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Emsworth, Hampshire,
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Bat Survey Report

March 2021

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Bat Survey Report
Emsworth Surgery, 6 North Street, Emsworth, Hampshire, PO10 7DD
for
Cordage Group

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This report represents sound industry practice; reports and recommends correctly, truthfully and objectively; is appropriate given the local site conditions, scope of works proposed and resources allocated to us by the client; and avoids invalid, biased, and exaggerated statements.

The author disclaims any responsibility to the client and others in respect of any matters outside the scope of the above. This report is confidential to the client and the author accepts no responsibility of whatsoever nature to third parties to whom this report, or any part thereof, is made known. Any such party relies on the report at their own risk.

Contents

1	EXECUTIVE SUMMARY	5
2	INTRODUCTION	7
2.1	GENERAL.....	7
2.2	SITE DESCRIPTION	7
2.3	PROPOSED ACTIVITIES	7
2.4	CURRENT PLANNING STATUS.....	7
2.5	OBJECTIVES OF THE SURVEY AND REPORT	7
2.6	STRUCTURE OF THIS REPORT	8
3	METHODS.....	9
3.1	DESK STUDY.....	9
3.2	FIELD SURVEY.....	9
3.2.1	<i>Date, times and weather.....</i>	<i>9</i>
3.2.2	<i>Personnel.....</i>	<i>9</i>
3.2.3	<i>Assessment of current bat roost suitability.....</i>	<i>10</i>
3.2.4	<i>Systematic inspection for bats or evidence of bats.....</i>	<i>11</i>
3.2.5	<i>Dusk emergence survey.....</i>	<i>13</i>
4	RESULTS	14
4.1	DESK STUDY.....	14
4.1.1	<i>Designated sites.....</i>	<i>14</i>
4.1.2	<i>Bats.....</i>	<i>14</i>
4.2	SURVEY OF BUILDINGS	14
4.3	EXTERNAL POTENTIAL BAT ACCESS POINTS	16
4.4	COMMUTING AND FORAGING HABITAT.....	18
4.5	EVIDENCE OF BATS	18
4.6	DUSK EMERGENCE SURVEYS	18
4.7	OTHER ECOLOGICAL CONSTRAINTS	18
5	INTERPRETATION AND EVALUATION	19
5.1	CONSTRAINTS ON SURVEY DATA	19
5.1.1	<i>Constraints on survey data.....</i>	<i>19</i>
5.1.2	<i>Constraints on the enhancement measures</i>	<i>19</i>
5.2	POTENTIAL IMPACTS OF THE PROPOSED DEVELOPMENT ON BAT ROOSTS	19
5.2.1	<i>General.....</i>	<i>19</i>
5.2.2	<i>Commuting and foraging bats.....</i>	<i>20</i>
5.2.3	<i>Emsworth Surgery.....</i>	<i>20</i>
5.2.4	<i>Birds.....</i>	<i>20</i>
5.3	ALTERNATIVE ROOSTING POTENTIAL	20
5.4	SURVEY REPORT EXPIRY	20
5.5	FURTHER SURVEY	21
5.6	OUTLINE ENHANCEMENT MEASURES.....	21
5.6.1	<i>Birds.....</i>	<i>21</i>
5.6.2	<i>Post works</i>	<i>22</i>
5.7	REQUIREMENT FOR HABITATS REGULATIONS LICENCE	22
6	FIGURES.....	24

7	PHOTOGRAPHS	28
8	REFERENCES	29
9	APPENDIX A: LEGISLATION.....	30
9.1	LEGAL CONTEXT	30
9.2	NATIONAL PLANNING CONTEXT	31
9.2.1	<i>General.....</i>	<i>31</i>
9.2.2	<i>National Planning Policy Framework (NPPF).....</i>	<i>31</i>
10	APPENDIX B: BAT ECOLOGY	33
11	APPENDIX C: DUSK EMERGENCE SURVEY DATA.....	34

EXECUTIVE SUMMARY

1. This report provides information from bat surveys carried out by Hampshire Ecological Services Ltd for Cordage Group in connection with a proposal to demolish some single-storey sections, renovate the surgery into offices and build a new two-storey building with a shop and one new dwelling on the site at Emsworth Surgery, 6 North Street, Emsworth, Hampshire, PO10 7DD (approximate Ordnance Survey Grid Reference SU749058). The location of the site is shown in *Figures 1 and 2* and a plan of the site is shown in *Figure 3* (see *Section 6*).
2. No access to the internal spaces of the doctor's surgery was possible at the time of the survey due to the Covid-19 risk. As the building was categorised as low bat roost potential, a dusk emergence survey was carried out on the 10th August 2020 as an alternative using two surveyors. An external inspection was also carried out prior to the survey.
3. The site is a doctor's surgery in a three-storey building with single-storey extensions to the west and south. Externally, the building has chimneys, soffits, lead-flashing, and dormers. Due to the small number of suitable roosting features on the building, and the minimal suitable foraging habitat nearby, this building has low bat roost suitability.
4. There is limited suitable foraging habitat in the immediate vicinity of the site, a small garden area onsite then roadside grassy areas nearby. The streets surrounding the site provide linear features for bats to use as commuting route, to areas of good habitat further afield such as Chichester Harbour.
5. No bats or evidence of bats was seen during the external inspection.
6. No bats were seen emerging or re-entering the building during the dusk emergence survey. Therefore, a bat EPS licence is not required. The full data from the survey is given in *Appendix C* and a plan showing the foraging and commuting bats is given in *Figure 4* in *Section 6*.
7. Common pipistrelles were observed flying in the vicinity of the building, indicating the weather was suitable for bat activity.
8. Changes in lighting can affect foraging and commuting bats. Therefore, no works should take place in the hours of darkness or under artificial lighting. In addition, no lighting should be directed onto retained vegetation, and security lights should operate on a timer, to avoid any negative impact on bats.
9. It is a requirement under national planning policy to provide ecological enhancements to sites requiring planning permission. However, as the site did not have significant bat activity (possibly due to lighting), it is proposed that the enhancements will be in the form of bird

boxes built into the exterior walls of the new building and mounted on the retained building. The site will be enhanced for birds as follows:

- two multi-chamber boxes suitable for house sparrows, such as a Schwegler 1SP sparrow terrace or Vivara Pro WoodStone House Sparrow Nest Box;
- two or more swift boxes, such as Ibstock Eco-habitat or No. 18 Schwegler swift box, to either incorporate into the build structure or mounted on the buildings under the eaves.

10. The proposed enhancement measures are shown in *Figure 5* in *Section 6*.

11. This survey data is valid for a maximum of 12 months. Bats frequently move around and adopt new roosting sites, therefore if more than 12 months elapses it may be advisable to conduct further survey work to obtain up-to-date information, thereby ensuring protected species compliance.

12. According to the *Multi-Agency Geographic Information for the Countryside* website (www.magic.gov.uk), there are six statutory designated sites within the 5km and 2km search areas of the site, and one non-statutory designated site within 500m of the site. None of these will be directly affected by this small-scale development and all links will be maintained. The site is within 5km of an SAC and an SPA. Both of these sites are designated due to the types of wetland habitats they include. In addition, there have been no granted bat European Protected Species (EPS) licences within 2km of the site.

13. As a result of its proximity to the SAC and SPA, the impacts of this small-scale development must be considered. The works to build two new dwellings on the site will increase the number of residents, from none to c.3-5 (based on proposed bedrooms). Therefore, there will be an increase in the recreational pressure and potentially pollution, on these internationally designated sites. As a result, a financial contribution may be sought by the local planning authority to help offset these impacts.

2 INTRODUCTION

2.1 General

This report provides information from bat surveys carried out by Hampshire Ecological Services Ltd for Cordage Group in connection with a proposal to demolish some of the single-story sections of the surgery and renovate it into offices, then build a new two-storey building with a shop and one new dwelling on the site at Emsworth Surgery, 6 North Street, Emsworth, Hampshire, PO10 7DD (approximate Ordnance Survey Grid Reference SU749058). The location of the site is shown in *Figures 1 and 2 in Section 6*.

2.2 Site description

The site is a doctor's surgery in a three-storey building with single-storey extensions. The building surveyed is shown on the building plan in *Figure 3 in Section 6*.

The site is south-west of the junction of High Street and Havant Road (A259), near the centre of Emsworth town. The immediate surroundings consist of residential housing and commercial properties, with the main road to the north and the High Street to the south-east. Slipper Mill Pond (tidal pond) is nearby, to the west. In the wider landscape Emsworth surrounds the site in all directions. To the south is Chichester Harbour (Emsworth Channel); west is the town of Havant; east is the village of Southbourne; and Westbourne is to the north. In addition the A27 dual carriageway is to the north and the River Ems flows c.200m east of the site.

2.3 Proposed activities

This survey was carried out in connection with a proposal to carry out the following works:

- demolish some of the single-storey extensions on the existing surgery building;
- convert the remaining doctor's surgery building into offices; and
- build a new two-storey building with a ground floor shop and first floor new dwelling.

2.4 Current planning status

Planning permission is being applied for at this site.

2.5 Objectives of the survey and report

The surveys by Hampshire Ecological Services Ltd included an external inspection of the building to identify bat roost suitability and one dusk emergence survey. The aim was to identify if bats were present or likely to use the site for roosting.

The survey and the report writing were carried out in accordance with *Bat Surveys for Professional Ecologists: Good Practice Guidelines, 3rd edition* (Collins, 2016). Any deviations from the guidelines are justified in the relevant sections.

Additionally, all ecological surveys should be completed in line with Natural England's *Standing Advice for Local Authorities*

(<http://www.naturalengland.org.uk/ourwork/planningdevelopment/spatialplanning/standingadvice/advice.aspx>), which states:

- Natural England will not comment on applications that are submitted without the relevant protected species surveys if there are no other issues (i.e. in relation to SSSIs or landscape).
- Natural England will not comment on scoping surveys that recommend further surveys where these have not been undertaken and submitted with the scoping reports.

2.6 *Structure of this report*

This report is structured as follows:

- *Section 1* contains the executive summary;
- *Section 2* contains an introduction;
- *Section 3* describes the survey methods;
- *Section 4* describes the results;
- *Section 5* evaluates the findings;
- *Section 6* contains the figures including:
 - *Figure 1* gives aerial photographs showing the site location;
 - *Figure 2* gives an Ordnance Survey map showing the location of the site;
 - *Figure 3* gives a site plan;
 - *Figure 4* illustrates the bat activity recorded during the dusk emergence survey; and
 - *Figure 5* give a plan of proposed enhancements for the site.
- *Section 7* gives photographs of the site;
- *Section 8* lists the references;
- *Appendix A* gives information on relevant legislation;
- *Appendix B* gives information on bat ecology; and
- *Appendix C* gives the data from the dusk emergence survey.

3 **METHODS**

3.1 **Desk study**

The *Multi-Agency Geographic Information for the Countryside* website (www.magic.gov.uk) was used to search for designated sites on or adjacent to the site including Local Nature Reserves (LNRs), National Nature Reserves (NNRs), Sites of Special Scientific Interest (SSSIs), Special Areas of Conservation (SACs), Special Protection Areas (SPAs) and Ramsar sites. The search area was 5km for SAC and SPA sites and 2km for LNRs, NNRs, Ramsar sites and SSSIs, as specified in Hampshire's *Biodiversity Checklist*. The search area is also 500m for Sites of Importance to Nature Conservation (SINCs) and ancient semi-natural and ancient replanted woodlands.

In addition, the *Multi-Agency Geographic Information for the Countryside* website (www.magic.gov.uk) was used to search for granted European Protected Species (EPS) licences in relation to bats within 2km of the site.

A data search from the Hampshire Biodiversity Information Centre (HBIC) has not been commissioned in relation to this site.

3.2 **Field survey**

3.2.1 *Date, times and weather*

An external inspection of the building was conducted during daylight on the 10th August 2020. This was followed immediately by one dusk emergence survey. The weather conditions during the survey were warm (23.1°C), dry, clear and calm (Beaufort scale 0).

The emergence survey commenced fifteen minutes before sunset and continued for an hour and a half after sunset (long after bats would have exited). The weather was suitable for bat emergence and foraging during all the surveys.

3.2.2 *Personnel*

The original assessment from client-supplied photos was carried out by John Poland CEnv MCIEEM CBiol MSB, who is a full member of the CIEEM, a Chartered Environmentalist (CEnv), a Chartered Biologist (CBiol) and multi-species licence holder with over 20 years of experience in ecological consultancy. The subsequent external and emergence survey was led by Calum Cooper BSc (Hons) GradCIEEM who has over five years of experience in ecological consultancy and is experienced and well trained in surveying buildings for bats, evidence of bats and assessing roost suitability with licenced ecologists as well as designing and supervising licensed mitigation works. He was assisted by Darla Brown [Assistant Ecologist]. All surveyors are experienced in carrying out bat surveys using detectors.

This report was reviewed by Principal Ecologist John Poland CEnv MCIEEM CBiol MSB.

All staff adhere to the Chartered Institute of Ecology and Environmental Management's (CIEEM) *Code of Professional Conduct*.

3.2.3 *Assessment of current bat roost suitability*

Because bats are crevice-dwelling mammals it is often difficult to thoroughly inspect buildings for bats and evidence of bats without a destructive search, which is not generally practical or acceptable. Examples are where bats roost between the roofing felt and tiles or slates, around window frames and behind bargeboards. These areas cannot be inspected, but a surveyor would know that bats might roost here because there are places where bats could gain entry. A pipistrelle bat is small enough to fit into a match box and can roost in gaps just 14-20mm wide.

The building was assessed for its **bat roost suitability** according to the following factors that influence the likelihood of bat roosting:

- Surrounding habitat: whether there are potential flight-lines and bat foraging areas nearby.
- Construction detail: the type and construction of architectural features such as attics, bargeboards, soffit boxes, lead-flashing, cavity walls and hanging tiles that could be used by roosting bats. Some construction details and materials are more favourable to bat occupation than others.
- Building condition: whether the building has no roof or has a sound roof without any potential bat access points.
- Internal conditions: bats favour sheltered locations with a stable temperature regime, protection from the elements and little wind/light/rain penetration.
- Potential bat access points: whether there is flight and crawl access.
- Potential roosting locations: the presence of bat-accessible voids, cracks and crevices.

The risk of bat roosts being present will be lower where structures have:

- Urban setting with little greenspace.
- Heavy disturbance.
- Small, cluttered roof void (particularly for brown long-eared bats).
- Modern construction with few gaps or crevices that bats can fly or crawl through (although pipistrelles may still be present).
- Prefabricated steel or sheet materials.
- Active industrial premises.

The above list provides generic criteria and there are exceptions to consider. For example, pipistrelle roost sites are often found in modern housing estates and therefore the absence of bats from such locations should not always be assumed.

Some information on bat ecology is included in *Appendix B*.

3.2.4 *Systematic inspection for bats or evidence of bats*

The building was assessed for its suitability to support roosting bats using the following inspection equipment: high-quality 10x42 binoculars and a 1,000,000 candlepower Clulite™ CB2 torch. Binoculars were employed to view higher areas such as potential access points on the outside of the building. A description of the building was recorded on a survey sheet and digital photographs were taken as a permanent record.

Visual, systematic examinations were made for bats and evidence of bats in the building, both internally and externally, of the following:

- cracks, crevices and sheltered voids;
- external features such as cracks and holes in the walls;
- wall and door surfaces;
- window and door frames; and
- wall bases.

Evidence of roosting bats includes droppings, feeding remains and dead bats, but also staining from urine and fur-oils, scratch marks, odour, the presence of bat-fly (Nycteribiid) pupal cases, and in some cases, the absence of cobwebs.

Bat droppings can prove beyond doubt that bats use a building and can help to identify roosting locations because piles often accumulate beneath roosting sites or entrance points. The location, size, shape, texture and colour of the droppings can be used to aid species identification. DNA analysis of droppings is also possible and samples are taken where necessary. The number and condition (age) of droppings can indicate the size of the roost and when it was last used.

Following the external inspection, the building was assigned a level of suitability for being used by roosting bats. This was based on the criteria in *Table 3.2.4.1* (Collins, 2016).

Table 3.2.4.1. Bat Roost Suitability.

Suitability	Description of roosting habitats	Description of commuting and foraging habitats
Negligible	Negligible habitat features on site likely to be used by roosting bats	Negligible habitat features on site likely to be used by commuting or foraging bats
Low	A structure with one or more potential roost sites that could be used by individual bats opportunistically. However, these potential roost sites do not provide enough space, shelter, protection, appropriate conditions and/or suitable surrounding habitat to be used on a regular basis or by larger numbers of bats (<i>i.e.</i> unlikely to be suitable for maternity or hibernation).	Habitat that could be used by small numbers of commuting bats such as a gappy hedgerow or un-vegetated stream, but isolated, <i>i.e.</i> not very well connected to the surrounding landscape by other habitat. Suitable, but isolated habitat that could be used by small numbers of foraging bats such as a lone tree (not in a parkland) or a patch of scrub.
Moderate	A structure with one or more potential roost sites that could be used by bats due to their size, shelter, protection, conditions and surrounding habitat but unlikely to support a roost of high conservation status (with respect to roost type only)	Continuous habitat connected to the wider landscape that could be used by bats for commuting, such as lines of trees and scrub or linked back gardens. Habitat that is connected to the wider landscape that could be used by bats for foraging such as trees, scrub, grassland or water.
High	A structure with one or more potential roost sites that are obviously suitable for use by larger numbers of bats on a more regular basis and potentially for longer periods of time due to their size, shelter, protection, conditions and surrounding habitat.	Continuous, high-quality habitat that is well connected to the wider landscape that is likely to be used regularly by commuting bats such as river valleys, streams, hedgerows, lines of trees and woodland edge. High-quality habitat that is well connected to the wider landscape that is likely to be used regularly by foraging bats such as broadleaved woodland, tree-lined watercourses and grazed parkland. The site is close to and connected to known roosts.

3.2.5 Dusk emergence survey

The dusk emergence survey followed standard survey protocol in *Bat Surveys – Good Practice Guidelines, 3rd edition* (Collins, 2016).

The dusk emergence survey commenced fifteen minutes before sunset and continued for an hour and a half after sunset. The weather was suitable for bat emergence and foraging on all occasions. See *Sections 3.2.1. and 3.2.2.* for dates, time, weather and personnel carrying out the survey.

The surveyors were located with good views of the potential bat access points identified during the initial assessment. The timing of the visits, from early evening until after dark and early morning until light, was aimed at detecting active bats in the vicinity. When it was too dark for visual observation, electronic bat detectors were used to listen for the ultrasonic sounds produced by bats either flying in the vicinity or emerging from the building.

The surveyors recorded all bat activity encountered, but particular attention was focused on any bats emerging or re-entering. The results were documented by noting the time, bat species and behaviour (*e.g.* commuting, foraging, social interaction *etc.*). The surveyors were in constant contact via hand-held radios so that information could be easily exchanged regarding bat activity. The time between all surveyors' devices was synchronised so time data was recorded precisely.

Bat detectors are used so that surveyors can identify most bat species in the field, using the heterodyne output in combination with bat shape, flight pattern and behaviour. Surveyors were equipped with BatBox Duet™ detectors connected to solid-state recorders (Edirol Roland-05) were employed to record bat calls for later sonogram analysis using BatSound™ computer software (should it be required). Frequency-division, whereby the ultrasound is divided by 10 into an audible range, has a considerable advantage over time-expansion for survey work as it allows recordings to be taken in real time. This ensures that all bat activity is recorded.

Queried recordings were later replayed and analysed through BatSound™ software to ensure that any activity accidentally missed during the survey was recorded and times and location calculated. The species of bat was confirmed at this stage where possible. Bat detector surveys provide one of the most effective methods of identifying bat species and activity patterns. However, it is not always possible to identify bats down to species level, even with subsequent sound analysis.

RESULTS**4.1 Desk study****4.1.1 Designated sites**

According to the *Multi-Agency Geographic Information for the Countryside* website (www.magic.gov.uk), the site is neither designated nor immediately adjacent to any designated areas of nature conservation. However there are three internationally statutory designated sites within 5km of the site, and one nationally and two county designated sites within 2km of the site. In addition, there is one Site of Importance for Nature Conservation (SINCs) within 500m of the site. These are listed in *Table 4.1.1.1*.

Table 4.1.1.1. Statutory designated sites; non-statutory designated sites and ancient semi-natural and ancient replanted woodlands within the designated search areas of the site.

Level of designation	Designation	Name	Distance & direction from site
International	SPA	Chichester and Langstone Harbours	c.300m south (at closest point)
	Ramsar	Chichester and Langstone Harbours	c.300m south (at closest point)
	SAC	Solent Maritime	c.300m south (at closest point)
National	SSSI	Chichester Harbour	c.300m south (at closest point)
	NNR	-	-
County	LNR	Brook Meadow (Emsworth)	c.150m north-east
		Eames Farm	c.925m south-east
Local	SINC	Lumley Meadows	c.300m north-east
	Ancient woodland	-	-

4.1.2 Bats

According to the *Multi-Agency Geographic Information for the Countryside* website (www.magic.gov.uk), there have been no bat European Protected Species (EPS) licences granted within 2km of the site.

4.2 Survey of buildings

The construction details and photographs of the building are summarised in *Table 4.2.1*. Additional photographs showing the immediate vicinity are given in *Section 7*.

Table 4.2.1. Summary of the buildings construction details.

Type/Name	Emsworth Surgery	
Description	A three-storey brick building with pitched and hipped tile roofs and a flat section on the south extension.	
No. of storeys	1 & 3	
Roof type	Pitched, hipped and flat	
Roof cladding	Tile, slate & bitumen felt	
Ridge	Tile	
Wall type	Brick	
Exterior	Soffits, chimneys, lead-flashing	
Photos	North elevation	South elevation
		
	East elevation	West elevation
		
Building dimensions	c.335m ²	
Roof void description	Unknown	
Frame	Unknown	
Roof lining	Unknown	
Roof void dimensions	Unknown	
Roof void height	Unknown	
Potential roosting locations	Within the brickwork where there is missing cement. Under lifted or slipped roof tiles	
Bat evidence	None	
Bat suitability	Low	

4.3 *External potential bat access points*

The majority of the roof appears well-sealed and in good condition. However, there are a small number of potential bat access points into the single-storey extensions. The locations and details of potential bat access points are illustrated in *Images 4.3.1 – 4.3.3*.

Image 4.3.1. Location of potential bat access points and potential roost locations on the north elevation of the building.



Image 4.3.2 Location of potential bat access points and potential roost locations on the east elevation of the building.



Image 4.3.3 Location of potential bat access points and potential roost locations on the west elevation of the building.



Due to the presence of these potential access points, and suitable roosting locations, the building is classed as having low suitability to be used by roosting bats, following the criteria provided in *Table 3.2.4.1*.

4.4 *Commuting and foraging habitat*

There is limited suitable foraging habitat in the immediate vicinity of the site, a small garden area onsite then roadside grassy areas nearby. The streets surrounding the site provide linear features for bats to use as commuting routes, to areas of good habitat further afield, such as Chichester Harbour.

Bats follow linear landscape features such as lines of trees, hedges, buildings and waterways in order to commute from their roost sites to their feeding grounds. Likewise they use these features to navigate between feeding areas and alternative roosts.

4.5 *Evidence of bats*

No evidence of bats was observed on the exterior of the building.

4.6 *Dusk emergence surveys*

No bats were observed emerging from or re-entering the building.

Common pipistrelles were observed flying in the vicinity of the building, indicating the weather was suitable for bat activity. The full data from the dusk emergence survey is given in *Appendix C* and a plan illustrating the bat activity during the survey is given in *Figure 4* in *Section 6*.

4.7 *Other ecological constraints*

No other ecological constraints were observed.

5 INTERPRETATION AND EVALUATION

5.1 Constraints on survey data

5.1.1 Constraints on survey data

Detailed searches often result in the discovery of evidence of bats. However, although such surveys can identify the presence of bats it is more difficult to prove absence due to the crevice-dwelling nature of these elusive mammals. Bat droppings may be missed where there is debris to obscure them (and also, very old droppings generally crumble away to dust).

No access to the internal spaces of the doctor's surgery was possible at the time of the survey due to the Covid-19 risk, therefore an external inspection only was carried out. The enclosed courtyard within the single-storey extension at the rear of the surgery could not be left accessible due to concerns of allowing opportunities for anti-social behavior.

5.1.2 Constraints on the enhancement measures

Indicative measures have been outlined, if changes are made, plans may need to be updated.

5.2 Potential impacts of the proposed development on bat roosts

5.2.1 General

According to the *Multi-Agency Geographic Information for the Countryside* website (www.magic.gov.uk), the site is neither designated nor immediately adjacent to any designated areas of nature conservation. However, there are six statutory designated sites within the 5km and 2km search areas of the site, and one non-statutory designated site within 500m of the site. None of these will be directly affected by this small-scale development and all links will be maintained.

The site is within 5km of an SAC and an SPA (see *Section 4.1.1*). Both of these sites are designated due to the types of wetland habitats they include.

As a result of its proximity to the SAC and SPA, the impacts of this small-scale development must be considered. The works to build two new dwellings on the site will increase the number of residents from none to c.3-5 (based on proposed bedrooms). Therefore, there will be an increase in the recreational pressure and potentially pollution, on these internationally designated sites. As a result, a financial contribution may be sought by the local planning authority to help offset these impacts. However, this is likely to be a decrease in the number of people using the site, compared to the number of people using the surgery.

According to the *Multi-Agency Geographic Information for the Countryside* website (www.magic.gov.uk), there have been no bat European Protected Species (EPS) licences granted within 2km of the site.

5.2.2 *Commuting and foraging bats*

There is limited foraging habitat for emerging bats in the immediate vicinity of the building. However, the wider landscape does offer suitable habitat nearby, including mature trees; two tidal ponds; Chichester Harbour; and open green spaces. These areas will be unaffected by the development and all links will be maintained.

Changes in lighting can affect foraging. Therefore, no works should take place in the hours of darkness or under artificial lighting. In addition, no lighting should be directed onto and retained vegetation, and security lights should operate on a timer, to avoid any negative impact on bats.

Any lighting installed should avoid spillage of greater than 1 lux onto any retained vegetation, particularly the ancient woodland. The use of non-UV LED lighting (preferably using warm spectrum wavelengths) is strongly recommended so as to avoid the most deleterious impacts of lighting on biodiversity and bats in particular.

5.2.3 *Emsworth Surgery*

No bats were recorded emerging from the building, therefore a bat EPS licence from Natural England is not required prior to the works commencing.

5.2.4 *Birds*

No nesting bird or evidence of nesting birds was observed during the survey. However, the building should be checked for nests (by an ecologist) immediately prior to works. Any active nests must be retained and work must be delayed in that area until the young have fledged and left the nest.

5.3 *Alternative roosting potential*

There are buildings nearby that could provide alternative roosting for bats (see *Figure 1* in *Section 6*). In addition, there are several mature trees in the vicinity which could provide bat roosting opportunities.

5.4 *Survey report expiry*

This survey data is valid for a maximum of 12 months. Bats frequently move around and adopt new roosting sites, therefore if more than 12 months elapses it may be advisable to conduct further survey work to obtain up-to-date information to advise work, thereby ensuring protected species compliance.

Given the mobility of bats, it is recommended that a walkover of the site to update the survey information is undertaken prior to the development commencing if this does not occur before the end of August 2021.

5.5 Further survey

No further surveys are proposed.

5.6 Outline enhancement measures

5.6.1 Birds

It is a requirement under national planning policy to provide ecological enhancements to sites requiring planning permission. However, as the site did not have significant bat activity (possibly due to lighting), it is proposed that the enhancements will be in the form of bird boxes built into the exterior walls of the new dwellings. The bird boxes are detailed in *Table 5.6.1*.

Table 5.6.1. Bird boxes to be erected within the site with additional details on siting them to increase chances of occupancy.

Type / example	Typical species	No.	Height	Additional information
Sparrow box/ terrace e.g. WoodStone Build-in House Sparrow Nest Box  Vivara Pro WoodStone House Sparrow Nest Box 	House sparrows	2	≥ 2m	• Either incorporate into the build structure or mount on a building. • Should be fixed onto a sturdy building, not onto fences or garden sheds due to its weight. • Position away from windows. • Position out of direct sunlight (below eaves on the north elevation), especially if not built into the build structure.
Swift boxes e.g. Ibstock Eco-habitat 	Swifts	2	≥ 5m	• Can either be incorporated into the build structure or mounted onto a building. • Position out of direct sunlight (below eaves on the north elevation), away from windows and in a straight line. • Should be in an open area so that it is less accessible to predators and birds are not obstructed as they leave the nest.

5.6.2 *Post works*

No lighting should be installed near to or directed onto any retained vegetation so that light disturbance is not a problem. This is because lighting can impact bat populations directly by reducing foraging area, or indirectly by severing commuting routes from roosts. Therefore, the following (modified from *Bats and lighting in the UK* (ILP 2018)) should be undertaken:

- **Aim of light** The light should be aimed to illuminate only the immediate area required by using as sharp a downward angle as possible. This lit area must avoid being directed at, or close to, any retained vegetation. A shield or hood can be used to control or restrict the area to be lit. Avoid illuminating at a wider angle as this will be more disturbing to foraging and commuting bats, as well as people and other wildlife.

For any security lighting, the following should also apply:

- **Power** It is rarely necessary to use a lamp of greater than 2000 lumens (150W) in security lights. The use of a higher power is not as effective for the intended function and will be more disturbing for bats.
- **Movement sensors** Many security lights are fitted with movement sensors which, if well installed and aimed, will reduce the amount of time a light is on each night. This is more easily achieved in a system where the light unit and the movement sensor are able to be separately aimed.
- **Timers** If the light is fitted with a timer this should be adjusted to the minimum to reduce the amount of 'lit time'.
- **Alternatives** The requirement for security lighting in each instance should be carefully considered and only used where absolutely necessary to deter crime.

5.7 *Requirement for Habitats Regulations licence*

A bat EPS licence from Natural England is not necessary before work commences on the Emsworth Surgery.

In the unlikely event that bats are found during the works, work will stop, further surveys carried out and an EPS licence will be applied for. This permits activities that may otherwise be offences under the *Conservation of Habitats & Species Regulations 2017*, such as the destruction of roost sites.

Evidence is required from emergence/ re-entry surveys during the bat active season between May and September in order to gather enough information about bat populations (including species, numbers and status of roost sites) to support a bat EPS licence application.

Survey data supporting EPS licence applications must be up-to-date *i.e.* have been conducted within the current or most recent optimal survey season (May to September). Therefore, if licensable work is delayed until, during or after the next survey season, updated survey(s) will be required to support an application.

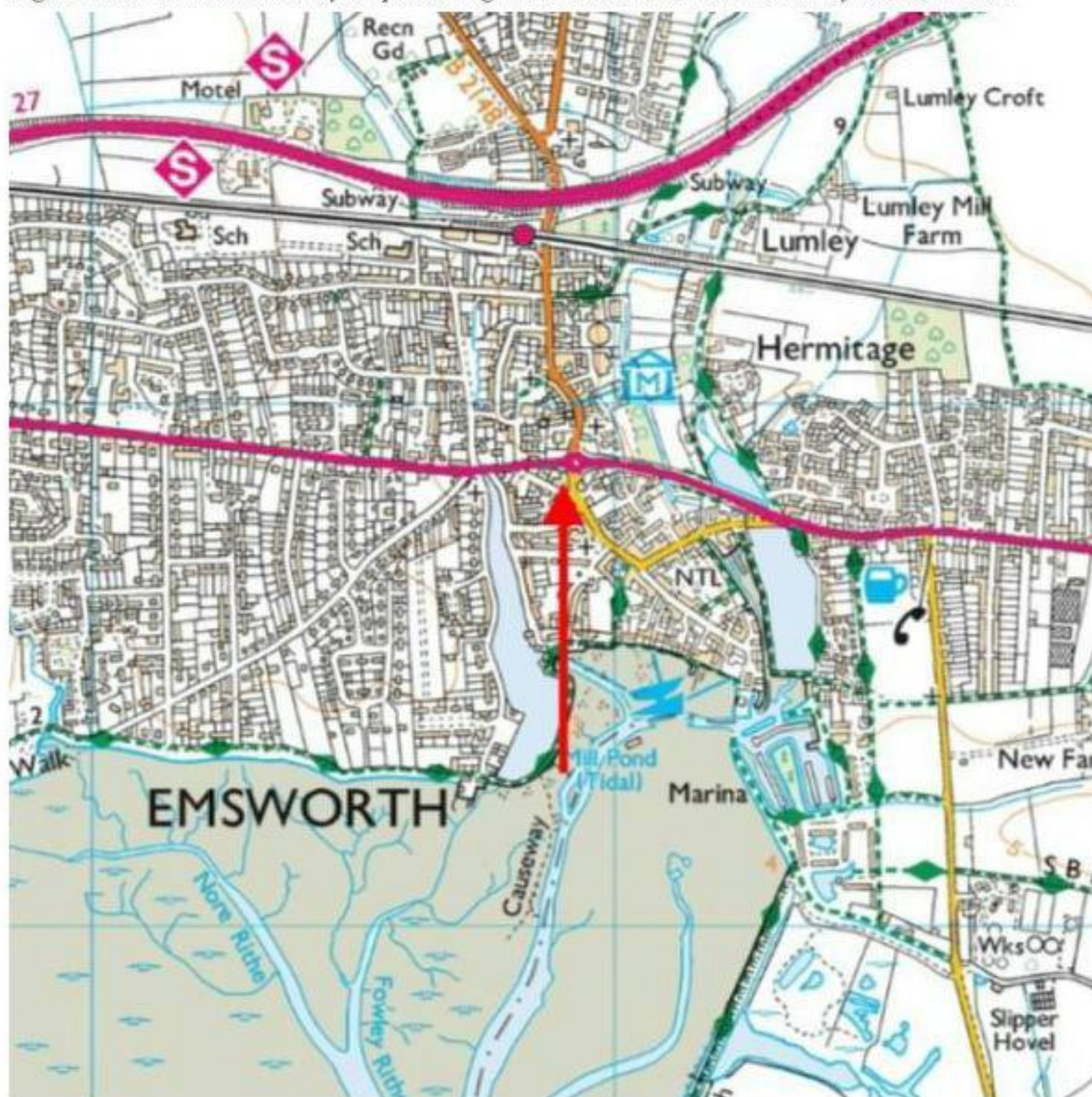
Natural England takes a minimum of 30 working days to process licence applications following receipt of all the relevant documentation. This includes an application form and a Method Statement. This includes a detailed mitigation strategy to eliminate or reduce impacts on bats.

It is not possible to apply for an EPS licence until full planning permission has been granted and any conditions relating to wildlife fulfilled, although Local Planning Authorities usually request the information prior to determining a planning application request. Additional time will be required where any revisions to a proposed mitigation strategy are necessary to obtain the licence.

Figure 1. Aerial photographs showing the location of the site.



Figure 2. An Ordnance Survey map showing the site location, as indicated by the red arrow.



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Figure 3. Plan of the site with the building surveyed highlighted in red.



Figure 4. Plan showing bat activity (observations only) for the dusk emergence survey carried out on Emsworth Surgery on the 10th August 2020. Arrows show direction of flight (where known).

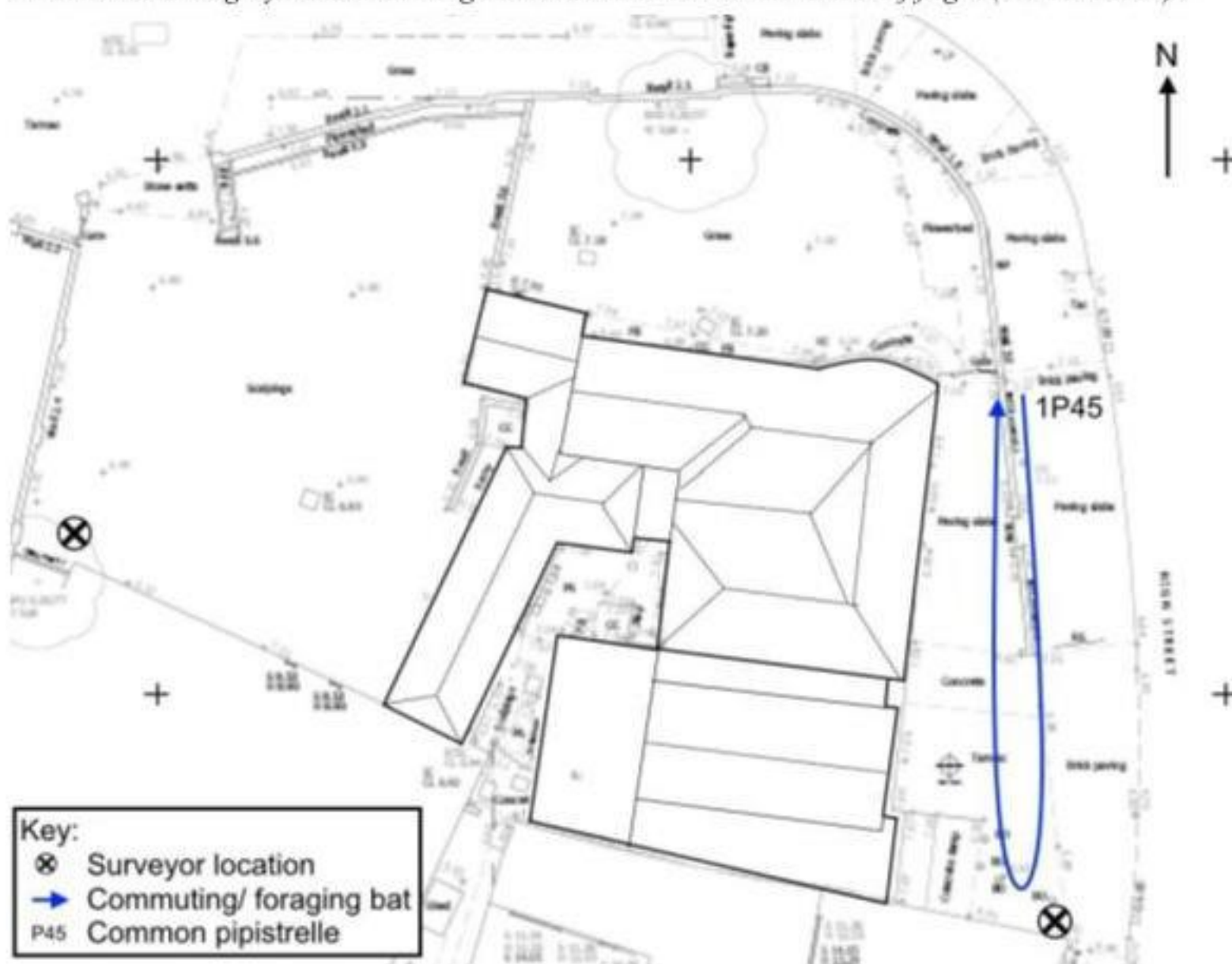
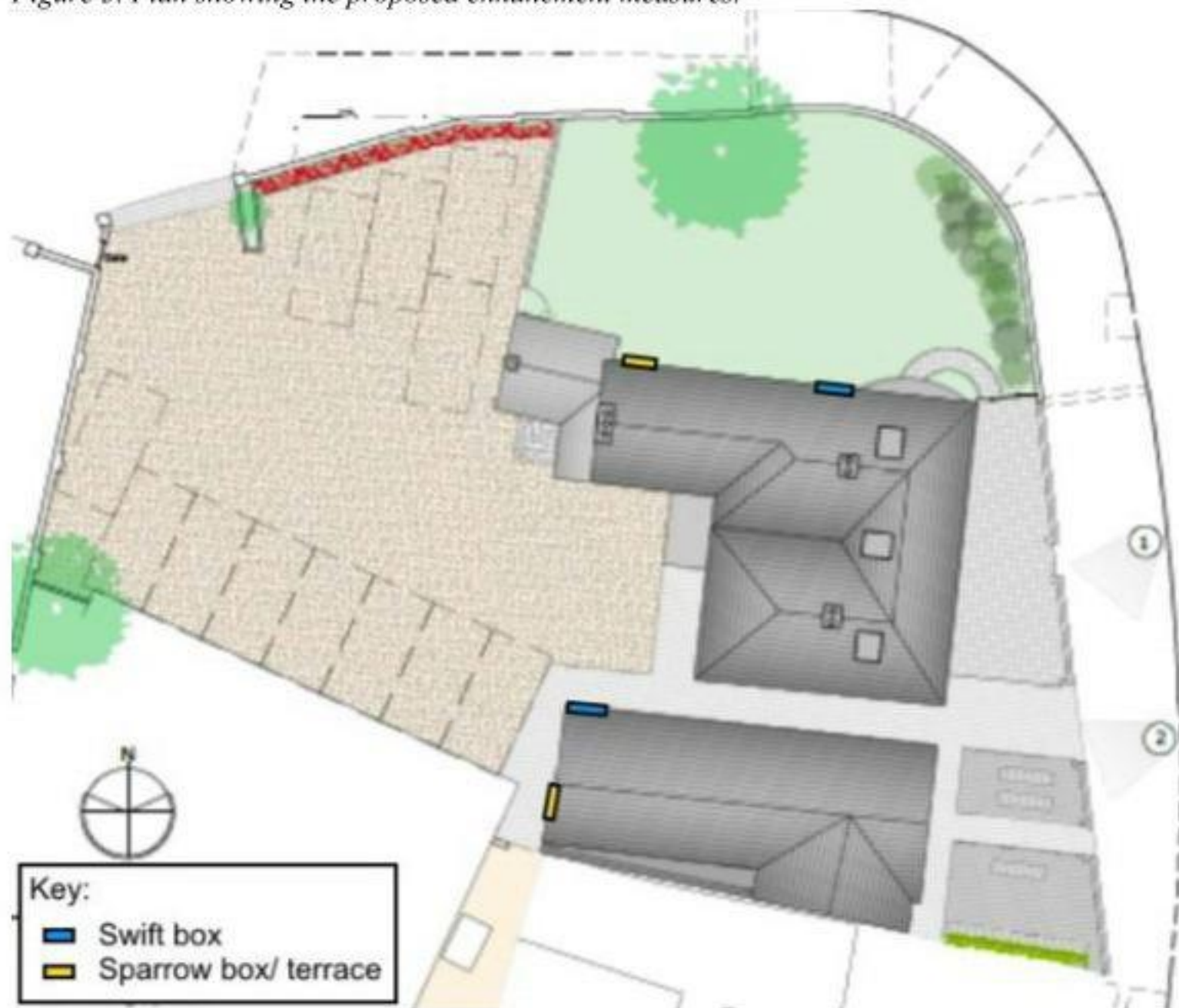


Figure 5. Plan showing the proposed enhancement measures.



PHOTOGRAPHS

Photo 1. Site from the High Street to the south-east.



Photo 3. Small garden on the north of the site.



Photo 5. Well-lit High Street, south-east of the site.



Photo 2. Busy roundabout immediately adjacent to the site (A259).



Photo 4. Gravel parking areas to the rear of the site (west).



Photo 6. Slipper Mill Pond (tidal) nearby (to the west).



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9.1 *Legal context*

All species of British bat are protected by the *Wildlife and Countryside Act 1981* (as amended) extended by the *Countryside and Rights of Way Act 2000*. This legislation makes it an offence to:

- intentionally kill, injure or take a bat;
- possess or control a bat;
- intentionally or recklessly damage, destroy or obstruct access to a bat roost; and
- intentionally or recklessly disturb a bat whilst it occupies a bat roost.

Bats are also European Protected Species listed on the *Conservation of Habitats & Species Regulations 2017*. This legislation makes it an offence to:

- deliberately capture, injure or kill a bat;
- deliberately disturb a bat (in such a way as to be likely to significantly affect: (i) the ability of a significant group of bats to survive, breed or rear/nurture their young; or (ii) the local distribution or abundance of the species concerned);
- damage or destroy a breeding site or resting place of a bat; and
- possess, control, transport, sell, exchange a bat, or offer a bat for sale or exchange.

All bat roosting sites receive legal protection even when bats are not present (bats tend to reuse the same roost).

Where it is necessary to carry out an action that could result in an offence under the *Conservation of Habitats & Species Regulations 2017* it is possible to apply for a European Protected Species (EPS) licence from Natural England. Licences are only issued where Natural England are satisfied that three derogation tests are met. These are: that the activity is for **imperative reasons of overriding public interest**; that there must be **no satisfactory alternative**; and that **favourable conservation status of the species must be maintained**.

Consideration of these three derogation tests was previously left to Natural England as part of their deliberations on whether to grant a licence for the development activity after a planning consent has been issued. However, the regulations now require that **all** public bodies, i.e. **Local Planning Authorities** (LPAs), have regard to the requirements of the European Habitats Directive when carrying out their functions. As a result, LPAs **must** address the three derogation tests when considering a planning application that could impact upon any European Protected Species (EPS).

9.2 *National planning context*

9.2.1 *General*

Surveys should be completed in line with Natural England's *Standing Advice for Local Authorities* (<http://www.naturalengland.org.uk/ourwork/planningdevelopment/spatialplanning/standingadvice/default.aspx>), which states:

- Natural England will not comment on applications that are submitted without the relevant protected species surveys if there are no other issues (*i.e.* in relation to SSSIs or landscape).
- Natural England will not comment on scoping surveys that recommend further surveys where these have not been undertaken and submitted with the scoping reports.

In addition to the above, *Section 40* of the *Natural Environment and Rural Communities Act* (2006) imposes a new duty on all public authorities to have regard for biodiversity.

9.2.2 *National Planning Policy Framework (NPPF)*

From the 19th February 2019, the Government published the revised National Planning Policy Framework. The document sets out the government's planning policies for England and how these are expected to be applied. This replaces a previous version which was published in March 2012. It states: "*at the heart of the Framework is a presumption in favour of sustainable development (paragraph 11).*"

Achieving sustainable development means that the planning system has three overarching objectives, which are interdependent and need to be pursued in mutually supportive ways (so that opportunities can be taken to secure net gains across each of the different objectives):

- an economic objective;
- a social objective; and
- an environmental objective.

The environmental objective is to "*contribute to protecting and enhancing our natural, built and historic environment; including making effective use of land, helping to improve biodiversity, using natural resources prudently, minimising waste and pollution, and mitigating and adapting to climate change, including moving to a low carbon economy*".

Planning policies and decisions should contribute to and enhance the natural and local environment by "*protecting and enhancing valued landscapes, sites of biodiversity or geological value and soils (in a manner commensurate with their statutory status or identified quality in the development plan)*" and "*minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures*".

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.

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.

It states that *"development whose primary objective is to conserve or enhance biodiversity should be supported; while opportunities to incorporate biodiversity improvements in and around developments should be encouraged, especially where this can secure measurable net gains for biodiversity"*.

It should be noted that the *"presumption in favour of sustainable development does not apply where the plan or project is likely to have a significant effect on a habitats site (either alone or in combination with other plans or projects), unless an appropriate assessment has concluded that the plan or project will not adversely affect the integrity of the habitats site"*.

The NPPF also encourages *"minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures"* and aims to *"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"*. This applies to non-statutory designated sites including Sites of Importance for Nature Conservation (SINCs) and equivalent county wildlife sites.

Early engagement with all necessary stakeholders, including expert bodies, is encouraged by the NPPF.

Bats use different roosting sites throughout the year according to their life cycle requirements.

Hibernation during the winter months requires roosting sites that are cool and humid. As conditions improve through the spring, bats become increasingly active and tend to use transitional roosting sites. During the summer months, females give birth in maternity roosts. Maternity roosts tend to be warm and temperature-stable, which aids rapid development of the young, which are weaned in late summer. In the autumn, adult bats congregate in mating roosts and also use transitional roosting sites. Autumn is the time when both adults and juveniles have to build up fat reserves in preparation for hibernation through the winter months.

Bats also use roosts during the night as feeding perches. Species that catch large prey items such as moths (*e.g.* brown long-eared bat) often enter buildings to hang up and eat their prey before emerging again to forage. Such feeding perches tend to be obvious from scatterings of bat droppings with moth wings, which the bats discard.

Bats are at their most vulnerable during the summer in their maternity roosts, when disturbance can jeopardise their breeding success. Bats give birth to only one pup per year and young do not breed until the second or third year after birth. This means that if maternity colonies are disturbed there can be serious implications for the conservation status of populations.

Bats are also vulnerable during the winter hibernation period, when disturbance can reduce their chance of survival through the winter at a time when food is in short supply.

This is why there are often only narrow timeframes for bat survey and mitigation work.

Date	10/08/2020			
Temp	23.1°C at start and 23.0°C at the end			
Weather	Warm, dry and clear with a calm air (Beaufort scale 0)			
Ecologists	Calum Cooper & Darla Brown			
Observer	Time	No.	Species	Observation
-	20:18		-	Ecologists commenced observations
-	20:33		-	Sunset
DB	21:20	1	Common pipistrelle	Heard but not seen
DB	21:25	1	Common pipistrelle	Heard but not seen
DB	21:35	1	Common pipistrelle	Heard but not seen
CC, DB	21:36	1	Common pipistrelle	Heard foraging but not seen
CC	21:39	1	Common pipistrelle	Heard but not seen
-	22:03	-	-	Ecologists ceased observations