



# PRELIMINARY ECOLOGY APPRAISAL REPORT

Sunny Terrace, Stanley, DH9 8AW

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## 1. Introduction

### 1.1 Background

A Preliminary Ecological Appraisal was commissioned to be undertaken at Sunny Terrace, Stanley, County Durham, DH9 8AW, hereafter referred to as “the site”.

This report has been prepared by Alexander Falconer PIEMA CEnv with consistent experience producing and validating preliminary ecological appraisals within his role as Environmental Advisor for EQUANS.

### 1.2 Proposed Development

The proposals include the development of a 4-bedroom detached property with a garage and entrance driveway. The building is expected to be of timber construction, with the potential of installing an air source heat pump and solar panels to improve building sustainability.

### 1.3 Site Location

The site is located at Sunny Terrace, Stanley, County Durham, DH9 8AW. A solid brick wall surrounds the site perimeter with access gates to the NW of the site. This leads onto the main road of sunny terrace. A covered reservoir is present approximately 100m NW of the site boundary. Please refer to Figure 1 below for the approximate site location and boundary.

Figure 1: Approximate Site Location & Boundary



### 1.4 Objectives

The objectives of this Preliminary Ecological Appraisal are to:

- Identify the major habitats present.
- Ascertain the presence or potential presence of any legally protected or notable species and habitats.
- Recommend any further surveys or mitigation that may be required.

The Preliminary Ecological Appraisal comprises a desktop study and site walkover. This survey has been completed as a baseline assessment of the site, and as such please see the end of the report for further surveys and mitigation proposed.

## 2. Methodology

### 2.1 Desktop Study

The following sources of information and ecological records were consulted:

- ERIC Northeast environmental data records.
- MAGIC – A web-based interactive mapping system, on which geographic information regarding key environmental schemes and designations are collated, including details of statutory conservation sites.
- Aerial mapping and ordinance survey maps.

### 2.2 Vegetation & Habitats

The walkover survey was undertaken on the 17<sup>th</sup> October 2022 to the standard methodology as detailed by the JNCC Handbook for Phase 1 Habitat Survey, 2010. The assessment follows the methodology as per “Preliminary Ecological Appraisal” (CIEEM, 2018).

Searches were made for uncommon, rare, and statutorily protected plant species, those species listed a protected in the Wildlife and Countryside Act 1981 (as amended) and species which are indicators of important and uncommon plant communities. All plant nomenclature follows Stace (2019).

Searches were carried out for the presence of invasive species, including those listed on the revised (April 2010) Schedule 9 of the Wildlife and Countryside Act 1981 (as amended) including Japanese knotweed (*Fallopia japonica*), Himalayan balsam (*Impatiens glandulifera*) and giant hogweed (*Heracleum mantegazzianum*).

### 2.3 Fauna

A thorough search of the site for signs of protected species of fauna was undertaken during the site walkover. These searches considered the following:

- Suitability of any waterbodies to support notable/protected amphibians, and the suitability of the site’s terrestrial habitats to support amphibians.
- Suitability of the site to support reptiles by way of habitat structure and refuge piles, as well as links to the wider landscape.
- Signs of badgers, by way of setts, mammal paths, foraging signs or latrines to indicate usage of the site by the species.

- Suitability of trees and structures which may support roosting bats.
- Assess suitability of the site to support foraging and commuting bats.
- Suitability of the site to support notable bird species.
- Search of the site for any invasive species.

### 2.3.1 Bat Survey

A bat survey was completed outside of this appraisal report which concluded limited value for bats. Site walkover confirmed this, although there was some potential for foraging bats in within the scrubbed areas.

### 2.4 Survey Limitations

An Ecological Appraisal does not constitute a full botanical survey. Instead, key species are identified to give a representative description of each habitat type.

This survey was undertaken in late October, which is an appropriate time of year to undertake ecological surveys. However, it is possible that some species of flora may have been missed or misidentified.

It is possible that some invasive/non-native species could have been missed during the survey. All habitats within the site area were accessed during the survey. No significant constraints to assessment were noted.

## 3. Survey Results

### 3.1 Desktop Study

#### 3.1.1 Site Context

From aerial observations, the site is located in a built-up area and appears to comprise grassland, scattered broadleaved mixed woodland and dense scrub. Residential housing surrounds the South and East of the site.

- Oakey Park is located approximately 100m SW to the site. The park comprises mixed conifer woodland. An area of woodland is located 50m to the North of the site, opening onto grassland and managed farmland. Everything east of the site is residential development with small, fragmented grassed landscaping of minimal ecological value throughout.
- A small Conifer woodland is located 100m to the west, behind a main road and residential street.

- An underground reservoir connected to Houghwell Burn is present approximately 200m Northwest of the ownership boundary.

### 3.1.2. Designated Sites

The following Local Nature Reserves (LNR) were identified within 2km of the site boundary:

- Tanfield Lea Fen Nature Reserve is located 500m Northwest of the site boundary, situated to the north of Stanley and is surrounded by urban and industrial development with some agricultural land to the northeast.
- The Houghwell Burn runs through the reserve and is entirely within the land ownership of Derwentside District Council. Wet and dry woodland is present and generally confined to a central band within the site; the fen habitats dominate the middle of the site and are surrounded by semi-improved grasslands of variable quality, but generally not of high ecological value.

Defra's MAGIC Maps was consulted on 5th November 2022 to identify the following "UK Priority Habitats":

- Multiple areas of Priority Habitat Inventory Deciduous Woodland were located within the search area, the closest located approximately 100m the northwest and 100m south of the site.
- Site is situated in an area of lower spatial priority for Woodland Priority Habitat Network areas.

## 3.2. Habitats

The main habitats and legal protections encountered during the survey are described in the following subsections.

### 3.2.1 Low Density, Felled Ground.

The site comprises of a section land that has previously been used for residential purposes, so the majority of the site has been disturbed for road paving. Prior to felling, the areas of green space were scattered with a combination of conifer and broadleaved tree landscaping.

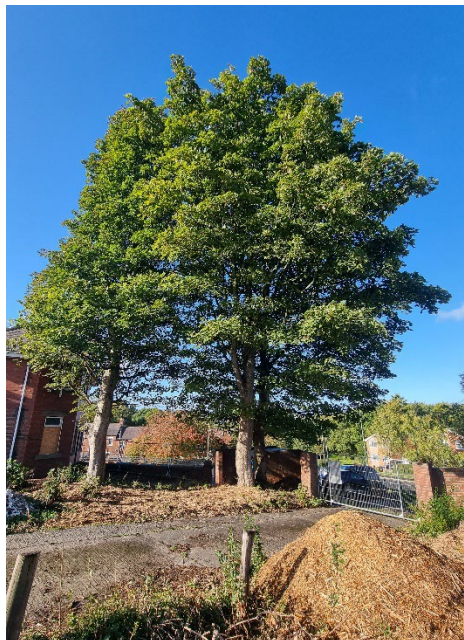
Figure 2: Low Density, Felled Ground.



### 3.2.2. Tree Preservation Orders

Two trees adjacent to the west of the site boundary have Tree Preservation Orders (TPO's) in place. This is outside of the boundary of the site in scope, however if works should be coordinated in accordance with BS 5837:2012 Trees in relation to design, demolition, and construction good practice if works would be seen to impact the integrity of the Tree and the TPO conditions.

Figure 3: TPO adjacent to site boundary.



### 3.2.3. Dense Scrub

Areas of dense scrub were present across the site and were associated with boundary features. The scrub within the north of the site was located on a slope towards the



residential houses to the north. Species present included bramble (*Rubus fruticosus* agg.) and common nettle.

Figure 4: Dense scrub located on site.



### 3.3 Protected & Notable Species

#### 3.3.1. Amphibians

Consultation with Great Crested Newt eDNA Habitat Suitability Index Pond Surveys for District Level Licensing 2019 concluded that no Great Crested Newt absences were present within 1km from the site. 3 were located around 4km Southwest to the site for note.

No waterbodies were located within the site boundary. Therefore the site does not have the capacity to support these species in their breeding phase.

#### 3.3.2 Bats

ERIC Northeast provided a relatively low number of records from the 2km search area of the site. As such, the area in which the site is located is considered to be of low value to bats. Consultation with MAGIC Mapping identified the presence of a European Protected Species Bat Mitigation Licence located approximately 1.5 km north of the site boundary

The scrub areas are anticipated to have some foraging value for bats within the local area and may attract invertebrate prey. The habitats within the site are generally common within the local area but would have low value for foraging bats. No distinct linear features were identified within the site and the site is not thought to be of value for commuting bats.

Under current industry guidelines (Collins 2016) the sites adjacent buildings and mature trees present did not present any suitable crevices, gaps or features with the potential to support roosting bats and therefore the impact of the development upon these species is likely to be negligible.

### 3.3.3. Badgers

No badger setts or signs of foraging badgers were noted on site, although the surrounding areas would be deemed as suitable for locating badgers.

### 3.3.4. Water Vole & Otter

No watercourses or rivers were located on or adjacent to the site with no habitat connectivity to such features, as such the site does not have any potential to support otter or water vole.

### 3.3.5. Other Terrestrial Mammals

No records of other terrestrial mammals were located within 1 km of the site boundary. However, the broadleaved tree line, scrub and hedgerows will provide suitable cover and foraging habitats for European hedgehog (*Erinaceus europaeus*). Hedgehog are anticipated to be present within the local area.

### 3.3.6. Nesting Birds

The site is subject to moderate levels of human disturbance but does provide some bird nesting habitat for common species in the sections of scrub and scattered trees, although no evidence of nesting sites was observed during walkover.

Consultation with MAGIC Mapping confirmed that the site is within the boundary for priority species targeting of Lapwing, Curlew and Snipe.

### 3.3.7. Reptiles

Site is has no suitability for reptiles and can be reasonably discounted from consideration.

## 3.4. Invasive Plant Species

No evidence of invasive plant species was observed.

## 4. Ecological Constraints & Mitigation

### 4.1. Development Proposals

The development proposes a 4-bedroom detached house with garage and entrance driveway. A section of hedgerows and soft landscaping will surround the site and attract biodiversity into the development.

## 4.2 Designated Sites

The site is not located near any SSSIs. Tanfield Lea Fen Nature Reserve is located 500m Northwest of the site boundary. It is anticipated that the designated sites are a sufficient distance away and are separated by anthropogenic barriers, that no impacts as a result of development are anticipated.

## 4.3 Habitats

No BAP habitats were recorded on site and those habitats present are common and widespread and therefore are of limited ecological value. The impact of the development upon plant species and habitats is therefore likely to be negligible.

### 4.3.1. Broadleaved, Mixed and Yew Woodland & Built-up Areas and Gardens

As a small area of woodland has already been lost due to being felled in anticipation for construction, it is recommended that trees lost are replaced at a minimum of a 1:2 ratio in order to compensate for the loss of habitat. Species that are in keeping with the surrounding tree populations is advised.

## 4.4 Protected & Notable Species

Overall, only limited opportunities for protected species are offered due to the common and widespread habitat types found within. However, further consideration needs to be given to the following species:

### 4.4.1. Breeding Birds

Consultation with MAGIC Mapping confirmed that the site is within the boundary for priority species targeting of Lapwing, Curlew and Snipe.

It is therefore recommended that the removal of any trees or shrubs from the site is timed to avoid the bird breeding season (mid-March-August inclusive) or if this is not possible, that these areas are checked for nesting birds by a suitably qualified ecologist immediately prior to the commencement of works.

Should any nests, or nests in construction be located, a suitable stand-off distance should be maintained until the young have fledged. The ecologist will advise on suitable stand off and provide a toolbox talk to all site contractors regarding their working limits and legal implications. Following construction, bird boxes should be installed to compensate for the loss of suitable breeding habitat loss.

### 4.4.2. Bats

The site was found to have limited value for foraging bats and low value for commuting bats. It is recommended that replacement planting within the site be of native fruiting/flowering species in order to enhance the site for foraging bats post-completion.

During construction, lighting should follow the protocols outlined in the Institute for Lighting Engineers document “Guidance for the Reduction of Obtrusive Lighting” (2005) and BCT’s “Bats and Artificial Lighting in the UK” (2018) to minimise disturbance and sky-glow off site.

#### 4.4.3. Badgers

No badger setts were located during the survey, though the habitats were identified as being suitable for the species.

If a badger sett is located, a stand-off distance may be required as well as precautionary working methods. If the sett requires closure, a Natural England Badger Licence would be required. Please note that badger licences can only be obtained between July and November (inclusive) each year to avoid potential impact on pregnant females.

The following precautionary working methods will be adhered to during construction phase to ensure that no badgers within the local area are impacted by the proposed development:

- All site operatives will be inducted to the presence of the species and their working limits and legal responsibilities.
- All site operatives will be inducted as to identifying potential badger setts and should be vigilant if they suspect they locate a new sett during works and inform the project ecologist immediately.
- All excavations will be battened at a 45-degree angle to allow escape should animals become trapped.
- All site machinery and materials will be appropriately stored to avoid harm to the species, notably between July and November (inclusive) each year when extra care is needed to avoid potential impacts on pregnant females.

It is not anticipated that the development will have a significant negative impact on badgers within the local area, should the above mitigation be carried out.

#### 4.4.4. Hedgehogs

If hedgehogs are located during clearance works, they should be carefully moved by hand to an area outside of construction workings.

### 4.5 Invasive Species

If any invasive species are noted, a licensed invasive species contractor will be used to eradicate the species from the site.

## 5. Further Surveys

No further ecological surveys are deemed necessary for the proposed development to proceed. The provided suggested guidance should be adhered to. Given the low value of the

site initially, and the absence of notable species requiring mitigation, it is not anticipated that this proposed development will impact local wildlife due to the small footprint of impact and the landscaping enhancements that are to be adopted as part of the build.

## 6. Opportunities for Ecological Enhancement

The following suggestions could be adopted to for ecological enhancement on the site:

- Hedgehog houses may be installed to enhance the site for hedgehogs which may be present locally. Gaps underneath fencing could be introduced to provide 'hedgehog highways'.
- Bat and bird boxes may be installed to enhance the site for both species groups which are anticipated to be present locally.
- Allowing some scrub habitat to develop; however, this is to be carefully managed to control coverage.
- Planting of species-rich native hedgerows or tree lines to create a distinctive linear feature across the site.

### 6.1 Design Advice for Biodiversity Net Gain

The scheme should strive to achieve biodiversity net gain, as per "Biodiversity Net Gain; Good Practice Principles for Development" CIEEM, CIRIA, IEMA (2016). Full details of this and a calculation of net gain could be completed after indicative landscape plans have been completed.

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