



Preliminary Roost Assessment

3 Elm Cottages, Old London Road, Copdock, Suffolk IP8 3JD

Simon Downey

Status	Issue	Name	Date
Draft	1	Georgia Arnold BSc (Hons), MSc Graduate Ecologist (Accredited Agent under Natural England Bat Licence Number: 2018-33540-CLS-CLS)	01/07/2023
Reviewed	1.1	Georgia Arnold BSc (Hons), MSc Graduate Ecologist (Accredited Agent under Natural England Bat Licence Number: 2018-33540-CLS-CLS)	02/07/2023
Final	2	Georgia Arnold BSc (Hons), MSc Graduate Ecologist (Accredited Agent under Natural England Bat Licence Number: 2018-33540-CLS-CLS)	02/07/2023

Arbtech Consultant's Contact Details:

Georgia Arnold
Graduate Ecologist
Tel: 07512300377 **Email:** georgiaarnold@arbtech.co.uk
<https://arbtech.co.uk>

Limitations and Copyright

Arbtech Consulting Limited has prepared this report for the sole use of the above-named client or their agents in accordance with our General Terms and Conditions, under which our services are performed. It is expressly stated that no other warranty, expressed or implied, is made as to the professional advice included in this report or any other services provided by us. This report may not be relied upon by any other party without the prior and express written agreement of Arbtech Consulting Limited. The conclusions and recommendations contained in this report are based upon information provided by third parties. Information obtained from third parties has not been independently verified by Arbtech Consulting Limited.

© This report is the copyright of Arbtech Consulting Limited. Any unauthorised reproduction or usage by any person other than the addressee is strictly prohibited.

Industry Guidelines and Standards

This report has been written with due consideration to:

- Chartered Institute of Ecology and Environmental Management (2017). Guidelines for Preliminary Ecological Appraisal. 2nd edition. Chartered Institute of Ecology and Environmental Management, Winchester.
- Chartered Institute of Ecology and Environmental Management (2018). Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater, Coastal and Marine. Version 1.1. Chartered Institute of Ecology and Environmental Management, Winchester.
- Chartered Institute of Ecology and Environmental Management (2017). Guidelines on Ecological Report Writing. Chartered Institute of Ecology and Environmental Management, Winchester.
- Chartered Institute of Ecology and Environmental Management (2020). Guidelines for Accessing, Using and Sharing Biodiversity Data in the UK. 2nd Edition. Chartered Institute of Ecology and Environmental Management, Winchester.
- British Standard 42020 (2013). Biodiversity – Code of Practice for Planning and Development.
- British Standard 8683:2021 (2021). Process for Designing and Implementing Biodiversity Net Gain.

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.

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)

Executive Summary

Arbtech Consulting Limited was instructed by Simon Downey to undertake a Preliminary Roost Assessment (PRA) at 3 Elm Cottages, Old London Road, Copdock, Suffolk IP8 3JD (hereafter referred to as “the site”). The survey was required to inform a planning application for the demolition of the existing double garage and construction of replacement new garage in its place with addition of cart lodge (planning reference: DC/23/01979; hereafter referred to as “the proposed development”).

The following is work you will need to implement or commission to comply with planning policy and legislation. Further information, along with opportunities for biodiversity enhancement, are outlined in Table 5 of this report.

Feature	Survey Results Summary	Impact Assessment	Recommendations
Roosting bats (B1)	B1 has negligible value for roosting bats due to a lack of potential roost features internally and externally on the survey building.	Bats are very unlikely to be roosting within this garage and as such, there are not anticipated to be any impacts on roosting bats as a result of the proposed works.	In the unlikely event that a bat or evidence of bats is discovered during the development all work must stop and a bat licensed ecologist contacted for further advice.
Foraging and commuting bats	The scattered trees and shrubs on site and within the adjacent garden boundaries could be used by local bat populations for foraging and commuting. These could also be used by bats dispersing from nearby roosts outside of the site.	The proposed development will not result in the removal of any habitats which could be used by foraging or commuting bats but will include the use of lighting which could spill on to bat foraging or commuting habitat and deter bats from using these areas.	A low impact lighting strategy will be adopted for the site during and post-development, please refer to Table 5.

Contents

1.0 Introduction and Context.....	6
1.1 Background	6
1.2 Site Location and Landscape Context.....	6
1.3 Scope of the Report	6
2.0 Methodology.....	8
2.1 Desk Study	8
2.2 Field Survey.....	8
2.3 Breeding Birds and Other Incidental Observations.....	8
2.4 Suitability Assessment.....	8
2.5 Limitations	9
3.0 Results and Evaluation	10
3.1 Designated Sites	10
3.2 Historical Records.....	10
3.3 Field Survey Results.....	10
4.0 Conclusions, Impacts and Recommendations.....	16
5.0 Bibliography.....	19
Appendix 1: Proposed Development Plan	20
Appendix 2: Site Location Plan.....	22
Appendix 3: PRA Plan.....	23
Appendix 4: Legislation and Planning Policy Related to Bats	24

1.0 Introduction and Context

1.1 Background

Arbtech Consulting Limited was instructed by Simon Downey to undertake a Preliminary Roost Assessment (PRA) at 3 Elm Cottages, Old London Road, Copdock, Suffolk IP8 3JD (hereafter referred to as “the site”). The survey was required to inform a planning application for the demolition of the existing double garage and construction of replacement new garage in its place with addition of cart lodge (planning reference: DC/23/01979; hereafter referred to as “the proposed development”).

A plan showing the proposed development is provided in Appendix 1.

The aim of the PRA was to determine the presence or evaluate the likelihood of the presence of roosting bats, and to gain an understanding of how bats could use the site for roosting, foraging or commuting. This has been undertaken with due consideration to the “Bat Surveys for Professional Ecologists —Good Practice Guidelines” publication (Collins, 2016). No previous ecology reports have been produced for this site by Arbtech Consulting Ltd or, to the author’s knowledge, by any other consultancy.

1.2 Site Location and Landscape Context

The site is located at National Grid Reference TM 11481 41385 and has an area of approximately 0.16ha comprising one main residential building, one double garage building and associated parking and garden with managed grassland, scattered trees and ornamental shrubs. It is set in a rural context within the village of Copdock in the Babergh district of Suffolk, on the outskirts of the town of Ipswich. It is surrounded by residential and commercial infrastructure to the north and south, including properties with small to medium sized gardens and moderate tree cover to the north and west and a residential care home and hotel to the south with good tree cover. A minor road (London Rd) runs to the east of the site. The wider landscape predominantly comprises arable land with scattered residential and agricultural infrastructure and the built-up areas of the village of Washbrook and the town of Ipswich to the north and north-east. There are scattered pockets of UK BAP priority habitat within 2km, including deciduous woodland, ancient woodland, coastal and floodplain grazing marsh, traditional orchards and woodpasture and parkland; the closest being some small pockets of deciduous woodland and woodpasture and parkland to the south within 200m of the site boundaries. There is a strong network of hedgerows and tree lines within 2km of the site which coalesce in places with the woodland pockets to form linear features providing connectivity for bats through the landscape and good opportunities for foraging. The nearby woodland pockets within 2km may also provide bat roosting value. The scattered trees and shrubs on site and within the adjacent gardens will provide further opportunities for foraging and commuting bats in the locality. A site location plan is provided in Appendix 2.

1.3 Scope of the Report

This report provides a description of all features suitable for roosting, foraging and commuting bats and evaluates those features in the context of the site and wider environment. It further documents any physical evidence collected or recorded during the site survey that establishes the presence of roosting bats. It provides information on possible constraints to the proposed development as a result of bats and summarises the requirements for any further surveys to inform subsequent mitigation proposals, achieve planning or other statutory consent and to comply with wildlife legislation. To achieve this, the following steps have been taken:

- A desk study has been carried out.
- A field survey has been undertaken, including an inspection of built structures, to determine the presence or the suitability of any features which bats could use for roosting and to assess the suitability of the site's bat foraging and commuting habitat.
- An outline of potential impacts on any confirmed or unidentified roosts has been provided, based on the proposed development.
- Recommendations for further surveys and mitigation have been made, along with advice on the requirements for a European Protected Species Licence (EPSL) application if appropriate.
- Opportunities for the enhancement of the site for roosting, foraging and commuting bats have been set out.

2.0 Methodology

2.1 Desk Study

The desk study included a 2km radius review of statutory designated sites with bat qualifying interests and granted EPSL records for bats held on magic.gov.uk database. An assessment of the surrounding landscape structure was also completed using aerial images from Google Earth and OS maps.

2.2 Field Survey

The survey was undertaken by Georgia Arnold (BSc, MSc, Accredited Agent under Natural England Bat Licence Number: 2018-33540-CLS-CLS) on 28/06/2023.

The PRA focussed on one built structure which will be affected by the proposed development as well as providing an overview of the wider site and the surrounding landscape for bat roosting, foraging and commuting habitat.

For any surveyed buildings:

A non-intrusive visual appraisal was undertaken from the ground, using binoculars to inspect the external features of the building for features which bats could use for roosting, including access or egress points and for signs of bat use including droppings, scratch marks, insect remains and urine smear marks. An internal inspection of the building was also made, including the living areas and any accessible roof spaces, using a torch and ladders. The surveyor paid particular attention to the floor and flat surfaces, window shutters and frames, lintels above doors and windows, and carried out a detailed search of numerous features within the roof space.

2.3 Breeding Birds and Other Incidental Observations

The surveyor also made note of any other ecological constraints observed during the survey, notably the likelihood of presence or signs of breeding birds, and the suitability of the site for barn owls.

2.4 Suitability Assessment

Built structures were categorised according to the likelihood of bats being present and the types of roost that the identified features could support. This is summarised in Table 1 below. Roost suitability is classified as high, moderate, low and negligible and dictates any further surveys required before works can proceed.

Table 1: Features of a building that are correlated with use by bats

Classification	Feature of building and its context
High	Buildings or structures with features of particular significance for larger numbers of roosting bats e.g. mines, caves, tunnels, icehouses and cellars. Habitat on site and surrounding landscape of high quality for foraging bats e.g. broadleaved woodland, tree-lined watercourses and grazed parkland. Site is connected with the wider landscape by strong linear features that would be used by commuting bats e.g. river and or stream valleys and hedgerows. Site is proximate to known or likely roosts (based on historical data). Buildings with high suitability could support roosts of high conservation value such as maternity or hibernation roosts.

Moderate	Buildings or structures with one or more features suitable for more regular roosting due to their size, shelter, protection, conditions and surrounding habitat but unlikely to support a roost of high conservation value such as maternity or hibernation roosts. Continuous habitat connected to the wider landscape which could be used by bats for commuting such as lines of trees, linked gardens. Foraging habitat in the surrounding area such as trees, scrub, grassland or water.
Low	Buildings or structures with one or more features suitable for use sporadically by individual or small numbers of bats. Potential roost features may be suboptimal for reasons such as shallow depth, poor thermal qualities or upwards orientation with exposure to inclement weather or predators. Habitat suitable for foraging in close proximity, but largely isolated in the landscape. Or an isolated site not connected by prominent linear features.
Negligible	Unsuitable for use by bats.

2.5 Limitations

It should be noted that whilst every effort has been made to describe the features on site in the context of their suitability for roosting bats, this does not provide a complete characterisation of the site. This survey provides a preliminary view of the likelihood of bats being present. This is based on suitability of the habitats on site and in the local area, the ecology and biology of bats as currently understood, and the known distribution of bats as recovered during the desk study. Bats are highly mobile creatures that switch roosts regularly and therefore the usage of a site by bats can change over a short period of time.

There were no specific limitations to the survey.

A search for historical bat records has not been undertaken at this stage. However, given the location of the site, the nature of the habitats present and the assessed suitability of the site for bats, it is not anticipated that the purchase of historical records data will add any significant weight or alter the conclusions and recommendations outlined in this report.

3.0 Results and Evaluation

3.1 Designated Sites

No statutory designated sites with bat qualifying interests were identified within 2km of the site.

3.2 Historical Records

A search of the magic.gov.uk database for granted EPSLs within a 2km radius of the site has been completed. Displaced bats from licensed sites <2km away from the survey site will find alternative habitat either within the mitigation measures implemented as part of the licence or will relocate to other known roosts sites in close proximity to the licensed site. EPSL records for bats are summarised in Table 2.

Table 2: Granted EPSLs for bats within 2km of the site

EPSL reference	Bat species affected	Impacts allowed by licence
EPSM2012-5184 – approx. 1.37km south-west of the site	Brown long-eared bat Common pipistrelle	Destruction of a resting place

3.3 Field Survey Results

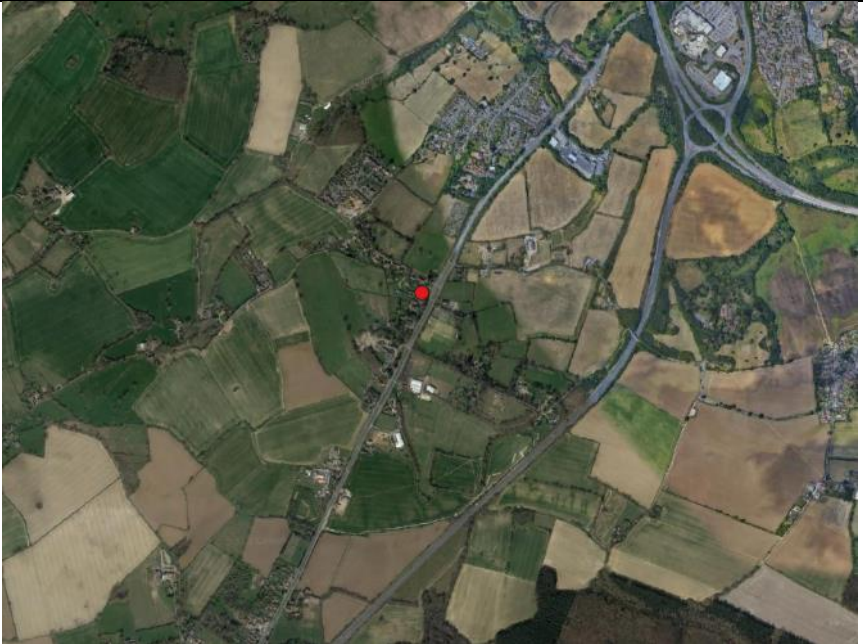
The weather conditions recorded at the time of the survey are shown in Table 3.

Table 3: Weather conditions during the survey

Date:	28/06/2023
Temperature	21°C
Humidity	80%
Cloud Cover	90%
Wind	8.7mph
Rain	None

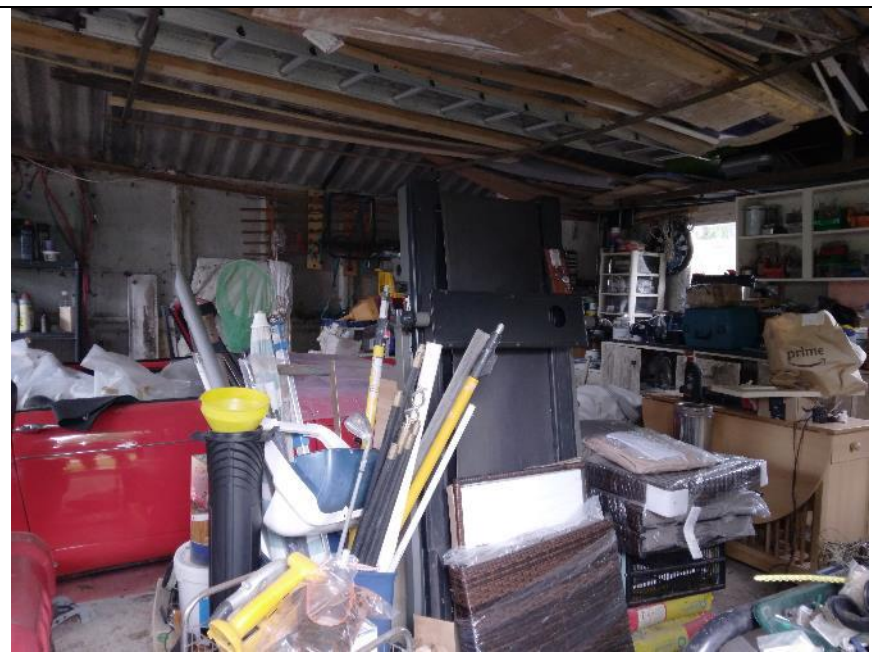

The results of the field survey are detailed in Table 4 below and illustrated in Appendix 3

Table 4: PRA Results

Feature	Description	Photographs
Bat foraging and commuting habitat	<p>The site is set within in a rural context with moderate tree cover in the surrounding area and a network of linear features with good opportunities for foraging and commuting bats. The scattered trees and shrubs on, and adjacent to, the site and the small woodland pockets nearby will provide foraging and commuting opportunities in the locality. The wider landscape predominantly comprises arable land with pockets of UK BAP deciduous and ancient woodland and a strong network of hedgerows and tree lines within 2km. The hedgerow network and scattered tree cover coalesce in places with the woodland pockets to form linear features providing connectivity for bats through the landscape. The small, nearby woodland pockets and other woodland within 2km may also provide bat roosting value. Given the type and extent of habitats recorded on site, the site itself is not assessed to represent a significant resource for foraging and commuting bats in the context of the wider landscape.</p> <p>Map reproduced from Google imagery (2023).</p>	
B1 - overview	<p>B1 is a single storey, detached, double garage with a pitched, gable ended roof clad in corrugated metal roofing. The building structure comprises single-skinned prefab concrete panels over concrete foundations with a steel beam roof support. The concrete structure appears in good condition with no holes or cracks which could be used by bats. The corrugated roofing appears in good condition with no suitable bat roosting sites. This type of roofing is suboptimal for bats as it is prone to extreme temperature fluctuations. There is timber cladding on the upper half of the structure at the eastern and western elevations which appears tight with no gaps. There is a timber weatherboard running below the roofline around the building which appears in good condition and lies flat to the structure with no gaps. The doors and windows around the building are wood framed and are tightly fitted with no gaps or bat roosting sites.</p>	<p>No photo (see elevation photos below).</p>

<p>B1 – southern elevation</p>	<p>There are no roost features or bat evidence on the southern elevation.</p>	
<p>B1 – eastern elevation</p>	<p>There are no roost features or bat evidence on the eastern elevation.</p>	

<p>B1 – northern elevation</p>	<p>There are no roost features or bat evidence on the northern elevation.</p>	
<p>B1 – western elevation</p>	<p>There are no roost features or bat evidence on the western elevation.</p>	

B1 – interior	<p>The garage interior comprises the single skinned concrete panels with no internal lining. The structure appears in good condition with no suitable bat roosting sites. Daylight enters the interior space through the windows around the building and two large windows on the double garage doors. The windows subject the internal space to light disturbance which is likely to deter roosting bats. The floor of the garage is concrete and there are numerous stored items present. The floor and stored items were searched for evidence of bats and no live bats or bat evidence were found.</p>	 A photograph showing the interior of a cluttered garage. The ceiling is made of single-skinned concrete panels. The floor is concrete and covered with various items, including a red car, a yellow bucket, a blue bucket, and several long-handled tools. There are shelves in the background with various items on them. The lighting is bright, likely from windows or doors.
B1 interior - roof	<p>There is no loft space within the roof of the garage as the room extends into the roof void. The roof void comprises corrugated metal roofing over steel support beams with no suitable bat roosting sites.</p>	 A photograph showing the roof void of the garage. The ceiling is made of corrugated metal roofing over steel support beams. There is no loft space. A light bulb is visible hanging from the ceiling.

B1 – suitability assessment	B1 has negligible value for roosting bats due to a lack of roost features present internally and externally on the building. No live bats or evidence of bats were found internally or externally on the survey building.	N/A
B1 - breeding birds and other incidental observations	No evidence of nesting birds was found internally or externally on the survey building and there do not appear to be any internal or external features on the building suitable for nesting birds.	N/A

4.0 Conclusions, Impacts and Recommendations

Taking the desk study and field survey results into account, Table 5 presents an evaluation of the value of the site for bats and also details any other ecological constraints identified such as nesting birds in relation to the proposed development which will comprise the demolition of the existing double garage and construction of replacement new garage in its place with addition of cart lodge (planning reference: DC/23/01979).

Table 5: Evaluation of the site for bats and any other ecological constraints

Building	Survey Results Summary	Impact Assessment	Recommendations	Biodiversity Enhancement Opportunities ¹
Roosting bats (B1)	<p>The garage (B1) has negligible value for roosting bats due to a lack of potential roost features internally and externally on the building.</p> <p>No evidence of bats was found during the survey visit.</p>	Bats are very unlikely to be roosting within this garage and as such, there are not anticipated to be any impacts on roosting bats as a result of the proposed demolition and construction of replacement garage building.	In the unlikely event that a bat or evidence of bats is discovered during the development all work must stop and a bat licensed ecologist contacted for further advice.	<p>The installation of one bat box at the site will provide additional roosting habitat for bats.</p> <p>The bat box will be installed on mature trees around the site or on the new garage building post construction. Bat boxes should be positioned 3-5m above ground level facing in a south or south-westerly direction with a clear flight path to and from the entrance, away from artificial light.</p> <p>The bat boxes will be a specification suitable for crevice dwelling species, such as the NHBS Beaumaris Woodstone Bat Box. Or a similar alternative brand.</p>

¹ The Local Planning Authority has a duty to ask for enhancements under the NPPF (2021).

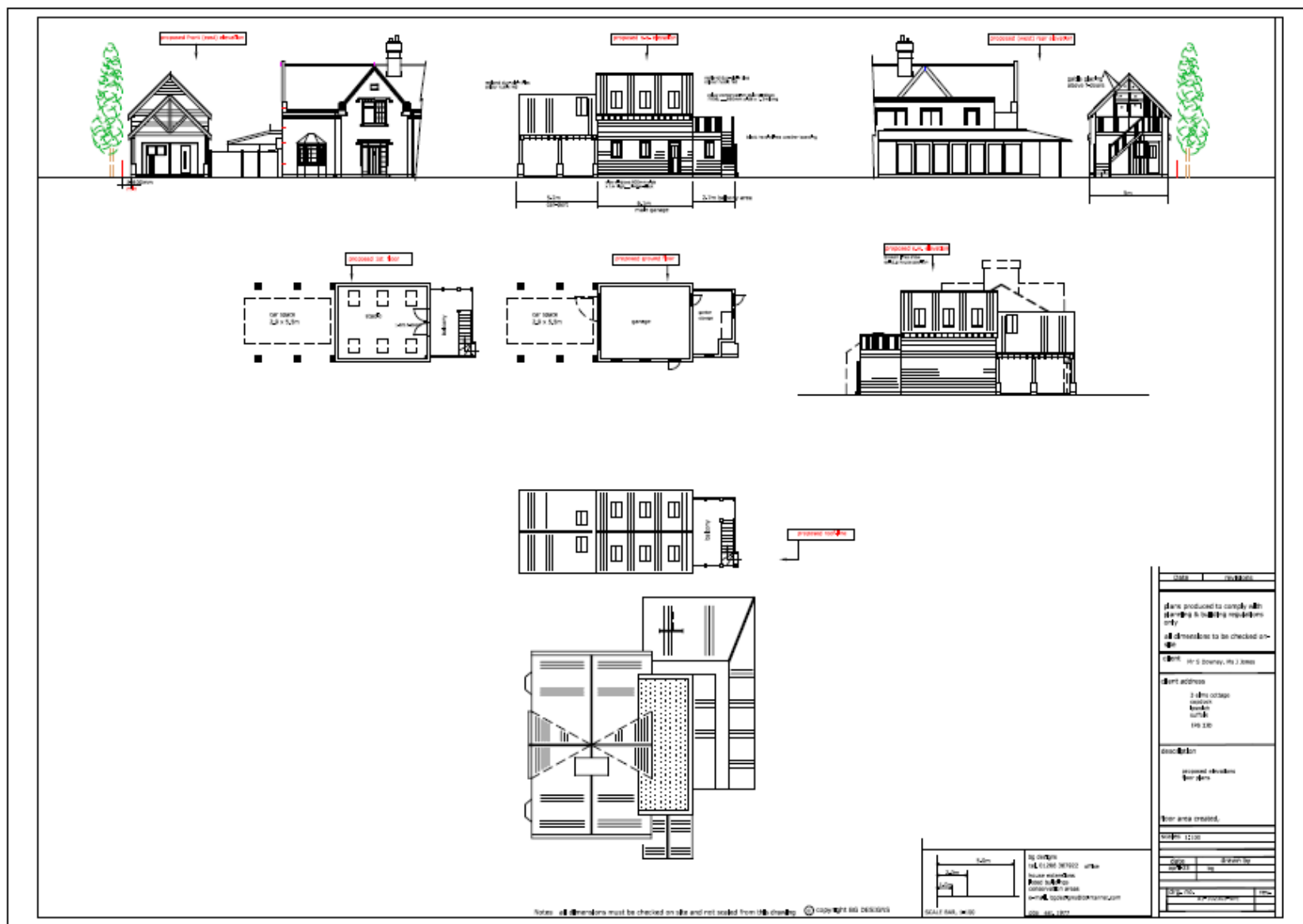
<p>Foraging and commuting bats</p>	<p>The scattered trees and shrubs on site and within the adjacent garden boundaries could be used by local bat populations for foraging and commuting. These could also be used by bats dispersing from nearby roosts outside of the site.</p>	<p>The proposed development will not result in the removal of any habitats which could be used by foraging or commuting bats. However, it will include the use of lighting which could spill on to bat foraging or commuting habitat and deter bats from using these areas.</p>	<p>A low impact lighting strategy will be adopted for the site during and post-development, which will include the following measures:</p> <ul style="list-style-type: none"> • Light spill on to nearby trees and shrubs should be avoided. • Use narrow spectrum light sources to lower the range of species affected by lighting. • Use light sources that emit minimal ultra-violet light. • 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 should be of a warm / neutral colour temperature <4,200 kelvin. • Not use bare bulbs and any light pointing upwards. The spread of light will be kept in line with or below the horizontal. • Light spill will be reduced via the use of low-level lighting used in conjunction with hoods, cowls, louvers and shields. Lights will also be directional to ensure that light is directed to the intended areas only. • External lighting will be on PIR sensors that are 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. • Wall lights and security lights will be 'dimnable' and set to the lowest light intensity settings. There are several products on the market that allow the control of the light intensity and the duration that the lights are on. All lighting on the developed site will make use of the most up to date technology available. 	<p>The following habitat creation and enhancement opportunities could be incorporated into the proposed development which would be beneficial for foraging bats:</p> <ul style="list-style-type: none"> • Planting of native tree, shrub and hedgerows to increase foraging opportunities.
------------------------------------	--	---	--	---

Nesting birds (B1)	The garage (B1) offers no opportunities for nesting birds.	None.	None.	<p>The installation of a minimum of one bird box on mature trees around the site or on the new garage building post construction will provide additional nesting habitat for birds e.g.</p> <p>Vivara Pro woodstone oval nest box Woodstone Nest Box Or a similar alternative brand.</p> <p>General purpose bird boxes, such as the Woodstone Nest Box, should be positioned 3m above ground level where they will be sheltered from prevailing wind, rain and strong sunlight.</p> <p>Species-specific bird boxes should be installed in line with manufacturers specifications.</p>
Other ecological constraints	None identified.	N/A	N/A	N/A

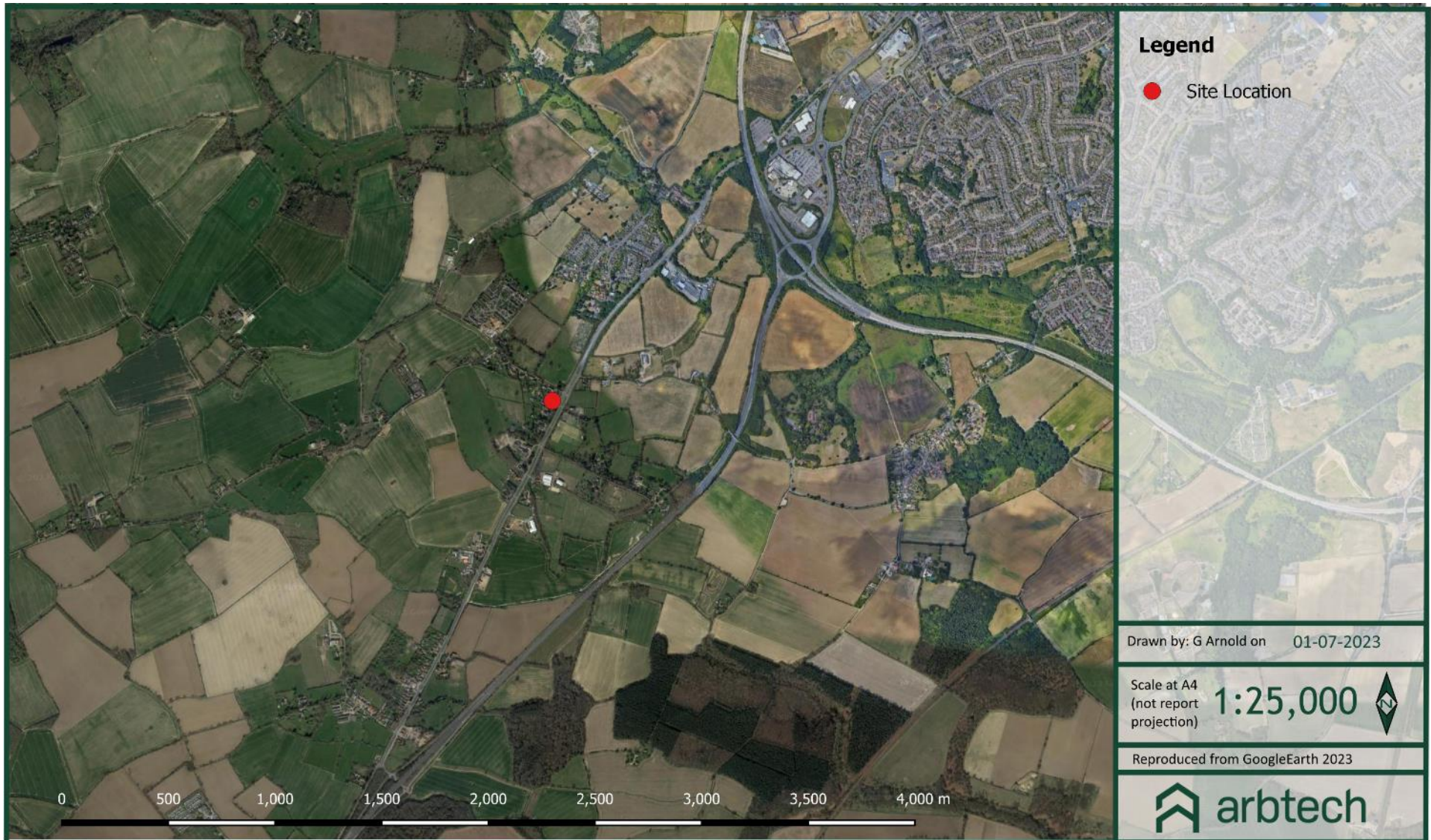
5.0 Bibliography

- Babergh and Mid Suffolk Joint Local Plan (2020). <https://www.babergh.gov.uk/planning/planning-policy/new-joint-local-plan/>
- Collins, J. (2016). Bat Surveys for Professional Ecologists —Good Practice Guidelines, 3rd edition, Bat Conservation Trust, London.
- Garland, L. & Markham, S. (2008) Is Important Bat Foraging and Commuting Habitat Legally Protected? <http://biodiversitybydesign.co.uk/cmsAdmin/uploads/protection-for-bat-habitat-sep-2007.pdf>
- Google Earth. Accessed on 01/07/2023.
- Institution of Lighting Professionals (2018). Guidance Note 08/18 Bats and Artificial Lighting in the UK. Bats and the Built Environment Series Publication: http://www.bats.org.uk/news.php/406/new_guidance_on_bats_and_lighting.
- Magic Database. <http://www.magic.gov.uk/MagicMap.aspx> Accessed on 01/07/2023.
- Mitchell-Jones, A.J. (2004). Bat Mitigation Guidelines. English Nature, Peterborough.
- Natural England Designated Sites View. <https://designatedsites.naturalengland.org.uk/SiteSearch.aspx> Accessed on 01/07/2023.
- Suffolk Local Biodiversity Action Plan - Grouped plan for bats (2012). <https://www.suffolkbis.org.uk/species/mammals-bats>
- Wray, S., Wells, D., Long, E., Mitchell-Jones, T (2010) Valuing Bats in Ecological Impact Assessment. IEEM In-Practice. Number 70 (December 2010). Pp. 23-25.

Proposed:



Appendix 2: Site Location Plan



Appendix 3: PRA Plan



Appendix 4: Legislation and Planning Policy Related to Bats

LEGAL PROTECTION

All species of bat are fully protected under *The Conservation of Habitats and Species Regulations 2017* (as amended) 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

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.

LOCAL PLANNING POLICY

Babergh and Mid Suffolk Joint Local Plan (2020)

The Babergh and Mid Suffolk Joint Local Plan (2020) can be viewed here: <https://www.babergh.gov.uk/planning/planning-policy/new-joint-local-plan/>

The following planning policies have implications for developers in relation to bats:

- Policy SP09 – Enhancement and Management of the Environment:
 - The Council will require development to support the enhancement and management of the natural and local environment and networks of green infrastructure, including: landscape; biodiversity, geodiversity and the historic environment and historic landscapes through detailed development management policies set out in the Plan, including environmental protection measures, such as biodiversity net gain and sustainable urban drainage systems.
- Policy LP03 - Residential Extensions and Conversions:
 - Proposals for development within the curtilage of existing dwellings, extensions to existing dwellings or conversions within residential dwelling curtilage may be permitted providing they:
 - Would not cause the felling of or any damage to any significant trees and hedgerows that contribute to the environmental quality and visual amenity benefits of the locality. Ecology/biodiversity may be a material consideration as part of the assessment.

- Policy LP18 - Biodiversity & Geodiversity:
 - All development should follow a hierarchy of seeking firstly to; enhance habitats, avoid impacts, mitigate against harmful impacts, or as a last resort compensate for losses that cannot be avoided or mitigated for. Adherence to the hierarchy should be demonstrated. Development should:
 - Conserve, restore and contribute to the enhancement of biodiversity and geological conservation interests including priority habitats and species. Enhancement for biodiversity should be commensurate with the scale of development.
 - Plan positively for the creation, protection, enhancement and management of local networks of biodiversity with wildlife corridors that connect areas. Where possible, link to existing green infrastructure networks and areas identified by local partnerships for habitat restoration or creation so that these ecological networks will be more resilient to current and future pressures.
 - Identify and pursue opportunities for securing measurable net gains, equivalent of a minimum 10% increase, for biodiversity. Where biodiversity assets cannot be retained or enhanced on site, the Councils will support 'biodiversity offsetting' to deliver a net gain in biodiversity off-site in accordance with adopted protocols.
 - Apply additional measures to assist with the recovery of species listed on S41 of the NERC Act 2006.
 - Development which would have an adverse impact on species protected by legislation, or subsequent legislation, will not be permitted unless there is no alternative and the local planning authority is satisfied that suitable measures have been taken to:
 - Reduce disturbance to a minimum.
 - Maintain the population identified on site.
 - Provide adequate alternative habitats to sustain at least the current levels of population.
 - Where appropriate, the local planning authority will use planning obligations and/or planning conditions to achieve appropriate mitigation and/or compensatory measures and to ensure that any potential harm is kept to a minimum.

Suffolk Local Biodiversity Action Plan

The Suffolk Local Biodiversity Action Plan (Grouped plan for bats) can be viewed here: <https://www.suffolkbis.org.uk/species/mammals-bats>

The following bat species are included in the plan:

- Barbastelle
- Brandts
- Brown long-eared
- Common Pipistrelle

- Daubentons
- Leislars
- Lesser horseshoe
- Nathusius' pipistrelle
- Natterer's
- Noctule
- Serotine
- Soprano pipistrelle
- Whiskered

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:

- 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;
- scientific and educational purposes;

- ringing or marking; and,
- 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.