

***71 Oak Tree Road,  
Reading ~  
Ecological Assessment  
October 2017***

COMMISSIONED BY  
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**71 Oak Tree Road,  
Reading ~  
Ecological Assessment**

**October 2017**

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## **1 INTRODUCTION**

### **1.1 Background**

- 1.1.1 Derek Finnie Associates Ltd was commissioned by Colony Architects Ltd to undertake an ecological assessment of a parcel of land known as 71 Oak Tree Road, Tilehurst, hereafter referred to as the 'Site'.
- 1.1.2 There is a proposal to re-develop the Site with up to three new residential dwellings after the demolition of the existing dwelling, which is located towards the north of the Site. Therefore, there is a need to assess any potential adverse ecological impacts of the proposal, as well as identify areas where biodiversity enhancements can be achieved. To this end, a baseline ecological assessment of the Site was undertaken in September 2017, comprising a desk study data search of publicly available information, a Phase 1 Habitat survey and a preliminary bat roost assessment of the dwelling and mature trees within the Site.
- 1.1.3 The following report outlines the methodologies employed throughout the ecological assessment, describes the current ecological status of the Site and discusses the ecological constraints to any future development, as well as options for biodiversity enhancement.

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## **2 METHODOLOGY**

### **2.1 Desk Study**

- 2.1.1 The Government's Multi- Agency Geographical Information for the Countryside (MAGIC) database was reviewed for the presence and extent of statutory designated sites within a 2km radius of the Site, extending to 5km for Natura 2000 sites.

### **2.2 Habitat survey**

- 2.2.1 An 'extended' Phase 1 Habitat Survey was carried out on 13<sup>th</sup> September 2017; this followed the methodology presented by the JNCC (2010). The Phase 1 technique aims to classify each habitat into categories based on the assemblage of plant species present, with the dominant plant species for each habitat being noted. In some cases, sub-divisions or modifications of the standard categories can be made where this is useful in providing further detail.
- 2.2.2 An 'extended' form of the basic methodology was employed to determine whether any notable or protected species of fauna utilise the study area, in particular badgers, bats, amphibians, reptiles and birds. In the absence of direct evidence of these species, an assessment was made on the potential for the site to support such species.

### **2.3 Preliminary Bat Roost Assessment**

#### ***Buildings***

- 2.3.1 An external inspection of the existing building on the Site was undertaken on the 13<sup>th</sup> September 2017 during good weather, with access being available to all aspects of the buildings. Leica 10 x 32 BGA binoculars, a CluLite 1 million candlepower torch and a 4m telescopic ladder were used to assist in the search as necessary. The external features of the buildings, particularly the roof and ridge lines were inspected for potential ingress/egress points.
- 2.3.2 After the external inspection, a detailed inspection of the internal void spaces of the building was undertaken. Evidence of droppings, scratch marks, staining, feeding remains, urine stains and bats themselves were sought throughout the void space. Particular attention was paid to the areas underneath the ridge and joists, especially where the two meet. Evidence of gaps in the roof, indicating access to the outside, was sought, as well as gaps into any cavities that may be present. Again, a CluLite 1 million candlepower torch was used to assist in the search.
- 2.3.3 Features that could be exploited by bats were assessed based on the criteria in Table 1 (after BCT 2016).

#### ***Trees***

- 2.3.4 The mature trees around the periphery of the Site were subject to a preliminary ground level roost assessment. Potential roost features (PRFs), such as crack, rot holes and plaits, were searched for throughout all trunks and main branches. The trees were then assessed based on the criteria present in Table 1 (after BCT 2016).

**Table 1.** Assessment criteria for bat roost evaluation.

| Suitability | Description                                                                                                                                                                                                                                                                                      |
|-------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Negligible  | Negligible features likely to be used by roosting bats                                                                                                                                                                                                                                           |
| Low         | Buildings: A structure or feature with one or more potential roosts sites that could be used by individual bats opportunistically<br><br>Trees: A tree of sufficient size and age to contain PRFs but with none seen from the ground or features seen with only very limited roosting potential. |
| Moderate    | A structure or tree with one or more potential roost sites that could be used by bats due its size, shelter, protection, conditions and surrounding habitat but unlikely to support a roost of high conservation status.                                                                         |
| High        | A structure or tree with one or more potential roost sites that are obviously suitable for use by a large number of bats on a more regular basis.                                                                                                                                                |

## 2.4 Survey Constraints

- 2.4.1 Phase 1 survey can be undertaken at any time of the year, with September considered one of the more favourable months, therefore, confidence in the results is high.
- 2.4.2 Access was available to all areas of the Site. No major constraints to the field survey were encountered.
- 2.4.3 The assessment was undertaken in line with the latest sectoral guidance produced by the Chartered Institute of Ecology and Environmental Management (CIEEM), Bat Conservation Trust — *Bat Surveys for Professional Ecologists: Good Practice Guidelines* (2016) as well as BS 42020: 2013 *Biodiversity – Code of Practice for Planning and Development*.

### 3 SITE DESCRIPTION

#### 3.1 Desk study

##### **Statutory Sites**

3.1.1 No part of the Site, or the immediate surrounding land is covered by any form of statutory designation on conservation grounds. The nearest statutory designated site, McIlroy Park LNR, lies some 550m to the east of the Site. The LNR comprises semi-ancient woodland, mostly around the edges of the site, containing bluebells, wood anemones and butchers broom.

3.1.2 There are no nationally or internationally designated sites within 5km of the Site boundary.

#### 3.2 Field Survey

##### **Phase 1 Habitat Survey**

3.2.1 The Site comprises a detached bungalow set in domestic gardens which have been subject to clearance in recent months. The Site is dominated tall ruderal community developing on the recently cleared rear garden, as well as hardstanding and built form. The southern and eastern boundary of the Site support a mature, outgrown hedge with several standard trees (Figure 1).

3.2.2 The following Phase 1 Habitat types were recorded within the Site:

- Scattered trees;
- Hedgerows;
- Tall ruderal; and
- Building and hardstanding.

3.2.3 Each of the habitats is described in turn and depicted on Figure 1.

##### **Scattered trees**

3.2.4 There are numerous semi-mature scattered trees within the hedgerow the forms the southern and eastern boundary to the Site. Ash *Fraxinus excelsior* and apple *Malus* spp, were the frequently encountered species.

##### **Hedgerows**

3.2.5 An outgrown hedgerow, dominated by hawthorn *Crataegus monogyna* and blackthorn *Prunus spinosa* runs along the eastern and southern boundary of the Site. The tree species outlined in paragraph 3.2.4 are also present

3.2.6 There is a paucity of a ground layer associated with the hedgerow, but where one is present it comprised common nettle *Urtica dioica* and bramble *Rubus fruticosus* agg.

##### **Tall ruderal**

The rear garden of the property has reportedly been subject to clearance activities, with the majority of the vegetation being removed in May/June 2017. However, no form of management appears to have been undertaken subsequently, which has led to a tall ruderal community developing throughout. Species recorded included cow parsley *Anthriscus sylvestris*, white dead nettle *Lamium album*, bugle *Ajuga reptans*, broad-leaved

dock *Rumex obtusifolius*, ragwort *Senecio jacobaea*, creeping buttercup *Ranunculus repens*, white clover *Trifolium repens*, red clover *T. pratense*, yarrow *Achillea millefolium*, white campion *Silene latifolia*, poppy *Papaver* sp., butterfly bush *Buddleja davidii* and scarlet pimpernel *Anagallis arvensis*. At the south of the Site common nettle becomes locally dominant.

### ***Building and Hardstanding***

3.2.7 The Site contains a single detached bungalow towards the north. The building is currently occupied and in sound condition throughout. To the front (north) of the building is an extensive area of hardstanding used for car parking, whilst to the rear is a small area of patio area.

3.2.8 A wooden shed is located within the garden.

### ***Fauna***

#### **Preliminary Bat Roost Assessment: Buildings**

3.2.9 The bungalow is constructed from brick with a pitched, hip style roof finished with flat, interlocking clay tiles; a cross hip extend to the front. A dormer window is also present to the rear. The roof tiles are in good condition throughout, with no broken or loose tiles noted. The ridge lines are also intact. Hanging tiles are present around the rear dormer window; these are as loin good condition with no potential ingress points.

3.2.10 The soffit and fascia boards are constructed from wood, with no gaps or splits noted. Externally, no potential ingress points were noted.

3.2.11 Internally, the joists and rafters within the roof void are of a simple design. Nail plates are absent at the junctions, but the results gaps are minimal. A heavy build-up of cobwebs was present around the majority of the junctions, suggesting a lack of bat activity. No staining or scratch marks were noted along any of the beams, and there was no evidence of feeding remains. No droppings were noted despite a thorough inspection and the distinct smell often associated with bat roosts was absent. A roof lining is absent throughout.

3.2.12 To the east of the main bungalow is a former garage that has been converted to habitable accommodation. However, this lacked an enclosed internal void space.

3.2.13 In summary, no evidence of bat occupancy was encountered within the dwelling, with it being assessed as having negligible potential to support bats.

#### **Preliminary Bat Roost Assessment: Trees**

3.2.14 None of the trees within the Site were noted as having suitable PRFs, hence have been assessed as having negligible potential to support roosting bats.

### **Other fauna**

3.2.15 No specially protected fauna, or species with a raised conservation status, were noted throughout the extended Phase 1 survey, and no evidence of such species was encountered.

- 
- 3.2.16 Bats may forage over the Site and use the hedgerows as a commuting area. However, the quality of the habitat within the Site is likely to be of limited value to these species compared to the more valuable habitats to the south and east.
  - 3.2.17 There are no waterbodies within the Site or the immediate surrounding area suitable for great crested newts, hence the probability of the Site providing terrestrial habitat for this specially protected species is negligible.
  - 3.2.18 On first inspection, the habitats within the Site may appear suitable for reptiles. However, consideration must be given the fact the habitat is immature, being bare ground three months prior. Therefore, there is likely to have been insufficient time for a reptile population to become established. However, the Site may support the occasional opportunistic individual reptile that may have enter from the surrounding habitats, but it is unlikely to form a major part of their foraging habitat.
  - 3.2.19 The Site may present foraging opportunities for some common and widespread breeding bird species, but due the extent and structure of the habitats present, this is likely to be limited.

## **4 EVALUATION**

### **4.1 Definition of ecological value**

- 4.1.1 While some level of subjectivity is unavoidable when apportioning value to ecological features and resources, certain parameters and points of reference can be used to help ensure consistency. Those used in this appraisal are explained below.
- 4.1.2 Sites already possessing statutory or non-statutory nature conservation designations will have been subjected to some form of evaluation process in the past, and their importance defined at a geographical scale (e.g. international, national, local). For these, evaluation will generally reaffirm their qualifying attributes, or in some cases may identify where designation may no longer be appropriate.
- 4.1.3 Factors such as extent, naturalness, rarity, fragility and diversity are all relevant to the determination of ecological value, and for the evaluation of sites and habitat features outside designated sites, these and other criteria as described by Ratcliffe (1977), may be applied. Ratcliffe's criteria are integral to the procedure for selecting both Sites of Special Scientific Interest and many non-statutory designation systems in the UK, and therefore remain an accepted standard for site evaluation.
- 4.1.4 In applying these criteria, attention may be drawn to the relative scarcity or abundance of features within the survey area and in the wider geographical context. Some criteria are however absolute and not relative to scale. Ancient woodland, for example, is fragile irrespective of whether it is being considered in an international or local context. Similarly, the value of an otherwise poor habitat may be elevated if it is central to the survival of a rare species.
- 4.1.5 Where evaluation is important for the purposes of informing decisions related to land-use planning and development control, the above approach needs to be supplemented by consideration of whether individual species are subject to legal protection , or whether habitats or species are present which have been identified as 'priorities' for biodiversity conservation in the UK . Planning authorities have a statutory duty to further biodiversity objectives and the presence of such resources may be material to the determination of development control decisions.
- 4.1.6 Further indications of conservation status for individual species are provided by reference to the Red Data Book system, the Vascular Plant Red Data List for Great Britain (Cheffings and Farrell 2006) or for birds by reference to the Birds of Conservation Concern (Eaton *et al.* 2015) This divides birds into three lists; Red List (birds of high conservation concern), Amber List (birds of moderate conservation concern) and Green List (not of conservation concern).
- 4.1.7 Scales of comparison varying from the international to the context of the local area may be used to define the measure of importance attached to individual features. The definition of geographic terms can vary, but in this evaluation the geographic frame of reference contained within the CIEEM guidelines (CIEEM 2016) is used.

## **4.2 Site Evaluation**

- 4.2.1 No part of the Site forms part of any statutory or non-statutory designated site. The closest site of note is some 550m away and outside the likely zone of ecological influence of the proposal.
- 4.2.2 The Site is dominated by a habitat of negligible ecological value, namely tall ruderal. There are several scattered trees within the hedgerow that form the boundary of the Site, however, the majority of the would be retained throughout the development.
- 4.2.3 No rare or uncommon species were recorded throughout the Phase 1 survey and the Site was assessed as having negligible potential to support such species. It is possible that the occasional reptile is opportunistically utilising the Site for foraging. However, careful, progressive clearance of the vegetation should ensure that no reptiles are present immediately prior to any demolition/construction activities.
- 4.2.4 Overall, the proposals will have a negligible impact upon the ecological resource, with opportunities to provide biodiversity enhancements within the landscape strategy.

## **5 SUMMARY**

- 5.1.1 An ecological assessment was undertaken of 71 Oak Tree Road. The Site was found to contain habitats of limited ecological value being dominated by tall ruderal and built structure.
- 5.1.2 No specially protected species, or species of a raised conservation status were identified throughout the Phase 1 survey and the Site was assessed as having negligible potential to support such species.
- 5.1.3 No major constraints to development have been identified, with options for biodiversity improvements being possible within the landscaping of the Site.

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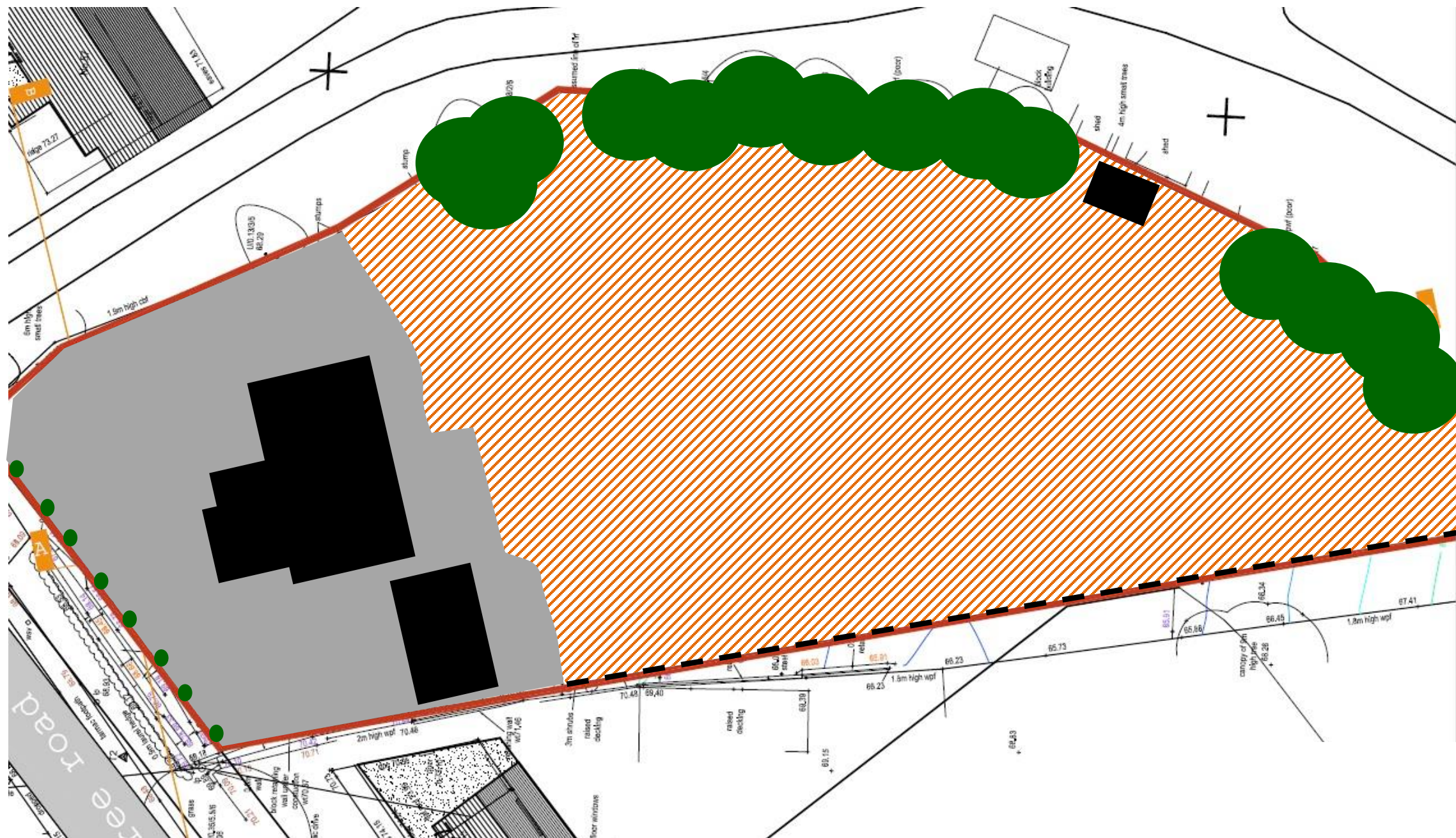
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N  Do not scale

#### Legend:

-  Tall ruderal
-  Hardstanding
-  Building
-  Scattered tree

Drawing No: Figure 1

Title: Phase 1 Habitat Map

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