

Libby Morris

Ecologist



Preliminary Ecological Appraisal

Site Name

Rashes Farm, Turners Hill

Client

Rick Verbeeten

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Author

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Reviewed by

Kate Ellis, MSc

Report Summary

1. Libby Morris was commissioned by Rick Verbeeten to provide a Preliminary Ecological Appraisal regarding the potential for any protected/notable species and/or habitats to be present at Rashes Farm, along with an assessment of the potential ecological constraints and opportunities in relation to the application for the extension of a residential building within the farm site.
2. The site currently comprises a number of residential buildings, permeable track surfaces and is located within a rural setting within a farm and adjacent to arable fields.
3. The key findings of this survey conclude that the extension of the current residential building will have a negligible impact on the overall biodiversity at site level only.
4. The building holds low roosting potential for bats. One bat emergence survey is required to ensure that no roosting bats are present within the section of roof to be impacted by the proposed works.
4. Recommendations for enhancements to the site have been laid out in Section 5. These include the implementation of bat and bird boxes and enhancement of the surrounding hardstanding through the implementation of native planting within planters to provide opportunities for pollinating invertebrates.

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About the Author

This report has been prepared by Libby Morris, BSc (Hons), an ecologist with seven years experience undertaking bird surveys as well as being a FISC level 3 accredited botanist and a MoRPH licenced river surveyor. She is experienced in habitat and PEA surveys as well as specialising in statutory Biodiversity Net Gain and habitat assessments.

This report has been reviewed by Kate Ellis, MSc, an ecologist with ten years' experience as an ecological advisor, as well as experience in undertaking habitat and wildlife surveys and Biodiversity Net Gain assessments.

1. Introduction

1.1 Purpose of the Report

Libby Morris has been commissioned to undertake a Preliminary Ecological Appraisal (PEA) at Rashes Farm, Snow Hill, Turners Hill by Rick Verbeeten. This report surmises the findings of a walkover of the site by Libby Morris BSc, (Hons) on the 19th of April 2024 and a bat scoping assessment undertaken on the 30th of May 2024. An assessment of the site was undertaken to assess the potential for any protected habitats or species to have been present at the site. This report also includes assessment of any potential ecological constraints and opportunities presented within the site.

Recommendations for further surveys that may be required to inform a planning application and Ecological Impact Assessment (EclA) of the proposal are provided where necessary, and possible measures to avoid, mitigate and/or compensate for significant adverse effects are summarised. The potential to incorporate ecological enhancement measures as part of the scheme is discussed.

This PEA is designed to inform the client about the key findings of the site survey alongside the results of desk study research in relation to the context of the site, considering both the current condition of the site and the condition of the site post-works.

1.2 Site Background

The site is located within a rural location on the eastern fringe of Turners Hill and south of Crawley Down, postcode RH10 4PR. It comprises a number of residential and agricultural buildings, permeable farm tracks and is surrounded by arable fields to the north, east and south boundaries with the village of Turners Hill to the west. The site comprises hardstanding, arable fields and broadleaved woodland habitats. The grid reference for the centroid point of the site is TQ 34528 35282. The location of the red line boundary for the application site is shown in Figure 1, with the applications site outlined in yellow.

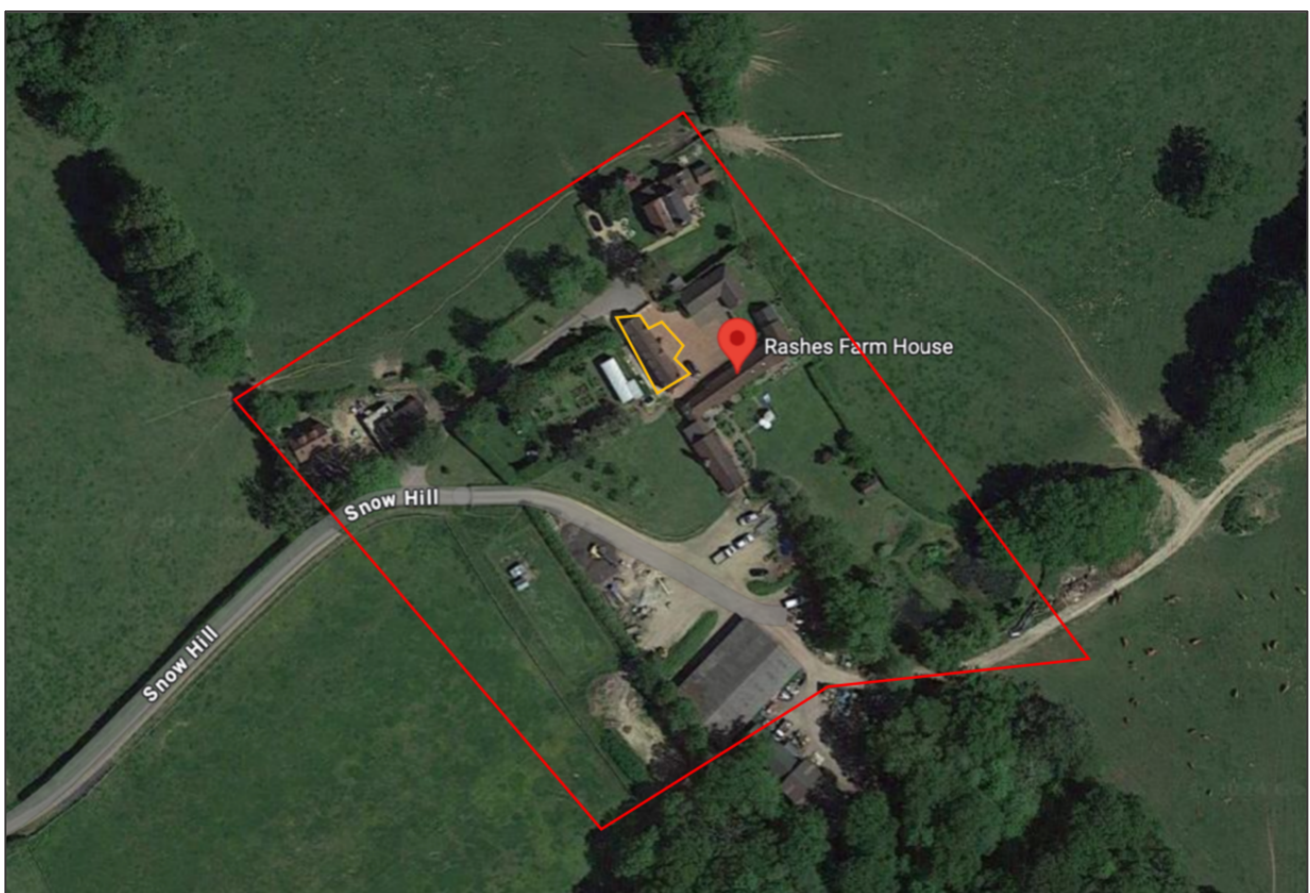


Figure 1. An aerial image showing the location of the site outlined in red, with the application site outlined in yellow. Image produced courtesy of Google maps (Map data ©2023 Google)

The application concerns the extension of a residential building, with plans shown in Figure 2.

Figure 2. Proposed plans for extension of residential dwelling, 2024.

2. Methodology

2.1 Desk Study

A desk study was undertaken using online mapping tool Magic (www.magic.gov.uk) to identify the following, either within the site itself or within a 2km radius of the site:

- A search for granted EPS licences within 2km of the site
- Designated sites within a 2km radius of the site
- Priority Habitats within a 2km radius of the site
- A review of current and historical ecological reports for the study site and sites within a 2km radius of the site
- Ponds within 500m of the site which may hold populations of Great Crested Newt (*Triturus cristatus*)

2.2 Field Based Studies

A site walkover was undertaken on the 19th of April 2024 Libby Morris, BSc (Hons) to assess the habitats and ecological features on site and their suitability to hold populations of European Protected Species (EPS) and other legally protected species including bats, reptiles, Common Dormouse (*Muscardinus avellanarius*) and amphibians. A further bat scoping assessment was undertaken by a licensed ecologist on the 31st May 2024. Other notable species and ecological features were recorded and an overall plant species list was recorded in order to effectively describe the habitats on site.

Details of the field survey methods for this assessment of the site are detailed below.

2.3 Great Crested Newt

Great Crested Newts require aquatic habitats such as ponds for breeding (although less often ditches are occasionally used), where eggs are laid on aquatic vegetation in spring. Juveniles spend most of their time on land and terrestrial phases range a considerable distance from the original breeding site. The terrestrial habitat utilised by newts varies greatly, with the most frequent being pastoral and arable farmland, woodland, scrub and grassland. Great Crested Newt populations are less able to succeed in areas with a high degree of landscape

fragmentation, since they often occur in metapopulations which help ensure the survival of overall populations should a single breeding habitat be negatively impacted.

2.4 Common Dormouse

Common Dormouse are found in deciduous woodland and hedgerows, particularly coppiced woodland with an established understorey. They have low population densities and dispersal rates, making them vulnerable to fragmentation.

The site was broadly assessed for its potential to support dormice. This included use of on-line mapping resources to evaluate the surrounding area for connectivity to woodland, scrub and hedgerows within the wider landscape as well as recording species often used by Common Dormouse such as Hazel (*Corylus avellana*) and Hawthorn (*Crataegus monogyna*).

2.5 Bats

Bats use a wide range of both urban and rural features for roosting and hibernation, including loft spaces, cavity walls and loose tiles, mortice joints as well as gaps in weatherboarding in built structures. They can also be found in trees with ecological niches such as holes, loose bark and ivy. There are a few key habitat characteristics that make good bat foraging habitats, primarily a suitable habitat structure including linear features such as hedgerows that provide foraging and commuting opportunities, allowing bats to move freely across the landscape. The habitats around the site were assessed both on-site and through the desk study for connectivity to assess suitability for foraging and commuting bats.

Both buildings and trees were broadly assessed for potential roosting and hibernation opportunities, with evidence confirming the presence of bats recorded as appropriate.

2.5 Reptiles

Reptiles are found in a variety of habitats, primarily rough/rank grassland, gardens, areas of scrub, wetlands, woodland edges and hedgerows. All six native British reptile species are considered to have declined dramatically in the last century, largely due to loss, degradation and fragmentation of habitat.

The habitats on the site were broadly assessed for their potential to support reptiles, particularly Common Lizard (*Zootoca vivipara*), Slow-worm (*Anguis fragilis*) and Grass Snake (*Natrix helvetica*). Particular attention was paid areas of rough grassland and woodland edges that offer refuge opportunities as well as features suitable for basking, hibernation sites such as banks, piles of organic matter and opportunities for foraging (rough grassland and scrub).

2.6 Badgers

Badgers (*Meles meles*) occupy a wide range of habitats including woodland, scrub, hedgerows, open fields and urban areas. Food supply is one of the most important factors influencing habitat selection. Population density and territory size are all influenced mainly by food availability, with an abundance of earthworms being particularly important. Sett sizes can reach up to 150ha, comprising main setts as well as annexe, subsidiary and outlying setts.

On site habitats were assessed for their potential to support badgers, with connectivity to the wider landscape and any potential for badger presence around the site also assessed. Any signs of badger activity such as setts, footprints, latrines and pathways were recorded.

2.7 Breeding, Wintering and Migratory Birds

Birds use a wide range of habitats across the year for breeding, feeding and roosting as well as when migrating. Woodlands, gardens, hedgerows, arable fields and buildings all offer valuable habitat.

The site was assessed for habitats that offer opportunities for the above, with any species seen or heard during the survey recorded. Particular attention was paid to species red-listed as Birds of Conservation Concern and those on Schedule 1 of the Wildlife and Countryside Act 1981 ([Appendix 1](#)).

2.8 Other species

Habitats on site were assessed for their potential to support species of principal importance for nature conservation (Section 41 NERC Act 2006, [Appendix 1](#)) and other notable species.

This includes mammals such as Hedgehog (*Erinaceus europaeus*), Brown Hare (*Lepus europaeus*), and invertebrates. Particular attention was paid to habitats with standing dead wood and botanically diverse habitats.

2.9 Invasive Species

Invasive Non-Native Species (INNS) are plant species which are not native to Britain, and pose a conservation threat to native biodiversity and habitats. INNS are listed on Schedule 9 of the Wildlife and Countryside Act (1981). Any incidental sightings of INNS were recorded during the survey walkover.

3. Desk and Field Study Results

3.1 Designated Sites and Priority Habitats

Designated sites within a 2km radius of the application site are shown in Figure 3.

The application site sits entirely within the High Weald National Landscape. The High Weald covers 1,461km² across Kent, Sussex and Surrey.

The application site lies 647m east of Turner's Hill Site of Scientific Interest (SSSI); a site designated for its geological features totalling 0,2ha. Wakehurst and Chiddingly Woods SSSI lies 1.6km south west of the application site and comprises 155ha of sandstone-based woodland, protected due to the presence of a diversity of ferns, mosses liverworts and lichens as well as a diverse breeding bird population.

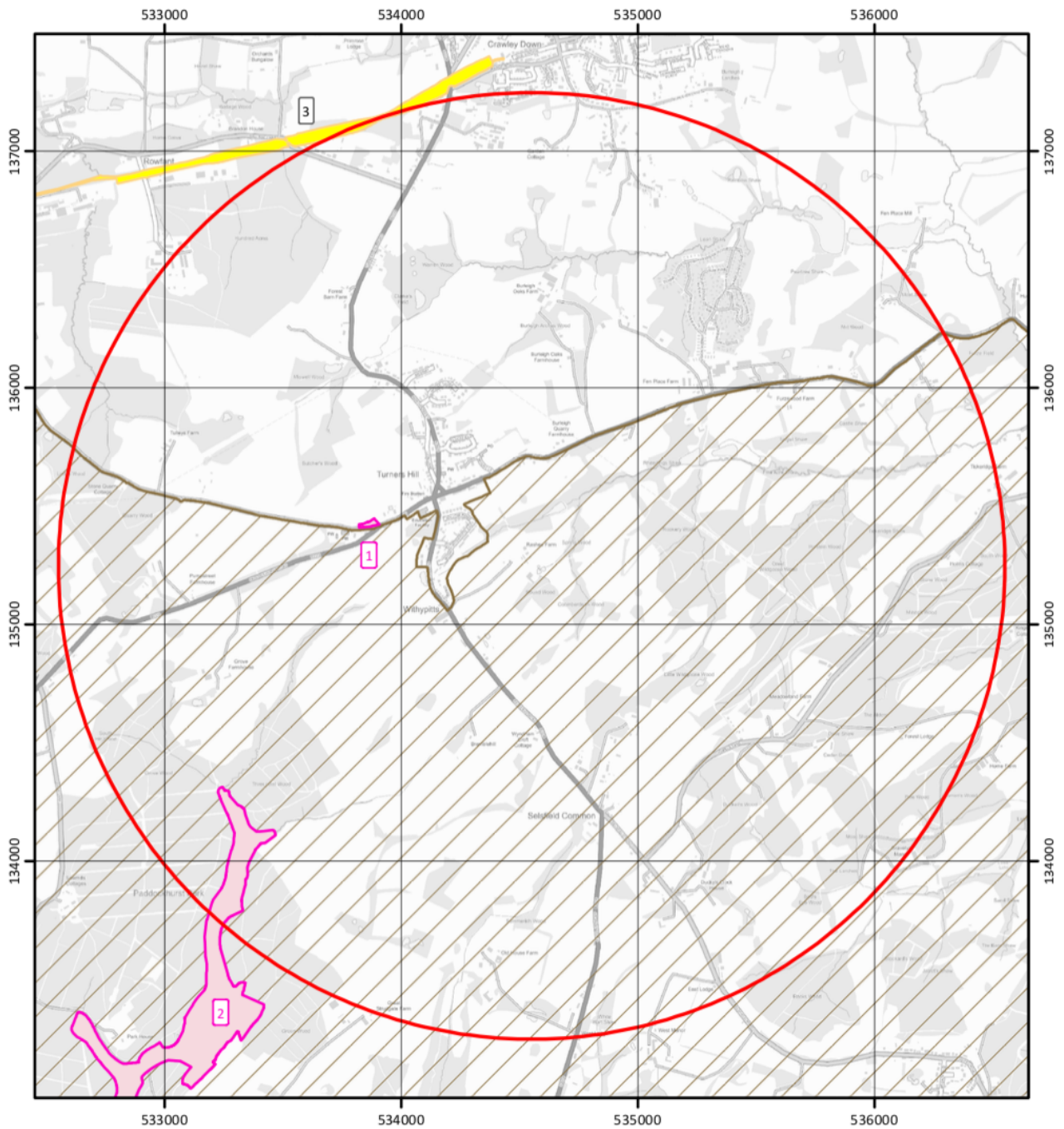


Figure 3. Aerial image showing locations of any designated sites within 2km of the application site.
Images produced courtesy of the Sussex Biodiversity Records Centre

There are five Priority Habitat types within 2km of the centre of the application site (Figure 4.). These are listed in Table 1.

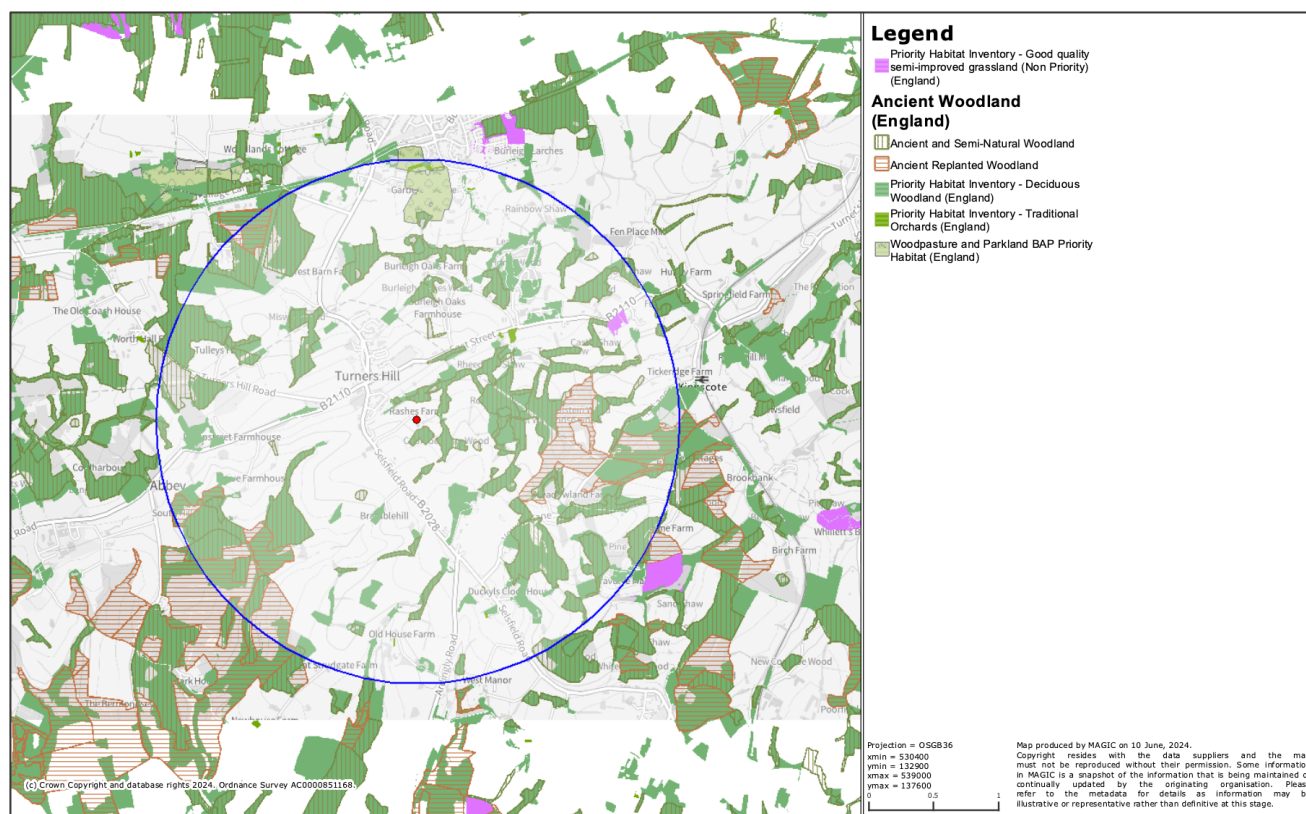


Figure 4. Aerial image showing locations of designated sites within 2km of the application site. Images produced courtesy of Magic Maps, contains public sector information licensed under the Open Government Licence v3.0

Table 1. Priority habitats within 2km of site

Habitat	Designation	Description	Distance
Deciduous woodland	Priority Habitat under section 6 of the NERC act	There is great variety in the species composition of the canopy layer and the ground flora, and this is reflected in the range of associated NVC and Stand Types. <i>Quercus robur</i> is generally the commoner oak (although <i>Quercus petraea</i> may be abundant locally) and may occur with virtually all combinations of other locally native tree species.	Round Wood located 70m south of application site; Spring Wood is 130m north of application site; further woodland parcels 154m east of application site; further parcels across western, eastern and southern boundaries

Ancient woodland	Priority Habitat under section 6 of the NERC act	Many ancient woods are Local Wildlife Sited and are encompassed by the Biodiversity Action Plan list of priority habitats (NERC Act 2006).	70m south of application site; 130m north of application site; 154m east of application site
Traditional orchard	Priority Habitat under section 6 of the NERC act	Lowland neutral meadows and pastures consist of a rich mixture of native grasses and broad-leaved herbs. They occur throughout lowland UK, often on shallow slopes or level ground with relatively deep soils that is neither strongly acidic nor lime-rich.	907m north east of application site
Good Quality semi-improved grassland	Non-Priority	Semi-natural grasslands are defined here as plant communities where a high proportion of the vegetation consists of a mixture of native grasses and dicotyledonous herbs where woody shrubs are largely absent and where vegetation height is normally less than one metre.	1.6km north east of application site
Woodpasture and parkland	BAP Priority Habitat under section 6 of the NERC act	Mosaic habitats valued for their trees, especially veteran and ancient trees and the plants and animals that they support. Specialised and varied habitats within wood-pasture and parkland provide a home for a wide range of species, many of which occur only in these habitats, particularly insects, lichens and fungi which depend on dead and decaying wood.	1.5km north of application site

3.2 Granted EPS Licences

There are three granted EPS licences within a 2km radius of the site (Figure 6.). The closest to the site is 992m south east of the site and pertains to the destruction of a breeding site and resting place for Common Pipistrelle (*Pipistrellus pipistrellus*) and Brown Long-eared Bat

(*Plecotus auritus*), granted in 2018. There is a second granted bat EPS licence 1.38km south east of the site that granted permission for the destruction of a breeding and resting place for Brown Long-eared Bat, Soprano Pipistrelle (*Pipistrellis pygmaeus*) and Common Pipistrelle in 2018.

There is a further licence 1.1km north east of the site, which permitted the destruction of a resting place of Great Crested Newt in 2017, and another 1.9km north of the site permitting the destruction of a resting place for Great Crested Newt in 2012.

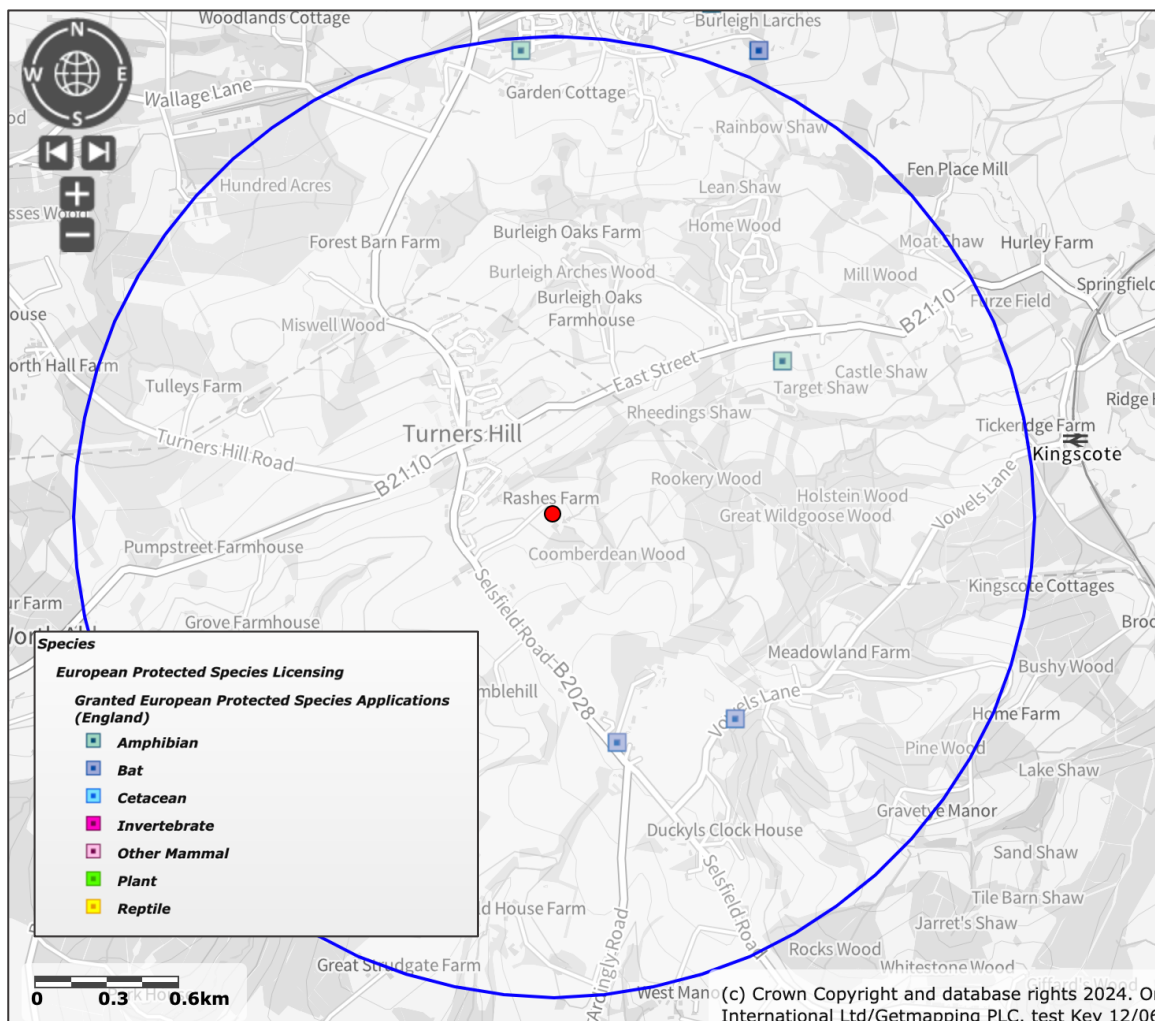


Figure 6. Aerial image showing locations of granted EPS licences within 2km of the application site. Images produced courtesy of Magic Maps, contains public sector information licensed under the Open Government Licence v3.0

3.3 On-site Habitats

The application site comprises a terraced residential property within an area of bricked hardstanding (Photograph 1). The roof is tiled with some loose tiles (Photograph 2). There are further residential buildings to the west and north of the application site. Behind the property to the west is a vegetated garden comprising mown lawn. There is further close-mown grassland to the south and east of the property, with an arable field further east.



Photograph 1. Terraced residential dwelling subject of proposed extension on hardstanding

3.4 Great Crested Newt and other Amphibians

There is a pond 80m south east of the application site. It holds marginal aquatic vegetation and is surrounded by trees and close-mown grassland. There are two records of Great Crested Newt within 2km of the site according to the Sussex Biodiversity Records Centre Database, the earliest and latest record both being made in 2019.

3.5 Common Dormouse

There are no hedgerows suitable for Common Dormouse present within the application site, and there is no woodland or suitable hedgerow habitat adjacent to the application site. The nearest woodland present within the wider landscape is 70m north of the application site and

outside of the zone of impact of the proposed works. There are no records of Common Dormouse within 2km of the application site according to the Sussex Biodiversity Records Centre Database.

3.6 Roosting and Foraging Bats

The building as a whole is in good condition, with no cracks or gaps on the walls. The roof and ridge tiles are largely in good condition, although a number of small gaps across both elevations of the property were present at the time of inspection around the gable (Photograph 2). The internal room is built up to roof height and no roof void is present (Photograph 3).



Photograph 2. (left) Area of loose tiles on dwelling around gable



Photograph 3. (right) Internal of building with no roof void

There is further valuable connectivity between the hedgerows and treelines of the wider site to all aspects, with the arable fields and hedgerows connected to land beyond the survey site. There are also mature trees and areas of woodland in close proximity to the proposed site that offer valuable foraging, commuting and roosting habitat.

There are records of Serotine (*Eptesicus serotinus*), Myotis sp.; Noctule (*Nyctalus noctula*), Common Pipistrelle; Soprano Pipistrelle and Brown Long-eared Bat (*Plecotus auritus*) within 2km of the application site according to the Sussex Biodiversity Records Centre Database.

3.8 Reptiles

The habitat present within the development site comprises only hardstanding and the surrounding landscape is kept close-mown and as such currently unsuitable for common reptiles. There is limited connectivity to wider suitable habitat, and much of the wider site does not contain any suitable habitat for reptiles as it comprises predominately close-mown modified grassland and arable fields.

There are records of Slow-worm (*Anguis fragilis*) and Grass Snake (*Natrix natrix*) within 2km of the site according to the Sussex Biodiversity Records Centre Database; the most recent records being made in 2021 and 2018 respectively.

3.9 Badgers

No signs of any badger activity were seen during the survey assessment, and although there are habitats of value for this species within the woodland adjacent to the wider site and surrounding landscape, there is no suitable habitat within the application site. It is likely that if any setts were situated within 30m of the site boundary, then evidence of badger activity would have been observed.

3.10 Breeding, Wintering and Migratory Birds

The surrounding grassland habitat holds little opportunity for foraging birds given that it is close-mown and the application site itself comprises only hardstanding and has no trees or suitable nesting habitat present within the application site. The building was checked for evidence of breeding bird nests at the time of the survey, with none recorded.

3.11 Other Species

The application site holds no foraging opportunities for mammals such as Hedgehog given that it comprises hardstanding, although the wider landscape does offer some opportunities for foraging and hibernation within the woodland, hedgerow and arable fields. There is

minimal vegetative biodiversity within the site, offering low potential to support invertebrate species.

3.12 Invasive Species

No invasive non-native species were recorded during the walkover survey.

3.13 Survey Limitations

A site assessment such as this is only able to act like a 'snapshot' to record the presence of any flora or fauna at the time of the survey. It is therefore possible that some species may not have been present during the survey, but may be evident at other times of the year. For this reason, habitats are assessed for their potential to support some species, even where no direct evidence has been found.

4. Assessment of Impact

4.1 Designated Sites

National Landscape Management Plans may be material considerations for making decisions on planning applications within National Landscapes and their setting, however given the small scale of the development and the current condition of the application site it is considered that there is no impact on designated sites as a result.

4.2 Habitats

The site comprises entirely hardstanding and impermeable surfaces, with no natural habitat on site. Therefore, it is considered that no habitats of ecological value will be lost as a result of this development, and any impact on the surrounding low-distinctiveness habitats will be minimal and at site level only.

4.3 Great Crested Newts and Amphibians

There is a pond 80m east of the application site, however the hardstanding comprising the entirety of the site does not offer habitat of value for Great Crested Newts, and is poorly connected to favourable habitat across the wider site. Great Crested Newts and amphibians

are therefore unlikely to be present at the site and it is not considered that they will be impacted as a result of construction.

4.4 Common Dormouse

The woodland 70m north of the red line boundary is outside of the zone of impact of the application site, making any impacts on Common Dormouse unlikely. There are no hedgerows that offer suitable habitat for Common Dormouse either within or adjacent to the application site.

4.5 Roosting and Foraging Bats

There are a limited number of tiles with suitable gaps within the building, therefore it is suitable for crevice dwelling species such as Common and Soprano Pipistrelle species only. The entrance to the crevice space is tight, with the majority of the roof tiles lying tight and flush to the rood. This, along with the context of the wider landscape, it is considered that the building holds 'low' potential to support roosting or hibernating bat species, and one emergence survey is required, focusing on the small area of tiles due to be impacted by the proposed works (Photograph 2).

Given the close proximity of the development to woodland habitat, artificial light sources should be kept to a minimum on all aspects of the property which are overlooking this habitat. It is advised that there is no flood lighting on these elevations, and any necessary outdoor lights will comply with the artificial lighting guidelines and regulations in [Appendix 2](#).

4.6 Reptiles

There was no suitable habitat present on the site for reptiles at the time of survey. The vegetated garden to the rear of the property is close-mown and, given the localised nature of the works on hardstanding it is considered that there will be no risk to reptiles.

4.7 Badgers

No signs of badger activity were identified during the assessment and no badger setts were recorded on or near to the construction zone. The works are unlikely to have impact on badgers or their setts.

4.8 Breeding, Wintering and Migratory Birds

The application site itself holds no habitat suitable for breeding or migratory birds, although there is nesting potential within the wider site. Given the small scale of works it is not considered that breeding or migratory birds will be impacted as a result of the proposal. As a precautionary measure, it is recommended that the area of building due to be impacted by the works is checked prior to works being undertaken if this is occurring during the breeding bird season (March–July inclusive) to ensure that no nesting birds are present prior to the commencement of works.

4.9 Other Species

The impact on any other notable species such as Hedgehog is considered to be low, given that there is minimal habitat of value for foraging Hedgehog within the site or across the wider landscape.

5. Enhancement Opportunities

The proposed development offers opportunity for enhancing the site. Given the nature of the development and the site comprising primarily hardstanding, the inclusion of integral bat roosting niches such as bat tiles and internal access points for bats offer a key opportunity for enhancing the wider site for bats. It is recommended that bat shelters be installed upon the south-facing external faces close to the eaves of the buildings. Equally, as best practice, the lighting scheme should be designed to minimize light spill around these roosting features and potential commuting routes. See [Appendix 2](#) for full lighting guidelines.

Implementation of bird boxes is also recommended, again on the south side of the building close to the bramble scrub. This will incorporate the area of hardstanding, which currently holds minimal ecological value.

There is also potential to enhance the habitat directly adjacent to the east of the application site on the hardstanding. Planters containing native flowering plant species within the hardstanding will enhance the site for pollinating invertebrate species.

6. Conclusion

The area of roof to be impacted by the proposed development holds potential for roosting bats. To ascertain the presence of bats within this area of the roof, **one emergence survey is required between the months of May-August.**

The area of hardstanding on which the proposed extension to the residential building is to be constructed currently holds very little ecological value, with no natural habitats on site. It is therefore considered that the construction of the building represents low impact to protected species at site level only. There is an opportunity to enhance the application site through the implementation of recommendations suggested in this report.

If any protected species are found during any works undertaken on the site, work should be stopped immediately and an ecologist must be contacted for advice.

APPENDIX 1 – Legislation and Best Practice

- **The Conservation of Habitats and Species Regulations 2017**

These regulations, referred hereafter as “the Habitats Regulations”, represent the primary method by which Council Directive 92/43/EEC on the Conservation of Natural Habitats and of Wild Fauna and Flora (the “Habitats Directive”) is transposed for England and Wales and their territorial seas. The Habitats Directive, in conjunction with the Birds Directive (Council Directive 2009/147/EEC) forms the basis for implementation of Europe’s nature conservation policy through both habitat and species level protection. The Habitats Directive requires the designation of strictly protected European sites known as Special Areas of Conservation (SACs). Together with the Special Protection Areas (SPAs) established by the Birds Directive, these collectively form the Natura 2000 Network of protected sites. The Habitats Directive also requires the strict protection of animals and plants of Community Interest listed under Annex IV. Habitat types requiring strict protection as SACs are listed under Annex I. The conservation of animals and plants listed under Annex II requires the designation of SACs. The Habitats Regulations require that public bodies must exercise their nature conservation responsibilities to ensure compliance with the Habitats Directive. These regulations also require the conservation of natural habitats and habitats of species through the selection, designation and notification of marine and terrestrial ‘European Sites’ to be afforded protection under the Habitats Directive. The habitats and species of European Importance are listed under Annexes I and II of the Habitats Directive. The regulations also contain provision for the appropriate management of these European Sites including the control of damaging operations, special nature conservation orders and restoration orders, for example. The Habitats Regulations afford strict protection to European Protected Species of animals under Schedule 2 and plants under Schedule 5. Offences (subject to certain exceptions) include the deliberate capture, killing, disturbance or trade in these animals. Similarly plants listed under Schedule 5 are protected (subject to exceptions) from picking, collection, cutting, destruction or trade.

- **The Wildlife and Countryside Act 1981 (as amended)**

The Wildlife and Countryside Act 1981 (as amended) (WaCA) is still a leading mechanism for the legislative protection of wildlife and national parks across the United Kingdom. The WaCA

draws on elements of pre-existing legislation and supports the Habitats Regulations in implementing the Bern Convention (1979) and Directive 2009/147/EC on the conservation of wild birds. Schedules within the WaCA provide a list of protected species and habitats, in addition to prohibited actions. It also contains measures for controlling invasive non-native species and amendments to a number of laws. Most notably within the scope of this report are Schedule 9 of the WaCA which lists non-native species that are already established in the wild and continue to pose a conservation threat to native biodiversity and habitats and stipulates that further releases should be regulated. Schedule 9 also includes some native species (for example, Barn Owl (*Tyto alba*)) in order to provide a level of control to ensure that releases, in particular re-introduction programmes, are carried out in an appropriate manner and biodiversity is properly safeguarded; and Schedule 14, which prohibits the introduction into the wild of any animal of a kind which is not ordinarily resident in, and is not a regular visitor to, Great Britain in a wild state, or any species of animal or plant listed in Schedule 9 of the WaCA.

- **The Natural Environment and Rural Communities (NERC) Act 2006**

The Natural Environment and Rural Communities Act imposes a Biodiversity Duty (S.40) on all public bodies to conserve biodiversity at both species and habitat levels (S40);

“Every public authority must, in exercising its functions, have regard, so far as is consistent with the proper exercise of those functions, to the purpose of conserving biodiversity.”

Section 41 of the Act requires the publication of a list of

“living organisms and types of habitat which in the Secretary of State’s opinion are of principal importance for the purpose of conserving biodiversity.”

The list generated under Section 41 of the Act contains a number of types of habitats and species of animal and plant that have the potential to be affected by development projects of a range of sizes and impacts including lowland deciduous woodland, floodplains and calcareous grassland habitats.

The Act also establishes Natural England as the independent body to:

“ensure that the natural environment is conserved, enhanced and managed for the benefit of present and future generations, thereby contributing to sustainable development”.

943 species and 56 habitats of principal importance are included on the S41 list as guidance for public bodies on decisions that affect biodiversity.

- **The Hedgerow Regulations 1997**

On 1 June 1997, the Hedgerow Regulations came into force under section 97 of the Environment Act 1995 to address the dramatic decline in UK hedgerows. The regulations protect important hedgerows by limiting removal through a system of notification via local planning authorities. The regulations are aimed at countryside hedgerows in England and Wales;

Section 3.6: *“on or adjoining, common land, village greens, Site of Special Scientific Interest (which include National Nature Reserves, Special Protection Areas under the Birds Directive and Special Areas of Conservation under the Habitats Directive), Local Nature Reserves, or land used for agriculture, forestry or the breeding or keeping of horses, ponies or donkeys”*

Written permission is required from the local planning authority before the removal of any hedgerow over 20 metres and more than 30 years old. Hedgerows less than 20 metres long may also be considered if they form part of a continuous network of hedges.

The LPA will then either issue a Hedgerow Retention or Hedgerow Removal Notice within 42 days depending on whether they define the hedgerow as important or not based on the following criteria:

- “They have been in existence 30 years or more; and”
- “They satisfy at least one of the criteria set out in Part II of Schedule 1 of the Regulations.”

Exemptions to the Regulations fall into three categories:

- “small scale works;”
- “works approved under other procedures which ensure careful assessment and consideration of the impact on the local environment; and”
- “works authorised under other legislation which justify the removal of a hedgerow without first establishing its importance.”

It is an offence to remove a hedgerow subject to a retention notice, or to remove a hedgerow protected under the Hedgerow Regulations without first obtaining the required removal notice.

Updated regulations as part of the Hedgerow Regulations due in 2024 regulations will include a two metre ‘buffer strip’ from the centre of hedgerows with no cultivation or application of

pesticides or fertilisers, and a hedge cutting ban between 1 March and 31 August to protect nesting birds. These updates are also to include over 90,000km of hedgerows being managed through 16,000 agreements in the government's Countryside Stewardship and Sustainable Farming Incentive schemes, and more than 13,000km of hedgerows created or restored using Countryside Stewardship grants.

- **The UK Post-2010 Biodiversity Framework**

The UK Post-2010 Biodiversity Framework was published on 17 July 2012. It was produced by JNCC and Defra, on behalf of the Four Countries' Biodiversity Group (4CBG), through which the environment departments of all four governments in the UK work together. It covers the period from 2011 to 2020, and was developed in response to two main drivers: the Convention on Biological Diversity's (CBD's) Strategic Plan for Biodiversity 2011-2020 and its five strategic goals and 20 'Aichi Targets', published in October 2010; and the EU Biodiversity Strategy (EUBS), released in May 2011. The framework shows how the work of the four UK countries joins up with work at a UK level to achieve the 'Aichi Targets' and the aims of the EU Biodiversity Strategy. It identifies the activities required to complement the country biodiversity strategies, and where work in the country strategies contributes to international obligations. In total, 23 areas of work were identified where all the countries agreed that they wanted to contribute to, and benefit from, a continued UK focus.

The development of the framework reflects a revised direction for nature conservation, towards an approach which aims to consider the management of the environment as a whole, and to acknowledge and take into account the value of nature in decision-making. The framework sets out the common purpose and shared priorities of the UK and the four countries, and, as such, is a hugely important document, which is to be owned, governed, and implemented by the four countries.

- **National Planning Policy Framework (NPPF)**

This framework acts as guidance for planning authorities (LPAs) in England to form Local Plan policies in favour of sustainable development as part of the government's reforms to increase the accessibility of the planning system and promote long term sustainable growth.

The framework states that “planning policies and decisions should contribute to and enhance the local environment” (paragraph 170).

Chapter 15 of the framework focusses on habitats and biodiversity. Specifically, paragraph 175 states:

“...when determining planning applications, local planning authorities should apply the following principles:

- if significant harm to biodiversity resulting from a development cannot be avoided (through locating on an alternative site with less harmful impacts), adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused'*
- development on land within or outside a Site of Special Scientific Interest, and which is likely to have an adverse effect on it (either individually or in combination with other developments) should not normally be permitted. The only exception is where the benefits of the development in the location proposed clearly outweigh both its likely impact on the features of the site that make it of special scientific interest, and any broader impacts on the national network of Sites of Scientific Interest (SSSI);*
- development proposals whose primary objective is to conserve or enhance biodiversity should be supported;*
- opportunities to incorporate biodiversity improvements in and around developments should be encouraged;*
- development resulting in the loss or deterioration of irreplaceable habitats (such as ancient woodland and ancient or veteran trees) should be refused, unless there are wholly exceptional reasons and a suitable compensation strategy exists”*

The NPPF also states section 185 in regard to planning applications:

“To protect and enhance biodiversity and geodiversity, plans should:

a) Identify, map and safeguard components of local wildlife-rich habitats and wider ecological networks, including the hierarchy of international, national and locally designated sites of importance for biodiversity; wildlife corridors and stepping stones that connect them; and areas identified by national and local partnerships for habitat management, enhancement, restoration or creation; and

b) promote the conservation, restoration and enhancement of priority habitats, ecological networks and the protection and recovery of priority species; and identify and pursue opportunities for securing measurable net gains for biodiversity.”

- **Circular 06/2005: Biodiversity and Geological Conservation**

The Circular 06/2005 complements the NPPF by advising on how the law relates to planning and nature conservation in England, with particular reference to designated sites and protected species;

“It is essential that the presence or otherwise of protected species, and the extent that they may be affected by the proposed development, is established before the planning permission is granted, otherwise all relevant material considerations may not have been addressed in making the decision” (Paragraph 99).

However;

“developers should not be required to undertake surveys for protected species unless there is a reasonable likelihood of the species being present and affected by the development.”

Part IV also reminds LPAs and developers that licences and mitigation measures may be required in addition to planning permissions if protected species are to be affected by the development

“The breach of protected species legislation can often give rise to a criminal offence” (Paragraph 101).

- **Bats**

All British bats are “European Protected Species” (EPS) and listed on Annex II and Annex IV of the EC Habitats Directive. The Directive is transposed into UK law through the Conservation of Habitats and Species Regulations 2017. The following actions affecting bats are prohibited under the legislation:

- deliberate capture, injury or killing of a bat;
- deliberate disturbance of a bat and in particular disturbance which is likely to impair their ability:
 - to survive, to breed or reproduce, or to rear or nurture their young, or

- in the case of animals of a hibernating or migratory species, to hibernate or migrate;
- or to affect significantly the local distribution or abundance of the species to which they belong.

- damage or destruction of a breeding site or resting place;
- possessing, controlling transporting, selling or exchanging, or offering for sale or exchange any bat or any part of a bat or anything derived from one.
-

Bats are also afforded protection from intentional or reckless 'disturbance' by the Wildlife and Countryside Act 1981 (as amended). The deliberate or reckless obstruction of access to a structure or place used by bats for shelter and protection is also an offence under the Act.

- **Birds**

All wild birds in the UK are afforded protection under the Wildlife and Countryside Act 1981 (as amended). This protection includes killing, injuring or taking wild birds as well as taking, damaging or destroying bird nests in use or being built, and taking or destroying eggs. Birds listed under Schedule 1 of the Act are afforded additional protection from disturbance during nesting and offences relating to these birds are subject to special penalties. The nest sites of birds listed under Schedule ZA1 of the act are afforded strict, year-round protection even when the nests are not in active use.

- **Reptiles**

All species of native reptiles are protected against killing or injury under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended). The Sand Lizard (*Lacerta agilis*) and Smooth Snake (*Coronella austriaca*) are further protected under The Conservation of Habitats and Species Regulations 2017 and The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019 against capture or disturbance and the places they use for breeding, resting, shelter and protection are protected from being damaged or destroyed.

- **Great Crested Newts**

The Great Crested Newt and its habitat are protected under the Wildlife and Countryside Act 1981 (as amended) and The Conservation of Habitats and Species Regulations 2017 and The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019. This

legislation makes it an offence to deliberately kill, injure or capture a Great Crested Newt; deliberately disturb a Great Crested Newt; damage, destroy or obstruct access to a structure used for shelter or protection by a Great Crested Newt; or possess or transport a Great Crested Newt. Great Crested Newts are also afforded protection from intentional or reckless 'disturbance' by the Wildlife and Countryside Act 1981 (as amended). The deliberate or reckless obstruction of access to a structure or place used by great crested newts for shelter and protection is also an offence under the Act. This applies to both aquatic and terrestrial habitat

- **Badgers**

Badgers and their setts are protected under the Protection of Badgers Act 1992 which makes it an offence to kill, injure or possess a badger; interfere with, damage or destroy a Badger sett including obstructing access to a badger sett; cruelly treat or harm a Badger; or disturb a Badger in a sett.

- **Otters**

Otters (*Lutra lutra*) and their resting places are protected under the Wildlife and Countryside Act 1981 (as amended) and the The Conservation of Habitats and Species Regulations 2017 and The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019. This legislation makes it an offence to deliberately kill, injure or capture an Otter; deliberately disturb an Otter in their breeding or resting places; damage, destroy or obstruct access to their resting or breeding places.

- **Water Voles**

Water Voles (*Arvicola amphibius*) are protected under the Wildlife and Countryside Act 1981 (as amended) from killing or taking by certain prohibited methods. Their breeding and resting places are fully protected from damage, destruction or obstruction; it is also an offence to disturb them in these places.

- **Common Dormouse**

Common dormice are protected under both The Conservation of Habitats and Species Regulations 2017 and The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019 and the Wildlife and Countryside Act 1981 (as amended). Dormice and their

breeding sites and resting places are fully protected. Without a licence it is an offence for anyone to deliberately disturb, capture, injure or kill them. It is also an offence to damage or destroy their breeding or resting places, to disturb or obstruct access to any place used by them for shelter. It is also an offence to possess or sell a wild Dormouse.

- **White-clawed crayfish**

White-clawed Crayfish (*Austropotamobius pallipes*) are protected under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended) protecting them from harm, disturbance and capture without an appropriate licence. It is illegal to buy or sell White-clawed Crayfish whether alive or dead.

- **Invertebrates**

Three UK invertebrate species are protected under The Conservation of Habitats and Species Regulations 2017 and The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019; the Large Blue butterfly (*Phengaris arion*), Fisher's Estuarine moth (*Gortyna borelii*) and Little Ramshorn Whirlpool snail (*Anisus vorticulus*). It is an offence for anyone to deliberately disturb, capture, injure or kill them. It is also an offence to damage or destroy their breeding or resting places, to disturb or obstruct access to any place used by them for shelter. It is also an offence to possess or sell these species. Approximately 400 further invertebrate species are listed as 'Species of Principle Importance under Section 41 of the NERC Act.

- **Invasive Plant Species**

It is prohibited to plant or otherwise cause to grow in the wild any species listed on Schedule 9 of the Wildlife and Countryside Act 1981 (as amended). The Environmental Protection Act 1990 also classifies certain invasive plants as controlled waste which must be disposed of safely at an appropriately licensed landfill site, in particular Japanese Knotweed (*Reynoutria japonica*). Under section 57 of the Anti-social Behaviour, Crime and Policing Act 2014, if an individual or an organisation fails to control an invasive plant species which is having a detrimental effect on the quality of life of those in the locality then a notice can be issued after a mandatory written warning has been served. Breach of this notice, without reasonable excuse, would be a criminal offence, subject to fixed penalty notice (a penalty of £100) or prosecution. On

summary conviction an individual could be liable to a level 4 fine and an organisation could be liable to a fine not exceeding £20,000.

- **Definitions of Statutory and Non-Statutory Sites**

Name	Statutory/Non-statutory	Definition
SAC – Special Area of Conservation	Statutory	Strictly protected sites designated under the EC Habitats Directive, that will make a significant contribution to conserving habitats or species identified in Annex I and II of the Directive (as amended).
SPA – Special Protection Area	Statutory	Strictly protected sites classified in accordance with Article 4 of the EC Birds Directive. They are classified for rare and vulnerable birds (as listed on Annex I of the Directive).
SSSI – Site of Special Scientific Interest	Statutory	SSSIs provide statutory protection for the best examples of the UK's flora, fauna, or geological or physiographical features.
NNR – National Nature Reserve	Statutory	NNRs contain examples of some of the most important natural and semi-natural terrestrial and coastal ecosystems in Great Britain. They are managed to conserve their habitats or to provide opportunities for scientific study.
LNR – Local Nature Reserve	Statutory	LNRs are declared and managed for nature conservation, and provide opportunities for research and education, or simply enjoying and having contact with nature.
Ramsar – Ramsar Site	Statutory	Ramsar sites are wetlands of international importance designated under the Ramsar Convention.
LWS – Local Wildlife Site SINC – Site of Importance for Nature Conservation	Non-statutory	Areas of land with significant wildlife value for the local area.
CWS – County Wildlife Site	Non-statutory	Areas of land with significant wildlife value for the county

APPENDIX 2 - Reducing Impacts of Artificial Light

External lighting has been proven to have a negative impact on foraging and commuting bats, as well as impact other nocturnal species such as invertebrates, birds and mammals such as Badger and Hedgehog. The Bat Conservation Trust has guidelines¹ which should be referred to when designing lighting schemes for proposed developments. In areas where the introduction of lighting will have a significant impact on the surrounding environment such as rural locations it is recommended that an ecologist is consulted prior to a lighting scheme being designed. The key measures recommended by the guidelines are as follows:

- Avoid unnecessary exterior lighting where possible
- Maintain a balance between appropriate lighting levels and the impact that exterior lighting will have on wildlife
- Comply with existing legislative buffers and avoid lighting key habitats and features altogether.
- Avoid lighting key habitats and features altogether
- Comply with guidance on illuminance levels and buffers

It may be necessary to demonstrate that the proposed lighting will comply with any agreed light-limitation or screening measures set as a result of your ecologist's recommendations and evaluation. This is especially likely to be requested if planning permission is required. Baseline, pre-development lighting surveys may be useful where existing on or off-site lighting is suspected to be acting on key habitats and features and so may prevent the agreed or modelled illuminance limits being achieved. As a condition of planning, post-completion lighting surveys by a suitably qualified person should be undertaken and a report produced for the local planning authority to confirm compliance. Any form of non-compliance must be

¹ Bat Conservation Trust and Institute for Lighting Professionals (2023) Guidance note 8. Bats and Artificial Lighting. Available [online](#)

clearly reported, and remedial measures outlined. Ongoing monitoring may be necessary, especially for systems with automated lighting/dimming or physical screening solutions.

The Bat Conservation Trust recommends the following specifications for lighting on developments to prevent disturbance:

- Lighting spectra: peak wavelength >550nm
- Colour temperature: <2700K (warm)
- Reduction in light intensity
- Minimal UV emitted
- Upward light ratio of 0% and good optical control

APPENDIX 3 – Conditions of use

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