



SILVER BIRCHES, NETLEY

LOW IMPACT PRELIMINARY ECOLOGICAL APPRAISAL REPORT

01/11/2021

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PROJECT NO.: SILVER2021

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## Executive Summary

SoEcology Ltd was commissioned by Mr Steve Clayton to produce a Low Impact Preliminary Ecological Appraisal Report (PEAR) to support a planning application for Silver Birches, Hound Road, Netley, SO31 5FX, grid reference: SU 46803 08711.

The proposals are for the renovation of the property. The Site is approximately 0.2ha in size with the construction zone restricted to the footprint of the existing dwelling, with no extensions into the surrounding garden proposed.

An Extended Phase 1 Habitat survey was not deemed necessary considering the nature of the proposals. The only ecological features for consideration within the Site are bats and birds and therefore, a Preliminary bat Roost Assessment (PRA) was undertaken in October 2021.

The PRA identified the property to support roosting bat features, which are predominantly located on the rear elevation. The roof itself is in very good condition, with no slipped or missing tiles and dense moss cover offering no bat access behind the tiles. In accordance with current Bat Conservation Trust guidance, one dusk emergence survey and one dawn re-entry survey are recommended for the 2022 survey season.

This PEAR report is not suitable for planning submission and is to be superseded by an Ecological Impact Assessment report once the bat surveys have been completed to confirm presence/likely absence of bat roost(s) and to provide a methodology for mitigation, where applicable. Compensation and enhancement recommendations are provided in this report with the aim of achieving a new gain in biodiversity in accordance with the National Planning Policy Framework and Local Policy 26.NC.

# Contents

|                                                              |    |
|--------------------------------------------------------------|----|
| Executive Summary .....                                      | 1  |
| 1 Introduction .....                                         | 3  |
| 2 Planning Policy and Legislation .....                      | 4  |
| 2.1 National Planning Policy .....                           | 4  |
| 2.2 Local Planning Policy .....                              | 5  |
| 2.3 International Designated Sites .....                     | 5  |
| 2.4 Nationally Designated Sites .....                        | 6  |
| 2.5 Protected Species Legislation .....                      | 6  |
| 3 Methodology .....                                          | 8  |
| 3.1 Scope of the Assessment .....                            | 8  |
| 3.2 Desk Study .....                                         | 8  |
| 3.3 Field Survey .....                                       | 8  |
| 3.4 Assessment .....                                         | 9  |
| 4 Baseline Ecological Conditions .....                       | 11 |
| 4.1 Designated Sites .....                                   | 11 |
| 4.2 Habitats .....                                           | 12 |
| 4.3 Protected Species .....                                  | 12 |
| 5 Potential Ecological Constraints and Recommendations ..... | 15 |
| 5.1 Designated Sites .....                                   | 15 |
| 5.2 Protected Species .....                                  | 15 |
| 6 Conclusions .....                                          | 17 |
| 7 APPENDICES .....                                           | 19 |
| Appendix 1 .....                                             | 19 |
| Appendix 2 .....                                             | 27 |

# 1 Introduction

SoEcology Ltd was commissioned by Mr Steve Clayton to produce a Low Impact Preliminary Ecological Appraisal Report (PEAR) to support a planning application for Silver Birches, Hound Road, Netley, SO31 5FX, grid reference: SU 46803 08711.

The purpose of the Low Impact Preliminary Ecological Appraisal Report is to inform the client about the key ecological constraints and opportunities associated with the project, possible mitigation requirements and any detailed further surveys required to inform an Ecological Impact Assessment (EclA). Under normal circumstances it is appropriate to submit a PEAR in support of a planning application. The PEAR report has been named “Low Impact” because the nature of the proposals means that the only ecological features requiring further consideration are bats and birds.

The Site is approximately 0.2ha in size with the renovation works restricted to the footprint of the existing property.

The purpose of the Low Impact PEAR report is:

- To identify the likely ecological constraints associated with a project;
- To identify any mitigation measures likely to be required;
- To identify any additional surveys that may be required to inform an Ecological Impact Assessment (EclA); and
- To identify the opportunities offered by a project to deliver ecological enhancement (CIEEM, 2017).

This report was written by Sophie Lancaster, an Ecologist working in private consultancies since 2013. Sophie has completed a masters (MSc) in Environmental Consultancy and is an Associate member of the Chartered Institute of Ecology and Environmental Management (ACIEEM). Sophie holds protected species licences for bats (level 2 class licence) and great crested newt (level 1 class licence).

## 2 Planning Policy and Legislation

This section does not provide a comprehensive list of nature conservation policies and legislation within the United Kingdom. The policies and legislation listed below are those relevant to the project only.

### 2.1 National Planning Policy

The most recent National Planning Policy Framework (NPPF) (Ministry of Housing, communities and Local Government, 2019) was published in February 2019. The NPPF sets out the Government's planning policies for England and how these should be applied. Paragraphs of relevance within the NPPF include:

Paragraph 170 of the NPPF states that *"Planning policies and decisions should contribute to and enhance the natural and local environment by:/... minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures."*

Paragraph 174 of the NPPF states that *"To protect and enhance biodiversity and geodiversity, plans should:/... 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."*

Paragraph 175 of the NPPF states that *"When determining planning applications, local planning authorities should apply the following principles:*

- a) 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;*
- b) development on land within or outside a Site of Special Scientific Interest, and which is likely to have an adverse effect on it (either individually or in combination with other developments), should not normally be permitted. The only exception is where the benefits of the development in the location proposed clearly outweigh both its likely impact on the features of the site that make it of special scientific interest, and any broader impacts on the national network of Sites of Special Scientific Interest;*
- c) 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<sup>1</sup> and a suitable compensation strategy exists; and*
- d) 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.*

Paragraph 176 of the NPPF also states that potential Special Protection Areas, possible Special Areas of Conservation and proposed Ramsar sites are to be afforded the same protection as designated Special Protection Areas, Special Areas of Conservation and Ramsar sites.

The NPPF is also complemented by the Circular 06/2005: Biodiversity and Geographical Conservation – Statutory Obligations and Their Impacts Within The Planning System (Office of the Deputy Prime

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<sup>1</sup> For example, infrastructure projects (including nationally significant infrastructure projects, orders under the Transport and Works Act and hybrid bills), where the public benefit would clearly outweigh the loss or deterioration of habitat.

Minister, 2005). Paragraph 99 states that *“It is essential that the presence or otherwise of protected species, and the extent that they may be affected by the proposed development, is established before the planning permission is granted, otherwise all relevant material considerations may not have been addressed in making the decision.”*

## 2.2 Local Planning Policy

Local planning policy within Eastleigh Borough is provided by the saved policies within the Adopted Local Plan Review 2001 – 2011 with seven policies referring specifically to ecology and biodiversity:

- I. Policy 21.NC: European Nature Conservation Designations. “Development which is likely to adversely affect the integrity of a European nature conservation site will not be permitted”
- II. Policy 22.NC: Sites of Special Scientific Interest. This policy prevents development which will have a direct or indirect adverse impact on SSSIs unless the reasons for development clearly outweigh the harm to the nature conservation value of the site.
- III. Policy 23.NC: Sites of Importance for Nature Conservation. This policy prevents development likely to have a direct or indirect adverse impact on a SINCC unless it can be demonstrated that the benefits of the development clearly outweigh the need to safeguard the site and that appropriate mitigation measures can be taken to mitigate for the adverse effects.
- IV. Policy 24.NC: Protected Species. Development will not be permitted where it would adversely affect species or habitat protected by legislation unless suitable mitigation can be demonstrated.
- V. Policy 25.NC: Biodiversity. Refers to the protection of habitats or features of importance for wild flora and fauna unless benefit outweighs impacts, impacts are unavoidable and mitigation is incorporated.
- VI. Policy 26.NC: Biodiversity. Seeks to enhance features and habitats of nature conservation importance through development proposals.
- VII. Policy 27.NC: Local Nature Reserves. Specifically lists a number of Local Nature Reserves where development preventing their designation would be refused.

Further guidance on planning policy in relation to development within Eastleigh Borough is provided by the adopted the Biodiversity SPD December 2009. The forthcoming Eastleigh Borough Local Plan 2011-2029 revised pre-submission draft contains a single overarching policy referring to ecology and biodiversity Policy DM9 which largely reflects the existing adopted policy framework with specific reference also made in relation to the Solent Disturbance and Mitigation Project (SDMP).

## 2.3 International Designated Sites

Internationally designated sites include Special Protection Areas (SPAs), Ramsar sites and Special Areas of Conservation (SAC).

SPAs, Ramsar sites and SACs form the Natura 2000 network of sites of nature conservation significance within Europe. SACs are designated under the Habitats Directive<sup>2</sup> to ensure the favourable conservation status of each habitat type and species. SPA's are designated under the Birds Directive

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<sup>2</sup> Council Directive on the conservation of wild birds of 2nd April 1979 (79/409/EEC) and Council Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora of 21st May 1992

and are designated for 194 threatened species, all of which being migratory bird species. Ramsar are afforded to wetlands of international importance, designated under the Ramsar Convention.

Within the UK these designations are protected under the Conservation of Habitats and Species Regulations 2017 (as amended) and Local Planning Authorities (LPA) are required to review all planning applications for potential to affect internationally designated sites. The application site does not need to be on or adjacent to an internationally designated site to have a potential impact. Where an LPA deems a significant effect on a European site to be likely, an Appropriate Assessment is to be undertaken to determine the implications of the development for the site's conservation objectives.

## 2.4 Nationally Designated Sites

National designations include Sites of Special Scientific Interest (SSSI) and National Nature Reserves (NNR).

In accordance to Section 28 of the Wildlife and Countryside Act 1981 (as amended) and Schedule 9 of the Countryside and Rights of Way Act 2000, LPAs are required to notify Natural England of a developments potential to likely damage a SSSI before granting planning permission. If a development is anticipated to affect a national designation an Appropriate Assessment is not required, however, the LPA will determine appropriate course of action to prevent adverse effects on the designation. Natural England will be consulted whether or not the application site is located on or adjacent to a SSSI, as indirect effects are also considered. SSSIs designations also frequently cover the same footprint of international designations.

## 2.5 Protected Species Legislation

### 2.5.1 Birds

All birds, their nests and eggs are protected under the Wildlife and Countryside Act 1981 (as amended), which makes it an offence to:

- a) Intentionally kill, injure or take a wild bird;
- b) Possess a wild bird or the egg of a wild bird;
- c) Damage and destroy or take an egg of a wild bird;
- d) Take, damage or destroy a nest whilst in use;
- e) Advertise or sell any wild bird or their eggs; and
- f) Use prohibited methods to kill or take wild birds.

Additional protection is offered to birds listed under Schedule 1 of the Wildlife and Countryside Act, such as barn owl *Tyto alba*. The Schedule makes it an offence to intentionally or recklessly disturb listed birds when nest building, in or near a nest that contain young and disturb dependent young.

If found guilty of any of the above offences you can be sent to prison for up to six months and receive an unlimited fine.

Additional protection is offered to birds listed under Annex I of the Birds Directive. Species listed on Annex I are those where their conservation requires the designation of SPA's. Although it is important to note that the recording of the species listed does not automatically qualify a site for SPA status. The species listed include a large number of waders found along the south coast of England, as well as, but not limited to, kingfisher *Alcedo atthis*, Dartford warbler *Sylvia undata*, nightjar *Caprimulgus euorpaus* and stone curlew *Burhinus Oedicnemus*.

### 2.5.2 Bats

All UK species of bat are fully protected as a European Protected Species under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended) and Schedule 2 of the Conservation of Habitats and Species Regulations 2017 (as amended), which makes it an offence to:

- a) Deliberately capture, injure or kill;
- b) Deliberately disturb a bat while in a structure or place of shelter or protection;
- c) Damage or destroy a breeding site or resting place;
- d) Obstruct access to their resting or sheltering place; and
- e) Keep, transport, sell or exchange, or offer for sale or exchange, any live or dead animal.

If found guilty of any of the above offences you can be sent to prison for up to six months and receive an unlimited fine.

Four British bat species are afforded additional protection under Annex II of the Habitats Directive. These species include barbastelle *Barbastella barbastellus*; Bechstein's bat *Myotis bechsteinii*; greater horseshoe bat *Rhinolophus ferrumequinum*; and, lesser horseshoe bat *Rhinolophus hipposideros*. Species listed on Annex II are those where their conservation requires the designation of SACs.

## 3 Methodology

This section of the report details the scope of the assessment, data acquired, and surveys undertaken.

### 3.1 Scope of the Assessment

For all projects it is imperative that the zone of influence is established. CIEEM defines zone of influence to be “*the area over which ecological features may be affected by biophysical changes as a result of the proposed project and associated activities*” (CIEEM, 2018). The zone of influence is determined by a suitably experienced ecologist, taking into consideration the site proposals, desk study and field survey results. The zone of influence differs for each ecological feature<sup>3</sup>. Section 4.0 identifies the projects zone of influence for each ecological feature.

The scope of the assessment initially takes into consideration all possible ecological features that have potential to be impacted by the proposal. The baseline ecological conditions (Section 4.0) includes the outcomes of the desk study and field survey(s), which results in a process of elimination, with ecological features assessed to be likely absent not considered further in the report. Scoping is an ongoing process influenced by further surveys and assessment. Further surveys are required where an impact on an ecological feature cannot be avoided.

### 3.2 Desk Study

#### 3.2.1 Local Record Centre

Hampshire Bat Group (HBG) was contacted in October 2021 to provide data on bat activity recorded within a 2km radius of the Site.

#### 3.2.2 Multi-Agency Geographic Information for the Countryside

Defra’s Multi-Agency Geographic Information for the Countryside (MAGIC) online resource was also accessed on 27<sup>th</sup> October 2021. A search was undertaken to identify any statutory designated sites within a 2 kilometre (km) radius and to detect whether the Site is located within the varying buffer zones of internationally designated sites, which require additional consideration in regards to in-direct effects. The Impact Risk Zones (IRZ) were also obtained from MAGIC, which are used to help guide and assess planning applications for likely effects on SSSIs. MAGIC was also accessed to identify any European Protected Species (EPS) mitigation licence applications for bats within a 2km radius.

### 3.3 Field Survey

The assessment for protected species included a Preliminary bat Roost Assessment (PRA), where the building on-site is assessed for its roosting bat suitability in accordance with the Bat Conservation Trust (BCT) best practice guidance<sup>4</sup>. This includes a search for potential roosting features such as lifted tiles and fascia’s within the buildings and internal inspection for evidence of bats such as droppings and any access opportunities for bats using a high powered torch. All buildings roosting bat suitability is scored as either negligible, low, medium, high or confirmed in accordance with the BCT criteria, which determines the necessary mitigation requirements.

An Extended Phase 1 Habitat survey was not deemed necessary considering the nature of the proposals; with the renovation restricted to the footprint of the existing property. In this instance the only ecological features for consideration are bats and birds.

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<sup>3</sup> Ecological features – habitats, species and ecosystems that may be affected given the nature of the proposals and geographical location of the application site.

<sup>4</sup> Collins, J.(ed.)(2016) Bat Surveys for Professional Ecologists: Good Practice Guidelines (3<sup>rd</sup> edn). The Bat Conservation Trust, London

The PRA survey was undertaken by SoEcology Ltd Ecologist Sophie Lancaster. Sophie attained an MSc in environmental Consultancy in 2013, since which she has worked full-time as an Ecologist for private consultancies. Sophie is an Associate member of the Chartered Institute of Ecology and Environmental Management (CIEEM). The survey was undertaken on 5<sup>th</sup> October 2021 at 10am and for the duration of the survey the weather was 13°C, 10% cloud cover, sunny and wind speed best described as light breeze in accordance to the Beaufort scale.

### 3.3.1 Limitations

The survey was undertaken during suitable conditions and full access to the loft space was possible. There is a length of eaves cupboards which are not accessible along the eastern elevation, however, this is not considered a limitation as no entry/egress features were recorded along the eastern elevation during the external survey. There are no limitations to the PRA.

## 3.4 Assessment

The assessment evaluates the importance of ecological features and the impact and residual effect of a development in accordance to CIEEM (2018) guidance<sup>5</sup>.

The importance of an ecological feature is based on geographical context, in accordance with the following scale of reference:

- International and European
- National
- Regional
- County
- River Basin District
- Local
- Site

The geographical evaluation is determined by professional judgement and legislation and policy documents and data on the distribution of species and habitats. Ecological features assessed to be of site value in Section 4.0 are not considered to be important and their loss is not deemed to have a significant negative impact to overall biodiversity. Subsequently, habitats of site value are not considered for further assessment of effects or mitigation in Section 5. It is important to note that habitats are assessed separately to species and a habitat assessed to be of site value may have potential or be confirmed to support protected species and will indirectly undergo further assessment regarding said specie(s).

Within this PEAR the assessment process ends with providing geographical scale of importance within Section 4, survey results. Where further surveys are required, a geographical scale is not provided as this can only be established once the further surveys are undertaken and the conservation status of the protected species/habitat is confirmed.

Once the further survey requirements identified within this report are completed, this PEAR can be superseded with an ECIA. The assessment process will continue within the ECIA report by assessing potential impacts, provide mitigation recommendations in response and, determining residual impact (likely impact if mitigation measures are implemented) at a geographical scale. Where a negative

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<sup>5</sup> CIEEM (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.

residual impact is identified compensation measures and enhancement recommendations will be provided.

## 4 Baseline Ecological Conditions

This section of the report details the baseline ecological conditions of the Site based on the desktop study, PRA and bat survey. Photographs of the property are available in Appendix 1 and a Roosting bat Features Plan is provided in Appendix 2. An assessment of ecological value at a geographical scale is made for each ecological feature based on the survey results.

### 4.1 Designated Sites

The Site is located approximately 1.2km east (at it's closest point) of Solent and Southampton Water SPA/Ramsar site and Lee-on-The Solent to Itchen Estuary SSSI. The SPA and Ramsar site are notable for their unusual double tide flow and the inclusion of wetland habitats characteristic of the biogeographic region: saline lagoons, saltmarshes, estuaries, intertidal flats, shallow coastal waters, grazing marshes, reedbeds, coastal woodland and rocky boulder reefs. At least 33 British Red Data Book invertebrates and at least eight British Red Data Book plants are represented on-site. The site is also designated for regularly supporting over 20,000 waterfowl. The site is ornithologically important for supporting populations of Annex I bird species:

- Mediterranean gull *Larus melanocephalus*
- Sandwich tern *Sterna sandvicensis*
- Common tern *S. hirundo*
- Little tern *S. albifrons*
- Roseate tern *S. dougalli*

The site also qualifies as a Ramsar and SPA for the supporting population of European importance of the following migratory bird species:

- Dark-bellied brent goose *Branta bernicla bernicla*
- Eurasian teal *Anas crecca*
- Ringed plover *Charadrius hiaticula*
- Black-tailed godwit *Limosa limosa islandica*

Lee-on-Solent to Itchen Estuary SSSI is designated for its array of scarce and valuable habitats, such as intertidal muds, saltmarsh, reedbed, marshy grasslands, woodland and vegetated shingle. The designation is also of international importance for its over-wintering dark-bellied brent geese, and of national importance for great-crested grebe, teal, wigeon, black-tailed godwit, dunlin, grey plover, ringed plover and redshank. The SSSI also supports an outstanding assemblage of nationally scarce coastal plants and high densities of benthic invertebrates.

Solent Maritime SAC is located 1.39km east and is designated for its Annex 1 habitats of:

- Estuaries
- Spartina swards *Spartinion maritimae*
- Atlantic salt meadows *Glauco-Puccinellietalia maritimae*.

Annex 2 habitats also present as a qualifying feature include:

- Sandbanks which are slightly covered by sea water all the time
- Mudflats and sandflats not covered by seawater at low tide
- Coastal lagoons
- Annual vegetation of drift lines
- Perennial vegetation of stony banks

- Salicornia and other annuals colonizing mud and sand
- Shifting dunes along the shoreline with *Ammophila arenaria* ("white dunes").

An Annex II species which is also a qualifying feature for the SAC designation is Desmoulin's whorl snail *Vertigo moulinsiana*.

Westwood Woodland Park LNR is also located approximately 960m north-west. The LNR supports ancient woodland and grassland habitat supporting an important assemblage of wildlife.

Lincegrove and Hackett's Marshes SSSI is located 1.39km east, of conservation significance as structurally the marshes are one of the best examples of mature saltmarsh on the south coast.

There are a number of international designations within England that have adopted a mitigation strategy, whereby any development within an agreed Zone of Influence (Zoi) that will result in a net increase in dwellings needs to provide mitigation and compensation measures (The Solent Recreation Mitigation Partnership, 2017). The Site is located within the Zoi of Solent and Southampton Water SPA and Solent Maritime SAC.

## 4.2 Habitats

The renovation proposals are to be retained within the properties existing footprint, with no extension proposed.

The residential property is a bungalow with an extension into the existing roof void and dormer windows protruding out from the interlocking roman clay tiles. The elevations are white rendered with wooden shiplap located on the top half of the front and rear gable ends. At the front of the property there is a uPVC conservatory and the window and door frames of the property are also made of uPVC. The dormer windows also comprise uPVC panelling and flat felt roofs. The soffits and barge boards are however wooden.

The habitat immediately surrounding the property is predominantly hardstanding of paving slabs, with manicured lawn wrapping around the north-west corner. An arboricultural survey has been undertaken of the surrounding trees and appropriate mitigation has been provided to avoid harming any trees and their root systems.

Overall, the habitats within the construction zone are assessed to be of **site value** and are not considered further in this report.

## 4.3 Protected Species

### 4.3.1 Birds

No evidence of nesting birds was recorded during the survey. The soffits are in good condition and do not provide any nesting opportunities. The only potential nesting opportunity is provided by the chimney, which are known to be favoured by species such as jackdaw *Corvus monedula*.

Overall, nesting birds are considered to be **likely absent** from the property.

### 4.3.2 Bats

#### Desk Study

HBG returned records of at least nine bat species within a 2km radius within the last 10 years. No rare species that are afforded extra protection under Annex II of the Habitats Directive have been recorded. Species recorded within a 2km radius of the Site include soprano pipistrelle *Pipistrellus pygmaeus*, noctule *Nyctalus noctula*, common pipistrelle *P. pipistrellus*, serotine *Eptesicus serotinus*, brown long-

eared bat *Plecotus auritus*, Daubenton's bat *Myotis daubentonii*, *Myotis* species, Natterer's bat *M. nattereri*, Nathusius's pipistrelle *P. nathusii* and Whiskered/Brandt's bat *M. mystacinus*/*M. brandtii*.

HBG returned four confirmed bat roost locations within a 2km radius of the Site. The closest bat roost record is from 2017, of brown long-eared bat located approximately 1.1km south. There is also a common pipistrelle bat roost located approximately 1.2km north-east and a notable noctule tree maternity roost some 1.2km south and a well-documented Natterer's bat roost within Netley Abbey located 1.5km west.

Magic returned records of three European Protected Species (EPS) mitigation licence applications to facilitate the destruction/damage of resting places of common pipistrelle only. The licence applications are all more than 1km from the Site; located 1.1km north, 1.1km north-east and 1.5km east, within the residential area of Bursledon.

### **Internal Inspection**

The property comprises three separate loft voids. The largest loft void is located above the garage, and is boarded throughout, with a permanent set of stairs leading to the void from ground floor of the garage. The garage loft is approximately 2.5m tall at the apex and is open with no trusses present but roof rafters with struts and underpurlin along the sloped sides. Bitumen felt lining is exposed behind the rafters, which was in good condition. The western gable end comprised breezeblock wall and the eastern gable comprising shiplap with closed double doors. The entire loft space was searched for evidence of bats and none was found. The only potential entry/egress feature being a slither of light emitting from the northern elevation eaves. The ground floor of the garage was also searched for evidence of bats as the staircase is fixed, and no evidence was recorded. The ground floor of the garage is very light with windows on the northern and western elevations and it is in active use as a workshop.

The southern most loft void comprises two by separate roof pitches. Similarly to the garage, the loft spaces are designed with roof rafters with struts and under purlin and the height of the loft space at the apex is approximately 2.5m. However, the loft space is notably more enclosed, with the pitch being significantly steeper than the garage and used for storage. The northern half of the loft void is boarded throughout and comprises a chimney on the northern end. The southern half of the loft is not boarded and is empty with exposed floor insulation. There are two parallel walls located between the two pitched sections of roof which create a deep crevice suitable for bats to roost. The exposed bitumen felt behind the rafters is intact but sags and therefore has potential for bats to access the roof void, if access behind the roof tiles is possible. The western gable end of the northern void is boarded by MDF and a crevice behind is evident from rodent damage around the edges. A pane of glass leaning up against the gable end and urine staining was noted, which could be from bats or rodents, although the chewed MDF above and the mouse droppings recorded within the roof space implies that the staining is more likely from mice.

The third loft space within the property is located within the north-west corner, in the form of an eaves cupboard. The cupboard is short and thin and the floor boarded. Bitumen felt lining behind the rafters is in good condition and no potential entry/egress features were recorded. However, the eaves cupboard continues along the properties front elevation, but is not accessible, evident from a hole in the wall of the accessible eave cupboard.

### **External Inspection**

The external inspection assessed the property to be in relatively good condition, with the interlocking roman clay tiles not showing any signs of lifting and densely covered with moss. The rendered elevations are also smooth and no deep cracks present.

No potential roosting bat features were recorded on the front aspect of the property, with the garage shiplap, wooden soffits and dormer window all in good condition and offering no crevices for bat entry/egress.

Potential roosting bat features recorded to the rear and north aspect of the property are as follows:

1. Gaps where window meets ceils. Scoped out for bats as mortar visible behind and confirmed to be shallow.
2. Gap between the porch ceiling and the stone wall. Likelihood of bat utilising crevice considered low as the porch is sheltered and no evidence of bat presence such as droppings was recorded on the stone wall (photograph 28).
3. Ground floor window with deep cracks in render above, where wall meets soffit. Considered a feature of low potential (photograph 29).
4. Dormer window lead flashing is slightly raised. This is considered a low value feature as lead flashing is subjected to heat fluctuations (photograph 31).
5. Garage gable end there is a long thin gap above the window, behind the shiplap (photograph 32).
6. Garage gable end there is a gap behind the shiplap from lifting at the bottom (photograph 33).
7. Garage gable end there is missing mortar along the edge of the end tiles. The missing mortar in areas is deep and offers potential access being tiles (photograph 34).
8. On the northern aspect of the property gaps in the soffit box was recorded. These gaps are too thin for bat entry/egress along much of the length, however, there are gaps of suitable width for bats. This is considered a low suitability feature as the gap is along the outer edge of the soffit board and thus bats would not have the wall to perch on to enter the crevice and dense cobwebs were recorded in front much of the gap (photograph 36).

*Note: The bullet point numbers correlate with the Target Note numbers on the Bat Roost Features Plan in Appendix 2.*

The gaps behind the garage's shiplap have potential to provide access to an inaccessible void between the breeze block wall and shiplap, suitable for crevice dwelling species.

Potential roosting features are restricted to the target noted features and access into large areas of roof considered unlikely as the tiles are flush with high amount of moss also present, with no crevices visible. Target note features 1 to 4 and 8 are considered low value features for reasons stated above and the features of greatest value are associated with the garages western gable elevation. Overall, the building is assessed to be of **moderate suitability** for roosting bats.

## 5 Potential Ecological Constraints and Recommendations

The Site is approximately 0.2ha in size with the construction zone restricted to the footprint of the existing property. Due to the nature of the proposals the only protected species requiring further surveys prior to planning submission are bats.

The renovation works are to be retained within the footprint of the existing property and will not result in the net increase in residential dwellings. Therefore, no impacts are anticipated for local designations and no potential impacts in response to the loss of habitats are likely.

### 5.1 Designated Sites

#### Potential Impacts

The nearest designation is Westwood Woodland Park LNR located 960m north-west, which by the nature of the designation is open for the public and considered important for environmental education and community and thus, any increases in visits to the reserve because of development is not considered detrimental. The second nearest designations are Solent and Southampton Water SPA and Ramsar site and Lee-on-The-Solent to Itchen Estuary SSSI, which cover the same footprint approximately 1.2km west of the Site. These designations are sufficiently distanced from the Site and are not at risk of being impacted during the construction phase. The Site is located within the ZOI for recreational impacts on Solent and Southampton Water SPA and Solent Maritime SAC. However, as the proposals will not result in a net increase in dwellings, the mitigation strategies do not apply.

#### Potential Mitigation measures

Natural England's SSSI Impact Risk Zones (SSSI IRZs) identifies specific criteria that determine the potential for certain developments to impact SSSIs within a given area. The Site is within the Lee-on-The-Solent to Itchen Estuary SSSI IRZ which requires development within existing residential areas of 500 units or more consult Natural England. As the development will not in an increase in residential units, no further consultation is required.

#### Potential Compensation and Enhancement Measures

Not applicable.

### 5.2 Protected Species

#### 5.2.1 Birds

##### Potential Impacts

The likelihood of nesting birds is considered very low, however, there is minor potential for nesting to occur on the chimney. If nesting activity occurs during renovation works there is a risk of the nest being destroyed.

##### Potential Mitigation Measures

If birds are identified to be actively nesting on the chimney an Ecologist is to be contacted immediately to provide further advice to avoid committing a wildlife offence.

##### Potential Compensation and Enhancement Measures

The Site can be enhanced for nesting birds via the installation of bird boxes on suitably sized trees on-site. It is advised that nest boxes are made from woodcrete (wood and concrete mix) which has a longer lifespan than traditional wooden boxes and are installed at least 3m high facing east or north.

The planting of berry producing shrubs within the garden for birds to feed will provide an enhancement. Suitable shrubs include holly *Ilex aquifolium*, hawthorn *Crataegus monogyna*, honeysuckle *Lonicera periclymenum*, rowan *Sorbus aucuparia*, guelder rose *Viburnum opulus*, berberis, yew *Taxus baccata*, crab apple *Malus domestica*, dogwood *Cornus sanguinea* and spindle *Euonymus europaeus*.

### 5.2.2 Bats

#### Potential Impacts

The PRA identified the property to offer suitable entry/egress features for bats to roost. Therefore, there is a risk of the renovation works damaging and/or destroying a roost and harming bats, if present.

#### Further Surveys

Current Bat Conservation Trust guidance states that two surveys comprising one dusk emergence survey and one dawn re-entry survey, is to be carried out on the building. The bat survey season extends from May to September and each survey must be spaced apart by at least two weeks.

Each survey is to be undertaken by two surveyors who will record any bat emergences/re-entries and provide information on general bat activity within the Site. Each surveyor will be equipped with bat detectors and Night Vision Aids and the dusk survey will commence 15 minutes before sunset until 1.5-2hours after sunset with the dawn survey undertaken 1.5-2hours before sunrise and 15 minutes after sunrise.

The survey results will enable the assessment of the Sites value to bats and provide appropriate mitigation within the superseding EclA report.

#### Potential Compensation and Enhancement Measures

The loss of the potential roosting bat features can be compensated for via the installation of woodcrete bat boxes (wood and concrete mix) which has a longer lifespan than traditional wooden boxes, at least 4m high on suitably sized trees located within the Site boundary.

## 6 Conclusions

The Site is approximately 0.2ha in size with the construction zone restricted to the footprint of the existing property. Due to the nature of the proposals the only ecological features scoped in for further consideration are bats and birds.

The property has been identified to support suitable roosting bat features. Further surveys have been recommended to confirm the presence/likely absence of roosting bats. The survey effort includes one dusk emergence survey and one dawn-re-entry survey, to be undertaken in the 2022 survey season.

This PEAR report is not suitable for planning submission and is to be superseded by an EcIA report once the bat surveys have been completed to confirm presence/likely absence of bat roost(s) and to provide a methodology for mitigation, where applicable. Compensation and enhancement recommendations are provided in this report with the aim of achieving a new gain in biodiversity in accordance with the National Planning Policy Framework and Local Policy 26.NC.

## 7 References

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- CIEEM. (2017, December). *Guide to Ecological Surveys and Their Purpose*. Retrieved from <https://cieem.net/wp-content/uploads/2019/02/Guide-to-Ecological-Surveys-and-Their-Purpose-Dec2017.pdf>
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- Ministry of Housing, communities and Local Government. (2019, February 19). *National Planning Policy Framework*. Retrieved from [gov.uk: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/810197/NPPF\\_Feb\\_2019\\_revised.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/810197/NPPF_Feb_2019_revised.pdf)
- Office of the Deputy Prime Minister. (2005, August 16). *Biodiversity and geological conservation: circular 06/2005*. Retrieved from [gov.uk: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/7692/147570.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/7692/147570.pdf)
- The Solent Recreation Mitigation Partnership. (2017). *Solent Recreation Mitigation Strategy*.

## 8 APPENDICES

### Appendix 1: Photographs



Photograph 1: Loft above garage looking at west gable end.



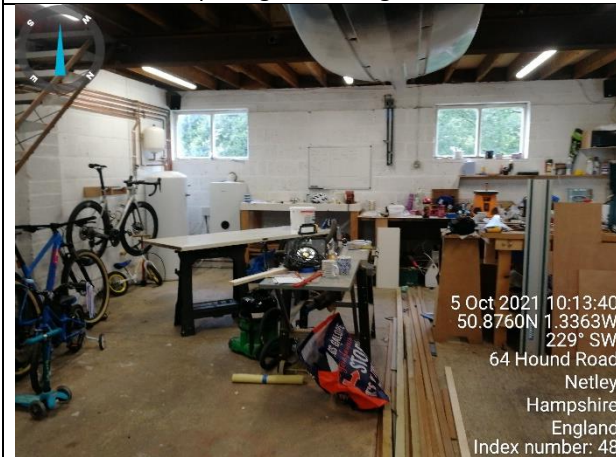
Photograph 2: Loft above garage looking at east gable end.



Photograph 3: Eaves on the northern length of garage loft with thin strip of light emitting.



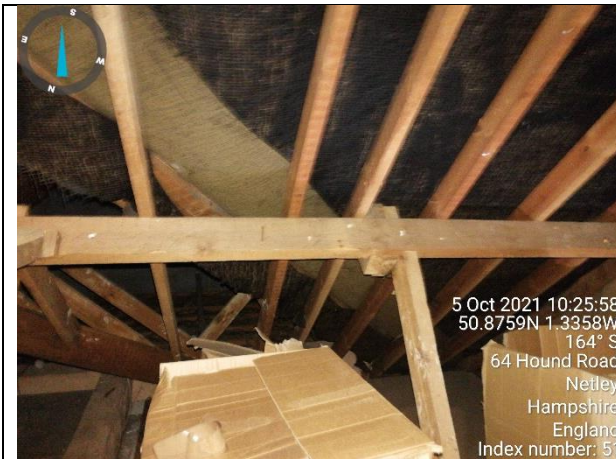
Photograph 4: View of ground floor of garage with two single garage doors.



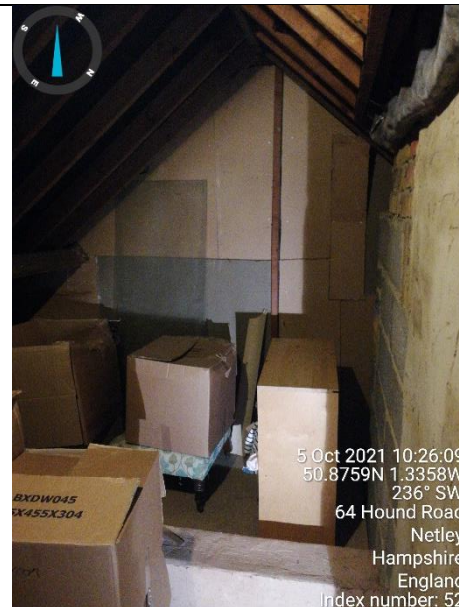
Photograph 5: View of ground floor of garage, which is well lit and stairs to loft visible to left.



Photograph 6: Loft space within southern aspect of house and a pane of glass with urine staining present. Thought likely from rodents due to chewed MDF board above.



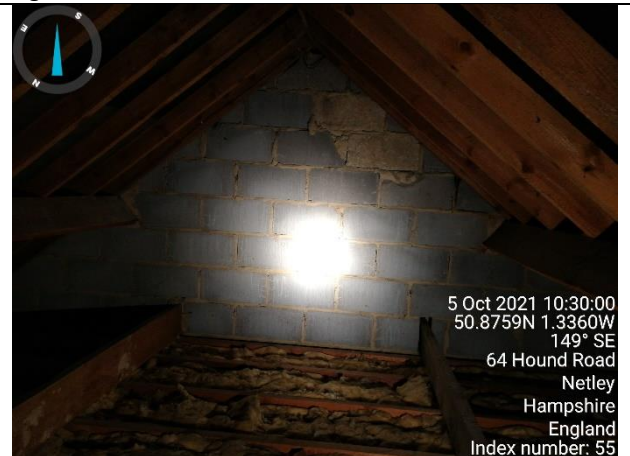
Photograph 7: View of the southern loft void with rafters and struts and bitumen felt lining.



Photograph 8: View of southern loft with chimney to right.



Photograph 9: Continuation of the loft behind the chimney.



Photograph 10: Southern end of the loft, which is an additional loft space located above the single storey section of the property.



Photograph 11: Large cavity located between the two separate sections of roof void.



Photograph 12: View of the interior of a small eaves cupboard located on the north-west corner of the property.



Photograph 13: View of the front of the property and driveway.



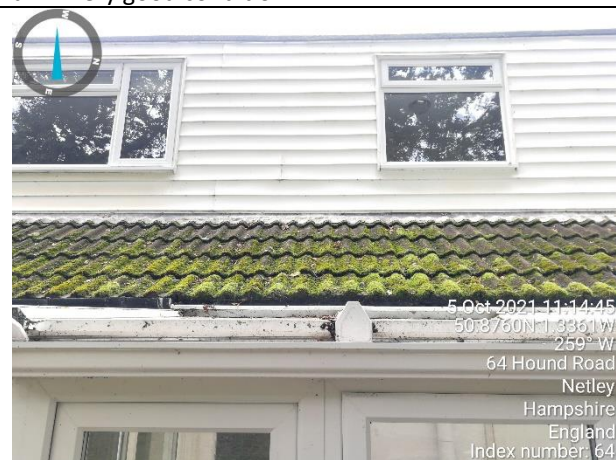
Photograph 14: View of the northern end of the properties front.



Photograph 15: View of the southern end of the properties front, including dormer window.



Photograph 16: View of shiplap garage at the front (east) gable end with double shiplap doors and wooden soffits all in very good condition.

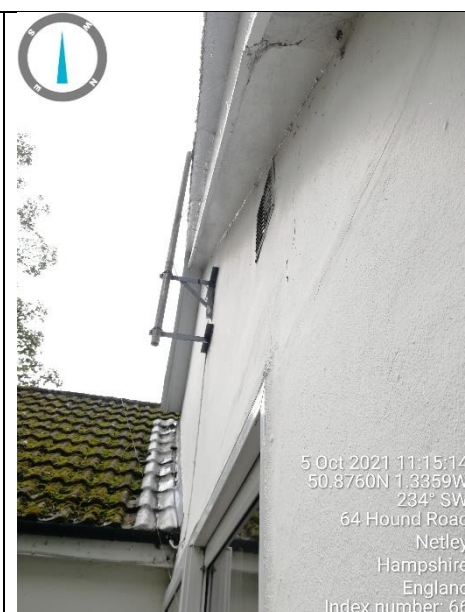


Photograph 17: View of the intact rendering behind the bottom run of shiplap at the front gable end of garage.

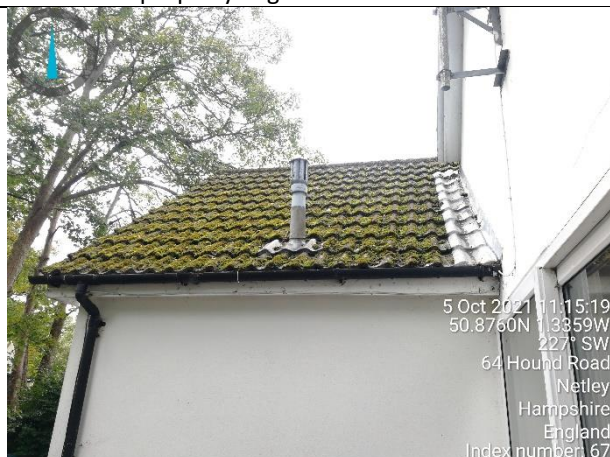
Photograph 18: View of moss-covered tiled roof and dormer window with lead flashing flush to tiles.



Photograph 19: View of the wooden soffit along the front of the property in good condition.



Photograph 20: View of the southern gable end with rendered walls and wooden soffit in good condition.



Photograph 21: View of single storey section located on the southern end with a moss-covered tiled roof.



Photograph 22: View of the wooden soffits on the single storey section of property.



Photograph 23: View of the rendered rear section of property and patio to the left.



Photograph 24: View of wooden soffit on the southern end of the rear (west) elevation, in good condition.



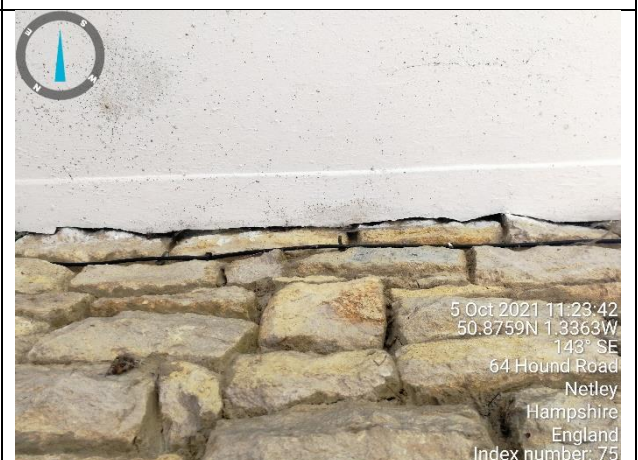
Photograph 25: View of the shiplap gable end with wooden soffit box in good condition located on the rear of the property.



Photograph 26: View of shiplap gable end to the rear of the property with rendered and stone facing.



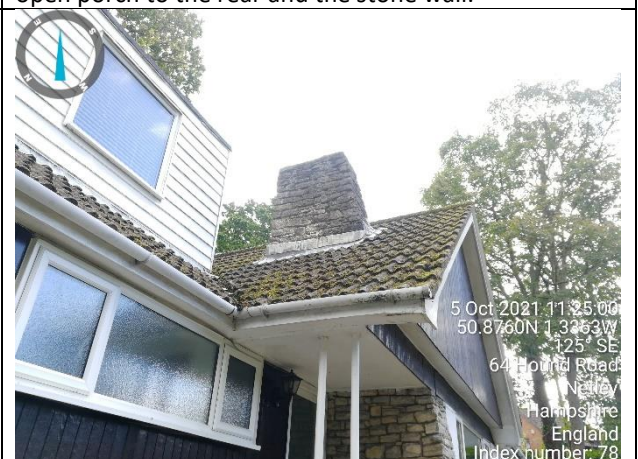
Photograph 27: View of the dormer window to the rear of the property.



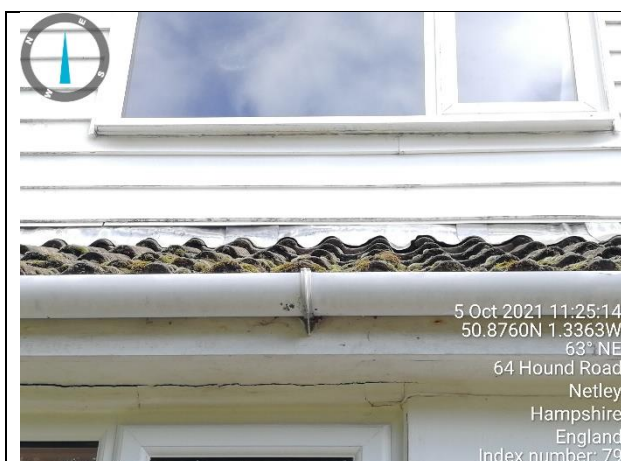
Photograph 28: View of a gap between the ceiling of the open porch to the rear and the stone wall.



Photograph 29: View of PVC window to the rear with a crack above located just under the soffit.



Photograph 30: View of the chimney and porch to the rear of the property.



Photograph 31: View of some lifting in the lead flashing below the dormer on the rear of the property.



Photograph 32: View of a gap from missing render behind the shiplap located on the garages western gable end.



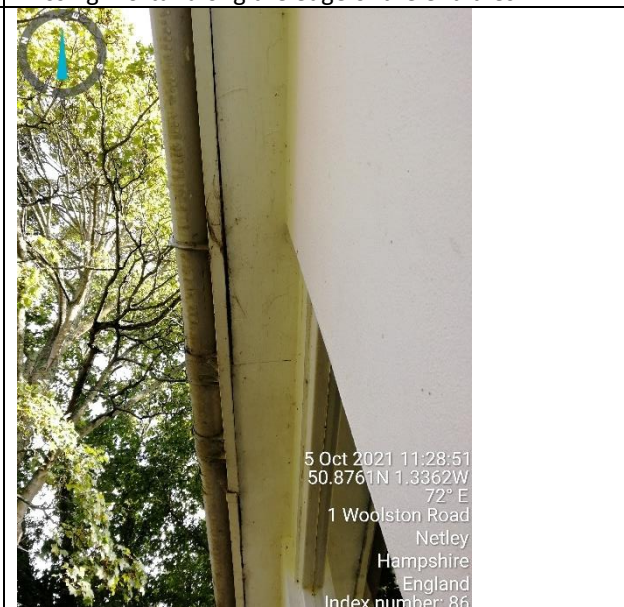
Photograph 33: View of lifting on the bottom of shiplap located on the garages western gable end.



Photograph 34: View of garages western gable end and missing mortar along the edge of the end tiles.



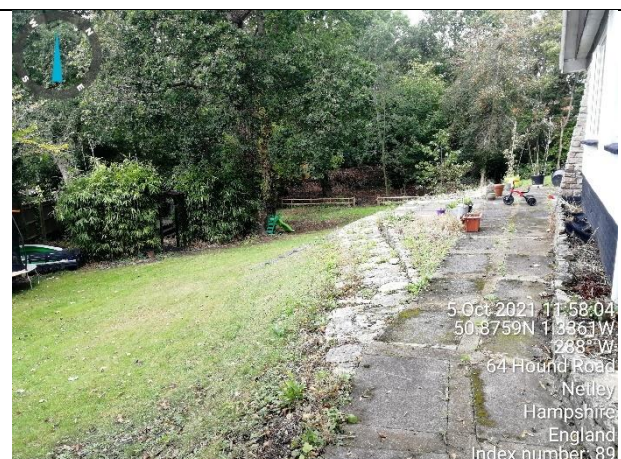
Photograph 35: View of the rear of the property looking north-east.



Photograph 36: View of the soffit along the northern elevation of the garage with gaps between the fascia and soffit board.



Photograph 37: View of the northern aspect of the garage.



Photograph 38: View of the paved patio and lawn located immediately west of the property.



Photograph 39: View of the lawn to the rear of the property and continues round to the northern aspect.



Photograph 40: View of the terraced patio to the south of the property.

## Appendix 2: Bat Roosting Features Plan

