Internal /External Bat Survey

Former Fole Dairy, Uttoxeter

Report to C B Colllier F.D. Ltd.

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Appendices

1. **Additional site images**

1.0. Introduction

A building, was subject to a pre-determinative bat survey at the Former Fole Dairy, Uttoxeter. This constitutes a survey in relation to the potential for presence of bat species and roost sites, in relation to an application for planning permission proposal for demolition of the existing buildings and conversion the existing Mill building (refer to Planning Application).

The brief of the survey was as follows;

- An External/Internal evaluation of the buildings for utilization signs by bat species.
- To determine whether any buildings and trees within the site had potential for use by bats for roosting or as a place of shelter, with consequent implication for development work with respect to Schedule 5 of the *Wildlife and Countryside Act 1981 and the conservation (Natural Habitats &c.) Regulations (and subsequent amendments).*
- To determine the presence of any roosts within the site.
- To determine any use of the buildings concerned by bird species
- To make an overall assessment of the value of the site as foraging, feeding and commuting areas.
- To make recommendations for the development work to take place including any mitigation/ compensation required.

1.1. Background

Bats and the Law

Prior to August 2007, all bat species in the UK were fully protected under the *Wildlife and Countryside Act 1981* (as amended) through an inclusion in Schedule 5. The amendment of the *Conservation (Natural Habitats) Regulations 1994,* in August 2007 now is the regulatory protection mechanism. In addition there are obligations within the Conservation of Species and Habitat Regulations (2010) and National Planning Policy Framework (2012) which replaced the former Planning Policy Statement 9 (PPS 9).

In England, Scotland, Wales and Ireland all bat species are fully protected by the Conservation (Natural Habitats, &c.) Regulations, which defines 'European protected species of animals' (EPS). This gives protection to bats and their roosts.

The Regulations have slightly different amendments in the different countries.

Under the regulations it is an offence to-

a) Deliberately or recklessly to capture, injure, or kill a EPS.

b) Deliberately or recklessly –

i. To harass a wild animal or group of wild animals of a EPS.

ii. To disturb while it is occupying a place of shelter (roosts).

iii. To disturb while it is rearing its young or caring for its young.

iv. To obstruct access to a breeding site or resting place, or otherwise deny the animal use of that site or resting place.

v. To disturb a EPS in a manner that is, or circumstances which are likely to significantly affect the local distribution or abundance of the species.

vi. To disturb a EPS in a manner that is, or circumstances which are likely to impair its ability to survive, breed or reproduce, or rear or otherwise care for young.

In this interpretation, a bat roost is "any structure or place which any bat uses for shelter or protection". As bats tend to reuse the same roosts, legal opinion is that the roost is protected whether or not the bats are present at the time.

Planning and Development

All British bat species and their roosts are protected under the Wildlife and Countryside Act 1981, through inclusion on Schedule 5. They are also protected under the Conservation (Natural Habitats &c.) Regulations 1994 (which were issued under the European Communities Act 1972), through inclusion on Schedule 2.

The Act and Regulations include provisions making it illegal to:

- Intentionally or deliberately kill, injure or capture bats.
- Deliberately disturb bats.

- Damage, destroy or obstruct access to a roost.

Local Planning Authorities consult the Government's guidance notes, National Planning Policy Framework (2012) and the Conservation of Species Habitat Regulations (2010) in England, and equivalents in Scotland and Wales, before making a planning decision where there may be protected species on a site. The presence of a protected species should be a material consideration when considering a development proposal which, if carried out, would be likely to result in harm to the species or its habitat. If bats use the site, appropriate Statutory Nature Conservation Organization (English Nature, Scottish Natural Heritage or the Countryside Council for Wales) must be consulted before any work is carried out. Where necessary, a bat expert should visit and assess the site.

If planning permission is being sought from the local authority, any observations of bats should be reported to them and they can be reminded of their obligations within the National Planning Policy Framework (2012). The presence of bats will rarely prevent the general approval of a development, although it may be possible to incorporate mitigation to maintain habitats for bats.

Developers need to be aware that:

- Assessment of current use, likely effects and mitigation or habitat enhancement should be incorporated into development proposals at an early stage.
- Where changes in land use could affect bats, the implications to bats should be considered and advice sought.
- When considering planning applications, authorities are required to take account of protected species, including all bats, and their habitats.

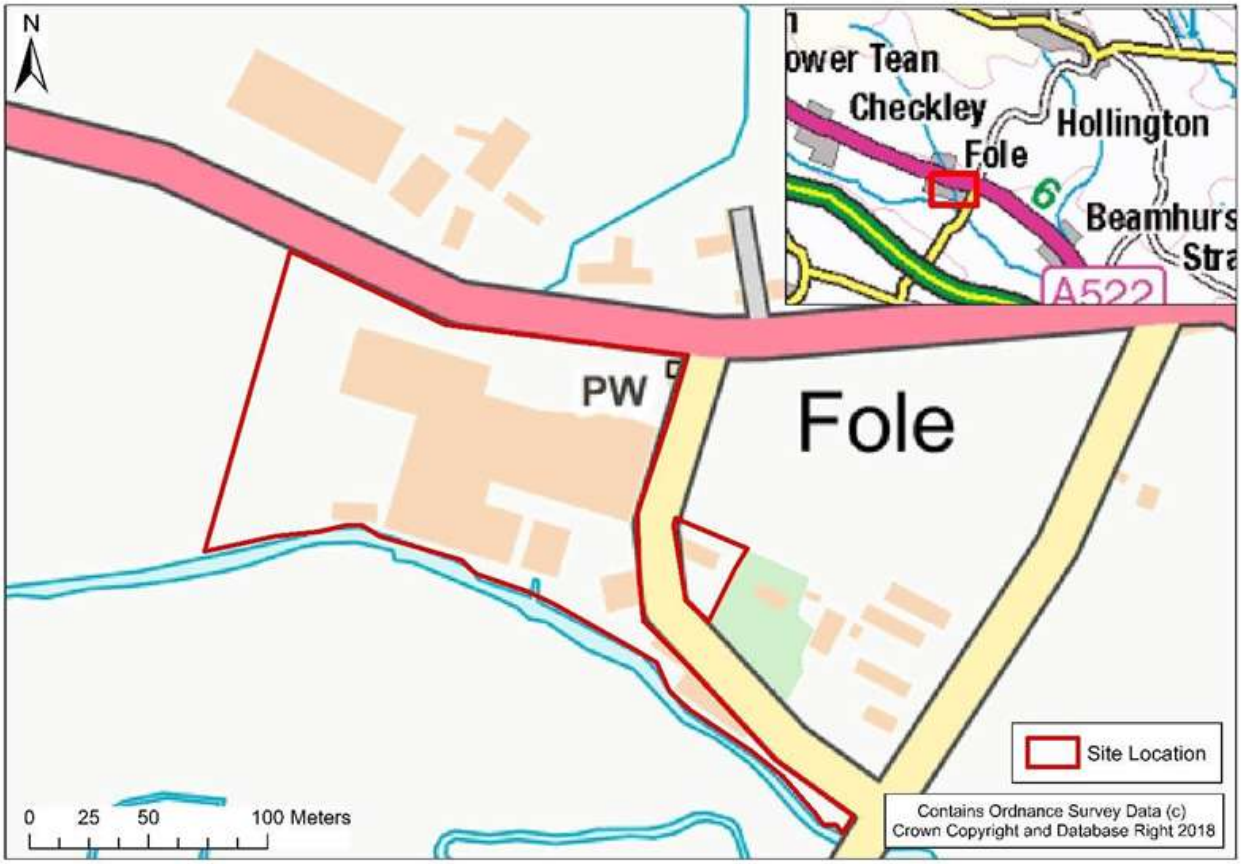
Bat feeding habitats can be some distance from their roost sites, therefore, bats seen in flight may roost nearby or some miles away. Bats use a range of sites for roosting, including buildings and trees. Signs of roosts, which are visible from the outside, include bats emerging from the roost (timing varies from before sunset to up to about an hour after) and bat droppings on surfaces near emergence points.

1.2. Site Location

Fole Dairy is located north-west of Uttoxeter (NGR: SK 04358 37323, centre of area), see Figure 1-1 below. The site area is immediately north of the River Tean, within an arable-dominated landscape.

Fole Dairy is a disused dairy farm and several buildings are present within the site area which will require demolition as part of the works.

All parts of the site and buildings were available for access. The site is shown below.

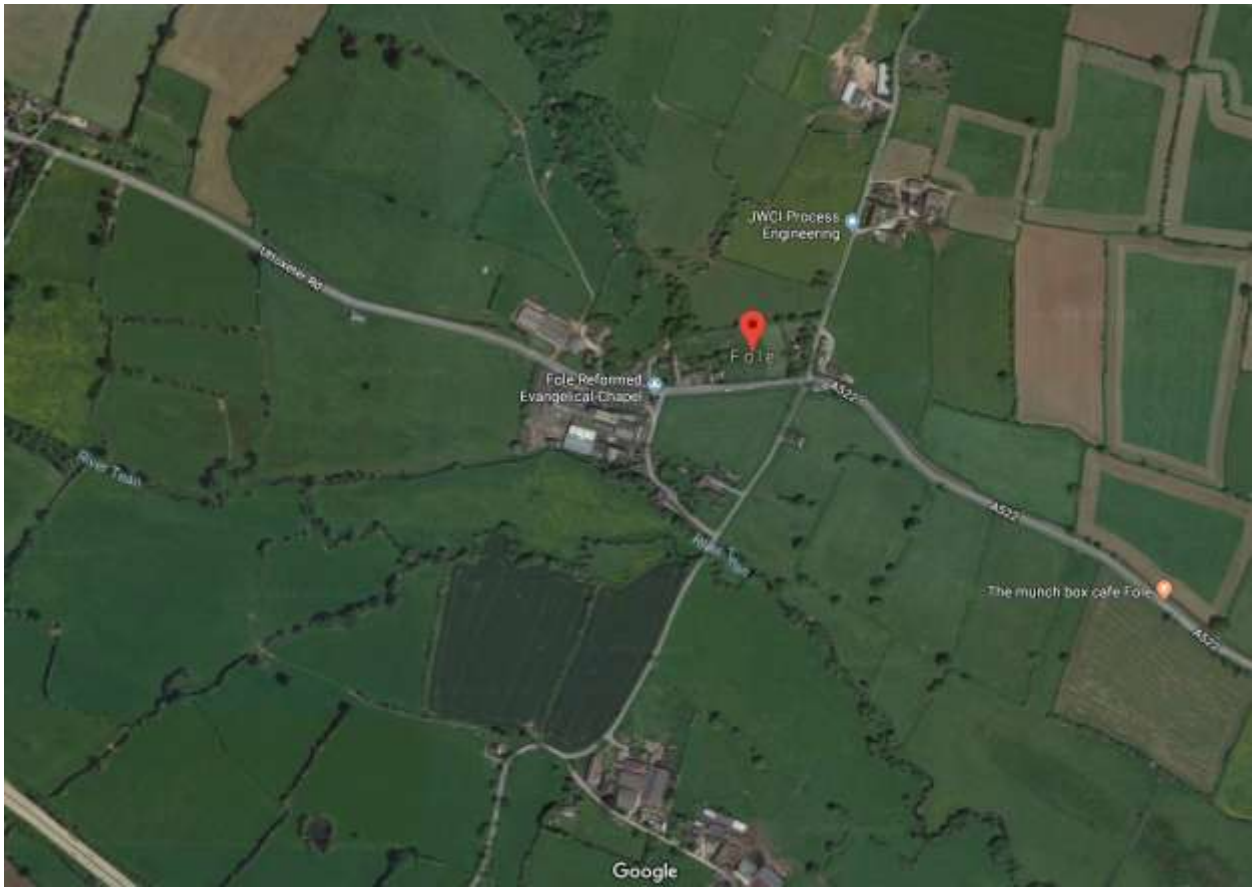


1.3. General Site Description and Status

The majority of the site supports disused buildings bound by expanses of hardstanding. These were predominantly constructed from brick and breezeblock walls with pitched corrugated sheet roofing at single-storey level. Many of the buildings had access and egress points for bats, predominantly via broken windows The brickwork was generally considered to be in good condition with only few cracks and areas of deterioration noted. The guttering and horizontal ledges of the buildings were also considered suitable for nesting birds.

1.3.1. Immediate Surrounding Area and wider Landscape Context in Relation to Bats

The site lies in the small village of Fole, Staffordshire (see below). Surrounding land is largely intensive agriculture, primarily grazing, with hedgerows, small woodlots the River Tean, which abuts the site to the south providing the main opportunities for bats to forage in the immediate area. See aerial photograph below:



A Natural England 'Magic' data search (shown below) reveals that the site lies within 6 km of Saltersford lane Marshes (SSSI), which is the nearest designated Nature Conservation site to the NE, and Dimmings Dale and the Ranges (SSSI) which lies 7 km N. The site lies within a Nitrate Vulnerable Zone (NVZ) and within a SSSI Impact Zone.

Three Local Wildlife Sites (LWSs) are present within 2km of the site (see table below). These LWSs are recognised for their remnant ancient semi-natural woodland habitat and the associated ground flora. One Biodiversity Alert Site (BAS) is also present. This designation refers to a Grade 2 Site of Biological Importance (SBI) which contains some of the best remaining areas of semi-natural habitat in the Staffordshire county.

Site Name	Status	Proximity to Site	Description
Slang Drumble and Hell Clough	LWS	1.2km (SW)	Two ancient semi-natural clough woodland remnants that were both part of the same wood until the road cut them off from each other. Both remnants occupy polluted stream valleys and both retain some of the

			characteristic ancient woodland ground flora.
Upper Nobut	LWS	1.4km (S)	A selection of habitats including: a botanically diverse, alder-dominated wet woodland community, marshy grassland, running water, standing water and a narrow strip of species-rich neutral grassland.
Broadgatehall Drumble	LWS	0.5km (N)	Ancient semi-natural broad-leaved woodland into which some conifers have been introduced. Rare species within Staffordshire were observed within the woodland which include Herb-Paris *Paris quadrifolia* and Toothwort *Lathraea squamaria*.
Birchendale road verge	Retained BAS	1.9km (NE)	A small roadside verge south of the village of Hollington that contains a suite of broadleaved herbs and grasses forming a neutral grassland habitat.

1.4. Bat Ecology (a Summary)

Where do bats build roosts?

Different species of bat prefer different places; some creep into tiny spaces, cracks and crevices. Only occasionally do they hang free or are easily visible.

Outside they may roost:

- Under weather boarding or hanging tiles
- Above soffits and behind fascia and barrage boarding
- Between window frame and wall brickwork
- In gaps behind cladding tiles or wood
- Between underfelt and boards or tiles
- Inside cavity walls

Inside roof spaces they may roost

- Along the ridge beam
- Around the gable end
- Around the chimney breast

Looking for the evidence

Bats do not make nests or cause structural damage. The most obvious sign of their presence is droppings.

- Bat droppings consist largely of insect remains and crumble easily between your fingers to a powder of semi-shiny fragments.
- Rodent droppings are smooth and plastic, quickly becoming hard. They cannot be crumbled.
- Bat droppings do not present any known health hazards.
- Droppings may not always be readily visible in a loft.
- Large accumulations may reflect use over a number of years rather than large numbers of bats at any one time.

When do bats use buildings?

Bats use buildings at any time, but are most often found in houses between May and August.

- Mother bats have only one baby a year, suckling it for several weeks. The mothers gather in maternity roosts to have their young in summer, and this is the time they are most likely to be seen using buildings.

- The bats move away when the young can fly and feed themselves, and have usually left by September.
- Immature individuals, adult males and non- breeding females will occupy a variety of roosts, individually or in small groups, at any time of year.
- Disturbance or the use of chemicals at maternity roosts in houses can have a major impact on bat populations gathered from a wide area.
- Bats do roost in houses in winter, usually individually, but are difficult to see.

Which bats use buildings?

All UK species have been recorded in houses, but some very rarely. Pipistrelles and Long-eared bats are the species most usually found.

Pipistrelle bats

There are three different species of Pipistrelle; the common Pipistrelle, Soprano Pipistrelle and the rarer Nathusius' Pipistrelle. They sometimes use houses as maternity roosts, choosing confined spaces. These are usually on the outside of buildings, such as under the soffits or behind barge boards or hanging tiles, where the bats can rarely be seen.

Brown long-eared bats

This species mostly prefers older houses with large roof spaces. Small clusters may be seen at junctions of roof timbers or under the ridge. It is the bat most frequently seen inside lofts, small numbers may stay longer than the other species.

1.5 Description of Works

The proposals will involve the development of approximately 58 dwellings on the site and will include access roads and landscaping. Site preparatory works will involve the removal of existing buildings, hardstanding and vegetation across the majority of the site, although the Old Mill Building and Chapel are to be retained in-situ. In addition, the existing Mill House, located at the southernmost extent of the site, is proposed for conversion into four residential dwellings. (refer to Planning Application).

1.6 Bat Species Records

Information was gathered from a wide range of sources including Staffordshire Ecological Record (SER) and Staffordshire Bat Group regarding any presence of bat species within 2 km of the site. The Distribution Atlas of Bats in Britain and Ireland, (P.J. Richardson, BCT (2000), was also consulted regarding bat species known from the region, and the publication, Staffordshire Bats (1997).

Bat Group Records: Common pipistrelle, (*Pipistrellus pipistrellus*), have been recorded in the search area.

The Book, Staffordshire Bats, G. Halfpenny (1997) lists 12 resident species in Staffordshire:

- Lesser horseshoe bat *R. hipposideros*
- Whiskered bat *M. mystacinus*
- Brandt's bat *M. brandti*
- Natterer's bat *M. nattereri*
- Daubenton's bat *M. daubentoni*
- Serotine *Eptesicus serotinus*
- Common noctule *Nyctalus noctula*
- Leisler's bat or lesser noctule *N. leisleri*
- Common pipistrelle *Pipistrellus pipistrellus*
- Soprano pipistrelle *P. pygmaeus*
- Barbastelle *Barbastella barbastellus*
- Brown long-eared bat *Plecotus auritus*

Information gathered from the **Distribution Atlas of Bats in Britain and Ireland, (P.J. Richardson, BCT (2000)**, regarding bat species known from the region indicates that the following bat species are present within 5 km:

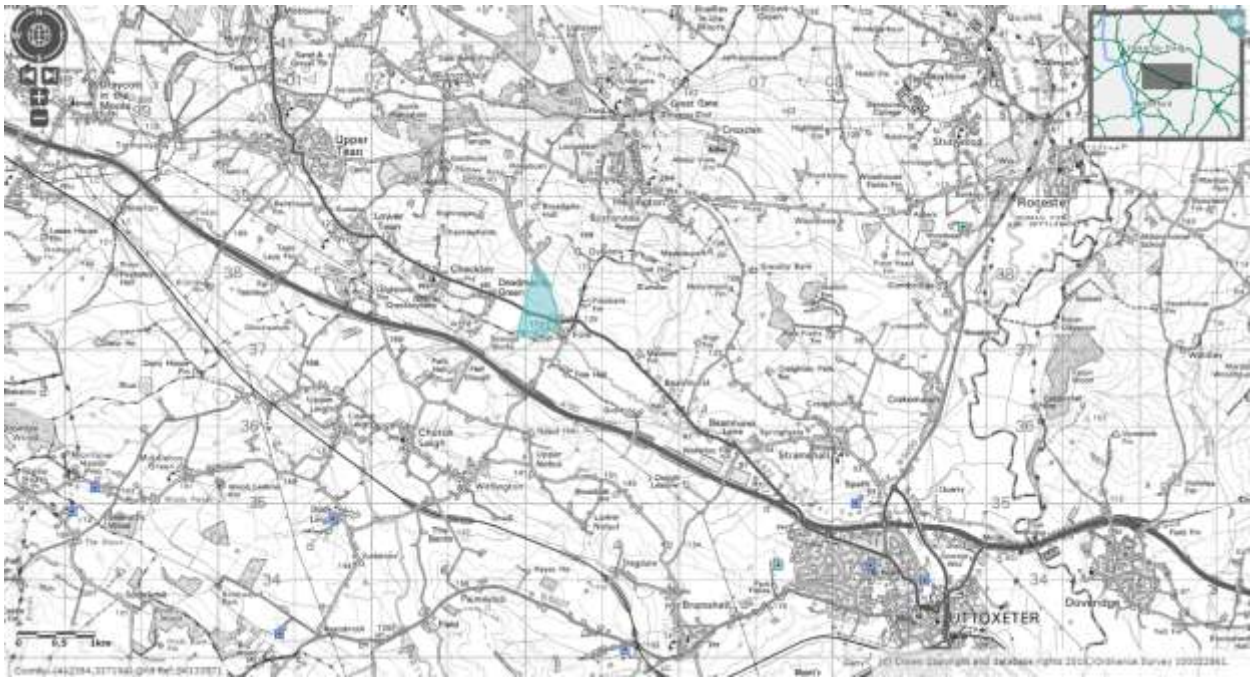
- Common pipistrelle *Pipistrellus pipistrellus*

- Soprano pipistrelle *Pipistrellus pygmaeus*
- Brown long-eared bat *Plecotus auritus*
- Daubenton's bat *Myotis daubentonii*
- Natterer's bat *Myotis nattereri*
- Noctule *Nyctalus noctula*

Results from Staffordshire Ecological Record (SER)

Brown Long-eared Bat	*Plecotus auritus*	1.7km SW (2012)
Common Pipistrelle	*Pipistrellus pipistrellus*	1.7km SW (2012)
Natterer's Bat	*Myotis nattereri*	0.8km NW (2001)

EPSM Search (Source: Magic)



A search showed that the nearest EPSM licenses granted were at distances of 3.5 km for bats (blue squares in map below). These relate to Common pipistrelle, and Brown long eared bat, with Natterer's bat recorded at 5.5 km distance and Soprano pipistrelle at 6 km SE.

Interpretation of available biological data.

The data search reveals that there are 3 bat species recorded recently within 2 km radius of the survey site, with further species within 5-6 km. No bats have been recorded from the survey site itself.

2.0. Methodology

The survey consisted of two elements:

- A day-time visual external assessment of the buildings and their potential in relation to use by bats as roosts.
- A day-time visual internal assessment of the buildings and their potential in relation to use by bats as roosts

2.1. Personnel

The survey was conducted by Dr. Stefan Bodnar, a full time member of the Chartered Institute of Ecology and Environmental Management, an experienced ecologist with over 31 years experience of bat surveys, working under Natural England class license: Level 2, survey: bats

2.2. Visual External Assessment

The external building inspection (from the ground using binoculars) focused particularly on roof areas, soffits, areas of wall with cracks and apertures, window surrounds and the overall structure of the buildings including any features such as crevices or cavities that may be suitable for bats to roost in. Evidence of roosting such as droppings or staining around entrances was also recorded. Where appropriate gaps and cavities were checked using an endoscope. The date of site visit was 13th February 2018.

Methods of survey used have been based on those outlined in Joint Nature Conservation Committee's Bat Workers Manual (Mitchell-Jones & McLeish, 2004), The Good Survey Guidelines, BCT (2016), and English Nature's Bat Mitigation Guidelines (Mitchell-Jones, 2004).

2.3. Visual Internal Assessment

The internal roof space of the buildings were inspected using ladders to gain access where appropriate. The interior spaces present within the building, that bats might access were fully

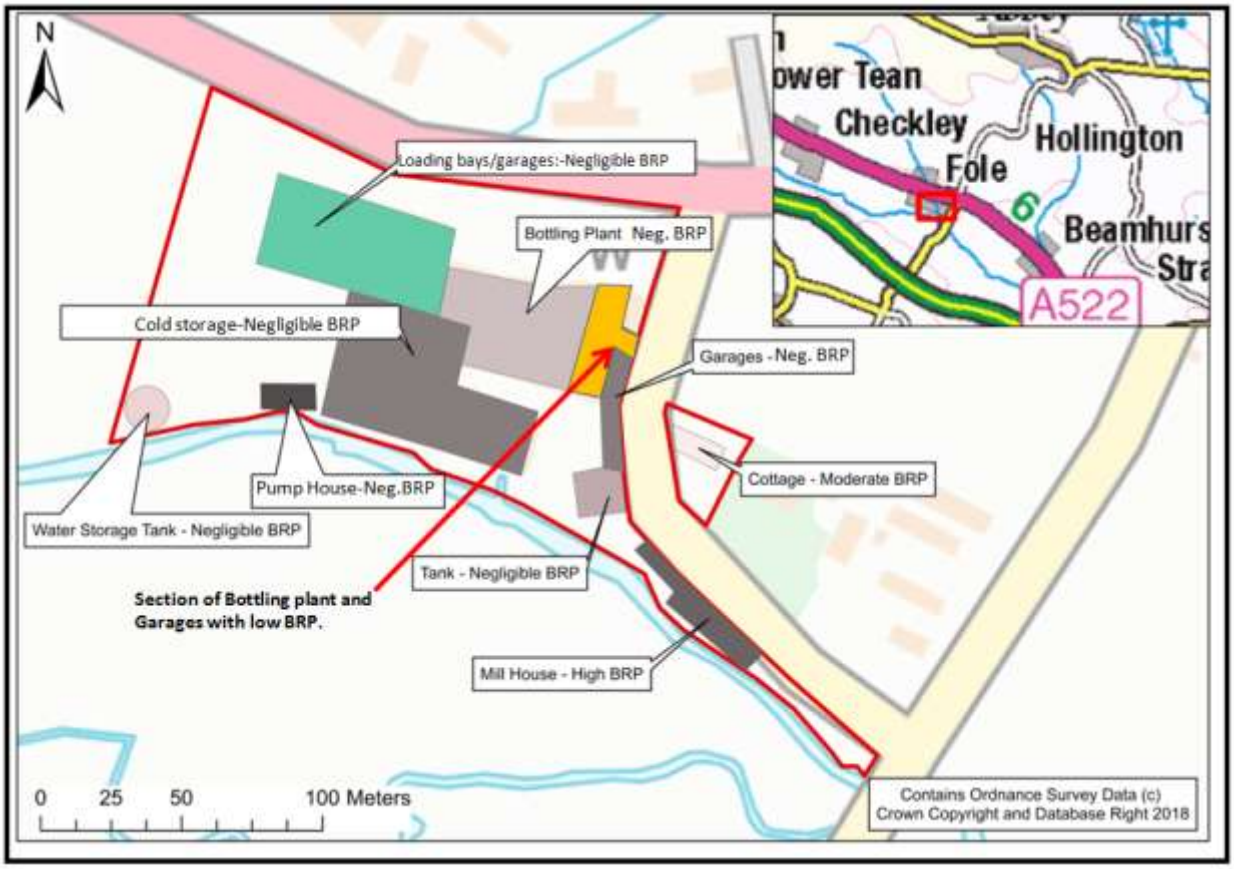
surveyed, and suitable features checked with an endoscope. The date of site visit was 13th February 2018.

3.0. Results

3.1. External and Internal Visual Assessment

The majority of the site supports disused buildings bound by expanses of hardstanding. These were predominantly constructed from brick and breezeblock walls with pitched corrugated sheet roofing at single-storey level. Many of the buildings had access and egress points for bats, predominantly via broken windows The brickwork was generally considered to be in good condition with only few cracks and areas of deterioration noted. The guttering and horizontal ledges of the buildings were also considered suitable for nesting birds.. See images Appendix 1. A full internal and external assessments of all buildings was undertaken, with the exception of the Cottage and Mill buildings where an external assessment and use of previous surveys determined the Bat Roost Potential Category.

The buildings are described and categorised below:



Pump House

The pump house is a disused, two-storey structure and is entirely brick built. This is located within the western extent of the site and is detached from the main complex of buildings. The pump house supports a flat roof and has several broken windows Signs of disrepair were also noted along the rendering, but no suitable bat roosting features (e.g. cracks) were noted. The windows offer potential access and egress points for bats but, equally, has allowed the internal fabric of the building to be become draughty / exposed and generally unsuitable for roosting. Internal inspection revealed no signs of bats and no suitable features.

This building was therefore assessed as having negligible BRP.

Water storage tank

External inspection revealed no signs of bats and no suitable features.

This building was therefore assessed as having negligible BRP.

Loading bays and Garages

The building is constructed, predominantly, out of corrugated metal with brick built wing walls and corrugated sheet, pitched roofing. Corrugated sheeting creates no suitable opportunities for roosting bats and no cracks or crevices were noted within the bricked sections of the cold storage building. A low quality potential bird nesting/roosting feature was noted underneath a white fascia board, bordering the southern face of the building. This was stripped under direct ecological supervision on 13th February 2018 with Dr. S. Bodnar in attendance. The results showed a number of former nests of House sparrow and stock dove. The removal of this fascia removes any bat roosting or bird breeding potential from this structure. see below:

This building is assessed as having negligible BRP.

Cold storage

The corrugated sheet metal construction of the cold store and the exposure of the building to natural elements (e.g. weather), creates an unsuitable roosting habitat for bats.

This building is assessed as having negligible BRP.

Bottling Plant

The former bottling plant is a brick-built building with several chipboard windows . No obvious cracks or crevices for bats were noted along the brickwork, with the majority of the brickwork noted as being in good condition. However, a number of holes were noted along the extreme north-eastern face of the building, where there are suitable access/egress point for bats.

Internally there are a number of suspended ceilings, partly dismantled, though it can be clearly seen that there are roof lights present in the roof, and these areas are unsuitable for roost formation. Internal insulation is tight packed with no obvious cavities where bats could access (image shows cut away section, revealing this structure). A section to the extreme East of this building has a roof-space with a wooden lined corrugated metal pitched roof. This roof-space was inspected, although suitable for bats to use, the

only access was a chute which had substantive previous nesting use by jackdaws (large amounts of nesting debris) and as such the BRP of this particular area of the bottling plant is Low. See images below:

Lining structure and remains of jackdaw nest


Gaps in brickwork in this section (NW of bottling plant)

This building is assessed as being of negligible BRP, with the exception of the area noted on the plan and shown above which are classified as low BRP.

Tank and Garages

The brick built, flat roof tank was considered to be in good condition with no suitable access/egress points noted.

This building is considered to be of negligible BRP.

The garages had no access/egress features noted with the windows bordered with metal sheeting and the roller door closed. The brickwork was considered to be in good condition with no cracks/crevices identified. Areas of the fascia were lifting with evidence of previous blue tit nesting at one location, which creates a potential access/egress point for bats.

This building is assessed as being of negligible BRP, with the exception of the area noted on the plan and shown above which is classified as low BRP.

Water Storage Tower

A large water tower is located to the south-west of the site (Photographic Plate 15) and will not be directly impacted upon by the works. The nature of these towers and the metal construction material is not suitable to support roosting bats and therefore this building is considered to have **negligible BRP.**

Cottage

The cottage situated beyond a lane to the east of the site is brick constructed with a pitched roof supporting a combination of tiles and corrugated sheeting. The building is currently redundant and boarded across the windows but was considered to be in reasonable condition with the exception of a number of absent/slipped roof tiles. However, close up observations of the building exterior were not possible, nor was the interior of the building investigated due to restricted access.

On a precautionary basis, due to limitations, this building was assessed as having moderate BRP due to the condition of the building and level of deterioration.

Mill House

The southernmost extent of the site is occupied by Mill House which is a 2-3 storey, red brick building with a pitched, tiled roof. This has been formerly assessed by WSP as documented within an initial Bat survey report (WSP, 2013[2]) and Bat Emergence Survey Report (WSP, 2013[3]) as having a confirmed

Brown Long-eared and Pipistrelle bat roost with evidence of emergence activity and former field signs being observed. Access to the internal fabric of the building could not be achieved at the time of the PEA survey, although the exterior of the building was determined as being generally intact and largely unchanged from the assessment within the former bat surveys.

The Mill House was, therefore, assessed as having a confirmed roost, although the level and extent of bat activity associated with the structure would require further investigation.

3.2 Birds

The Wildlife and Countryside Act 1981 (as amended) makes it an offence (with certain limited exceptions) to intentionally kill, injure or take any wild bird, or to damage, take or destroy the nest of any wild bird whilst that nest is being built or in use, or to take or destroy its eggs. Furthermore, the Act affords additional protection to specific species of birds listed in Schedule 1 of the Act. In respect of these species, it is unlawful to intentionally or recklessly disturb such a bird whilst it is nest-building or is in, on or near a nest containing eggs or young; or to disturb their dependent young. Following recent revisions, fifty-nine species are listed on the UKBAP. The following species were recorded on-site during the visit:

Bird Species:	**Latin name:**
Magpie	*Pica pica*
Wood pigeon	*Columba palumbus*
Buzzard	*Buteo buteo*
Carrion Crow	*Corvus corone*
Goldfinch	*Carduelis carduelis*
Raven	*Corvus corax*
Starling	*Sturnus vulgaris*
Jackdaw	*Corvus monedula*
Blue tit	*Cyanistes caeruleus*
Long tailed tit	*Aegithalos caudatus*
Collared dove	*Steptopelia decaocto*
House sparrow	*Passer domesticus*

The site clearly has potential to support breeding birds during the breeding season. Features of a number of the buildings are suitable for species such as starling, house sparrow, blue tit and stock dove/feral pigeon in particular. The tower structure forming part of the bottling plant has a low potential to be used for breeding by Peregrine falcon *Falco peregrinus*. The hedgerows and trees located within the site boundary were considered suitable to support nesting birds.

4.0. Conclusion

The survey determined that the majority of the built structures have either negligible or low opportunities for bats, and for roost formation, with the exception of the Bungalow which has moderate BRP and Mill House where Brown Long-eared and Pipistrelle bat roost(s) have been confirmed during previous bat activity surveys completed by WSP (WSP, 20173). An internal assessment of these buildings would be required to determine any further potential roosting features and/or signs.

Further surveys are recommended, as follows:

Building / Structure	Bat Roosting Potential	Further surveys required
Pump House	**Negligible**	Should potentially intrusive works be required to the pump house (e.g. refurbishment / dismantling / demolition). **No further survey**
Cold Storage Building	**Negligible**	There are no further recommendations concerning any works proposed to the Cold Storage Building
Bottling Plant -	**Negligible** Small area low	Should potentially intrusive works be required to the Bottling Plant (e.g. refurbishment / dismantling / demolition). **No further survey, except area denoted as Low BRP. For this area only, one Nocturnal Activity Surveys to be conducted in May-September 2018.**
Tank and Garages -	**Negligible** Small area low	Should potentially intrusive works be required at the garages (e.g. refurbishment / dismantling /

		demolition). **No further survey, except area denoted as Low BRP. For this area only, one Nocturnal Activity Surveys to be conducted in May-September 2018.**
Water Storage Tower -	**Negligible**	There are no further recommendations concerning any works proposed to the Water Storage Tower.
Cottage - *Exterior*	**Moderate**	Should potentially intrusive works be required at the cottage (e.g. refurbishment / dismantling / demolition). **Two Nocturnal Activity Surveys to be conducted in May-September 2018.**
Mill House - *Exterior*	**Confirmed Roost**	Should potentially intrusive works be required at Mill House (e.g. refurbishment / dismantling / roof repairs). **Three Nocturnal Activity Surveys will require conducting in May-September 2018** and **an appropriate EPSL/Low Impact Licence obtained from Natural England.** In addition, it is advised that the building is subjected to a detailed internal inspection. It is advised that this is combined **undertaken during the winter months - preferably January to February 2018 – to ensure that the potential for the building to be utilised by hibernating bats has been explored.**

Precautions in respect of breeding birds

Site clearance in the October to February period will have the least impact on these species (birds). Vegetation clearance would take place outside of the main bird-breeding season i.e. between October and February. If vegetation removal was required outside of this period, a survey by an experienced ecologist would be undertaken to ensure that no nesting birds would be affected. In terms of demolition and interior stripping of the buildings, this can proceed with caution during the nesting season, with site staff checking for breeding birds. Should breeding birds be found, work should cease in the area immediately and the on-call ecologist (Dr. Stefan Bodnar MCIEEM, 07429 209549) contacted for advice prior to any work re-commencing in the area. If active bird nests were found, work in that area would be delayed until eggs had hatched and chicks had fledged.

5.0. Mitigation/Compensation

In relation to the National Planning Framework (2012) there is likely to be a requirement for Mitigation/ Compensation measures for loss of bat roost and bird nesting opportunity. This will be fully detailed following the surveys recommended above, and will form part of the ecological enhancement scheme for the development.

Procedures for emergencies: Protected species

Note 1: If bats or breeding birds are discovered at any time during processes involved with the development, work should cease immediately and the advice of a licensed ecologist sought.

6.0. References

Bats in Roofs. A guide for surveyors. English Nature, Peterborough, Mitchell-Jones, A.J. (2004).

Bat Mitigation Guidelines. English Nature, Peterborough, Mitchell-Jones, A.J.& Mcleish, A.P. (Eds)(2004).

Bat workers Manual, 3rd Edn. Joint Nature Conservation committee, Peterborough.

Bats and Trees, (2000), Bat Conservation Trust

Bat Survey guidelines (2016), Bat Conservation Trust

Appendix 1: Further site images

Internal and External images


NO SMOKING
ON THIS SITE


no parking