

**NYTON HOUSE CARE HOME, NYTON ROAD,
WESTERGATE, CHICHESTER**

ECOLOGICAL IMPACT ASSESSMENT

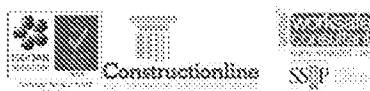
Final Document

February 2019

Preliminary Ecological Appraisals • Protected Species Surveys and Licensing • NVC • EclA • Management Plans
Habitats • Badger • Bats • Hazel Dormouse • Birds • Reptiles • Amphibians • Invertebrates • Riparian and Aquatic Species

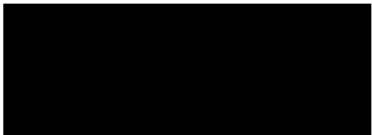
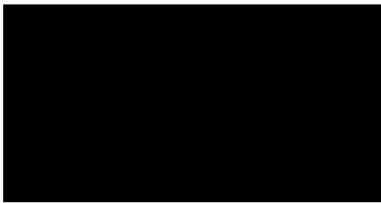
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ECOSA Quality Assurance Record

This report has been produced in accordance with the Chartered Institute of Ecology and Environmental Management (CIEEM) Guidelines for Ecological Report Writing 2017 (CIEEM, 2017). The Ecological Impact Assessment and report has been prepared in line with the CIEEM Guidelines for Ecological Impact Assessment in the UK and Ireland (CIEEM, 2016) and survey work has been undertaken in line with references within CIEEM's Source of Survey Guidance (CIEEM, 2017).

Description:	Ecological Impact Assessment
Produced For:	MH Architects
Issue:	Final
Report Reference:	4184.F0
Date of Issue:	12 th February 2019
Date of Survey Works:	Various dates between 6 th September and 18 th October 2018
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**NYTON HOUSE CARE HOME, NYTON ROAD,
WESTERGATE, CHICHESTER**

ECOLOGICAL IMPACT ASSESSMENT

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EXECUTIVE SUMMARY

Ecological Survey and Assessment Ltd (ECOSA) have been appointed by MH Architects to undertake an Ecological Impact Assessment to support a planning application for the redevelopment of Nyton House Care Home, Chichester. The site is located in Westergate, West Sussex and comprises a number of complex buildings associated with an existing assisted living residence, with carparking and grounds. The proposals entail the construction of a new extension to the existing building and an additional dementia unit.

The main findings of the Ecological Impact Assessment are:

- Habitats on site comprise the existing buildings, scattered trees, mown grassland and ornamental planting;
- The site supports a low status day roost of common pipistrelle. Unmitigated, the proposals may result in the harm/killing of individual bats and the long-term loss of a roost;
- The site offers suitability for foraging and commuting bats, breeding birds, badger and hedgehog. Unmitigated, the proposals will lead to the loss/degradation of habitat suitable for these species;
- Recommendations to reduce these impacts and achieve gains for biodiversity have been provided. These include avoidance of breeding bird habitat during the nesting season, no/sensitive lighting, a landscape scheme comprising native planting (and appropriate management), replacement/additional bat roost units and additional nesting opportunities for birds;
- Given the impacts identified, and the mitigation and compensation measures proposed it is considered that the proposals accord with all relevant local and national planning policy;
- If the planning application boundary changes or the proposals for the site alter, a re-assessment of the scheme in relation to ecology may be required. Given the mobility of animals and the potential for colonisation of the site over time, updating survey work may be required, particularly if development does not commence within 12 months of the date of the most recent relevant survey.

1.0 INTRODUCTION

1.1 Background

Ecological Survey & Assessment Limited (ECOSA) have been appointed by MH Architects to undertake an Ecological Impact Assessment to support a planning application for the redevelopment of Nyton House Care Home, Nyton Road, Westergate, Chichester, PO20 3UL (hereafter referred to as the site).

1.2 The Site

The site is located in Westergate, West Sussex centred on National Grid Reference (NGR) SU 9347 0558 (**Map 1**).

The entirety of the site measures approximately 1.4 hectares and comprises a number of complex buildings associated with an existing assisted living residence, with associated carparking and grounds. To the east lies 0.9 hectares of undeveloped land, however, for the purposes of this application, the land to the east is not being affected by the proposals and is therefore not considered in this report. An access road enters the site from the south-east corner. The site is bounded by farm buildings and associated work yards to the north, residential development and gardens to the west and Nyton road to the south. To the east lies agricultural fields.

The site is located on the north-western corner of Westergate, approximately six kilometres east of Chichester. The surrounding landscape is dominated by agricultural fields with scattered settlements and patches of woodland to the north.

1.3 Aims and Scope of Report

The information within this report is based on a field survey and desktop study and relevant species-specific surveys carried out between 6th September 2018 and 9th October 2018. The report describes the habitats and species (hereafter referred to as ecological features) within the site's Zone of Influence (Paragraph 3.2), and provides a detailed assessment of potential ecological effects of the proposed development of the site. It identifies the need for any measures to avoid, mitigate or compensate for significant adverse effects¹ on habitats and species and outlines enhancements to the site's ecology to be implemented as part of the development. The objectives of the assessment are:

- To provide baseline information on ecological features within the site's Zone of Influence and determine the importance of these features;

¹ For the purposes of this assessment a 'significant' adverse effect is one which will have an adverse effect on the ecological feature at the site level or higher.

- To assess, characterise and quantify the effects on ecological features, including cumulative effects, and identify significant effects in the absence of any mitigation;
- To set out measures to avoid, mitigate and compensate for significant ecological effects in accordance with the 'mitigation hierarchy'²;
- To provide an assessment of the significance of any residual effects;
- To outline opportunities for enhancement in order to achieve a net gain for biodiversity; and
- To set out the requirements for any post-construction monitoring.

1.4 Site Proposals

The proposals entail the part demolition of existing buildings, internal reconfiguration of part of the main house, the construction of a new extension and landscaping of the grounds.

The Ecological Impact Assessment is based on the proposals plan produced by MH Architects, dated October 2018 (Drawing No. 18-003 303 P2) (**Appendix 1**).

Planning permission is being sought during 2018 with construction proposed to commence soon after permission has been granted.

² In accordance with CIEEM Ecological Impact Assessment guidance (CIEEM, 2016) a sequential process is adopted to address impacts on features of ecological interest, with 'Avoidance' prioritised at the top of the hierarchy and Compensation/Enhancement' at the bottom. This is often referred to as the 'mitigation hierarchy'.

2.0 PLANNING POLICY CONTEXT

2.1 Introduction

This section summarises the planning policy in relation to ecology and biodiversity within the Arun District Council administrative area. This information is then used to assess the compliance of the scheme in relation to relevant planning policy and where necessary make recommendations for mitigation, compensation and enhancements (see Section 5.0).

2.2 National Policy

The National Planning Policy Framework (NPPF) sets out the government's requirements for the planning system in England. The original document was published in 2012 with the revised NPPF published in July 2018. A number of sections of the NPPF are relevant when taking into account development proposals and the environment. As set out within Paragraph 11 of the NPPF *"Plans and decisions should apply a presumption in favour of sustainable development"*. However, Paragraph 177 goes on to state that *"The presumption in favour of sustainable development does not apply where development requiring appropriate assessment because of its potential impact on a habitats site³ is being planned or determined"*.

The general impetus of the NPPF in relation to ecology and biodiversity is for development proposals to not only minimise the impacts on biodiversity but also to provide enhancement. Paragraph 170 states that the planning system should contribute to and enhance the natural environment by *"...minimising impacts on biodiversity and providing net gains in biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures..."*.

A number of principles are set out in Paragraph 175, including that where harm cannot be adequately avoided then it should be mitigated for, or as a last resort, compensated for. Where impacts occur on nationally designated sites, the benefits must clearly outweigh any adverse impact and incorporating biodiversity in and around developments should be encouraged. Specific reference is also made to the protection of irreplaceable habitats⁴. Where loss to irreplaceable habitats occur planning permission would normally be refused unless there are wholly exceptional reasons and an adequate compensation strategy is in place. Paragraph 175 also states *"development whose primary objective is to conserve or enhance biodiversity should*

³ The NPPF defines a habitats site as *"Any site which would be included within the definition at regulation 8 of the Conservation of Habitats and Species Regulations 2017 for the purpose of those regulations, including candidate Special Areas of Conservation, Sites of Community Importance, Special Areas of Conservation, Special Protection Areas and any relevant Marine Sites."*

⁴ The NPPF defines irreplaceable habitats as *"Habitats which would be technically very difficult (or take a very significant time) to restore, recreate or replace once destroyed, taking into account their age, uniqueness, species diversity or rarity. They include ancient woodland, ancient and veteran trees, blanket bog, limestone pavement, sand dunes, salt marsh and lowland fen."*

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". Protection of sites proposed as Special Protection Areas (SPAs), Special Areas of Conservation (SACs) and Ramsar sites or acting as compensation for SPAs, SACs and Ramsar sites, should receive the same protection as habitat sites.

In addition to the NPPF, Circular 06/05 provides guidance on the application of the law relating to planning and nature conservation as it applies in England. Paragraph 98 states *"the presence of a protected species is a material consideration when a planning authority is considering a development proposal that, if carried out, would be likely to result in harm to the species or its habitat"*. Whilst paragraph 99 states *"it is essential that the presence or otherwise of a protected species, and the extent that they may be affected by the proposed development, is established before planning permission is granted"*.

2.3 Local Policy

Local planning policy within Arun District is provided by the saved policies within the Arun District Local Plan 2003. These are summarised below:

▪ Policy GEN28: Trees and Woodland

Development will not be permitted if it would damage or destroy one or more trees protected by a tree preservation order, identified as ancient woodland or in a conservation area unless:

The removal of one or more trees would be in the interests of good arboricultural practice; or

The benefits of the proposed development outweigh the amenity value of the protected trees.

Conditions may be used to ensure that, for any trees which are removed as part of a development, an equivalent number are planted on the site.

▪ Policy GEN29: Nature Conservation Across the District

Development will only be permitted on sites which contain semi-natural habitats, features of nature conservation interest, or within wildlife corridors, where these can be largely retained and sympathetically incorporated into the scheme. Legal agreements may be used to offset the loss of, or impact on, any nature conservation resource present on the site prior to development.

- **Policy AREA13: Sites of International Importance for Nature Conservation**

Proposals for development in, or likely to affect (directly or indirectly) a site of international importance for nature conservation will be subject to the most rigorous examination. Development not directly connected with or necessary to the management of the site which is likely to have an adverse effect on the site, will not be permitted unless: there is no alternative solution, there are reasons of public health or public safety, or there are benefits of primary importance to the environment.

Where such sites do not host a priority habitat or species, development will not be permitted unless there are imperative reasons of overriding public interest.

Where development is permitted, the use of conditions or planning obligations will be considered in order to avoid and minimise harm to the site, to enhance the site's nature conservation interest, and to secure any compensatory or mitigation measures and appropriate management that may be required.

- **Policy AREA14: Sites of National Importance for Nature Conservation**

Proposals for development in, or likely to affect (directly or indirectly) Sites of Special Scientific Interest will be subject to special scrutiny. Where such development is likely to have an adverse effect, it will not be permitted unless the reasons for the development clearly outweigh the nature conservation value of the site itself and the national policy to safeguard the national network of such sites.

Where the site concerned is a National Nature Reserve, a site identified by the Nature Conservation Review or Geological Conservation Review, particular regard will be paid to the national importance of that site.

Where development is permitted, harm to the nature conservation interest must be minimised. The use of conditions or planning agreements will be considered to ensure the protection and enhancement of the nature conservation interest, and to provide appropriate compensatory or mitigation measures and site management.

- **Policy AREA15: Sites of Local Importance for Nature Conservation**

Proposals for development in, or likely to have an adverse effect (directly or indirectly) on a Local Nature Reserve, Site of Nature Conservation Importance (including ancient woodlands or wildlife corridors) or Regionally Important Geological/Geomorphological Site will not be permitted unless it can be

demonstrated that reasons for the proposal outweigh the need to safeguard the nature conservation value of the site/feature. Where development is permitted which would damage the nature conservation value of the site/feature, such damage should be kept to a minimum.

Conditions or planning obligations will be used to secure necessary compensatory or mitigation measures, enhancement and site management. Where appropriate, the Authority will consider the use of legal agreements to provide appropriate compensatory measures, enhancement and site management.

- **Local Plan 2011-2031**

A new Arun District Local Plan covering the period from 2011-2031 was submitted on 30th January 2015 for independent examination to the Secretary of State for Communities and Local Government via the Planning Inspectorate. The Policies within the emerging Local Plan largely reflect the existing policy contained within the adopted local plan.

3.0 METHODS

3.1 Introduction

This section details the methods employed during the Ecological Impact Assessment. Any significant limitations to the assessment are also considered.

3.2 Zone of Influence

To define the total extent of the study area for this assessment, the proposed scheme was reviewed to establish the spatial scale at which ecological features could be affected⁵. The appropriate survey radii for the various elements of the assessment (i.e. desktop study, field survey and species-specific surveys) have been defined in the relevant sections below. These distances are determined based on the professional judgement of the ecologist leading the appraisal, taking into account the characteristics of the site subject to assessment, its surroundings and the nature of the proposals.

3.3 Scoping

Protected species considered within the Ecological Impact Assessment are those species/species groups considered likely to be encountered given the geographical location and context of the site. Where the site was found to be suitable to support these species/species groups, and adverse effects cannot be avoided from the outset, further species-specific surveys are undertaken. These are discussed within the results section (Section 4.0) of the current report. Where such a species is unlikely to be present on site a justification for likely absence is provided. Species considered likely absent from the site are not then considered in the assessment of ecological effects and mitigation/compensation measures section (Section 5.0) of this report.

3.4 Desk Study

3.4.1 Biological Records Centre

Sussex Biodiversity Records Centre (SxBRC) was consulted on 4th September 2018 for the following data:

- Records of non-statutory designated sites (Local Wildlife Sites (LWSs), Sites of Importance for Nature Conservation (SINCs), Site of Nature Conservation Interest (SNCIs) etc.) within one kilometre of the site boundary. See **Appendix 2** for details; and
- Records of legally protected and notable species (flora and fauna) within one kilometre of the site boundary, including Species of Principal Importance (**Appendix 3**); and

⁵ The Zone of Influence (Zoi), as defined by CIEEM, is the area over which ecological features may be subject to significant effects as a result of the proposed project and associated activities (CIEEM, 2016).

- Records of bats within two kilometres of the site boundary. Bat species are highly mobile and therefore the search radius is increased for this species group.

3.4.2 Multi-Agency Geographic Information for the Countryside

The Multi-Agency Geographic Information for the Countryside (MAGIC) database (DEFRA, 2017) was reviewed on 4th September 2018 to establish the location of statutory designated sites located within the vicinity of the site. This included a search for all internationally and nationally designated sites such as Special Protection Areas (SPAs), Special Areas of Conservation (SACs), Wetlands of International Importance (Ramsar sites), Sites of Special Scientific Interest (SSSIs), National Nature Reserves (NNRs) and Local Nature Reserves (LNRs) within one kilometre of the site. See **Appendix 2** for details. Where appropriate, the desk study search area has been extended to take account of any appropriate statutory designated sites which need consideration in terms of potential in-direct effects and which support particularly mobile species, particularly those specifically mentioned in local planning policy. 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.

Sites within one kilometre of the site boundary where European Protected Species Mitigation (EPSM) licences or Bat Low Impact Class Licences (BLICLs) have been granted were reviewed. This information allows a greater understanding of the potential for European protected species to be present in the local area.

3.4.3 Other Sources of Information

Online mapping resources, at an appropriate scale, were used to identify the presence of habitats such as woodland blocks, ponds, watercourses and hedgerows, in the vicinity of the site. These habitats may offer resources and connectivity between the site and suitable habitat in the local area, which may be exploited by local species populations.

The presence of ponds or other waterbodies within a 500 metre radius of the site in particular are noted in relation to great crested newt. The 500 metre radius is a standardised search radius to assist in the assessment of the suitability of a site and its surrounding habitat to support this species, based on current Natural England guidance (English Nature, 2001).

3.5 Field Survey

3.5.1 Survey Methods

The field survey broadly followed standard Phase 1 habitat survey methodology (JNCC, 2010) and included a search for evidence of, and an assessment of the site's suitability to support, protected and notable species as recommended by CIEEM (CIEEM, 2017).

The field survey covered all accessible areas of the site, including boundary features. Photographs have been provided, where relevant. For ease of reference.

Phase 1 Habitat Survey

An assessment was made of all areas of vegetation within the site based on the standardised Phase 1 habitat survey methodology (JNCC, 2010)⁶. This involved identification of broad vegetation types, which were then classified against Phase 1 habitat types, where appropriate. A list of characteristic plant species for each vegetation type was compiled and any invasive species⁷ encountered as an incidental result of the survey recorded.

Protected and Notable Species Appraisal

A preliminary appraisal of the site's suitability to support legally protected and notable species was carried out. Specific methods for species/species groups considered during the appraisal are provided in **Appendix 4**.

3.5.2 Survey Details

The field survey was carried out by Samantha Munslow, Principle Ecologist of ECOSA on 6th September 2018. The weather conditions were dry and clear with 25% cloud cover, an ambient temperature of 15°C and a light breeze.

During the survey, the surveyor was equipped with a ladder, 10x40 binoculars, a high powered torch and a digital camera.

3.5.3 Field Survey Limitations

Ecological surveys are limited by factors which affect the presence of plants and animals such as the time of year, migration patterns and behaviour. The field survey has therefore not produced a complete list of plants and animals and in the absence of evidence of any particular species should not be taken as conclusive proof that the species is absent or that it will not occur in the future.

Online mapping resources provide an indication of habitat features present in the wider area, but do not provide a detailed assessment of habitat types.

Not all potential bat roosting features are accessible to the surveyor, e.g. gaps beneath roof materials or holes or cracks in trees, and therefore assessments are based upon the potential for these features to provide suitable roosting opportunities.

⁶ The standard JNCC Phase 1 habitat survey methodology involves the production of a Phase 1 map showing the location and extent of habitat types, however, given the limited size and complexity of the site surveyed a Phase 1 habitat map has not been produced in this instance.

⁷ Plant species included on Schedule 9 of the Wildlife and Countryside Act 1981 (as amended). The survey was not specifically aimed at assessing the presence of these species and further specialist advice may need to be sought.

It is not always possible to provide definitive assessments of a species' presence/likely absence at a site and so in the absence of direct evidence, assessments and recommendations are based on the presence of suitable habitat within/adjacent to a site and the results of species records within the desk study data.

3.6 Bat Survey

3.6.1 Survey Methods

Bat Emergence/Re-entry Survey

The bat emergence/re-entry survey was undertaken in line with current best practice guidelines (Collins, 2016). In accordance with the guidelines for a building assessed as having moderate suitability to support roosting bats a single dusk emergence survey and a single dawn re-entry survey were undertaken in order to ascertain the presence/likely absence of roosting bats from within the building. Where the presence of roosting bats was confirmed, a further dusk emergence survey was subsequently undertaken. This allowed for an assessment of the status of the roost present. The status of roosts (where appropriate) has been based on standard terminology as detailed in **Appendix 6**.

The surveys were carried out by three experienced ECOSA surveyors, positioned at previously identified vantage points around the building (**Map 2**). These vantage point locations allowed a sufficient coverage of the Potential Roosting Features identified on the building impacted by the proposals.

During the surveys surveyors recorded the time, species, location and direction of flight for each bat encountered, with particular attention paid to establishing bat access/egress locations to any roosts within the buildings.

3.6.2 Survey Details

Bat Emergence/Re-entry Survey

The bat emergence/re-entry surveys were undertaken between September and October 2018. **Table 1** provides details of each emergence/re-entry survey.

Table 1: Bat emergence/re-entry survey details

Survey Date	Survey Type	Duration	Weather Conditions	Sunset/ Sunrise Time
12 th September 2018	Dusk	19:15 – 21:24	General conditions: Cool and dry Start temp: 13°C End temp: 12°C Cloud Cover: 70-40% Wind Speed: WF0	19:24
26 th September 2018	Dawn	04:54 – 07:09	General conditions: Clear and dry Start temp: 7°C End temp: 5.9°C Cloud Cover: 0% Wind Speed: WF2	06:54
9 th October 2018	Dusk	18:08 – 20:23	General conditions: Clear and dry Start temp: 14°C End temp: 13°C Cloud Cover: 0% Wind Speed: WF0	18:23

During the bat emergence/re-entry surveys the surveyors were equipped with Pettersson D240x time expansion bat detectors. The Pettersson detectors were connected to Edirol R-05 recorders for the full duration of the survey. Recordings made with the detectors were later analysed using Sonobat® (v2.9.7) to confirm the identity of any species encountered.

The bat emergence/re-entry surveys were coordinated by Samantha Munslow, Principle Ecologist of ECOSA (Natural England Bat Licence 2015-16434-CLS-CLS) assisted by suitably qualified and experienced ECOSA surveyors.

3.6.3 Survey Limitations

Some bat species, e.g. long-eared bats *Plecotus* species, generally emerge from their roosts in total darkness and do not produce strong echolocations, and therefore these bats can be difficult to observe and record during bat surveys, leading to under-recording.

As a result of the time of year which the bat surveys were commissioned, the survey was carried out relatively late in the active bat season. However, due to the unusually mild weather for the time of year, conditions during the survey were considered

⁸ There are two species of long-eared bat, the brown long-eared bat *Plecotus auritus* and the grey long-eared bat *Plecotus austriacus*. These species can only be separated by examination of physical characteristics and Phylogenetic Analysis Identification of bat droppings. Unless confirmation of identification has been made by visual identification the two species shall be referred to in this report as long-eared bat. The brown long-eared bat is the commonest of the two species typically being found roosting within large roof voids although small voids and trees are also utilised. The grey long-eared bat is rare and confined to southern England and like the brown long-eared typically roosts in roof voids.

suitable, allowing a robust assessment of the usage of the on-site buildings by roosting bats and of the site by foraging and commuting bats.

The quality of hand-held bat detector recordings is based, to a large extent, on the proximity of a bat to the detector's microphone. Obstructions such as vegetation or environmental variables such as rainfall and wind noise from vegetation will all influence the quality of sound reaching the microphone and thus some bat echolocation recordings are of insufficient quality for specific identification. Bats routinely alter their echolocations in relation to behaviour and their environment. It is not always possible to make a robust identification of every bat recording.

The use of bat detectors is likely to result in the under-recording of a percentage of bats present, such as those flying at height (Collins & Jones, 2009), which would be out of the recording range for the detectors.

3.7 Criteria used to Assess Ecological Value

The evaluation criteria used in this report are based on ECOSA's professional judgement and publicly available publications, survey data and other sources as referenced in the main text. The evaluation is based on a sliding scale of importance as follows; international and European, national, regional, county, local and site. There are a wide range of characteristics which contribute to the importance of ecological features, and these may justify an increase or reduction in the value of an ecological feature. Where deviations occur, these will be explained in the evaluation section of this report (Section 4.0). Current published relevant guidance, including information sources such as A Nature Conservation Review (Ratcliffe, 1977) and Guidelines for Ecological Impact Assessment in the United Kingdom (CIEEM, 2016) have also been used to inform the assessment.

4.0 BASELINE ECOLOGICAL CONDITIONS AND EVALUATION

4.1 Introduction

This section details the results of the Ecological Impact Assessment undertaken for the site. It assesses the baseline ecological conditions of the site at the time the desktop study was completed and based on the findings of the field survey and subsequent protected species surveys. This section also provides an assessment of the ecological value of ecological features present at the site.

4.2 Statutory and Non-Statutory Designated Sites

4.2.1 Baseline Ecological Conditions

There are no statutory designated sites of nature conservation interest situated within one kilometre of the site boundary. The nearest is Eartham Pit, Boxgrove SSSI located approximately three kilometres north west of the site, which is designated for being a site of geological conservation interest. There are no non-statutory designated sites within one kilometre of the site.

4.3 Habitats

4.3.1 Baseline Ecological Conditions

Desktop Study Results

Consultation with SxBRC produced records of frog orchid *Coeloglossum viride* and bluebell *Hyacinthoides non-scripta* in various locations within the desk study area from 2017 and 2009 respectively.

Field Survey Results

Habitats are described in general terms using standard Phase 1 habitat survey terminology, with reference to dominant, characteristic and notable species in each vegetation type. The main habitats recorded on site during the Phase 1 habitat survey were as follows:

Scattered Trees

A mixture of native and non-native trees are scattered across the site, including a number of fruit bearing trees situated within landscaped gardens. Cherry *prunus* species (**Figure 1**) and mature conifers located behind the workshops (north of the care home main building) (**Figure 2**) were recorded. A number of other semi-mature and immature specimens are present in garden borders.

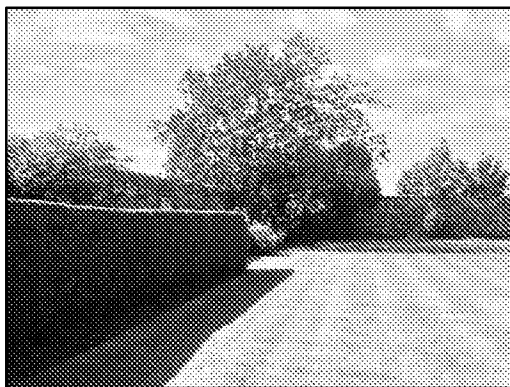


Figure 1: Cherry tree located on the border of landscaped garden west of the care home

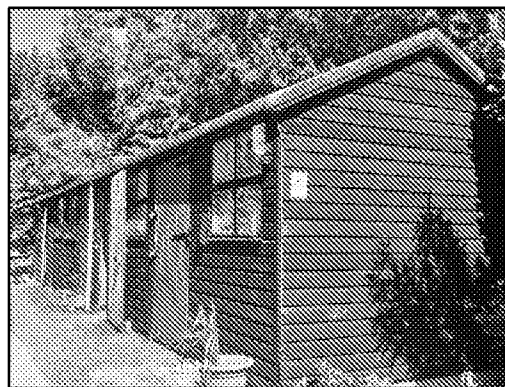


Figure 2: Conifers located behind workshop north of the care home

Semi-Improved Grassland

The majority of the grounds are landscaped and well-managed. Lawns surrounded by garden walls and hedgerows are species-poor and mown to a short sward (**Figure 3** and **Figure 4**) comprising species typical of amenity grassland including bent *Agrostis* and fescue *Festuca* species, perennial rye-grass *Lolium perenne*, yarrow *Achillea millefolium*, ribwort plantain *Plantago lanceolata*, dandelion *Taraxacum officinale* aggregate and cat's-ear *Hypochaeris radicata*.

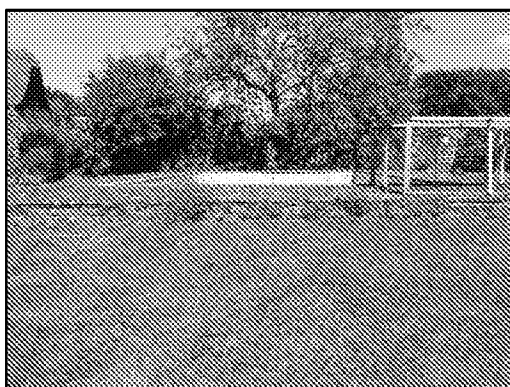


Figure 3: Semi-improved grassland surrounding disused swimming pool

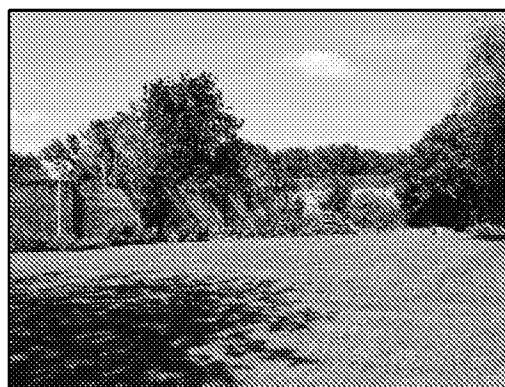


Figure 4: Well-managed lawns across the site

Introduced Shrub

Ornamental borders and hedges comprising a range of introduced shrubs (**Figure 5**) include, but are not limited to palm *Arecaceae* species, *Cotoneaster* species, cherry laurel *Prunus laurocerasus*, ornamental rose *Rosa* species, sunflower *Helianthus annuus*, *Rhododendron*, *Geranium* species and hellebore *Helleborus* species.

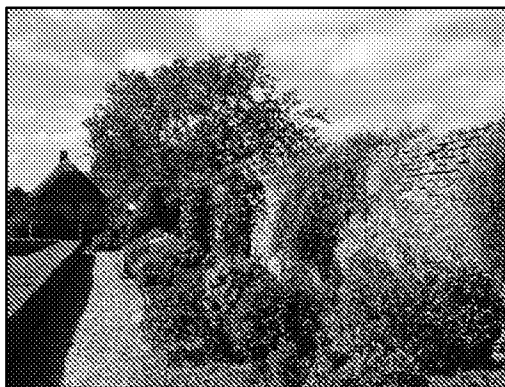


Figure 5: Introduced shrubs in ornamental border

Buildings

On-site buildings comprise the main house with a single-storey extension on the northern elevation and a 1980s extension north west, a row of garages, a small workshop, conservatory and a temporary office. Further details of the buildings on site are provided in **Table 1**.

Other Habitats

A concrete access road enters the site from the south-east corner and terminates at an area of hardstanding used for carparking. A disused swimming pool is located in the south-western corner of the site; much of the grounds are surrounded by a brick wall approximately two metres high.

4.3.2 Evaluation

Habitats comprise various buildings associated with the care home, landscaped gardens with species-poor, well-managed lawns, ornamental borders, short managed hedges and a number of scattered trees. The plant species and habitats present are all common and widespread with the mature scattered trees being the features of greater ecological interest.

4.4 Bats

4.4.1 Baseline Ecological Conditions

Desktop Study Results

Consultation with SxBRC produced records of five bat species within the desk study area: barbastelle *Barbastella barbastellus*, serotine *Eptesicus serotinus*, pipistrelle *Pipistrellus* species, common pipistrelle *Pipistrellus pipistrellus* and brown long-eared bat *Plecotus auritus*.

A review of MAGIC did not reveal the presence of any granted European Protected Species Mitigation (EPSM) licences within one kilometre of the site boundary. The closest licence was granted in 2016 and covers the destruction of a common pipistrelle resting place located two kilometres south east of the site.

Field Survey Results

Building Assessment

The 1980s extension on the western end of the main building was assessed as offering moderate suitability for roosting bats. Potential Bat Roost Features were also recorded on the western elevation of the main house, which was also assessed as offering moderate suitability for roosting bats. The results of the building assessment are provided in **Table 1**.

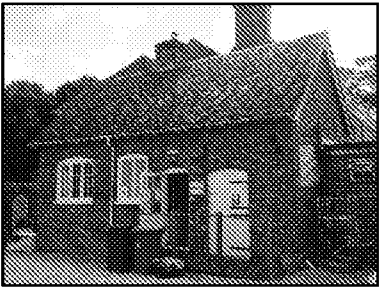
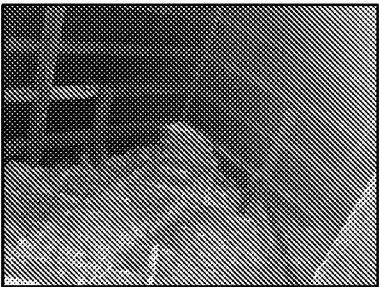
Tree Assessment

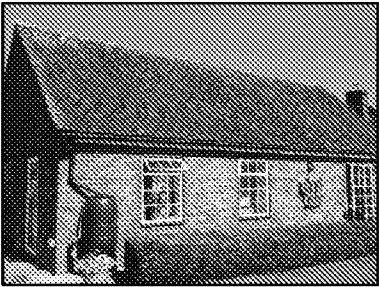
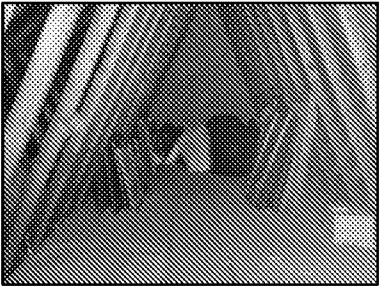
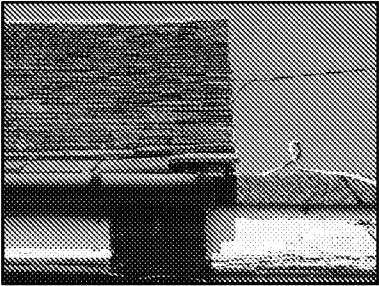
On-site trees were assessed from ground level during the survey. No Potential Bat Roost Features such as loose bark, rot holes or limb scars were identified on any of the specimens. As a result, all trees were assessed as offering negligible suitability for roosting bats.

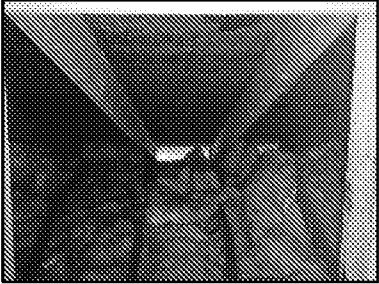
Foraging and Commuting Habitat

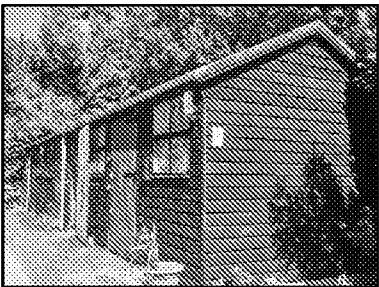
The site provides, to some extent, suitable foraging habitat for bats. The woodland area to the east of the site is likely to be of greater value to foraging bats, however, they may also pass over the site itself. From reference to aerial photography, hedgerow networks and blocks of woodland within the wider landscape offer good foraging and commuting habitat for bat species. However, these are not well-connected to the site itself. Overall, the site is assessed as offering low suitability for foraging and commuting bats.

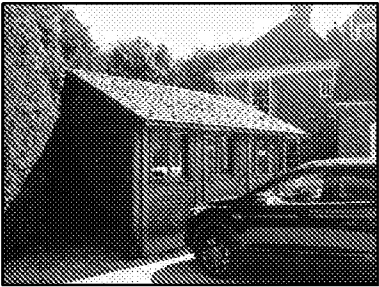
Table 1: Building Assessment – Summary of Features with Bat Roost Potential and Evidence of Bat Roost Activity

Surveyed Feature	Figure	Building Description	Description of Potential Bat Roost Features	Evidence of Bat Roost Activity and Location	Assessment of Suitability for Roosting Bats
Main House	 Figure 6: Western elevation of the main house  Figure 7: Northern elevation of the delivery office  Figure 8: Internal roof void	The main house is a large, three-storey, brick-built construction with a complex multi-pitched and gable-ended roof comprising clay roof and ridge tiles, six dormer windows - two on each of the eastern, southern and western elevations and five chimneys (Figure 6). Multiple extensions adjoin the main house to the north and west including a deliveries office (Figure 7) and a single-storey 1980s construction, as well as a two-storey bay window on the eastern elevation and a single-storey porch on the southern elevation. Wooden soffits and fascia board encircle the building on all sides Entering the delivery office from the northern elevation, the roof void is open to the apex which extends to the height of the main house (Figure 8). The rest of the internal roof void of the main house has been converted. The house is currently in use as an assisted living facility.	Gaps under roof tiles, gaps behind fascia and brickwork and gap in lead flashing above the conservatory where it joins the main house.	No evidence of roosting bats was recorded during the survey.	Moderate Suitability

Surveyed Feature	Figure	Building Description	Description of Potential Bat Roost Features	Evidence of Bat Roost Activity and Location	Assessment of Suitability for Roosting Bats
1980s Extension on Main House	 Figure 9: Northern elevation  Figure 10: Internal roof void  Figure 11: Lifted roof tiles	A single-storey brick construction built in the 1980s, extending from the north-western elevation of the main house (Figure 9). The roof is pitched, with clay roof and ridge tiles and wooden soffits and fascia board on the northern and southern elevations. Internally, the roof void is approximately two metres in height to the apex with wooden floor boarding, a wooden frame and lined with bitumen roofing felt (Figure 10). The building is currently in use for residential purposes.	Gaps under lifted roof and ridge tiles are present on the northern and southern elevations (Figure 11). Wooden fascia board is warped and damaged in some places, creating small gaps. The internal roof void inspection revealed gaps that lead into the void which may act as access/egress points for bats (Figure 12).	No evidence of roosting bats was recorded during the survey.	Moderate Suitability

Surveyed Feature	Figure	Building Description	Description of Potential Bat Roost Features	Evidence of Bat Roost Activity and Location	Assessment of Suitability for Roosting Bats
	 Figure 12: Entry/exit point to roof void				
Conservatory	 Figure 13: Conservatory building	A single-storey conservatory extends from the western elevation of the main house (Figure 13).	The conservatory does not contain any suitable Potential Bat Roost Features and does not provide suitable internal thermal conditions favourable to roosting bats.	No evidence of roosting bats was recorded during the survey.	Negligible Suitability

Surveyed Feature	Figure	Building Description	Description of Potential Bat Roost Features	Evidence of Bat Roost Activity and Location	Assessment of Suitability for Roosting Bats
Garages	 Figure 14: Row of garages  Figure 15: Internal view of garages	A row of three garages are located immediately north of the 1980s extension (Figure 14). There are single-storey wooden structures with wooden doors and a metal corrugated roof. The buildings are single-skin with no insulation. Brick columns separate the garages internally. The garages are used for a daily basis for storage (Figure 15).	The buildings are generally well sealed and do not contain any visible Potential Bat Roost Features. The garages are single-skin with no insulation, and are therefore unlikely to offer favourable thermal conditions for roosting bats.	No evidence of roosting bats was recorded during the survey.	Negligible Suitability
Workshop	 Figure 16: External view of workshop	A single-storey wooden structure used as a workshop, located north of the main house (Figure 16). The building is single-skin with a pitched roof comprising bitumen roofing felt. Internally, the building is open to the apex with no roof void (Figure 17).	The structure is well sealed and in relatively good condition. No suitable Potential Bat Roost Features were recorded. There is no roof void and the internal structure does not provide favourable thermal conditions for roosting bats.	No evidence of roosting bats was recorded during the survey.	Negligible Suitability

Surveyed Feature	Figure	Building Description	Description of Potential Bat Roost Features	Evidence of Bat Roost Activity and Location	Assessment of Suitability for Roosting Bats
	 Figure 17: Internal view of workshop				
Temporary Office	 Figure 18: Temporary office building	A small, temporary structure used as an office, located adjacent to the northern extension of the main house. Wooden clad construction with roofing felt tiles (Figure 18).	The structure is well sealed and does not contain any suitable Potential Bat Roost Features. There is no roof void and the internal structure does not provide favourable conditions for roosting bats.	No evidence of roosting bats was recorded during the survey.	Negligible Suitability

Bat Emergence/Re-entry Survey Results

The surveys recorded a total of five species of bat: common pipistrelle, soprano pipistrelle *Pipistrellus pygmaeus*, long-eared bat *Plecotus* species, *Myotis* species and serotine *Eptesicus serotinus*. Two common pipistrelle bats were recorded emerging from the delivery office building on the northern elevation of the main house on 12th September 2018.

Table 3 provides details of the species, numbers and locations of bats recorded roosting and foraging/commuting during the emergence/re-entry surveys. Locations of bat emergences and re-entries are shown in **Map 2**.

Table 3: Bat Emergence/Re-entry Survey Results

Survey Date	Recorded Bat Roosts			General Bat Activity at the Site		
12 th September 2018 <						

<i>Dawn Re-entry</i>				registrations. <i>Myotis</i> species was the only species recorded during the survey.		
9 th October 2018	Species	First Emergence/ Re-entry	Last Emergence/ Re-entry	Species	First Pass	Last Pass
	<u>Summary:</u> No bats were recorded emerging from the building during the survey.			Common pipistrelle	18:55	19:30
				Serotine	19:08	19:10
<i>Dusk Emergence</i>				<u>Summary:</u> Bat activity levels were low throughout the survey, with the majority of registrations attributable to common pipistrelle and two registrations of serotine. The majority of activity was recorded along the northern elevation of the northern extension, particularly in front of the delivery office.		

4.4.2 Evaluation

Roosting Bats

During the surveys, a total of two common pipistrelle were recorded emerging from beneath roof tiles on the northern elevation of the northern extension (the delivery office building). The roost associated with the delivery office roof is a common pipistrelle day roost of low value; the survey data suggests the roost supports two bats.

Foraging and Commuting Bats

The bat surveys recorded a total of five species of bat foraging and commuting at the site. **Table 4** shows the geographic level of value of foraging and commuting habitat at the site.

Table 4: Value of the site to bat species/species complexes

Species	Foraging and Commuting Value
Common pipistrelle	Local
Long-eared bat	Local
Soprano pipistrelle	Local
<i>Myotis</i> species	Local
Serotine	Local

Bat activity levels were generally low throughout the surveys, with the first survey on the 12th September 2018 recording low to moderate levels of activity. Common pipistrelle registrations were the most frequent during the emergence surveys, while *Myotis* species was the only species recorded during the dawn re-entry survey. Occasional long-eared bat, soprano pipistrelle and serotine registrations were also recorded. Most foraging activity was recorded along the northern elevation of the building complex. The site is considered to be of local importance to foraging and commuting bats.

4.5 Otter

4.5.1 Baseline Ecological Conditions

Desktop Study Results

Consultation with SxBRC produced no records of otter *Lutra lutra* within the desktop study area, however, this does not confirm the absence of the species in the local area.

Field Survey Results

There are no watercourses on the site suitable for this species. Along Nyton Road immediately south of the site, is a small drainage ditch which was dry at the time of the initial survey. A review of aerial photography shows that a network of drains intersects the surrounding area, however, these do not seem to provide sufficient hydrological connectivity to the Aldingbourne Rife (known to support otter), located 1.3 kilometres to the west. Due to the unsuitability of habitat for otter on the immediately adjacent to the site, this species is not considered further in this report.

4.6 Badger

4.6.1 Baseline Ecological Conditions

Desktop Study Results

Consultation with SxBRC produced no records of badger within the desktop study area, however, this does not confirm the absence of the species in the local area.

Field Survey Results

The majority of on-site habitats are well managed lawns and ornamental borders with limited suitability for sett construction and no sign of badger was recorded during the initial survey. The site does provide some opportunities for badger to forage and it is likely that the site falls within commuting habitat.

4.6.2 Evaluation

The site provides only limited suitable habitat for badger and given the extent of suitable habitat in the wider area, the site is assessed as being of site value to badger overall.

4.7 Hazel Dormouse

4.7.1 Baseline Ecological Conditions

Desktop Study Results

Consultation with SxBRC produced no records of hazel dormouse within the desktop study area, however, this does not confirm the absence of the species in the local area.

Field Survey Results

The site offers very limited opportunities for foraging/commuting dormouse due to the well-managed, species poor/ornamental planting and short mown lawns. From looking at aerial photography, the site does not appear connected to any potentially suitable dormouse habitat and therefore hazel dormouse is not considered further in this report.

4.8 Water Vole

4.8.1 Baseline Ecological Conditions

Desktop Study Results

Consultation with SxBRC produced one record of European water vole *Arvicola amphibius* within the desk study area. The exact location is not provided however the record is likely to be associated with Aldingboure Rife (given its approximate location), some 1.3 kilometres west.

Field Survey Results

There are no watercourses on or adjacent to the site that would be suitable for use by water vole. A review of aerial photography shows that a network of drains intersects the surrounding area, however, these do not seem to provide sufficient hydrological connectivity to the Aldingbourne Rife, where water vole has been recorded. As a result, habitats on site are not suitable for water vole and the species is not considered further in this report.

4.9 Birds

4.9.1 Baseline Ecological Conditions

Desktop Study Results

Consultation with SxBRC produced records of 82 species within the desk study area. Of these, woodpigeon *Columba palumbus*, wren *Troglodytes troglodytes*, the Amber

Listed⁹ dunnoek *Prunella modularis*, blue tit *Cyanistes caeruleus*, the Red Listed¹⁰ house sparrow *Passer domesticus* and the Amber Listed swift *Apus apus* are most likely to nest in the trees and buildings on site. The Red Listed overwintering birds: fieldfare *Turdus pilaris*, redwing *Turdus ilicaus* and mistle thrush *Turdus viscivorus* may use the undeveloped part of the site to the east over the winter.

Field Survey Results

The site supports habitat suitable for breeding birds in the form of scattered trees and ornamental hedges. The buildings may also provide nesting opportunities for birds, particularly swift which is known to breed in the local area, although no evidence of nesting birds was recorded during the surveys. The grassland on site is limited in extent and is generally unsuitable for notable species of wintering birds. Extensive suitable breeding bird habitat is present in the wider landscape in the form of hedgerow networks and woodland blocks. The site is unsuitable for waders and waterfowl.

4.9.2 Evaluation

Breeding Birds

The site is suitable for common and widespread species of breeding bird. The building may be used by breeding swift. Given the extent of suitable habitat in the wider area, the site is likely to be of local value to breeding birds.

4.10 Reptiles

4.10.1 Baseline Ecological Conditions

Desktop Study Results

Consultation with SxBRC produced records of grass snake *Natrix helvetica* and adder *Vipera berus* associated with various locations within the desk study area.

Field Survey Results

The vast majority of the site comprises grassland that is well-managed and tightly mown and well-managed ornamental borders providing few if any suitable areas for

⁹ **Birds of Conservation Concern Amber List**

The UK's birds are split in to three categories of conservation importance - red, amber and green. Red is the highest conservation priority, with species needing urgent action. Amber is the next most critical group, followed by green. Amber list criteria include species which are: in unfavourable conservation status in Europe; subject to historical population decline during 1800–1995, but recovering; subject to moderate (25–49%) decline in UK breeding population or contraction of UK breeding range over last 25 years, or the longer-term period; subject to moderate (25–49%) decline in UK non-breeding population over last 25 years, or the longer-term period; rare breeders (1–300 breeding pairs in UK); rare non-breeders (less than 900 individuals), or; internationally important species with at least 20% of European breeding or non-breeding population in UK.

¹⁰ **Birds of Conservation Concern Red List**

The UK's birds are split in to three categories of conservation importance - red, amber and green. Red is the highest conservation priority, with species needing urgent action. Amber is the next most critical group, followed by green. Red List criteria include species which are: globally threatened; have been subject to historical population decline in UK during 1800–1995; are in severe (at least 50%) decline in UK breeding population over last 25 years, or longer-term period, or; subject to severe (at least 50%) contraction of UK breeding range over last 25 years, or longer-term period.

common species of reptile. Where vegetation is less managed around the very edges of the site, there may be opportunities for species such as slow-worm but if present, numbers would likely be low and outside of any impacted areas of the redevelopment. As a result, reptiles are not considered further in this report.

4.11 Great Crested Newt

4.11.1 Baseline Ecological Conditions

Desktop Study Results

Consultation with SxBRC produced two records of great crested newt *Triturus cristatus* within the desk study area from 2013, associated with a property on Hook Lane, approximately one kilometre south of the site. A review of MAGIC did not reveal the presence of any EPSM licences in respect of great crested newt. A review of OS online mapping and aerial imagery revealed the presence of a further seven standing waterbodies within 500 metres of the site.

Field Survey Results

A large fish pond is present north-east of the site within the land ownership boundary. This is unlikely to be suitable for breeding great crested newt due to the presence of fish and waterfowl. At the time of the surveys, there was no water within this waterbody and no aquatic plant species. The drainage ditch along Nyton Road south of the site was also dry at the time of the site survey and contained no aquatic vegetation.

Five of the waterbodies identified by online mapping and the waterbody on Hook Lane identified in the desk study are separated from the site by the B2233 (Nyton Road), which, although not a main road, could reduce the chances of this species traveling from any possible breeding ponds located south of the site. The two other waterbodies identified are located approximately 140 metres north and 240 metres north-east of the site. The latter comprises a group of small ponds associated with a drainage network which are separated from the site by houses and gardens. The former is a large pond surrounded by trees. Great crested newt may use these waterbodies for breeding.

Taking into account the terrestrial habitat on the site, comprising short, mown lawns and ornamental borders, the site does not provide suitable terrestrial habitat for great crested newt and this species is therefore considered no further in this report..

4.12 Invertebrates

4.12.1 Baseline Ecological Conditions

Desktop Study Results

Consultation with SxBRC produced 11 records of stag beetle *Lucanus cervus* within the desk study area, one of which is associated with Nyton Lodge in 2017, located approximately 50 metres to the south east. One record of purple emperor *Apatura iris* was also returned.

Field Survey Results

Due to the low diversity and limited extent of on-site habitats, it is considered unlikely that the site will support notable invertebrate species or assemblages. None of the habitat types known to support the notable invertebrates identified in the desk study are present on the site, including decaying wood for stag beetle and willow *Salix* species for the purple emperor butterfly.

The habitat on site is unsuitable for notable invertebrates and therefore the species is not considered further in this report.

4.13 Other Relevant Species

4.13.1 Baseline Ecological Conditions

Desktop Study Results

Consultation with SxBRC produced records of West European hedgehog *Erinaceus europaeus*, a Species of Principal Importance, within the desk study area.

Field Survey Results

The site is well managed with no scrub habitat or long grass suitable for foraging hedgehog, however ornamental hedgerows may provide a limited foraging resource.

4.13.2 Evaluation

The site is likely to be of site value to hedgehog.

5.0 ASSESSMENT OF ECOLOGICAL EFFECTS AND MITIGATION/COMPENSATION/ENHANCEMENT MEASURES

5.1 Introduction

This section assesses the ecological effects of the proposed development scheme on the identified ecological features as identified in Section 4.0. Methods for addressing potential impacts on ecological features have been approached in accordance with the mitigation hierarchy¹¹ with avoidance of impacts prioritised where possible. Where significant adverse effects cannot be avoided other forms of mitigation are prioritised over compensation. Enhancement measures have been detailed, where relevant, in order to not only minimise the impacts on biodiversity but also to provide enhancement in accordance with Paragraph 170 of the NPPF (Paragraph 2.2). It is anticipated that mitigation, compensation and enhancement measures will be secured through the planning process.

5.2 Scheme Design

Redevelopment of the site will be carried out across three phases. Phase 1 entails the internal reconfiguration of part of the main house. Phase 2 entails the construction of a new dementia unit in the north-western corner of the site and landscaping of the grounds. Arisings created from the construction of the dementia unit will be used to fill the disused pool to the south. Phase 3 entails the demolition of the 1980s extension to the main building, the conservatory, garage and part of the northern extension currently used as a delivery office, followed by the construction of a replacement extension to the north-west. The garage will be relocated to the north-eastern corner of the site, and an existing wall to the east of the main building will be removed. External lighting is likely to form part of the proposals. Access will remain the same from the south-eastern corner of the site.

The potential ecological impacts and effects of these proposals, in the absence of mitigation, are described for each ecological feature below. For each ecological feature, measures to mitigate and/or compensate for significant effects are described.

5.3 Designated Sites

5.3.1 Potential Impacts and Effects

There are no statutory or non-statutory designated sites within one kilometre of the site boundary. Given the distance between the site and the closest designated site and the

¹¹ In accordance with CIEEM Ecological Impact Assessment guidance (CIEEM, 2016) a sequential process is adopted to address impacts on features of ecological interest, with 'Avoidance' prioritised at the top of the hierarchy and Compensation/Enhancement' at the bottom. This is often referred to as the 'mitigation hierarchy'.

absence of any hydrological connectivity, no impacts are anticipated on any designated sites as a result of the proposals.

5.3.2 Mitigation Measures

Given the potential impacts and effects identified above, no mitigation measures are considered necessary.

5.3.3 Significance of Residual Effects

No significant residual effects are anticipated as a result of the proposals.

5.3.4 Compensation

No compensation measures are required.

5.3.5 Enhancement

No additional enhancement is considered necessary.

5.3.6 Monitoring

No future monitoring is considered necessary.

5.4 Habitats

5.4.1 Potential Impacts and Effects

Approximately 0.008 hectares of semi-improved grassland will be lost to the construction of the new dementia unit in the north-west corner of the site, and an additional 0.002 hectares to the construction of the new extension to the main house. No trees or hedgerows are due to be removed.

5.4.2 Mitigation Measures

Given the potential impacts and effects identified above, no mitigation measures are considered necessary.

5.4.3 Significance of Residual Effects

There will be an overall loss of 0.01 hectares of species-poor, semi-improved grassland to the proposed works. This impact is assessed as being of site level only due to the generally low value of on-site habitats.

5.4.4 Compensation

The grounds at the southern end of the site are due to re-landscaped. Proposed landscaping will incorporate native tree and shrub species as opposed to cultivars such as hazel, holly, hawthorn and dogwood *Cornus sanguinea*. Some non-native species that are known to benefit invertebrates can also be incorporated. These species could include lavenders *Lavandula* species, verbenas *Verbena* species, *Salvia* species and similar species. New areas of grassland will comprise a native wildflower lawn mix such

as Emorsgate EL1 Flowering Lawn Mixture with some areas around the edges of the site left to grow longer. Ideally the grassland areas of the site should be managed in such a way as to benefit invertebrates (and other wildlife) as much as possible. If managed appropriately, these measures should compensate for the loss of on-site habitat.

5.4.5 Enhancement

No further enhancement measures are considered necessary.

5.4.6 Monitoring

No future monitoring is required.

5.5 Bats

5.5.1 Potential Impacts and Effects

The northern extension of the main house (currently used as a delivery office) is a confirmed low status day roost of common pipistrelle due to the emergence of two bats from the northern elevation of the building during the survey on the 12th September 2018.

The proposed works have the potential to result in the killing/disturbance of roosting bats within the building during the construction phase and the long-term loss of a roost post-development due to the partial demolition of the building. Impacts associated with noise, vibration and lighting occurring during the construction phase have the potential to result in disturbance to foraging and commuting bats on the site and in the immediate vicinity. Additional external lighting may cause long-term disturbance to foraging and commuting bats post-development.

In England, bats and their habitat are fully protected under the Wildlife and Countryside Act 1981 through inclusion in Schedule 5. In addition, all bat species are protected under the Conservation of Habitats and Species Regulations 2017. Refer to **Appendix 3** for details.

5.5.2 Mitigation Measures

Due to the presence of a low status day roost of common pipistrelle within the delivery office, a Natural England bat licence will need to be obtained prior to the proposed works commencing. The data gathered during the bat surveys and the initial inspection will be incorporated into the licence application and will be used to devise an appropriate mitigation strategy.

The species protection provision of the Habitats Directive, as implemented by the Conservation (Natural Habitats etc.) Regulations 2017 contains three 'derogation tests' which must be applied by the Local Planning Authority at the Planning Application stage

and by Natural England when deciding whether to grant a licence to a person carrying out an activity which would harm a European Protected Species. The three tests that must be met in order to successfully obtain a Natural England licence are as follows:

- The consented operation must be for 'preserving public health or public safety or other imperative reasons of overriding public interest including those of a social or economic nature and beneficial consequences of primary importance for the environment';
- There must be 'no satisfactory alternative'; and
- The action authorised 'will not be detrimental to the maintenance of the population of the species concerned at a favourable conservation status in their natural range'.

In relation to the three derogation tests the following statements relate to the Nyton House Care Home site:

Preserving Public Health and Safety or other Imperative Reasons of Overriding Public Interest

Currently the on-site buildings allow for the provision of care home facilities for a certain number of residents. These buildings are not able to accommodate for the increasing demand for care home facilities and higher numbers of residents requiring use of the facilities. Further, the existing facilities do not include a dementia unit. The proposals will include the provision of a new dementia unit and provide additional accommodation for a higher number of residents to the demand for further care home facilities. For these additional facilities to be provided, part of the existing building needs to be demolished and an undeveloped part of the site will need to be used for the new dementia unit.

No Satisfactory Alternative

The proposed works are required to provide additional facilities for residents at the care home, as well as additional accommodation for new residents. Internally converting the existing buildings into new accommodation is not an option as there is not sufficient space within the existing buildings to provide the additional services required. Further, the existing buildings are not of suitable size or layout to provide the facilities needed. Construction of the new dementia unit elsewhere would mean a net loss in habitat which is of higher quality than the species-poor, semi-improved grassland currently in the north-west corner of the site.

Maintaining the Favourable Conservation Status of the Species at the Site

Given the presence of roosting bats within the delivery office building, partial demolition will result in the potential loss and disturbance to a roost. The bat licence application will require the preparation of a clear and reasoned Method Statement which details the methods for maintaining the conservation status of the species at the site. This can be achieved by the following measures:

- All stripping and demolition works likely to disturb bats will be carried out during March to October (ideally), so as to minimise the impact on bat roosting locations;
- A toolbox talk will be given to contractors on site, and signage will be installed informing contractors of issues relating to bats and the redevelopment works;
- One Schwegler 1FF bat box or one of similar design will be erected on a retained tree prior to any roof tile stripping and demolition work taking place; this will remain in place at the site in perpetuity;
- Prior to any stripping and demolition works commencing at the site, the delivery office building will be inspected by a licensed bat worker to locate roosting bats. Any bats found during these inspections will, if necessary, be removed by hand and placed within bat box which has been previously erected on a tree within the site;
- To ensure that no bats are injured or maimed during the stripping and demolition works, the careful removal of all identified bat roost areas and suitable bat roosting features including areas of roof tiles, soffits, fascias and brickwork will be carried out by a licensed bat worker, using hand tools;
- All work to be carried out during the construction phase will be completed within daylight hours so as not to disturb potential roosting, foraging and commuting bats.

Any additional external lighting should be avoided where possible. If needed, the lighting scheme will comprise hooded luminaires directed away from vegetation (including new planting areas), particularly trees. Ideally, the bulbs will be LED and at the warmer end of the spectrum (e.g. avoiding blue or white light). LED lights emit much lower levels of UV and therefore have a lower impact on wildlife (ARUP, 2014). The lighting should be motion activated and task related, associated with specific entrance/exit points of the building. The lux level will be as low as possible to allow the task to be carried out safely and effectively. Guidance on task related lighting levels published by the Chartered Institute of Building Services Engineers (CIBSE) (CIBSE,

2002) will be followed. None of the areas in the vicinity of bat mitigation infrastructure should be directly illuminated.

The recommendations for native species planting and appropriate aftercare of the grassland on site should compensate for any loss of foraging habitat.

5.5.3 Significance of Residual Effects

Measures to avoid disturbance or harm to roosting, foraging and commuting bats during the construction phase will mitigate for potential impacts. However, the proposed works will result in the overall loss of a bat roost within the building.

5.5.4 Compensation

The newly constructed extension will contain two Schwegler 1FR bat tubes incorporated into the fabric of the building to compensate for the loss of an existing bat roost. If the newly constructed extension is to include a roof void, new roof lining will be traditional style bitumen rather than breathable membrane (BRM) as bats are known to get tangled within BRM and therefore this should be avoided.

5.5.5 Enhancement

Two Schwegler 1FR bat tubes will be incorporated into the fabric of the newly constructed dementia unit and a bat box will be retained on site; these will provide both compensatory and enhancement features for bats.

5.5.6 Monitoring

Due to the low status of the roosts, no future monitoring will be required as part of the bat licence conditions.

5.6 Badger

5.6.1 Potential Impacts and Effects

The proposals have the potential to result in long-term loss of foraging habitat for badger. However, it is not considered that any population would rely on the site given the nature of the habitats present in the context of the wider area. No setts will be affected by the proposals.

Badger are protected from killing and injury, and their setts protected from damage and interference, under the Protection of Badgers Act 1992. Refer to **Appendix 3** for details.

5.6.2 Mitigation Measures

Given the potential impacts and effects identified above, no mitigation measures are considered necessary.

5.6.3 Significance of Residual Effects

No significant residual effects on badger are anticipated as a result of the proposals.

5.6.4 Compensation

No compensation is considered necessary. .

5.6.5 Enhancement

No additional enhancement measures are considered necessary.

5.6.6 Monitoring

No future monitoring is required.

5.7 Birds

5.7.1 Potential Impacts and Effects

Any removal of woody vegetation may result in the killing/injury of nesting birds if undertaken during the nesting bird season of March to August inclusive and works to the buildings could also affect nesting birds, if present. There will be an overall minor loss of suitable nesting habitat.

All birds, their nests, eggs and young are legally protected, with certain exceptions, under the Wildlife and Countryside Act 1981 (as amended). Refer to **Appendix 3** for details.

5.7.2 Mitigation Measures

If any necessary woody vegetation clearance is required, this will be undertaken outside of the nesting bird season of March to August inclusive. Or if this is not possible, an ecologist will inspect the vegetation immediately prior to removal for signs of nesting birds. Any active nests will be left with a suitable buffer until nesting ends. As part of the building works, if works are undertaken during the nesting season, the ecologist working under the bat licence will check for nesting birds during the destructive search and appropriate advice provided should nesting birds be present.

5.7.3 Significance of Residual Effects

Given the potential impacts and effects identified above and the mitigation measures recommended, no significant residual effects are anticipated.

5.7.4 Compensation

In the event that any woody vegetation is removed as part of the proposals, landscaping of the site should seek to replace this vegetation to ensure no overall loss of suitable nesting habitat.

5.7.5 Enhancement

As an enhancement measure, landscaping proposals will comprise the planting of native trees and shrubs suitable for nesting birds and appropriate management of the grassland to benefit a range of wildlife. In addition, two swift boxes will be installed on the outside of the newly constructed buildings to provide nesting opportunities for swifts which are known to breed in the local area.

5.7.6 Monitoring

No future monitoring will be required.

5.8 Other Relevant Species

5.8.1 Potential Impacts and Effects

The proposals will result in the loss of habitat suitable for European hedgehog; no additional fencing/walls are being installed and therefore there will be no impacts of habitat fragmentation or isolation.

5.8.2 Mitigation Measures

Given the potential impacts and effects identified above, no mitigation measures are considered necessary.

5.8.3 Significance of Residual Effects

No significant residual effects on hedgehog are anticipated as a result of the proposals.

5.8.4 Compensation

New areas of native species planting and grassland within the proposed landscaping scheme will provide replacement and improved foraging habitat for hedgehog.

5.8.5 Enhancement

No additional enhancement measures are considered necessary.

5.8.6 Monitoring

No future monitoring is required.

5.9 Cumulative Effects

Assuming that the mitigation and compensation measures outlined in the paragraphs above are implemented, no significant residual effects are anticipated. As such it is considered unlikely that the proposals will contribute to cumulative adverse effects in association with other proposals in the local area.

6.0 CONCLUSIONS

6.1 Conclusion

The site supports a low status day roost of common pipistrelle. The site also supports suitable habitat for badger (foraging/commuting only), breeding birds and hedgehog. Adverse impacts on these ecological features have been identified and appropriate mitigation measures proposed. No residual or cumulative impacts are anticipated. Post-development the site will be enhanced for bats through the installation of additional bat roosting features, for breeding birds through the installation of nesting boxes, and landscaping proposals will incorporate native planting known to benefit a range of species. If the site is managed appropriately, the proposed measures should result in an overall net gain for biodiversity. As such it is considered that the proposals will accord with all relevant national and local planning policy in relation to ecology including policies included in the Arun District Local Plan and the NPPF (see Section 2.0).

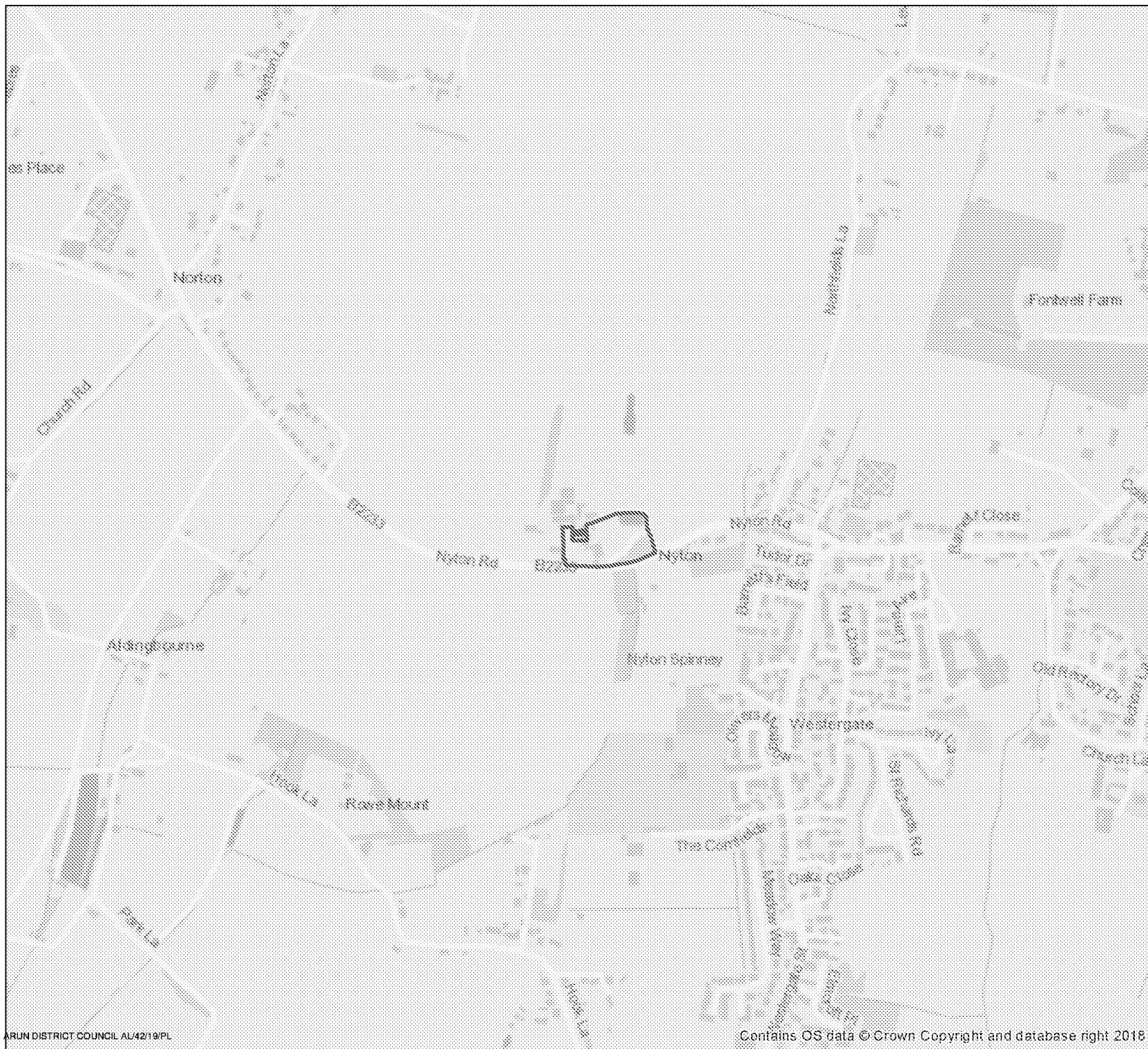
6.2 Updating Site Survey

If the planning application boundary changes or the proposals for the site alter, a re-assessment of the scheme in relation to ecology may be required. Given the mobility of animals and the potential for colonisation of the site over time, updating survey work may be required, particularly if development does not commence within 12 months of the date of the most recent relevant survey.

7.0 REFERENCES

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Map 1 Site Location Plan



NYTON HOUSE CARE HOME, NYTON ROAD, WESTERGATE, CHICHESTER

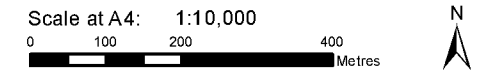
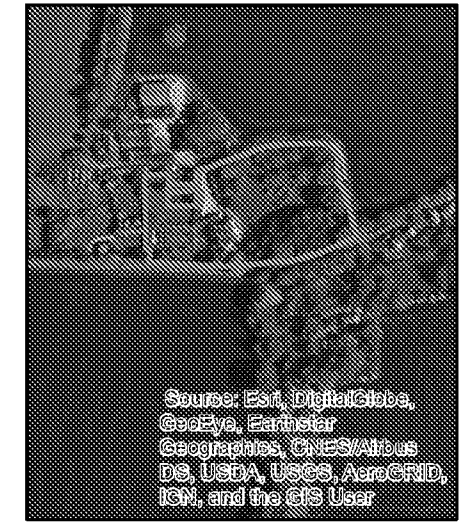
ECOLOGICAL IMPACT ASSESSMENT

Map 1 - Site Location Plan

Client:	MH Architects
Date:	November 2018
Status:	Final

KEY

 Site Boundary



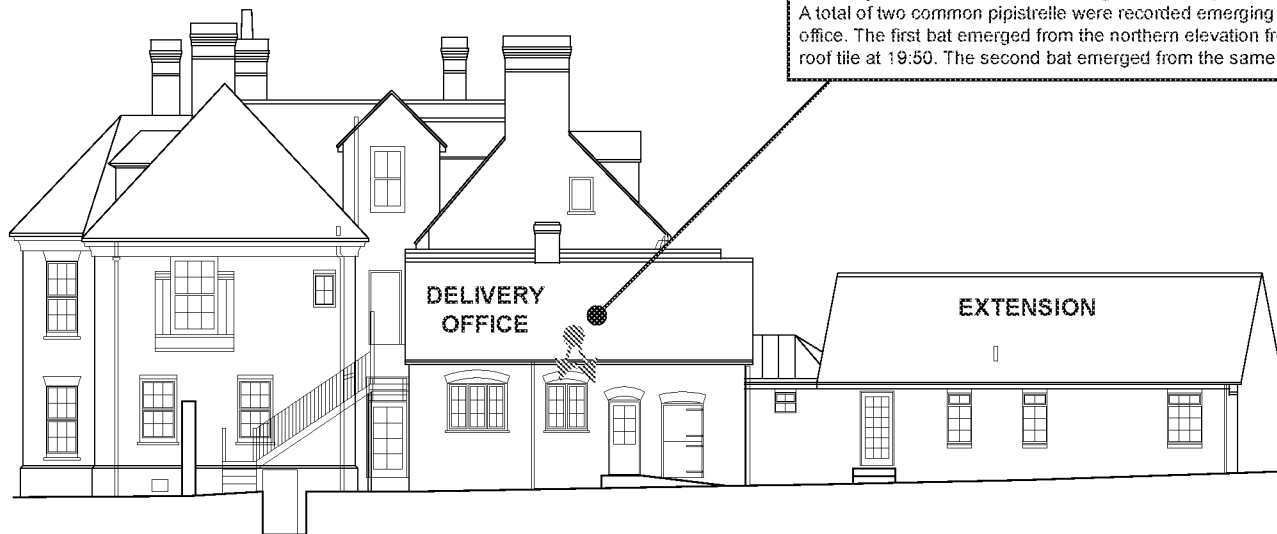


Ecological Survey & Assessment

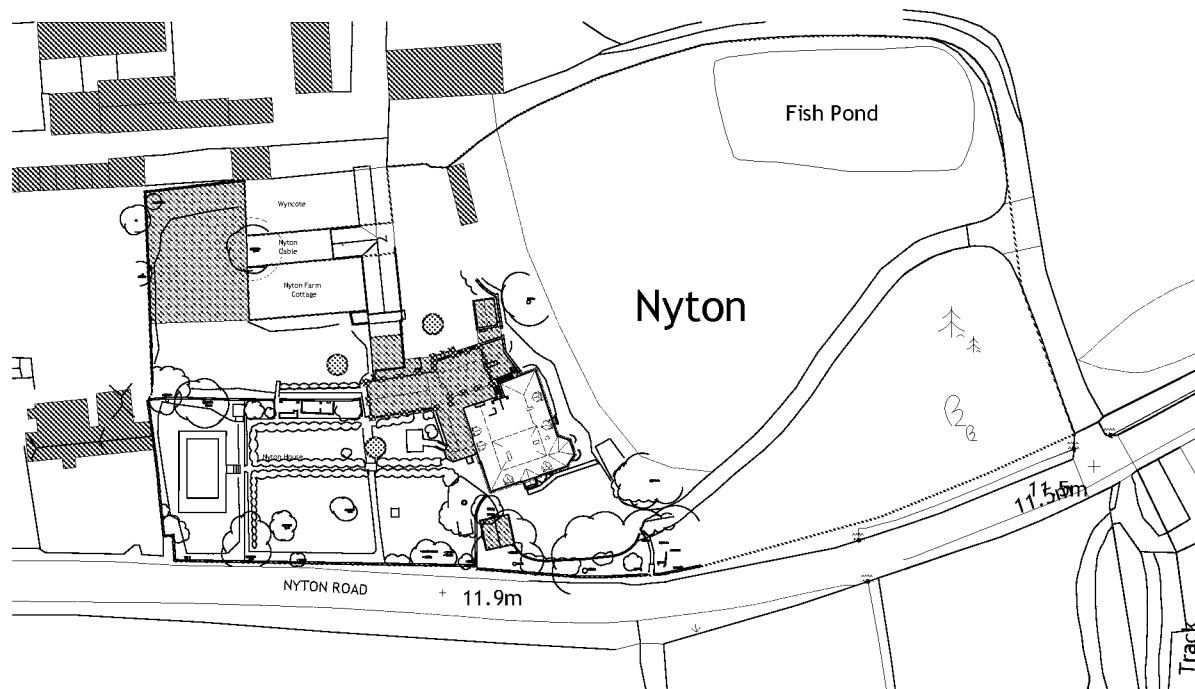
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Map 2 Bat Emergence/Re-entry Survey

Northern Elevation



10.0m DATUM
NORTH ELEVATION



Site Location Plan

NYTON HOUSE CARE HOME, NYTON ROAD, WESTERGATE, CHICHESTER

ECOLOGICAL IMPACT ASSESSMENT

Map 2 - Bat Emergence/Re-entry Survey

Client:	MH Architects
Date:	November 2018
Status:	Draft

KEY

	Site Boundary
	Buildings subject to bat dusk emergence / dawn re-entry surveys
	Bat Surveyor Location
	Common Pipistrelle Emergence

N.B. The Delivery Office and Extension buildings were subject to bat dusk emergence surveys on 12th September and 9th October 2018, and a single dawn re-entry survey on 26th September 2018.

Northern Elevation reproduced from MH Architects 'Main House - Existing Elevations', Job No. 18-003, Drawing No. SK03 (no revision), Scale @ A1 1:1000, dated 22nd March 2018.

Site Location Plan reproduced from MH Architects 'Main House - Existing Site and Location Plan', Job No. 18-003, Drawing No. SK01 (no revision), Scale @ A1 1:1000, dated 22nd March 2018.

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Appendix 1 Proposed Site Layout



Notes
1. This drawing is the copyright of MH Architects Ltd
2. Do not scale this drawing except for Local Authority planning purposes
3. All dimensions must be checked on site by the contractor prior to commencement of the works.

Rev.	Revision	By	Date	Check	Date

Development At Nyton House Care Home

Nyton Rd, Westergate,
Chichester PO20 3UL
Nyton House Residential Care Home

Project & Drawing title

Site Plan

Drawn	Date	Checked	Date	Scale at A1
JH	22/03/2018	HJC	22/03/2018	1:100
Job N°	18-003	Drawing N°	SK04	Rev. C
Status	PRELIMINARY DRAWING			

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Appendix 2 Sites Designated for Nature Conservation

Statutory Sites

Internationally Designated Sites - Ramsar Sites, Special Areas of Conservation and Special Protection Areas

Special Protection Areas (SPA) and Special Areas of Conservation (SAC) form a network of protected sites across the European Union called Natura 2000 sites. In the United Kingdom the primary legislative protection is afforded to these sites under the Conservation of Habitats and Species Regulations 2017 (as amended).

Ramsar sites are designated as wetlands of international importance which are afforded similar legislative protection to Natura 2000 sites.

SACs are sites which support intentionally important habitats or internationally important assemblages or populations of species. SPAs are designated for supporting internationally important populations of birds listed in the annexes of the Birds Directive. SACs, SPAs and Ramsar sites are generally also designated as Sites of Special Scientific Interest.

Under Regulation 63 of the Conservation of Habitats and Species Regulations 2017 (as amended) there is a legal requirement that competent authorities, such as local planning authorities, need to consider whether plans or projects are likely to have a significant adverse effect on Natura 2000 sites or Ramsar sites, either alone, or in combination with other plans or projects. In the event that a likely significant effect cannot be ruled out, on the basis of objective information, then the competent authority must undertake an “Appropriate Assessment” to fully assess the plan or project against the site’s conservation objectives. Unless certain defined derogation tests can be met, the competent authority may not authorise nor undertake any plan or project which adversely affects the integrity of a Natura 2000 site or Ramsar site.

Nationally Designated Sites – Sites of Special Scientific Interest and National Nature Reserves

Sites of Special Scientific Interest (SSSI) receive legal protection under the Wildlife and Countryside Act 1981 (as amended). Such sites are designated to protect specific areas of biological or geological interest of national importance. Such sites also generally receive strict protection through the planning system.

National Nature Reserves (NNR) are also usually designated as SSSIs and are specifically managed for their wildlife value. They receive legal protection through the National Parks and Access to the Countryside Act 1949 and the Wildlife and Countryside Act 1981 (as amended). As with SSSIs, these sites generally receive strict protection through the planning system.

Locally Designated Sites – Local Nature Reserves

Local Nature Reserves (LNR) are designated by local authorities under the National Park and Access to the Countryside Act 1949. These are generally designated not only for their local wildlife value but also for education, scientific and recreational purposes. These sites generally receive protection from development through the planning system.

Non-Statutory Sites

Locally Designated Sites

In addition to statutory designations, local authorities often designate sites of nature conservation importance at the local level. Such designations are named differently by each local authority and may be referred to as Local Wildlife Sites (LWS), Sites of Importance for Nature Conservation (SINC) or Sites of Nature Conservation Importance (SNCI), amongst others. The exact level of protection afforded to these sites varies and is normally defined through local planning policy.

Appendix 3 Relevant Legislation

Bats

All UK bat species are listed in Schedule 5 of the Wildlife and Countryside Act 1981 (as amended) and Schedule 2 of the Conservation of Habitats and Species Regulations 2017. They are afforded full protection under Section 9(4) of the Act and Regulation 43 of the Regulations. These make it an offence to:

- Deliberately capture, injure or kill any such animal;
- Deliberately disturb any such animal, including in particular any disturbance which is likely:
 - To impair its ability to survive, breed, or rear or nurture their young;
 - To impair its ability to hibernate or migrate;
 - To affect significantly the local distribution or abundance of that species;
- Damage or destroy a breeding site or resting place of any such animal;
- Intentionally or recklessly disturb any of these animals while it is occupying a structure or place that it uses for shelter or protection; or
- Intentionally or recklessly obstruct access to any place that any of these animals uses for shelter or protection.

In addition, five British bat species are listed on Annex II of the Habitats Directive. These are:

- Greater horseshoe bat *Rhinolophus ferrumequinum*;
- Lesser horseshoe bat *Rhinolophus hipposideros*;
- Bechstein's bat *Myotis bechsteinii*;
- Barbastelle *Barbastella barbastellus*; and
- Greater mouse-eared bat *Myotis myotis*.

In certain circumstances where these species are found the Directive requires the designation of Special Areas of Conservation (SACs) by EC member states to ensure that their populations are maintained at a favourable conservation status. Outside SACs, the level of legal protection that these species receive is the same as for other bat species.

Breeding Birds

With certain exceptions, all wild birds, their nests and eggs are protected by Section 1 of the Wildlife and Countryside Act 1981 (as amended). Therefore, it is an offence, to:

- Intentionally kill, injure or take any wild bird;
- Intentionally take, damage or destroy the nest of any wild bird while it is in use or being built; or
- Intentionally take or destroy the egg of any wild bird.

These offences do not apply to hunting of birds listed in Schedule 2 subject to various controls. Bird species listed on Schedule 1 of the Act receive further protection, thus for these species it is also an offence to:

- Intentionally or recklessly disturb any bird while it is nest building, or is at a nest containing eggs or young; or
- Intentionally or recklessly disturb the dependent young of any such bird.

Appendix 4 Protected and Notable Species Appraisal Methods

Bats

The survey conformed to current Bat Conservation Trust guidelines (Collins, 2016). An assessment was made of the suitability of buildings and trees on the site and immediately on the site boundary to support roosting bats based on the presence of features such as loose or missing roof tiles or lifted lead flashing for buildings and holes, cracks, splits, loose bark and ivy cladding for trees. A detailed external and internal inspection of accessible structures was undertaken to compile information on potential and actual bat entry/exit points; potential and actual bat roosting locations; any evidence of bats found.

An assessment was made of the suitability of the site and the surrounding landscape to support foraging and/or commuting bat species. The assessment of the potential for the site to support roosting, foraging and commuting bat is based on a four-point scale as detailed in **Appendix 5**.

Otter

The otter appraisal was based on an assessment of the suitability of the habitat present within the site to support otter by reference to habitat type (such as rivers, streams, ditches, wetlands, reed beds, lakes, ponds and reservoirs), proximity of the site to freshwater and potential important feeding resources (such as fisheries), presence of habitat features which could provide opportunities for resting places and/or holts (such as tunnels, hollows at the base of trees and presence of dense, undisturbed habitat). During the survey attention was paid to the presence of evidence such as spraints, feeding remains, footprints and slides.

Badger

The survey involved a detailed investigation of the site to identify evidence of badger residence, foraging or territorial activity. Particular emphasis was placed on locating badger setts, paths, and signs of territorial activity such as latrine sites both on-site and within immediately adjacent areas where access was possible.

Hazel Dormouse

The appraisal for the potential of the site to support dormouse was based on an assessment of habitat features that may indicate that the species is present. This includes the presence of key food sources such as hazel and bramble, or plants used as nesting material such as honeysuckle and clematis. Additionally, the species requires a continuum of food supply so that habitat structure, diversity and connectivity to adjacent areas of woodland/scrub are important features in determining the potential presence of hazel dormouse.

Water Vole

The water vole appraisal was based on an assessment of the suitability of the habitat present within the site to support water vole by reference to habitat type (such as rivers, streams, ditches, wetlands, reed beds, lakes, ponds and reservoirs), bank structure and the bank side

vegetation. Water voles generally require sloping banks in which to burrow and well-developed bank side vegetation to provide shelter and food. During the survey attention was paid to the presence of burrows, latrines, feeding remains, trails and footprints.

Birds

The appraisal of breeding birds on the site was based on the suitability of habitat present to support nesting bird communities, the presence of bird species that may potentially nest within the available habitat and evidence of nesting such as old or currently active nests.

The assessment of wintering birds was based on an assessment of the suitability of the habitat on site to support important wintering bird species and populations. Particular attention was paid to the potential for the site to support wintering farmland bird species, waders and wildfowl.

Reptiles

The reptile appraisal was based on an assessment of the suitability of the habitat present within the site to support a population of reptiles. Reptiles particularly favour scrub and rough grassland interfaces and the presence of these is a good indication that reptiles may be present on-site. In addition, reptiles may utilise features such as bare ground for basking, tussocky grassland for shelter and compost heaps and rubble piles for breeding and/or hibernating.

Great Crested Newt

The appraisal of the site to support great crested newt included establishing the presence of suitable aquatic habitats such as ponds, lakes or other waterbodies within or adjacent to the site and the presence of suitable terrestrial habitat. Waterbodies that are densely shaded, highly eutrophic or that contain fish are likely to be less suitable for this species. The suitability of on-site ponds and terrestrial habitat is considered in relation to the presence of ponds within the wider area, as identified within the desktop study (Paragraph 3.4.3), and their suitability to be used as a network.

Invertebrates

An assessment was made of the site for its potential value to support diverse communities of invertebrates. The assessment was based on the presence of habitat features which may support important invertebrate communities. These features include, for example, an abundance of dead wood, the presence of diverse plant communities, varied woodland structure, sunny woodland edges with a diverse flora, waterbodies and water courses and areas of free draining soil exposures. During the field survey there was no attempt made to identify species present as this is a more specialist area of ecological assessment reserved for targeted surveys.

Other Relevant Species

An assessment was made of site suitability for other notable species such as more rarely encountered protected species, Species of Principal Importance for the Conservation of diversity in England notified under Section 41 of the NERC Act 2006 and as listed in the England

Biodiversity List, and Local Biodiversity Action Plan (LBAP) species¹², specific to the study region.

Invasive Species

During the field survey any incidental records of invasive species listed on Schedule 9 of the Wildlife and Countryside Act 1981 (as amended) were recorded. However, it should be considered that the survey was not specifically aimed at assessing the presence of these species and further specialist advice may need to be sought.

¹² LBAPs identify local priorities for biodiversity conservation by translating national targets for species into effective action at the local level and identifying targets for species important to the local area.

Appendix 5 Appraisal Criteria for Bats

The criteria used to assess the suitability of roosting and foraging/commuting habitat for bats is based on industry guidelines and outlined in **Table 5**¹³.

Table 5: Criteria used to Assess Suitability of Roosting and Foraging/Commuting Habitat for Bats

Suitability	Description of roosting habitats	Commuting and foraging habitats
High	A structure or tree 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. Site is close to and connected to known roosts.
Moderate	A structure of tree 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.	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.
Low	A structure with one or more potential roost sites that could be used by individual bats opportunistically/structure that does 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.e. unlikely to be suitable for maternity or hibernation). A tree of sufficient size and age to contain potential roost features but with none seen from the ground or features seen with only very limited roosting potential.	Habitat that could be used by small numbers of commuting bats such as a gappy hedgerows or un-vegetated stream, but isolated (i.e. 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 or a patch or scrub.
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.

¹³ Table adapted from (Collins, 2016)

Appendix 6 Assessment Criteria for Roosting Bats

Roost types have been defined in accordance with Natural England and Bat Conservation Trust guidelines. Definitions are set out in **Table 6**.

Table 6: Bat roost types as defined by Natural England and the Bat Conservation Trust

Roost Type	Definition
Day Roost	A place where individual bats, or small groups of males, rest or shelter in the day but are rarely found by night in the summer.
Night Roost	A place where bats rest or shelter in the night but are rarely found in the day. May be used by a single individual on occasion or it could be used regularly by the whole colony.
Feeding Roost	A place where individual bats or a few individuals rest or feed during the night but are rarely present by day.
Transitional/Occasional Roost	Used by a few individuals or occasionally small groups for generally short periods of time on waking from hibernation or in the period prior to hibernation.
Swarming Site	Where large numbers of males and females gather during late summer to autumn. Appear to be important mating sites.
Mating Sites	Where mating takes place from late summer and can continue through winter.
Maternity Roost	Where female bats give birth and raise their young to independence.
Hibernation Roost	Where bats may be found individually or together during winter. They have a constant cool temperature and high humidity.
Satellite Roost	An alternative roost found in close proximity to the main nursery colony used by a few individual breeding females to small groups of breeding females throughout the breeding season.