

BAT PRESENCE/ABSENCE SURVEYS OF:

IVYDENE,
HIGHER TOWN,
ST MARTIN'S,
ISLES OF SCILLY,
TR25 0QL

Client: RTP Chartered Building Surveyors on behalf of the Duchy of Cornwall

Our reference: BS13-2019PAS

Report date: 2nd September 2020

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REPORT ISSUED IN ELECTRONIC FORMAT ONLY

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Non-Technical Summary

- A Preliminary Ecological Appraisal (PEA) and Preliminary Roost Assessment (PRA) was carried out at Ivydene in Higher Town, St Martin's, Isles of Scilly, TR25 0QL to inform proposals to demolish the two existing outbuildings to the north-east and replace with a new two-storey dwelling; to alter the existing house to the north-east with a two-storey dormer extension; and to undertake minor alterations to the south-east facing porch.
- The survey concluded that the building had moderate potential to support roosting bats. Two presence/absence surveys were recommended and the results of these surveys are outlined in this Presence/Absence Survey (PAS) report.
- Dusk surveys were conducted on 27th July 2020 and 30th July 2020 and dawn survey were conducted on 31st August 2020 and 2nd September 2020. No evidence of roosting bats was identified during the surveys.
- The surveys accord with the survey effort required by Best Practice Guidance and do not identify any roosts associated with the building. There is therefore no legislative constraint to development with regards to bats; however, there is a residual risk of potential roosting features being utilised by individual bats on a transient basis. Precautionary mitigation measures relating to the demolition/construction phase are therefore outlined and should be followed during works. Ecological enhancement in the form of the installation of a Kent Bat Box is recommended within a retained tree within the Ivydene property.

1.0 Introduction

1.1 Background

A Preliminary Roost Assessment report (dated 25th March 2020) identified that the building under consideration provided Moderate roosting potential for bats. Additional presence/absence surveys were recommended in order to meet Best Practise Guidance to support a Planning Application. This report outlines the results of these additional surveys.

1.2 Survey Objectives

The objectives of this Presence and Absence Survey (PAS) report, is to provide further ecological information to support the planning proposal by:

- Ascertaining if roosting bats are present at the application site
- Identifying the location of these bat roosts (including exit/entry points)
- Subjecting this information (and the information from the PEA and PRA) to evaluation and impact assessment
- Providing advice on the potential for contravention of legislation/policy
- Providing recommendations on any further actions needed (i.e. further surveys, licensing, mitigation or enhancement).

2.0 Methodology

2.1 Bat Dusk emergence survey

The objective of the emergence and re-entry surveys was to assess the use of the site by bats, specifically to identify any entry/exit locations around the building. Survey effort was concentrated on areas of the site where suitable features or bat field signs were noted from the PRA.

The survey timings accord with Best Practise Guidance. Dusk surveys commenced 15 minutes before sunset and continued for 1.5h after sunset. Dawn surveys commenced 1.5h before sunrise and continued until 15 minutes after sunrise.

Identification of bat species was undertaken primarily using ultrasound characteristics. To aid identification, flight and habitat characteristics were also noted (where possible) to determine the species.

The survey was designed with sufficient surveyors appropriate positioned to ensure that all potential access points to the building could be observed – for logistical reasons the three surveyor positions in each instance were covered across multiple surveys to ensure comprehensive cover when taken in combination.

2.2 Equipment

The following equipment was used for the dusk emergence survey at the site:

- Wildlife Acoustics EchoMeter Touch detector
- Wildlife Acoustics SongMeter 2 detector.

Sound recordings were analysed using Kaleidoscope (Wildlife Acoustics) software to confirm surveyors' identification of species.

2.3 Surveyor Details

The survey was undertaken by James Faulconbridge MRes, MCIEEM on behalf of the Isles of Scilly Wildlife Trust. James has twelve years' experience undertaking bat surveys and holds a Natural England WML-A34-Level 2 (Class 2 License); registration number: 2015-12724-CLS-CLS which permits him to survey bats using artificial light and endoscopes and capture bats using hand and hand-held static nets.

Additional support was provided by Holly Robbins who has over ten years' experience of bat building inspections and presence/absence surveys. Holly was working under the direction and supervision of the Licenced Bat Worker.

2.4 Survey Limitations

Surveys carried out during a specific season can only provide information on that particular time, as bats are highly mobile in nature and may only use buildings at certain times of the year that favour a particular part of their roosting, maternity and hibernating requirements.

Due to access constraints, the north-western aspect of the property could only be viewed indirectly and from a distance; however the low levels of activity recorded during the surveys and the degree of visibility which was possible provide sufficient confidence that no further surveys are required to address this constraint.

3.0 Results

3.1 Weather conditions, temperatures and timings

Survey Information:	Start and End Times:	Conditions (Start):	Conditions (End):
Dusk Emergence:	Date: 27.7.20 Start: 20.55 Sunset: 21.09 End: 22.40	Temp: 14°C Wind speed (Beaufort): 3 Cloud cover: 40% Rain: None	Temp: 14°C Wind speed (Beaufort): 3 Cloud cover: 40% Rain: None
	Surveyors		
	1. Holly Robbins 2. James Faulconbridge	Notes: A single 'survey' comprising three surveyor positions was split across two dusk surveys for logistical reasons – the third surveyor position (see Figure 01) was held during the dusk survey on 30 th July 2020 (detailed in Table 02) and the results considered in combination.	

Table 01 - Site conditions for dusk emergence survey

Survey Information:	Start and End Times:	Conditions (Start):	Conditions (End):
Dusk Emergence:	Date: 30.7.20 Start: 20.50 Sunset: 21.10 End: 22.40	Temp: 17°C Wind speed (Beaufort): 3 Cloud cover: 5% Rain: None	Temp: 17°C Wind speed (Beaufort): 3 Cloud cover: 5% Rain: None
	Surveyors		
	3. James Faulconbridge	Notes: A single 'survey' comprising three surveyor positions was split across two dusk surveys for logistical reasons – the first two surveyor positions (see Figure 01) were held during the dusk survey on 27 th July 2020 (detailed in Table 01) and the results considered in combination.	

Table 02 - Site conditions for dusk emergence survey

Survey Information:	Start and End Times:	Conditions (Start):	Conditions (End):
Dawn Re-entry:	Date: 31.9.20 Start: 05:10 Sunrise: 06:40 End: 06:45	Temp: 13°C Wind speed (Beaufort): 2 Cloud cover: 30% Rain: None	Temp: 13°C Wind speed (Beaufort): 2 Cloud cover: 30% Rain: None
	Surveyors		
	1. Holly Robbins 2. James Faulconbridge	Notes: A single 'survey' comprising three surveyor positions was split across two dawn surveys for logistical reasons – the third surveyor position (see Figure 01) was held during the dawn survey on 2 nd September 2020 (detailed in Table 04) and the results considered in combination.	

Table 03 - Site conditions for dawn re-entry survey

Survey Information:	Start and End Times:	Conditions (Start):	Conditions (End):
Dawn Re-entry:	Date: 2.9.20 Start: 05:10 Sunrise: 06:43 End: 06:45	Temp: 15°C Wind speed (Beaufort): 2 Cloud cover: 30% Rain: None	Temp: 15°C Wind speed (Beaufort): 2 Cloud cover: 30% Rain: None
	Surveyors		
	3. James Faulconbridge	Notes: A single 'survey' comprising three surveyor positions was split across two dawn surveys for logistical reasons – the first two surveyor positions (see Figure 01) were held during the dawn survey on 31 st August 2020 (detailed in Table 03) and the results considered in combination.	

Table 04 - Site conditions for dawn re-entry survey

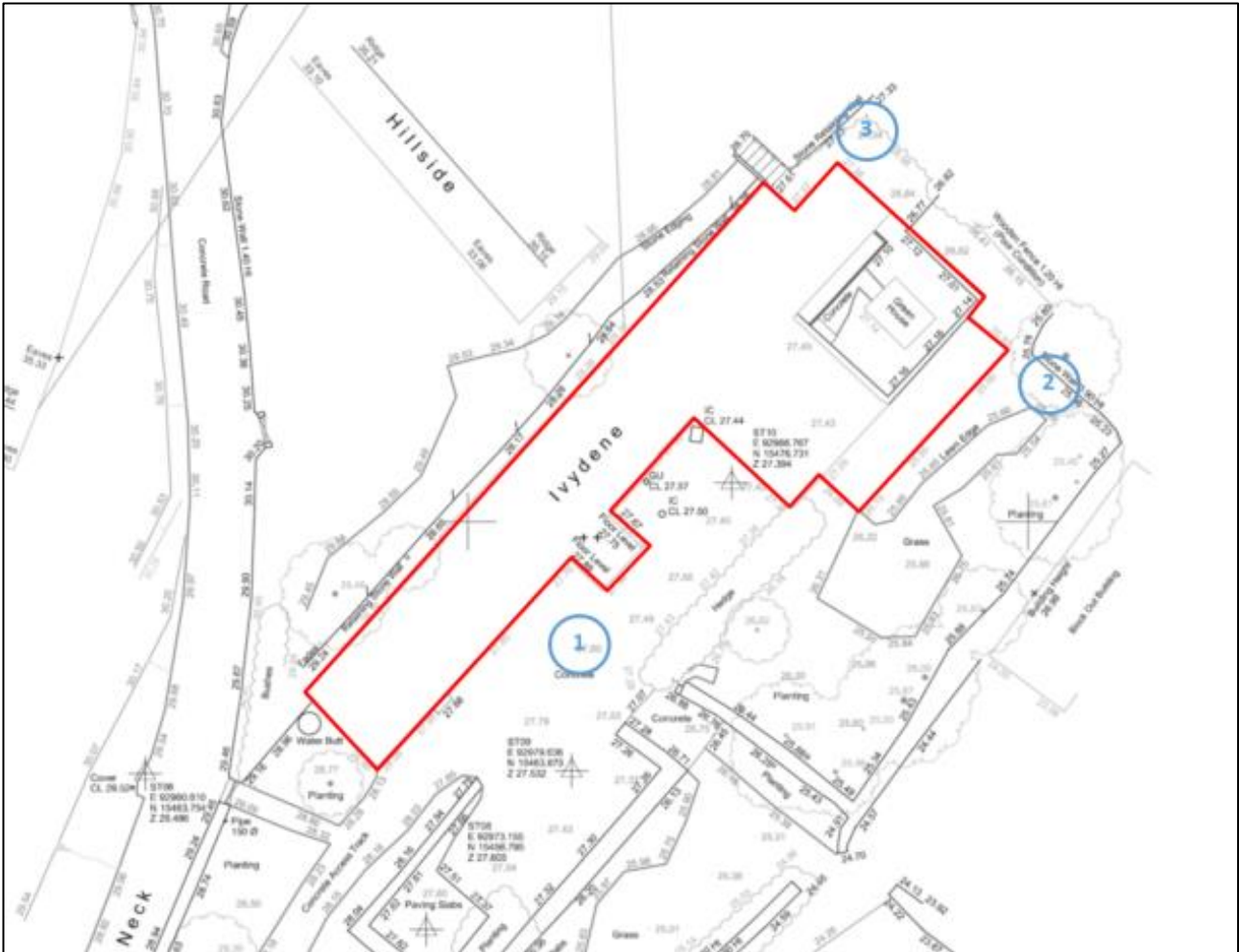


Figure 01 - Surveyor Positions – note that alterations to the southern-western portion of the building are not proposed and the surveyor distribution therefore focuses on those aspects of the construction to the north and east.

3.2 Dusk emergence survey results

The dusk survey comprising three surveyor positions was split across two separate surveys for logistical reasons, such that all surveyor positions were effectively covered. The details of the two dusk surveys are outlined in Tables 01 and 02.

No emergence was recorded during the dusk surveys. On the first dusk survey, dated 27th July 2020, a single common pipistrelle passed Surveyor 1 flying north across the site. No further bat encounters were recorded. On the second dusk survey, dated 30th July 2020, an individual common pipistrelle flew in from the south and was recorded by Surveyor 3 foraging along the edge of the canopy of elm trees to the south of the building at 21:32 before continuing north. A further brief fly-by was recorded at 21:48.

3.3 Dawn re-entry survey results

The dawn survey comprising three surveyor positions was split across two separate surveys for logistical reasons, such that all surveyor positions were effectively covered. The details of the two dawn surveys are outlined in Tables 03 and 04.

No re-entry was recorded during the dawn surveys. On the first dawn survey, dated 31st August 2020, a single common pipistrelle was recorded by Surveyor 2 foraging along the edge of the canopy of elm trees to the south of the building between 05:49 – 06:05 before continuing south. Occasional distant calls were subsequently recorded indicating ongoing offsite foraging until 6:10. No bats were recorded on the second dawn survey.

4. Evaluation of Results

To identify which ecological features are important and which could potentially be affected by the proposed project, their importance needs to be evaluated with regards to geographical context, degree of scarcity or level of protection. The table below outlines those features identified as important, the nature conservation legislation relevant to those features and an assessment of the level of impact from the proposed development on those features.

Ecological Feature	Relevant Legislation	Evaluation (of importance)	Mitigation Hierarchy	Impact Level
Bats Site use includes occasional foraging by common pipistrelle as a minor component of a wider foraging resource.	CHSR, W&CA	Local	A, M, C	Medium/High
Impacts to Roost Sites: No impacts identified as no roost sites are identified. Impacts to Bats – No impacts identified. Other impacts – No other impacts to habitat availability or connectivity are identified as a result of the proposed works to the buildings as foraging was concentrated on adjacent vegetation.				
Key to Legislation and Mitigation Hierarchy				
CHSR – Conservation of Habitats and Species Regulations 2017 ¹⁰ - http://www.legislation.gov.uk/uksi/2017/1012/made W&CA – Wildlife & Countryside Act 1981 (as amended) ¹¹ - http://www.legislation.gov.uk/ukpga/1981/69/contents A – Avoid, M – Mitigate, C – Compensate, E – Enhancement				

5. Recommendations and Mitigation

The recommendations in this section are provided as information only and specialist legal advice may be required. If works are delayed for more than one year, then re-assessment may be required.

5.1 Further survey requirements

No further surveys are recommended with regards to the Proposed Development – it is considered that this report, alongside the PRA produced separately, constitute a comprehensive ecological baseline from which to assess the impacts of the Application.

5.2 EPS Licence requirement

The surveys do not identify any evidence of roosting bats associated with the buildings; therefore no EPS licence is required to permit works to proceed.

5.3 Planning Recommendation(s)

The information gathered here is considered sufficient to support a Planning Application with regards to Protected Species in accordance with relevant Best Practise Guidance.

If minded to do so, it is recommended that Planning Permission can be granted provided that compliance with the recommendations in Section 5.4 of this document is conditioned. This should be a compliance rather than a pre-commencement condition and should not be required to be discharged as no further information or detail is required.

5.4 Mitigation Proposals

Precautionary Method of Works (PMW)

It has been determined that direct harm to roosting bats during the works to the identified building(s) would be unlikely as no roosts are confirmed. Bats are however transient in their use of roosting habitats, especially during spring and autumn (the transitional periods) and there is therefore a low risk of encountering bats associated with potential roosting opportunities identified in the PEA at any time of

year. Contractors working on the project should therefore be made aware of their own legal responsibility with respect to the presence of roosting bats.

All site workers should be aware of the statutory legislation protecting bats and what process to follow in the event of finding bats during demolition works. This includes:

- The legal protection of bats
- Where they could potentially be found in the building structures (as detailed in the PEA for the site)
- The evidence to look for (i.e. live animals, droppings that look like those of mice)
- The process to follow in the event of finding bats (i.e. stop works, report the findings to a site supervisor, the site supervisor to immediately contact the Ecologist).

Ecological Enhancement

A new roosting site should be created within the grounds of Ivydene. This should comprise a bat box using the Kent Bat Box design which would be sited on a retained tree within the gardens of the property. This will secure ecological enhancement of roosting habitat on the site.

The bat box should be installed on south-east/south-west aspects and at a height of above 3m. The box should be installed in a location away from branches where cats may access the boxes. The box should not be installed where vegetation will block the entrance, especially the 'drop zone' beneath the box. The method of fixing will allow trees to grow without causing damage to the tree.

The design of the Kent Bat Box is provided in **Appendix 2**.

6. References

- Collins, J. (ed.) (2016). Bat Surveys for Professional Ecologists: Good Practice Guidelines (3rd edition). The Bat Conservation Trust
- English Nature (EN), (2004., Bat Mitigation Guidelines, English Nature, Peterborough.
- HMSO (1981). The Wildlife and Countryside Act 1981 (as amended). London.
- HMSO (2010). The Conservation of Habitats and Species Regulations 2010 (as amended). London.
- JNCC, (2004). Bat Worker's Manual, JNCC, Peterborough

APPENDIX A – BAT CONTACTS SURVEY TABLE

Date:	27.7.20 – Dusk emergence survey			
Survey Type:	Time	Species	Record Type	Notes
Surveyor:	Surveyor 1			
	21.40	P. pip	Brief Pass	Bat not seen
Surveyor:	Surveyor 2			
	No bats recorded			

Date:	30.7.20 – Dusk emergence survey			
Survey Type:	Time	Species	Record Type	Notes
Surveyor:	Surveyor 3			
	21.32	P. pip	Foraging	Bat flew in from south, foraging along edge of the canopy of elm trees to south of the building before continuing north
	21.48	P. pip	Brief pass	Brief pass

Date:	31.8.20 – Dawn re-entry survey			
Survey Type:	Time	Species	Record Type	Notes
Surveyor:	Surveyor 1			
	No bats recorded			
Surveyor:	Surveyor 2			
	05:49 – 06:05	P. pip	Foraging	Foraging along edge of the canopy of elm trees to south of the building
	06:05 – 06:10	P. pip	Foraging	Brief distant offsite foraging – not associated with site

Date:	2.9.20 – Dawn re-entry survey			
Survey Type:	Time	Species	Record Type	Notes
Surveyor:	Surveyor 3			
	No bats recorded			

APPENDIX B – LEGISLATION AND LICENSING

a) Legislation

All species of bats receive special protection under UK law making it a criminal offence under Schedule 5 section 9 (4) (b) and (c) of the Wildlife and Countryside Act 1981 (as amended) to *"intentionally or recklessly disturb a bat at a roost"* or *"intentionally or recklessly obstruct access to a roost"* and under Regulations 43 (1) and (2) of the Conservation of Habitats and Species Regulations 2017 (The Habitat Regulations) to *"deliberately disturb a bat in a way that would affect its ability to survive, breed or rear young or, affect the local distribution or abundance of the species; or to " damage or destroy a roost"* without first having obtained the relevant licence for derogation from The Habitat Regulations from the Statutory Nature Conservation Organisation (the SNCO – Natural England in England).

The word 'roost' is not used in the legislation but is used here for simplicity. The actual wording in law is 'any structure or place which any wild animal...uses for shelter or protection' or 'breeding site or resting place'. Because bats tend to re-use the same roosts after periods of vacancy, legal opinion is that the roost is protected whether or not the bats are present at the time.

Penalties on conviction of a bat-related crime - the maximum fine is £5,000 per incident or per bat, up to six months in prison, and forfeiture of items used to commit the offence, e.g. vehicles, plant, machinery.

b) Licensing

In order to obtain such a licence (as set out above) the SNCO must apply the requirements of the Regulations and, in particular, the three tests set out in sub-paragraphs 55(2)(e), (9)(a) and (9)(b). These are as follows:

(1) Regulation 55 (2)(e) states that a licence can be granted for the purposes of *"preserving public health or public safety or other imperative reasons of overriding public interest including those of a social or economic nature and beneficial consequences of primary importance for the environment"*.

(2) Regulation 55 (9)(a) states that the appropriate authority (the SNCO) shall not grant a licence unless they are satisfied *"that there is no satisfactory alternative"*.

(3) Regulation 55 (9)(b) states that the appropriate authority (the SNCO) shall not grant a licence unless they are satisfied "*that the action authorised will not be detrimental to the maintenance of the population of the species concerned at a favourable conservation status in their natural range.*"

The licence would permit an otherwise unlawful activity to take place, and it requires of the licensee measures to ensure that negative impacts are prevented, reduced or offset, and that the favourable conservation status of the bats is maintained. **Once a licence is granted, failure to comply with its contents, including its attached Method Statement is a Criminal Offence with fines of a maximum of £5,000 per infringement.** A licensed bat consultant must be appointed to assist in the preparation and the delivery of the mitigation proposals that ensure the species protection requirements (Favourable Conservation Status 'FCS' test) can be met.

Additional information on the tests is available from the Natural England website.

<http://publications.naturalengland.org.uk/publication/4727870517673984?category=12002>

The ecologist is responsible for providing evidence to meet Test 3. The evidence to satisfy tests 2 and 3 is submitted on a part of the license application called the Reasoned Statement. The Reasoned Statement must be filled in by the client or their agent. Applicants often approach planning consultants, architects or similar for advice regarding completion of the Reasoned Statement.

- **Permissions**

The development must have **full permission** before the licence application will be registered including any ecology-related conditions or reserved matters that can be discharged before the date of application.

- **Further bat surveys**

If a full active bat season is going to pass between the granting of planning permission and the licence application period, Natural England will require **update survey(s)** (March-Aug) prior to application submission. The number of surveys required will vary by site depending on the size and complexity of the site as well as the species and roost types present.

- **Land ownership**

If mitigation, compensation or monitoring is anticipated to be on land not owned by the applicant, then written consent from the landowner will be required by Natural England. Responsibility for management and maintenance must also be agreed.

- **Commitments**

Applications should not give any commitments to undertake licensed works (or actions relating to the licence) that cannot be delivered.

- **Multi-phased projects**

If a plan is phased, Natural England will require a Master Plan with all mitigation and timetables included on it.

c) Licence timescales:

- **Licensing decision**

The licence application pack can take anywhere from **2 to 3 weeks** to produce and Natural England allow themselves **30 working days** from the date of receipt to respond to applications, a window which can be extended if further information is requested by themselves. It is important that clients, developers, contractors, agents, etc. keep this in mind when designing work timetables. Occasionally, further information will be requested by NE, which can result in additional delays; therefore application as soon as possible is advised.

- **Timing of works**

In most cases, the works most likely to affect bats (bat exclusion work, soft strip, re-roofing, ecologist-advised timber treatment, etc.) will normally be timed to avoid the hibernation and maternity periods. Thus, these works tend to be timed for either the **September-October period** or the **March-April period**. This means licence application is normally completed 3 months prior to these periods and cannot be submitted any earlier.

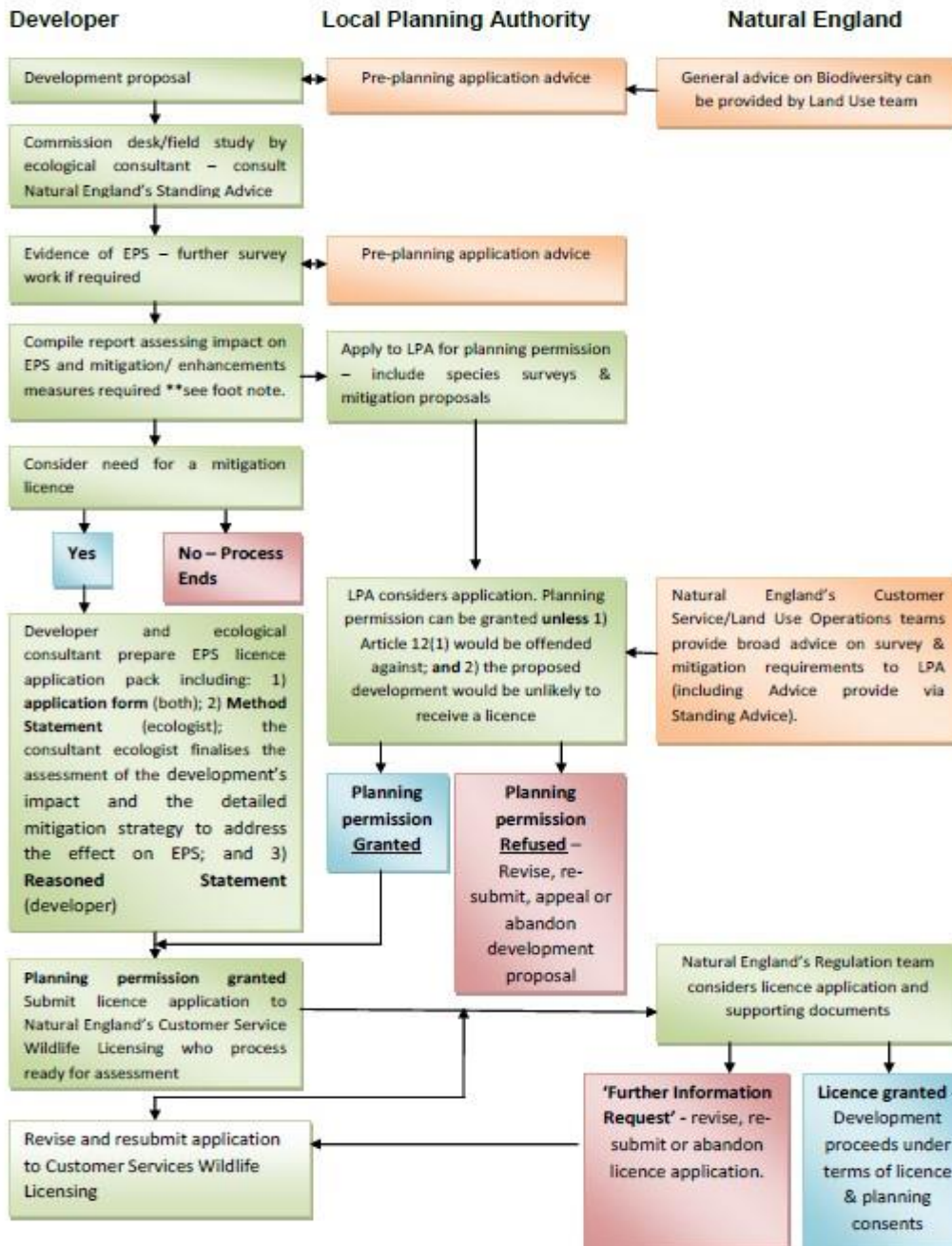
- **Other Timing**

All timescales are weather-dependent (e.g. 5 days post-exclusion period extended due to inclement weather) and also may be impacted by other aspects of the project not related to ecology. In some situations license periods can be extended, but this involves more work and is not guaranteed as they must ensure that Test 3 is still met.

d) Scale of work involved:

- **Mitigation** Production and submission of the license application pack as well as the completion of the licensed works themselves are time intensive and involve inspections, exclusions, site induction and other works requiring onsite supervision such as bat roost creation, soft strip and other necessary checks under the terms of the license. Costs for materials and equipment including bat boxes, exclusion materials, lifts/scaffolding to carry out soft strips, roost construction materials, etc. needs to be considered. Costs can vary considerably by project, but the applicant should ensure provision for all aspects of the licensed works is well-budgeted.
- **Monitoring** Most mitigation schemes require some sort of post-development monitoring, the type and extent of which would be confirmed in the license method statement. A contract with the ecologist for all survey, mitigation and post-development monitoring surveys needs to be agreed for this at the application stage.

EPS Mitigation Licensing – includes development and other activities (other than survey or conservation work) impacting on EPS*



*This process map covers our most common case types, i.e. where planning permission is needed and secured before applying. Consult the guidance for more details.

** Try to design scheme with no impacts on the species.

APPENDIX C – KENT BAT BOX DESIGN

The Kent bat box

Simple to construct, self-cleaning and low maintenance.

The only critical measurement is the width of the crevices—these should be no larger than suggested. Other measurements are approximate.

Materials and construction

Box to be made from untreated rough-sawn timbers
Timber should be c.20mm thick
The box should be rainproof and draught-free
Crevices can be between 15 and 25 mm wide
Fixing may be by use of brackets, durable bands or wires

Location

Boxes are best fixed as high as possible in a sheltered wind-free position, exposed to the sun for part of the day.

They can be fitted to walls, other flat surfaces or trees

A clear flight line to the entrance is important

