

**Preliminary Bat Roost Assessment and Bird
Survey for,
Mr. and Mrs. G. Sclater.
Buildings at,
Apple Orchard Farm,
Fenn Lane,
Dadlington,
NUNEATON,
Warwickshire,
CV13 6DR.**

**Map Ref SP 3950 9887
20th September 2023.**

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Natural England License Number 2015-23395-CLS-CLS

Natural England Bat Low Impact Class License

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Summary.

- **There is no evidence of bats using the building as a place of shelter.**
- **There was evidence of birds nesting in the building.**
- **There are no bat roosting opportunities in the buildings to be demolished.**
- **The demolition of the buildings if approved by the Local Authority must not occur if birds are nesting in the building until the young have fledged. Demolition between the beginning of March and the end of August in any year must be preceded by a survey for nesting birds.**
- **New roosting for bats can be created by installing a ridge tile bat roost on the roof of the timber framed garage.**
- **New nesting opportunities for swallows can be created by installing three artificial nest cups in the retained stables.**
- **A method of working must be put in place with contractors to ensure that in the event of bats being found they will not be injured.**

Introduction.

An inspection and building survey for bats was requested by Mr. and Mrs. G. Slater. The survey was to be undertaken in relation to the submission for the release of Condition 7 of planning permission 22/00770/FUL to Hinckley and Bosworth Borough Council. The property was visited on the 8th September 2023 and the surveyor spent 1 hour on site. The weather was dry with high cloud.

Temperature; 23°C Wind; 0-1 Beaufort Scale Cloud Cover; /8th.



Legislation concerning bats.

The Wildlife and Countryside Act 1981 (WCA) protects bats and their roosts in England, Scotland and Wales. Some parts have been amended by the Countryside and Rights of Way Act 2000 (CRoW) which applies only in England and Wales, and by the Nature Conservation (Scotland) Act 2004 which applies in Scotland.

The Conservation and Habitats Regulations 2010 (better known as the Habitats Regulations) implements the Council Directive on the Conservation of Natural Habitats and of Wild Fauna and Flora. All bats are listed as 'European protected species of animals'

Under Regulation 41 of the Conservation of Habitats and Species Regulations 2010 it is illegal to:

- Deliberately capture, injure or kill any wild animal of a European Protected Species (EPS),
- Deliberately disturb wild animals of an EPS (affecting ability to survive, breed or rear young) – disturbance of animals includes in particular any disturbance which is likely to impair their ability to survive, to breed or reproduce, or to rear or nurture their young,
- Deliberately disturb wild animals of an EPS (impairing ability to migrate or hibernate) – disturbance of animals includes in particular any disturbance which is likely to impair their ability in the case of hibernating or migratory species to hibernate or migrate,
- Deliberately disturb wild animals of an EPS (affecting local distribution and abundance) – disturbance of animals includes in particular any disturbance which is likely to affect significantly the local distribution or abundance of the species to which they belong,
- Deliberately disturb wild animals of an EPS (whilst occupying a structure or place used for shelter or protection) – intentionally or recklessly disturb any wild animal while it is occupying a structure or place which it uses for shelter or protection,
- Damage or destroy a breeding site or resting place of a wild animal an EPS.

Under the Wildlife and Countryside Act 1981 (as amended) it is legal to:

- Recklessly or intentionally kill, injures or take any wild animals included in Schedule 5.
- Recklessly or intentionally damage or destroy, or obstruct access to any structure or place which any wild animal included in Schedule 5 uses for shelter or protection,
- Recklessly or intentionally disturb any such animal while it is occupying a structure or place which it uses for shelter or protection.

Legislation concerning birds.

All common wild birds are protected under The Wildlife and Countryside Act 1981 (and as amended). Under this legislation it is an offence to:

- kill, injure or take any wild bird
- take, damage or destroy the nest of any wild bird while it is in use or being built
- take or destroy the egg of any wild bird

Certain rare breeding birds are listed on Schedule 1 of The Wildlife and Countryside Act 1981 (and as amended). Under this legislation they are afforded the same protection as common wild birds and are also protected against disturbance whilst building a nest or on or near a nest containing eggs/unfledged young.

Methodology for bats.

The building surveys have been undertaken in accordance with Bat Surveys for Professional Ecologists- Good Practice Guidelines, 2016, the Bat Conservation Trust. Surveys of the buildings were undertaken during the daytime to look for evidence of bats using the buildings, or likely roosting sites. The evidence of bats using a building as a place of shelter can include bat

droppings, grease marks, urine stains or actual bats. This evidence is then considered when planning evening emergence counts and activity surveys, using bat detectors. These surveys provide evidence of where bats are roosting and activity across the site by foraging or commuting bats.

The Bat Surveys for Professional Ecologists- Good Practice Guidelines, 2016, specify that emergence surveys are undertaken dependent upon the roost potential of the buildings on the survey site, as set out below;

Roost potential.	Number of surveys.
High.	3
Low to moderate.	2
Low.	1

The surveys are started at sunset, with bats emerging from roosts at different times, dependent upon the species, and continued for two hours. Emergence surveys can only be undertaken from the beginning of April to the end of September when bats are active. The optimum period of undertaking surveys is the beginning of May to the end of August. Their emergence is dependent upon the weather, the bats only leaving their roost on warm nights when there will be sufficient insect prey around to make flight worthwhile. While bats will emerge in light rain and moderate winds, the surveys would not be undertaken when there is heavy rain and/or strong winds as this would not provide reliable data upon which to base the conclusions of the surveys. Mild weather in April and October will produce bat activity, particularly providing information on forage areas, commuting routes and pre-maternity group roosting.

Any trees on site are surveyed following the methodology set out in the Bat Tree Habitat Key, Henry L Andrews et al 2013, which produces a key for identifying Potential Roost Features in trees and their likelihood of being used by bats. Trees on any site being surveyed will have Potential Roost Features identified from ground level surveys and highlighted in the report.

Bat records and habitats.

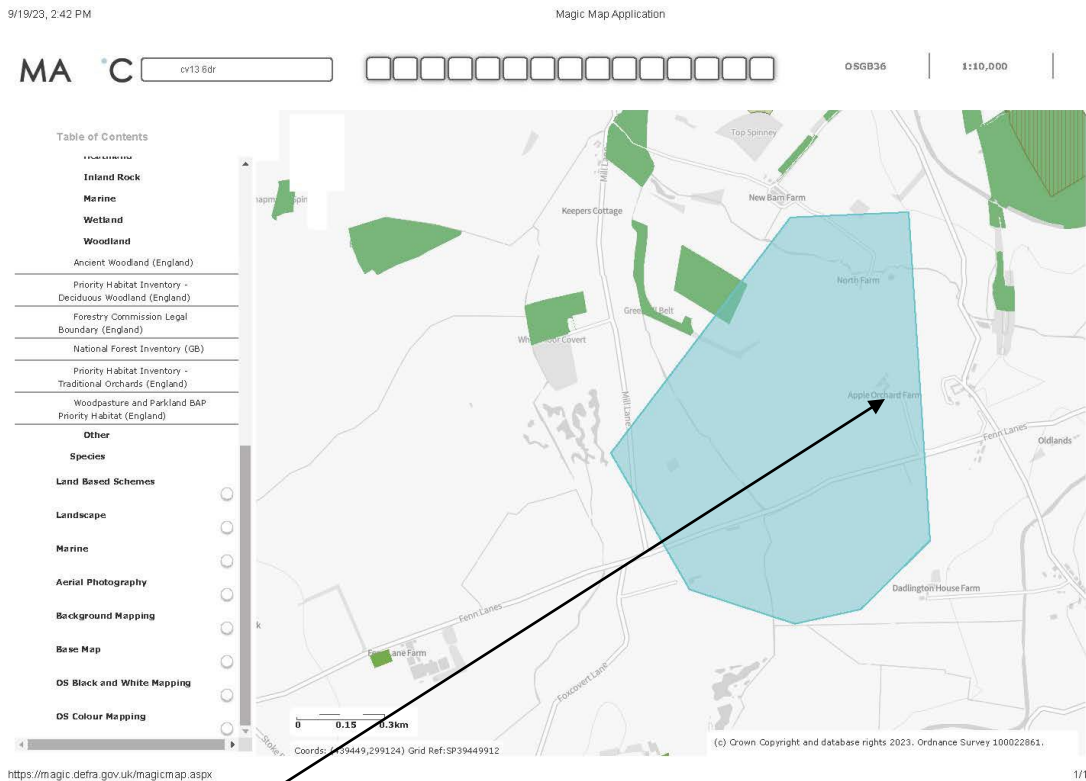
A search of public records has revealed the presence of;

Myotis daubentonii.
Myotis mystacinus.
Nyctalus noctula.
Pipistrellus nathusii.
Pipistrellus pipistrellus.
Pipistrellus pygmaeus.
Plecotus auritus.

Bat roosts recorded by the surveyor within 3km have been a maternity roosts of Common pipistrelle bats, a non-maternity group of Pipistrelle bats and a non-maternity group of Brown long eared bats.

Habitats.

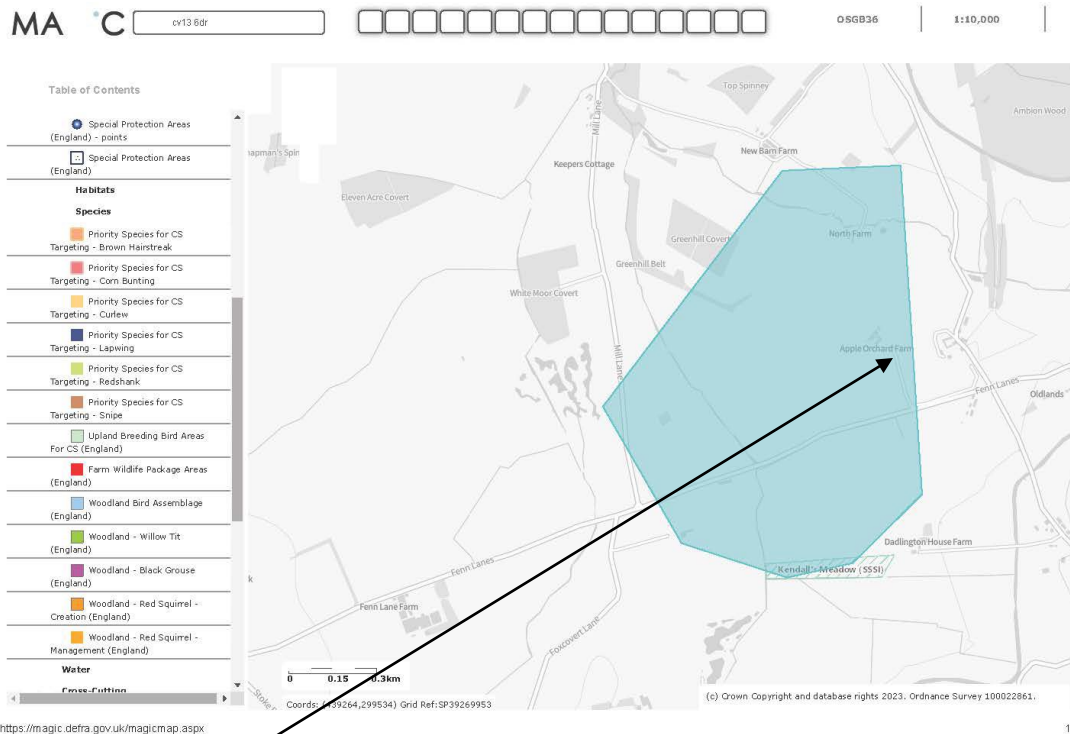
There are areas of Deciduous Woodland on the priority habitat inventory in the landscape, none of which are affected by this proposed development.



Apple Orchard Farm.

Biodiversity.

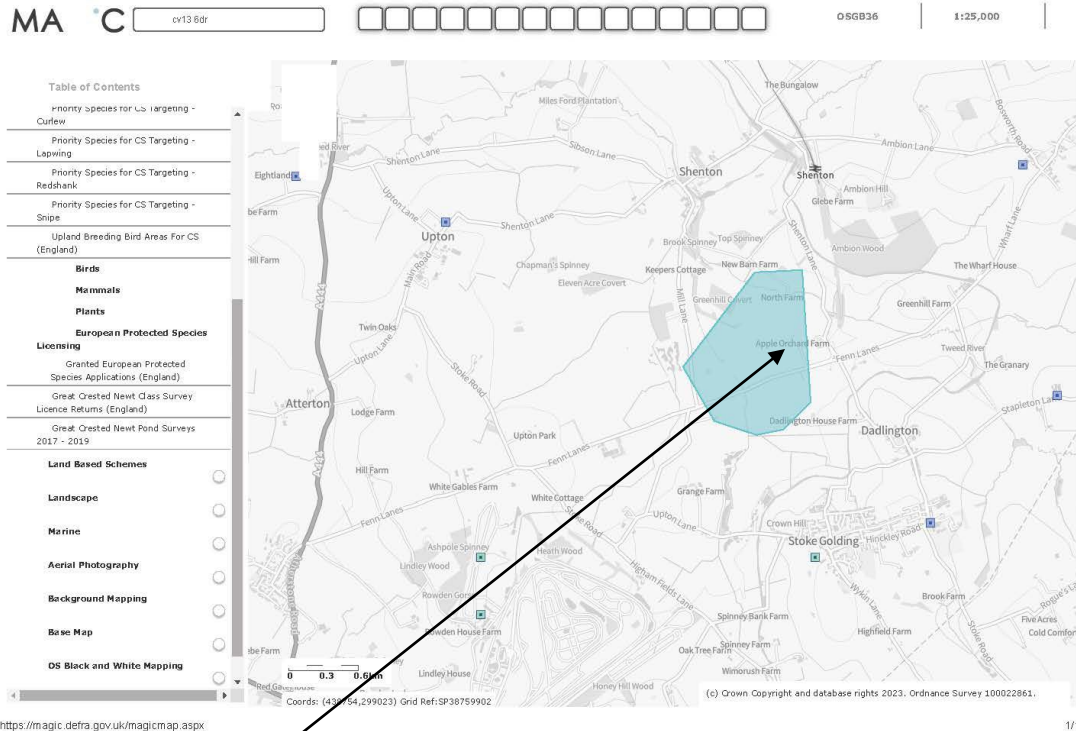
There is an area to the south of the site, Kendall's Meadow which is a Site of Special Scientific Interest. This will not be affected by the proposed development. The site falls within an area where there is support for Lapwings and Willow Tit through Countryside Stewardship.



Apple Orchard Farm.

European Protected Species.

There have been no European Protected Species licenses granted close to the site. The licenses that have been two licenses granted are for Common pipistrelle resting places and two Common pipistrelle and Brown long eared bat resting places.



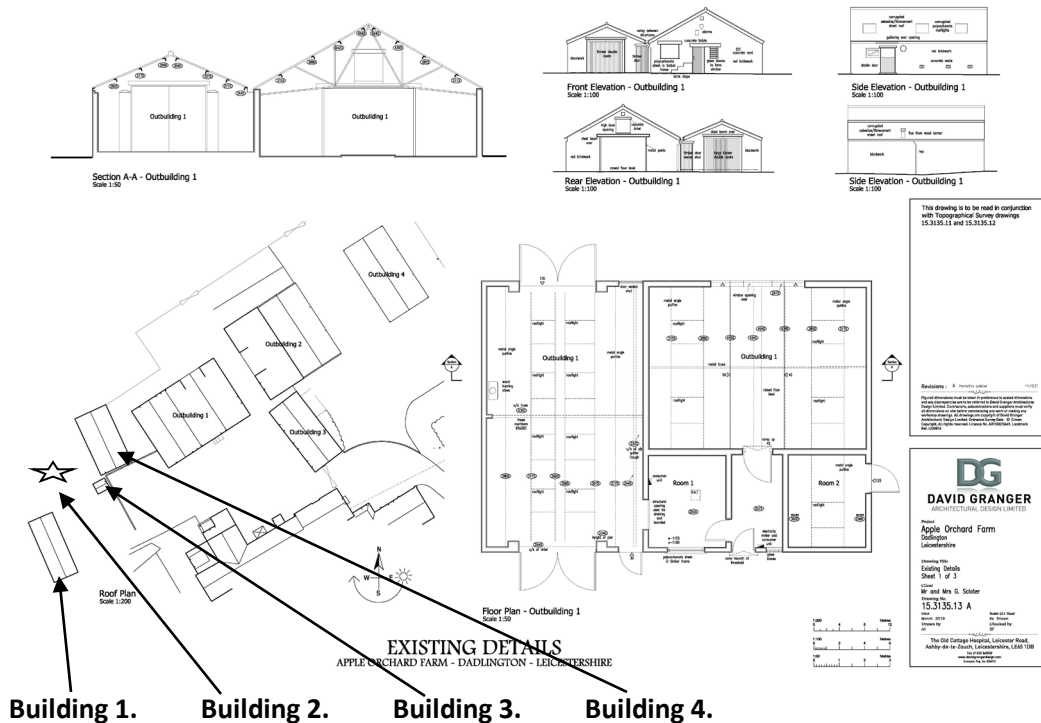
Apple Orchard Farm.

Constraints.

The building survey was undertaken in the summer when evidence of bats internally can still be seen but external evidence may be unavailable after heavy rain. The surveyor does not believe that the weather masked any evidence or access points for bats. There were no constraints to the surveyor for the building survey bats for bats with ladders making access to the poor roof of the extension possible.

Building Survey.

The buildings to be surveyed consisted of a number of stables and agricultural buildings. The planning permission is for the demolition of a number of buildings and their replacement with a timber framed carport.



The property is situated in open countryside with agricultural land surrounding the site. There are mature trees in the hedgerows and trees between the fields which provide commuting routes for bats. There are areas of woodland in the countryside around the village and this woodland would provide foraging habitat for bats.

The results of the building survey are presented as the likelihood of bats using an area/feature;

None.	Bats are unlikely to use the feature/area in any way.
Poor.	Bats may use the feature/area but it is not thought to be likely.
Possible.	The feature/area provides an area that may be used by bats but no direct evidence of occupation was found.
Definite.	Clear evidence of the use of a feature/area as a place of shelter, such as droppings.

Building 1.

This is blockwork store with fibre cement roof panels supported on steel sheeting rails.



There are no roosting opportunities for bats in the building.



There is evidence of pigeons nesting in the building.

Bat roosting opportunities; None.

Bird nesting; Definite.

Building 2.



This is a timber framed building with timber cladding and fibre cement roof sheets. The roof sheets are supported on timber sheeting rails and there is a gap between the rear of the fibre cement roof sheet and the sheeting rail that could be used by individual crevice dwelling bats. The likelihood of this space being used is exceptionally small and can be managed by contractors following the method of working set out below.



There are liner boards and insulation on the walls the building so there are no crevices for bats.



There are no nesting opportunities for birds.

Bat roosting opportunities; None.

Bird nesting; None.

Building 3.

This is a single skin brick toilet with a pitched roof covered with plain tiles which were removed to expose the underfelt, the ceilings being fixed to the underside of the rafters. There is a bitumous underfelt on the roof with no roosting opportunities for bats.



Bat roosting opportunities; None.

Bird nesting; None.

Building 3.



This is a timber framed building with a pitched roof covered with fibre cement roof sheets.

There is timber cladding on the building. The walls and the ceilings are lined and have insulation.



There are no roosting places for bats.



There are no nesting opportunities for birds.

Bat roosting opportunities; None.

Bird nesting; None.

Outbuilding 1.

The proposal is to demolish the lefthand side of the building. This is a blockwork building with a pitched roof covered with fibre cement roof sheets.



There is no place of shelter for bats in the blockwork. The roof has been lined with a metallic insulation sheet. There is a gap between the rear of the insulation sheet and the fibre cement roof sheets but bats will not be able to move across the insulation sheet so there is no place of shelter for bats.



There are no nesting opportunities for birds.

Bat roosting opportunities; None.

Bird nesting; None.

Outbuilding 3.

This is a blockwork stables building with a pitched roof.



There are fibre cement roof sheets supported on angle iron sheeting rails. There are no places of shelter for bats.

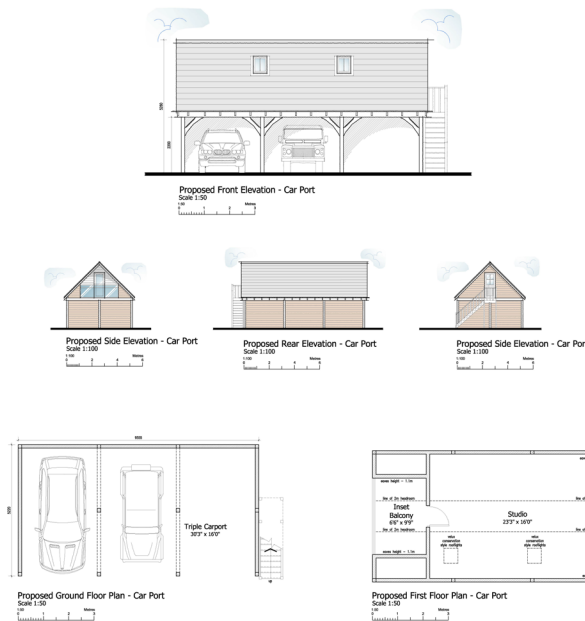
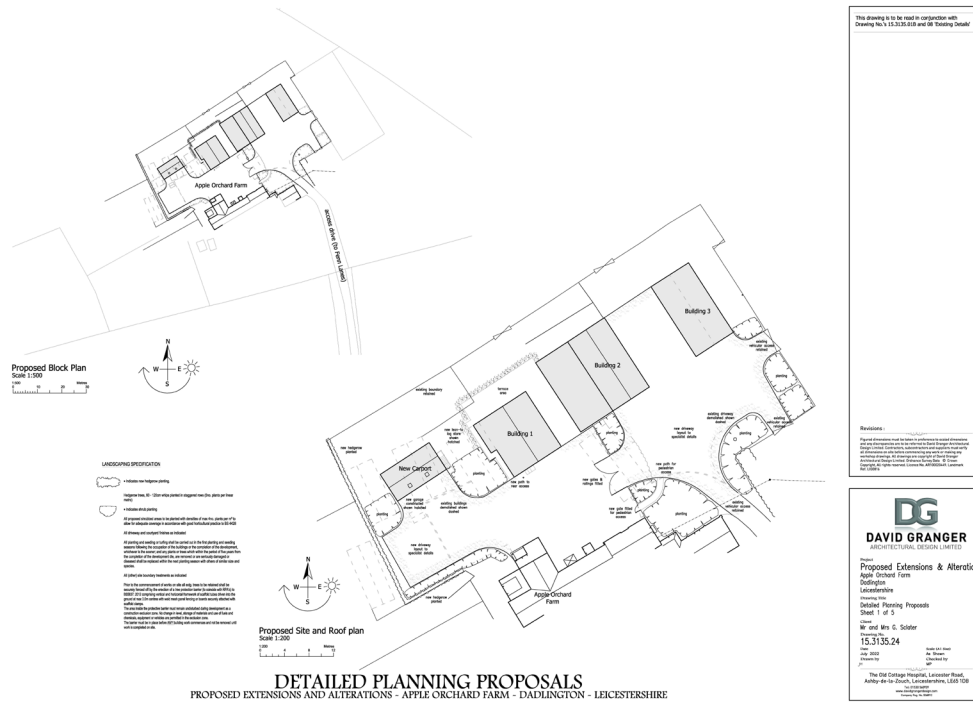


Swallows have nested in the building with the one nest having been taken over by Wrens.

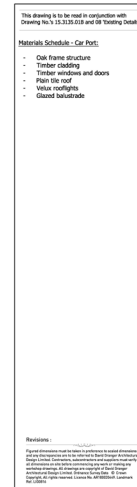


Enhancements for bats.

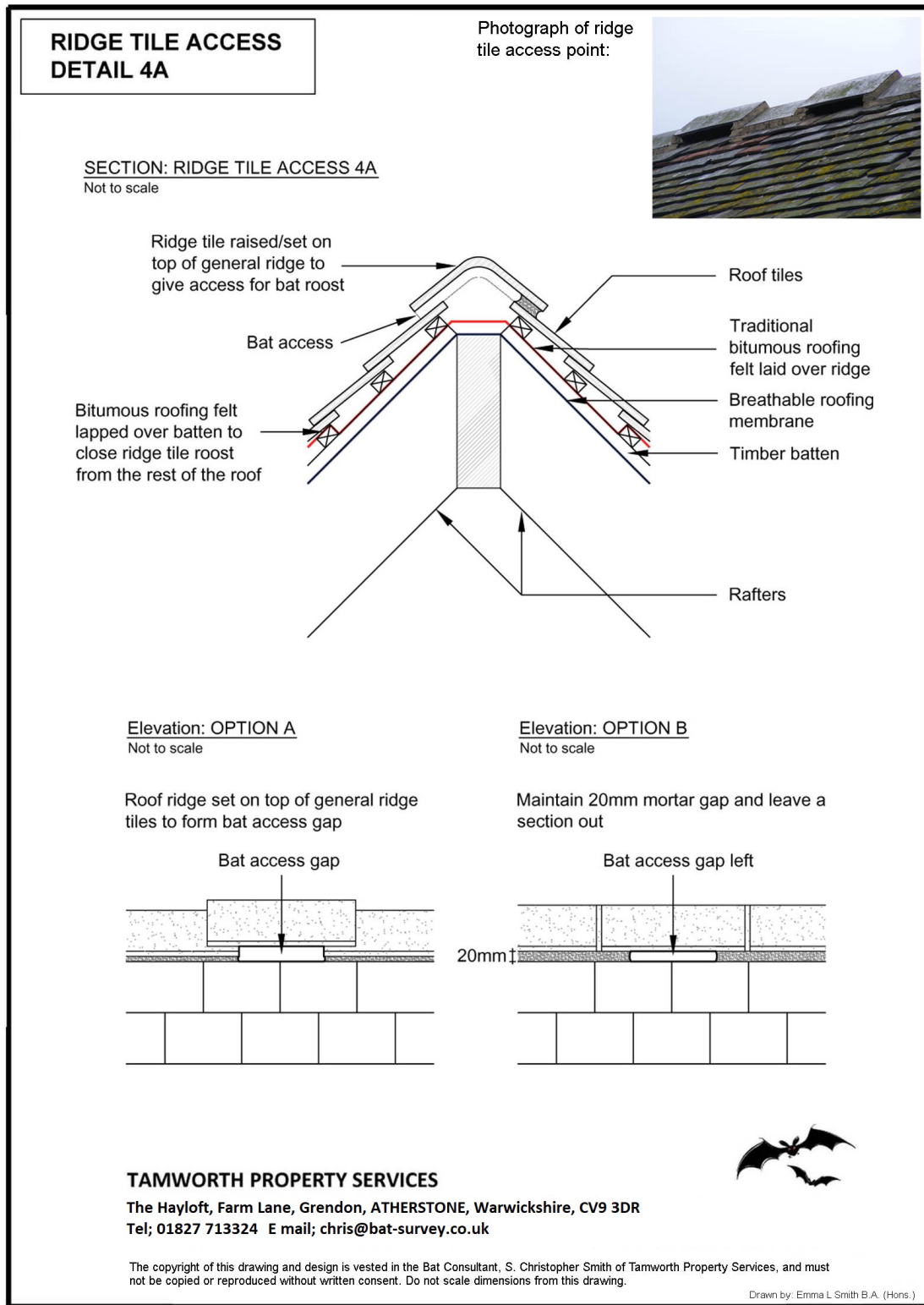
New roosting opportunities for these species of bats can be created when the new dwelling is built if planning permission is granted, to meet the requirements of the National Planning Policy Framework (2019). The proposal is to build a timber framed car port.



DETAILED PLANNING PROPOSALS
PROPOSED EXTENSIONS AND ALTERATIONS - APPLE ORCHARD FARM - DADLINGTON - LEICESTERSHIRE



New roosting opportunities for bats can be created by using a bitumous underfelt on the ridge of the roof and installing a ridge tile bat roost as per the detail below.





The method of working has been set out so that it can be printed and handed to contractors on site.

Method of working.

There is no evidence of bats using the buildings as a place of shelter but it is possible that individual bats may use the exceptionally poor temporary roosting sites between the sheeting rails and the corrugated fibre cement sheets at different times of year. Because of this possibility a method of working must be put in place when there are contractors on site. This would cover work to the roof or demolition where there was access for bats.

The common species of bats that are likely to roost in buildings of this nature and are evidenced from the regional records, are crevice dwelling bats, such as the Common Pipistrelle. These bats are small and can use accesses as little as 50mm x 20mm. When found in buildings they appear no bigger than a thumb and have dark brown fur.



It is common to find bat droppings in places used by bats. These are small and often confused with mouse droppings. It is possible to distinguish between them as mouse droppings are hard whereas bat droppings, being only insect remains, crumble when rubbed between the fingers.



The other species of bat that may possibly be found on site is the Brown Long Eared bat. These are a medium sized bat, larger than a Pipistrelle with very long ears that meet in the centre of the head. These bats may be found in crevices in the brickwork, behind ridge boards or in splits in the larger roof timbers.



- When tiles are removed they should be lifted away from the roof and not slid or twisted to avoid injuring any bats roosting beneath the tiles.
- Ridge tiles should be lifted without sliding so as to avoid injuring any bats roosting beneath them.
- If a bat is found under a roof tile or ridge tile, the tile should be carefully replaced and work in that area stopped until such time as a licensed bat worker can attend the site.
- The bat can then be removed to a place of safety until such time that it can be released at night.

- The demolition of any part of the building where bats could potentially roost should be by hand. This includes the removal of roof tiles, ridge tiles, soffits, gutter fascia boards and hanging tiles. If a bat is found the work should be stopped immediately and a bat worker called to come and deal with the bat. The bat should not be handled except by a licensed bat worker. Any bats found will be taken into care for release on site later dependent upon the time and weather.
- Bats discovered during the winter period will be taken into care, feed and kept healthy until they can be released on site in the Spring.
- Bats will not be released on site until evening temperatures are consistently above 6°C, at least three nights, the wind is light, and there is no rain.
- Bats taken into care over the winter will be released to the new roost opportunities in Spring if they are available using the same release criteria as above.

Legislation concerning bats.

The Wildlife and Countryside Act 1981 (WCA) protects bats and their roosts in England, Scotland and Wales. Some parts have been amended by the Countryside and Rights of Way Act 2000 (CROW) which applies only in England and Wales, and by the Nature Conservation (Scotland) Act 2004 which applies in Scotland.

The Conservation of Habitats and Species Regulations 2010 (better known as the Habitats Regulations) implements the Council Directive on the Conservation of Natural Habitats and of Wild Fauna and Flora. All bats are listed as 'European protected species of animals'.

It is an offence for any person to:

- Deliberately capture, injure or kill a bat.
- Intentionally or recklessly disturb bats, where that disturbance may significantly affect the ability of those bats to survive, breed, rear or nurture their young, or is likely to significantly affect the local distribution or abundance of any bat species, whether in a roost or not.
- Damage or destroy a place of shelter (roost) of a bat, be that a resting or breeding place.
- Possess a bat, whole or in part, alive or dead.
- Intentionally or recklessly obstruct access to a roost.
- Sell or offer for sale or exchange whole or parts of bats, alive or dead.

The fine for committing an offence is £5,000 per bat.

If a bat is found on site, work should stop in the area where the bat was found and the contractor should call the Bat Consultant; S. Christopher Smith 07967636115.

Breathable Roofing Membranes-Info Sheet

What are they?

- ✦ Traditional roofing felt was bitumen based
- ✦ Modern membranes are made from very fine and long plastic fibres that are spun into thin sheets. They be single ply or have various layers to provide a more complex membrane.
- ✦ They are known as Breathable roofing membranes or Vapour permeable underlay's (BRMs/VPUs)

Who Makes them?

- ✦ When most people talk about BRMs, they will call it Tyvek as this is the most famous brand name
- ✦ There are over 70 products in the UK alone, made by 20+ companies – never assume the product is Tyvek unless there is proof.



Why are they used?

- ✦ Modern houses are designed to be more energy efficient, meaning they tend to be warmer.
- ✦ Along with human activities this means increased levels of water vapour in the air
- ✦ When this passes up into the cold roof space, it forms condensation, which can lead to problems
- ✦ In the past gaps would have been left near the ridge and eaves to allow ventilation, but increased insulation often means this isn't possible. A breathable membrane aids this as it allows water vapour to pass out of the loft into the external air

Potential Problems

- ✦ There have been reports of bats becoming entangled in fibres pulled from the membranes
- ✦ Possibility of Temperature and humidity change
- ✦ A lot of membranes are white or brightly coloured

Advice

- ✦ At present we cannot recommend specific brands that are considered safe for use in bat roosts, as such it is recommended that bitumen felt be used where possible
- ✦ It is not against the law not to install a BRM
- ✦ If the planner insists on a BRM, suggest a dark coloured and reinforced membrane

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- Bat Tree habitat Key, Henry L Andrews et al, 2012.
- British Bat Calls, Jon Russ, 2012.
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- Bats of Britain and Europe, C. Dietz and A. Keifer, 2016.

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S.Christopher Smith MRICS MSc CEnv.

Appendix 1.

Roost Types as designated by Natural England and the Bat Surveys for Professional Ecologists, Good Practice Guidelines.

- A. Day roost: a place where individual bats, or small groups of males, rest or shelter in the day but are rarely found by night in the summer.
- B. Night roost: a place where bats rest or shelter in the night but are rarely found in the day. May be used by a single individual on occasion or it could be used regularly by the whole colony.
- C. Feeding roost: a place where individual bats or a few individuals rest or feed during the night but are rarely present by day.
- D. Transitional / occasional roost: used by a few individuals or occasionally small groups for generally short periods of time on waking from hibernation or in the period prior to hibernation.
- E. Swarming site: where large numbers of males and females gather during late summer to autumn. Appear to be important mating sites
- F. Mating sites: sites where mating takes place from later summer and can continue through winter.
- G. Maternity roost: where female bats give birth and raise their young to independence.
- H. Hibernation roost: where bats may be found individually or together during winter. They have a constant cool temperature and high humidity.
- I. Satellite roost: an alternative roost found in close proximity to the main nursery colony used by a few individual breeding females to small groups of breeding females throughout the breeding season.
- J. Other – Explain what the roost type is if not one of the above (it is recognised that roost types are interchangeable and not always easy to classify according to the nuances of certain species).