Trust (BCT) has produced guidance on bats and artificial lighting, generally some species can benefit from lighting where as other species prefer dark corridors. Ref:-Bat Conservation Trust, Guidance Note 08/23 Bats and Artificial Lighting At Night. Any introduced lighting should take in the recommendations given for bats and lighting guidance issued by the Bat Conservation Trust and that the lighting scheme is no greater than the original layout.

Research with regards to impacts from lighting on bats has identified that lighting which emits ultra violet radiation attracts flying insects. This has been recorded as being potentially beneficial to some foraging species of bat, namely Pipistrelle, Noctule, Leisler's, however high levels of ultra violet radiation has been found to have an adverse impact on other bat species, Horseshoe, Myotis species, which forage in low light levels. Historically lights emitting low levels of ultraviolet radiation, SONS etc have been recommended but with the requirement for lighting on adoptable roads, lighting with a low carbon footprint and the movement towards promoting dark skies, lighting is moving towards the installation of LED lighting. Although this type of lighting is more efficient, it does emit a level of ultraviolet radiation, therefore shading, filtering, and directional lighting is to be promoted. Any lighting plans provided by the electrical engineers are to show compliance with the above requirements as part of the scheme and specifically in proximity to the retained woodland and hedgerow boundaries.

Lighting recommendations as follows:-

The front elevation, i.e., frontage onto Green Street will be lit by the existing street lighting which is outside of the control of the applicant.

Lighting to the rear and side of the property can be controlled to a limit, however lighting spill from adjoining properties cannot be controlled.

Any security lighting is to be set on timers limiting to short durations of illumination. Any lighting should be so shielded so as not to light directly onto the newly sighted bat bricks. All lighting installed should be in accordance with the guidance.

14. Landscaping scheme, presently the site is devoid of any mature tree stock. The land in ownership consists of the development area which includes, all of the existing buildings to the east, and a narrow strip of land running to the west of the property. This parcel of land presently is dominated by rank grass/ruderal herb. The strip is located between arable fields; however, the boundaries are formed by mature mixed species hedgerows, which in turn give good connectivity to the habitats to the west. The river Dee Corridor is not directly connected other than through adjacent developments and formal gardens to the west.

The landscape plan is to show the retention of the existing hedgerows and a plan of management going forward. This is to include replacement planting and gapping up to maintain the connectivity. Any introduced planting should be assessed for compliance with the INNS lists. It is recommended that a biosecurity assessment is undertaken to cover all materials and plan leaving and coming to site.

Tim Hodnett

edc

September 2023

K.2 Raw survey data.

Bat Chiroptera –

There are no records for this taxon group within 2km of the site. The county of Wrexham does support several species for both breeding roosts and hibernation sites beyond 2km.

The following species are recorded at both local and at a county level: -

Pipistrelle *Pipistrellus pipistrellus/pygmaeus*

Brown Long-eared *Plecotus auritus*

Lesser Horseshoe *Rhinolophus hipposideros*

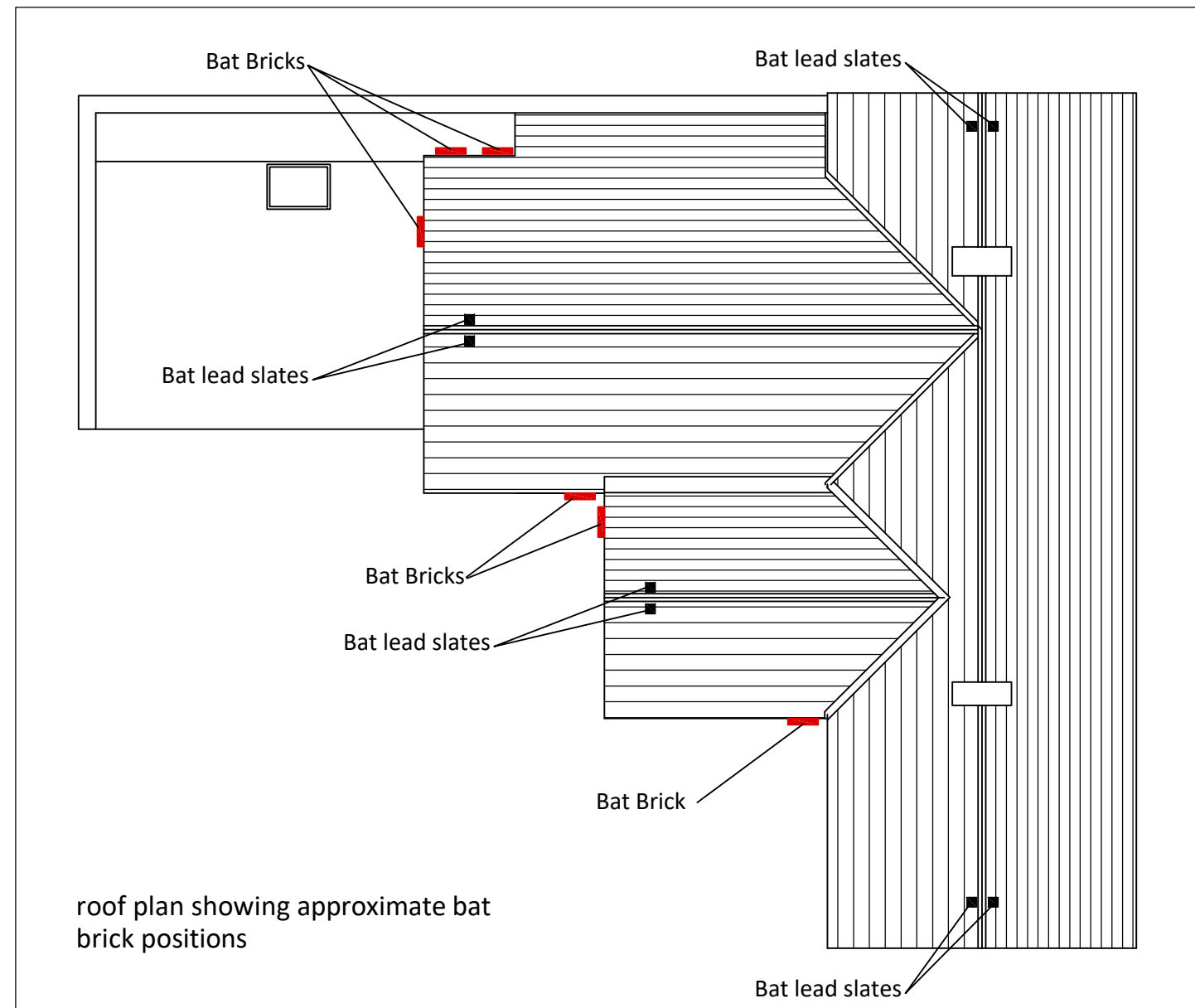
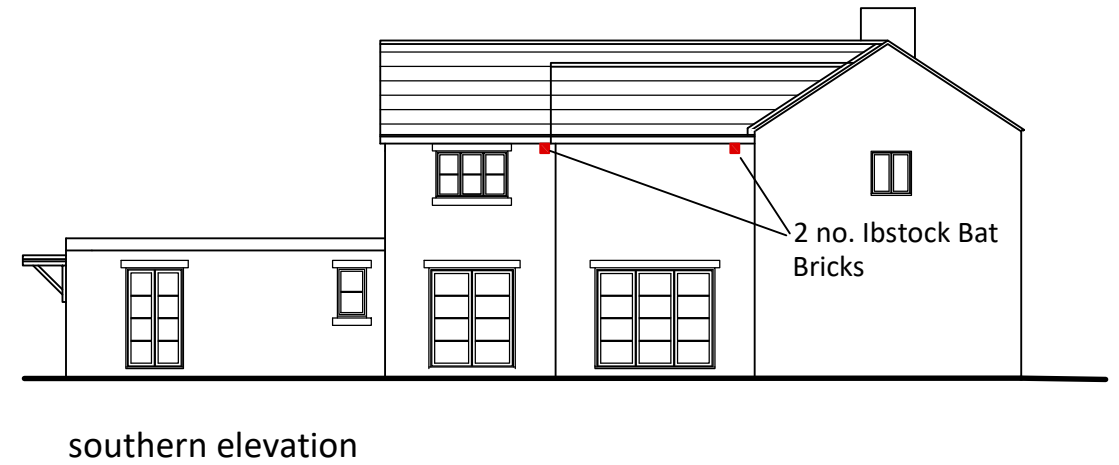
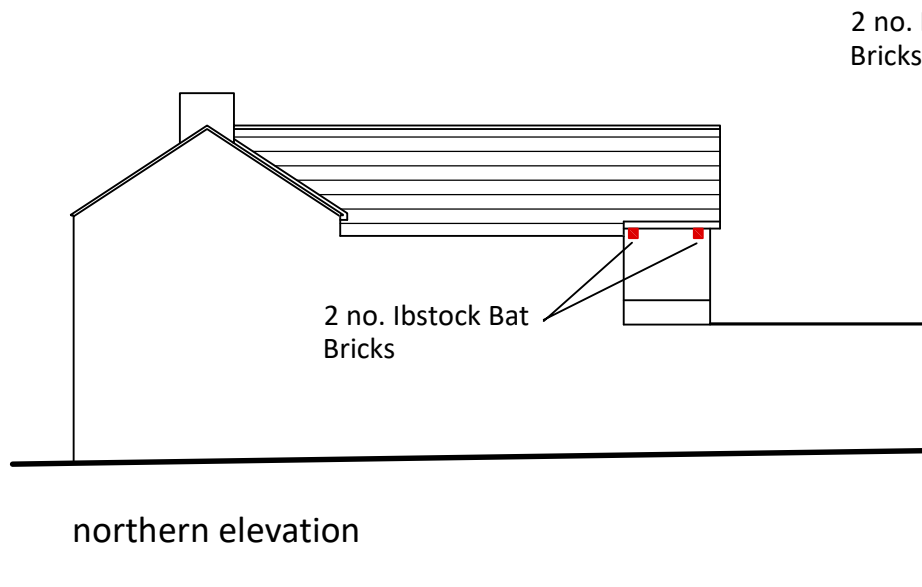
Daubenton's *Myotis daubentonii*

Whiskered/Brandt's *Myotis mystacinus/brandtii*

Natterer's *Myotis nattereri*

Noctule *Nyctalus noctula*

Serotine *Eptesicus serotinus*



client

Sue Robson-Catling
99 Lansdowne Way
London
SW8 2PB

project title

The Old Croft Extension and
Refurbishment - Holt

drw. title

Bat Brick, Bat Slates Positions

scale
NTS @A3
rev.

date
Sept '23
chkd.

drawn
TJH

A
project ref.

drawing no.

1074

MIT-01



ecological design consultants

NOTES:

To be read in conjunction with Engineers, Services drawings etc. All dimensions to be checked prior to construction on site. All works to be carried out to the satisfaction of LA and relevant B.S. All discrepancies to be reported immediately.