Ecological Impact Assessment and Bat Risk Assessment

CLEADON HOUSE, CLEADON, NORTHUMBERLAND

March 2025

Ruth Hadden, BSc. MCIEEM
Ryal Soil and Ecology
Ryal
Northumberland

Tel: 01661 886562

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Principal Author	Ruth Hadden	
Client/Agent	Doonan Architects	
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Author Contact Details	01661 886562	
	Author	**Date**
Originated	Ben Hadden	March 2025
Approved for issue	R Hadden	26 March 2025

Disclaimer:

Ecology surveys are carried out in good faith, to the relevant professional guidelines. Where variation from these guidelines is necessary, this is outlined in the report. Any comments regarding condition of buildings or trees are in relation to the use of the building/tree by bats and birds and should not be considered as a building survey or arboricultural opinion on the condition of those features.

The client should be aware that the mitigation recommendations in ecology reports are often translated directly into planning conditions, and as such these should be studied closely and agreed with any contractors in advance of site works commencing.

Mitigation recommendations should be clearly marked on the Architect's Plans submitted with any planning or other consent.

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Ecological Impact Assessment for Cleadon House, Cleadon, Northumberland

Summary

- An ecology survey was requested primarily for bats and birds at Cleadon House, Cleadon, Northumberland by Doonan Architects on behalf of the owner.
- The building surveyed is situated within the residential area in the centre of Cleadon. The town is surrounded by agricultural land consisting of improved/modified grassland and arable land with boundaries of hedges and fences. Immediately to the south of the site an area of deciduous trees is present, which links to an amenity/sports area with residential gardens backing onto it.
- The proposal will be to remove the bottom two courses of tiles from the central valley gutter and replace the lead with new lead sheeting. It is likely to require the installation a new ply gutter lining. The conservatory will be dismantled and replaced.
- Inspection results reveal a bonded brick-built house with a double pitched slate roof running west to east. The eaves and outer slopes of the roofs have parapet walls and a valley runs between. The southern loft has a reinforced 'plastic type' sarking and the northern roof has a mix with some bitumen felt sarking. Both lofts are shallow with no typical ridge beam and are well cobwebbed. Eaves voids are also present. No evidence of bats was located either externally or within the lofts or eaves void or in the region of the proposed works. Negligible risk of bat roost potential beneath the slates. Potential roost crevices were present beneath the watertables on the outer slopes of the roof in two locations, on the west gable, however no works are proposed in these locations.
- The conservatory is glass with timber and is in a poor condition with glass panes falling from the roof. The timber frame has rot in a number of places however no suitable crevices were located. Negligible risk of bat roost potential.
- Due to the negligible roost potential, no emergence surveys are recommended.
- Known bat activity in the area within 2km of the site are maternity roosts of Pipistrelle sp 1.6km to the southwest and Pipistrelle species 1.4km to the north. Several occasional roosts of Pipistrelle 45kHz are known within 2km. In addition, foraging Nathusius' Pipistrelle, *Myotos sp*., Noctule and Pipistrelle 55kHz have also been recorded within 2km**.**
- The occasional bat may be present in any suitable crevice at any time of the year in small numbers. Timing of any destructive works to avoid the hibernation period will ensure that the works has as little negative affect on bat conservation status as possible.
- Any nesting bird species will be allowed access to the nest until the young have fledged.

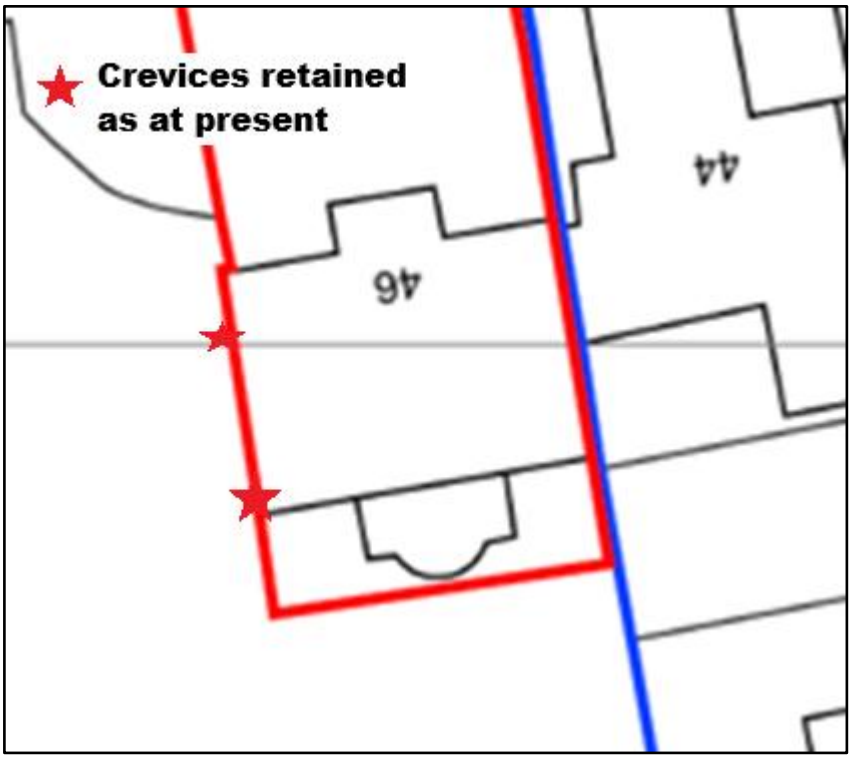


Figure 1. Ecological Mitigation Plan

1. Introduction.

The internal inspection was carried out by Ben Hadden MSc an experienced Ecologist.

Figure 2. Survey area approximately marked in red.

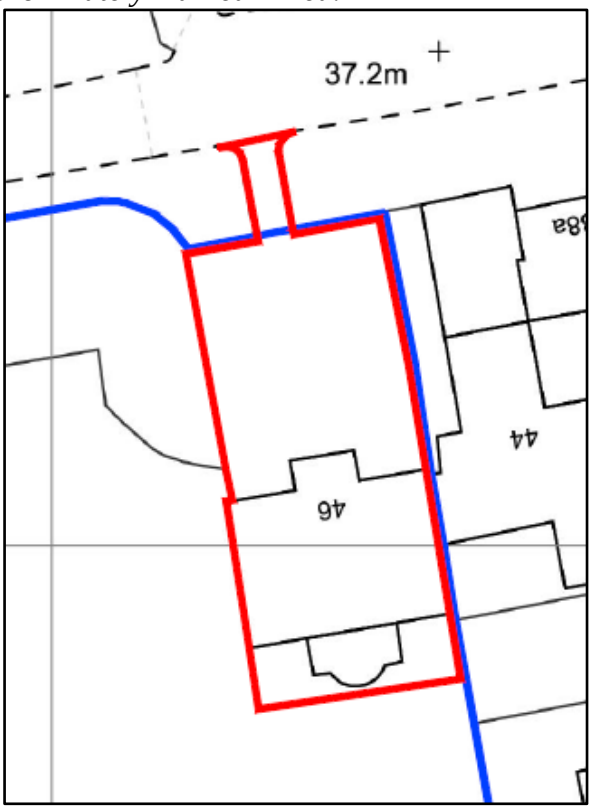
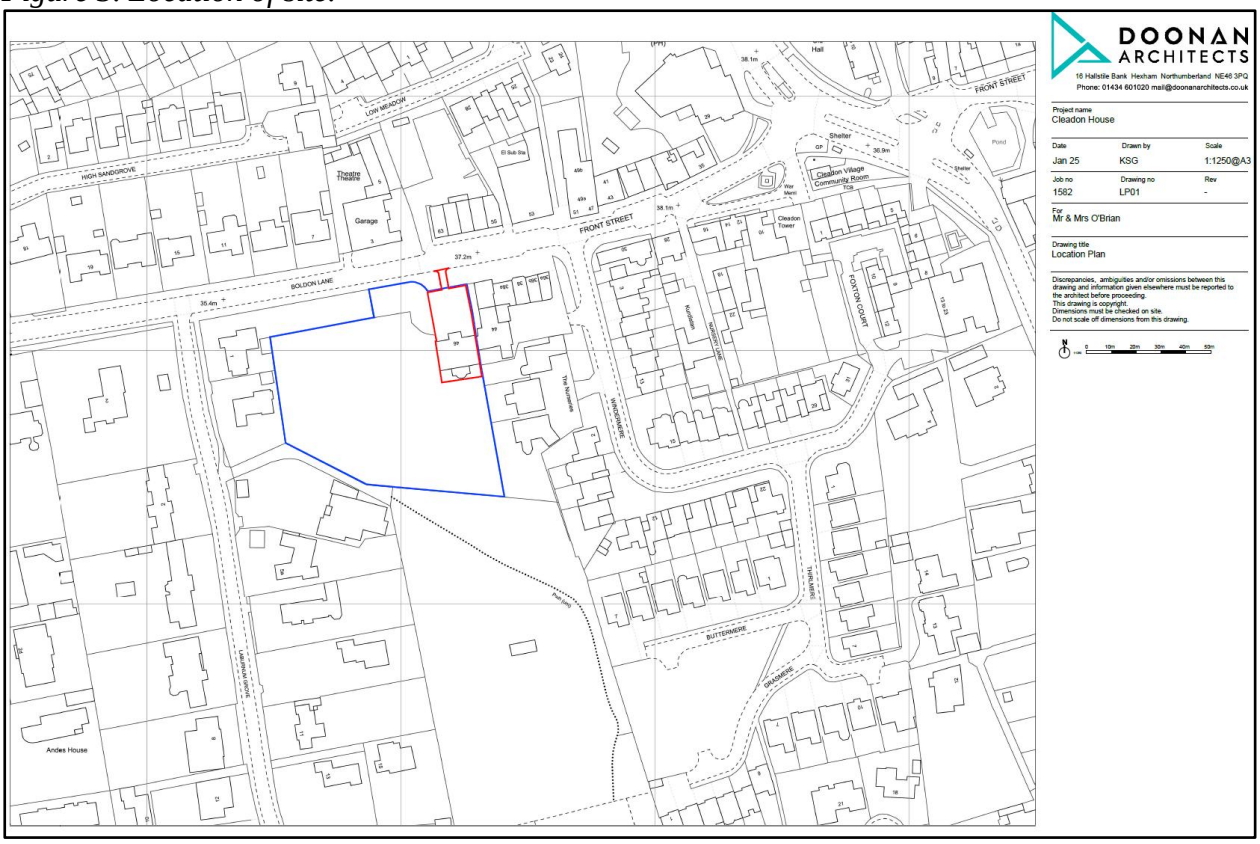


Figure 3. Location of site.



2. Relevant Policies and Legislation.

Under Section 25 (1) of the Wildlife & Countryside Act (1981) local authorities have a duty to take such steps as they consider expedient to bring to the attention of the public the provisions of Part I of the Wildlife & Countryside Act, which includes measures to conserve protected species.

The Natural Environment and Rural Communities Act (2006) places a Statutory Biodiversity Duty on public authorities to take such measures as they consider expedient for the purposes of conserving biodiversity, including restoring or enhancing a population or habitat.

The National Planning Policy Framework (NPPF) states "*When determining planning applications, local planning authorities should apply the following principles:*
a) if significant harm to biodiversity resulting from a development cannot be avoided (through locating on an alternative site with less harmful impacts), adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused;" (paragraph 175).

ODPM Circular 06/2005/Defra Circular 01/2005 states that the presence of a protected species is a material consideration when considering a development proposal that could harm the species or its habitat.

Appendix 1 details legislation relating to applicable species.

Section 41 of The Natural Environment and Rural Communities (NERC) Act (2006) requires the Secretary of State to publish a list of habitats and species which are of principal importance for the conservation of biodiversity in England. The S41 list is used to guide decision-makers such as public bodies, including local and regional authorities, in implementing their duty under Section 40 of the Natural Environment and Rural Communities Act 2006, to have regard to the conservation of biodiversity in England, when carrying out their normal functions. This includes planning decisions.

2.1 Designated Sites

Site of Special Scientific Interest (SSSI) citations are for special features of importance to nature conservation. Sites of Special Scientific Interest (SSSIs) are nationally important sites protected under laws including The Wildlife and Countryside Act 1981, Countryside and Rights of Way Act 2000. LPAs must consult Natural England on planning applications that might affect SSSIs. Operations that could damage special interests require consent by Natural England. It is an offence for any person to intentionally or recklessly damage or destroy any of the features of special interest of an SSSI, or to disturb wildlife for which the site was notified.

3. Methodology.

3.1 Scope of the Assessment.

The zone of influence of this development is defined as being the site itself and habitats to the immediate boundaries within 2km.

The assessment has included consideration of:

- designated sites
- habitats and species of principal importance for conservation of biodiversity
- protected species, namely bats.

3.2 Desktop Survey.

Natural England's Magic on the Map website was accessed for details of any designated wildlife sites within 2km.

The Environmental Records Information Centre North East (ERIC) data search has been restricted to bats, as this is the major constraint to any destructive building works on site.

Natural England's Magic on the Map and OS Explorer 1:12500 maps were used to assess the distance to habitat features close to the site.

3.3 Site Survey

This ecological assessment has been conducted according to the Institute of Ecology and Environmental Management's *Guidelines for Preliminary Ecological Appraisal* (CIEEM, 2017). The JNCC *Phase 1 Habitat Survey Method* (2010) was used to classify the main habitats and interest features on site. The survey is classed as an Extended Phase 1 Habitat Survey as it includes an assessment of the habitats on site along with a bat risk assessment and consideration of the neighbouring SSSI.

The search area is shown in Figure 1. The survey included searching for signs of any wildlife using the site, with the key indicators listed below.

- Tracks, prints, live or dead animals, droppings, fur/hair, feeding remains (all mammals)
- Setts or feeding evidence, clear tunnels under boundaries (badger)
- Suitable bat roosting features such as deadwood or limb holes in trees.
- Nests or singing/displaying birds.

Areas of vegetation were noted and any features such as trees or hedgerows that may be affected.

The survey included an assessment of habitats on site for use by bats following the Bat Conservation Trust (BCT) *Bat Surveys for Professional Ecologists, Good Practice Guidelines* (4th edition, 2023) and Natural England's definitions except where indicated. The survey effort at the site has taken account of the recommendations of the BCT Good Practice Survey Guidelines, taking proportionality into account and the proposals.

Field Survey for Bats and Birds

Visual Inspection
A close inspection of the building was made in good light, and by torch where required. The exterior and voids of the building was examined as far as was feasible for signs of bats: droppings, urine streaks, clean cobweb-free areas on the ridge boards or crevices and potential roost exit holes. All external and internal crevices were checked using a torch and possible roosting sites were noted. Crevice-loving bats can be difficult to find especially when bats are present between the roofing felt and clay tiled/tiles. Beneath ledges the

ground was examined for feathers, pellets and birdlime that could indicate occupation by barn owls.

Timing and Weather Conditions

Survey	Date	Timings	Weather
Inspection	24 February 2025	Externally and internally 40 mins	Fine and dry

Personnel

Ruth Hadden – Bat Consultant since 1996, Class Survey Licence CL20 2015-13665-CLS-CLS (Bat Survey Level 4). Licensed to handle bats and enter known roosts since 1986. Qualifications BSc Joint Honours Zoology & Plant Biology, Newcastle upon Tyne. MCIEEM

Ben Hadden – Class Survey Licence WML CL18 (Bat Survey Level 2). Registration number 201514223-CLS-CLS. 19 years of experience. Qualifications MSc Ecological Consultancy, Newcastle upon Tyne.

3.4 Assessment.

The assessment has been conducted according to the *Guidelines for Ecological Impact Assessment in the UK and Ireland Terrestrial, Freshwater, Coastal and Marine,* CIEEM, September 2018. Impacts are considered for during construction and occupation.

Preliminary Ecological Appraisal Reports (PEAR) which CIEEM guidelines[1] states can be used to support a planning application where it can be determined that the project would have no significant ecological effects, no mitigation is required, and no further surveys are necessary. PEARs though can also provide;

- the results of initial ecological surveys associated with a proposed development
- identify further ecological surveys necessary to inform an EcIA
- identify ecological constraints to a project
- make recommendations for design changes
- highlight opportunities for ecological enhancement.

4. Baseline Ecological Conditions

4.1 General

The building surveyed is located at NZ383623 as shown below.

4.2 Designated Sites

Data search results reveal that there are five designated sites within 2km, Cleadon Hill SSSI and LNR, Boldon Pastures SSSI, Marsden Old Quarry LNR and Tilesheds LNR. The development site falls within the impact risk zones for SSSI's in the wider area, please see Figure 4.

[1] *Guidelines for Ecological Report Writing Second Edition* December 2017

Figure 4. Designated Sites and Priority Habitats within 2km of the site (from magic.defra.gov.uk)



4.3 Habitats

Figure 4 shows BAP Priority Habitats, within 2km (listed under Section 41 of the Natural Environment and Rural Communities Act 2006). These habitats are mainly lowland meadow, deciduous woodland, traditional orchard, lowland calcareous grassland and habitats with no main type.

4.4 Species and Species Groups

4.4.1 Desktop Search

Records from the Environmental Records Information Centre North East (ERIC) show results from within 2km of the site for bats. There are two granted European Protected Species licence for bats and none for great crested newts within 2km. There are two ponds shown on Magic within 500m however commuting barriers are present.

4.4.2 Habitat Description

The building surveyed is situated within the residential area in the centre of Cleadon. The town is surrounded by agricultural land consisting of improved/modified grassland and arable land with boundaries of hedges and fences. Immediately to the south of the site an area of deciduous trees is present, which links to an amenity/sports area with residential gardens backing onto it.

The immediate area has some potential for feeding bats, within the gardens and the amenity area. Bat roost potential will be present in Cleadon and any suitable tree.

The building surveyed is located on a busy road (B1298) with a garden area to the west and south, consisting of amenity grass and wooded areas.

4.4.3 Bats

Pre-existing information on the species at the site.
There are no known pre-existing records for the site. The closest records are foraging Pipistrelle 45kHz bats (2006) within 225m. (ERIC North East).

Status of species in the local/regional area.
Known bat activity in the area within 2km of the site are maternity roosts of Pipistrelle sp 1.6km to the southwest (2020) and Pipistrelle species 1.4km to the north (2015). Several occasional roosts of Pipistrelle 45kHz are known within 2km (2008-2020). In addition, foraging Nathusius' Pipistrelle (2019/2020), *Myotos sp*., Noctule and Pipistrelle 55kHz have also been recorded within 2km (2006-2019). (ERIC North East. A full data set available upon request).

There are two granted European Protected Species licence for bats, both are for occasional roosts of Pipistrelle 45kHz (2009/2012) northwest (1.3km) and to the east (350m) respectively. (Magic Site).

Locally and regionally, the Common Pipistrelle is the most common bat. Both Pipistrelle 45kHz and 55kHz bats are frequent in northern England, although Pipistrelle bats are the most abundant species, they are thought to have declined by 70% between 1978 and 1993 (National Bat Colony Survey). Since 1997 monitoring by the National Bat Monitoring Programme (NBMP) has shown that bat numbers seem to be steady with small fluctuations up or down depending on the species and survey type carried out. The Brown long-eared bat is occasional with colonies much smaller in numbers than the Pipistrelle. Daubenton's, Natterer's and Whiskered/Brandt's bats are also occasional but widespread in Northumberland with an average colony size being about 35 adult bats. The Nathusius' Pipistrelle is a rare bat, has migratory habits and has been proved to fly across the North Sea from Bristol to Holland and has occasionally been recorded in Northumberland throughout the season.

Bats – Daytime Risk Assessment
Inspection results reveal a bonded brick-built house with a double pitched slate roof running west to east. The eaves and outer slopes of the roofs have parapet walls and a valley runs between. The southern loft has a reinforced 'plastic type sarking and the northern roof has a mix with some bitumen felt sarking. Both lofts are shallow with no typical ridge beam and are well cobwebbed. Eaves voids are also present. No evidence of bats was

located either externally or within the lofts or eaves void or in the region of the proposed works. Negligible risk of bat roost potential beneath the slates.

Potential roost crevices were present beneath the watertables on the outer slopes of the roof in two locations, on the west gable, however no works are proposed in these locations.

The conservatory is glass with timber and is in a poor condition with glass panes falling from the roof. The timber frame has rot in a number of places however no suitable crevices were located. Negligible risk of bat roost potential.

Due to the negligible roost potential, no emergence surveys are recommended.

No potential bat hibernation sites were identified in the building; however, bats may be present in any suitable crevice, on the wall top.

4.4.4 Bird Assessment

No birds were noted during the inspection.

4.4.5 Invasive Species

These are non-native invasive species included in Schedule 9 of the Wildlife & Countryside Act 1981 (as amended), which makes it illegal to release or allow to escape into the wild.

Survey
No invasive species (as listed in Schedule 9) were noted on site.

4.4.6 Great Crested Newts

Pre-existing information on the species at the site.
There are no known pre-existing records for great crested newts (GCN) within 1km (Magic). A pond with GCN is known 1.5km to the northeast. There are no ponds present within 500m without commuting barriers.

There is no pond on site. No suitable habitat for amphibians was noted during the survey. There is low risk that great crested newts will be impacted.

5. Photographs of the Site



From the southeast



Crevices on west gable



Loft space



Second loft with even more cobwebs, some bitumen felt sarking

Cleadon House from the northwest



From the north



Crevice on west gable



No ridge





Eaves void



Roof valley looking east



Looking west



Aerial view showing parapet walls along the eaves



Conservatory from the west



From the southeast

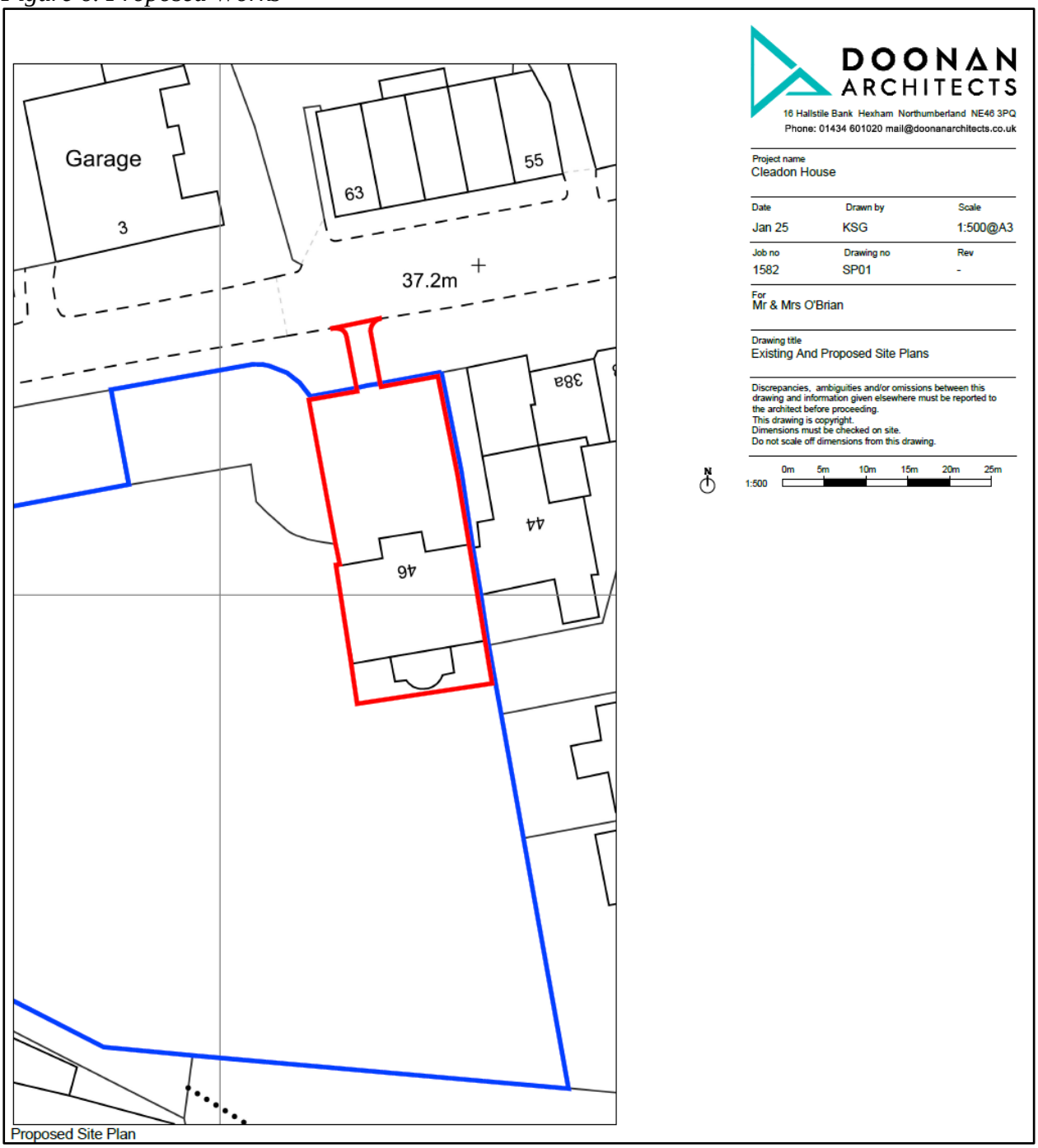


Rotten area in the timbers and missing panes in the roof.

6. Description of Proposed Development

The proposal will be to remove the bottom two courses of tiles from the central valley gutter and replace the lead with new lead sheeting. It is likely to require the installation a new ply gutter lining. The conservatory will be dismantled and replaced.

Figure 6. Proposed Works



7. Assessment of Impacts

7.1 Constraints

No constraints.

7.2 Site Based Impacts.

Pre-activity impacts are negligible with no changes being made to the use of the buildings.

Mid-activity impacts would be high and can cause disturbance, injury and death to bats, if no mitigation is carried out in the eventuality of a bat being located during works, however

mid-activity impacts on bats could be reduced further if mitigation such as caution for any dismantling work carried out.

The development will result in the loss of no roosts. The proposed works will not impact any potential bat roosts. The section of roof being repaired has negligible conservation significance for bats as a roost site at present. This assessment takes into account the location of the building and the good feeding habitat and shelter within 300m, the results of the inspection and the potential of the roof a maternity bat roost site.

Site Assessment
The development site is considered to have negligible conservation significance for bats and birds.

7.3 Impacts on the SSSI.

The development site falls within the risk impact zone for the nearby SSSI's in the area, however, the development is a small scheme and it is unlikely to greatly impact the designated area.

8. Mitigation and Enhancement.

The National Planning Policy Framework (NPPF) requires that the planning system minimizes impacts on biodiversity and provides net gains. The following recommendations will likely be translated into conditions placed on any planning consent. They are intended to reduce the risk of this development to protected species and habitats.

8.1 Pollution Prevention

To protect any nearby waterways, measures to be made to ensure that there is no runoff (herbicides, wheel washing, cement washings etc.) either during construction to prevent pollution or sediment issues, or after development. (See Environment Agency's Pollution Prevention Guidelines (PPG5) for guidance.

8.2 On Site Mitigation

The crevices beneath the water tables will be maintained as at present.

Wooden beams and timbers will be treated only with 'bat friendly' products, permethrin or cypermethrin as insecticides for example. Further information is available if the contractor requires it.

A traditional bitumen felt (F1) or wood sarking that would give bats some grip will be used in the region of any bat roost potential and not a more modern smooth or breathable roofing membrane (BRM) that may fray and entrap bats. **No BRM (Breathable Roofing Membrane) to be used in any areas where bats could gain access to roof as a result of new roost provisions.**

Any external lights will be set on a motion detector and short timer and be positioned in such a way that they do not shine on any of the bat access positions or the buildings, as this can deter bats. Any external lighting will be designed to the meet the minimum recommendations of the Guidance Note 8 - Bats and Artificial Lighting at Night, published in 2023 by the Bat Conservation Trust and Institute of Lighting Professionals.

Any nesting bird species that may be present will be allowed access to the nest between April and October until the young have fledged.

8.3 Mitigation Summary

To maintain bat and bird populations in the area the following will be carried out:-

- A Bat and Bird Method Statement to be followed during the works on the building.
- The crevices beneath the water tables will be maintained as at present.
- Any external lighting will be on a relatively short timer, directed away from bat roost access points and flight paths and motion-sensitive only to large objects.
- Any nesting bird species that may be present will be allowed access to the nest until the young have fledged between April and October.

Figure 7. Mitigation Locations

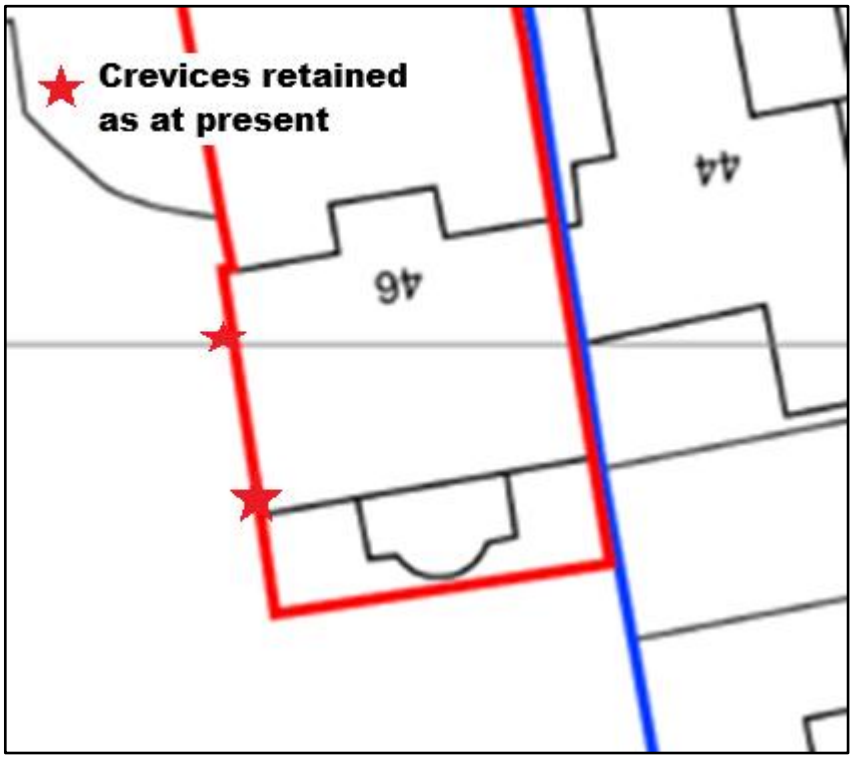


Table 1 Mitigation Summary

Location	Mitigation Type
West gable	Any crevices beneath the watertables will be maintained as at present.

8.4 Enhancement

Post construction, landscaping on the site will use locally native species and pollinator friendly species where possible.

8.5 Monitoring

Due to negligible impact on bat activity on site by the proposals, no monitoring after the development is completed, will be required to assess the success of mitigation. (UK Bat Mitigation Guidelines 2023). Ruth Hadden available to liaise with the owners as required regarding the mitigation.

8.6 Conclusions

- Without any mitigation the proposed works will result in negligible negative impact on the vegetation and wildlife present.
- The provision of mitigation in the maintenance of the crevices on the gable wall tops will maintain biodiversity on the existing site.

9. References

Barn Owl Trust (2002), Barn Owls on Site. English Nature

Chartered Institute and Ecology and Environmental Management (CIEEM) (2017). Guidelines for Ecological Report Writing 2nd Ed.

Collins J (ed.) (2023) Bat Surveys for Professional Ecologists: Good Practice Guidelines (4th edn). Bat Conservation Trust, London.

Corbet and Harris (1991). The Handbook of British Mammals. Blackwell.

Durkin J L (2016) Amphibian Atlas of North East England.

English Nature (2004) Bat Mitigation Guidelines. EN

Environment Agency's (2007) Pollution Prevention Guidelines: Works and maintenance in or near water: PPG5 **https://www.sepa.org.uk/media/100531/ppg-5-works-and-maintenance-in-ornearwater.pdf**

Institution of Lighting Professionals/Bat Conservation Trust (2023) Bats and artificial lighting at night, Guidance Note 08/23.

Joint Nature Conservancy Council (2004) The Bat Workers Manual. JNCC.

Reason, P.F. and Wray, S. (2023). UK Bat Mitigation Guidelines: a guide to impact assessment, mitigation and compensation for developments affecting bats. Chartered Institute of Ecology and Environmental Management, Ampfield.

Bat boxes: https://www.nhbs.com/low-profile-woodstone-bat-box

Build-in WoodStone Bat Box https://www.nhbs.com/build-in-woodstone-bat-box

Barn Owl Box : http://www.barnowltrust.org.uk/infopage.html?Id=41

Sparrow Terrace: www.nhbs.com/1sp-schwegler-sparrow-terrace

Swift boxes: **https://www.nhbs.com/vivara-pro-cambridge-swift-nest-box**

Bird box : https://www.nhbs.com/1b-schwegler-nest-box

Swift box https://www.nhbs.com/woodstone-swift-nest-box

Swallow Cups https://www.nhbs.com/eco-swallow-nest

Meadow Seed Mix. https://britishwildflowermeadowseeds.co.uk/products/northumberland-meadow-seed-mix

APPENDIX 1. LEGISLATION RELATING TO PROTECTED SPECIES

Bats

All bats are protected under the Wildlife and Countryside Act (Schedule 5). They are also included in Schedule 2 of the Conservation Regulations 2017. The Act and Regulations make it illegal to:

Intentionally or deliberately kill, injure or capture (take) bats

Deliberately disturb bats (whether in a roost or not)

Damage, destroy or obstruct access to bat roosts

The Countryside and Rights of Way Act 2000 converted the protection given to bats to cover *reckless* damage or disturbance.

A bat roost is interpreted as 'any structure or place which is used for shelter or protection', whether or not bats are present at the time.

Birds

Under the Wildlife and Countryside Act (1981) it is illegal to :-

- Kill, injure or take any wild bird (unless under licence);
- Take, damage or destroy a bird's nest whilst in use or being built;
- Take or destroy the egg of any wild bird;
- Disturb any wild bird listed on Schedule 1 of the Act while it is nest building or at a nest containing eggs or young or disturb the dependant young of such a bird.

Priority species in the UK BAP are also considered to be Species of Principal Importance for the Conservation of Biodiversity in England under Section 74 of the Countryside and Rights of Way Act 2000.

All bird's nests and their contents are protected under the Wildlife and Countryside Act 1981 from damage or destruction while the nests are being built or in use. Specially protected species, i.e. those that must not be disturbed whilst nesting, are very unlikely to occur on the site.

Hedgehog

The hedgehog is protected under the Wildlife and Countryside Act (Schedule 6) and is a priority species in the UK BAP and Northumberland BAP.

The Act and Regulations make it illegal to:

- Intentionally or deliberately kill, injure or capture (take) using certain methods.

Hedgehogs are closely linked with urban and in particular garden areas and can be commonly found hibernating beneath timber buildings or in leaf litter.

Biodiversity

The National Planning Policy Framework (NPPF) 2012 requires Local Planning Authorities (LPA's) to seek to deliver biodiversity enhancement through the planning system, see paragraphs 9, 109 and 118. In particular Paragraph 109 includes a statement:

The planning system should contribute to and enhance the natural and local environment by:

- ‘minimising impacts on biodiversity and providing net gains in biodiversity.’

APPENDIX 2. BAT METHOD STATEMENT FOR CONTRACTORS

This statement should be copied to the site owner, architect, clerk of works and to those contractors whose work may affect bat roosts including those involved in conversion, stone treatment, roofing and building works.

Bats are fully protected by law. To avoid breaking the law by damaging or disturbing bat roosts, resulting in possible imprisonment, fines or confiscation of equipment, certain procedures have to be followed.

Legislation
All bats are protected under the Wildlife and Countryside Act (Schedule 5). They are also included in Schedule 2 of the Conservation Regulations 2017. The Act and Regulations make it illegal to:

Intentionally or deliberately kill, injure or capture (take) bats

Deliberately disturb bats (whether in a roost or not)

Damage, destroy or obstruct access to bat roosts

The Countryside and Rights of Way Act 2000 extended the protection given to bats to cover *reckless* damage or disturbance.

A bat roost is interpreted as 'any structure or place which is used for shelter or protection', whether or not bats are present at the time.

Similarly the Barn Owl is protected under Part 1 of the Countryside Act 1981 and is listed on Schedule 1, which gives them special protection. It is an offence, with certain exceptions to:

- Intentionally or deliberately kill, injure or capture (take) any wild barn owl.
- Intentionally take, damage or destroy any wild barn owl nest whilst in use or being ‘built’.
- Intentionally take or destroy a wild barn owl egg.
- Intentionally or recklessly disturb any wild barn owl whilst ‘building’ a nest or whilst in, on, or near a nest containing young.
- Intentionally or recklessly disturb any dependant young or wild barn owls.

Identifying roosts
Pipistrelle the most common bat, favours small crevices and spaces between brickwork, stone and roofing felt. Bats are small mammals and when at rest the bodies are only 4-6 cm long, their fur colour can range from brown to pale and dark grey. When disturbed the bat is likely to be torpid and unable to fly effectively for some minutes, because of this they are vulnerable to injury as they are not fast moving and may fall to the ground, breaking bones or be accidentally crushed. Basically, when material from the roof and tops of the walls is removed any crevices underneath should be checked to ensure that no bat has been disturbed.

Other traces that can indicate a past presence of bats are their droppings. These resemble mouse droppings but unlike mouse droppings can be crumbled to dust between finger and thumb. Droppings may be found on wall tops and beneath slates and tiles on top of any sarking.



Photo showing disintegrated bat droppings beneath coping stones. If examined carefully, in the black dust exoskeletons of insects can be seen shining.

Timing

Any development work involving the removal of the existing roof materials or stonework will be carried out avoiding the hibernation period (November to March inclusive) if possible. Periods of cold weather (below 5ºC including night temperatures) will also be avoided if possible as any bats present will be in hibernation torpor and be extremely vulnerable. If torpid bats are encountered and disturbance is unavoidable the bat will be taken into care and fed until suitable conditions for release at the site is possible.

Contractors

All contractors will be aware that bats may be present in the area and could be present and may be found torpid in crevices if any. Table 1 below highlights where bats may be found and the recommendations. Any bats found during operations will have the cavity re-covered for its safety and any work in the vicinity will cease. Ruth Hadden to be informed for advice immediately (01661 886562). As only licensed bat handlers can move bats and the contractors are not permitted to handle bats, the bat will be allowed to disperse of its own accord overnight.

Table 1 General Methodology for Works

STRUCTURE	METHOD	INSPECT
Roofs	Remove any ridge tiles, tiles/slates or roof coverings including loose felt by hand, lifting vertically to prevent any bats from being crushed. Removal of any timbers/beams.	Check any crevices underneath the roofing materials including the underside, as it is removed. Check any crevices around the beams as work proceeds.
Walls/Eaves	Expose the wall tops. Remove any gutters. Dismantle any walls required, by hand.	Examine for bat droppings and any wall cavities for bats.
Walls - Pointing	**Only point crevices where the full depth can be seen otherwise leave as at present.**	Check deep crevices for the presence of bats using a torch.
Windows/doors	Remove windows, doors and frames by hand, where gaps exist around the frames.	Examine any wall cavities exposed. Avoid blocking any external pre-existing gaps.

If a barn owl is found unexpectedly during operations the cavity will be re-covered or protected and work will cease in that area. Ruth Hadden to be informed (01661 886562) immediately for assistance. Any nesting bird species will be allowed access to the nest until the young have fledged between April and October.

Mitigation Summary

The crevices beneath the water tables will be maintained as at present. Please see plan below for locations.

Wooden beams and timbers will be treated only with 'bat friendly' products, permethrin or cypermethrin as insecticides for example. Further information is available if the contractor requires it.

A traditional bitumen felt (F1) or wood sarking that would give bats some grip will be used in the region of any bat roost potential and not a more modern smooth or breathable roofing membrane (BRM) that may fray and entrap bats. **No BRM (Breathable Roofing Membrane) to be used in any areas where bats could gain access to roof as a result of new roost provisions.**

Any external lights will be set on a motion detector and short timer and be positioned in such a way that they do not shine on any of the bat access positions or the buildings, as this can deter bats. Any external lighting will be designed to the meet the minimum recommendations of the Guidance Note 8 - Bats and Artificial Lighting at Night, published in 2023 by the Bat Conservation Trust and Institute of Lighting Professionals.

Mitigation Locations

