



BJ Collins
PROTECTED SPECIES SURVEYORS

ECOLOGICAL CONSTRUCTION METHOD STATEMENT
FOR THE DEVELOPMENT OF
LANGAR-CUM-BARNSTONE VILLAGE HALL
MAIN ROAD
BARNSTONE
NOTTINGHAMSHIRE

A report to:

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Report to:	Welham Architects
Report Title:	Ecological Construction Method Statement for Langar-cum-Barnstone Village Hall

Survey Site/Job:	Langar-cum-Barnstone Village Hall, Main Street, Barnstone, Nottinghamshire, NG13 9JP
OS Grid Reference:	SK 7330 3539

Survey Date(s):	5 th , 13 th and 27 th of July 2022
Surveyed by:	Mr Patrick Collins BSc (Hons)

Architect/Agent:	NA
Planning Reference:	NA

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The evidence which we have prepared and provided is true and has been prepared and provided in accordance with the guidance of The Chartered Institute of Ecology and Environmental Management's Code of Professional Conduct.

RELIANCE - The report describes the conditions and ecological features on the site (and possibly its environs) at the time of survey and that this may (is likely to) change over time. Reliance upon the findings of this report should be determined in accordance with the Chartered Institute of Ecology and Environmental Management guidance on the longevity of ecological surveys, see Advice Note (April 2019) *On the Lifespan of Ecological Reports and Surveys* CIEEM.

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1. INTRODUCTION

This Ecological Construction Method Statement has been prepared by BJ Collins – Protected Species Surveyors Limited for Welham Architects on behalf of the Langar-cum-Barnstone Parish Council. The document provides the results of protected species surveys, focused on bats (*Chiroptera*), of the Langar-cum-Barnstone Village Hall, located off Main Street, in Barnstone, Nottinghamshire, NG13 9JP. The site is centred upon the OS grid reference, SK 7330 3539.

The objective of the protected species surveys, which consisted of a preliminary bat roost assessment and wider protected species assessment, and follow-up bat emergence and activity surveys, was to assess the site with regards to protected species, as per the Wildlife and Countryside Act 1981 (as amended), to address Planning Condition 12 of the Rushcliffe Borough Council Planning Permission – 19/02496/FUL and ensure that the proposed demolition works to the village hall remain lawful.

12. **Prior to the commencement of the new village hall development, an Ecological Construction Method Statement shall be submitted to and approved by the Local Planning Authority.**

[This is pre-commencement to ensure adequate consideration of ecological matters and to comply with the requirements of the Wildlife and Countryside Act 1981, Policy 17 (Biodiversity) of the Local Plan Part 1: Core Strategy and to comply with policies 1 (Development Requirements) and 38 (Non-Designated Biodiversity Assets and the Wider Ecological Network) of the Local Plan Part 2: land and Planning Policies].

Figure 1 - the planning condition framed for the ecological construction method statement.

In order to address this condition, in the 1st instance it was necessary to identify whether there would be any potential breach of wildlife legislation. In order to achieve that a preliminary ecological appraisal was undertaken. This appraisal identified the potential for protected species and therefore phase 2 bat surveys were undertaken. On the completion of these surveys an Ecological Construction Method Statement was designed and this is provided within chapter 6 of this document.

The legislation with regard to bats (*Chiroptera*) is listed below.

1.1 Legislation applicable to bats

All species of British bat and their roosts are protected under British law by the Wildlife and Countryside Act 1981 (as amended), and bats are classified as European Protected Species under the Conservation of Habitats and Species Regulations 2017 ('the 2017 Regulations'). This has recently been amended by the Conservation of Habitats and Species Regulations (Amendment) (EU Exit) Regulations (2019) which continue the same provision for European protected species, licensing requirements, and protected areas after Brexit.

The legislation makes it an offence to kill, injure or disturb a bat and/or to damage or destroy a breeding site or resting place for a bat. It is also an offence to disturb the animals such that it impairs their ability to survive, to reproduce, to nurture their young, or such that it impairs their ability to hibernate or migrate. Under this legislation development work that could affect a bat or bat roost can only be permitted under a licence from Natural England.

Licences in respect of European Protected Species affected by development can be granted under Section 55(2) (e) of The Conservation of Habitats and Species Regulations (Amendment) (EU Exit) Regulations (2019), for the purpose of preserving public health or public safety or other imperative reasons of overriding public interest including those of social or economic nature and beneficial consequences of primary importance for the environment.

Under section 55(9) of the Regulations licences can only be issued if Natural England is satisfied that:

- there is no satisfactory alternative to the work specification
- and the action authorised will not be detrimental to the maintenance of the population of the species at a favourable conservation status in their natural range.

Natural England aim to process EPS licence applications within 35 working days of receipt and Low Impact Class licenses are typically registered within 14 working days of receipt.

1.2 Legislation applicable to breeding birds

The bird breeding season generally lasts from early March to September for most species. All birds are protected under the Wildlife and Countryside Act (1981) (as amended) and the Countryside & Rights of Way Act 2000. This legislation makes it illegal, both intentionally and recklessly to:

- Kill, injure or take any wild bird.
- Take, damage or destroy the nest of any wild bird while it is being built or in use.
- Take or destroy the eggs of any wild bird; and
- Possess or control any wild bird or egg unless obtained legally.

2. SITE DESCRIPTION

2.1 Location of Langar-cum-Barnstone Village Hall



Figure 1: The situation of Langar-cum-Barnstone village hall, encircled in yellow, in relation to the surrounding landscape, courtesy of Google Earth.

The survey site, which contains the village hall, two wooden sheds and areas of hardstanding, is located in the village of Barnstone, in Nottinghamshire. The immediate surrounding area contains residential properties in all directions, with established garden landscapes containing shrubbery, hedges and mature tree species. The proximity of such features may provide cover during emergence for potentially roosting bats, as well as an immediate foraging resource and direct access to wider commuting pathways across the landscape.

The wider surrounding landscape contains an extension of the residential areas to the south, with large areas of agricultural farmland to the north. The agricultural areas are dominated by arable fields that are bounded by intact hedgerow interspersed with tree species. This abundance of hedgerow and trees offers a good level of connectivity across the landscape for commuting bats. Within a 1 km radius of the site there are at least two copses of deciduous woodland, and a large body of water, namely Fish Pond, all connected by the previously mentioned commuting pathways, providing a good level of foraging opportunity for most of the bat species found in Nottinghamshire.

The surveyor searched the Magic Mapping Application online resource looking for Statutory and Non-statutory Designations as well as optimal habitat for bats such as Ancient Woodland. The search returned just one result within a 2.5km radius of the site, namely the Barnstone Railway Cutting SSSI (Site of Special Scientific Interest), 750m to the east. Additionally, the surveyor searched for previously granted European Protected Species Licences but found none within 2.5 km of the site.

The surveyor also utilised the Nottinghamshire insight Mapping online resource for Local Wildlife Sites within a 2.5 km radius of the site and identified 7 sites. These were the Langar Quarry, Langar Airfield, Barnstone Disused Railway, Barnstone Dismantled Railway, Granby Green Lane, Bingham Disused Railway and the River Smite.

2.2 Description of the Village Hall

The Langar-cum-Barnstone Village Hall dates back to the 1920's and is constructed from a mixture of solid brick and large painted ironstone blocks and a substantial timber roofing frame topped with a concrete interlocking roofing tile. There is a small porch on the northern elevation of similar construction to the hall, and there is a flat roof extension on the southern elevation of the village hall which is constructed from a cavity brick and is topped with a felt roof covering. The building is fitted with uPVC windows and doors.

The following photographs demonstrate the buildings construction.



Photograph 1: Langar-cum-Barnstone Village Hall, taken from the north-west, showing the mixed construction of brick and painted ironstone and the porch attached on the northern elevation.



Photograph 2: Langar-cum-Barnstone Village Hall, taken from the south-west, showing the flat roof extension to the rear of the building constructed from cavity brick.

2.3 Description of the Timber Sheds

There are two timber sheds on site, both constructed from a simple timber panel frame. The shed to the west of the village hall is fitted with a felt roof covering, and the one to the south-east is covered in a plastic sheeting.



Photograph 3: The timber shed located to the west of the village hall.



Photograph 4: The timber shed located to the south-east of the village hall.

3. SURVEY METHODOLOGY

3.1 Preliminary Bat Roost Assessment

A preliminary bat roost assessment was undertaken to the buildings on the 5th of July 2022. This survey was completed in accordance with the Good Practice Guidelines (Collins 2016), comprising a visual inspection of all areas of the buildings (formerly referred to as a bat scoping survey).

The methodology included examining the village hall and timber sheds for potential roost features and assessing the likelihood of these features being used by bats. This included searching for evidence of bat roosting in the form of feeding remains, droppings, staining, worn surfaces and the bats themselves (alive or dead).

Equipment used included a powerful torch, collapsible ladders, camera, and binoculars.

3.2 Ecology walkover

An assessment for other relevant protected species was undertaken to the buildings and habitat on site. The search included looking for evidence of other protected species, with the lack of any area of extensive landscape this search was principally aimed at the potential presence of breeding birds.

3.3 Emergence and Activity Surveys

Due to the determination of the preliminary bat roost assessment, the village hall was subject to two emergence and activity surveys, as per the Guidelines. The surveys were carried out on the 13th and 27th of July 2022.

The surveys were completed by deploying two bat ecologists for the first, and just a single ecologist for the second, comprising an experienced and licensed bat ecologist and assistant bat worker. The surveyors used a range of equipment including Anabat Scout full spectrum bat detector and recording units and Echometer Touch II full spectrum bat detector and recording unit. Night vision video equipment was used in support of the surveyors.

This included a Canon XA20 digital camcorder with night vision recording paired with a Dedolight infrared floodlight and a Sony Handycam with night vision recording supported by infra-red floodlighting.

Ambient temperature was measured with an ETI Hygro-Therm hygrometer.

All bat activity was documented by the surveyors.

3.4 Survey constraints

The surveyors did not encounter any significant constraints upon the survey effort. They were able to access all areas of the survey site.

3.5 Weather Data

The weather for the preliminary bat roost assessment was dry with good daylight allowing full observations of the external fabrics of the dwelling.

Date	Sunset/ Sunrise	Temperature (°C)		Cloud Cover (%)		Wind (Beaufort)		Precipitation
		Start	End	Start	End	Start	End	
13/07/2022	21:25	21.4	14.9	25	0	1	1	None
27/07/2022	21:06	19	17.6	100	100	2	2	Light Rain at 22:15

Table 1: The weather data from the emergence and activity surveys undertaken in the active season of 2022.

3.6 Personnel

Date	Surveyor	Position	Licences (If applicable)
05/07/2022	Patrick Collins BSc (Hons)	NA	Natural England Class Licence: 2021-52948-CLS-CLS
13/07/2022	Patrick Collins BSc (Hons)	North of Village Hall	Natural England Class Licence: 2021-52948-CLS-CLS
	Katie Higham	SW of Village Hall	
04/07/2022	Patrick Collins BSc (Hons)	North of Village Hall	Natural England Class Licence: 2021-52948-CLS-CLS

Table 2: The surveyor data from the protected species surveys

4. SURVEY RESULTS

4.1 Preliminary Bat Roost Assessment Results

The village hall is an open void from floor to near roof apex, with a narrow ceiling less than a metre below the apex creating an inaccessible small void.

Externally, the surveyor identified evidence of bat roosting in the form of approximately 30-50 droppings within the void between the coping stones of the north-facing porch and its bitumen felt underlining. These droppings were of the typical shape and size of those known to be voided by Long-eared bats, as seen below, the droppings were all even aged and were typical of an animal being in situ for a limited period.



Photograph 5: Evidence of the void between the coping stone of the north facing porch and the roofing frame and bitumen felt underlining.



Photograph 6: Dropping evidence from within the void between stone and roofing frame and membrane.

Externally, the building was found to contain a limited number of features suitable for a crevice dwelling species such as one of the Pipistrelle bats. Such features included the feature identified above, along with potential gaps between roof tiles, gaps behind the timber bargeboards, a settlement crack between old and newer sections of the building, missing bedding mortar of end tiles and gaps around roofing timbers.

Evidence of the features considered to be of at least low bat roosting potential as per the Good Practice Guidelines (Collins 2016), are shown below.



Photograph 7: Evidence of gaps behind the timber bargeboard on the south-eastern corner of the flat roof section.



Photograph 8: Evidence of features such as the missing bedding mortar of some end tiles, leading to the exposed timber of the roofing frame, as well as gaps behind the bargeboard and behind a section of felt, all located on the south-western corner of the village hall.

4.2 Wider Protected Species Assessment Results

4.2.1 Breeding Birds

Within the void between the coping stones of the north facing porch and its timber frame and roof covering, the surveyor located evidence of historic nesting by a smaller bird species such as Wren (*Troglodytes troglodytes*) or Blue tit (*Cyanistes caeruleus*).



Photograph 9: Evidence of historic nesting material identified behind the bitumen felt within the void between stone and roofing material on the north facing porch.

4.3 Emergence and Activity Survey Results

13th of July 2022 – Emergence and Activity Survey

Two bat ecologists were deployed positioned on the northern and southern elevation of the village hall to ensure all elevations were under observation simultaneously, as well as identifying bats that approach from outside the survey area.

A total of 32 observations of bat activity were documented by the surveyor on the northern side of the building, monitoring the area where evidence of bat roosting has been previously recorded. No bats were seen emerging from any areas of the survey building during the survey, including for the porch area. The surveyor recorded 3 species of bat with the Common pipistrelle (*Pipistrellus pipistrellus*) being the most frequent followed by Soprano pipistrelle (*P. Pygmaeus*) and with a single pass by Noctule (*Nyctalus noctula*).

The surveyor to the south of the village hall recorded significantly less bat activity. This comprised of a total of 5 observations of bat, although there was continuous foraging within the gardens behind the surveyor, south of the village hall, between 22:22 and 22:30. The surveyor recorded Common pipistrelle and Soprano pipistrelle bats. No bats were observed emerging.

At the close of this survey no bats were recorded emerging from or associating with the structure such as to suggest future roosting.

27th of July 2022 – Emergence and Activity Survey

On the 27th of July the building was monitored by a single licensed bat ecologist on the southern elevation observing the porch area and the northern side of the structure.

The survey commenced at 21:06 hours and the first bat was recorded at 21:30, Common pipistrelle heard but not observed to the south-west of the surveyor's position. This species was then recorded at 21:32, with 3 passes again to the south-west, 21:34 with 4 passes again in the gardens to the south-west, 21:39 with 2 passes to the west of the surveyor, the survey terminated at 22:20 hours with no bats observed emerging from out of the porch.

At the close of this survey no bats were recorded emerging from or associating with the structure such as to suggest future roosting.

5. EVALUATIONS AND RECOMMENDATIONS

5.1 Bats in buildings

The preliminary bat roost assessment determined the presence of evidence to suggest some low level usage by a bat species, most likely to be the Brown long eared bat (*Plecotus auritus*), in the porch of the village hall. Close examination at this time found no bat present to suggest current roosting and the evidence was of a few evenly aged droppings suggesting transit usage.

The remainder of the structure contained a few limited features with some potential for roosting bats, but no evidence of such usage.

Therefore, in accordance with national guidance the structure was categorised as being of low/moderate potential of supporting roosting bats.

In order to address this categorisation, whilst remaining proportionate to the scale of evidence and the structure, two emergence and activity surveys were carried out.

The surveys found no current bat roosting.

It is therefore the conclusion of this report that the village hall does not contain an active bat roost, and as such, the proposed development project cannot be covered under a European Protected Species Licence. In order to acquire an EPS licence a site has to have an active bat roost with bat species present.

In this instance, it is recommended that the demolition work is carried out under the concept of "continuous ecological functionality" as described by Natural England in their newsletter dated July 2011.

The Ecological Construction Method Statement below describes how this will be delivered.

5.2 Breeding Birds

The few limited features with potential for roosting bats had evidence of historic nests by smaller common garden bird species.

Therefore precautionary actions are recommended and included within the Ecological Construction Method Statement overleaf.

6. ECOLOGICAL CONSTRUCTION METHOD STATEMENT

6.1 Bats

The building is proposed for demolition soon after the publication of this document. If demolition is delayed beyond April 2023 then a further emergence and activity survey should be carried out as the first action.

At the time that the demolition of the existing building commences, actions will be required to ensure that in the unlikely event that a bat has returned to roost between the publication of this document and the end of the active season, that it will not be harmed by the demolition commencing with a precautionary soft demolition of a limited section of the building where bats typically roost.

This work will need to be supervised by a suitably licensed bat ecologist.

Specifically, this includes for the hand removal of all the ridge tiles from off of the village hall roof and in particular all of the tiles from off of the porch. It then includes all of the tiles from off of the eaves to cover both potential for bats and nesting birds, see below. All the areas requiring this methodology are identified within figure 2 below.



Figure 2 - showing the areas that must be soft stripped by hand in advance of demolition, under the supervision of a bat ecologist (areas highlighted in yellow).

The soft demolition will entail the hand removal of the tiles with care and caution. The tiles must be lifted and not allowed to slip or be lowered again after lifting. The contractor should then check underneath every tile before removing the tile completely.

6.1.1 Temporary receptor site

If a bat is discovered during these works then it will be captured by the bat ecologist only and placed into a holding box for a limited period of time. There will then be a bat box fixed to the fence at the rear of the plot, the bat will be placed in there and allowed to emerge and disperse at its own leisure.

6.1.2 Actions post 'soft-demolition'

Once the areas of potential risk are removed under the soft demolition actions and the supervision of the bat ecologist, the building should be left for a period of 2 days to allow the elements access and

any other animals inside time to disperse, in the unlikely event that a bat is present within the structure at that time.

From that point onwards, the contractor should be advised by a toolbox talk that if a bat is discovered elsewhere that work was be suspended and the ecologist contacted for further advice without delay. To facilitate this there is a procedure included within Appendix 1 of this report.

To ensure that the contractors follow this precautionary approach, once a toolbox talk has been provided the procedure included within appendix 1 of this report will be issued and retained on site within the site cabin.

6.2 Breeding birds

All breeding birds are listed under Schedule 1 of the Wildlife and Countryside Act (1981) (as amended) (e.g. barn owl) are afforded additional protection, which includes making it an offence to disturb a bird while it is nest building, or at a nest containing eggs or young, or disturb the dependent young of such a bird

To avoid any potential risk of conflict the demolition of the building should be timed for outside of the breeding season, which is variable and runs for the entire period between March and September.

Note that a nest is protected from the beginning of its construction until the young have fledged and have left the nest.

If demolition work is required within the bird nesting season, in this instance before the beginning of September or after March 2023, then in advance a pre-commencement breeding bird check should be carried out by suitably qualified ecologist. Note that if an active nest is found then the nest itself an area of 5 m around will have to remain unaffected and undisturbed until the young have hatched and fledged.

7. REFERENCES

Collins, J. (ed) (2016): **Bat Surveys for Professional Ecologists: Good Practice Guidelines, 3rd Edition**, Bat Conservation Trust, London.

APPENDIX 1 -PROCEDURE FOR IF A BAT IS DISCOVERED DURING WORKS

- If at any point in the building works bats are discovered then contractors must stop work immediately and telephone BJ Collins Protected Species Surveyors on 01636 830058 or 07957 122217.
- B J Collins PSS will either provide an appropriately licensed bat worker to the site or provide a member of staff who will liaise directly with the contractor. Actions will then be taken following advice given. This may include removal of bats, but only where the bat ecologist considers this to be a viable and safe option.
- Bats are a protected species and there should be no attempt to handle a bat if discovered. The bat should be covered with a light material (cloth) and the bat worker called out to carry out the rescue.
- Only when the bat ecologist is satisfied that the risk to bats is ceased will works recommence.
- Should it transpire that the operation being carried out is of more risk to bats than was originally thought, then works will be stopped until they can be supervised by an appropriately licensed bat worker.
- If a bat is found under a tile or within any other niche to the building fabric, works will stop immediately (as above). If the bat does not voluntarily fly out, then the aperture will be carefully covered over to protect the bat(s) from the elements, leaving a small gap for the bat to escape voluntarily. Any covering should be free from grease or other contaminants, and should not be a fibreglass-based material.