

Wildlife Sensitive Lighting Strategy

Survey site: Holly Tree House, Cuckfield Road, Burgess Hill RH15 8RE

Client: Christopher Jones

Date: 05/08/2026

Project:

This report is prepared to inform a planning application with **Mid Sussex District Council**. The proposal is described as: *Proposed 4 dwellings as 2 x pairs of semi-detached properties*

Planning Application Number:

DM/25/0209.

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Guidelines

This assessment has been designed to meet:

- British Standard 42020 (2013) 'Biodiversity – Code of Practice for Planning and Development'.

Proportionality

The work involved in preparing and implementing all ecological surveys, impact assessments and measures for avoidance, mitigation, compensation and enhancement should be proportionate to the predicted degree of risk to biodiversity and to the nature and scale of the proposed development. Consequently, the decision-maker should only request supporting information and conservation measures that are relevant, necessary and material to the application in question. Similarly, the decision-maker and their consultees should ensure that any comments and advice made over an application are also proportionate.

This approach is enshrined in Government planning guidance, for example, paragraph 174 of the National Planning Policy Framework for England.

The desk studies and field surveys undertaken to provide a preliminary ecological appraisal (PEA) might in some cases be all that is necessary.

(BS 42020, 2013)

In consequence of the scale and intensity of the proposed development, this plan-led report is considered adequate and proportionate. It communicates all relevant information necessary to determine a planning application or support the recommendations for further surveys.

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Version	Author	Date
V0.1	Rebecca Gane BSc (Hons) Consultant Ecologist	05/08/2026
V1.0	Rebecca Gane BSc (Hons) Consultant Ecologist	05/08/2026
1.0 Introduction		
Arbtech Consulting Ltd was commissioned by Christopher Jones to produce a Wildlife Sensitive Lighting Scheme for the new proposed development at Holly Tree House, Cuckfield Road, Burgess Hill RH15 8RE (hereafter referred to as the site). The proposal is described as 4 dwellings as 2 x pairs of semi-detached properties.		
1.1 Site Context and Landscape History		
A detailed description and history of the site is provided in the Preliminary Ecological Appraisal. (JWK Wildlife Surveys, 2025). The site is centred at National Grid Reference TQ 30647 20642 and has an area of approximately 0.5ha. The proposed development site is formed of landscaped amenity gardens areas with associated access point and boundary vegetated features. Within the wider landscape, agricultural habitats are dominant, with dispersed parcels of woodland and hedgerow. The location of the site is shown in Appendix 1 .		
1.2 Planning Conditions		
Condition 6	Prior to occupation, a "lighting design strategy for biodiversity" in accordance with Guidance Note 08/23 (Institute of Lighting Professionals) shall be submitted to and approved in writing by the local planning authority. The strategy shall: a) identify those areas/features on site that are particularly sensitive bats and that are likely to cause disturbance in or around their breeding sites and resting places or along important routes used to access key areas of their territory, for example, for foraging; and b) show how and where external lighting will be installed so that it can be clearly demonstrated that areas to be lit will not disturb or prevent the above species using their territory or having access to their breeding sites and resting places. All external lighting shall be installed in accordance with the specifications and locations set out in the scheme and maintained thereafter in accordance with the scheme. Under no circumstances should any other external lighting be installed without prior consent from the local planning authority. Reason: To allow the LPA to discharge its duties under the Conservation of Habitats and Species Regulations 2017 (as amended), the Wildlife & Countryside Act 1981 (as DECISION NOTICE Page 4 amended), s40 of the NERC Act 2006 (as amended) and policy DP38 of the Mid Sussex District Plan.	
1.3 Ecological Conditions Relevant to This Report		
The baseline and post-development ecological conditions of relevance to this report were determined as a result of the PEA and BNG undertaken at the site by JWK Wildlife Surveys in 2025.		

2.1 Habitats recorded on site On site habitats include grassland, mixed scrub and scattered trees. Deciduous woodland is approximately 740m northeast, with a secondary parcel approximately 840m north. These habitats are likely to provide elevated foraging and commuting opportunities for bats and will be unaffected by the installation of the development.	
2.2 Surrounding habitats The site is surrounded by agricultural land with scattered residential/commercial properties along Burgess Hill Road. Treelines and hedgerows are located in between fields of grassland and bound the site. A review of MAGIC and Google Earth indicated that there is a parcel of ancient, deciduous woodland ~150m west of the site. Foraging and commuting bats are most likely to use the hedgerows located on the offsite boundaries, as bats are well known to utilise linear features for commuting. The increase in light spill from the development may deter bats from using this area.	
2.0 Mitigation	
The Lighting Mitigation Strategy to be implemented at the site is detailed below. The Lighting Strategy aims to mitigate potential impacts of artificial light spill on wildlife as a result the proposed development.	
2.1 Wildlife Sensitive Lighting Strategy Prescriptions	
Prescription	Specification
Mitigating impacts of internal lighting	Impacts of artificial light spill through windows will be mitigated by fitting internal lighting fixtures in line with recommendations within Guidance Note 08/23 (BCT & ILP 2023).

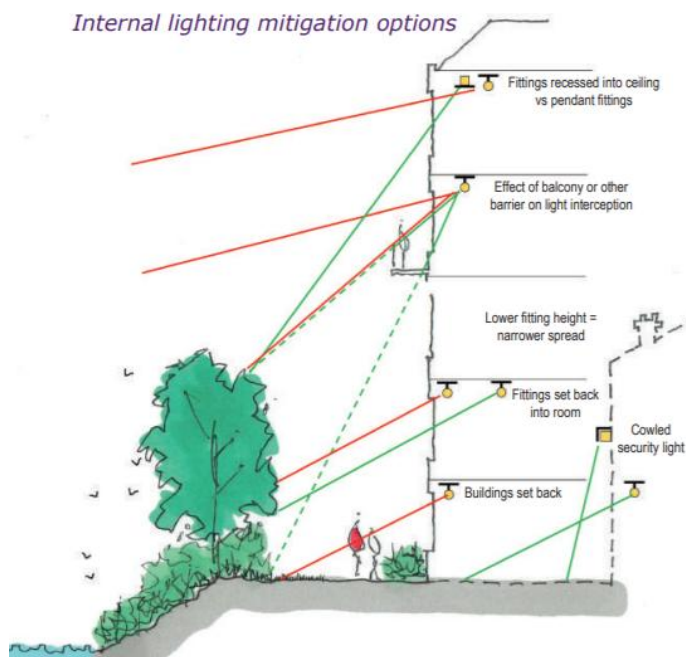


Figure 1: Internal Lighting mitigation options. Image taken from Guidance Note 08/23: Bats and Artificial lighting in the UK (BCT & ILP 2023).

The proposed development comprises windows on the second and third floors. Lighting impacts from internal lighting are therefore considered to be limited to these upper levels only and are situated ~15m from areas of suitable habitat, limiting the amount of light spill that would impact any retained habitats. However, mitigation measures are recommended to limit internal lighting impacts to reduce overall light spill into the wider environment and habitats that may be used by bats:

- All luminaires should lack UV elements when manufactured. Metal halide, compact fluorescent sources should not be used.
- LED luminaires should be used where possible due to their sharp cut-off, lower intensity, good colour rendition.
- A warm white light source (2700 Kelvin or lower) should be adopted to reduce blue light.
- Light sources should feature peak wavelengths higher than 550nm to avoid the component of light most disturbing to bats (Stone, 2012).

Internal luminaires can be recessed (as opposed to using a pendant fitting – as illustrated in Figure 1) where installed in proximity to windows to reduce glare and light spill. These should be fitted a minimum of 1m from windows. Lighting should be controlled by dimmers.

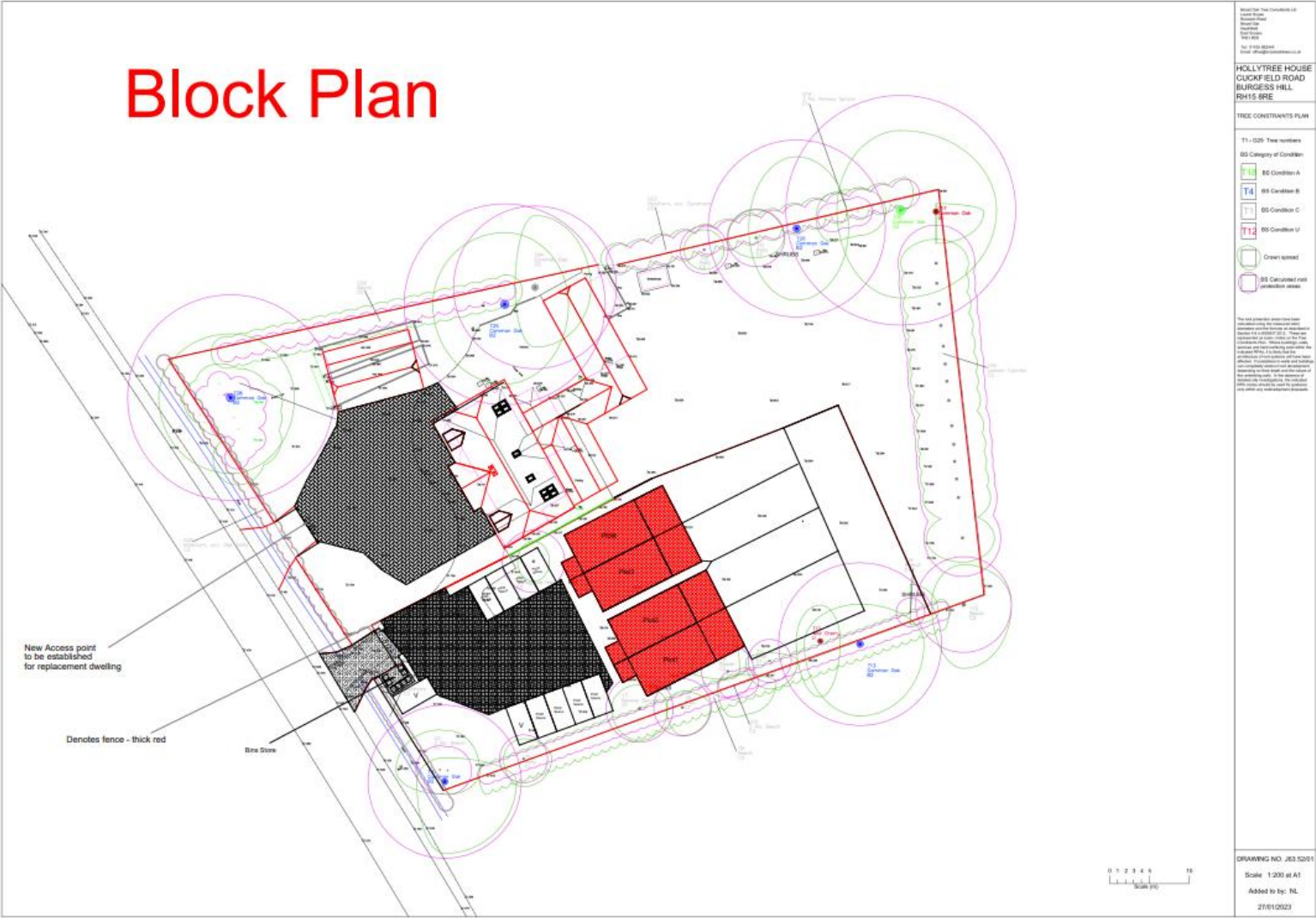
Mitigating impacts of external lighting	The external lighting will be installed in accordance with current guidance issued by the Bat Conservation Trust and Institute of Lighting Professionals: <i>Guidance Note 08/23: Bats and Artificial lighting in the UK</i> (BCT & ILP 2023). The below strategy utilises light prescriptions detailed within this guidance to limit impacts of artificial lighting on bats likely to be utilising adjacent habitats. Additional lighting could impact behaviour of wildlife and adversely affect the integrity of roosting and foraging resources. Any proposed external lighting will be installed in accordance with current guidance issued by the Bat Conservation Trust and Institute of Lighting Professionals: <i>Guidance Note 08/18: Bats and Artificial lighting in the UK</i> (BCT & ILP 2024). The below strategy utilises light prescriptions detailed within this guidance to limit impacts of artificial lighting on bats and other light sensitive species using retained habitats on and directly adjacent to the site including badgers and hedgehogs. In particular, the lighting strategy seeks to influence the lighting design so that impacts can be avoided to key habitats of value including: • The species-specific habitat enhancements detailed within the Ecological Mitigation and Enhancement Management Plan (EMEMP). • The created neutral grassland, mixed scrub and newly planted trees. • Retained habitats directly adjacent to the site including scattered trees and scrub/hedgerow. Lighting design prescriptions: The following lighting design prescriptions are considered suitable for the type and scale of the Development to minimise the impacts of artificial lighting on site or within the public realm on bats and other light sensitive species. • The key habitats/ areas identified above must not be illuminated to ensure the present dark zones are retained. • Reducing the operating time of any installed public realm lighting and levels of illuminance provided via: Part-night operation. Turning off lights between certain hours, for example between midnight and 06:00. • The use of motion sensors will be avoided to ensure no unnecessary light spill occurs during night-time hours. Where the use of motion sensors cannot be avoided, lights must be set to be turned on for no longer than 1 minute. • Avoiding light spill via: The use of shields and an upwards lighting ratio of zero; and consideration to the height and spacing between lighting columns where practicable. There will be no bare bulbs and no light pointing upwards. The spread of light will be kept in line with or below the horizontal. Use low-level lighting in conjunction with hoods, cowls, louvers and shields. • Lights will be directional to ensure that light is directed to the intended areas only. • Light type: Use of lamps that minimise UV emissions or use UV filters to reduce the attractiveness of the lamp to invertebrates. LED luminaires are recommended due to their sharp cut off and dimming capability, in addition to the variety on the market capable of meeting the required standards. • Use narrow spectrum light sources to lower the range of species affected by lighting. • Use light sources that emit minimal ultra-violet light.
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	• Avoid white and blue wavelengths of the light spectrum to reduce insect attraction and where white light sources are required in order to manage the blue shortwave length content, they will be of a warm white temperature <2,700kelvin, with a peak wavelength of at least 550nm • External lighting on PIR sensors will be sensitive to large objects only (so that they are not triggered by passing bats) and will be set to the shortest time duration to reduce the amount of time the lights are on. • All lighting on the developed site will make use of the most up to date technology available.
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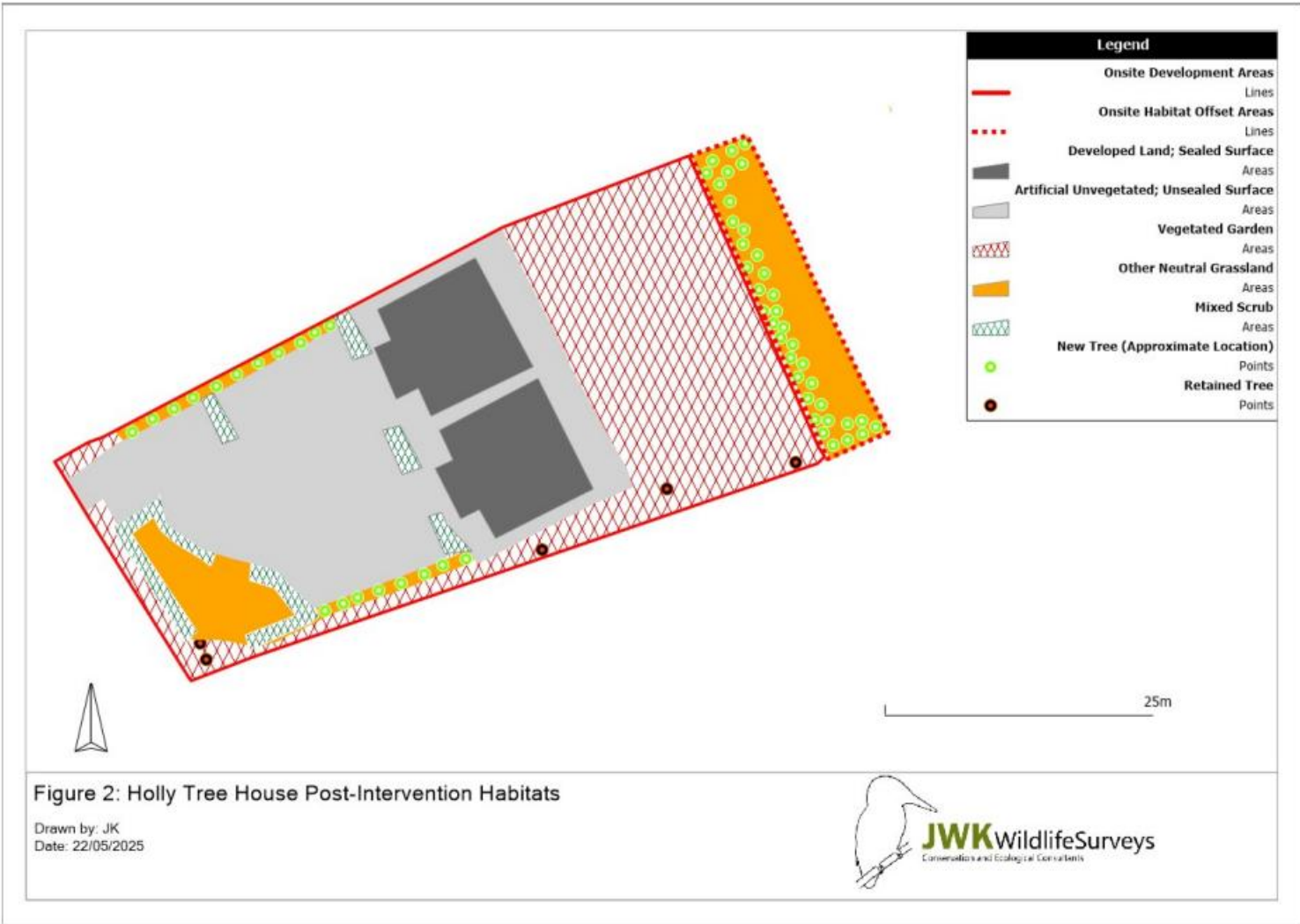
Appendix 1: Location of the site.



Appendix 2: Block plan



Appendix 3: Post-intervention habitats.



Appendix 4: Legislation and Planning Policy Related to Bats

LEGAL PROTECTION

The ***Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019*** came into force when Britain left the European Union on 31st January 2020. It covered amendments relevant to this survey to:

Wildlife and Countryside Act 1981: England and Wales (x1 amendment)

Conservation of Habitats and Species Regulations 2017 (x29 amendments)

All species of bat are fully protected under ***The Conservation of Habitats and Species Regulations 2017*** (amended by the ***Conservation of Habitats and Species Regulations (amendment) (EU Exit) Regulations 2019*** which continue the same provision for European protected species, licensing requirements and protected sites after the UK leaves the EU) through their inclusion on Schedule 2.

Regulation 43: Protection of certain wild animals - offences

(1) A person is guilty of an offence if they:

- (a) Deliberately captures, injures or kills any wild animal of a European protected species,
- (b) Deliberately disturbs wild animals of any such species,
- (c) Deliberately takes or destroys the eggs of such an animal, or
- (d) Damages or destroys a breeding site or resting place of such an animal,

(2) For the purposes of paragraph (1) (b), disturbance of animals includes in particular any disturbance which is likely—

- (a) To impair their ability:
 - (i) To survive, to breed or reproduce, or to rear or nurture their young; or
 - (ii) In the case of animals of a hibernating or migratory species, to hibernate or migrate; or
- (b) To affect significantly the local distribution or abundance of the species to which they belong.

Bats are also protected under the ***Wildlife and Countryside Act 1981 (as amended)*** through their inclusion on ***Schedule 5***. Under this Act, they are additionally protected from:

- Intentional or reckless disturbance (at any level)
- Intentional or reckless obstruction of access to any place of shelter or protection
- Selling, offering or exposing for sale, possession or transporting for purpose of sale

NATIONAL PLANNING POLICY (ENGLAND)

National Planning Policy Framework 2021

The National Planning Policy Framework promotes sustainable development. The Framework specifies the need for protection of designated sites and priority habitats and species. An emphasis is also made on the need for ecological infrastructure through protection, restoration and re-creation. The protection and recovery of priority species (considered likely to be those listed as species of principal importance under Section 41 of the Natural Environment and Rural Communities (NERC) Act 2006) is also listed as a requirement of planning policy.

In determining a planning application, planning authorities should aim to conserve and enhance biodiversity by ensuring that: designated sites are protected from harm; there is appropriate mitigation or compensation where significant harm cannot be avoided; measurable gains in biodiversity in and around developments are incorporated; and planning permission is refused for development resulting in the loss or deterioration of irreplaceable habitats including aged or veteran trees and also ancient woodland.

The Natural Environment and Rural Communities Act 2006 and the Biodiversity Duty

Section 40 of the Natural Environment and Rural Communities (NERC) Act 2006, requires all public bodies to have regard to biodiversity conservation when carrying out their functions. This is commonly referred to as the 'biodiversity duty'.

Section 41 of the Act requires the Secretary of State to publish a list of habitats and species which are of 'principal importance for the conservation of biodiversity'. This list is intended to assist decision makers such as public bodies in implementing their duty under Section 40 of the Act. Under the Act these habitats and species are regarded as a material consideration in determining planning applications. A developer must show that their protection has been adequately addressed within a development proposal.

EFFECT OF LEGISLATION AND POLICY ON DEVELOPMENT WORKS

A European Protected Species Licence (EPSL) issued by Natural England will be required for works likely to affect a bat roost or for operations likely to result in a level of disturbance which might impair their ability to undertake those activities mentioned above (e.g. survive, breed, rear young and hibernate). The licence is to allow derogation from the relevant legislation but also to enable appropriate mitigation measures to be put in place and their efficiency/success to be monitored. The legislation may also be interpreted such that, in certain circumstances, important foraging areas and/or commuting routes can be regarded as being afforded *de facto* protection, for example, where it can be proven that the continued usage of such areas is crucial to maintaining the integrity and long-term viability of a bat roost (Garland & Markham, 2008).

There are 17 species of bat breeding in England and Natural England issues licences under Regulation 55 of the Habitats Regulations to allow you to work within the law.

Licences are issued for specific purposes stated in the Regulations, if the following three tests are met:

- The purpose of the work meets one of those listed in the Habitats Regulations (see below).
- That there is no satisfactory alternative.
- That the action authorised will not be detrimental to the maintenance of the population of the species concerned at a favourable conservation status (FCS) in their natural range

The Habitats Regulations permits licences to be issued for a specific set of purposes including:

- 1. include preserving public health or public safety or other imperative reasons of over-riding public interest including those of a social or economic nature and beneficial consequences of primary importance for the environment.***
2. scientific and educational purposes,
3. ringing or marking
4. conserving wild animals

Development works fall under the first purpose and Natural England issues bat mitigation licences for developments.

EUROPEAN PROTECTED SPECIES POLICIES

In December 2016 Natural England officially introduced the four licensing policies throughout England. The four policies seek to achieve better outcomes for European Protected Species (EPS) and reduce unnecessary costs, delays and uncertainty that can be inherent in the current standard EPS licensing system. The policies are summarised as follows:

- Policy 1; provides greater flexibility in exclusion and relocation activities, where there is investment in habitat provision.
- Policy 2; provides greater flexibility in the location of compensatory habitat.
- Policy 3; provides greater flexibility on exclusion measures where this will allow EPS to use temporary habitat; and,
- Policy 4; provides a reduced survey effort in circumstances where the impacts of development can be confidently predicted.

The four policies have been designed to have a net benefit for EPS by improving populations overall and not just protecting individuals within development sites. Most notably Natural England now recognises that the Habitats Regulations legal framework now applies to 'local populations' of EPS and not individuals/site populations.

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