

# WILD FRONTIER ECOLOGY

Church Farm, Smallburgh



Biodiversity Method Statement

August 2021

Report produced by	Submitted to
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The data which we have prepared and provided are accurate, and have been prepared and provided in accordance with the CIEEM's Code of Professional Conduct. We confirm that any opinions expressed are our best and professional bona fide opinions.

This report conforms to the British Standard 42020:2013 Biodiversity - Code of practice for planning and development.



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# 1. Background

## 1.1 Planning Conditions

The conversion of the barns at Church Farm, Smallburgh is permitted by North Norfolk District Council under the planning consent PF/19/1287. The planning decision requires the following Conditions (3, 4 and 5) to be discharged before works on site can begin:

*3. The following works: clearance, demolition, modification or building work; to the buildings or land identified on approved drawing number 17.10 01B (Location Plan) shall not in any circumstances commence unless the local planning authority has been provided with either:*

*a) A licence issued by Natural England pursuant to Regulation 55 of The Conservation of Habitats and Species Regulations 2017 authorising the specified activity/development to go ahead; or*

*b) A statement in writing from Natural England to the effect that it does not consider that the specified activity/development will require a licence.*

*Reason:*

*The Habitats Directive requires a system of 'strict protection' for certain protected species. It is a criminal offence to consciously harm European protected species without a licence, which would only be issued if the statutory licensing body is satisfied that the derogation criteria are met. This condition is to ensure that the developer will apply for an EPS licence and, if they do not, can be prevented in advance from undertaking the activities that might jeopardise the protected species, before the species is harmed. This condition can be enforced by a temporary stop notice or by injunction. This condition ensures that the local planning authority is complying with its statutory obligations with respect to the Habitats Directive.*

*4. No development shall take place (including any demolition, ground works, or site clearance) until a method statement for bats, birds, barn owls and species of principle importance has been submitted to and approved in writing by the local planning authority. The content of the method statement shall include:*

*a) Purpose and objectives for the proposed works;*

*b) Detailed design(s) and/or working method(s) necessary to achieve stated objectives (including where relevant, type and source of material to be used);*

*c) Extent and location of proposed works shown on appropriate scale maps and plans;*

*d) Timetable for implementation, demonstrating that works are aligned with the proposed phasing of construction;*

*e) Persons responsible for implementing the works;*

*f) Initial aftercare and long-term maintenance (where relevant); and*

*g) Disposal of any wastes arising from works.*

*The works shall then be carried out strictly in accordance with the approved details and timescales and shall be retained in that manner thereafter to the satisfaction of the Local Planning Authority.*

*Reason:*

*In accordance with the requirements of Policy EN 9 of the adopted North Norfolk Core Strategy and paragraph 175 and 176 of the National Planning Policy Framework, and for the undertaking of the council's statutory function under the Natural Environment and Rural Communities Act (2006).*

*5 Prior to the installation of any further external lighting (other than hereby approved), details shall be submitted to and approved in writing by the Local Planning Authority.*

*The lighting shall then be installed and thereafter retained in accordance with the approved details.*

*Reason:*

*In the interests of the visual and residential amenities of the area, protected species and to avoid light pollution, in accordance with Policies EN 4, EN 9 and EN 13 of the adopted North Norfolk Core Strategy.*

Condition 3 relates specifically to the obtaining of a European Protected Species (EPS) mitigation licence from Natural England, which is required due to the presence of common pipistrelle *Pipistrellus pipistrellus*, soprano pipistrelle *Pipistrellus pygmaeus* and brown long-eared bat *Plecotus auritus* roosts (see Wild Frontier Ecology's Ecology Report, 2019 and confirmed by further surveys undertaken in 2021 to inform the licence application).

The EPS licence and associated mitigation will need to be in place prior to the commencement of the proposed conversion works. However, the EPS licence cannot be applied for until all other wildlife-related planning conditions (conditions 4 and 5) are discharged by the Local Planning Authority.

## **1.2 Objective**

The objective of this document is therefore to provide the required details of the mitigation, compensation and enhancement measures for protected and valued species, and details of the sensitive lighting requirements for the development. This is to ensure that no protected and valued species are disturbed, injured or killed during the works. It will also ensure that the project provides enhanced nesting and roosting opportunities for bats and barn owls in the long term, in line with the stipulations of the relevant legislation and planning conditions above.

This Method Statement should provide sufficient information for North Norfolk District Council to make a decision on a Discharge of Conditions (DoC) application for the discharge of conditions 4 and 5 of planning consent PF/19/1287. A separate, subsequent DoC will need to be made to discharge condition 3 once the EPS licence has been issued by Natural England.

## **1.3 Site Details**

The development site is at Church Farm, off Hall Road/ Knowles' Lane in Smallburgh (British National Grid Reference TG 3323 2398; see Figure 1 and Figure 2).

The proposals are for the conversion of the barns into an office building, with associated areas for parking (see Figure 3 and 4).

Figure 1: Site Location

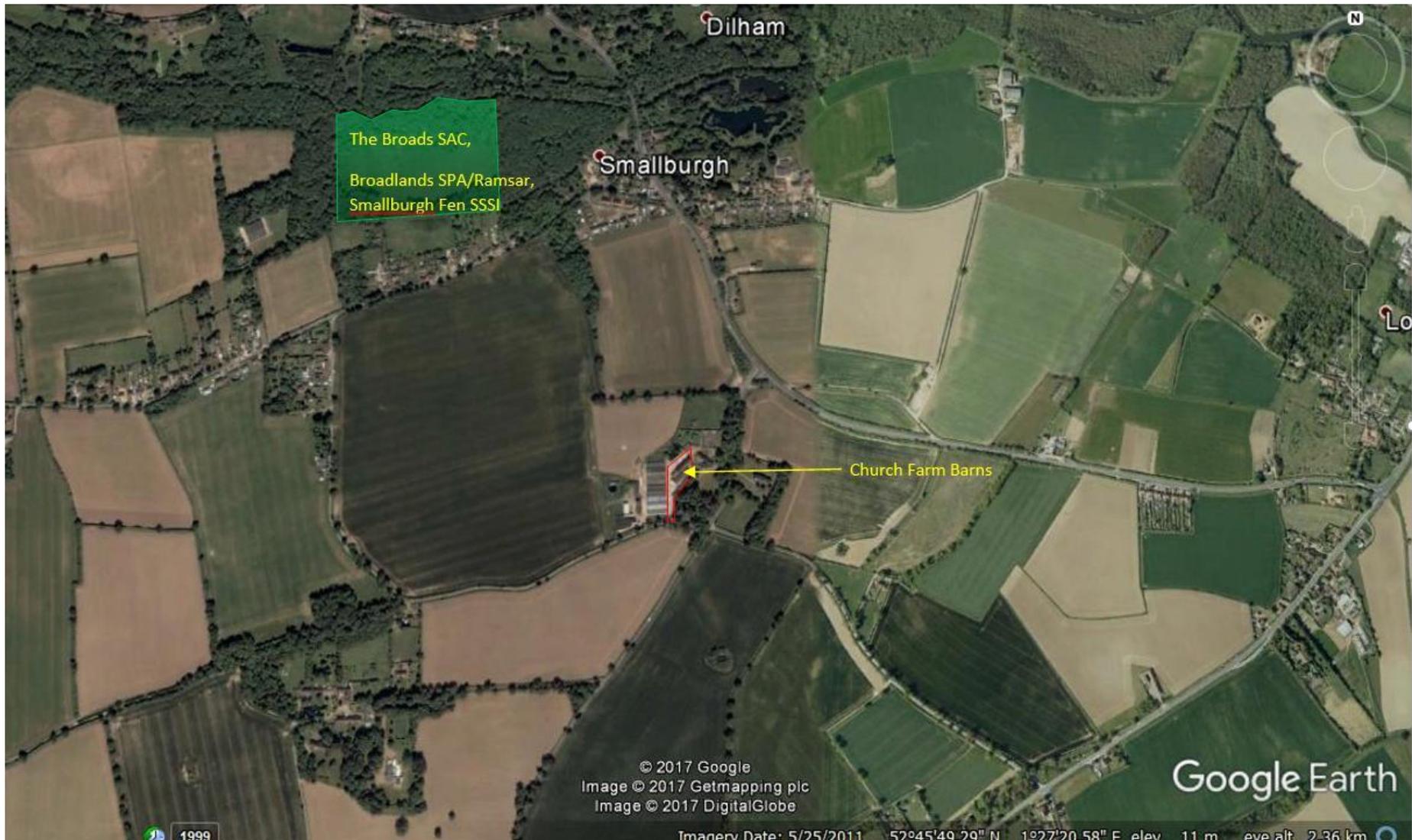


Figure 2: Existing site plan

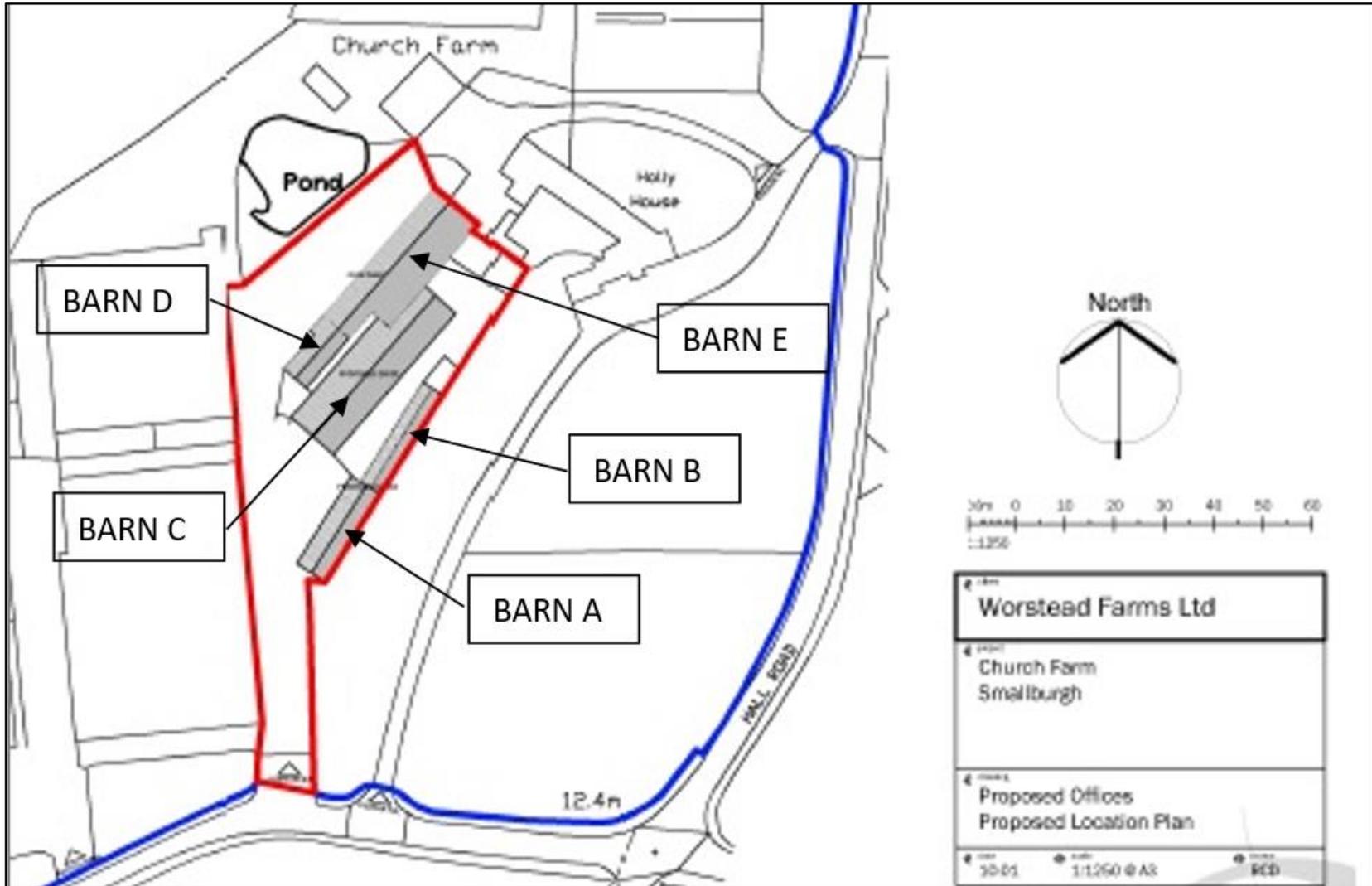


Figure 3: Proposed site plan



Figure 4: Proposed floor plan



## 2. Risk Assessment

### 2.1 Ecologically Valued Features

The baselines for protected and valued ecological receptors on site which require impact consideration during construction are detailed in Table 1.

**Table 1. Protected species status on site at Church Farm, Smallburgh**

Receptor	Status	Occurrence on Site	Estimated Ecological Value
Common breeding birds	All bird species are protected under the Wildlife and Countryside Act 1981 as amended. This prevents killing or injuring any bird or damaging or destroying nests and eggs.  BoCC Green-listed	It is likely that common bird species will make use of the building for nesting.	Local
Breeding birds of Conservation Concern	All bird species are protected under the Wildlife and Countryside Act 1981 as amended. This prevents killing or injuring any bird or damaging or destroying nests and eggs.  Barn owls <i>Tyto alba</i> are also listed under Schedule 1 of the Wildlife and Countryside Act 1981, which prohibits intentionally or recklessly disturbing the species at, on or near an 'active' nest.  BoCC Amber- and Red-listed	Breeding barn owls were confirmed in 2017 and 2021 and there is suitable habitat for species such as starling and house sparrow.	Local
Roosting bats- Common pipistrelle, soprano pipistrelle and brown long-eared bat.	All bat species are listed under Annex IV (and certain species also under Annex II) of the European Union's Council Directive 92/43/EEC (The Habitats Directive), and are given UK protected status by Schedule 2 of the Conservation of Habitats and Species Regulations 2010. Bats and their roosts also receive protection from disturbance from by the Wildlife and Countryside Act 1981 (as amended by the Countryside and Rights of Way Act 2000). This protection extends to both the species and roost sites. It is an offence to kill, injure, capture, possess or otherwise disturb bats. Bat roosts are protected at all times of the year (making it an offence to damage, destroy or obstruct access to bat roosts), regardless of whether bats are present at the time.	Across surveys in 2017, 2019 and 2021, small numbers of common pipistrelles, soprano pipistrelles and brown long-eared bats were recorded using day roosts in barns D and E.	Local

Receptor	Status	Occurrence on Site	Estimated Ecological Value
Priority Species	The protection of Priority Species is not statutory, but “specific consideration” should be afforded by Local Planning Authorities when dealing with them in relation to planning and development control. Also, there is an expectation that public bodies would refer to the Section 41 list when complying with the Section 40 duty.	It is likely that species such as hedgehog and common toad will occur on site.	Local

## 2.2 Potentially Damaging Activities

Potential negative impacts from construction could come from:

- Disturbance of designated sites through an increase in human activity, noise, lighting, vibration, fumes and traffic.
- Direct killing or injury of protected species by works.
- Entrapment of protected species in ground trenches and/or wall cavities.
- Destruction of bat roosts for soprano pipistrelles common pipistrelle and brown long-eared bat.
- Destruction of bird nesting sites, including for barn owls.
- Night lighting of sensitive areas.

The unmitigated maximum impact potential for the works to the barns is significant. Unsupervised contractor work during the peak season for bats has the potential to disturb, injure or possibly even kill common pipistrelle, soprano pipistrelle and brown long-eared bats. This could result in minor negative impacts to populations at a local population scale.

In the absence of any mitigation measures, the destruction of an active barn owl nest site could result in up to intermediate negative impacts on the district population. WFE’s 2019 Ecology Report predicted minor negative impacts for other breeding birds using the proposed development site.

### 3. Mitigation/ Avoidance Measures

#### 3.1 General Measures

An Ecological Clerk of Works (ECoW) will be appointed to oversee the construction phase of the project. The ECoW will be a suitably qualified ecologist from Wild Frontier Ecology with the necessary licences. Contact details for the ECoW will be left with any site managers and in a suitable location onsite (e.g. site notice board) so that the ECoW can be contacted as and when required.

##### 3.1.1 Requirement for ECoW Presence

The ECoW will be present on site as a minimum:

- For a final site inspection prior to commencement of works
- To give a toolbox briefing at the start of works
- To supervise the soft-stripping of roofs (under EPS licence) and demolition of roost locations, and safely translocate any bats
- To conduct checks for nesting birds and monitor active nests
- For the set-up of any Construction Exclusion Zones
- On the discovery of unexpected bats, active nests or any other protected species on site
- And otherwise at regular intervals throughout the construction programme to ensure that the construction methods proposed are adhered to.

##### 3.1.2 Toolbox Talk

A toolbox talk will be provided by an ECoW to the workforce prior to the commencement of work on the buildings. This will familiarise the workforce with the ecological issues. It will also familiarise the workforce with the key protected species and Priority Species that could potentially be encountered.

##### 3.1.3 Construction Exclusion Zones

Construction Exclusion Zones (CEZ) will be defined by the ECoW as required during construction works. CEZs will be used to protect key areas for example a suitable buffer around active bird nests (e.g. 10-metres around an active barn owl nest), should any be discovered.

No worker or works traffic will enter a CEZ without prior agreement with the ECoW. All CEZs will be defined by a barrier, e.g. heras fencing. All CEZs will be clearly marked with signs to confirm the purpose of the barrier and to provide the contact details of the ECoW if access is required (signage must be weather-proof, e.g. laminated).

#### 3.2 Receptor-Specific Method Statements

##### 3.2.1 Breeding Birds

Two barn owl nest boxes will be erected on mature trees within the landholding prior to works commencing, with suitable trees identified within the hedgerow approximately 120-metres north of Church Farm (see Figure 5). The boxes will be at

least 600mm wide x 610mm high x 600mm deep, these being the *minimum* dimensions specified by the Barn Owl Trust. They will have an inspection hatch and a 250mm deep exercise platform at the front. These boxes will provide continued nesting and roosting provision for the resident barn owls during the development of the site.

Additionally, a new integral barn owl nest space will be built into Building D during construction. The box will be built into the southern gable end as shown in Figure 5 and the proposed plans for the site. The internal floor space will be a minimum of 500mm deep by 800mm wide, with a minimum height of 532mm on the sides and 794mm at the apex. The box will have an entrance hole of 130mm x 250mm (the existing owl access), with a protruding ledge beneath the hole on the exterior of at least 250mm x 500mm wide with a graspable raised edge. The nest space will be 450mm below the entrance hole. A removable inspection hatch will be provided on the back of the owl space so that periodic cleaning can be undertaken.

Work will commence outside of the main bird nesting period, which is considered to be 1<sup>st</sup> March to 31<sup>st</sup> August inclusive, to avoid impacts to breeding barn owls and other breeding bird species. If this is not possible then works may only commence if a check of the affected buildings undertaken by the ECoW (a suitably licensed ecologist) confirms that barn owls are not currently nesting on site.

If any trees or shrubs require trimming or removal then these will also be checked.

If any nests are found, either by the ECoW or by on-site workers, then works will cease in the vicinity of the nest. A temporary CEZ would be agreed with the ECoW (size dependent on species) and observed until the nest has come reached a natural conclusion.

Normally it will be possible to provide nesting songbirds with a buffer that can be worked around, but this is less feasible with regards to barn owls. Active nests must be allowed to reach a natural conclusion without disturbance, interference or destruction.

### 3.2.2 Bats

#### Bat Roosts

Before construction work commences, three receptor bat boxes suitable for pipistrelles and brown long-eared bats will be installed on a mature tree within the landholding, to provide appropriate emergency accommodation for any bats encountered during the construction works. Bats removed from the building will be relocated to these boxes. Work will only begin once an EPS licence has been issued by Natural England.

The ECoW will provide a toolbox talk to roofers/contractors and undertake a site inspection **prior to any work commencing**. The ECoW will then be on site to supervise the soft-stripping of the roof, by hand, and soft demolition of masonry in sensitive areas where bat roosts are confirmed as necessary. Crevices/cavities in which bats were confirmed roosting will be thoroughly inspected with an endoscope to check that no bats are present before works to such features are undertaken. If bats are present, or the presence of bats cannot be ruled out (e.g. for complex/convoluted cavities), then a suitable exclusion device will be fitted for a minimum of 5 nights of suitable weather conditions. Masonry features in which bats have been confirmed absent will be blocked by the ecologist to prevent re-occupation before works to those features takes place. Works to exclude and destroy the bat roosts will be carried out during suitable weather when bats are expected to be active and not torpid.

Compensation for bats (Figure 5) entails the provision of four crevice-style artificial roosts to compensate for the identified pipistrelle day roosts, with the location on the converted barn designed to mimic the existing roosts as closely as possible. The low number of brown long-eared bats recorded does not warrant the provision of a dedicated bat void. Monitoring of the compensation features provided will take place in the active season following the completion of construction, in order to establish use by bats. Monitoring will comprise a visual inspection of the bat boxes where possible.

### Lighting Plan

The effect on foraging bats posed by the proposal consists of disturbance through lighting at night, therefore night-lighting of the site will be minimal, and sensitive where essential. The use of movement sensors installed on lights can ensure that they come on only when needed and avoid unnecessary constant illumination. Positioning lights at angles of not greater than 90° to the ground can reduce overspill of light and sky glow, which can disrupt the nocturnal behaviours of bats and insects<sup>1</sup>. Night-lighting must avoid illuminating all existing or compensation bat roosts (both during construction and on the finished site), as illumination of roost access points can disrupt emergence and re-entry from the roost and even entomb bats in their roosts (leading to death).

A sensitive lighting plan showing required “Dark Zones” and advising specifications and locations for exterior lighting on the finished site is provided in Appendix 1.

### 3.2.3 *Priority Species*

Any excavations, such as for service connections or footing works, should either be (in preferential order) back-filled before nightfall, securely covered overnight, or fitted with egress boards sloped at a shallow angle (<40°) to allow animals that fall in to escape.

All stored construction materials will be kept on hardened surfaces or raised off the ground (e.g. on pallets) to prevent them being used as temporary wildlife refugia, thereby avoiding the likelihood of injury or death to animals when such materials are used/moved.

All waste materials, especially green waste, should be regularly removed from site or moved into skips. Mounds of building materials or brush should not be left about to attract animals as a shelter if they are planned to later be removed.

### 3.2.4 *Invasive Species*

Himalayan balsam was recorded on site. It is a non-native plant that colonises rapidly and smothers all native plants. The fact that it reduces biodiversity and drives out native species is the reason for its recommendation to be included on Schedule 9 Part II of the Wildlife and Countryside Act 1981.

It is recommended that a specialist is contacted to ensure that the Himalayan balsam is removed from site correctly. Likely measures will involve:

- Hand pulling or cutting the plant as the preferred and appropriate management technique. This should be undertaken annually, before the plant has flowered (between May and June) to achieve the best results. Cutting should be at ground level, below the first node, to be most effective.

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<sup>1</sup> Stone, E.L. (2013) Bats and lighting: Overview of current evidence and mitigation guidance



- Himalayan balsam seeds between August and October inclusive. Construction works carried out between November and March will not contribute to the spread of seeds as this will have already occurred naturally. Construction during the periods of seeding should be avoided, but if it is necessary, a one-off program of cutting (below the first nodule) should take place in areas which will be affected by the construction, including proposed access points.
- To clear ground contaminated with Himalayan balsam, it may be required to remove soil up to 6 metres from the parent plant and to a depth of 0.5 metres.
- Seeds can remain viable in the soil for several years, annual cutting, mowing or grazing or annual herbicide treatment during the spring growing season can be an effective control for this plant.
- Minimise the amount of waste generated that contains invasive plants, or their seeds and rhizomes. Any waste produced should be treated on site where possible.
- Any waste that is taken off site must be taken by a licensed waste carrier and must go to a suitably authorised landfill site.

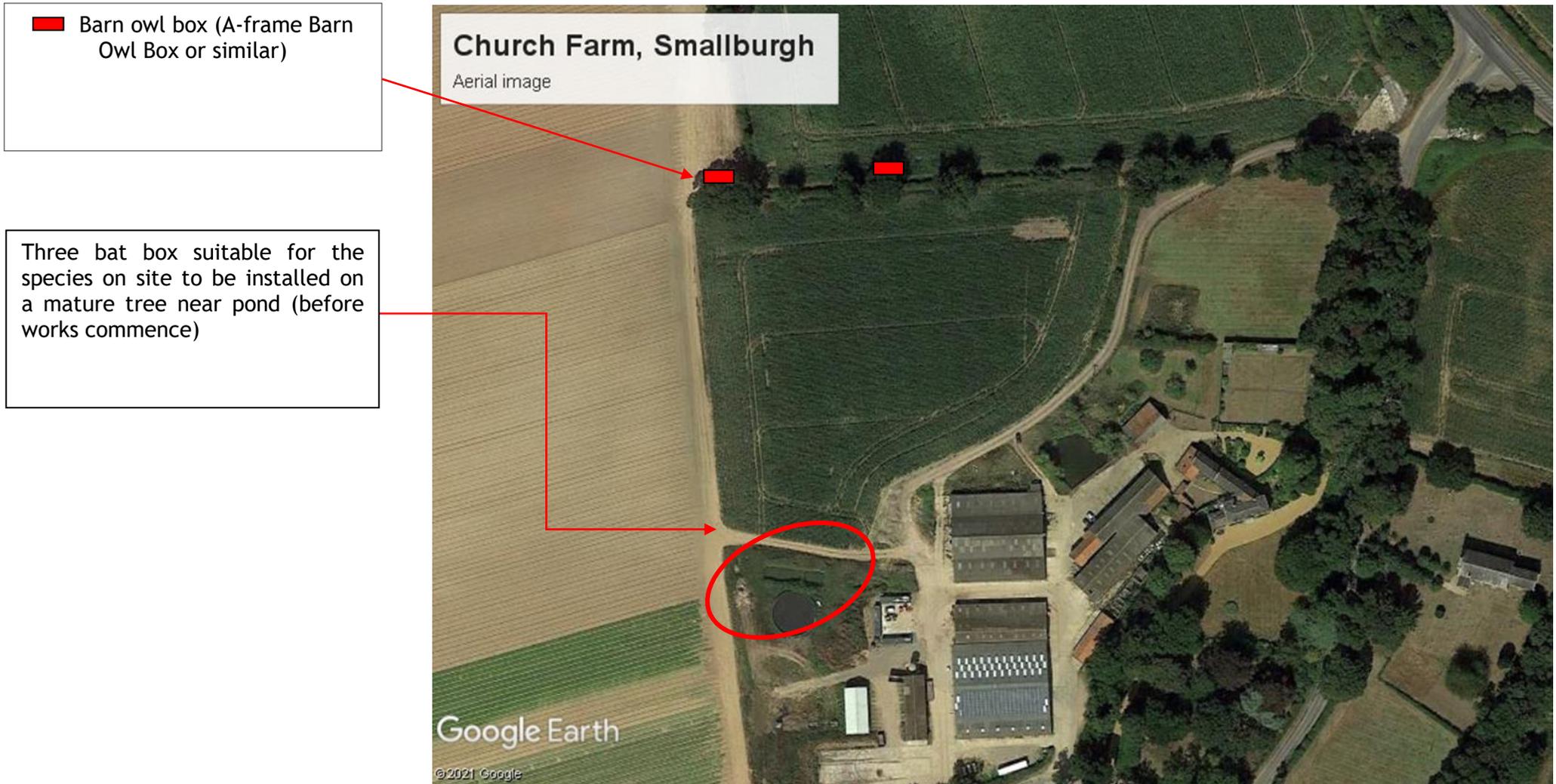
Figure 5. Overview of mitigation features

Key:

-  Integral bat box (Ibstock Enclosed Bat Box 'C' or similar)
-  In-built barn owl nest space in gable of Building D



Figure 6. Overview of mitigation features across the wider site

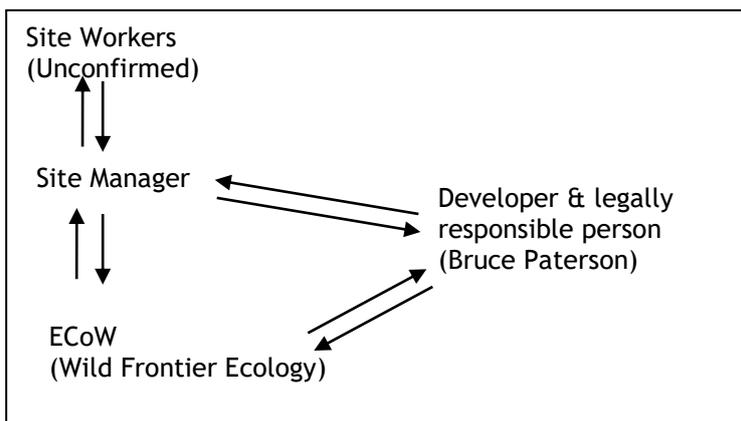


## 4. Responsible Persons

The site owner, Bruce Paterson, is the person responsible for ensuring adherence to the Method Statement. The building work will be undertaken by contractors (to be confirmed), and Wild Frontier Ecology will provide the Ecological Clerk of Works (ECoW) service.

During construction the site will have a site manager (to be confirmed) or assistant site manager present during all working hours. It is the responsibility of these site managers to liaise with workers and ensure that they are aware of the ecological issues. Should any concerns be raised, it is the responsibility of the site managers (once clarified) to contact the ECoW to ask them to attend the site or provide advice as appropriate.

**Figure 6. Lines of Communication**



## 5. Post Construction Maintenance

### 5.1 Bat Roost Features

The bat boxes will all have entrances through which droppings can fall near the bottom of the box and will therefore not require cleaning out.

### 5.2 Bird Nest Boxes

The barn owl boxes will have an inspection hatch so that periodic cleaning, monitoring (by a Schedule 1 licensed person) and maintenance can be undertaken. The checking of boxes during periods when owls are likely to be breeding (1<sup>st</sup> March to 31<sup>st</sup> August in general, although barn owls are known to breed outside of this period on occasion), must only be undertaken by a person holding the relevant Schedule 1 permit. Cleaning out of material (pellets and uneaten prey items) from the boxes may be carried out during the winter months when owls are unlikely to be present, preferably during January-February. Cleaning out is likely to be necessary approximately every three years.

## 6. Provisional Timeline for Construction Phase

Two barn owl boxes will be installed on trees to the north of the site prior to works commencing. Following the discharge of Conditions 4 and 5, the intention is to apply for the bat EPS licence in September-October of 2021. Once granted, works will commence on hand-stripping the roof of the existing barn (under ECoW supervision) and

soft demolition of any necessary parts of the walls around the bat roost. Features for bats and the in-built barn owl box will be incorporated into the walls of the converted barn during the construction process, with contractors working closely with the ECoW to ensure features) are as specified and fit for purpose.

## Appendix 1. Sensitive Lighting Plan

The recommendations in this sensitive lighting plan are made in line with “Guidance Note 08/18: Bats and artificial lighting in the UK” produced by the Bat Conservation Trust and the Institution of Lighting Professionals (2018). Figures A and B illustrate the proposed lighting measures for the finished site, including “Dark Zones” that are of particular importance to bats and must not be illuminated.

The bat species recorded roosting at Church Farm, and dominating the overall site activity, were common pipistrelle, with soprano pipistrelle, brown long-eared bat and barbastelle also being recorded. In order to protect roosting bats in the compensation features to be provided on site and prevent disturbance to foraging and commuting bats (both during and following the construction phase), the following measures must be applied to night-lighting of the site:

- The primary foraging area, over the farm pond, is to be retained as a dark area within the site, by a lack of illumination in this area.
- Exterior luminaires (lights) will not include UV elements and will not use metal halide, florescent sources. Luminaires will, instead, use LEDs. For this scheme, down-only lights will be fitted, using <6W GU10 LED bulbs or similar at approximately 1.8 metres height, or over the doorways. This will allow placement of mitigation bat boxes (under licence) at suitable places higher up the building.
- The operational/timing schedule for the outdoor lighting would be a manual switch-on operated on appropriate evenings only (when the offices are being used in hours of darkness, presumably mostly in winter months), assuming the offices are normally occupied during working hours only.
- The anticipated bat box locations to be incorporated into the Church Farm buildings post-conversion are shown in Figure 5. These positions emulate the most significant existing roost locations, as well as an elevation of the building expected to have less potential for disturbance via human activity.
- Luminaires will emit a warm, white light with a spectrum of <2700 kelvin and will feature peak wavelengths of >550nm, which avoids the component of light most disturbing to bats (light at the blue end of the spectrum).

The proposed scheme satisfies the key requirement of keeping new lighting away from the compensation bat roost position. Any bats emerging from the new artificial roost could head south or west (as was the observed behaviour during the survey) and comfortably avoid an illuminated area.

Presumably there is a minimum amount of strategic outdoor lighting that is needed from a health and safety perspective. The number of light positions may be further reducible as judged by someone with more relevant experience, but the ecological preference would be for slightly more lights with low wattage over fewer lights with higher wattage (e.g. 35W). A combination of a limited proposed period of operation and down-only lights with low wattage LED bulbs, offers a lighting plan that could reasonably be expected to have an insignificant impact on site bat activity (given the impact already inherent to the actual barn conversion).

Figure A. Proposed scheme with lighting proposals

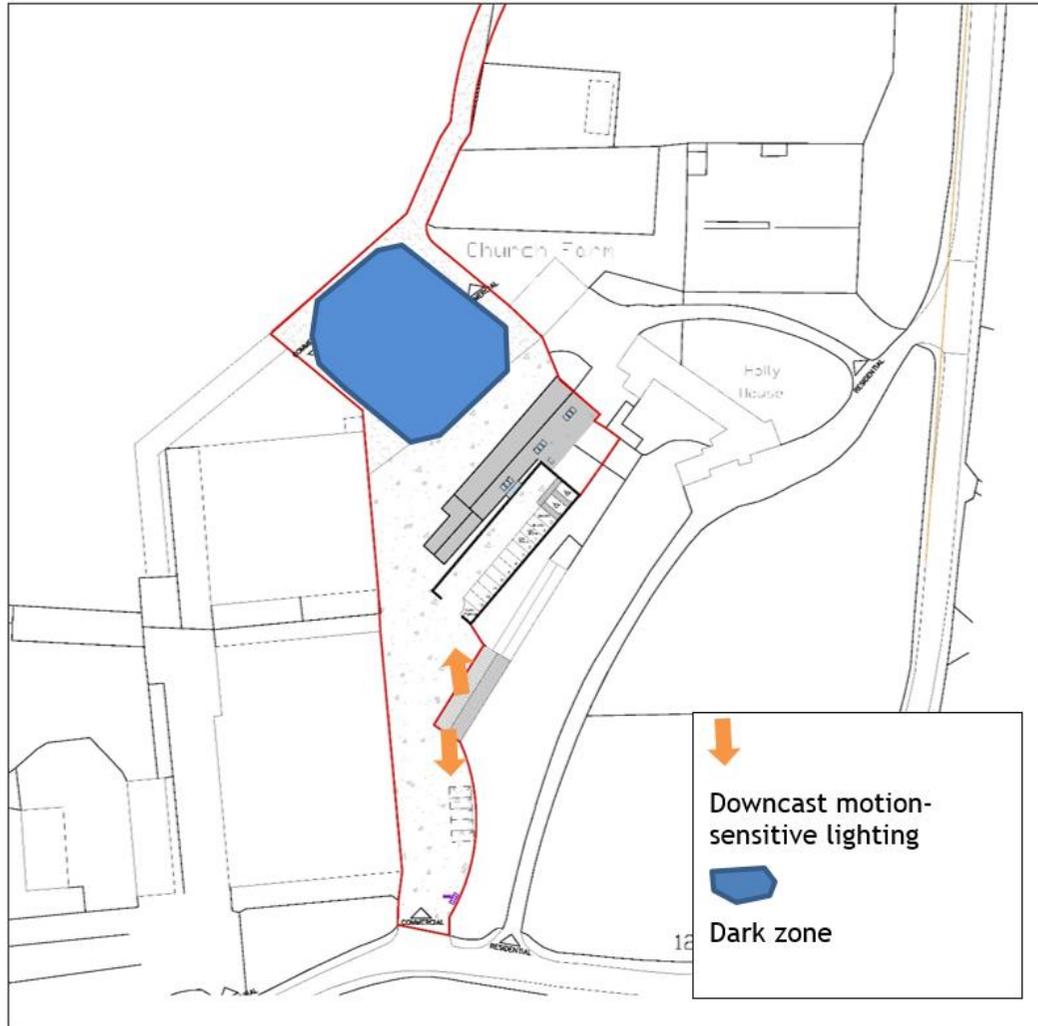




Figure B. Main building - lighting proposals

