



PRELIMINARY ROOST ASSESSMENT

3 Killiebrigs, Heddon-on-the-Wall, NE15 0DD



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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.

It is the client's responsibility to commission, in writing, any additional survey effort/licence requirements detailed within this report with RH Ecological Services.

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

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IT IS THE CLIENT'S RESPONSIBILITY TO COMMISSION ANY MITIGATION MEASURES OR RECOMMENDATIONS DETAILED WITHIN THIS REPORT.

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PRELIMINARY ROOST ASSESSMENT 3 KILLIEBRIGS, HEDDON-ON-THE-WALL, NE15 0DD

Summary

ADDITIONAL BAT SURVEY(S) REQUIRED TO DETERMINE THIS ASSESSMENT.

A Preliminary Roost Assessment for bats and birds at 3 Killiebrigs, Heddon-on-the-Wall (NZ 13157 66554) was produced to inform a planning application for a front extension to the property. No planning application reference is currently available.

The building is in a reasonable state of repair. Potential Roost Features (PRFs) include:

- Gaps into soffit boxes.
- Gaps beneath plastic hip tiles that may lead into roof space.

Droppings consistent with bat droppings (they crumbled upon handling) were found within the loft void. A sample has been taken for DNA analysis, if required. The building is therefore likely used by roosting bats.

In order to determine if the bat roost is still active and if it is affected by the development proposals then bat survey(s) should be undertaken between May and August to get an understanding of the use of the building by bats (if any). This is in accordance with the Bat Conservation Trust (2016) ‘Bat Surveys Good Practice Guidelines’.

No work should be carried prior to these survey(s) being undertaken on the building. This is to reduce any impacts on any bat roosts, if present, which could constitute a legal offence.

Bat records have been requested from ERIC North East¹ and will be discussed once received.

The nearest Designated [wildlife] site is Heddon Common LNR, located ~365 metres west. The property lies within the SSSI Impact Risk Zone, no impacts are expected.

There are no areas of Priority Habitat on/adjacent to the site.

The property is surrounded by gardens laid to lawn with shrubs and gravelled areas present. Small apple trees are present in the rear garden. None of the trees have any Potential Roost Features (PRFs) for bats noted. The root systems of these trees are away from the development area.

A Pollution Prevention Plan should be put in place during the construction phase.

No signs of badger, owls, red squirrel or other protected species were noted on site. There is potential for birds to nest on the property and around the gardens. Integrated features suitable for bats and birds are recommended to be incorporated into the proposed extension works.

Aside from bats, any other potential impacts can be suitability dealt with via Precautionary Working Methods which are provided within this report (appendix 1).

This report is valid for 2 years.

An updated assessment will be required should work not commence by July 2024.

¹ www.ericnortheast.org.uk

1. Introduction and proposed works

The proposed works are for a front extension to the property. No planning application reference is currently available.

The site location / aerial imagery is shown in **figure 1**. Existing and proposed plans are shown in **figures 2-4**.

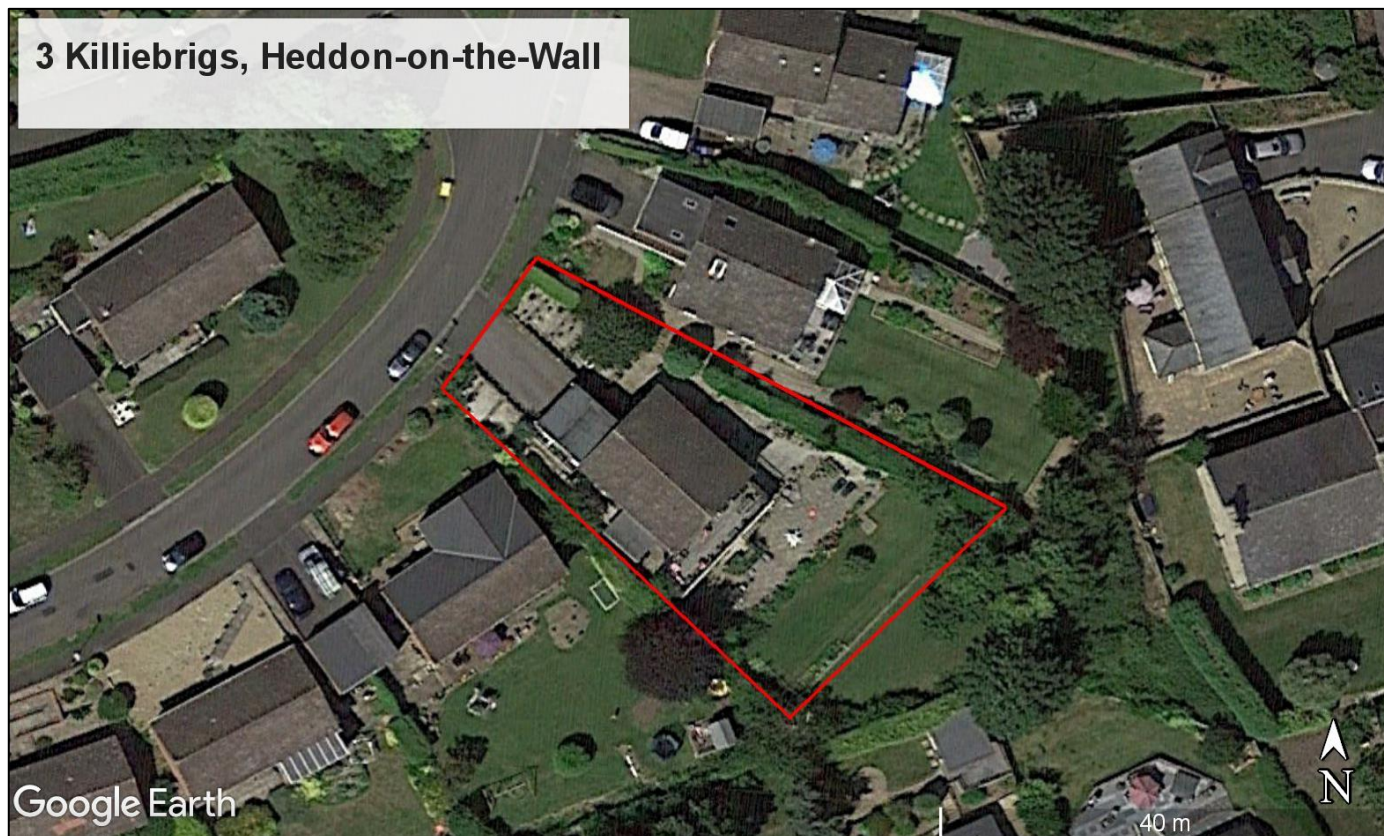


Figure 1. Site location - aerial view².

² Reproduced with permission from Google Earth (2022).

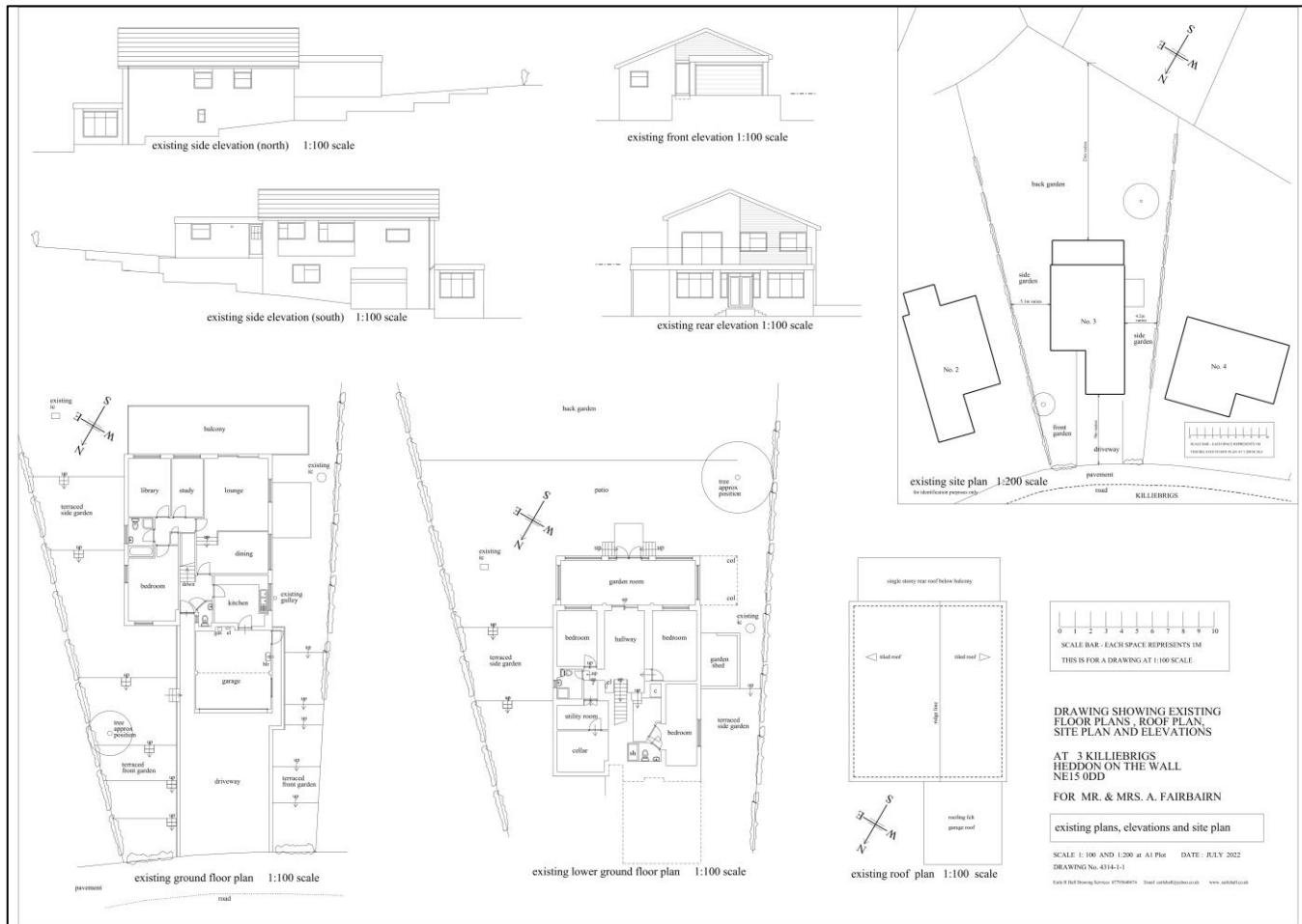


Figure 2. Existing plans.



Figure 3. Proposed plans.

3. Methodology

3.1 Desktop survey

The area was surveyed using Ordnance Survey Explorer maps (1:25,000 scale) and Google Earth Pro with habitat features of value to bats such as watercourses, woodland and hedgerows noted.

Bat data records have been requested from ERIC North East³.

Natural England's 'Magic on the Map' website was accessed for details of the citations for the designated sites and EPS licensing. The JNCC website⁴ and Natural England websites provided further information on site designations.

3.2 Daylight assessment

The daylight visit for the 'Preliminary Roost Assessment' was carried out **30th July 2022**. This was conducted according to the Chartered Institute of Ecology and Environmental Management's Guidelines for Preliminary Ecological Appraisal (CIEEM, 2012) and the Bat Conservation Trust's Bat Surveys Good Practice Guidelines (2016) on Preliminary Roost Assessment.

The weather was suitable for the assessment, being 21°C, dry and sunny.

The surveyor assessed the building for signs of bats and birds. The building was checked thoroughly both internally and externally for any signs of bats; including live or dead bats, droppings, feeding remains, clawing or scuff/grease/urine marks at roost entrances, and potential roost features such as cavities or gaps in roofing tiles, soffits, loose mortar *etc.* The surveyor used a headtorch, powerful compact torch, binoculars and inspection camera (endoscope).

³ www.ericnortheast.org.uk

⁴ <http://jncc.defra.gov.uk>

3.3 Surveyor

The daylight site visit and report were compiled by Rachel Hepburn, an experienced ecologist and an associate member of the CIEEM since 2013 with over 15 years' experience in ecological surveying. She holds Natural England Licences for bat surveys (2015-12969-CLS-CLS) and great crested newt surveys (2016-19907-CLS-CLS).

4. Site description

The property is a detached residential building, located on a housing estate in the small village of Heddon-on-the-Wall.

The wider countryside, connected to the site by lines of trees within the residential gardens is located approximately 135 metres south and consists of grassland fields with scattered trees and copses of woodland

An area of woodland is found approximately 220 metres west. Several small ponds can be seen on aerial imagery within a golf course approximately 850 metres south west.

The River Tyne flows ~1.1km south. The Rudchester Burn flows ~1.1km north west.



Figure 5. Surrounding area⁵.

⁵ Reproduced with permission from Google Earth (2022).

5. Desktop survey

5.1 Designated Sites

Designated [wildlife] Sites were checked on 'MAGiC on the Map'⁶. There are 3 within 2km:

Designated Site	Proximity
Heddon Common Local Nature Reserve (LNR)	~365 metres west
Close House Riverside Site of Special Scientific Interest (SSSI)	~1.18km south
Clara Vale LNR	~1.5km south

There is very little information about **Heddon Common LNR** in the Public Domain. Of interest are animals, wildflowers and mushrooms.

Close House Riverside SSSI is one of a series of sites in the Tyne and Allen river system where alluvial deposits, contaminated by heavy metals derived from the North Pennine Orefield upstream, support an unusual community of metal-tolerant plants.

Clara Vale LNR is a former mining site and it was saved from development in the mid-1980s by the formation of the Clara Vale Conservation Group. Within the site are wooded areas, hedgerows, ponds and streams. The site is home to overwintering birds, amphibians, wildflowers and butterflies.

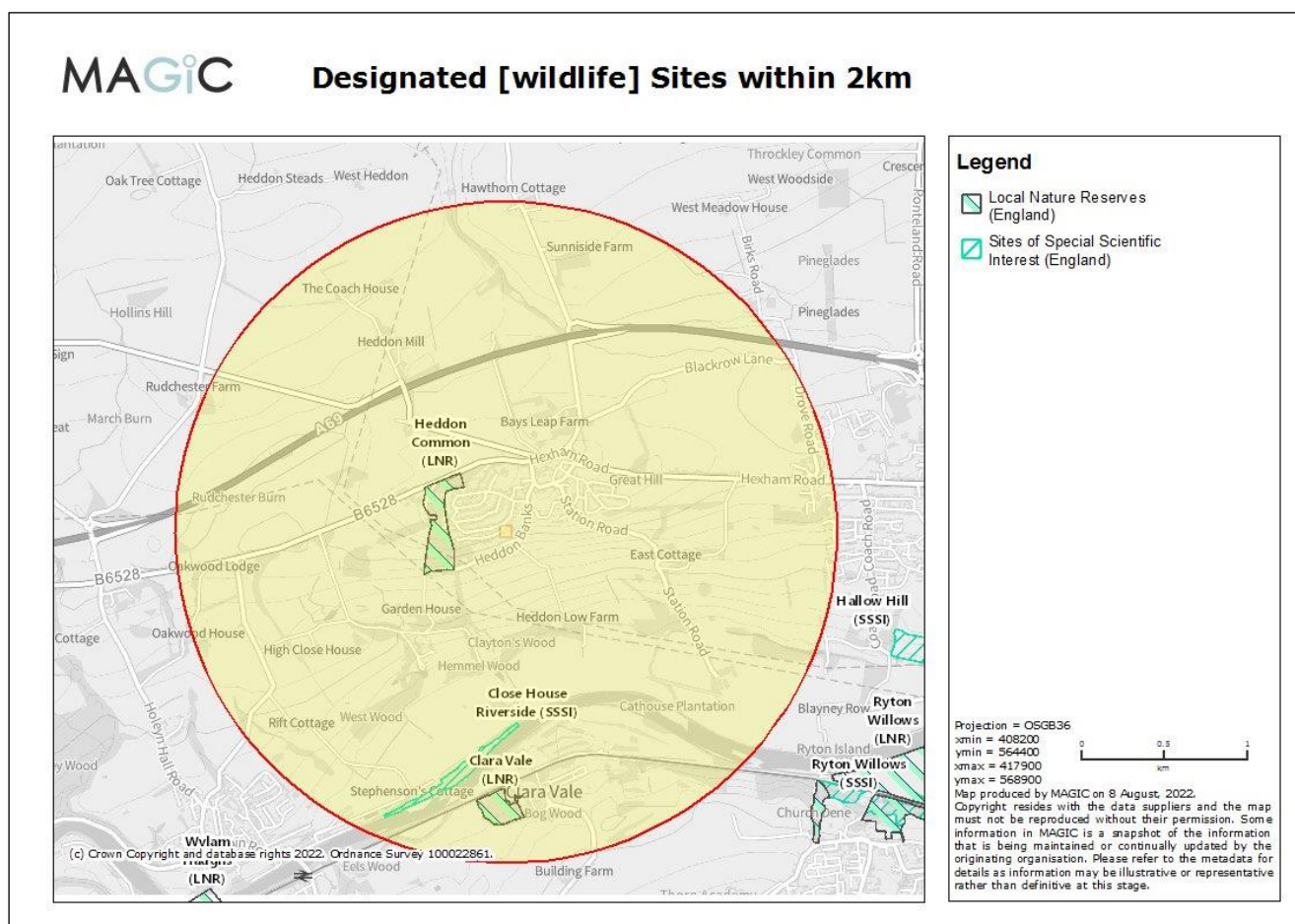


Figure 6. Designated [wildlife] Sites within 2km.

⁶ magic.defra.gov.uk

The site falls within the SSSI Impact Risk Zones. Potential impacts are discussed in the table below. No impacts are expected.

Category	Impact	Description
Infrastructure	N/A	Pipelines, pylons and overhead cables. Any transport proposal including road, rail and by water (excluding routine maintenance). Airports, helipads and other aviation proposals.
Minerals, oil and gas	N/A	Planning applications for quarries.
Air pollution	N/A	Any industrial/agricultural development that could cause air pollution.
Combustion	N/A	General combustion processes >20MW energy input.
Waste	N/A	Landfill.
Composting	N/A	Any composting proposal with more than 75000 tonnes maximum annual operational throughput.
Water supply	N/A	Large infrastructure such as warehousing / industry where total net additional gross internal floorspace following development is 1,000m ² or more.

5.2 Priority Habitats

'MAGiC on the Map' was checked for Priority Habitats (Habitats of Principal Importance). These are habitats listed under Section 41 of the Natural Environment and Rural Communities Act 2006. There are no Priority Habitats on/adjacent to the development site. The following are found within 2km of the site:

Habitat	Proximity
Deciduous woodland	~210 metres west
Woodpasture and Parkland BAP	~730 metres south west
Good quality semi-improved grassland	~1.1km south
Calaminarian grassland	~1.25km south
Traditional orchard	~1.4km south east
Open Mosaic Habitats on Previously Developed Land ⁷	~1.6km south
Ancient and semi-natural woodland	~1.7km south east (Mill Wood / Eels Wood)
Mudflats	~1.7km south east
Lowland fens	~2km south east

As the development is an extension to an existing property, it will not result in an increase of residential dwellings. Therefore negligible impact is expected on these habitats.

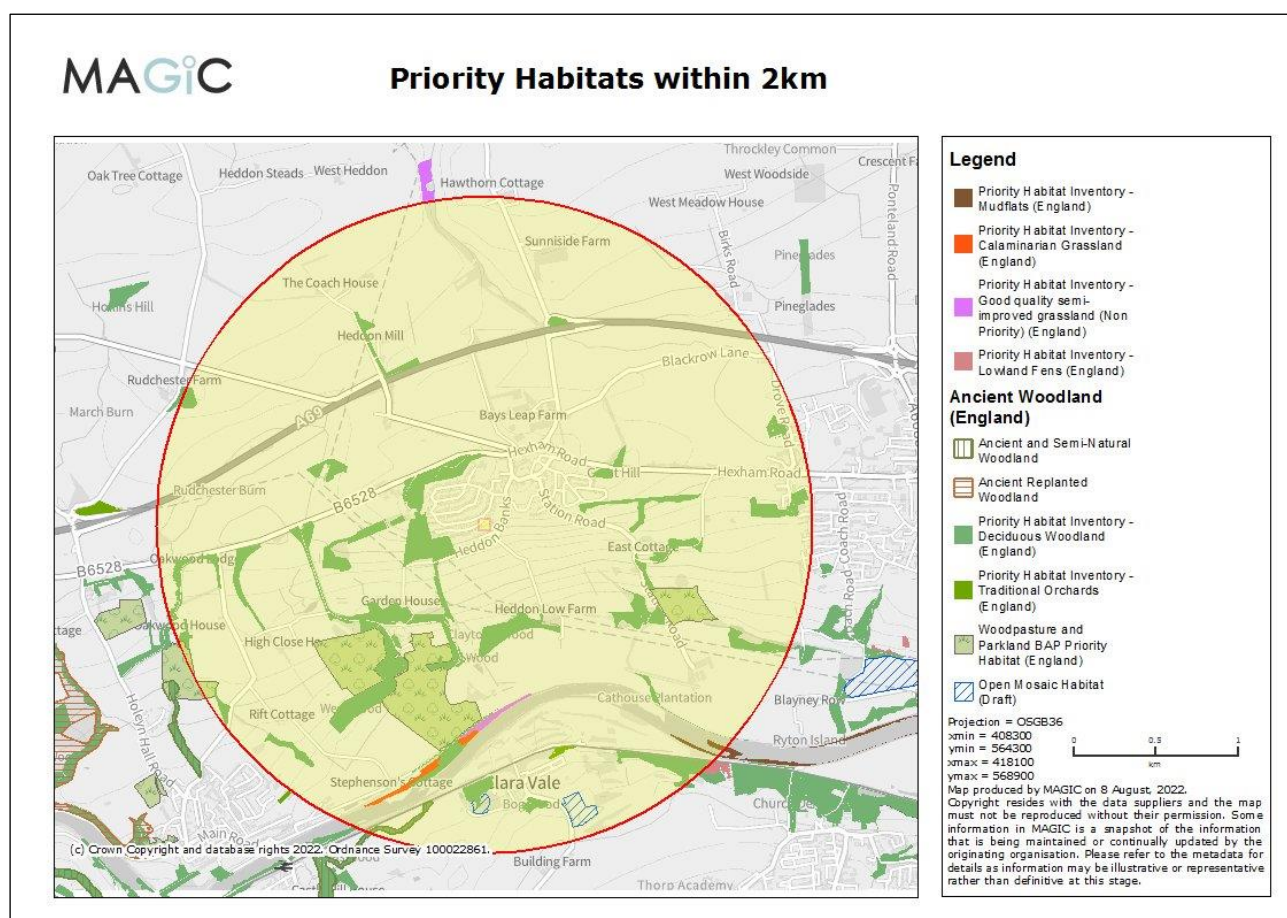


Figure 7. Priority Habitats.

⁷ Draft mapping.

5.3 EPSLs and bat records

Bat data records have been requested from ERIC North East⁸ and will be discussed once received.

'MAGiC on the Map' was checked for any granted Endangered and Protected Species Licences (EPSLs) granted within 2km. This brought back 4 results:

Reference	Species	Licence dates	Impact	Proximity
2019-39109- EPS-MIT	Common pipistrelle	18/03/2019 - 30/06/2020	Destruction of a resting place.	~150 metres NE
EPSM2010- 2103	Brown long-eared	30/11/2010 - 30/09/2012	Impact on a breeding site. Destruction of a breeding site. Destruction of a resting place.	~885 metres SW
EPSM2009- 1474	Common pipistrelle	25/11/2008 - 31/10/2009	Unknown.	~1.7km NE
EPSM2011- 3246	Common pipistrelle Soprano pipistrelle Brown long-eared Natterer's	14/09/2011 - 31/08/2014	Destruction of a resting place.	~2km SE

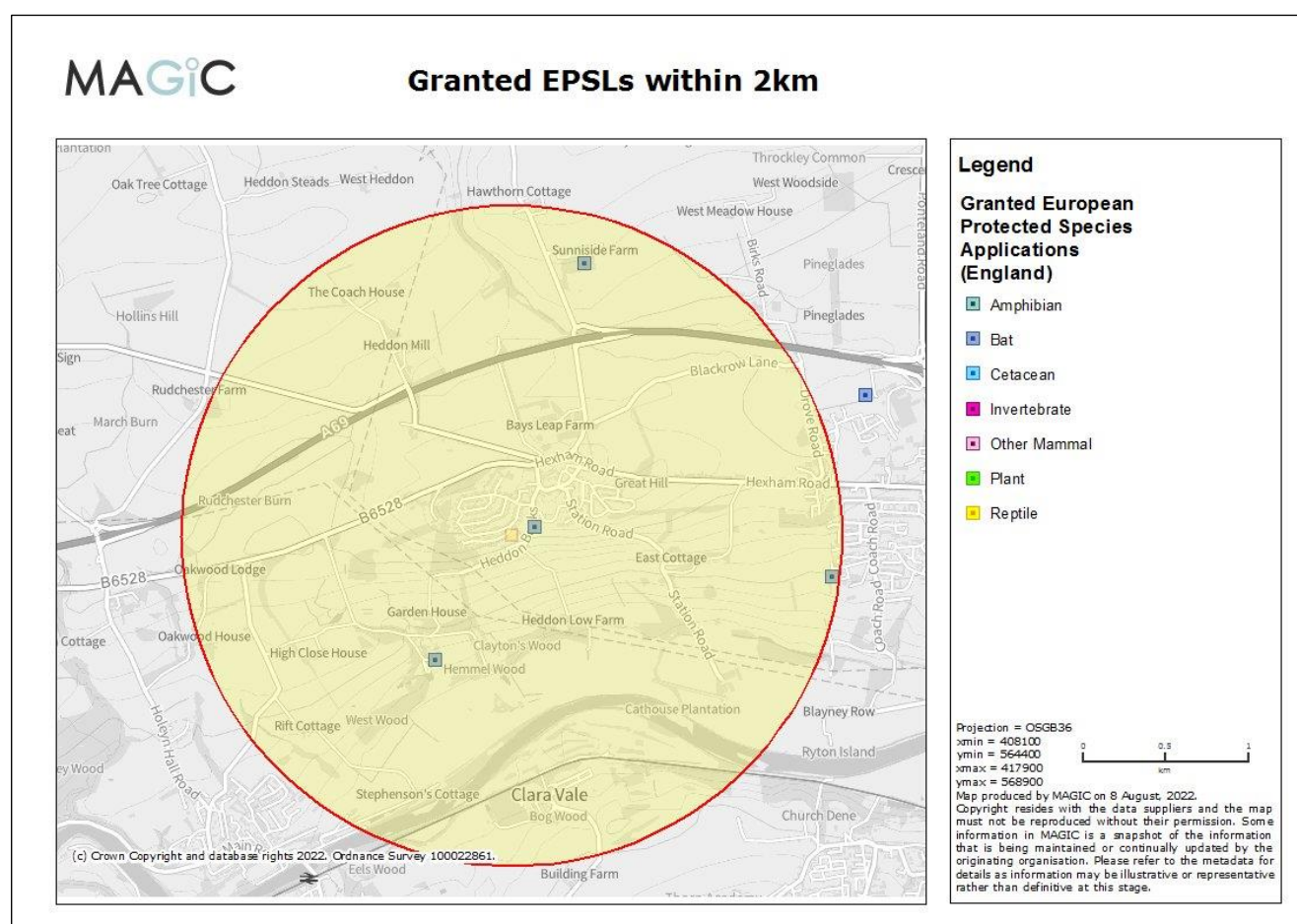


Figure 8. Granted EPSLs within 2km.

⁸ www.ericnortheast.org.uk

5.4 Local planning portal

The property, 3 Killiebrigs, has no previous planning history.

6. Site walkover

6.1 Description

The property is of brick-and-breezeblock construction and is a detached dwelling with an integrated garage (**figure 10**). The roof tiles appear to be in place (however there is limited viewing of the roofline unless at a distance from the property) – see **figure 13**. The hips were capped off with plastic end tiles, which provide gaps down to the ends (**figure 12**).

The windows are uPVC double glazed. Soffit boxes (of uPVC construction) are present, gaps are present into the soffits (**figure 12**).

An upper floor balcony area is present on the south eastern elevation (**figure 9**). Some elevations have vertical plastic sheeting present, which appear to be flush to the wall.

A large loft void is present (**figure 14**). This has insulation laid down throughout and bitumen felt present below the tiles. Droppings, consistent with bat droppings (they crumbled when handled) were found near a wall at the south eastern end (**figure 15**). A sample has been collected.

A small lean-to and wooden porch (**figure 11**) are present on the side (south eastern) elevation. No Potential Roost Features were noted in this region.

The rear garden is laid to lawn with species present of no particular note. Young apple trees (**figure 17**) are present in the garden. The trees will not be affected by the proposed development. The front and sides of the property have gravelled areas present with some ornamental planting (**figure 16**).

Hedges delineate the site boundary.

There is potential for birds to nest around the garden.

6.2 Photos



Figure 9. Rear (south eastern) and side (north eastern) elevations.



Figure 10. Front (north western) elevation.



Figure 11. South western elevation showing wooden porch area.



Figure 12. Gaps into soffit boxes and plastic cap tiles.



Figure 13. Roofline.



Figure 14. Loft void.



Figure 15. Wall with droppings present in the loft void.



Figure 16. Gravelled area of the garden.



Figure 17. Apple trees in rear garden.

7. Impact assessment and proposed mitigation

7.1 Summary

ADDITIONAL BAT SURVEY(S) REQUIRED TO DETERMINE THIS ASSESSMENT.

- The building is deemed to have **low-medium risk of supporting roosting bats**. Droppings consistent with bat droppings (they crumbled upon handling) were found within the loft void. The building is therefore likely used by roosting bats.
- There is potential for birds to nest on the property and within the surrounding gardens.
- A Pollution Prevention Plan should be put in place during the construction phase,
- No signs of any other protected species were noted.
- The nearest Designated [wildlife] site is Heddon Common LNR, located ~365 metres west. The property lies within the SSSI Impact Risk Zone, no impacts are expected.
- There are no areas of Priority Habitat on/adjacent to the site.

In order to determine if the bat roost is still active and if it is affected by the development proposals then bat survey(s) should be undertaken between May and August to get an understanding of the use of the building by bats (if any). This is in accordance with the Bat Conservation Trust (2016) ‘*Bat Surveys Good Practice Guidelines*’.

No work should be carried prior to these survey(s) being undertaken on the building. This is to reduce any impacts on any bat roosts, if present, which could constitute a legal offence.

Integrated features for bats and birds are recommended to be incorporated into the proposed extension⁹. Aside from bats, any potential impacts can be suitably dealt with *via* a Precautionary Working Method Statement (**appendix 1**) without the need for further survey work. These should be conditioned as part of a planning application.

Factors supporting the recommendations are discussed in the sections below:

7.2 Limitations

The roofline (tiles) was only partially viewable and at some distance from the property.

⁹ www.nhbs.com

7.3 Birds

There is potential for birds to nest on the building and around the garden.

Potential impacts

- Disturbance to breeding birds.
- Destruction of active nests, causing death or injury to fledging birds.

Actions and mitigation

- Site contractors must be made aware of the law around the bird nesting season (March-August inclusive).
- Construction works should avoid the bird nesting season unless a suitably experienced ecologist has confirmed that no nesting birds are present 48 hours prior to the works commencing.
- Integrated bird nesting features are recommended to be included with the extension works.

7.4 Bats

ADDITIONAL BAT SURVEY(S) REQUIRED TO DETERMINE THIS ASSESSMENT.

The building is in a reasonable state of repair and is deemed to have **low-medium potential for roosting bats**. Potential Roost Features (PRFs) include:

- Gaps into soffit boxes.
- Gaps beneath plastic hip tiles that may lead into roof space.

Droppings consistent with bat droppings (they crumbled upon handling) were found within the loft void. A sample has been taken for DNA analysis, if required. The building is therefore likely used by roosting bats.

In order to determine if the bat roost is still active and if it is affected by the development proposals then bat survey(s) should be undertaken between May and August to get an understanding of the use of the building by bats (if any). This is in accordance with the Bat Conservation Trust (2016) '*Bat Surveys Good Practice Guidelines*'.

No work should be carried prior to these survey(s) being undertaken on the building. This is to reduce any impacts on any bat roosts, if present, which could constitute a legal offence.

Bat records have been requested from ERIC North East¹⁰ and will be discussed once received

¹⁰ www.ericnortheast.org.uk

The [initial] Assessment was made based on the Bat Conservation Trust (2016) 'Bat Surveys Good Practice Guidelines'. The full assessment tables can be found in **appendix 3**.

Overall suitability for bats	Habitat and settings	Moderate
	Building	Low-medium
	External	Low-medium
Potential suitability of the development site for bats	Commuting and foraging habitats	Moderate
	Roosting habitats	Moderate

Potential impacts

- Disturbance, killing or injury to occasional/opportunistic bats which may use the building as a roost.
- Disturbance to foraging bats.
- Increased lighting levels may affect foraging and commuting routes for nocturnal animals.
- Loss of habitat connectivity/disruption of flight lines.

Actions and mitigation

- **Bat survey(s) should therefore be undertaken between May and August to get an understanding of the use of the building by bats (if any). This is in accordance with the Bat Conservation Trust (2016) 'Bat Surveys Good Practice Guidelines'.**
- **No work should be carried out prior to these survey(s) being undertaken on the building. This is to reduce any impacts on any bat roosts present, which could constitute a legal offence.**
- Roofing and wall features including tiles, soffits and flashing to be removed by hand, carefully checking for bats.
- If bats or signs of bats are found, then work must stop, and the project ecologist contacted for advice.
- Any external lighting should be low level, directional and follow the ILP/BCT 2018 guidance¹¹.
- Non-Bitumen (Breathable) Roofing Membranes¹² should not be used as these are known to cause death to bats by entanglement. Currently the only 'bat safe' roofing membrane is bitumen 1F felt that is a non-woven short-fibred construction.
- Any external paint used should be checked to ensure it will not cause harm to bats or birds.
- Integrated features suitable for bats (such as bat access tiles) are recommended to be incorporated into the proposed development to ensure No Net Loss of bat roost potential.

7.5 Designated Sites and Priority Habitats

The nearest Designated [wildlife] site is Heddon Common LNR, located ~365 metres west. The property lies within the SSSI Impact Risk Zone, no impacts are expected.

There are no areas of Priority Habitat on/adjacent to the site, therefore no impacts are expected.

¹¹ ILP (2018). *Advice note 08/18 - Bats and artificial lighting in the UK - Bats and the Built Environment series*. BCT

¹² www.bats.org.uk/our-work/buildings-planning-and-development/non-bitumen-roofing-membranes

7.6 Other species and habitats

The property is surrounded by gardens laid to lawn with boundary hedges present. None of the nearby trees had any Potential Roost Features (PRFs) for bats noted. RH Ecological Services are not aware of any proposed tree works and the root systems of these trees are away from the development area.

No signs of badger, owls, red squirrel or other protected species were noted on site.

Potential impacts

- Potential impact on foraging animals.
- Pollution *via* site run-off and/or materials/chemicals stored/increased traffic on site.
- Pollution *via* site run-off during the construction phase.
- Disturbance and/or injury to wildlife during the construction phase..
- Activities such as mixing cement, refuelling or storage of materials/equipment may cause significant damage to those features such as compaction or contamination.
- Pollution *via* site run-off through discharges of waste during construction works on site, particularly with regard to the nearby watercourse.

Proposed mitigation measures

- A pollution prevention strategy/plan should be put in place. This should include standard good practice measures included in PPG6 (see references). This should include both the construction phase and during residential site occupation. Chemicals must be stored carefully and following their COSHH guidelines. All those working on site to have access to spill kits and appropriate training in their use.
- Any storage of materials on site is likely to create suitable refugia for several species and therefore should only be moved by hand.
- Any pits or holes dug during the construction phase must be covered up overnight or fitted with exit ramps (scaffolding planks) for mammals, to be placed at an angle of 30° from base to top.
- Check any areas of ground thoroughly before work starts. Holes left following removal of tree stumps/rocks should also be checked.
- Remaining vegetation to be gradually reduced in size, checking for wildlife, such as small mammals and reptiles.
- Any small mammals should be given chance to move away of their own accord to a place of safety or carefully remove them to a safe area nearby, preferably in vegetation, away from the working area.

8. References

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APPENDIX 1. Precautionary Working Method Statement

METHOD STATEMENT FOR CONTRACTORS 3 KILLIEBRIGS, HEDDON-ON-THE-WALL, NE15 0DD

The following precautions are necessary to prevent a legal offence being committed. All species of bats and breeding birds are protected by law. Deliberate or reckless disturbance of these animals is a legal offence, punishable by fines and/or imprisonment. They are intended to reduce the impact of this development to protected species. These recommendations must be followed by all of those working on the site.

Should any protected species be found, work should immediately stop, and the project ecologist contacted.

Bats commonly roost in cavity walls and roofs. They may be present under roof tiles, ridge tiles and at wall tops or within crevices. All species of bats are strictly protected by law. Damage or destruction of a bat roost is an absolute offence with a maximum penalty of a £5,000 fine per offence, up to 6 months imprisonment, and confiscation of equipment.

Birds often nest at eaves, in roofs and in soffits. All species of breeding birds, their nests (whilst being built and when in use), eggs and chicks are also protected by law.

Example only – to be updated following bat activity survey(s).

- **No roofing, soffit box or work near the wall tops should be carried out until it has been confirmed by RH Ecological Service if a Natural England mitigation licence is required to be in place before work begins.**
- All works to cease immediately if bats, bat signs or nesting birds are found, and the project ecologist contacted for advice before works can proceed.
- Roofing and wall features including tiles, soffits and flashing to be removed by hand, carefully checking for bats.
- Non-Bitumen (Breathable) Roofing Membranes¹³ should not be used as these are known to cause death to bats by entanglement. Currently the only 'bat safe' roofing membrane is bitumen 1F felt that is a non-woven short-fibred construction.
- Any external paint used should be checked to ensure it will not cause harm to bats or birds.
- Integrated features suitable for bats (such as bat access tiles) and birds (nesting boxes) are recommended to be incorporated into the proposed extension.
- A pollution prevention strategy/plan should be put in place. This should include standard good practice measures included in PPG5 and PPG6 (see references). This should include both the construction phase and during residential site occupation. Chemicals must be stored carefully and following their COSHH guidelines. All those working on site to have access to spill kits and appropriate training in their use.

¹³ www.bats.org.uk/our-work/buildings-planning-and-development/non-bitumen-roofing-membranes

- Any external lighting should be directional away from any roosts/valuable habitat featured and follow the ILP 2018 guidance¹⁴. Any new external lighting will be directional, low intensity and controlled by motion sensor and face away from the nearby treelines.
- Site contractors must be made aware of the law around the bird nesting season (March-August inclusive). Construction works should avoid the bird nesting season unless a suitably experienced ecologist has confirmed that no nesting birds are present 48 hours prior to the works commencing.
- Any storage of materials on site is likely to create suitable refugia for several species and therefore should only be moved by hand. Holes left following removal of tree stumps/rocks should also be checked.
- Any pits or holes dug during construction phase must be covered up overnight or fitted with exit ramps (scaffolding planks) for mammals to be placed at an angle of 30° from base to top.
- Contractors should check any areas of ground thoroughly before starting work and before they leave.
- All materials, fuel, equipment and chemicals, if left on site, to be stored securely.
- Remaining vegetation to be gradually reduced in size, checking for wildlife, such as small mammals and reptiles.
- Any small mammals should be given chance to move away of their own accord to a place of safety or carefully remove them to a safe area nearby, preferably in vegetation, away from the working area.
- Root Protection Areas should be marked up around retained trees. Refer to '*British Standard 5837:2012 Trees in relation to design, demolition and construction*' and '*BS 3998:2010: Tree work – Recommendations*'.
- No storage of materials or parking of machinery should occur within the RPAs.
- All materials, fuel and equipment, if left on site, to be stored securely in a position away from the site boundaries and at least 5 metres from any tree canopies.
- Utilities (if applicable) should be installed outside of any tree's RPA where practical to minimise damage to roots and disturbance of soils. Vehicles and machinery will be restricted from operating/parking on unprotected soil within these RPAs.

¹⁴ ILP/BCT (2018) Advice note 08/18 - Bats and artificial lighting in the UK - Bats and the Built Environment series.

Signed by Owners

Names

Date.....

Signed by Contractors

Name	Job Title	Date	Signature

APPENDIX 2. Relevant wildlife 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.

Paragraph 109 of the **National Planning Policy Framework (NPPF)** requires that the planning system minimizes impacts on biodiversity and provides net gains where possible.

The **Environment Act (2021)** has two main functions:

- To give a legal framework for environmental governance in the UK.
- To bring in measures for improvement of the environment in relation to waste, resource efficiency, air quality, water, nature and biodiversity, and conservation.

In Britain **all bat species and their roosts** are legally protected, principally under the Conservation of Habitats and Species Regulations (2010), with additional protection under the Wildlife and Countryside Act (1981) (as amended), including under Schedule 12 of the Countryside and Rights of Way Act, 2000, which created a new offence of reckless disturbance.

The combined effect of these is that a person is guilty of an offence if they:

- Deliberately capture, injure or kill a bat.
- Intentionally or recklessly disturb a bat in its roost or deliberately disturb a group of bats. In particular where this may:
 - i. Impair their ability to survive, to breed or reproduce, or rear or nurture their young.
 - ii. Affect significantly the local distribution or abundance of the species.
- Damage or destroy a bat roosting place (even if bats are not occupying the roost at the time).
- Intentionally or recklessly obstruct access to a bat roost.

All **birds, their nests and eggs** are protected by law and it is an offence, with certain exceptions, to:

- Intentionally kill, injure or take any wild bird.
- Intentionally take, damage or destroy the nest of any wild bird while it is in use or being built.
- Intentionally take or destroy the egg of any wild bird.
- Intentionally or recklessly disturb any wild bird listed on Schedule 1 while it is nest building or is in, on or near a nest with eggs or young; or disturb the dependent young of such a bird. Barn Owls are named in Schedule 1 of this Act.

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 dependent young of wild barn owls.

APPENDIX 3. Bat suitability tables

From 'Bat Conservation Trust (2016). *Bat Surveys Good Practice Guidelines*'. Those in **bold** and blue shaded boxes apply to the building/site.

Overview of site suitability for bats.				
Habitats and settings				
	Negligible	Low	Moderate	High
Habitats and cover within 200 metres.	City centre.	Open, exposed arable, amenity grass or pasture.	Hedges and trees linking site to wider countryside.	Excellent cover with mature trees and/or good hedges.
Habitats within 1km.	City centre.	Little tree cover, few hedges, arable dominated.	Semi-natural habitats e.g. trees, hedgerows.	Good network of woods, wetland and hedges.
Alternative roosts within 1km.	City centre.	Numerous alternative roost sites of a similar nature.	A number of similar buildings in the local area.	Few alternative buildings and site of good quality for roosts.
Setting.	Inner city.	Urban with little green space.	Built development with green-space, wetland, trees.	Rural Lowland with woodland and trees.
Distance to water/marsh.	>1km	500m-1000m	200m-500m	<200m
Distance to woodland/scrub.	>1km	500m-1000m	200m-500m	<200m
Distance to species-rich grassland.	>1km	500m-1000m	200m-500m	<200m
Commuting routes.	Isolated by development, major roads, large scale agriculture.	No potential flyways linking site to wider countryside.	Some potential commuting routes to and from site.	Site is well connected to surrounding area with multiple flyways.

Overview of site suitability for bats.				
Building				
	Minimal	Low	Medium	High
Age (approximate)	Modern.	Post 1940s.	1900-1940.	Pre 20th Century.
Building/complex type	Industrial complex of modern design.	Single, small building.	Several buildings, large old single structure.	Traditional farm buildings, country house, hospital.
Building – storeys	N/A	Single storey.	Multiple storeys.	Multiple storeys with large roof voids.
Stone/brick work	No detectable crevices.	Well-pointed.	Some cracks and crevices.	Poor condition, many crevices, thick walls.
Framework – timbers/steel	Modern metal frame with sheet cladding.	Timber purlins, sheet asbestos.	Timbers kingpost or similar.	Large timbers traditional joints.
Roof void	Fully sealed roof.	Small, cluttered void.	Medium, relatively open.	Large, open, interconnected.
Roof covering	Modern sheet materials and tightly sealed.	Good condition or very open not weatherproof modern sheet materials.	Some potential access routes, slates, tiles.	Uneven with gaps, not too open, stone slates.
Additional features	Very well maintained and tightly sealed.	No features with potential access.	Some features with potential access.	Hanging tiles, cladding, barge boards, soffits with access gaps.
External				
Lighting	Extensive security. Lights covering much of the site.	Widespread areas above 2 lux at night.	Intermittent lights of low intensity	Minimal
Building use	Very noisy, dusty	Regular use	Intermittent use	Disused

Guidelines for assessing the potential suitability of proposed development sites for bats, based on presence of habitat features within the landscape.

Suitability	Commuting and foraging habitats
Negligible	Negligible habitat features on site likely to be used by commuting or foraging bats.
Low	<p>Habitat that could be used by small numbers of commuting bats such as a gappy hedgerow or un-vegetated stream, but isolated, <i>i.e.</i> not very well connected to the surrounding landscape by other habitat.</p> <p>Suitable, but isolated habitat that could be used by small numbers of foraging bats such as a lone tree (not in a parkland situation) or a patch of scrub.</p>
Moderate	<p>Continuous habitat connected to the wider landscape that could be used by bats for commuting such as lines of trees and scrub or linked back gardens.</p> <p>Habitat that is connected to the wider landscape that could be used by bats for foraging such as trees, scrub, grassland or water.</p>
High	<p>Continuous, high-quality habitat that is well connected to the wider landscape that is likely to be used regularly by commuting bats such as river valleys, streams, hedgerows, lines of trees and woodland edge.</p> <p>High-quality habitat that is well connected to the wider landscape that is likely to be used regularly by foraging bats such as broadleaved woodland, tree lined watercourses and grazed parkland.</p> <p>Site is close to and connected to known roosts.</p>

Suitability	Roosting Habitats
Negligible	Negligible habitat features on site likely to be used by roosting bats.
Low	A structure with one or more potential roost sites that could be used by individual bats opportunistically. However, these potential roost sites do not provide enough space, shelter, protection, appropriate conditions and/or suitable surrounding habitat to be used by larger numbers of bats (<i>i.e.</i> unlikely to be suitable for maternity or hibernation).
Moderate	A structure with one or more potential roost sites that could be used by bats due to their size, shelter, protection, conditions and surrounding habitat but unlikely to support a roost of high conservation status (with respect to roost type only – the assessments in this table are made irrespective of species conservation status, which is established after presence is confirmed).
High	A structure with one or more potential roost sites that are obviously suitable for use by larger numbers of bats on a more regular basis and potentially for longer periods of time due to their size, shelter, protection, conditions and surrounding habitat.