

# **Protected Species Survey of Buildings at Church Farm, Cotterstock, Northamptonshire**



*West elevation of farmhouse*

**November 2022**

**Carried out on behalf of  
Mr and Mrs Ward**

**Philip Irving**

# Contents

	Page
<b>EXECUTIVE SUMMARY</b>	<b>3</b>
<b>1. INTRODUCTION</b>	<b>4</b>
1.1 Surveyor Experience and Competence	
1.2 Site Description	
1.3 Proposed Works	
1.4 Aims of Survey	
<b>2. LEGISLATION RELEVANT TO PROTECTED SPECIES</b>	<b>5</b>
2.1 Bats	
2.2 Barn Owls and Nesting Birds	
<b>3. METHODOLOGY</b>	<b>6</b>
<b>4. RESULTS</b>	<b>6</b>
4.1 Desk Study	
4.2 Description	
4.3 Field Survey	
<b>5. ASSESSMENT</b>	<b>7</b>
5.1 Interpretation and Evaluation	
5.2 Impact Assessment	
5.3 Consideration of Regulations	
<b>6. RECOMMENDATIONS AND MITIGATION</b>	<b>9</b>
6.1 Bats	
6.2 Nesting Birds and Other Species	
<b>PLANS</b>	<b>11</b>
Protected Species Survey	
Proposed Development	
<b>APPENDIX</b>	<b>12</b>
Photographs	

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## **Buildings at Church Farm, Cotterstock Protected Species Survey**

### **EXECUTIVE SUMMARY**

A protected species survey was carried out of the farmhouse and outbuildings at Church Farm which are subject to a planning application for a single storey rear extension on the farmhouse to replace the existing 20th century rear extension with the addition of a glazed link to the outbuildings, conversion and cutaway balcony to the attic of the farmhouse, refurbishment and conversion of the outbuildings, with changes to fenestration and the addition of a pool. The survey involved carrying out an internal and external inspection of the affected buildings for evidence of use by roosting bats, barn owls and nesting birds.

Scattered old bat droppings, their appearance and location beneath the ridge beam typical of brown long-eared bat, were present in the south section of the roof space of the farmhouse, with a small number in the north section, indicating previous use of the roof space as a roost site by this species. The age of the droppings and relatively low number would suggest it is used as a low level day roost, though its use as a maternity roost cannot be ruled out. As the work proposed to the roof space is likely to result in the loss of a probable brown long-eared bat roost site, a licence from Natural England will be required, with a schedule of precautionary measures adopted during building work as outlined in the mitigation section at the end of the report. Bat activity surveys will be required during the May-August summer breeding period to confirm the species and level of use by bats and to inform the licence application once planning permission has been obtained. If the surveys confirm that the roof space supports a low level brown long-eared bat day roost used by one or a small number of bats, artificial bat cavities such as Schwegler 2FR bat tubes or equivalents incorporated into the external south or west elevations of the farmhouse or one of the new extensions or converted outbuildings would provide an appropriate alternative roost site. If the surveys confirm it is used as a maternity roost, an appropriate sized roof space dedicated as a bat roost zone will need to be provided in the farmhouse or another suitable building at the property.

No evidence of bats was found in the extensions of the farmhouse or the outbuildings, most of which are of negligible or no potential to support roosting bats due to their good structural condition, with no significant damage to the well pointed walls and the roofs that could provide external roosting opportunities or access points into the interior. One of the outbuildings is partly open-sided, making the interior very light and draughty, and some have already been converted for use as an office, gym and art studio. The dovecote has no potential to support bats as it is unroofed and the interior exposed to the weather, and the car port also has no potential due its timber and corrugated sheeting construction, which provide no significant roosting opportunities and have poor insulation properties. It is also partly open-sided and has numerous skylights in the roof, which makes the interior very draughty with high light levels. A bat licence from Natural England would not be required for the outbuildings to be converted though as the presence of bats can never be discounted entirely, the same schedule of precautionary measures should be adopted during building work as for the farmhouse.

The surrounding farmland and nearby River Nene would provide foraging habitat for bats, and any new external lighting should be kept to a minimum and directed away from these features and from the existing bat boxes on the car port and any new bat roosting features required by the licence.

No evidence of barn owls was found in any of the buildings though one old bird nest was present in the south section of the roof space of the farmhouse. A check for nesting birds will need to be undertaken prior to building and demolition work commencing. If nesting birds are identified, works in the area of the nest will be delayed until the birds have left the nest.

## **1. INTRODUCTION**

### **1.1 Surveyor Experience and Competence**

The survey was carried out by Philip Irving MCIEEM, who has worked for over twenty years as a Senior Ecologist for a Countryside Management Trust based in Bedfordshire, providing ecological advice on the management of Trust sites and writing management plans etc.

He also undertakes consultancy work including surveys for bats, great crested newts and other protected species, and holds a Natural England Bat Survey Class Licence CL18 (licence registration no: 2015-12411-CLS-CLS), and a great crested newt class licence CL08 (licence registration no: 2015-17174-CLS-CLS).

### **1.2 Site Description**

Church Farm is located on the northeast side of the main road on the east edge of Cotterstock, with the farmhouse and outbuildings subject to the survey situated in the southeast corner of the property at Ordnance Survey Grid Reference TL049905.

There are further traditional and modern agricultural and previously converted buildings in the farmyard to the northwest of the affected buildings, with the churchyard of St. Andrews Church directly to the south of the farmhouse, and further housing and agricultural buildings of various ages and construction c. 140m to the west. The property is otherwise surrounded by small fields of mixed farmland, mostly pasture, though arable farmland is the predominant land-use in the wider area. The River Nene is c. 40m to the east of the buildings, and has areas of plantation alongside it c. 360m to the northeast and c. 700m to the southwest, with a further small area of woodland in the grounds of Cotterstock Hall c. 250m to the west, all of which would provide good foraging habitat and commuting routes for bats.

### **1.3 Proposed Works**

The farmhouse and outbuildings are subject to a planning application for a single storey rear extension on the farmhouse to replace the existing 20th century rear extension with the addition of a glazed link to the outbuildings, conversion and cutaway balcony to the attic of the farmhouse, refurbishment and conversion of the outbuildings, with changes to fenestration and the addition of a pool. Given that the presence of protected species is a material consideration in the planning process (NPPF), a survey is required to provide information to the local planning authority (North Northamptonshire Council) on any impact the proposal is likely to have on any species present. Any impact identified on protected species will need mitigation proposals to be put forward to the planning authority to ensure any populations in the area are maintained at a favourable conservation status.

### **1.4 Aims of Survey**

The aims of the survey are to:

- Assess the current use of the buildings by bats, barn owls and nesting birds.
- Determine the impact of the proposed development on any protected species using the buildings.
- Produce a mitigation plan for any impact on the protected species to ensure the population is maintained at a favourable conservation status in the local area.

## **2. LEGISLATION RELEVANT TO PROTECTED SPECIES**

### **2.1 Bats**

Throughout Europe in the last 30 years there has been an awareness that bat populations are declining considerably. This decline combined with their special roosting requirements has led to them being given special protection by law. All bats and their roosts are protected by law under The Wildlife and Countryside Act 1981 (as amended), through inclusion in schedule 5, section 9. From 1st April 2010, a new version of the Habitats Regulations came into force in England and Wales to become the Conservation of Habitats and Species Regulations. This version of the legislation updates and consolidates all the amendments to the Regulations since they were first made in 1994 and effectively makes any disturbance of bats an offence. In summary, taken together the legislation makes it illegal to:

- Intentionally kill, injure or capture bats;
- Intentionally or recklessly disturb bats while they are occupying a structure used for shelter or protection;
- Intentionally or recklessly damage, destroy or obstruct access to areas used by bats for shelter or protection.

Structures used by bats for shelter are commonly known as bat roosts. Because bats tend to re-use the same roosts, legal opinion is that, the roost is protected whether or not the bats are present at the time. The appropriate Statutory Nature Conservation Organisation (SNCO) must be consulted of any work that may affect bats, or their roosts. In England, the appropriate SNCO is Natural England who will advise as to whether work can be carried out, and if so, the methods to be used.

Developments that would contravene the protection afforded to bats under the Conservation of Habitats and Species Regulations 2010 require a Habitat Regulations Licence issued by Natural England before any works can commence. Three tests must be satisfied before Natural England can issue a licence or permit otherwise prohibited acts. The Local Planning Authority will need to ensure that tests 1 and 2 have been satisfied and Natural England will need to be consulted regarding test 3. The three tests are:

1. That the development is 'in the interests of public health and public safety, or for other imperative reasons of overriding public interest, including those of social or economic nature and beneficial consequences of primary importance for the environment' (Regulation 44 (2) (e)).
2. That there is no satisfactory alternative (Regulation 44 (3) (a)).
3. That 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 (Regulation 44 (3) (b)).

The legislation means that the developer will need to have a clearly documented compensation strategy to maintain the numbers of bats in the local area.

### **2.2 Barn Owls and Nesting Birds**

Nesting birds are protected by law under The Wildlife and Countryside Act 1981 which makes it an offence to kill, injure or take any wild bird, and take, damage or destroy any nest in use or being built or any egg. Barn owls also have additional protection as they are listed on Schedule 1 of the Wildlife and Countryside Act 1981 (as amended) making it unlawful to intentionally or recklessly disturb these birds whilst they are building a nest or are in, on or near a nest containing eggs or young or to disturb their dependent young.

### **3. METHODOLOGY**

An internal and external inspection of the affected buildings, especially any roof spaces, was made on the 16<sup>th</sup> November 2022 by Philip Irving MCIEEM, and evidence of use by bats and other protected species was looked for, for example droppings, urine streaks, nesting/roosting sites, feeding remains or live animals.

Bats may roost in a variety of situations including within the hollows of timbers, within gaps in brickwork and stonework, or below the ridge beam inside buildings. Buildings can be considered as potential roosts if cracks or holes in excess of 8mm x 12mm are present. Such gaps are large enough to allow the smallest species of bats to gain access. It is usual for bats to select roosting areas that are sheltered and warm, avoiding exposed draughty conditions.

The weather at the time of the survey was mostly cloudy with a light south-easterly breeze and a temperature of 10°C.

Constraints - Bat roosts are of a transient nature and bats may move from roost to roost. A single bat may use a large number and wide variety of roosts during the year. This behaviour may result in some roosting sites not being encountered during the dates of the survey.

### **4. RESULTS**

#### **4.1 Desk Study**

The few bat records within 1km of the property include a roost of common pipistrelle and brown long-eared bat c. 900m to the southeast near Elmington, with more distant roosts of common and soprano pipistrelle, brown long-eared, barbastelle and natterer's bat in Oundle and Ashton more than 2km to the south and southwest. There are occasional records of barn owl within 1km of the property.

#### **4.2 Description**

The farmhouse is of limestone construction with a pitched, slate roof, unlined internally, and containing three chimneys at the north and south ends and in the centre. It is a two storey building though attic bedrooms are present in the northern half of the farmhouse. The roof space is divided into two sections at the central chimney, the south section high, disused and sealed off from the adjacent attic rooms and containing frequent cobwebs, with a low roof space retained above the attic rooms of the north section.

Attached to the north elevation of the farmhouse is a one storey extension of the same construction, the mono-pitched roof containing a single roof space above the plastered ceiling that contains frequent cobwebs. Attached to the east elevation is a one storey glazed, conservatory style extension (to be removed), the flat roof having narrow, sloping sections of slate around the edges with a single large skylight in the centre of the roof, this and the glazing creating high internal light levels.

Attached to the south elevation of the farmhouse are two one storey outbuildings constructed of limestone with mono-pitched pantile roofs lined internally with boarding. They are both vaulted internally and used for storage. Attached to their south end is an open-sided pergola (to be removed) with timber supports and a hipped pantile roof.

The one storey outbuildings to the north of the farmhouse which are to be converted are constructed mostly of limestone though the south elevation of the western outbuildings is constructed of brick. The pitched slate roofs are lined internally with black felt though the section at the western end has

been converted for use as an art studio with plastered walls and ceiling and a low inaccessible roof void retained along the apex. It is divided from the adjacent section by a plastered partition to the apex. This section is partly open-sided on the south elevation with an unglazed window and a door opening in the north elevation, making the interior very light and draughty. This and the adjacent unconverted sections to the east are used as stores and all are vaulted internally and have stone floors. The dovecote to the east of the stores is unroofed with narrow pitched sections of slate roof along the top of the limestone walls. The sections to the east of the dovecote have also been converted with plastered internal walls and ceilings, the pitched roofed section used as an office with an inaccessible roof space, and the mono-pitched section at the east end vaulted with a skylight in the roof and containing gym equipment.

Attached to the north elevation of the western half of the outbuildings is a car port of modern timber framed construction, open-sided on the north elevation, and clad with Yorkshire and other timber boarding on the south, east and west elevations with the limestone wall of the adjacent outbuilding forming the lower half of the south elevation. The low-pitched corrugated sheeting roof is unlined internally and contains eight skylights, which with being open-sided makes the interior very light and draughty. Four woodcrete bat boxes have been attached to the west elevation.

All the buildings are in good structural condition with well-pointed stonework and brickwork, sealed eaves and no significant damage to the roofs.

To the east of the farmhouse is a large area of paving with the front and rear gardens consisting of regularly mown lawn with occasional ornamental shrubs and young trees.

### **4.3 Field Survey**

Frequent scattered old bat droppings, their appearance and location below the apex typical of those of brown long-eared bat, were present in the south section of the roof space of the farmhouse. Urine stains were also present on items within it, with a small number of similar droppings in the north section of the roof space. No evidence of bats was found in the extensions of the farmhouse or any of the outbuildings.

No evidence of barn owls was found in the buildings, with only an old bird nest present in the south section of the roof space of the farmhouse.

## **5. ASSESSMENT**

### **5.1 Interpretation and Evaluation**

Scattered old bat droppings, their appearance and location beneath the ridge beam typical of brown long-eared bat, were present in the south section of the roof space of the farmhouse, with a small number in the north section, indicating previous use of the roof space as a roost site by this species. The age of the droppings and relatively low number would suggest it is used as a low level day roost, though its use as a maternity roost cannot be ruled out.

No evidence of bats was found in the extensions of the farmhouse or the outbuildings, most of which are of negligible or no potential to support roosting bats due to their good structural condition, with no significant damage to the well pointed walls and the roofs that could provide external roosting opportunities or access points into the interior. One of the outbuildings is partly open-sided, making the interior very light and draughty, and some have already been converted for use as an office, gym and art studio. The dovecote has no potential to support bats as it is unroofed and the interior exposed to the weather, and the car port also has no potential due its timber and corrugated sheeting construction, which provide no significant roosting opportunities and have poor insulation

properties. It is also partly open-sided and has numerous skylights in the roof, which makes the interior very draughty with high light levels.

The surrounding farmland and nearby River Nene would provide foraging habitat for bats.

## 5.2 Impact Assessment

Pre- and mid-activity impacts – There is the potential for direct disturbance of any roosting bats that may be present as building work is undertaken on the roof space of the farmhouse. Preliminary building work should be undertaken with care during early spring or autumn which are the least sensitive times for bats and to avoid disturbing any potential breeding or hibernating bats.

Long term impacts – The proposed works to the roof space of the farmhouse will result in the loss of a probable brown long-eared bat day roost of low conservation significance, though its use as a maternity roost cannot be ruled out.

Post-activity interference impacts – Any new external lighting could affect the use of the area by foraging, commuting and roosting bats, and should be kept to a minimum with lighting directed away from the adjacent farmland, the River Nene, the existing bat boxes on the car port and any new bat roosting features required by the licence. The property would only be a very small part of any bats foraging area so the impact on bats in this respect would be low.

Summary of the impacts in a wider context – The loss of a low level brown long-eared bat roost site is likely to have a negligible impact on the local population of this widespread species with no impact on the regional or national populations, though the loss of a maternity roost could have a higher impact on the local population.

## 5.3 Consideration of Regulations

The species protection provisions of the Habitats Directive, as implemented by the Conservation of Habitats and Species Regulations 2010, contain three "derogation tests" which must be applied by Natural England when deciding whether to grant a licence to a person carrying out an activity which would harm an EPS. For development activities this licence is normally obtained after planning permission has been obtained. The three tests are that:

*“the activity to be licensed must be for imperative reasons of overriding public interest or for public health and safety”*

The proposed works to the roof spaces of the farmhouse will provide new accommodation space required by the owners, and will increase the economic value of the property.

*“there must be no satisfactory alternative”*

Converting the southern section of the roof space for residential use will make use of a large area of the house that is currently disused, and will ensure it is properly maintained.

*“favourable conservation status of the species must be maintained”*

Replacement roosting opportunities appropriate for the level of use of the roof spaces by bats such as artificial bat cavities or a bat roost zone will be provided in the farmhouse or another suitable building at the property.



## 6. RECOMMENDATIONS AND MITIGATION

### 6.1 Bats

Bats and their roosts are protected by law under The Conservation of Habitats and Species Regulations 2010 and a European Protected Species license to derogate from this protection would be required to allow building work to be undertaken if a roost was present and the proposed activity is likely to result in an offence, such as significant alterations to or loss of bat roosts.

As the work to the roof space of the farmhouse will result in the loss of a probable brown long-eared bat roost site, a licence from Natural England will need to be obtained. Bat activity surveys will be required during the May-August summer breeding period to confirm the species and level of use by bats and to inform the licence application once planning permission has been obtained. The following measures will be implemented to reduce the impact of disturbance to bats as a result of the proposed work and will form the basis of the bat licence application. As the presence of bats in the outbuildings can never be discounted entirely, these precautions should also be implemented during work on those buildings:

- Preliminary building work will be undertaken during March/April or September/October to avoid disturbing any potential breeding or hibernating bats. Care will be taken when removing any roof slates or tiles, which will be lifted as carefully as possible, by hand and in an upwards direction to minimise any possible impact on any bats which may be present. This work will be undertaken in the presence of a licensed bat worker who will need to be present to ensure that due caution is being used and to deal with any situation that may arise if bats are found to be present. Any bats found will be removed by hand and placed in the pre-erected woodcrete bat boxes on the west elevation of the car port. If during later building work any bats are discovered when the licensed bat worker is not present, all works will cease until the bat worker is available.
- Any timber treatment products required will be sanctioned by Natural England and a check for roosting bats made before timber treatment commences.
- A toolbox talk will be given to all contractors working on the buildings to make them aware of the potential presence of bats, the protection afforded them, the methods of working required to avoid harm to bats, and what to do in the event that bats are found.

If the surveys confirm that the roof space supports only a low level brown long-eared bat day roost used by one or a small number of bats, artificial bat cavities such as Schwegler 2FR bat tubes or equivalents incorporated into the external south or west elevations of either the farmhouse, or one of the new extensions or converted outbuildings will provide an appropriate alternative roost site. If the surveys confirm it is used as a maternity roost, an appropriate sized roof space dedicated as a bat roost zone will need to be provided in the farmhouse (possibly the north section of roof space) or another suitable building at the property.

Any new external lighting required, either temporary lighting during building work, or permanent lighting post development, will be low level to reduce impacts on foraging bats and not directed at the surrounding farmland or the nearby River Nene, the existing bat boxes on the car port or any new bat roost features. Where external lighting proves necessary it should consist of LED light sources or be fitted with directional accessories (i.e. hoods, cowls, shields, louvres) to minimise light spillage and direct light away from sensitive areas.

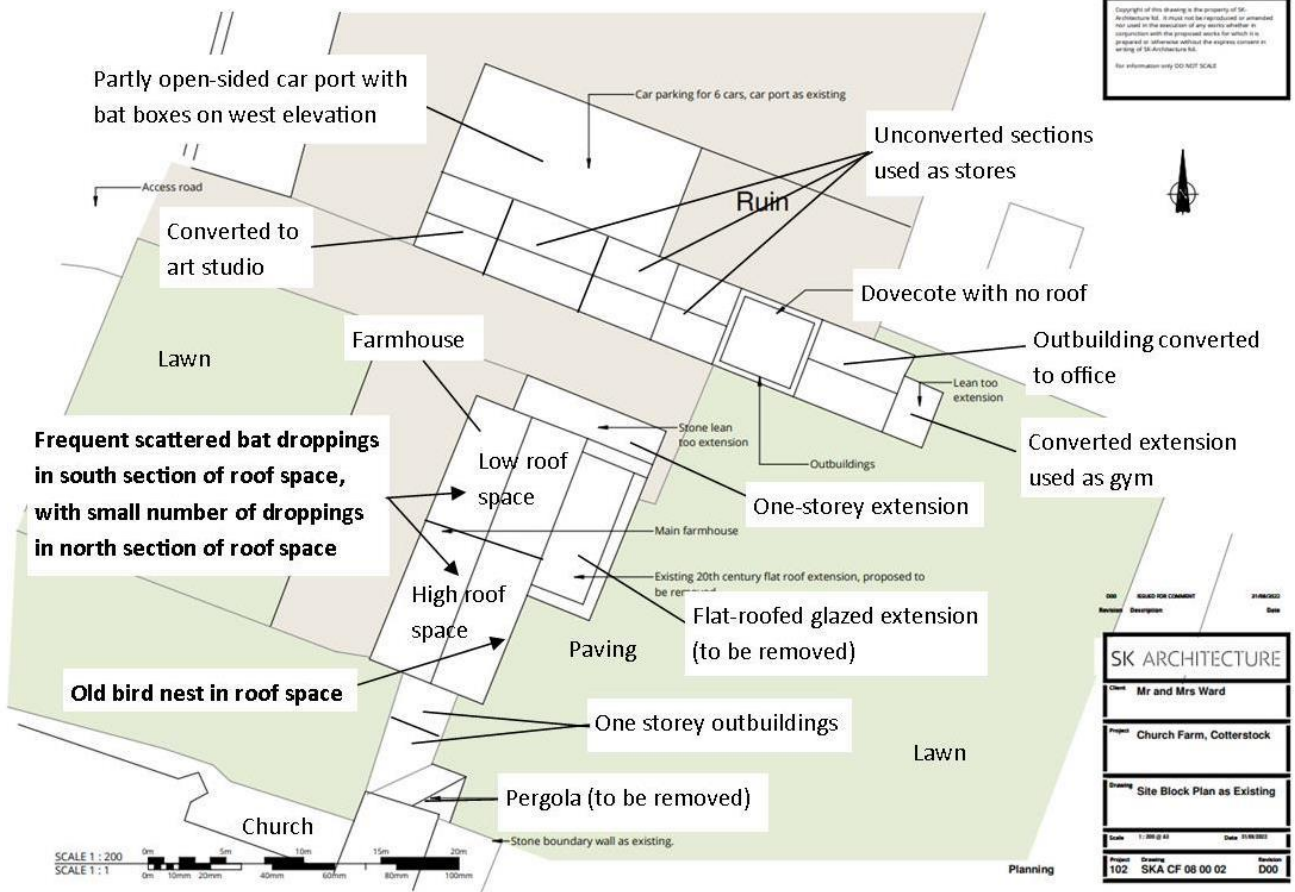
## 6.2 Nesting Birds and Other Species

As nesting birds are protected by law under The Wildlife and Countryside Act 1981, a check for nesting birds should be undertaken prior to building work commencing. If an active nest is found, work must cease and an appropriate sized buffer established around the nest. The buffer must remain intact until it has been confirmed that the young have fledged and the nest is no longer in use.

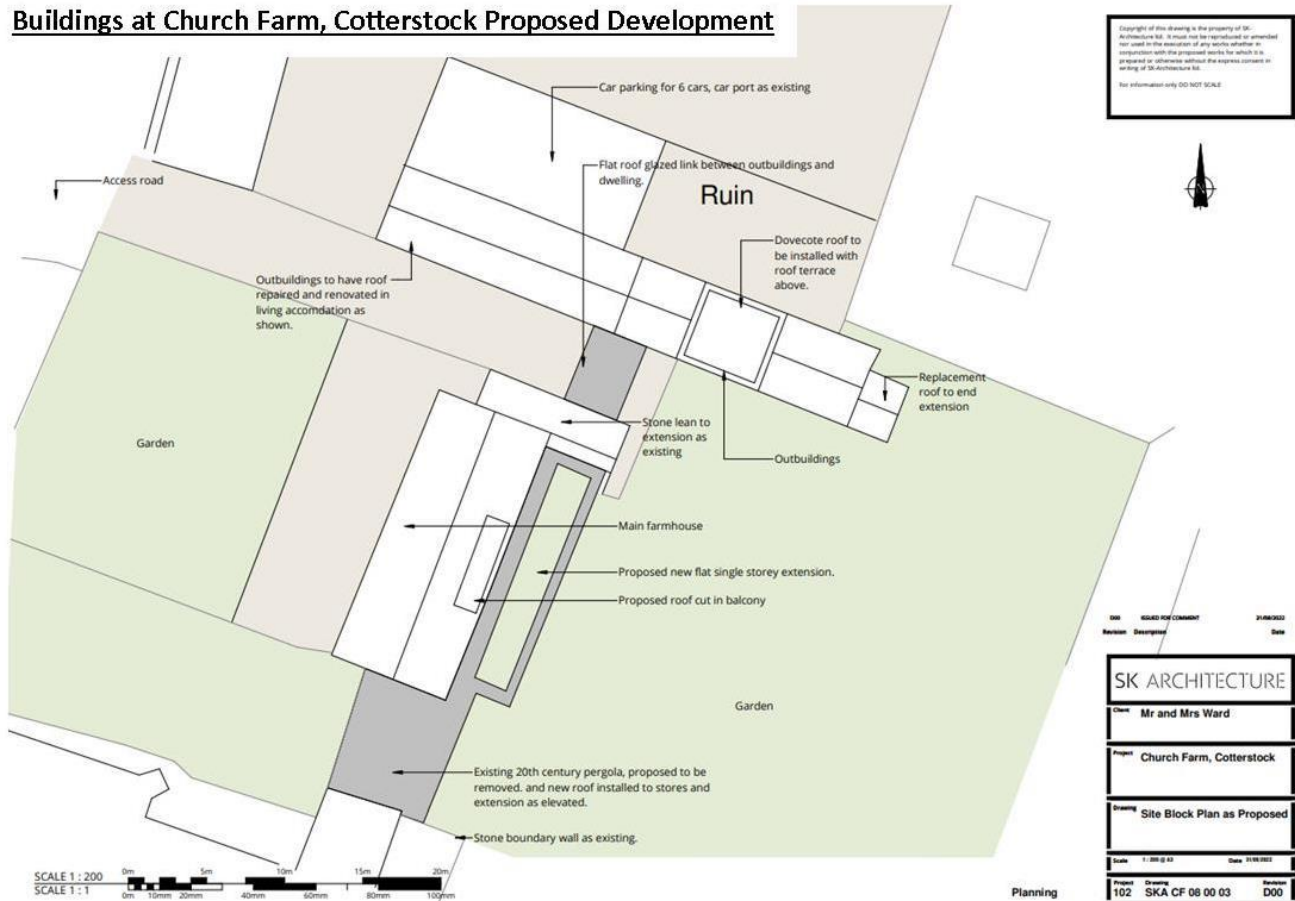
The paved patio and regularly mown lawns of the garden provide poor terrestrial habitat and no cover for reptiles and amphibians, and there are no ponds on or near the property, though due to the proximity of the River Nene, it is recommended that the following avoidance measures are implemented during construction work to reduce the impact of disturbance to any reptile or amphibian species that may be present in the area:

- All vegetation due for clearance will be kept close cut from February onwards prior to work commencing, to deter any species from using it as cover, and to make it easier to find any that may be present. Any materials lying around the site will be removed by hand, and any animals that are found will be collected and moved to suitable undisturbed areas of long vegetation in the surrounding farmland or near the river. Animals will be transported in a covered black bucket to reduce stress and will not be contained for longer than 30 minutes. If great crested newts are found whilst works are on-going despite following good practise guidelines, all work will stop and the situation re-assessed and a mitigation licence applied for if necessary. Any handling of this species will only be carried out by someone with a great crested newt license.
- If construction work is carried out at a time of year when these species are likely to be active, the following precautions will be carried out:
  - Excavations will be backfilled, covered overnight, or ramps placed in to allow any animals to escape
  - Machinery, materials etc. should be stored on areas of hardstanding or raised off the ground on pallets where possible
  - Waste materials will be removed off site immediately or stored in skips where possible
  - Concrete will not be left unset overnight, or suitable barriers erected to prevent newts accessing the concrete.
  - Excavations and working areas will be managed so as not to create temporary waterbodies which may attract newts onto the site

## Buildings at Church Farm, Cotterstock Protected Species Survey



## Buildings at Church Farm, Cotterstock Proposed Development



**APPENDIX**

**Photographs**



*South and east elevations of farmhouse*



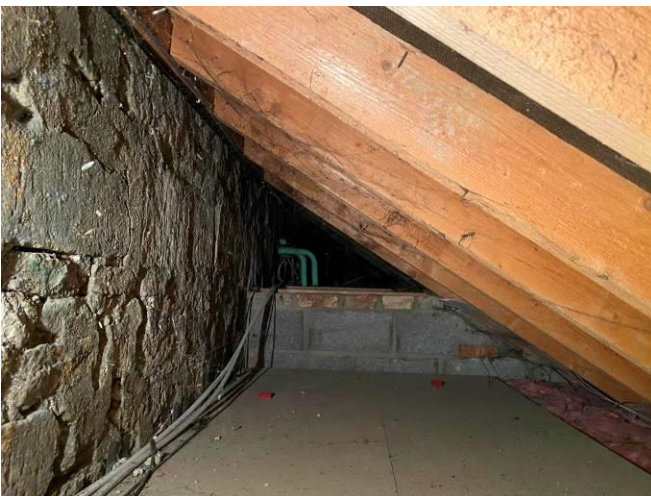
*North and east elevations of farmhouse and extension*



*South section of roof space*



*North section of roof space*



*Roof space of northern extension*



*South and east elevations of glazed extension*



*Interior of glazed extension*



*Outbuildings and pergola to south of farmhouse*



*Interior of southern outbuilding to south of farmhouse*



*Interior of northern outbuilding to south of farmhouse*



*South and east elevation of eastern outbuildings*



*South and west elevations of western outbuildings*



*North elevation of eastern outbuildings*



*Art studio at western end of outbuildings*



*Store in central section of western outbuildings*



*Store in central section of western outbuildings*



*Store to west of dovecote*



*Interior of dovecote*



*Office to east of dovecote*



*Gym at eastern end outbuildings*



*Car port attached to north elevation of outbuildings*



*Interior of car port*



*Bat droppings in south section of farmhouse roof space*



*Urine stains in south section of farmhouse roof space*



*Bat dropping in north section of farmhouse roof space*



*Bird nest in south section of farmhouse roof space*