

## Evaluation Methodology

Using the guidance set out below and professional judgement, the bat assemblage was evaluated according to the CIEEM geographic scale of reference (CIEEM, 2019) with reference to the following documents:

- The Bat Mitigation Guidelines (English Nature, 2004);
- The framework for evaluating bat populations set out by Wray et al. (2010) Valuing Bats in Ecological Impact Assessment;
- The BCT's Bat Surveys for Professional Ecologists: Good Practice Guidelines (Collins, 2016);
- The Mammal Society's Review of the Conservation Status of British Mammals (Mathews et al. 2018);
- Section 41 of the NERC Act;
- Information provided in the Distribution Atlas of Bats in Britain and Ireland (Richardson, 2000); and
- The population status of bat species in Surrey as set out in the Surrey Nature Partnership's Biodiversity and Planning in Surrey document (SNP, 2019).

## BADGER SURVEY

The Badger survey was conducted following standard guidance (Harris et al., 1989; Macdonald et al 1998; Scottish Badgers, 2018). The Site was systematically walked by Katharine Luckhurst a suitably qualified Badger ecologist of EPR Ltd 22<sup>nd</sup> August 2024. The survey area covered all accessible land within the Zol of the proposed scheme, where access was possible.

The survey involved searching for signs of Badger residence and activity, as shown in **Table A4.5**. The Site was examined for Badger presence through the discovery of setts, and Badger activity levels through identification of field signs (e.g., well-used pathways, foraging holes (snuffle holes), Badger hairs, footprints, dung pits, latrines and push-unders beneath fencing. Any setts that were discovered were categorised and their entrances mapped out, numbered and where possible assigned a level of current use.

When the Site had been surveyed and all field signs were collated an assessment was made as to the likely number of clans present within the Zol, the likely extent of the clan(s) territory and their likely valuable foraging resources.

**Table A4.5: Field Signs for Badgers**

| Sign         | Description                                                                                                                                                                                                                                   | Interpretation and Significance                                                                                                                                                                                                                                                                           |
|--------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Sett         | A complex of burrows (tunnels and chambers) used as a dwelling-place.                                                                                                                                                                         | Setts are classified according to their size and level of use, providing an indication of their value to the occupiers – see <b>Tables 2 and 3</b> . Any sett that is in current use, usually determined as within the last year, is protected by national law.                                           |
| Entrance     | Mouth of a tunnel/ burrow.                                                                                                                                                                                                                    | Sett classification relies on counting the number of entrances and determining the level of Badger activity at these entrances– see <b>Tables 2 and 3</b> .                                                                                                                                               |
| Day-nest     | Above-ground resting-place, often comprising a bed of hay beneath scrub or other cover.                                                                                                                                                       | Temporary, usually overnight resting-place, not considered to be given the same level of protection as setts.                                                                                                                                                                                             |
| Path         | Well-worn, determined movement routes, most obvious through long grass, across muddy areas and when there are push-unders.                                                                                                                    | Badgers are creatures of habitat, using well-established pathways to patrol their territory and reach setts and foraging areas. Continued use of major paths is vital to clan survival.                                                                                                                   |
| Push-under   | Gap created by a Badger under fencing or other barrier to enable access.                                                                                                                                                                      | Gives an indication of the level of activity along a path and degree of determination to access an area.                                                                                                                                                                                                  |
| Footprint    | Characteristic broad, five-toed, large-padded impression.                                                                                                                                                                                     | Confirms Badger use of an area and gives an indication of the recentness and level of activity along a path, around a sett, or in a foraging area.                                                                                                                                                        |
| Hair         | Black and white striped, coarse, angled hairs, often caught on barbs of fencing or thorns, especially at push-unders and found amongst diggings and bedding in sett entrances.                                                                | Confirms Badger use of an area and gives an indication of the recentness and level of activity.                                                                                                                                                                                                           |
| Dung         | Droppings of a variable consistency, but usually predominantly composed of black matter from earthworms. Also include grain, berries and insect remains. Of a larger size than fox droppings and with a musty, rather than unpleasant, smell. | Confirms Badger use of an area and gives an indication of the recentness and level of activity.                                                                                                                                                                                                           |
| Dung-pit     | Small pit that may have originally been a snuffle-hole, but used for the deposition of dung, urine or scent. May or may not contain traces of dung at the time.                                                                               | Confirms Badger use of an area and gives an indication of the recentness and level of activity.                                                                                                                                                                                                           |
| Latrine      | Aggregation of dung-pits, usually showing dung of various ages and with pits containing more than one deposition of dung.                                                                                                                     | Used by a clan as a social marker of an important feature, including the main sett and path intersections and push-unders, especially near the territory boundary. May be used to mark important foraging resources. At the territory boundary, the neighbouring clan may also contribute to the latrine. |
| Snuffle-hole | Small pit dug by Badgers in pursuit of retreating earthworms.                                                                                                                                                                                 | Shows Badger use of an area for foraging. Care must be taken interpreting foraging signs, which can be confused with those of other mammals.                                                                                                                                                              |

## HAZEL DORMOUSE SURVEY

The nest tube survey methodology followed the Dormouse Conservation Handbook (Bright *et al.*, 2006). These guidelines recommend that a minimum of 50 nest tubes are deployed in suitable and connected habitat to determine the presence or absence of Dormice.

A total of 55 nest tubes were deployed within in suitable habitat within the Site on the 25<sup>th</sup> of July 2024. Dormouse nest tubes were installed at 20m intervals in suitable habitat throughout the Site in accordance with best practice guidance. Nest tubes were secured just below branches in all hedgerows, tree lines and areas of scrub to encourage Dormice to nest within them.

Surveys were undertaken by Anna Showan and Siobhan Pryke of EPR, who hold Natural England level 1 class survey licence for Dormice.

The nest tubes were then checked for signs of use between August 2024 and May 2025. **Table A4.6** shows the dates and weather conditions present on site for each survey.

**Table A4.6.** *Dates and weather conditions during Hazel Dormouse surveys.*

| Date of Survey | Survey Number           | Temperature (°C) | Cloud Cover (% cover) | Wind (Beaufort scale) | Rain |
|----------------|-------------------------|------------------|-----------------------|-----------------------|------|
| 25/07/2024     | Set-up                  | -                | -                     | -                     | -    |
| 18/08/2024     | Survey 1                | 19               | 100                   | 1                     | None |
| 09/10/2024     | Survey 2                | 15               | 40                    | 1                     | None |
| 30/10/2024     | Survey 3                | 12               | 100                   | 2                     | None |
| 20/11/2024     | Survey 4                | 3                | 5                     | 1                     | None |
| 16/05/2025     | Survey 5 and collection | 16               | 60                    | 2                     | None |

## GREAT CRESTED NEWT SURVEY

Field survey work for GCN was carried out in 2025 and comprised:

- Habitat Suitability Index (HSI) assessment of all accessible ponds within the Zol; and
- Environmental DNA (eDNA) sampling.

### *eDNA Survey*

Environmental DNA (eDNA) surveys have been shown to be a reliable way of detecting the presence of GCN in water samples, with 99% accuracy (DEFRA, 2014). Field sampling of ponds requires a single visit to the target pond between mid-April and June. Such surveys should be conducted by a Natural England licensed surveyor if they are to be relied on for the purposes of an EPSML application.

eDNA surveys require a number of water samples to be collected from the perimeter of the pond. As DNA sinks, the samples should include water from as close to the bottom of the pond as is feasible, without disturbing sediment.

Samples were taken from Pond 1 and Waterbody 3 on 2<sup>nd</sup> of June 2025 by licensed surveyor Katrina Diedericks of EPR.

## REPTILE SURVEY

The reptile survey method was based on the standard accepted practice (Froglife 1999<sup>1</sup>, Gent and Gibson, 2003<sup>2</sup>). The deployment of 137 artificial refugia of which in Area 1 18 were onduline, 10 were corrugated tin and 42 were roofing felt and in Area 2 were 15 onduline, 10 corrugated tin and 48 roofing felt) with a minimum size of 0.5m<sup>2</sup> was carried out across relevant suitable habitat within the developable areas on site.

Seven surveys in each area were conducted in suitable weather conditions, refer to **Table A4.7** and **Table A4.8** for metadata.

**Table A4.7 Metadata for Area 1 reptile surveys**

| Visit No. | Date       | Time  | Temperature (0°C) |        | Cloud Cover (%) | Wind (Beaufort Scale) | Rain |
|-----------|------------|-------|-------------------|--------|-----------------|-----------------------|------|
|           |            | Start | Start             | Finish |                 |                       |      |
| 1         | 16/09/2022 | 10:15 | 13                | 14     | 5-20            | 1-2                   | Dry  |
| 2         | 19/09/2022 | 10:20 | 14                | 15     | 20              | 1                     | Dry  |
| 3         | 21/09/2022 | 10:30 | 17                | 17     | 50              | 0                     | Dry  |
| 4         | 23/09/2022 | 12:55 | 18                | 18     | 95              | 0                     | Dry  |
| 5         | 26/09/2022 | 11:35 | 15                | 16     | 80              | 5                     | Dry  |
| 6         | 28/09/2022 | 15:40 | 16                | 15     | 40              | 0                     | Dry  |
| 7         | 30/09/2022 | 10:00 | 12                | 13     | 100             | 2                     | Dry  |

1 Slow Worm was found during these surveys.

**Table A4.8 Metadata for Area 2 reptile surveys**

| Visit No. | Date       | Time  |        | Temperature (0°C) |        | Cloud Cover (%) | Wind (Beaufort Scale) | Rain                 |
|-----------|------------|-------|--------|-------------------|--------|-----------------|-----------------------|----------------------|
|           |            | Start | Finish | Start             | Finish |                 |                       |                      |
| 1         | 20/08/2024 | 8:15  | 9:15   | 17                | 20     | 80              | 1                     | Dry                  |
| 2         | 27/08/2024 | 8:10  | 8:50   | 17                | 18     | 100             | 1                     | Rain prior to survey |
| 3         | 03/09/2024 | 7:30  | 8:45   | 15                | 16     | 40              | 1                     | Dry                  |
| 4         | 10/09/2024 | 9:45  | 10:35  | 14                | 15     | 100             | 0                     | Dry                  |
| 5         | 17/09/2024 | 10:15 | 11:15  | 15                | 16     | 0               | 1                     | Dry                  |
| 6         | 24/09/2024 | 09:30 | 10:15  | 14                | 14     | 100             | 2                     | Dry                  |
| 7         | 27/09/2024 | 13:55 | 14:55  | 12                | 13     | 100             | 2                     | Dry                  |

2 Slow Worms were found during these surveys.

<sup>1</sup> Froglife (1999) Reptile Survey: An introduction to planning, conducting and interpreting surveys for snake and lizard conservation. Froglife Advice Sheet 10. Froglife, Halesworth

<sup>2</sup> Gent, T. and Gibson, S. (2003) The Herpetofauna Workers Manual. Joint Nature Conservation Committee, Peterborough.

# Appendix 5

## Veteran Trees

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### 1. INTRODUCTION

#### Scope

1.1 This Technical Appendix supports the Environmental Impact Assessment (EclA). It sets out the detailed methodologies and results of the survey work undertaken to inform:

- The baseline mapping and evaluation of the veteran trees and other trees of ecological interest supported by the Zone of Influence of the Proposed Development;
- The assessment of likely impacts on veteran and other trees of ecological interest;
- The design of impact avoidance and mitigation measures; and
- The design of biodiversity enhancements for veteran and other trees of ecological interest.

#### Site and Development Description

1.2 The Site is located on the edge of a predominantly rural area on the eastern fringes of Boorley Green in Hampshire. The Site comprises one former pastoral field, and two arable fields bound by hedgerows, a dry ditch, fencing and mature trees. Additionally, within the east of the Site there are two Sites of Importance for Nature Conservation (SINCs). To the west, the surrounding area is dominated by residential housing whilst to the north, east and south is a rural landscape dominated by agricultural land with woodland pockets, and the River Hamble.

1.3 The Proposed Development is for Outline Planning Permission with all matters reserved except the main points of access to the Site for demolition of existing buildings and the construction of up to 280 dwellings, provision of informal and formal open space, together with associated highways, landscape, earth works and level changes, foul and surface water drainage facilities, utilities provision and other associated and necessary infrastructure.

#### Policy and Legislative Context

1.4 Full details of the planning policy and legislation of relevance to ecology and nature conservation in general are included in **Appendix 2** of the EclA, however those of particular relevance to veteran trees are summarised below.

1.5 The definition of what constitutes a ‘veteran’ tree has been much debated; however those used for this report are the given under the National Planning Policy Framework (NPPF) 2024 and The Biodiversity Gain Requirements (Irreplaceable Habitat) Regulations 2024. In both cases, veteran trees are defined as ‘Irreplaceable Habitat’ though the definitions are slightly different, as set out below.

## Legislation

- 1.6 A minimum 10% net gain in biodiversity, as measured by the Statutory Biodiversity Metric (DEFRA, 2025a,) is now a condition of most types of planning permission in England under the Environment Act 2021 and associated secondary legislation. This is known as Biodiversity Net Gain (BNG).
- 1.7 The Biodiversity Gain Requirements (Irreplaceable Habitat) Regulations 2024 (hereafter BGRR) provide a list in Schedule of irreplaceable habitats, which includes ‘ancient and veteran trees’, and an associated description in Table 2 of the Schedule, reproduced in **Table A5.1** below.

**Table A5.1:** Definition of ancient and veteran trees in the BGRR 2024

| Habitat                         | Description                                                                                                                                                                                                                                                                                                                                                                                                                       |
|---------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Ancient trees and veteran trees | Ancient and veteran trees can be found as individual trees or collections of trees in any setting.                                                                                                                                                                                                                                                                                                                                |
|                                 | Ancient trees have passed beyond maturity into an ancient life stage or are old in comparison with other trees of the same species which exhibit one or more of the following—                                                                                                                                                                                                                                                    |
|                                 | (i) demonstrably great age relative to others of the same species                                                                                                                                                                                                                                                                                                                                                                 |
|                                 | (ii) changes to their crown and trunk development indicative of the ancient life stage                                                                                                                                                                                                                                                                                                                                            |
|                                 | Veteran trees are mature trees that share physical and other characteristics in common with ancient trees, due to their life or environment, but are neither developmentally nor chronologically ancient. All ancient trees are veteran trees, but not all veteran trees are ancient. Veteran and ancient trees which have died are still recognised as such because they retain significant biodiversity value for many decades. |
|                                 | Veteran trees exhibit one or more of the following—                                                                                                                                                                                                                                                                                                                                                                               |
|                                 | (i) significant decay features such as deadwood, hollowing or signs of advanced decay in the trunk or major limbs                                                                                                                                                                                                                                                                                                                 |
|                                 | (ii) a large girth, depending on and relative to species, site and management history                                                                                                                                                                                                                                                                                                                                             |
|                                 | (iii) a high value for nature, especially in hosting rare or specialist fungi, lichens and deadwood invertebrates                                                                                                                                                                                                                                                                                                                 |

- 1.8 The Regulations and associated guidance require that adverse effects to ‘irreplaceable habitat’ are minimised and that a bespoke strategy must be agreed with the Local Planning Authority to compensate for any impacts.

## Planning Policies and Associated Guidance

### National Planning Policy Framework

- 1.9 The National Planning Policy Framework (NPPF) (2024) sets out the Government’s planning policies for England and how they should be applied. With regard to protecting the natural environment, Section 15 of the NPPF requires that planning decisions should enhance the natural environment and provide net gains for biodiversity.

- 1.10 The main information relevant to veteran trees is under paragraph 186, with additional information in the NPPF Annex 2 Glossary. Paragraph 186 states that:

*When determining planning applications, local planning authorities should apply the following principles (...)*

*c) development resulting in the loss or deterioration of irreplaceable habitats (such as ancient woodland and ancient or veteran trees) should be refused, unless there are **wholly exceptional reasons** and a suitable compensation strategy exists (...) [EPR emphasis]*

- 1.11 The Annex 2 Glossary descriptions of ancient or veteran trees and irreplaceable habitat are as follows:

*Ancient or veteran tree: A tree which, because of its age, size **and** condition, is of **exceptional** biodiversity, cultural or heritage value. All ancient trees are veteran trees. Not all veteran trees are old enough to be ancient, but are old relative to other trees of the same species. Very few trees of any species reach the ancient life-stage. [EPR emphasis].*

*Irreplaceable habitat: Habitats which would be technically very difficult (or take a very significant time) to restore, recreate or replace once destroyed, considering 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.*

#### *Guidance from Natural England and Forestry Commission*

- 1.12 Natural England and the Forestry Commission provide 'standing advice' for ancient woodland, ancient trees and veteran trees in their document: Ancient woodland, ancient trees and veteran trees: advice for making planning decisions' published online on 14 January 2024. Included in the Guidance is their description of veteran trees:

#### *Ancient and veteran trees*

*Ancient and veteran trees can be individual trees or groups of trees within wood pastures, historic parkland, hedgerows, orchards, parks or other areas. They are often found outside ancient woodlands. They are also irreplaceable habitats.*

#### *Ancient trees*

*An ancient tree is exceptionally valuable. Attributes can include its:*

- great age*
- size*
- condition*
- biodiversity value as a result of significant wood decay and the habitat created from the ageing process*
- cultural and heritage value*

*Very few trees of any species become ancient.*

### Veteran trees

*A veteran tree may not be very old, but it has significant decay features, such as branch death and hollowing. These features contribute to its exceptional biodiversity, cultural and heritage value.*

*All ancient trees are veteran trees, but not all veteran trees are ancient. The age at which a tree becomes ancient or veteran will vary by species because each species ages at a different rate.*

### *Local Planning Policy*

- 1.13 In line with the NPPF, Policy DM11 Nature conservation of the adopted Eastleigh Borough Local Plan 2016-2036 states that “Development will not be permitted if it results in the loss or deterioration of irreplaceable habitats (such as ancient woodland and ancient or veteran trees), unless there are wholly exceptional reasons and a suitable compensation strategy exists.”

### *Considerations*

- 1.14 The descriptions used to define veteran trees under the NPPF and BGRR are different to each other (see above).
- 1.15 NPPF veteran trees are, at present, considered to have a higher threshold for selection and this is based on the phrase “...because of its age, size and condition, is of exceptional biodiversity, cultural or heritage value”. In contrast, the threshold for BGRR includes mature trees that exhibit one or more of significant decay features, large girth, or high value for nature.
- 1.16 Given this difference, and the different planning and legislative obligations attached to each category, this report identifies and maps ‘NPPF veteran trees’ and ‘BGRR veteran trees’ separately.
- 1.17 Due to the higher threshold, all NPPF veteran trees are by default also BGRR veteran trees; however not all BGRR veteran trees are NPPF veteran trees.
- 1.18 For either category – NPPF or BGRR – classifying a tree as a ‘veteran’, particularly in the early stages of becoming a veteran, includes a certain level of subjective interpretation. This is allowed for in the descriptions of veteran trees in the various legal, policy, and guidance documents listed above. Words and phrases such as ‘*exceptional*’, ‘*may not be very old*’, ‘*significant decay features*’ and ‘*mature tree*’ are not defined; this adds an element of subjective interpretation and thus scope for professional judgement. EPR’s methodology for classifying veteran trees is described in more detail in **Section 2**.

### **Other Trees of Ecological Interest**

- 1.19 Mature trees that were surveyed for veteran status but that did not quite meet EPR’s threshold for that status (see **Section 2**) under either the NPPF or BGRR were recorded as ‘Other Trees of Ecological Interest’ (OTEIs).
- 1.20 These trees are included in this report in part because of the subjective aspects of the veteran tree classification, and in part because these trees are likely to have an important function in the landscape in supporting the biodiversity associated with veteran trees. They are also likely to

form the next generation of veteran trees, and this continuity is important in maintaining the biodiversity supported by the trees at the Site.

### **Collation of Data**

- 1.21 Tree survey work for the Proposed Development has been carried out by both EPR and Arbor-Eco Consultancy. Each survey had different aims and methods, but both shared an objective to identify veteran trees according to the NPPF (note, arboricultural surveys typically do not cover the BGRR definition of a veteran tree). EPR has therefore reviewed its results against those from Arbor-Eco Consultancy to ensure a consistent approach to the identification and classification of NPPF veteran trees.
- 1.22 EPR uses its own tree numbering system. The results table in **Section 3** therefore contains a list of all identified veteran trees and OTEIs with both EPR's and Arbor-Eco Consultancy's tree numbers, for cross-referencing.

### **Tree Positions**

- 1.23 EPR surveys of tree positions use GPS receivers within mobile phones. These typically are accurate to within +/- 5 to 10m depending on model and reception.
- 1.24 It is therefore essential to refer to the Arbor-Eco Consultancy Arboricultural Impact Assessment report and plans (Dec 2025) for accurate tree positions as their survey methods enable an accuracy finer than that achievable with hand-held GPS receivers.

## 2. SURVEY AND ASSESSMENT METHODOLOGY

### Introduction

- 2.1 The approach to ecological impact assessment taken in this report is in line with guidance from the Chartered Institute of Ecology and Environmental Management Guidelines for Ecological Impact Assessment (CIEEM, 2018).

### Defining the Zone of Influence

- 2.2 The area over which the activities associated with the Proposed Development are considered to potentially affect veteran and other trees of ecological interest, the Zone of Influence (Zol), has been predicted by considering the activities and resultant biophysical changes arising during the construction and operational phases, as summarised below.

#### *Likely Biophysical Changes*

- 2.3 The predicted biophysical changes of relevance to veteran and other trees of ecological interest are as follows:

#### *Activities and Resultant Biophysical Changes During the Construction Phase*

- Permanent and/or temporary loss of veteran and other trees of ecological interest due to the erection then removal of temporary fencing, site compounds etc;
- Permanent and/or temporary damage to veteran and other trees of ecological interest through increased levels of human and vehicular activity (e.g. trampling, soil compaction);
- Permanent and/or temporary damage to veteran and other trees of ecological interest and the biodiversity they support due to pollution from dust, chemicals, contaminated water, hydrological changes and/or airborne traffic pollution; and
- Permanent loss of veteran and other trees of ecological interest due to planned vegetation clearance to facilitate the Proposed Development.

#### *Activities and Resultant Biophysical Changes During the Operational Phase*

- Permanent and/or temporary damage to veteran and other trees of ecological interest from increased levels of human activity and vehicle movements (e.g. trampling, soil compaction, fire, litter, vandalism, spillages, dog fouling);
- Permanent and/or temporary damage to veteran and other trees of ecological interest due to hydrological changes; and
- Implementation of habitat creation and enhancement measures and long-term management plans.

- 2.4 Some of the changes that could potentially affect veteran trees and OTEIs, such as dust generation, have effects beyond the construction footprint, whilst others are likely to result in more localised changes. With this in mind, the potential Zol that has been considered within this Appendix includes the Site and the immediately adjacent land.

## Desktop Study Methodology

- 2.5 A biological records search was commissioned from the Hampshire Biodiversity Information Centre (HBIC; dated 04/07/24) to gather existing biological records within a 2km radius of the Site, including vascular and non-vascular plant species, lichens, fungi, and any locally designated sites for nature conservation.
- 2.6 The Woodland Trust's Ancient Tree Inventory was also checked for the records of potential veteran trees within the Zol, so that these could be ground-truthed if present.
- 2.7 A desktop study of the Zol was carried out to provide physical, biological, and historical information relevant to the trees. The research was based on examining published information and internet resources under the following categories:
- Geographical information held by Multi-Agency Geographic Information for the Countryside (MAGIC);
  - Physical Nature of the Site (geology, topography, and hydrology); and
  - Landscape and Ecological History.
- 2.8 Sources consulted included:
- The Multi-Agency Geographic Information for the Countryside (MAGIC);
  - The British Geological Survey;
  - The Environment Agency;
  - Open-source LiDAR imagery;
  - Tithe map and apportionments for Botley Parish, 1838;
  - The 25"/6" to the Mile Ordnance Survey Maps (original issue where available and subsequent revisions, c.1870s-1930s); and
  - Aerial imagery from the 1940s onwards.

## Field Survey Methodology

### *Survey Area*

- 2.9 The survey area covered mature trees outside of woodlands within the Site boundary shown on **Figure A5.1**. As a rule, EPR only surveys for veteran trees on the woodland edge, where the buffer associated with a veteran tree may extend further into the adjacent land than any buffer that is required or recommended for the woodland itself. Exceptions are made where direct loss of woodland – and therefore potentially of veteran trees – is highlighted as a risk during the masterplanning process.

### *Fieldwork*

- 2.10 Surveyors walked along all boundaries and woodland edges to search for mature trees, as well as any individual field trees identified in the desk study work. Upon encountering a mature tree, surveyors initially followed a flowchart to determine whether the tree might have veteran or OTEI status – if so, the point was added to the digital field map using GIS software and a detailed

survey form was completed. As part of this initial triage process, trees were inspected from all angles (including with binoculars) if possible and girth (breast height/approx 150cm) was measured if accessible.

- 2.11 EPR's standard data collection form for potential veteran and OTEIs is reproduced in **Annex 1**. This includes attributes relating to species, girth, location, tree form, evidence of aging/decay, and evidence of biodiversity. This allows a standardised dataset to be collected for each tree that can be exported to Microsoft Excel for analysis.

### *Classification*

- 2.12 As mentioned in **Section 1**, the classification of a tree as an NPPF veteran, BGRR veteran or OTEI is largely a matter of professional judgement as the definitions overlap and include words and phrases which leave room for subjective interpretation.
- 2.13 "Age" is a particularly difficult attribute to assess. Girth measurements are used as a guide, particularly those set out in Lonsdale (2013) which, for example, indicates that Oaks enter the veteran/notable stage from around 470cm. However, many factors influence the growth rate of a tree, including different starting conditions, variation in local physical features (temperature, hydrology, soil type, aspect etc.), and genetics. It is not necessarily the case that the largest trees of a given species are the oldest, and an Oak tree does not automatically become veteran once it ticks over from 469cm to 470cm girth and vice versa. EPR has therefore applied some flexibility when assessing trees against the "age" and "size" criteria in the NPPF and BGRR descriptions.
- 2.14 In practice, EPR considers all of the data collected on a tree when deciding how to classify that tree – this includes information gathered through the desktop study, in addition to the attributes recorded in the field, and additional information gathered by Arbor-Eco Consultancy.
- 2.15 The trees which EPR classifies as NPPF veterans are those considered to be truly 'exceptional' examples of veteran trees. These trees score "major" on at least one of the "Major Structural Features" listed in **Annex 1** (extensive decay or hollowing of trunk, crown senescence or retrenchment) and typically also exhibit several of the secondary features of aging/decay or biodiversity evidence, such as dead limbs, loss of bark, water pools, crevices and fungi. They may also have a large size for the species and/or an interesting growth form which contributes to their 'exceptional' status.
- 2.16 The BGRR definition of veteran trees is particularly open to interpretation in respect of what constitutes a 'significant decay feature'. On a precautionary basis, in this case EPR have taken this to include any mature tree with a dead or lost major limb (or major stem in the case of coppice stools), or decay in the trunk. EPR has also included trees which score 'Major' in at least two of the secondary features of aging/decay or biodiversity evidence, but Minor/None in the Major Structural Features.
- 2.17 Finally, EPR classifies OTEIs as mature trees which are generally in good condition, but may score 'minor' on some of the secondary features of aging/decay or biodiversity evidence, are of cultural interest as a pollard or stub, and/or are located close to/on a boundary with veteran trees, and are therefore likely to play a supporting role in sustaining the biodiversity associated with those trees, both now and in the future.

### *Nomenclature*

- 2.18 Nomenclature follows Stace, 4<sup>th</sup> edition 2019.

### *Survey Limitations and Constraints*

- 2.19 The survey was undertaken during the winter months, which is considered optimal as structural and decay features can be obscured when trees are in leaf.
- 2.20 Access to trees was occasionally constrained by dense undergrowth and barbed wire fences, meaning that girth measurements were estimated measuring the accessible portion of the trunk(s) and the trees in question could not be inspected from all angles.
- 2.21 Some trees were clad in dense Ivy *Hedera helix*, which can obscure decay features but is also a feature in itself.

### **Evaluation Methodology**

- 2.22 The evaluation of the veteran trees and OTEIs has been undertaken in accordance with the Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater and Marine (CIEEM, 2018).
- 2.23 The veteran tree/OTEI assemblage within the Zol has been assessed as a whole, rather than by looking at each tree individually. Trees are connected in ways we are only beginning to understand through mycorrhizal networks and to some extent depend on each other for their survival. The biodiversity value associated with a veteran or OTEI is also rarely isolated to a single tree – together they act as a collective resource for species dispersal and provide different habitat niches at different times of year and at different points in the lifecycle of various species.
- 2.24 As per the Guidelines the first stage of an EclA is to identify “important ecological features” within the Zol of a proposed scheme and evaluate the relative importance of these on a geographic scale (International, National, Regional, County, Local or Within the Zol). Typically, only those features of “Local” importance or above are taken forward for full impact assessment.
- 2.25 The following documents were used to inform an evaluation of the veteran trees and OTEIs within this geographic context:

#### *National*

- Guidelines for the Selection of Biological SSSIs Part 2, Chapter 2a: Woodlands, Wood Pasture and Parkland, and Veteran Trees (Latham et al., 2018).

#### *County*

- Criteria for the Selection of Sites of Importance for Nature Conservation (SINCs) in Hampshire (Hampshire Biodiversity Information Centre, 2021).
- 2.26 It is important to note that the purpose of this assessment is not to identify sites that could be considered for selection/notification as Sites of Special Scientific Interest (SSSIs) or Sites of Importance for Nature Conservation (SINCs). Rather, the criteria set out in the resources listed above are used as a tool to inform an objective evaluation of the veteran trees and OTEIs within the Zol according to CIEEM's geographic frame of reference (2018).

### 3. ECOLOGICAL BASELINE

#### Desktop Study Results

##### *HBIC Datasearch*

- 3.1 The records search did not return any records relevant to veteran trees or OTEIs specifically, but the following species associated with trees have been recorded within 2km of the Site:
- Several records of Stag Beetle *Lucanus cervus*, associated with deadwood habitats;
  - Several species of bat which roost in trees (e.g. Common, Soprano and Nathusius Pipistrelle *Pipistrellus pipistrellus*, *P.pygmaeus* and *P.nathusii*, Noctule *Nyctalus noctula* and Barbastelle *Barbastellus barbastellus*); and
  - Several species of bird which nest in trees such as Barn Owl *Tyto alba* and Mistle Thrush *Turdus viscivorus*.

##### *Physical Description*

- 3.2 The majority of the Site lies on a plateau above the River Hamble, with a steep slope separating the higher ground from the floodplain in the far north-east of the Site.
- 3.3 The bedrock underlying the Site is the Wittering Formation (sand, silt and clay). This is overlain with superficial deposits of alluvium on the floodplain, and river terrace (sand and gravel) deposits around the urban complex and field 39 in the east (see Figures 3 and 4a of the EcIA). A localised area of river terrace deposits is also present at the junction of fields 38, 39, 23 and 16 in the centre of the Site. The majority of the Site above the River Hamble floodplain is therefore likely to be freely-draining with slightly acidic soils.

##### *Landscape History*

- 3.4 The earliest map examined was the Tithe map for Botley Parish from the late 1830s, which shows that the field layout at the Site has remained largely unchanged since this time, though fields 38 and 25 were divided into smaller plots. The boundaries LOT01, LOT02, LOT04, LOT05, LOT06, LOT07, H1, H2 and H3 are all present in their current configuration.
- 3.5 The Tithe apportionments recorded the majority of the Site as being in arable use at this time, but woodland was present in field 27 and the adjacent part of field 25 in the south-east of the Site, as well as in the upper-left hand corner of field 25. The floodplain area was listed as a meadow.
- 3.6 The first edition 6-inch to the mile Ordnance Survey (OS) map from the late 1860s depicts trees along the north-south section of H1, plus LOT02 and LOT07. Individual trees shown on this map correspond to the present-day locations of trees 3, 6, 11, 12 and 37 (**Figure A5.1**). Woodland is still present in the south of the Site, but the area in the upper-left corner of field 25 is not shown, with LOT05 now forming the eastern edge of an off-site woodland called Emery Copse.
- 3.7 The second edition 6-inch to the mile OS map from the late 1890s and subsequent editions no longer depict any woodland in the south of the Site and it is assumed to have been cleared between the late 1860s and 1890s. Aerial photography from the mid-1940s confirms that fields

25 and 27 plus Emery Copse were in arable use by this time. Tree lines LOT01, LOT02 and LOT05 are prominent landscape features on these images, and mature trees can also be seen along LOT07 in the location of present-day trees 11 and 12 (**Figure A5.1**).

- 3.8 The majority of the hedgerows and tree lines within and around the Site have therefore been a continuous feature in the landscape for at least 150-200 years, either as internal field boundaries or on historic woodland edges.

## Field Survey Results

### *Survey Metadata*

- 3.9 The survey was undertaken in October 2025 by Matthew Robinson and Laura Kidd of EPR.

### *Headline Results*

- 3.10 Of the mature trees surveyed by EPR and Arbor-Eco Consultancy, ten have been characterised as Veteran Trees and a further six as OTEIs. These trees are shown on **Figure A5.1** and listed in **Table A5.2** below.
- 3.11 The veteran trees are referable to the description of veteran trees in both the NPPF and the BGRR.

**Table A5.2: Veteran and Other Trees of Ecological Interest recorded by EPR and/or Arbor-Eco Consultancy within the ZOI**

| EPR Tree No (Arb no) | Species         | Location                                                                                    | Description                                                                                                    |
|----------------------|-----------------|---------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------|
| <b>Veteran Trees</b> |                 |                                                                                             |                                                                                                                |
| 2 (T41)              | Pedunculate Oak | Within LOT05, historic woodland edge                                                        | Mature tree, classified as veteran by Arbor-Eco due to major deadwood in crown.                                |
| 3 (T63)              | Pedunculate Oak | Within a small wooded plot in the north-east of the Site, shown on first edition 6-inch map | Very large pollard (girth over 550cm) with major deadwood and cavities in crown and fungi around base of stem. |
| 4 (T42)              | Pedunculate Oak | Within LOT05, historic woodland edge                                                        | Very large specimen (girth around 450cm).                                                                      |
| 7 (T38)              | Pedunculate Oak | Within LOT05, historic woodland edge                                                        | Mature tree, classified as veteran by Arbor-Eco due to major deadwood in crown.                                |
| 10 (T44)             | Pedunculate Oak | Within southern part of LOT05                                                               | Large stub, classified as veteran by Eco-Arbor due to major deadwood in crown.                                 |
| 11 (T52)             | Pedunculate Oak | On historic boundary H2, also shown on first edition 6 inch map                             | Mature tree, classified as veteran by Eco-Arbor.                                                               |
| 36 (T36)             | Pedunculate Oak | Within historic boundary LOT02                                                              | Mature tree, classified as veteran by Arbor-Eco due to major deadwood in crown.                                |

| EPR Tree No (Arb no)                      | Species         | Location                                                               | Description                                                                     |
|-------------------------------------------|-----------------|------------------------------------------------------------------------|---------------------------------------------------------------------------------|
| 37 (T37)                                  | Pedunculate Oak | Within historic boundary LOT02, also shown on first edition 6-inch map | Mature tree, classified as veteran by Arbor-Eco due to major deadwood in crown. |
| 43 (T43)                                  | Pedunculate Oak | Within LOT05, historic woodland edge                                   | Mature tree, classified as veteran by Eco-Arbor.                                |
| 49 (T49)                                  | Pedunculate Oak | South-eastern corner of field 27, historic woodland edge               | Mature tree, classified as veteran by Arbor-Eco due to major deadwood in crown. |
| <b>Other Trees of Ecological Interest</b> |                 |                                                                        |                                                                                 |
| 1 (T14)                                   | Pedunculate Oak | Within historic boundary LOT02                                         | Large mature stub with storm damage to canopy and cavity forming at base.       |
| 5 (H1)                                    | Pedunculate Oak | Within historic boundary hedgerow H1                                   | Coppice stool (unusual form).                                                   |
| 6 (T4)                                    | Pedunculate Oak | Within historic LOT02, also shown on first edition 6-inch map          | Deadwood in crown, large mature twin-stemmed tree                               |
| 8 (T39)                                   | Pedunculate Oak | Within LOT05, historic woodland edge                                   | Deadwood in crown, large mature tree                                            |
| 9 (T40)                                   | Pedunculate Oak | Within LOT05, historic woodland edge                                   | Deadwood in crown, large over-mature tree                                       |
| 12 (T54)                                  | Pedunculate Oak | On historic boundary LOT04, also shown on first edition 6-inch map     | Large mature tree                                                               |

### Description

- 3.12 The treescape at the Site is dominated by mature to over-mature Pedunculate Oak *Quercus robur* trees associated with historic boundaries and woodland edges. Several exhibited major deadwood within the crown and many have girths over 400cm.
- 3.13 Several growth forms are represented including pollards, stubs, maidens and twin-stemmed trees. Different tree forms give rise to different habitat and decay features and ecological niches (such as water pools forming in the boles of pollards and stubs, or collapsed stems of coppice stools).
- 3.14 The veteran status attributed to these trees also takes into account their long continuity in the landscape, which is essential for developing and sustaining the biodiversity they support.
- 3.15 Most of the biodiversity associated with veteran trees and OTEIs – for example invertebrates – is difficult to survey. Decay features are therefore typically used as a proxy for biodiversity value due to the relatively high number of species associated with these features, including specialist fungi, invertebrates, nesting birds and roosting bats.
- 3.16 Oaks in particular are known to be an extremely important part of the landscape for biodiversity. The Environmental Information Data Centre (EIDC) (Mitchell *et. al.*, 2019) holds a dataset that “contains a list of all known birds, bryophytes, fungi, invertebrates, lichens and mammals that use oak (*Quercus petraea* and *Quercus robur*) in the UK. In total **2,300** species are listed in the dataset.” (EPR emphasis)

- 3.17 The natural history of some of these 2,300 species is set out Lewington and Streeter's book 'The Natural History of the Oak' (Lewington and Streeter, 1993). The authors, with reference to invertebrates in particular, write that: "More different kinds of insect are found on oak than on any other European plant." A subset of this list of the 2,300 species will be present on the Oaks in the Zol.

## 4. EVALUATION

- 4.1 The assemblage of veteran trees and OTEIs supported by the Zol is evaluated below in the context of CIEEM's (2018) geographic scale of importance for Ecological Impact Assessment.

### National

- 4.2 The SSSI Selection Guidelines (Latham et al., 2018) provide a veteran tree site assessment protocol for assessing the relative quality of a site with veteran trees. This has been used to evaluate whether the veteran tree resource supported by the Zol could potentially be of National-level importance.
- 4.3 The veteran tree resource within the Zol scores as follows against Table 4 of the Guidelines:
- Primary Assessment Criteria: Low value
  - Secondary Assessment Criteria: Medium value
  - Overall: Low-Medium value
- 4.4 Sites are generally selected for notification where this would significantly increase the range or number of veteran trees protected, the site represents a slightly different aspect of the veteran tree resource, or the site is significantly higher in value than the main sites currently selected.
- 4.5 In comparison to sites known for their high number and diversity of ancient and veteran trees, such as Windsor Great Park or the New Forest, the veteran tree resource within the Zol would not typically be considered for selection as an SSSI of National importance.

### County

- 4.6 Reference is made to the criteria for the Selection of Sites of Importance for Nature Conservation (SINCs) in Hampshire (HBIC, 2021) to inform an evaluation of whether the veteran tree and OTEI resource within the Zol may be of County-level importance.
- 4.7 Ancient and veteran trees are covered under criterion 1G, which describes veteran trees as exhibiting the following features:
- *hollow areas on trunks or main branches (>150mm)*
  - *small holes in trunk or branches (<150mm)*
  - *water filled tree pools on tree or roots*
  - *red, brown or white rot*
  - *large amounts of deadwood in crown or on ground*
  - *sap stains, loose old thick bark*
  - *live branches which have broken with shattered ends*
  - *wood fibre separation*
  - *wet exudes from the surface of the bark, wounds or holes*
  - *exit holes from insect tunnelling with dry powdery residues*

- *bracket fungi and epiphytes – vascular plants, bryophytes and lichens*
- 4.8 The Criteria states that a single veteran tree may qualify as a SINC in its own right, including a buffer of land 15x the diameter of the tree, if it is not already included within other SINC categories such as hedgerows or woodlands.
- 4.9 This points towards the assemblage of ten veteran trees and six OTEIs within the ZOI being of **County** importance. This is supported by the discussion above regarding the diversity of growth form and considerable ecological continuity associated with many of these trees, which is likely to be of high value for biodiversity at the landscape scale.

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*Contributors: Laura Kidd BSc (Hons)*

*Document Reviewed By: Jodie Southgate BA (Hons) MSc MCIEEM*

## 5. REFERENCES

- British Geological Survey (accessed 2025). *BGS Geology Viewer*. Available at: <https://www.bgs.ac.uk/map-viewers/bgs-geology-viewer/>
- Chartered Institute of Ecology and Environmental Management (CIEEM) (2018). *Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater, Coastal and Marine version 1.3 updated September 2024*. CIEEM, Ampfield.
- DEFRA (2022). *Keepers of time: ancient and native woodland and trees policy in England Government's statement on England's ancient and native woodland and ancient and veteran trees*. May 2022.
- DEFRA (2025). *The Statutory Biodiversity Metric Calculation Tool*. July 2025.
- Hampshire Biodiversity Information Centre Partnership (HBIC) (2024). *Ecological Data Search: Land at Holly Tree Farm*. Dated 2024-06-04.
- His Majesty's Stationery Office (HMSO) (2024). *The Biodiversity Gain Requirements (Irreplaceable Habitat) Regulations 2024*. HMSO, London.
- Latham, J, Hall, J, Holl, K, Perry, S, Goldberg, E. (2018). *Guidelines for the Selection of Biological SSSIs. Part 2: Detailed Guidelines for Habitats and Species Groups. Chapter 2a Woodlands, Wood Pasture and Parkland, and Veteran Trees*. Joint Nature Conservation Committee, Peterborough.
- Lewington, R. and Streeter, D. (1993). *The Natural History of the Oak*. Dorling Kindersley, London.
- Lonsdale, D. (ed.) (2013). *Ancient and other veteran trees: further guidance on management*. The Tree Council, London.
- Ministry of Housing, Communities and Local Government (MHCLG) (2024). *National Planning Policy Framework*.
- Mitchell, R.J.; Bellamy, P.E.; Ellis, C.J.; Hewison, R.L.; Hodgetts, N.G.; Iason, G.R.; Littlewood, N.A.; Newey, S.; Stockan, J.A. and Taylor, A.F.S. (2019). *Oak-associated biodiversity in the UK (OakEcol)*. NERC Environmental Information Data Centre. <https://doi.org/10.5285/22b3d41e-7c35-4c51-9e55-0f47bb845202>
- Natural England and Forestry Commission (updated 2022). *Ancient woodland, ancient trees and veteran trees: advice for making planning decisions*. Available at: <https://www.gov.uk/guidance/ancient-woodland-ancient-trees-and-veteran-trees-advice-for-making-planning-decisions>
- Rackham, O. 1990. *Trees & Woodland in the British Landscape*. Revised edition. Dent & sons, London.
- Woodland Trust (accessed 02/03/2023). *Ancient Tree Inventory*. Available at: <https://ati.woodlandtrust.org.uk/>

## FIGURES

**Figure A5.1**      Veteran Tree Survey Results



Figure A5.1 Veteran Tree Survey Results

- KEY
- Site boundary
  - Veteran tree (NPPF and BGRR)
  - Tree of ecological interest

SCALE: 1:2,000 at A3

0 25 50 75 100 Metres



CLIENT: Bloor Homes Ltd

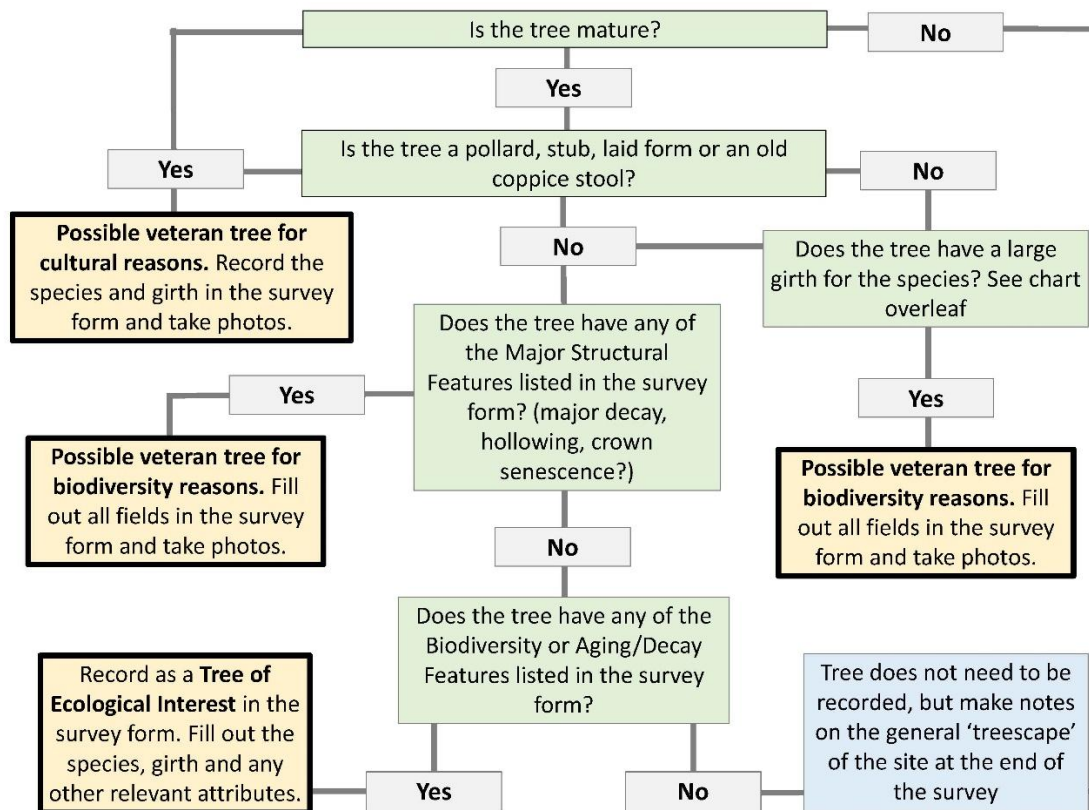
PROJECT: Land South of Maddoxford Lane

DATE: 18 December 2025

# Annex 1

## EPR Veteran Tree Survey Form

As discussed in **Section 2**, EPR's data collection process begins with a flowchart to determine whether a tree may be a veteran tree or OTEI. This is provided below.



Tree girth guide from Lonsdale (2013) [adapted to make numbering clearer]

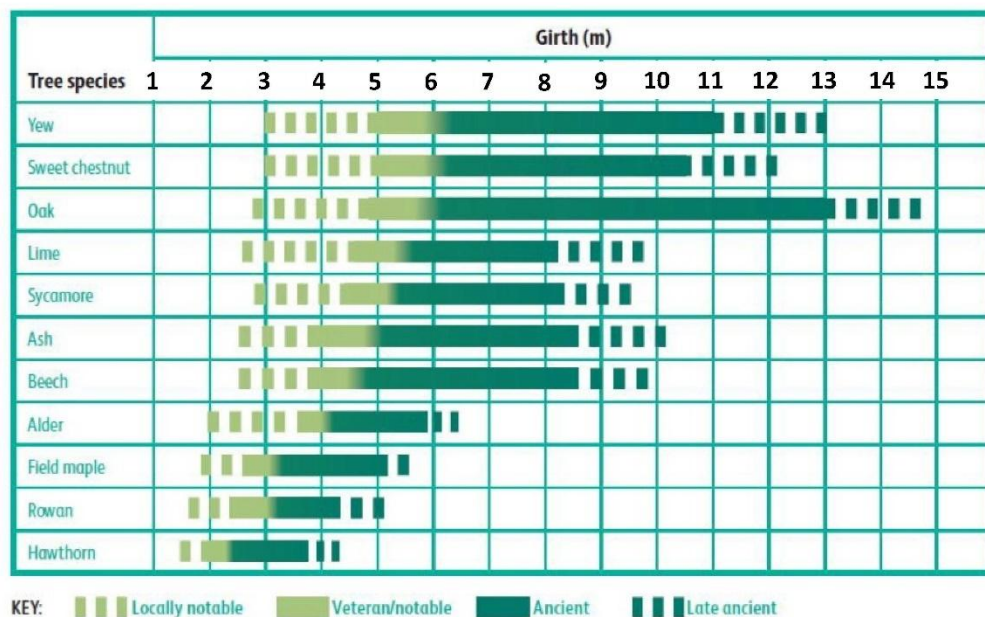


Fig 1.3: Chart of girth in relation to age and developmental classification of trees\*

Once a tree has been identified as a potential veteran tree or OTEI, the tree is added as a point in mobile GIS software and the following data is collected in the field.

| Field                             | Notes                                                                                       |
|-----------------------------------|---------------------------------------------------------------------------------------------|
| <b>Metadata</b>                   |                                                                                             |
| Surveyor name                     |                                                                                             |
| Survey date                       |                                                                                             |
| Survey ID                         | Temporary ID for use on survey, used to cross-reference to any paper notes and photographs. |
| General Notes                     |                                                                                             |
| <b>Basic Data</b>                 |                                                                                             |
| Species                           |                                                                                             |
| Tree Girth                        | cm at breast height                                                                         |
| <b>Historic/Cultural Features</b> |                                                                                             |
| Tree Form                         | E.g. maiden, pollard, stub, coppice stool                                                   |
| Location/context                  | E.g. field tree, historic boundary                                                          |
| <b>Major Structural Features</b>  |                                                                                             |
| Extensive decay in trunk          | Recorded as major/minor/none                                                                |
| Hollowing of trunk                |                                                                                             |
| Crown senescence                  |                                                                                             |
| Retrenchment                      |                                                                                             |
| <b>Evidence of Aging/Decay</b>    |                                                                                             |
| Loss of major limbs/branches      | Recorded as major/minor/none                                                                |
| Deadwood in major limbs/branches  | Added following the introduction of the BGRR                                                |
| Dead limbs                        | Recorded as major/minor/none                                                                |
| Damage to trunk                   | Recorded as natural, man-made or none                                                       |
| Loss of bark on trunk             | Recorded as major/minor/none                                                                |
| Naturally forming water pools     |                                                                                             |
| Decay holes                       |                                                                                             |
| Sap runs                          |                                                                                             |
| Crevices                          |                                                                                             |
| <b>Biodiversity</b>               |                                                                                             |
| Ivy                               | Recorded as major/minor/none                                                                |
| Fungi                             |                                                                                             |
| Evidence of invertebrates         |                                                                                             |
| Epiphytes                         |                                                                                             |

## **Appendix 6**

### **eDNA Results**

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**Folio No:** 2142-2025  
**Purchase Order:** PO 3125  
**Contact:** Ecological Planning & Research Ltd  
**Issue Date:** 19.06.2025  
**Received Date:** 05.06.2025

# GCN Report

Technical Report



SureScreen Scientifics

# GCN eDNA Analysis

## Summary

When great crested newts (GCN), *Triturus cristatus*, inhabit a pond, they continuously release small amounts of their DNA into the environment. By collecting and analyzing water samples, we can detect these small traces of environmental DNA (eDNA) to confirm GCN habitation or establish GCN absence.

## Results

| Lab ID   | Site Name             | OS Reference | Degradation Check | Inhibition Check | Result   | Positive Replicates |
|----------|-----------------------|--------------|-------------------|------------------|----------|---------------------|
| R25 0274 | Holly Tree Farm - P1  | SU 5098 1418 | Pass              | Pass             | Negative | 0/12                |
| R25 0279 | Holly Tree Farm - WB3 | SU 5102 1406 | Pass              | Pass             | Negative | 0/12                |

Matters affecting result: none

Reported by: Amy Bermudez

Approved by: Lauryn Jewkes

## Methodology

The samples detailed above have been analyzed for the presence of GCN eDNA following the protocol stated in DEFRA WC1067 'Analytical and methodological development for improved surveillance of the Great Crested Newt, Appendix 5.' (Biggs et al. 2014). Each of the 6 sub-sample tubes are first centrifuged and pooled together into a single sample tube which then undergoes DNA extraction. The extracted sample is then analyzed using real-time PCR (qPCR), which uses species-specific molecular markers to amplify GCN DNA within a sample. These markers are unique to GCN DNA, meaning that there should be no detection of closely related species.

If GCN DNA is present, the DNA is amplified up to a detectable level, resulting in positive species detection. If GCN DNA is not present then amplification does not occur, and a negative result is recorded. Analysis of eDNA requires attention to detail to prevent the risk of contamination. True positive controls, negative controls, and spiked synthetic DNA are included in every analysis and these have to be correct before any result is declared and reported. Stages of the DNA analysis are also conducted in different buildings at our premises for added analytical security.

SureScreen Scientifics Ltd is ISO9001 accredited and participates in Natural England's proficiency testing scheme for GCN eDNA testing.

## Interpretation of Results

### Sample Integrity Check:

When samples are received in the laboratory, they are inspected for any tube leakage, suitability of sample (not too much mud or weed etc.) and absence of any factors that could potentially lead to inconclusive results. Any samples which fail this test are rejected and eliminated before analysis.

### Degradation Check:

**Pass/Fail.** Analysis of the spiked DNA marker to see if there has been degradation of the kit or sample between the date it was made to the date of analysis. Degradation of the spiked DNA marker may lead indicate a risk of false negative results.

### Inhibition Check:

**Pass/Fail.** The presence of inhibitors within a sample is assessed using a DNA marker. If inhibition is detected, samples are purified and re-analyzed. Inhibitors cannot always be removed, if the inhibition check fails, the sample should be re-collected.

### Result:

#### **Presence of GCN eDNA (Positive/Negative/Inconclusive)**

**Positive:** GCN DNA was identified within the sample, indicative of GCN presence within the sampling location at the time the sample was taken or within the recent past at the sampling location.

**Positive Replicates:** Number of positive qPCR replicates out of a series of 12. If one or more of these are found to be positive the pond is declared positive for GCN presence. It may be assumed that small fractions of positive analyses suggest low level presence, but this cannot currently be used for population studies. In accordance with the WC1067 Natural England protocol, even a score of 1/12 is declared positive. 0/12 indicates negative GCN presence.

**Negative:** GCN eDNA was not detected or is below the threshold detection level and the test result should be considered as evidence of GCN absence, however, does not exclude the potential for GCN presence below the limit of detection.

**Inconclusive:** Controls indicate inhibition or degradation of the sample, resulting in the inability to provide conclusive evidence for GCN presence or absence.



## Appendix 7

### Breeding Bird Surveys

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#### 1. INTRODUCTION

##### **Brief**

- 1.1 Ecological Planning & Research Limited (EPR) was commissioned by Bloor Homes Southern to undertake breeding bird surveys at Land South of Maddoxford Lane ('the Site').
- 1.2 The following note outlines the results of the surveys relating to the breeding bird assemblage within the Site. It provides a summary of the methodology and the results of the surveys, as well as outlining recommendations for mitigation and/or compensation as necessary to allow the proposed development to proceed in accordance with nature conservation legislation alongside local and national planning policy.
- 1.3 The current proposed development for the Site includes the provision of residential dwellings including informal and formal open space and its associated infrastructure.

##### **Site Location & Context**

- 1.4 The Site is located on the edge of a predominantly rural area on the eastern fringes of Boorley Green. It is comprised of arable fields, hedgerows, a meadow, woodland, buildings, and mature trees (**Figure A7.1**).
- 1.5 The surrounding area is mostly agricultural land, with residential to the west and the River Hamble to the east.
- 1.6 Within the Site there are two Sites of Importance for Nature Conservation (SINC) present, Holly Tree Farm Meadow SINC and Holly Tree Farm Woods SINC, both located in the east of the Site.
- 1.7 Holly Tree Meadow SINC was designated under criteria 2B "Semi-improved grasslands which retain a significant element of unimproved grassland" and criteria 5B "Fens, flushes, seepages, springs and inundation grasslands of floodplains that support a flora and fauna of less-improved wet conditions (seasonal or permanent)" of the Criteria for the Selection of Sites of Importance for Nature Conservation (SINC) in Hampshire (Hampshire Biodiversity Information Centre, 2021).
- 1.8 Holly Tree Farm Wood SINC was designated under criteria 1A "Ancient Semi-natural Woodlands" and criteria 1C(ii) "Wet Woodlands such as Alder or Willow Woods and Birch Bog Woods which Support a Good Diversity of Woodland and/or Marsh/Swamp/Mire Species" (Hampshire Biodiversity Information Centre, 2021).

## **Likely Biophysical Changes**

- 1.9 The activities associated with the proposed scheme which are likely to lead to biophysical changes and could accordingly give rise to potential ecological impacts on birds, are set out below, which is drawn from the EclA Guidelines (CIEEM, 2023).
- 1.10 Biophysical change means an “alteration in biological and/or physical conditions of the environment (e.g., changes in the atmospheric concentration of carbon dioxide, altered soil pH or change in the frequency of a plant species in an area)” (CIEEM, 2023).
- 1.11 The predicted biophysical changes that could be generated from the proposed development and be of relevance to birds are as follows:

### *Activities and Resultant Biophysical Changes Likely during the Construction Phase*

- Vegetation removal has the potential to cause harm/injury to individuals and result in the loss of nesting and foraging habitats;
- Groundworks and excavations, construction of new buildings and laying down of hard surfacing, activities which may lead to disturbance of birds;
- Soft landscaping creating new habitats;
- Acoustic disturbance; and
- Disturbance through light pollution.

### *Activities and Resultant Biophysical Changes Likely during the Operational Phase*

- Activity in and around the local area by people, and cars, which may lead to disturbance to birds;
- Introduction of pets such as cats and dogs, which may lead to increased levels of predation on birds; and
- Implementation of habitat management plans, resulting in the enhancement of existing and creation of new habitats.

## **Zone of Influence**

- 1.12 The Zone of Influence (Zol) of a proposed scheme is defined by the EclA Guidelines as “...the area over which ecological features may be affected by biophysical changes as a result of the proposed project and associated activities” (CIEEM, 2018).
- 1.13 The Zol of the proposed scheme in relation to breeding birds has been predicted giving consideration to the biophysical changes likely to arise during the construction and operational phases of the Scheme.
- 1.14 Some of those changes, such as predation and disturbance, are likely to have effects beyond the area to be developed. The potential Zol is therefore conserved to be the Site and its immediate surroundings.

## 2. RELEVANT NATURE LEGISLATION

### *Legislation*

- 2.1 All wild birds and their nests are afforded protection under the Wildlife and Countryside Act 1981 (as amended), making it an offence, with certain exceptions (e.g. game birds), to intentionally kill, injure or take any wild bird and to take, damage or destroy their nests or eggs.
- 2.2 Additionally, Schedule 1 of the Wildlife and Countryside Act 1981 (as amended) affords extra protection for certain species and applies harsher penalties for offences. Any intentional or reckless disturbance of a Schedule 1 bird, whilst it is nesting or rearing dependent young, constitutes an offence. Barn Owl *Tyto alba* is one of the species afforded protection under Schedule 1 of the Wildlife & Countryside Act 1981 (as amended).
- 2.3 Regulation 10 of the Conservation of Habitats and Species Regulations 2017 (as amended) requires appropriate authorities and conservation bodies, in the exercise of their functions, to take such steps that they consider appropriate in order to secure “the preservation, maintenance and re-establishment of a sufficient diversity and area of habitat for wild birds in the United Kingdom, including by means of the upkeep, management and creation of such habitat (...)”.
- 2.4 Section 41 of the Natural Environment and Rural Communities (NERC) Act 2006 (as amended) lists a number of Species of Principle Importance, the presence of which are to be a material consideration in planning decisions. There are currently 49 bird species listed as Species of Principle Importance under S41 of the NERC Act.

### *Additional Guidance*

- 2.5 The Birds of Conservation Concern list (Stanbury *et al.*, 2021) assigns all UK bird species a status of either Green, Amber or Red depending on a number of factors such as changes in population, size or distribution over the last 25 years. This information is determined by a partnership of nature conservation organisations including the Royal Society for the Protection of Birds (RSPB) and British Trust for Ornithology (BTO) and is updated every three to six years.
- 2.6 The Birds of Conservation Concern list carries no legal weight in itself but is used to set priorities for conservation and guide policy and decision making, and it provides a useful tool for assessing the value of breeding bird assemblages. Many red and amber-listed species are also listed on Section 41 of the NERC Act.

### **3. SURVEY METHODOLOGY**

#### **Survey Scope and Aims**

- 3.1 The aim of the bird surveys was to characterise the bird assemblage present within the Zol during the breeding season, including species diversity, where applicable, likely number of territories (i.e. breeding pairs), and to understand how birds utilise the habitats and features present.
- 3.2 The information will be used to describe and assess the likely effects of the proposed development on the structure and function of the systems on which the breeding bird assemblage depends in the absence of mitigation.
- 3.3 Knowledge acquired during the surveys will also be used to avoid (or minimise where avoidance is not possible) negative effects as a result of the proposed development. In addition, the information will be used to design mitigation and enhancement measures aimed at improving the conservation status of the breeding bird assemblage within the Zol.

#### **Desktop Study**

- 3.4 A record search was requested from Hampshire Biodiversity Information Centre (HBIC), dated May 2024. A search radius of 2km from the Site boundary was used.
- 3.5 Possibly more than any other taxa (except for perhaps terrestrial invertebrates), there can be bias in recording efforts of local enthusiasts and the location of nearby 'hotspots'. This will often skew the data and often may not detail the true distributions of species recorded in the vicinity. Equally, these 'hotspots' can have the reverse effect and could account for species not being recorded more widely across the area.
- 3.6 Whilst the biological records search data has not been used to complete a detailed assessment, it has been used to inform the scope of the breeding bird surveys completed.

#### **Field Survey**

- 3.7 Surveys were undertaken in accordance with methods set out in Gilbert et al. (1998), Bibby et al. (2000) and by the Bird Survey & Assessment Steering Group (2025). Surveyors walked the Proposed Scheme at a slow pace, covering all areas within 50m of an internal or external boundary, to enable birds to be identified and located. All birds seen or heard were recorded on large-scale maps using standard codes to denote species and behaviour.
- 3.8 The Bird Survey Guidelines (Bird Survey & Assessment Steering Group, 2025) recommends that six visits are undertaken over the breeding season, between late March and early July. It is considered that six visits are sufficient to demonstrate an understanding of the species assemblage within more complex habitats and therefore can be applicable to most terrestrial habitats. Birds recorded during the survey period (the core bird breeding season) are those that are likely to be breeding, with different levels of evidence enabling breeding to be classed as Proven, Probable or Possible.
- 3.9 Surveyors walked through the site at a slow pace during suitable weather conditions (principally in the absence of strong wind and persistent rain), to enable all birds to be identified and located. All birds seen or heard were recorded on large-scale maps using standard BTO codes to denote

species and behaviour. Routes were varied during each survey visit so that different parts of the site were surveyed at different times of the day.

- 3.10 Three surveys were conducted between March and June 2025. Further details are provided in **Table A7.3.1**.

**Table A7.3.1: 2025 Breeding Bird Survey Metadata.**

| Date       | Start Time | Finish Time | Start Temperature (°C) | Finish Temperature (°C) | Cloud cover (%) | Wind (Beaufort Scale) | Rain |
|------------|------------|-------------|------------------------|-------------------------|-----------------|-----------------------|------|
| 24/03/2025 | 05:50      | 08:15       | 7                      | 9                       | 100             | 1-2                   | None |
| 15/04/2025 | 06:15      | 08:45       | 7                      | 9                       | 25              | 1                     | None |
| 01/05/2025 | 05:45      | 07:50       | 9                      | 11                      | 0               | 0                     | None |
| 14/05/2025 | 20:45      | 22:15       | 17                     | 11                      | 0               | 0                     | None |
| 03/06/2025 | 05:10      | 07:05       | 10                     | 12                      | 0               | 3                     | None |
| 24/06/2025 | 05:00      | 07:20       | 14                     | 15                      | 100             | 1                     | None |

#### *Analysis of Field Data*

- 3.11 Results from each survey were compiled and analysed following guidance detailed in Gilbert *et al.* (1998) to identify two or more registrations suggesting territories being held by each species across the Zol.

#### *Evaluation Methodology*

- 3.12 The method for describing the importance of areas for birds is based on that developed by Fuller, 1980 & 1982, which is the standard evaluation method that can be applied to EcIA. The objective is to establish the relative importance of bird populations within a geographical context which accords with the CIEEM levels of conservation importance.
- 3.13 The principal attributes of bird communities that are considered when evaluating the importance of an area for birds are population size, diversity and rarity, as well as the presence of any conservation priority species, as outlined below.

#### *Conservation Priority Species*

- 3.14 Bird species that are listed as Species of Principal Importance for Conservation under Section 41 of the NERC Act 2006, or as Red/Amber-listed Birds of Conservation Concern, are considered to be particularly vulnerable due to factors such as serious population declines or reductions in their natural range. These species are therefore given special consideration when assessing the conservation importance of breeding bird assemblages.

#### *Rarity*

- 3.15 The current Species List and annual reports of the Rare Breeding Bird Panel (RBBP) at [www.rbbp.org.uk](http://www.rbbp.org.uk) are a key resource when considering the rarity of a species. The RBBP splits its data into different geographical areas to provide regional context. Rarity should also be considered in a local context where possible.

- 3.16 Several measures of rarity can be used. Species with fewer than 1,000 breeding pairs in Britain are described as Nationally Rare (Fuller, 1980). A species with a County population of up to 25 pairs might therefore be treated as being rare in the County (depending on the species and its status).
- 3.17 Rarity can also be recorded by distribution rather than population size. The Breeding Bird Atlas (Balmer *et al.*, 2013) records breeding distributions of birds in Britain and Ireland by 10x10 km grid squares. This makes it possible to describe the frequency of occurrence of individual species in terms of the proportions of squares in which they occur. A 30% level forms a useful line below which species can be described as 'Scarce', for both breeding and wintering species. This method can also be applied on a more local basis where suitable atlases exist, as it does in counties on a tetrad (2x2km) basis.
- 3.18 The occurrence of species which are specially protected by law or otherwise listed as threatened, although not necessarily strictly rare, can also be helpful in establishing the conservation importance of sites. Species listed on Schedule 1 of the Wildlife and Countryside Act 1981 (as amended) or on Annex 1 of the Birds Directive are worthy of special consideration. These lists consider measures such as population size and distribution.

#### *Relative Population Size*

- 3.19 This is evaluated by assessing the percentage of a population size unit (e.g. national, county) that occurs within the study area. The standard criterion upon which evaluation of population is based is that if 1% or more of the defined geographical unit of a species regularly uses a site, then the site may be important at that geographical scale. This means, for example, that if 1% of the county population occurs, then the site may be of county level importance for that species.
- 3.20 Sources of population data include Woodward *et al.* (2020) and the JNCC SSSI Selection Guidelines at the UK level (though generally such sites have already been designated as SPAs or SSSI for their bird interest), the BTO's annual 'BirdTrends' reports and Wetland Bird Survey (WeBS) alerts (where relevant).

#### *Diversity*

- 3.21 The number of species recorded in an area (species richness) is a simple and effective measure of diversity, which can be used in the assessment of a breeding bird assemblage. **Table A7.3.2** below shows the thresholds commonly used to measure diversity (Fuller, 1980).
- 3.22 However, since the publication of the criteria in 1980, species diversity has declined significantly, and it is considered that Fuller's thresholds are too high for today's breeding bird populations. For this reason, it is therefore judged appropriate to recalibrate the categories slightly downward, as shown. This is achieved by splitting the 'local' category into two and adding a 'district' category, which also fits with the geographical scale set out in the CIEEM guidelines.

**Table A7.3.2 Breeding bird assessment using the number of breeding bird species.**

| Level of Importance | Number of Breeding species |                  |
|---------------------|----------------------------|------------------|
|                     | Fuller (1980)              | Adapted criteria |
| Local               | 25-49 species              | <25              |
| District            | -                          | 25-49            |
| County              | 50-69                      | 50-60            |
| Regional            | 70-84                      | 70-84            |
| National            | 85+                        | 85+              |

## 4. SURVEY RESULTS

### Desktop Study

- 4.1 The 2024 desktop study returned records of 56 different bird species within 2km of the Site. A number of these are of Species of Conservation Concern and are associated with habitat types present on Site.
- 4.2 These included farmland specialists such Skylark *Alauda arvensis*, Greenfinch *Chloris chloris*, and Linnet *Linaria cannabina*. Woodland species included Lesser Spotted Woodpecker *Dryobates minor* and Spotted Flycatcher *Muscicapa striata* whilst common suburban species such as Starling *Sturnus vulgaris* and House Sparrow *Passer domesticus* were also returned.

### Field Survey

#### Habitat Assessments

- 4.3 Habitats on Site consist of cropland, grassland, scrub, woodland, and hedgerow, which offers suitable breeding and foraging habitat for a number of bird species such as Skylark, Dunnock *Prunella modularis*, Linnet, Greenfinch, and Yellowhammer *Emberiza citrinella*, respectively, all of which have been recorded in the desktop study. The River Hamble flows north to south, along the eastern border of the Site, within the woodland and could offer suitable foraging habitat for species such as Kingfisher *Alcedo atthis*, also recorded in the desktop study.

#### Breeding Bird Surveys

- 4.4 A total of 40 bird species were recorded throughout the breeding bird survey (**Annex 1**).
- 4.5 Of these species, four of which were observed flying over the Site and not appearing to use the Site directly, these include Greylag Goose *Anser anser*, Mandarin Duck *Aix galericulata*, Lesser Black-backed Gull *Larus fuscus*, and Canada Goose *Branta canadensis*. Despite not directly using the Site, these species will be considered in future analysis as they could be using land within the Zol if not the Site directly.
- 4.6 Of the 40 species recorded, 31 of which are considered to be breeding on the Site, five are Red-listed Birds of Conservation Concern (BoCC) (Linnet, Mistle Thrush *Turdus viscivorus*, Greenfinch, House Sparrow, Starling) and eight species are Amber-listed BoCC (Stock Dove *Columba oenas*, Woodpigeon *Columba palumbus*, Rook *Corvus frugilegus*, Whitethroat *Curruca communis*, Willow Warbler *Phylloscopus trochilus*, Dunnock, Wren *Troglodytes troglodytes*, and Song Thrush *Turdus philomelos*.)
- 4.7 Five of the species that used the Site in 2024 are listed as Species of Principal Importance (House Sparrow, Dunnock, Starling, Song Thrush and Linnet).
- 4.8 Three of the species that used the Site in 2024 are listed on Schedule 1 of the Wildlife and Countryside Act 1981 (as amended), these being Firecrest *Regulus ignicapilla*, Kingfisher, and Redwing *Turdus iliacus*. However, of these, only Firecrest is considered to be breeding on Site.
- 4.9 The majority of bird species were recorded either in the woodland, or along its edges, along the hedgerows, or around the complex of buildings in the north of the Site. The woodland on Site, Holly Tree Farm Wood SINC, provided habitat for several species such as Mistle Thrush,

Greenfinch, Dunnock, and Song Thrush. The complex of buildings in the north of the Site supported species such as House Sparrows and Starlings, using the surrounding fields and hedgerows for foraging. Holly Tree Farm Meadow SINC supported species such as Mistle Thrush, Greenfinch, Stock Dove, and Wren.

### **Ecological Evaluation**

- 4.10 Overall, the assemblage of breeding birds using the Site and diversity of species, as detailed previously in the methodology, suggests the ecological importance of the Site is that of **Local Level**.

## 5. RECOMMENDATIONS

### Mitigation

- 5.1 Where vegetation clearance is required, it must take place outside of the breeding bird season (March – mid-September inclusive). Should any vegetation clearance be necessary during the breeding bird season, a nesting bird check should be undertaken by a suitably experienced ecologist on the morning of the clearance. This includes the clearance of ground vegetation where ground-nesting birds have been identified. If nesting birds are deemed to be present, an exclusion zone will need to be set up around the nest (the size of which will depend on the species present) and works will only be able to commence once an ecologist has confirmed the nest is no longer active.
- 5.2 Due to the extra protections afforded to species listed under Schedule 1 of the Wildlife & Countryside Act 1981 (as amended) it is an offence to intentionally or recklessly disturb a Schedule 1 species whilst it is nesting. Of the Schedule 1 species recorded on the Site, suitable breeding habitats are only available for Firecrest which typically nest within woodland habitats. Given that woodlands form part of the Holly Tree Farm Woods SINC, 'disturbing works' (such as vegetation clearance) within, or within immediate proximity of suitable nesting habitat are therefore not anticipated. Should such works be required, they should be undertaken outside of the Firecrest breeding season (March to early-July inclusive) where possible. Should works take place within this period an ecologist must be consulted first and the following measures may be required:
- Update targeted survey for Firecrest, carried out by a suitably experienced ecologist;
  - Mark-up of appropriate exclusion zones around any Firecrest nests (including on the ground); and
  - If nests are found, no works must take place until the nests have become inactive of their own accord. An ecologist will attend Site to confirm when works are able to proceed.
- 5.3 The SINC within the Site are protected by Policy DM11 of the Eastleigh Borough Council Local Plan 2016-2036 (2022), meaning measures must be implemented to prevent negative effects on the SINC as a result of the Proposed Development. Whilst not designated due to breeding bird assemblages/species, measures implemented to avoid impacts on the grasslands/woodlands will by proxy provide mitigation for the breeding bird assemblage, maintaining suitable nesting, foraging and roosting habitats. For example, sensitive lighting strategies should seek to avoid light pollution within the SINC. This will prevent impacts on diurnal bird species circadian rhythms, which can result in birds being active at night thereby reducing fitness and increasing risk of predation.
- 5.4 The introduction of domestic pets as a result of residential development may result in increased levels of predation on breeding birds, most notably by cats. The inclusion of thorny native species, such as Blackthorn *Prunus spinosa* and Hawthorn *Crataegus monogyna* will aid in providing shelter
- 5.5 The hedgerows and lines of trees on Site should be retained and enhanced where possible to retain nesting and foraging habitat, as well as the connectivity of the Site to the wider landscape.

## Compensation

- 5.6 Planting of scrub and hedgerows with a diverse range of native species would compensate for the loss of any scrub/hedgerow currently being used by bird species for foraging and nesting.

## Enhancement

- 5.7 Whilst Swifts *Apus apus* were not recorded throughout the breeding bird surveys, swift bricks installed on the houses would benefit this Red-listed BoCC, subsequently they also provide further nesting cavities for other Red-listed species such as House Sparrows and House Martins *Delichon urbica*.
- 5.8 More generally, a range of bird boxes should be included throughout the Proposed Development to increase nesting opportunities for sub-urban species, such as Blue Tit *Cyanistes caeruleus*, Great Tit *Parus major* and House sparrow. These boxes could include integrates boxes into new buildings, as well as tree mounted boxes on retained trees within the landscape.
- 5.9 Hedgerows on Site can be enhanced through planting and good management practices. This would then provide greater opportunities to birds for foraging, shelter, and nesting, as well as providing greater connectivity to the wider landscape for the species currently using the Site and those in the surrounding areas. Plant species could include Hawthorn *Crataegus monogyna*, Blackthorn, Wild Cherry *Prunus avium*, Holly *Ilex aquifolium*, and Privet *Ligustrum vulgare*. These all offer abundant sources of food for a range of species, supporting birds throughout the breeding season and over winter.
- 5.10 To create a food rich environment throughout the year, native fruit-bearing trees such as Rowan *Sorbus aucuparia* and Dogwood *Cornus sanguinea* could be planted throughout the Site and would provide berries eaten by numerous species of birds as well as provide corridors for birds to pass through, particularly in the developed areas of the Site. These species are not thorny so therefore will be safer to plant around areas of the development where higher pedestrian use is expected.
- 5.11 De-engineered permanently wet SuDS constructed on Site could provide opportunities for waterfowl currently recorded flying over the Site such as Mandarin Ducks, Canada Geese, and Greylag Geese, as well as providing opportunities for bird species recorded in the wider area such as Mallards *Anas platyrhynchos*. These should be planted with enough vegetation to provide ample cover and nesting opportunities, as well as to attract insects which birds could then feed on.
- 5.12 Areas of grassland, such as those around the SuDS, should be sown with a high diversity seed mix. The resulting diverse grassland / meadow would attract insects which would then create increased foraging opportunities for birds.

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Document Reviewed By: Katie Cammack BSc (Hons) MSc MCIEEM

Document Dated: 09 October 2025

## 6. REFERENCES

- Balmer, D.E., Gillings, S., Caffrey, B.J., Swann, R.L., Downie, I.S. & Fuller, R.J. (2013). *Bird Atlas 2007-2011: the breeding and wintering birds of Britain and Ireland*. BTO Books, Thetford.
- Bibby, C.J., Burgess, N.D., Hill, D.A. & Mustoe, S.H. (2000). *Bird Census Techniques*. Second Edition. London, Academic Press.
- Bird Survey & Assessment Steering Group. (2024). *Bird Survey Guidelines for assessing ecological impacts*. Available at: <https://birdsurveyguidelines.org>. Date Accessed: 02/10/24.
- CIEEM (2018) *Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater, Coastal and Marine version 1.3*. Chartered Institute of Ecology and Environmental Management, Winchester.
- Fuller, R.J. (1980). *A method of assessing the ornithological interest of sites for nature conservation*. Biological Conservation. 17, 229-239.
- Fuller, R.J. (1982). *Bird Habitats in Britain*, London, T & AD Poyser.
- Gilbert, G., Gibbons, D.W. & Evans, J. (1998). *Bird Monitoring Methods: A manual of techniques for key species*. Sandy, RSPB/BTO/JNCC/WWT/ITE/The Seabird Group RSPB/BTO.
- Hampshire Biodiversity Information Centre (2021). *Criteria for the Selection of Sites of Importance for Nature Conservation (SINCs) in Hampshire*.
- Her Majesty's Stationery Office (HMSO). (1981). *The Wildlife and Countryside Act 1981*. London, HMSO.
- Stanbury, A., Eaton, M., Aebischer, N., Balmer, D., Brown, A., Douse, A., Lindley, P., McCulloch, N., Noble, D. and Win, I. (2021). *The status of our bird populations: the fifth Birds of Conservation Concern in the United Kingdom, Channel Islands and Isle of Man and second IUCN Red List assessment of extinction risk for Great Britain*. British Birds 114, 723-747.
- Wilson, P. (2021) *Criteria for the Selection of Sites of Importance for Nature Conservation (SINCs) in Hampshire*. Hampshire Biodiversity Information Centre.
- Woodward, I., Aebischer, N., Burnell, D., Eaton, M., Frost, T., Hall, C., Stroud, S. & Noble, D. (2020) Population estimates of birds in Great Britain and the United Kingdom. *British Birds*. 113: 69-104.

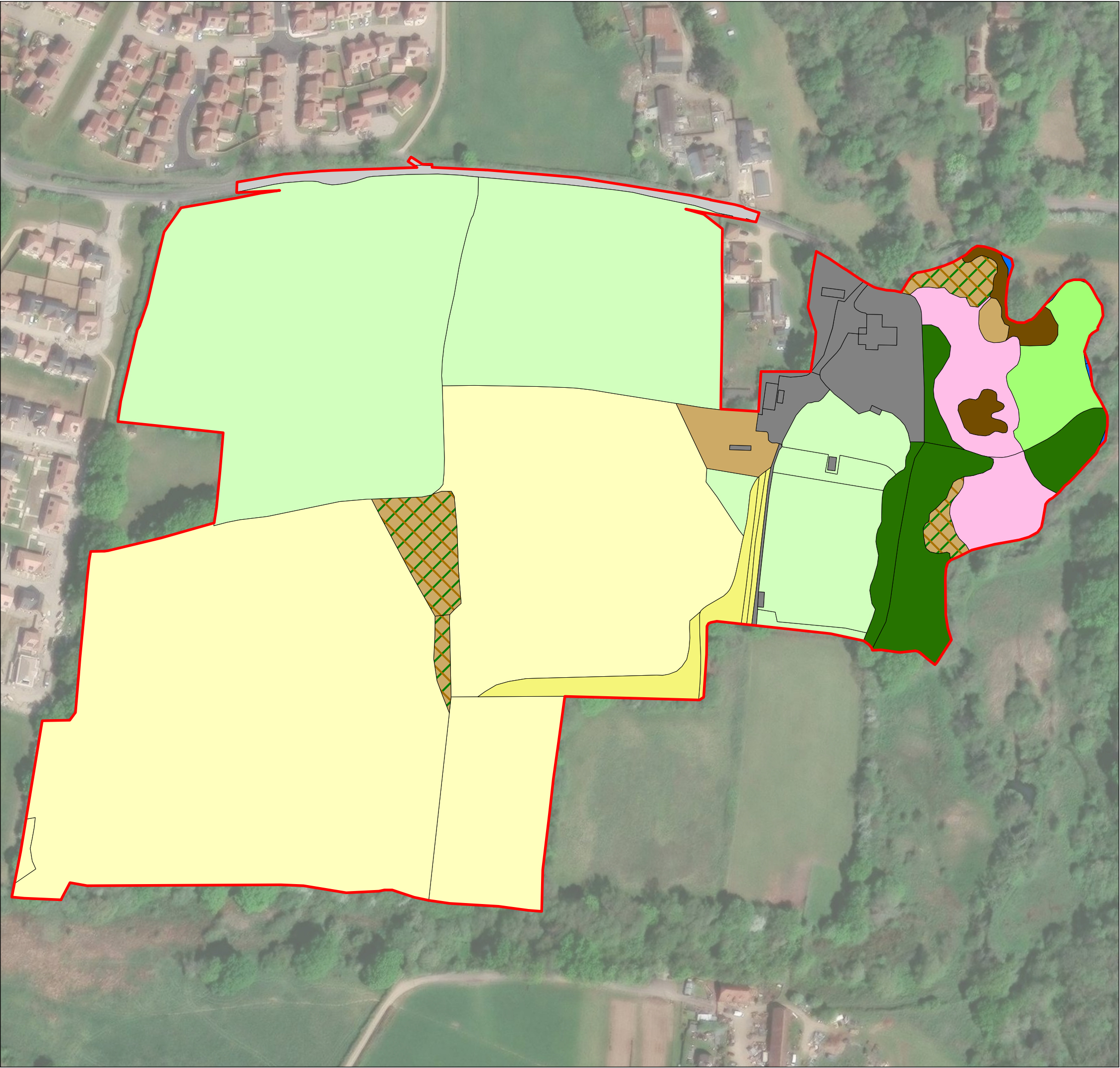


Figure A7.1 Site Location and Habitats

- KEY
- Site boundary
  - c1 - Arable and horticulture
  - c1b - Temporary grass and clover leys
  - f2b - Purple moor-grass and rush pastures
  - g3c - Other neutral grassland
  - g4 - Modified grassland
  - h3d - Bramble scrub
  - h3h - Mixed scrub
  - h3j - Willow scrub
  - r2 - rivers and streams
  - u1 - Built-up areas and gardens
  - u1b - Developed land, sealed surface
  - w1f - Lowland mixed deciduous woodland

SCALE: 1:2,000 at A3

0 20 40 60 80 100 Metres



CLIENT: Bloor Homes Ltd

PROJECT: Land South of Maddoxford Lane

DATE: 05 February 2026

# Annex 1

## Bird Species Recorded

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**Table A1.1: Full List of Bird Species Recorded During Breeding Bird Surveys.**

| Name                     | Scientific Name            | BoCC Status    | Breeding Status |
|--------------------------|----------------------------|----------------|-----------------|
| Long-tailed Tit          | <i>Aegithalos caudatus</i> | Green          | Pr              |
| Mandarin Duck            | <i>Aix galericulata</i>    | Green          | O               |
| Kingfisher               | <i>Alcedo atthis</i>       | Green          | O               |
| Greylag Goose            | <i>Anser anser</i>         | Green          | O               |
| Canada Goose             | <i>Branta canadensis</i>   | Green          | O               |
| Goldfinch                | <i>Carduelis carduelis</i> | Green          | Pr              |
| Treecreeper              | <i>Certhia familiaris</i>  | Green          | Pr              |
| Greenfinch               | <i>Chloris chloris</i>     | Red<br>BDp1/2  | Pr              |
| Jackdaw                  | <i>Coloeus monedula</i>    | Green          | Po              |
| Stock Dove               | <i>Columba oenas</i>       | Amber<br>BI    | Po              |
| Woodpigeon               | <i>Columba palumbus</i>    | Amber<br>BI    | Pr              |
| Carrion Crow             | <i>Corvus corone</i>       | Green          | Po              |
| Rook                     | <i>Corvus frugilegus</i>   | Amber<br>ERLOB | Po              |
| Whitethroat              | <i>Curruca communis</i>    | Amber<br>BDMp2 | Po              |
| Blue Tit                 | <i>Cyanistes caeruleus</i> | Green          | Pr              |
| Great Spotted Woodpecker | <i>Dendrocopos major</i>   | Green          | Po              |
| Robin                    | <i>Erithacus rubecula</i>  | Green          | B               |
| Chaffinch                | <i>Fringilla coelebs</i>   | Green          | Pr              |
| Jay                      | <i>Garrulus glandurias</i> | Green          | Po              |
| Swallow                  | <i>Hirundo rustica</i>     | Green          | Po              |

| Name                     | Scientific Name                | BoCC Status          | Breeding Status |
|--------------------------|--------------------------------|----------------------|-----------------|
| Lesser Black-backed Gull | <i>Larus fuscus</i>            | Amber<br>BL, BI      | O               |
| Great Tit                | <i>Parus major</i>             | Green                | Pr              |
| House Sparrow            | <i>Passer domesticus</i>       | Red<br>BDp2          | Pr              |
| Coal Tit                 | <i>Periparus ater</i>          | Green                | Po              |
| Chiffchaff               | <i>Phylloscopus collybita</i>  | Green                | Pr              |
| Willow Warbler           | <i>Phylloscopus trochilus</i>  | Amber<br>BDMp1/2     | Po              |
| Magpie                   | <i>Pica pica</i>               | Green                | Po              |
| Green Woodpecker         | <i>Picus viridis</i>           | Green                | Po              |
| Dunnock                  | <i>Prunella modularis</i>      | Amber<br>BDMp2       | Pr              |
| Firecrest                | <i>Regulus ignicapilla</i>     | Green                | Po              |
| Goldcrest                | <i>Regulus regulus</i>         | Green                | Po              |
| Nuthatch                 | <i>Sitta europaea</i>          | Green                | Po              |
| Starling                 | <i>Sturnus vulgaris</i>        | Red<br>BDp1/2        | Pr              |
| Blackcap                 | <i>Sylvia atricapilla</i>      | Green                | Pr              |
| Wren                     | <i>Troglodytes troglodytes</i> | Amber<br>BI          | Pr              |
| Redwing                  | <i>Turdus iliacus</i>          | Amber<br>BDMr1/2, BR | O               |
| Blackbird                | <i>Turdus merula</i>           | Green                | B               |
| Song Thrush              | <i>Turdus philomelos</i>       | Amber<br>BDMp2       | Po              |
| Mistle Thrush            | <i>Turdus viscivorus</i>       | Red<br>BDp2          | Po              |

#### Key

|    |                                                                                                                                                               |
|----|---------------------------------------------------------------------------------------------------------------------------------------------------------------|
| B  | Breeding confirmed (nest or young seen)                                                                                                                       |
| Pr | Breeding probable (holding territory, e.g. singing male)                                                                                                      |
| Po | Breeding possible (present during breeding season in suitable habitat)                                                                                        |
| O  | Observed during breeding season, but no evidence of breeding (i.e. raptors flying over, herons with no evidence of heronry, ducks summering on an urban pond) |
| N  | Not breeding: wintering, transients or passage                                                                                                                |
| *  | Listed under Section 41 of the NERC Act 2006                                                                                                                  |
| ^  | Listed under Schedule 1 of the Wildlife and Countryside Act 1981 (as amended)                                                                                 |

Bird of Conservation Concern (BoCC) codes:

*Red-list criteria*

|        |                                                                                  |
|--------|----------------------------------------------------------------------------------|
| HD     | Historical Decline in breeding population                                        |
| BDp1/2 | Severe breeding population decline over 25 years/longer term                     |
| BDr1/2 | Severe breeding range decline over 25 years/longer term                          |
| WDp1/2 | Severe non-breeding population decline over 25 years/longer term                 |
| WDr1   | Severe non-breeding range decline over 25 years                                  |
| IUCN   | Globally Threatened – CR (critically endangered) EN (endangered) VU (vulnerable) |

*Amber-list criteria*

|         |                                                                                   |
|---------|-----------------------------------------------------------------------------------|
| HDrec   | Historical Decline in breeding population – recovery                              |
| BDMp1/2 | Moderate breeding population decline over 25 years/longer term                    |
| WDMp1/2 | Moderate non-breeding population decline over 25 years/longer term                |
| BDMr1/2 | Moderate breeding range decline over 25 years/longer term                         |
| WDMr1   | Moderate non-breeding range decline over 25 years                                 |
| BR/WR   | Breeding/non-breeding rarity                                                      |
| BL/WL   | Breeding/non-breeding localisation                                                |
| BI/WI   | Breeding/non-breeding international importance                                    |
| ERLOB   | Threatened in Europe – CR (critically endangered) EN (endangered) VU (vulnerable) |

# Land South of Maddoxford Lane

## Technical Appendix 8: Biodiversity Net Gain

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### BIODIVERSITY GAIN VALIDATION STATEMENT

This Statement provides the minimum statutory information required for Eastleigh Borough Council to validate the planning application for the Proposals, as set out in Article 7 of the Town and Country Planning (Development Management Procedure) (England) Order 2015 (as amended by The Biodiversity Gain (Town and Country Planning) (Modifications and Amendments) (England) Regulations 2024).

EPR hereby confirms that the Applicant believes that planning permission, if granted, would be subject to the biodiversity gain condition.

The on-site pre-development biodiversity value is taken to be the date that the Application is submitted. No activities resulting in a loss of on-site biodiversity value (degradation) have taken place between 30 January 2020 and this date.

A completed Statutory Biodiversity Metric Calculation Tool (published on 12<sup>th</sup> February 2024) has been submitted with the Application as part of the Information for Biodiversity Net Gain Pack. This shows the calculations of the pre-development biodiversity value of the onsite habitat on the date of application. The baseline on-site biodiversity value is calculated as follows:

- 36.641 Area Habitat units
- 9.54 Hedgerow units
- 4.38 Watercourse units

Plans, drawn to an identified scale and showing the direction of North, are included within this document (**Figures A8.1**) showing the on-site habitat existing on the date of application, including any irreplaceable habitat if present.

The following irreplaceable habitats are present on-site:

- Ancient Woodland; and
- Veteran Trees.

# Land South of Maddoxford Lane

## Technical Appendix 8: Biodiversity Net Gain

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### 1. INTRODUCTION

#### Scope

- 1.1 This Technical Appendix sets out the details of the Biodiversity Net Gain calculations completed for the Proposals, including:
- Assessment Methodology;
  - Summary of evidence underpinning Metric decisions;
  - Assumptions and Limitations;
  - Headline Results;
  - Summary of proposed significant on-site habitat enhancements; and
  - Overview of proposed arrangements for BNG delivery and monitoring.
- 1.2 It is equivalent to the 'BNG Design Stage Report' recommended by the Chartered Institute of Ecology and Environmental Management (CIEEM) in their Biodiversity Net Gain Report & Audit Templates guidance document (CIEEM, 2021a).

#### Description of Site

- 1.3 The Site comprises one former pastoral field, and two arable fields bound by hedgerows, a dry ditch, fencing and mature trees as well as residential dwellings, and existing buildings associated with a motor car storage and associated scrap material business. Additionally, within the east of the Site there are two Sites of Interest to Nature Conservation (SINCs). Along, the eastern boundary is the River Hamble, which the Site falls within 10m of the top of the Riverbank.

#### Description of Development

- 1.4 The Proposals are described in the application documents as follows:

“Outline planning permission with all matter reserved (except the main point of access) for the demolition of two residential dwellings (Use Class C3), and demolition of existing buildings associated with a motor car storage and associated scrap metal business, and proposal for up to 280 dwellings (Use class C3), including affordable dwellings, and associated provision of informal and formal public space, together with associated highways, ;landscape, earth works and level changes, foul and surface water drainage facilities, utilities provision and other associated and necessary infrastructure works.”

## **Legislation and Policy Context**

- 1.5 A minimum 10% net gain in biodiversity, as measured by the Statutory Biodiversity Metric (DEFRA, 2024a,) is now a condition of most types of planning permission in England under the Environment Act 2021 and associated secondary legislation.
- 1.6 Guidance has clarified that where present on-site, the 10% gain requirement applies individually to three categories of habitat: ‘Area Habitats’, ‘Hedgerows’, and ‘Watercourses’. This is measured in ‘units’ which can be delivered on-site, off-site, or a combination of both, and must be secured for a minimum of 30 years.
- 1.7 The National Planning Policy Framework (NPPF) (DLUHC, 2023) requires local plans to “identify and pursue opportunities for securing measurable net gains in biodiversity” and enhance the natural and local environment by “minimising impacts on and providing net gains for biodiversity”.

## **Guidance**

- 1.8 The following guidance documents have informed the BNG assessment and overall approach:
  - Defra’s Biodiversity Gain Guidance, available at: <https://www.gov.uk/government/collections/biodiversity-net-gain>;
  - The Statutory Biodiversity Metric User Guide (DEFRA, 2024);
  - The UK Habitat Classification Version 2.0 (UKHab Ltd, 2023);
  - Biodiversity Net Gain. Good Practice Principles for Development – A Practical Guide (Baker et al., 2019);
  - Biodiversity Net Gain Report and Audit Templates (CIEEM, 2021a);
  - Good Practice Requirements for Delivering Biodiversity Net Gain (On- and Off-Site) (CIEEM, 2021b); and
  - BS8683:2021 Process for designing and implementing Biodiversity Net Gain – Specification (BSI, 2021).

2. ASSESSMENT METHODOLOGY

Metric Version and Assessors

- 2.1 The Statutory Biodiversity Metric and Condition Assessments published 12<sup>th</sup> February 2024 were used for this BNG assessment.
- 2.2 The calculations were carried out by Siobhan Pryke, Senior Ecologist EPR and reviewed by Alison Hogan, managing Director of EPR, both experienced ecologists and BNG practitioners.

Baseline Surveys

On-Site

- 2.3 Baseline habitat and condition assessment surveys were carried out by EPR botanists Hannah Coriigan, Andrew Cross and Jodie Southgate. The survey dates are as follows:

Table 2.1: Baseline habitat survey dates

| Date       | Survey Type                                  | Surveyor(s)                      |
|------------|----------------------------------------------|----------------------------------|
| 25/09/2024 | Condition Assessment Survey of all habitats  | Hannah Corriigan                 |
| 09/05/2025 | Early Spring Woodland Survey                 | Andrew Cross                     |
| 20/08/2025 | Updated Site Survey and Condition Assessment | Andrew Cross and Jodie Southgate |

- 2.4 Habitat mapping was undertaken according to the UK Habitat Classification v.2.0 methodology (UKHab Ltd, 2023) and translated into BNG habitat categories where necessary.
- 2.5 Following the surveys, each area or length of habitat mapped in ESRI ArcGIS software (**Figures A8.1**).
- 2.6 The River Condition Assessment (RCA) was carried out by Anna Showan, an accredited RCA surveyor, on 10/10/2024. using the Modular River Physical Survey (MoRPh) methodology (Gurnell et al., 2021).

Post-Development Plans

On-Site

- 2.7 The following plans produced by other technical consultants, submitted for approval with the Application, were used as the basis for the post-development calculations. These plans were imported into ArcGIS software and each line or polygon was assigned a BNG habitat type and target condition (**Figure A8.2**):
  - Land Use and Access Plan (BLOO240103 LUP-01 P6)

## **Metric Inputs**

- 2.8 As set out in the Statutory Metric User Guide (DEFRA, 2024), one of the key principles of the Biodiversity Metric is that “this biodiversity metric is not a complex or comprehensive ecological model and is not a substitute for expert ecological advice”.
- 2.9 When completing a Metric, the assessor must therefore make a number of decisions based on available evidence (such as ecological survey data), professional judgement, and ecological expertise. The User Guide (DEFRA, 2024) also states that “Evidence for metric decisions should be provided and signposted within the ‘User Comments’ column of the biodiversity metric tool”.
- 2.10 To ensure that the Metric Calculation Tool remains as user-friendly as possible, the following paragraphs expand upon the User Comments to provide more detail on the decisions behind the data entered into the Metric, where this is considered necessary and proportionate.

## ***On-Site Habitat Type and Condition***

### ***Target Conditions***

- 2.11 Target habitat conditions have been predicted with reference to the relevant Condition Assessment sheet (DEFRA, 2024b), with full details and justifications set out in the separate spreadsheet submitted with the Application.
- 2.12 The Target Conditions are considered to be realistic and achievable, and will be delivered and maintained through the implementation of the Habitat Management and Monitoring Plan to be submitted alongside the Biodiversity Gain Plan to discharge the general biodiversity gain planning condition, should consent be granted. A draft version of the HMMP has been submitted with this Application.

### ***Strategic Significance***

- 2.13 The Local Nature Recovery Strategy for Hampshire and The Eastleigh Borough Council Biodiversity Strategy 2024-2034 was used to assess the strategic significance of the habitats within the Site and to be created within the Site.

## **Assumptions and Limitations**

- 2.14 As the proposed scheme is an outline scheme, the development plan lacks detail. We have done a modest amount of planting and will update the BNG when detailed landscaping plans are prepared at Reserved Matters stage.
- 2.15 Additionally, as per the user guide, the developed areas have been assumed at a 70:30 ratio of houses to gardens.

### ***General Limitations of Metrics***

- 2.16 As acknowledged in the User Guide (DEFRA, 2024), the Statutory Biodiversity Metric includes several inherent limitations. Extracts are provided below:

*The use of this biodiversity metric does not override existing biodiversity protections, statutory obligations, policy requirements, ecological mitigation hierarchy or any*

*other requirements. This includes consenting or licensing processes, for example woodlands.” (Principle 2).*

*“This biodiversity metric is not a complex or comprehensive ecological model and is not a substitute for expert ecological advice.” (Principle 4)*

*This biodiversity metric is designed to inform decisions in conjunction with locally relevant evidence, expert input, or guidance.” (Principle 6)*

- 2.17 In relation to Principle 2, protected and valued species are considered in detail as part of the EclA. This also includes avoiding and mitigating impacts and promoting enhancements such as the provision of wildlife boxes, the latter of which should also be taken into account when assessing the overall BNG that can be delivered by the Proposals.

### 3. SUMMARY OF RESULTS

#### Introduction

- 3.1 The following should be read with reference to **Figure A8.1** and the completed Metric Calculation Tool (particularly the Assessor Comments column) and Condition Assessment spreadsheets submitted separately with the Application.

#### Description of Baseline

- 3.2 The total number of on-site baseline units is calculated as follows:
- Area Habitats: 36.64 units;
  - Hedgerows: 10.20 units; and
  - Watercourses: 4.38 units
- 3.3 The Site comprises mainly of arable land with grazed grassland fields, with small patches of scrub and hedgerow and tree lines which are part of the field boundaries. Additionally, within the Site are two SINC's which comprise a variety of habitats. These include habitats of importance such as rush pasture, other neutral grassland and woodland which includes Ancient woodland habitat. Within the SINC meadow there are patches of mixed and willow scrub which have naturally generated.

#### The BNG Hierarchy

- 3.4 The Proposals were designed with ecological input from an early stage and due consideration has been given to the BNG Hierarchy throughout the masterplanning process.
- 3.5 The BNG Hierarchy, as set out in Article 37A of the Town and Country Planning (Development Management Procedure) (England) Order 2015 (as amended) requires developers to take the following steps in relation to BNG:
- Avoidance of adverse effects to on-site habitats of 'Medium' distinctiveness and above;
  - Insofar as they cannot be avoided, mitigating those effects;
  - Insofar as they cannot be mitigated; compensating for those effects by prioritising in order, where possible:
    - 1) Enhancement of existing on-site habitats;
    - 2) Creation of new on-site habitats;
    - 3) Allocation of registered off-site gains; and finally
    - 4) Purchase of national off-site biodiversity credits.
- 3.6 **Table 3.1** sets out a summary of how the BNG Hierarchy has been applied by the Proposals.

**Table 3.1: Application of the BNG Hierarchy**

| Action                     | Evidence of application                                                                                 |
|----------------------------|---------------------------------------------------------------------------------------------------------|
| <b>Impact Avoidance:</b>   | Retained all SINC habitats<br>Concentrated development on arable/ grazed fields of low distinctiveness. |
| <b>Mitigation:</b>         | SINC buffers with restored greenspace                                                                   |
| <b>Compensation:</b>       |                                                                                                         |
| Habitat creation (on-site) | Native tree and grassland creation                                                                      |

### Headline Results

- 3.7 As set out in the Metric Calculation Tool submitted with the Application, the Proposals are predicted to deliver the following net gain:
- 5.04 area habitat units, or 13.74%;
  - 4.14 hedgerow units, or 40.60%; and
  - 0 watercourse units, or 0%.
- 3.8 At this time not all trading rules for habitats have been met, however these will be addressed at the Reserved Matters stage when detailed landscaping plans are produced, which will include the relevant habitats to satisfy the trading rules.
- 3.9 The on-site proposals include the planting of 216 native trees, included within the development areas, as well as the green space within the Site. The proposals retained and added natural buffers to the SINC. There will be the creation of species-rich grassland within the areas of open space within the Development.
- 3.10 All of the gains for habitats and hedgerows are predicted to be delivered on-site. Further investigation into watercourse options is required but if at Reserved Matters stage all the units cannot be delivered within the Site, the purchase or delivery of off-site units or credits will be required.

### Irreplaceable Habitats

- 3.11 Within the Site there is ancient woodland which will be retained as part of the development.
- 3.12 There are ten veteran trees within the Site, which are all being retained as part of the development.

## 4. PROPOSALS FOR DELIVERY AND MONITORING

### Delivery

#### *On-Site*

- 4.1 A Draft Habitat Management and Monitoring Plan (HMMP) will set out the proposed details of how the target habitat types and conditions required to achieve the BNG results reported in **Section 3** will be achieved. This will be through a combination of habitat retention, creation and enhancement measures, followed by ongoing management for a minimum period of 30 years for the 'significant' on-site enhancements described in **Section 3**.
- 4.2 Should planning consent be granted, the final version of the HMMP will be submitted to Eastleigh Borough Council alongside a Biodiversity Gain Plan to discharge the biodiversity gain planning condition. The mechanism for securing the delivery of significant on-site enhancements is to be agreed with Eastleigh Borough Council, but could take the form of a planning condition, planning obligation or conservation covenant.

### Monitoring

#### *On-Site*

- 4.3 The successful establishment of newly created habitats, and progress of all habitats towards their post-development Target Conditions, will need to be regularly monitored to ensure that the predicted BNG will be realised on the ground. The draft HMMP sets out details of the proposed monitoring actions and frequency.

### Conclusion

- 4.4 This Technical Appendix has set out the methodology and results of the Statutory Biodiversity Metric calculations completed for the Proposals, which predict a net gain in 5.04 habitat units (13.61%), 4.14 hedgerow units (40.60%) and no net change of 0 watercourse units (0%).
- 4.5 Net gains will be delivered on-site through a combination of habitat creation and retention, and the purchase of off-site biodiversity units/credits, where necessary at the Reserved Matters stage.
- 4.6 Should planning consent be granted, full details of the arrangements for the delivery of minimum 10% BNG will be set out in a Biodiversity Gain Plan and final Habitat Management and Monitoring Plan and submitted to Eastleigh Borough Council for approval.
- 4.7 It is therefore concluded that the Proposals as envisaged would comply with the statutory minimum requirements for 10% biodiversity net gain as a condition of planning permission in England under the Environment Act 2021 and Town and Country Planning (Development Management Procedure) (England) Order 2015 (as amended), as well as with the NPPF and local planning policy.

## 5. REFERENCES

- The British Standards Institution (BSI) (2021). *BS 8683:2021 Process for designing and implementing Biodiversity Net Gain – Specification*. British Standards Limited, 2021.
- Chartered Institute of Ecology and Environmental Management (CIEEM) (2021). *Biodiversity Net Gain Report & Audit Templates. Version 1 July 2021*. CIEEM, Winchester.
- CIEEM, CIRIA and IEMA (2019). *Biodiversity net gain. Good practice principles for development*.
- DEFRA (2025a). *The Statutory Biodiversity Metric Calculation Tool. July 2025*.
- DEFRA (2025b). *The Statutory Biodiversity Metric User Guide. July 2025*.
- DEFRA (2025c). *The Statutory Biodiversity Metric – Technical Annex 1: Condition Assessment Sheets and Methodology. July 2025*.
- DEFRA (2025d). *Collection: Biodiversity Net Gain*. Available at: <https://www.gov.uk/government/collections/biodiversity-net-gain>
- Eastleigh Borough Council (2024). *Eastleigh Borough Council Biodiversity Strategy 2024-2034*
- Gurnell, A.M., England, J., Scott S.J. and Shuker L.J. (2024). *A Guide to Assessing River Condition. Part of the Rivers and Streams Component of the Biodiversity Metric Watercourse Module for calculating Biodiversity Net Gain*.
- His Majesty's Stationery Office (HMSO) (2015). *The Town and Country Planning (Development Management Procedure) (England) Order 2015*. HMSO, London.
- HMSO (2021). *Environment Act 2021*. HMSO, London.
- HMSO (2024a). *The Biodiversity Gain (Town and Country Planning) (Modifications and Amendments) (England) Regulations 2024*. HMSO, London.
- HMSO (2024b). *The Environment Act 2021 (Commencement No. 8 and Transitional Provisions) Regulations 2024*. HMSO, London.
- HMSO (2024c). *The Biodiversity Gain Requirements (Irreplaceable Habitat) Regulations 2024*. HMSO, London.
- Ministry of Housing, Communities and Local Government (MHCLG) (2024). *National Planning Policy Framework*.
- Ministry of Housing, Communities and Local Government (MHCLG) and Department for Levelling Up, Housing and Communities (DLUHC) (2025). *Planning Practice Guidance: Biodiversity Net Gain*. Available at: <https://www.gov.uk/guidance/biodiversity-net-gain>
- UKHab Ltd (2023). *UK Habitat Classification Version 2.0*. Available at <http://ukhab.org>

## FIGURES

- Figure 1**      BNG Baseline  
**Figure 2**      BNG Post-Development





Figure 2 On-Site Post Development Habitats

- KEY
- Retained**
- Site boundary
  - Veteran tree (NPPF and BGRR)
  - Species-rich native hedgerow with trees - associated with bank or ditch
  - Species-rich native hedgerow
  - Ecologically valuable line of trees
  - Ecologically valuable line of trees - associated with bank or ditch
  - Native hedgerow
  - Line of trees
  - Other rivers and streams
  - Modified grassland
  - Other neutral grassland
  - Bramble scrub
  - Mixed scrub
  - Willow scrub
  - Developed land; sealed surface
  - Purple moor grass and rush pastures
  - Lowland mixed deciduous woodland
  - Watercourse footprint
- Created**
- Urban tree
  - Species-rich native hedgerow
  - Modified grassland
  - Other neutral grassland
  - Artificial unvegetated, unsealed surface
  - Developed land; sealed surface
  - Developed land; sealed surface & Vegetated gardens
  - Ancient woodland - Indicative location

SCALE: 1:2,000 at A3

0 25 50 75 100 Metres



CLIENT: Bloor Homes Ltd

PROJECT: Land South of Maddoxford (Holly Tree Farm)

DATE: 17 February 2026