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NATURAL PROGRESSION

# 23 Ravenshaw Street, West Hampstead, London

Preliminary Ecological Appraisal

February 2015





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## Preliminary Ecological Appraisal

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## Abbreviations

CSH	Code for Sustainable Homes
GiGL	Greenspace Information for Greater London
IEA	Institute of Environmental Assessment
LNR	Local Nature Reserve
NNR	National Nature Reserve
PEA	Preliminary Ecological Assessment
SAC	Special Area for Conservation
SNCI	Site of Nature Conservation Interest
SPA	Special Protection Area

# Executive Summary

## **E1 Introduction**

- E1.1 A Preliminary Ecological Appraisal was undertaken for a proposed residential development at 23 Ravenshaw Street, West Hampstead, London (Grid Reference 524852, 185036).
- E1.2 The study was undertaken in order to identify any features present on site which are ecologically significant and which may act as constraints or opportunities to the proposed development, and to consider the need for further surveys and available mitigation measures for potential impacts.

## **E2 Findings**

- E2.1 The desk-top study revealed a variety of protected or notable species in the locality. The West Hampstead Rail Sides, Medley Orchard and Westbere Copse Site of Nature Conservation Importance (SNCI) lies adjacent to the south-west of the site. Westbere Copse Local Nature Reserve and nine further SNCIs are located within 1km of the application site.
- E2.2 The application site itself is predominantly buildings and hard-standing with small areas of amenity grassland, ornamental planting, scattered trees and scrub and a small ornamental pond. The wider area is comprised of housing and residential gardens.

## **E3 Evaluation**

- E3.1 Provided that standard construction methods to protect adjacent habitats are adhered to, it is not considered that the proposed development will result in significant impacts to the adjacent West Hampstead Rail Sides, Medley Orchard and Westbere Copse SNCI. Furthermore the proposed development is not likely to result in any impacts to the other designated wildlife sites in the desk-study area.
- E3.2 Based on the findings of this survey, the ecological value of the application site is considered to be of importance within the zone of influence of proposed development only. No priority habitats were identified on the site. The grassland is short-mown, heavily disturbed amenity grassland and considered unsuitable to support rare or protected plant species. The area of scrub consists of widespread species and is considered to be of negligible ecological importance. The ornamental pond within the site does not qualify under any of the relevant criteria to be considered a priority habitat.
- E3.3 However, the site and its surroundings provide potential habitat for a number of protected species. These include:

- ▶ Bats: A Preliminary Roost Assessment of the exterior of the buildings found them to have negligible roosting opportunities for bats. Internally all spaces within the roof have been converted to living areas. Trees within the site were not observed to contain any features which could be exploited by roosting bats. No further survey or mitigation for bats is considered necessary
- ▶ Nesting birds: Suitable nesting bird habitat occurs in trees, areas of scattered scrub and ivy growth, particularly to the boundary of the site with the adjacent SNCI.
- ▶ Reptiles: The site contains habitat of limited suitability for reptiles, with very small areas of sub-optimal foraging habitat in the form of short amenity grassland. However, there are features within the site which could be used by reptiles for hibernation or shelter including log piles, piles of brash, garden refuse and earth mounds. It is concluded that there is a low likelihood of reptiles being present within the application site boundary.

## **E4 Recommendations**

E4.1 Key Recommendations are made for avoiding ecological impacts during development and for use as part of the Code for Sustainable Homes Assessment, including:

- ▶ Protection of breeding birds during clearance/demolition/construction;
- ▶ Protection of reptiles during clearance/demolition/construction;
- ▶ Protection of adjacent habitats and trees during clearance/demolition/construction; and
- ▶ Protection of hedgehogs and other fauna during construction.

E4.2 Additional Recommendations are made with a view to enhancing the value of the site for biodiversity post-construction.

## **E5 Conclusions**

E5.1 Assuming that the precautionary methods described in Section 5 can be adhered to, it is concluded that there are unlikely to be any significant long-term ecological impacts resulting from the proposed development. Recommendations are given to enhance the ecological value of the site post-development, in order to contribute towards the goal of achieving positive gains for biodiversity in the design of the developments proposals.



# 1 Introduction

## 1.1 Background

1.1.1 This report presents a Preliminary Ecological Appraisal for the site of a proposed residential development at 23 Ravenshaw Street, West Hampstead, London (Grid Reference 524852, 185036).

1.1.2 The study was undertaken in order to identify any features present on site which are ecologically significant and which may act as constraints or opportunities to the proposed development, and to consider the need for further surveys and available mitigation measures for potential impacts. To meet this need, an Extended Phase 1 Habitat Survey of the area was undertaken, involving a desk study of available ecological records data and a walkover site survey on 23 January 2015 by an experienced ecologist.

## 1.1 Objectives

1.1.1 The approach to establishing the ecological baseline found within this report has been achieved through:

- ▶ A desk study involving a review of statutory and non-statutory nature conservation sites, and records of habitats and species from the local area (1km radius from the centre of the proposed development site);
- ▶ An Extended Phase 1 Habitat survey (IEA, 1995) identifying the main habitats on the site and the presence of, or potential for, protected and/or notable species;
- ▶ Preparing a botanical species inventory for use as part of an assessment under Category 9 (Ecology) of the Code for Sustainable Homes (CSH);
- ▶ A Preliminary Roost Assessment (Hundt, 2012) of buildings, structures and trees with the potential for use by bats; and
- ▶ A Preliminary Ecological Appraisal of the effects of development proposals with respect to the nature conservation value of the site.

1.1.2 The baseline information was then used to fulfil the following objectives;

- ▶ Identification of any features present on the site which are ecologically interesting or significant and which may act as constraints or opportunities to the proposed development;
- ▶ Identification of any further surveys which may be necessary and to broadly outline mitigation measures for potential impacts; and

- ▶ Making recommendations to protect ecological features within the site during construction, and enhance the ecology of the site post-construction, including 'Key' and 'Additional' Recommendations for use under Eco2 as part of the CSH assessment.

## **1.2 Survey Area**

1.2.1 The survey area is within the curtilage of 23 Ravenshaw Street in West Hampstead, London. The site contains a dwelling house which is in good repair with a hard standing driveway and parking area to the south east. There is a garden to the rear of the house which has been divided into three sections, the majority of which is paved or gravel surfaced with ornamental plants in pots. However, approximately a third of the garden is amenity grassland. The wider area is mostly residential, although a railway embankment (which forms part of the West Hampstead Rail Sides, Medley Orchard and Westbere Copse Site of Nature Conservation Importance; SNCI) is located to the rear of the garden.

1.2.2 Figure 1.1 shows the site location plan.

## **1.3 Proposed Construction Activities**

1.3.1 The proposals for the site include demolition of the existing property and associated structures and vegetation clearance to provide eight residential apartments, cycle storage and landscaping of the gardens. A damaged wall adjacent to railway land is to be demolished and re-built.

1.3.2 Figure 1.2 illustrates the general arrangement of the site post-construction.



Figure 1.1: Site location plan

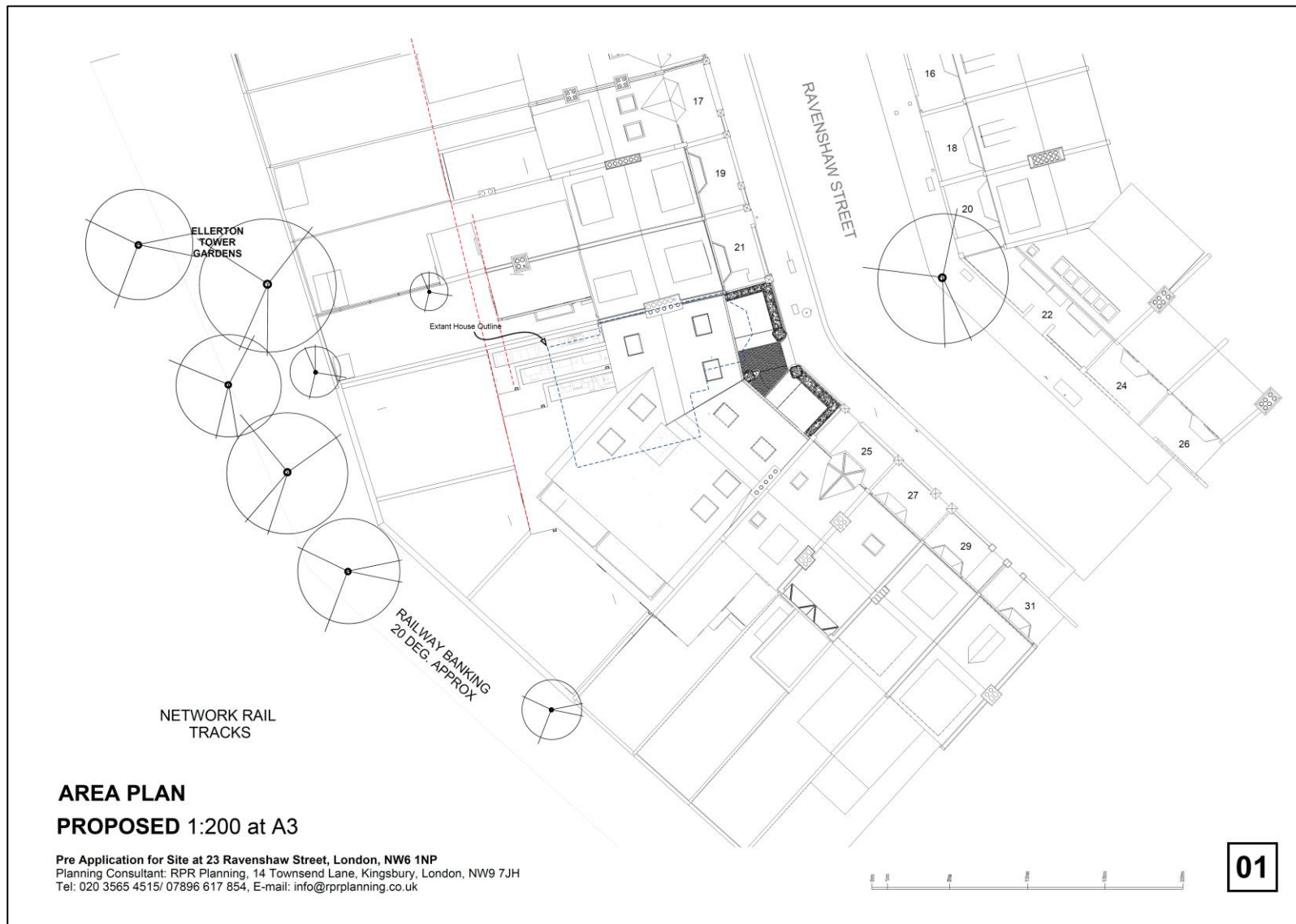


Figure 1.2: Proposed site layout

## 2 Survey Methodology

### 2.1 Desk Study

2.1.1 A desk-based study was undertaken to examine published information and biological records within a defined search area (site centre coordinates plus 1km radius). The desk study established the presence of any designated sites of nature conservation interest, or records of protected/notable species within the site and its surrounding area. This information was collected from the following sources:

- ▶ The 'MAGIC' (Multi-agency Geographic Information for the Countryside) website: [www.magic.gov.uk](http://www.magic.gov.uk) ; and
- ▶ Greenspace Information for Greater London (GiGL).

### 2.2 Preliminary Ecological Appraisal

2.2.1 The Preliminary Ecological Appraisal (compliant to British Standard BS42020:2013) is based on a survey of the site undertaken on 23 January 2015. Weather conditions were cool (6°C) and dry with a light wind (Beaufort Scale 2-3) and 20% cloud cover.

2.2.2 Within the survey area every parcel of land was classified, recorded and mapped in accordance with a list of ninety habitat types specified within the methodology for Phase 1 Habitat Survey (Joint Nature Conservation Council, 1993). This allows rapid visual assessment of the extent and distribution of different habitat types. Target notes were used to provide supplementary information on features which are particularly interesting or significant to specific construction proposals, or too small to map, or to provide additional details, for example relating to species composition and structure.

2.2.3 This basic methodology was extended to provide more detail in relation to habitats with potential to support rare or protected fauna, as described by Institute of Environmental Assessment (IEA, 1995), and in accordance with the Chartered Institute of Ecology and Environmental Management's Guidelines for Preliminary Ecological Appraisal (CIEEM, 2013). The assessment of habitat suitability for protected, rare or priority species is based on current best practice guidance such as that presented in the *Herpetofauna Workers' Manual* (Gent and Gibson, 1998) and *Bat Surveys – Good Practice Guidelines* (Hundt, 2012).

#### **Scope of the survey**

2.2.4 The buffer zone for the desk study was set at 1km from the centre of the site – a distance within which any features likely to be affected by the proposed scheme would be identified.

2.2.5 All habitats within the application site boundary were identified in order to identify any ecological constraints that would be likely to apply to the scheme from within this zone. This

area is referred to within this document as the "survey area". Smaller areas of potential habitat or of floristic interest were target noted. It was not possible to access neighbouring properties or the adjacent West Hampstead Rail Sides SNCI.

### **Evaluation criteria**

- 2.2.6 Habitats and species were evaluated where possible in relation to a geographical frame of reference, i.e. international value being most important, then national, regional, county, district, local and lastly, within the immediate zone of influence of the proposals only (based on CIEEM guidance, 2006).
- 2.2.7 Value judgements are based on various characteristics that can be used to identify ecological resources or features likely to be of importance to biodiversity. These include site designations (such as Sites of Special Scientific Interest (SSSI), or for undesignated features, the size, conservation status (locally, nationally or internationally important), and the quality of the ecological resource. In terms of the latter, 'quality' can refer to habitats (for instance if they are particularly diverse, or a good example of a specific habitat type), other features (such as wildlife corridors or mosaics of habitats) or species populations or assemblages.

## **2.3 Limitations**

- 2.3.1 The internal area of the house was not surveyed. There is no loft void and all internal roof areas have been converted to living areas. The adjacent West Hampstead Rail Sides SNCI and residential gardens could also not be accessed in order for an assessment of the wider ecological context of the site to be carried out.
- 2.3.2 See Appendix IV for general Legal and Technical Limitations which apply to this document.

## **2.4 Personnel**

- 2.4.1 The site survey was carried out by Sam Pottier BSc MSc ACIEEM, an ecologist with four years' experience of carrying out Extended Phase 1 Habitat Surveys and protected species surveys. Sam holds Natural England Class Licences to survey for bats and great crested newts. The project was overseen by Nick Pincombe BA (Hons) MSc MIEMA MCIEEM, director of Urban Edge Environmental Consulting, who has several years' experience in leading survey and assessment teams for a wide range of ecology and environmental planning projects.

## **2.5 Declaration of Compliance with Professional Code of Conduct**

- 2.5.1 The information, advice and opinions provided in this report are true and were prepared and provided in accordance with the Chartered Institute of Ecology and Environmental Management's [Code of Professional Conduct](#). We confirm that the opinions expressed are our true and professional bona fide opinions.

## 3 Results

### 3.1 Desk Study

#### **Landscape setting**

3.1.1 The survey area is within the London Basin Natural Area<sup>1</sup>. The London Basin is one of the two largest Natural Areas, covering some 5,000km<sup>2</sup>, of which the developed land ranges from about 15% in the most rural areas of each county to about 50% in and around London. What defines the character of the majority of the London Basin is the suburban landscape and ecology, which includes private gardens (amounting to 20% of London's land area) and areas of 'encapsulated countryside' within the Green Belt, i.e. accessible countryside for residents in the London Basin.

#### **Statutory and Non-statutory Site Designations**

3.1.2 There is one statutory designated site within 1km of the site, the Westbere Copse Local Nature Reserve (LNR) which is located approximately 450m north west of the site. Ten Sites of Nature Conservation Importance (SNCI) also lie within the search radius; these are described in Table 3.1. Westbere Copse forms part of the West Hampstead Rail Sides, Medley Orchard and Westbere Copse SNCI. The West Hampstead Rail Sides SNCI lies adjacent to the western boundary of the application site. Figure 3.1 shows the location of statutory nature conservation designations within 1km of the site. Figure 3.2 shows the locations of non-statutory sites.

**Table 3.1 Nearby Site Designations**

Site name	Description
Westbere Copse LNR.	An area with spring and summer meadows, woodland path, pond with dipping platform, field lab, stag beetle loggeries, and bird feeding station. 25 species of birds have been recorded and 150 species of plants. Frogs, toads and smooth newts are found here. The majority of Westbere Copse is woodland composed of sycamore <i>Acer pseudoplatanus</i> , oak <i>Quercus sp.</i> , ash and aspen <i>Populus tremula</i> . There is an understorey of snowberry <i>Symphoricarpos rivularis</i> , elder <i>Sambucus nigra</i> , elm <i>Ulmus sp.</i> , blackthorn <i>Prunus spinosa</i> and hawthorn <i>Crataegus monogyna</i> . Ground flora is generally shade tolerant, for example cow parsley <i>Anthriscus sylvestris</i> , nettle <i>Urtica dioica</i> , ivy <i>Hedera helix</i> and bramble.
Silverlink Metro between Brondesbury and Willesden Junction SNCI BrBI06A	A mosaic of bare ground, scattered trees, scrub, semi-improved grassland and embankments, providing important habitat for birds, mammals and insects. Bramble <i>Rubus fruticosus agg.</i> , buddleja <i>Buddleja davidii</i> and false oat grass <i>Arrhenatherum elatius</i> dominate in places, with grey willow <i>Salix cinerea</i> , apple <i>Malus spp.</i> , blackthorn <i>Prunus spinosa</i> and creeping thistle <i>Cirsium arvense</i> are also abundant.
West Hampstead Rail	A site composed of a number of sections of rail side, an old orchard and Westbere copse LNR. A mosaic of scattered trees, secondary woodland, semi-improved

<sup>1</sup> <http://www.naturalareas.naturalengland.org.uk/>

Site name	Description
Sides, Medley Orchard and Westbere Copse SNCI CaBI06	neutral grassland and tall herbs. The woodlands are mostly dominated by sycamore and wild cherry <i>Prunus avium</i> with more open areas supporting false oat grass, rosebay willowherb <i>Chamerion angustifolium</i> and Michaelmas daisy <i>Aster sp.</i>
Metropolitan line between Kilburn and Neasden SNCI BrBI06B	A mix of bare ground, ruderals, scattered trees, scrub and semi – improved neutral grassland with flora including; tufted vetch <i>Vicia cracca</i> , great willowherb <i>Epilobium hirsutum</i> , spear thistle <i>Cirsium vulgare</i> , Canadian goldenrod <i>Solidago canadensis</i> and goat’s rue <i>Galega officianalis</i>
Gondor Gardens Covered Reservoir SNCI CaBI10	A covered reservoir vegetated mostly with neutral grassland dominated by false oat grass. Spiked sedge <i>Carex spicata</i> which is uncommon in Camden is present. The site supports a number of butterfly species and is the only known location in Camden for slow worm <i>Anguis fragilis</i> . Pipistrelle bats have been recorded flying over the site.
Hampstead Cemetery SNCI CaBI01	A peaceful cemetery in a busy part of Camden, with woodland and a wildlife area. The site contains a large number of mature trees particularly ash <i>Fraxinus excelsior</i> . Also yew <i>Taxus baccata</i> , sycamore <i>Acer pseudoplatanus</i> and Swedish whitebeam <i>Sorbus intermedia</i> . The wildlife area supports a number of butterfly species including; speckled wood, holly blue and small copper
Kings College Hampstead Campus SNCI CaBI109	University campus with pleasant landscaping and wildlife friendly areas. A mix of amenity grassland, planted shrubbery, scattered trees and tall herbs.
The Dell Doorstep Green SNCI BrL29	A recently refurbished open space in the heart of Cricklewood, which in time will become a very attractive wildlife area.
160 Mill Lane Community Garden SNCI CaL03	A small community garden with plenty of shrubs and a pond. The pond is known to support a good population of smooth newts <i>Lisotriton vulgaris</i> . Marginal vegetation is plentiful and includes purple loosestrife <i>Lythrum salicaria</i> , water mint <i>Mentha aquatica</i> , water forget-me-not <i>Myosotis scorpioides</i> and brooklime veronica <i>beccabunga</i> .
Frogna Lane Gardens CaL07	A small communal garden with mature trees and a pond planted with soft rush <i>Juncus effusus</i> and water-starwort <i>Callitriche sp.</i>
Kilburn Grange Park SNCI CaL16	A part containing a good range of native mature trees including silver birch <i>Betula pendula</i> , hornbeam <i>Carpinus betulus</i> , ash and yew. The site also contains dense shrubs and a wasteland area with flora including round-leaved crane’s bill <i>Geranium rotundifolium</i> and small-flowered crane’s bill <i>G. pusillum</i>

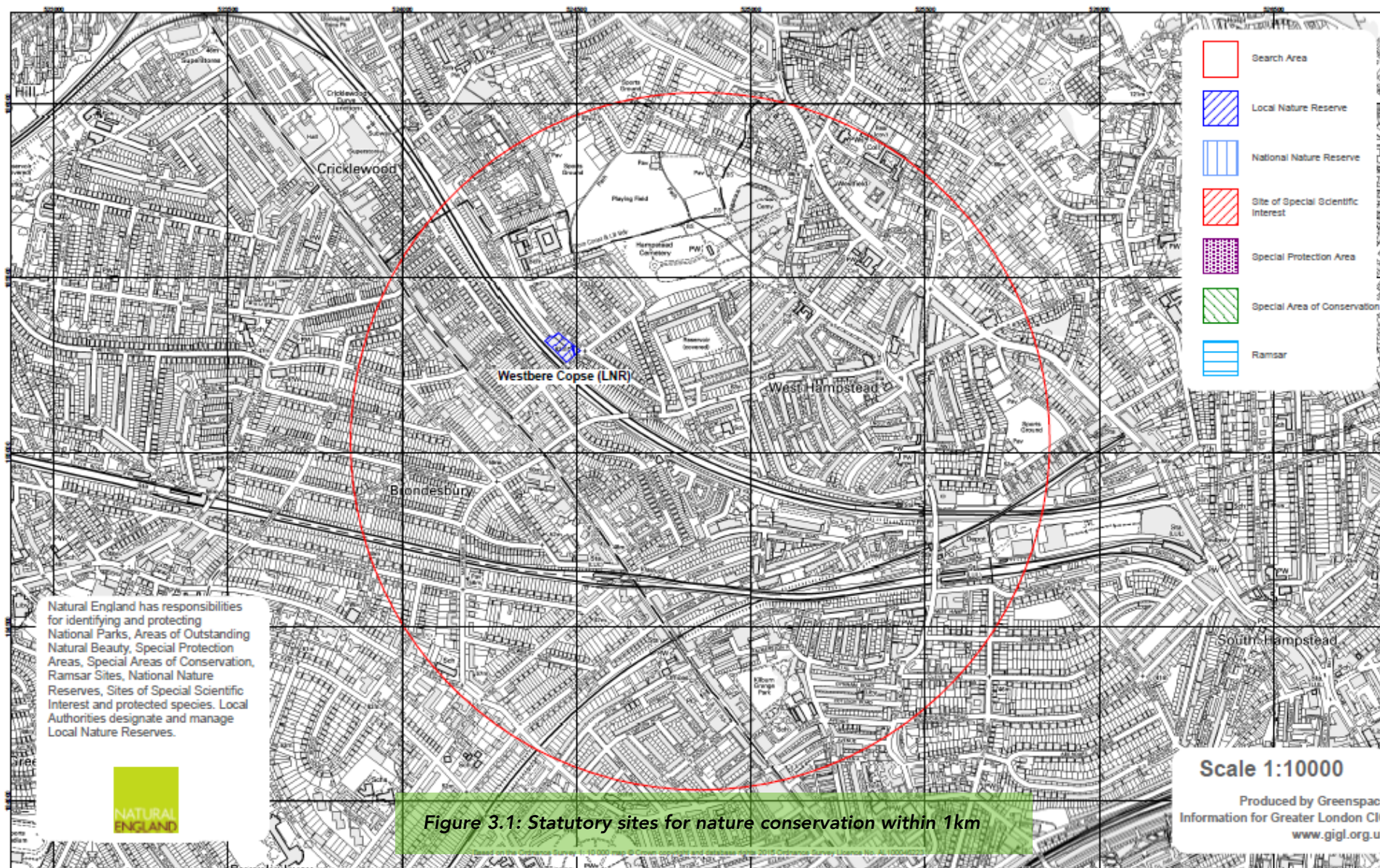


# Statutory Site Designations

Ecological Data Search (1229) for Urban Edge Environmental Consulting

Ravenshaw Street, 3 February 2015

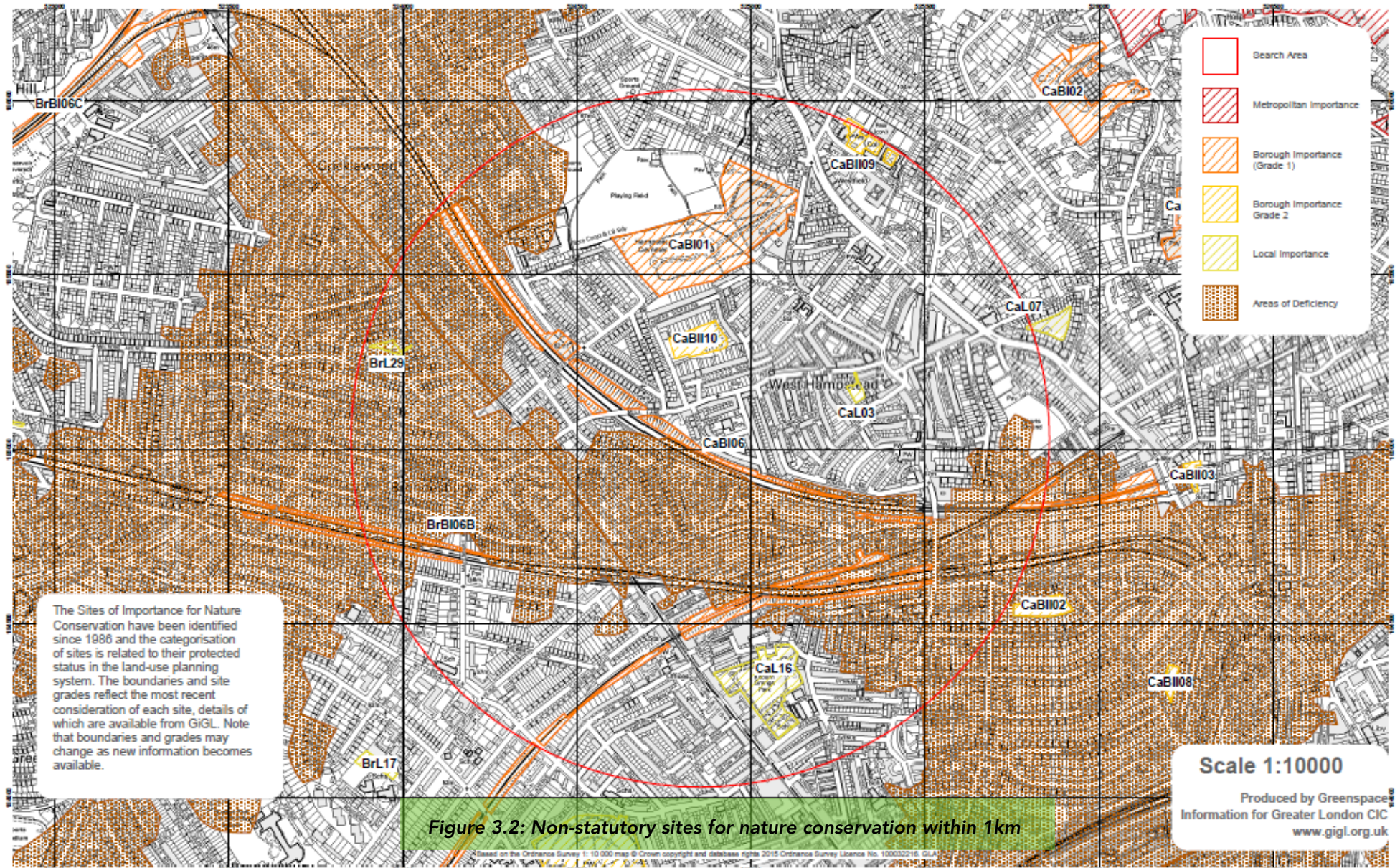
GiGL



# Sites of Importance for Nature Conservation

Ecological Data Search (1229) for Urban Edge Environmental Consulting  
Ravenshaw Street 3 February 2015

GiGL



The Sites of Importance for Nature Conservation have been identified since 1988 and the categorisation of sites is related to their protected status in the land-use planning system. The boundaries and site grades reflect the most recent consideration of each site, details of which are available from GiGL. Note that boundaries and grades may change as new information becomes available.

Figure 3.2: Non-statutory sites for nature conservation within 1km

Scale 1:10000

Produced by Greenspace  
Information for Greater London CIC  
[www.gigl.org.uk](http://www.gigl.org.uk)

Based on the Ordnance Survey 1:10 000 map © Crown copyright and database rights 2015 Ordnance Survey Licence No. 10003216. GLA

**Table 3.2: Relevant recent records of rare/protected species recorded within 1km of the centroid position**

Group	Species	Status / designation / protection
Plants	Chamomile <i>Chamomilla</i> <i>nobilis</i>	NERC s41, LBAP, RL, LSCC
	Water avens <i>Geum urbanum</i> , greater chickweed <i>Stellaria neglectum</i> , cross leaved heath <i>Erica tetralix</i> , bilberry <i>Vaccinium myrtillus</i> , wood horsetail <i>Equisetum sylvaticum</i> , meadow crane's bill <i>Geranium pratense</i> , marsh willowherb <i>Epilobium palustre</i>	LSCC
	Bluebell <i>Hyacinthoides non-scripta</i>	WACA Sch.8, LSCC
	Mistletoe <i>Viscum album</i>	LBAP, LSCC
Invertebrates	Stag beetle <i>Lucanus cervus</i>	Habs.Dir.Ax.2, NERC s41, LBAP, LSCC
	Ghost moth <i>Hepialus humuli</i> , spinach <i>Eulithis mellinata</i> , brindled beauty <i>Lycia hirtaria</i> , grey dagger <i>Acronicta psi</i> , cinnabar <i>Tyria jacobaea</i> , buff ermine <i>Spilosoma luteum</i>	NERC s41, LBAP, LSCC
	Wall <i>Lasiommata megara</i>	NERC s41, LBAP, RL, LSCC
Amphibians	Common Toad <i>Bufo bufo</i>	WACA Sch.5 partial, UK BAP
Birds	Fieldfare, <i>Turdus pilaris</i> , redwing <i>Turdus iliacus</i>	WACA Sch.1, RL
	Common redpoll <i>Acanthus flammea</i> , mistle thrush <i>Turdus viscivorus</i> , goldcrest <i>Regulus regulus</i> , swift <i>Apus apus</i>	LSCC
	Song thrush <i>Turdus philomelos</i> , starling <i>Sturnus vulgaris</i> , house sparrow <i>Passer domesticus</i>	NERC s41, LBAP, RL, LSCC
Reptiles	Slow worm <i>Anguis fragilis</i>	WACA Sch.5 partial, UK BAP
Terrestrial mammals	Common Pipistrelle <i>Pipistrellus pipistrellus</i>	Habs.Dir.Ax.2, WACA Sch.5 full
	Hedgehog <i>Erinaceus europaeus</i>	NERC s41, UK BAP

Birds Dir.Ax.1  
 Habs.Dir.Ax.2  
 Nat. Rare  
 Nat.Scarce  
 RL  
 NERC s41  
 LBAP  
 WACA Sch.X

Birds Directive 2009/147/EC Annex 1  
 Habitats Directive 92/43/EEC Annex 2  
 Nationally Rare  
 Nationally Scarce  
 IUCN Red Listed PBA Protection of Badgers Act 1992  
 Natural Environment and Rural Communities Act Section 41  
 London BAP LSCC Local Species of Conservation Concern  
 Wildlife and Countryside Act 1981, Schedules 1, 5 (fully or partially protected) 6 or 8

### 3.2 Extended Phase 1 Habitat Survey

- 3.2.1 The survey area contains a two storey Edwardian house and surrounding grounds. The house has been modified, with a brick extension and conversion of the loft space. There is a hard standing drive and car parking area on one side of the house and gardens to the rear. The garden has been divided into three with wooden fences. One of the areas is paved (Target Note 1) and the majority of the second is gravel (Target Note 2). The third area (Target Note 3) is amenity grassland which contains occasional forbs. A wall to the rear of the property separates it from an adjacent area of land which forms part of the west Hampstead Rail Sides, Medley Orchard and Westbere Copse SNCI.
- 3.2.2 The following Phase 1 habitats were identified within or adjacent to the survey area and are shown on the Phase 1 habitats map at Appendix I:
- ▶ Amenity grassland;
  - ▶ Buildings;
  - ▶ Eutrophic standing water (pond);
  - ▶ Hard standing;
  - ▶ Scattered scrub; and
  - ▶ Scattered trees.

#### **Amenity grassland**

- 3.2.3 The grassed area at Target Note 3 has a sward containing; cock's foot *Dactylis glomerata*, perennial rye grass *Lolium perenne*, bent *Agrostis sp.*, creeping buttercup *Ranunculus repens*, alexanders *Smyrniololium olusatrum*, dandelion *Taraxacum agg.* This part of the garden has scattered scrub, adjacent to the boundary wall, including rose *Rosa sp.*, privet *Ligustrum ovalifolium*, elder *Sambucus nigra* and ivy *Hedera helix*. Areas of scrub, brush piles and earth piles provide potential hibernation and shelter habitat for reptiles although the garden provides limited foraging habitat due to the small size of the area, the short sward and high levels of disturbance from pet dogs.



Plate 1: Amenity grassland and brush piles (Target Note 3)

## **Buildings**

- 3.2.4 The main building on the site is a two storey, semi-detached Edwardian house which has been modified to include rooms within the loft space and a brick-built side extension. The majority of the roof is flat felt, however there is a small area of pitched, tiled roof. The property is in good repair, with no observable gaps associated with the exterior brickwork or roof tiles which could provide access into the building or crevices which could be used by roosting bats. Lead flashing and felt roofing is also in good repair and well-sealed with negligible associated opportunities for roosting bats.
- 3.2.5 There are two sheds within the garden of the property. One is a metal storage shed and the other a single-skinned timber shed with a felt roof. Both buildings are considered to provide negligible opportunities for roosting bats.



Plate 2: Front of main house



Plate 3: Timber shed to rear of property



Plate 4: Metal shed to rear of property

## **Eutrophic standing water (pond)**

- 3.2.6 There is a small ornamental pond within the garden (Target Note 6). The pond is raised off the ground with timber clad sides approximately 60cm high. The pond is covered in netting and no emergent aquatic vegetation was visible at the time of survey. Due to its inaccessible nature the pond is not considered to provide suitable habitat for breeding amphibians, such as common toad *Bufo bufo* or great crested newt *Triturus cristatus*.



Plate 8: Pond in garden (Target Note 6)

### **Hard standing**

- 3.2.7 A significant part of the grounds surrounding the house is hard standing, with no vegetation other than very occasional bents and dandelions growing in cracks.
- 3.2.8 The gardens at Target Notes 1 and 2 are paved or gravelled. Both gardens contain a number of ornamental species including banana *Musa sp.*, autumn fern *Dryopteris erythrosora* and fan palm *Trachycarpus sp.* and bamboo *Bambuseae*. These are individual specimens or small clumps either within pots or planted at edges of the garden areas.



Plate 5: Hard standing to the south and east of the house



Plate 6: Gravel garden area (Target Note 2)

### **Scattered scrub**

- 3.2.9 To the rear of the amenity grassland at Target Note 3 is an area of scattered scrub adjacent to the wall which separates the property from the adjacent West Hampstead Rail Side SNCI. Species present are ivy, privet, elder, rose and bramble *Rubus fruticosus agg.* The scrub provides potential habitat for nesting birds as well as occasional areas of shelter for reptiles.



Plate 6: Scattered scrub to the rear of garden at Target Note 3

### **Scattered trees**

- 3.2.10 There are two trees within the garden; a large bay laurel *Laurus nobilis* (Target Note 4) and a cherry *Prunus sp* (Target Note 5). Both have the potential to be used by nesting birds, although the cherry is close to the house and relatively small so nesting opportunities are limited. Neither tree was observed to contain any features which could be exploited by roosting bats, for example; rot holes, splits or cracks within stem or limbs or dense ivy cladding.



Plate 7: Bay laurel in garden (Target Note 4)

## 4 Evaluation

### 4.1 Introduction

4.1.1 This section evaluates the proposed development site in terms of the habitats and species present or potentially present on site or its immediate vicinity, in the context of relevant legislation and planning policy. See Appendix III for a review of the legislation and planning context.

### 4.2 Designated Sites

4.2.1 Provided that standard construction methods to protect adjacent habitats are adhered to, it is not considered that the proposed development will result in significant impacts to the adjacent West Hampstead Rail Sides, Medley Orchard and Westbere Copse SNCI. Furthermore due to the relatively small size of the development, it is unlikely that the Westbere Copse LNR or other publically accessible SNCI will experience a significant increase in visitors as a result of the development.

### 4.3 Overall Ecological Importance of the Application Site

4.3.1 The application site itself is predominantly buildings and hard-standing with small areas of amenity grassland, ornamental planting, scattered trees and scrub and a small ornamental pond. Based on the findings of this survey, the ecological value of the application site is considered to be of importance within the zone of influence of proposed development only.

### 4.4 Habitats

4.4.1 No priority habitats were identified on the site. The grassland is short-mown, heavily disturbed amenity grassland and considered unsuitable to support rare or protected plant species. The area of scrub consists of widespread species and is considered to be of negligible ecological importance.

4.4.2 Although ponds can be priority habitats, a waterbody has to meet one of the following criteria to qualify as a priority habitat:

- ▶ Habitats of international importance;
- ▶ Support species of high conservation importance;
- ▶ Support exceptional assemblages of key biotic groups;
- ▶ Be of high ecological quality; and/or
- ▶ Be recognised as important because of their age, rarity of type or landscape context.



- 4.4.3 It is not considered that the ornamental pond within the site qualifies as a priority habitat under any of the above criteria.

## 4.5 Species

### **Bats: Preliminary Roost Assessment**

- 4.5.1 Although the house is in an urban location, it is close to habitat features which provide potential habitat for bats. The railway embankment which runs behind the site is a linear feature along which bats could forage or commute between roosts and feeding areas.
- 4.5.2 Common pipistrelles have been recorded in the local area, with the nearest and most recent record being 273m north of the site in 2010. Bat numbers associated with the nearby Westbere Copse LNR appear to be low, and bat boxes installed at the LNR have never been used (*Westbere Copse Local Nature Reserve Management Plan 2012 – 2017 - Nature for the Community, 2012*).
- 4.5.3 However, the house and the sheds in the garden have negligible potential to support roosting bats. The house itself is in good repair, with no obvious cracks associated with the external brickwork or window and door frames. There is only a small area of tiled roof, with the majority of the building having a flat felt roof; none of the tiles were obviously damaged, lifted or missing. The same is true of the felt roof and of lead flashing associated with dormer windows which have been incorporated into the roof following conversion of the loft into living space.
- 4.5.4 As a result of the absence of external features associated with the structure of the house, and the conversion of the interior loft space, it is not considered that the building offers roosting opportunities for bats.

### **Nesting birds**

- 4.5.5 Suitable nesting bird habitat occurs in trees and areas of dense vegetation within the survey area. A number of bird species which have been recorded in the local area such as song thrush *Turdus philomelus* and house sparrow *Passer domesticus* could use these habitats to nest on the site.
- 4.5.6 To avoid infringing legislation which protects all nesting birds it is recommended that site clearance takes place outside the main breeding bird season, which runs from the beginning of March until late August. If it becomes necessary to carry out works between these dates, it is recommended that an ecologist surveys the site for active nests immediately prior to clearance. If active nests are found then works must be delayed until young birds have fledged and left the nest, or the nest site must be cordoned off and adequately protected from impacts.

### **Reptiles**

- 4.5.7 The desk-study yielded records of slow worm *Anguis fragilis* in the local area and this species could potentially be using habitats within the application site boundary. The most recent record was from 273m north of the site in 2013.

- 4.5.8 The site lies adjacent to potentially suitable reptile habitat to the south-west designated as the West Hampstead Rail Sides, Medley Orchard and Westbere Copse SNCI, which also includes the Westbere Copse LNR approximately 450m north-west of the site. The site itself contains habitat of limited suitability for reptiles, with very small areas of sub-optimal foraging habitat in the form of short amenity grassland, and a likely high level of disturbance from domestic animals. Furthermore the application site is fairly isolated from the surrounding landscape by existing brick walls, although there are significant cracks in the wall which separates the site from the adjacent SNCI. However, there are features within the site which could be used by reptiles for hibernation or shelter including log piles, piles of brash, garden refuse and earth mounds. Although it is considered highly unlikely that reptiles would access the site to use these features given the existence of similar features in the SNCI, their presence within the application site cannot be definitively ruled out.
- 4.5.9 It is concluded that there is a low likelihood of reptiles being present within the application site boundary. Grass snake and common lizard are unlikely to be present due to the low levels of isolation of the site and the insufficient size of its suitable habitats. However, residential gardens in the surrounding area and the adjacent West Hampstead Rail Sides SNCI could potentially support a small population of slow worm and, if present, these may on occasion use shelter or hibernation habitats within the application site. It is therefore considered that, if reptiles are present within the site, they could be at risk of death or injury during construction.
- 4.5.10 It is therefore recommended that site clearance is carried out under ecological supervision and in accordance with the precautionary measures described at section 5.2.

#### **Other protected species**

- 4.5.11 The application site does not provide suitable habitat for other rare or protected species such as great crested newt *Triturus cristatus*, badger *Meles meles*, hazel dormouse *Muscardinus avellanarius*, otter *Lutra lutra* or water vole *Arvicola amphibious*. Furthermore none of these species have been recorded within the data search area.
- 4.5.12 The site provides limited areas of sub-optimal habitat for hedgehog *Erinaceus europaeus*, a priority species, and suitable habitats exist in the surrounding SNCI and residential gardens. The most recent record was from 273m north of the site in 2004.

## 5 Recommendations

### 5.1 Introduction

5.1.1 As part of the CSH Assessment all Key Recommendations and 30% of Additional Recommendations must be shown to be implemented in order to gain the Eco2 credit.

### 5.2 Key Recommendations

5.2.1 Key Recommendations are listed in Table 5.1.

**Table 5.1: Key Recommendations**

#	Key Recommendations
<b>K1</b>	No removal of trees or scrub or works to or demolition of buildings or structures that may be used by breeding birds should be undertaken between 1st March and 31st August inclusive, unless a competent ecologist has undertaken a detailed check for active birds' nests immediately prior to clearance/demolition and provided written confirmation that no birds will be harmed and/or that there are appropriate measures in place to protect nesting bird interest on site.
<b>K2</b>	There is a low risk that reptiles could occasionally use habitats within the application site (e.g. areas of scrub, brush piles and earth mounds) despite its generally poor suitability for these species. It is therefore recommended that site clearance is carried out during the active season for reptiles (approximately between March and September, though weather dependent). Prior to clearance it is recommended that suitable habitats are hand searched and dismantled by an ecologist, to remove the risk of death or injury to any reptiles that may be present at the start of the works. If reptiles are found they will be captured by the ecologist and kept in a suitable container until site clearance is complete. Once cleared the site would hold no interest for reptiles. At this stage captured reptiles would be released into suitable adjacent habitats, most likely the adjacent SNCI.
<b>K3</b>	Standard construction techniques should be adopted to ensure that there are no impacts to habitats adjacent to the site. For instance, the adjacent SNCI should be protected from activities such as storage of materials or vehicle movements. British Standard and/or National Joint Utilities Group Guidelines (NJUG) should be followed at all times during construction when working in close proximity to trees or shrubs which are to be retained. According to NJUG Guidelines the root protection zone or precautionary area (P.A.) is 4x the circumference of the trunk (circumference is measured around the trunk at a height of 1.5m above ground level). The distance is measured from the centre of the trunk to the nearest part of any excavation or other work.
<b>K4</b>	All excavations left overnight should either be covered over, or provided with a ramp to enable easy escape of hedgehogs and other fauna, and should be checked each morning before recommencement.

### 5.3 Additional Recommendations

5.3.1 Additional Recommendations are listed in Table 5.2.

**Table 5.2: Additional Recommendations**

#	Additional Recommendations
<b>A1</b>	Swift <i>Apus apus</i> boxes could be installed under the eaves of the new building. Integral swift boxes can be placed within the wall or alternatively they can be attached to exterior walls. Swift boxes should be placed at least 5m above the ground and out of direct sunlight, ideally on the north or north-west aspect of the building and facing clear, uncluttered airspace.
<b>A2</b>	Sparrow <i>Passer domesticus</i> terraces placed on top of the wall to the rear of the development would provide additional nesting habitat for this declining species, which is listed on the London Biodiversity Action Plan. The boxes should be placed at least 2m high, out of direct sunlight and close to but not restricted by vegetation.
<b>A3</b>	Planters could be placed on the roof of the building which will provide additional foraging opportunities for bees and butterflies. Plants including; selfheal <i>Prunella vulgaris</i> , comfrey <i>Symphytum officianale</i> , primrose <i>Primula vulgaris</i> , trailing azalea <i>Loiseleuria procumbens</i> , or loosestrife <i>Lysimachia spp.</i> could be considered as these are native species of particular benefit to bumblebees <i>Bombus spp.</i> but will also provide a nectar resource for butterflies and bees.
<b>A4</b>	The replacement boundary wall adjacent to the West Hampstead Rail Sides SNCI could be designed to incorporate additional habitat for insects, amphibians and reptiles. Habitat bricks could be used which provide shelter or hibernation opportunities for these groups.
<b>A5</b>	A green wall could be incorporated into the development, between garden divisions or on the exterior walls of the new building. This would provide a resource for invertebrates and as a result other species such as birds and bats. Species should be native and/or wildlife attracting such as honeysuckle <i>Lonicera periclymenem</i> , clematis <i>Clematis vitalba</i> , jasmine <i>Jasminum sp.</i> and ivy <i>Hedera helix</i> .
<b>A6</b>	A green roof could be installed onto the building. This should be of a specification of proven ecological value for foraging birds and invertebrates and can help to significantly enhance biodiversity in heavily urbanised areas. Such roofs are typified by substrates of varying type and depth, include dead wood habitat and open areas of vegetation, require low levels of maintenance, and are attractive to people as well as wildlife. They also provide opportunities for natural colonisation by plants and invertebrates. Such roofs are preferable to standard stonecrop <i>Sedum spp.</i> dominated roofs that deliver little in the way of biodiversity value as they are typically less species-rich and have a shallower substrate depth.

## 6 Conclusions

### 6.1 Introduction

- 6.1.1 A Preliminary Ecological Appraisal was undertaken for a proposed residential development at 23 Ravenshaw Street, West Hampstead, London.
- 6.1.2 The study was undertaken in order to identify any features present on site which are ecologically significant and which may act as constraints or opportunities to the proposed development, and to consider the need for further surveys and available mitigation measures for potential impacts.

### 6.2 Findings

- 6.2.1 The desk-top study revealed a variety of protected or notable species in the locality. The West Hampstead Rail Sides, Medley Orchard and Westbere Copse Site of Nature Conservation Importance (SNCI) lies adjacent to the south-west of the site. Westbere Copse Local Nature Reserve and nine further SNCIs are located within 1km of the application site.
- 6.2.2 The application site itself is predominantly buildings and hard-standing with small areas of amenity grassland, ornamental planting, scattered trees and scrub and a small ornamental pond. The wider area is comprised of housing and residential gardens.

### 6.3 Evaluation

- 6.3.1 Provided that standard construction methods to protect adjacent habitats are adhered to, it is not considered that the proposed development will result in significant impacts to the adjacent West Hampstead Rail Sides, Medley Orchard and Westbere Copse SNCI. Furthermore the proposed development is not likely to result in any impacts to the other designated wildlife sites in the desk-study area.
- 6.3.2 Based on the findings of this survey, the ecological value of the application site is considered to be of importance within the zone of influence of proposed development only. No priority habitats were identified on the site. The grassland is short-mown, heavily disturbed amenity grassland and considered unsuitable to support rare or protected plant species. The area of scrub consists of widespread species and is considered to be of negligible ecological importance. The ornamental pond within the site does not qualify under any of the relevant criteria to be considered a priority habitat.
- 6.3.3 However, the site and its surroundings provide potential habitat for a number of protected species. These include:
- ▶ Bats: A Preliminary Roost Assessment of the exterior of the buildings found them to have negligible roosting opportunities for bats. Internally all spaces within the roof have been

converted to living areas. Trees within the site were not observed to contain any features which could be exploited by roosting bats. No further survey or mitigation for bats is considered necessary

- ▶ Nesting birds: Suitable nesting bird habitat occurs in trees, areas of scattered scrub and ivy growth, particularly to the boundary of the site with the adjacent SNCI.
- ▶ Reptiles: The site contains habitat of limited suitability for reptiles, with very small areas of sub-optimal foraging habitat in the form of short amenity grassland. However, there are features within the site which could be used by reptiles for hibernation or shelter including log piles, piles of brash, garden refuse and earth mounds. It is concluded that there is a low likelihood of reptiles being present within the application site boundary.

## **6.4 Recommendations**

6.4.1 Key Recommendations are made for avoiding ecological impacts during development and for use as part of the Code for Sustainable Homes Assessment, including:

- ▶ Protection of breeding birds during clearance/demolition/construction;
- ▶ Protection of reptiles during clearance/demolition/construction;
- ▶ Protection of adjacent habitats and trees during clearance/demolition/construction; and
- ▶ Protection of hedgehogs and other fauna during construction.

6.4.2 Additional Recommendations are made with a view to enhancing the value of the site for biodiversity post-construction.

## **6.5 Conclusions**

6.5.1 Assuming that the precautionary methods described in Section 5 can be adhered to, it is concluded that there are unlikely to be any significant long-term ecological impacts resulting from the proposed development. Recommendations are given to enhance the ecological value of the site post-development, in order to contribute towards the goal of achieving positive gains for biodiversity in the design of the developments proposals.

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
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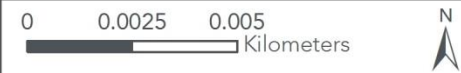


# Appendix I: Phase 1 Habitats Map

Please see insert.

# Ravenshaw St. West Hampstead Phase 1 Map

-  Site boundary
-  Target Notes
-  SNCI
-  Tree
-  Scattered scrub
-  Pond
-  Amenity grassland
-  Building
-  Hard standing



Aerial imagery © Getmapping plc.

 ENVIRONMENTAL CONSULTING Unit 5 Westergate Business Centre Brighton BN2 4QN	<b>Scale</b> 1: 163	<b>Date</b> Jan2015
	<b>Created by</b> SP	<b>Reviewed by</b> NP
	<b>Drawing number</b> UE-0172 Ravenshaw St Phase1_1_150126	



## Appendix II: Botanical Species List

### Forbs

Common Name	Scientific Name	Hard standing	Amenity Grassland	Scattered Scrub
Creeping buttercup (o)	<i>Ranunculus repens</i>		✓	
Alexanders (o)	<i>Smyrniololopodium</i>		✓	
Fig (r)	<i>Ficus sp.</i>			✓
Dandelion (f)	<i>Taraxacum agg</i>		✓	
Daisy (o)	<i>Bellis perennis</i>		✓	
Cleavers (o)	<i>Galium aparine</i>		✓	
Fan palm (r)	<i>Trachycarpus sp.</i>	✓		
Autumn fern (r)	<i>Dryopteris erythrosora</i>	✓		
Common nettle	<i>Urtica dioica</i>		✓	
Creeping thistle (o)	<i>Cirsium arvense</i>	✓	✓	
Cow parsley (o)	<i>Anthriscus sylvestris</i>	✓		
Bristly ox-tongue (r)	<i>Picris echioides</i>	✓		

### Trees and shrubs

Common Name	Scientific Name	Hard standing	Amenity Grassland	Scattered Scrub
Bramble (o)	<i>Rubus fruticosus agg</i>			✓
Rose (o)	<i>Rosa sp.</i>			✓
Ivy (a)	<i>Hedera helix</i>	✓		✓
Elder (o)	<i>Sambucus nigra</i>			✓
Cherry (r)	<i>Prunus sp.</i>		✓	
Bay laurel (r)	<i>Laurus nobilis</i>		✓	
Privet (o)	<i>Ligustrum ovalifolium</i>			✓
Banana (r)	<i>Musa sp.</i>	✓		
Dogwood (r)	<i>Cornus sanguinea</i>	✓		

## Grasses, sedges, rushes and ferns

Common Name	Scientific Name	Hard standing	Amenity Grassland	Scattered Scrub
Perennial rye grass (f)	<i>Lolium perenne</i>		✓	
Bent (o)	<i>Agrostis sp.</i>		✓	
Cock's foot (f)	<i>Dactylis glomerata</i>		✓	
Bamboo (r)	<i>Bambuseae</i>	✓		

Letters in brackets correspond to relative abundance using the DAFOR scale (d) dominant, (a) abundant, (f) frequent, (o) occasional, (r) rare. The scale is relative to the site as a whole.

# Appendix III: Relevant Legislation and Planning Context

## Legislation

### *General*

The main legislative instruments for ecological protection in England and Wales are the Wildlife and Countryside Act 1981 (WaCA; as amended), Countryside and Rights of Way Act 2000 (CRoW; as amended), Natural Environment and Rural Communities Act 2006 (NERC) and the Conservation of Habitats and Species Regulations 2010 (the Habitats Regulations).

WaCA 1981 consolidated and amended pre-existing national wildlife legislation in order to implement the Bern Convention and the Birds Directive. It complements the Habitats Regulations, offering protection to a wider range of species than the latter. The Act also provided for the designation and protection of nationally important conservation sites of value for their floral, faunal or geological features, termed Sites of Special Scientific Interest (SSSI). Schedules of the act list protected species of flora and fauna, as well as invasive species, and detail the possible offences that apply to these species.

The CROW Act 2000 amended and strengthened existing wildlife legislation detailed in the WCA. It placed a duty on government departments and the National Assembly for Wales to have regard for biodiversity, provided increased powers for the protection and maintenance of SSSI, and created a right of access to parts of the countryside. The Act contained lists of habitats and species (Section 74) for which conservation measures should be promoted, in accordance with the recommendations of the Convention on Biological Diversity (Rio Earth Summit) 1992.

The NERC Act 2006 consolidated and replaced aspects of earlier legislation. Section 40 of the Act places a duty upon all local authorities and public bodies in England and Wales to promote and enhance biodiversity in all of their functions. Sections 41 (England) and 42 (Wales) list habitats and species of principal importance to the conservation of biodiversity. These lists supersede Section 74 of the CRoW Act 2000. These species and habitats are a material consideration in the planning process.

The Habitats Regulations 2010 consolidate and update the Conservation (Natural Habitats, &c.) Regulations 1994 and all its various amendments. The Regulations are the principal means by which the EEC Council Directive 92/43 (The Habitats Directive) as amended is transposed into English and Welsh law, and place a duty upon the relevant authority of government to identify sites which are of importance to the habitats and species listed in Annexes I and II of the Habitats Directive. Those sites which meet the criteria are, in conjunction with the European Commission, designated as Sites of Community Importance, which are subsequently identified as Special Areas of Conservation (SAC) by the European Union member states.

The Habitats Regulations also place a duty upon the government to maintain a register of European protected sites designated as a result of EC Directive 79/409/EEC on the Conservation of Wild Birds (The Birds Directive). These sites are termed Special Protection Areas (SPA) and, in conjunction with SACs, form a network of sites known as Natura 2000. The Habitats Directive introduces for the first time for protected areas, the precautionary principle; that is that projects can only be permitted having ascertained no adverse effect on the integrity of the site. Projects may still be permitted if there are no alternatives, and there are imperative reasons of overriding public interest.

The Habitats Regulations 2010 also provide for the protection of individual species of fauna and flora of European conservation concern listed in Schedules 2 and 5 respectively. Schedule 2 includes species such as otter and great crested newt for which the UK population represents a significant proportion of the total European population. It is an offence to deliberately kill, injure, disturb or trade these species. Schedule 5 plant species are protected from unlawful destruction, uprooting or trade under the regulations.

### **Badgers**

Badgers are listed under Schedule 6 of the Wildlife and Countryside Act which grants them partial protection. This protection is extended by the Protection of Badgers Act 1992 (Badger Act) which makes it an offence to take, injure or kill a badger, interfere with a sett, sell or possess a live badger, or mark or ring a badger without a licence. Under the Act disturbance is illegal without a licence. Natural England has published guidelines to be adopted when determining whether an activity is 'disturbing' i.e. a licence is required when, for example, using heavy machinery (generally tracked vehicles) within 30m of any entrance to an active sett. Licences are not normally issued during the badger breeding season (December – June inclusive).

### **Bats (Chiroptera)**

Bats and their roosts are fully protected by protected by the Wildlife and Countryside Act 1981 (and subsequent amendments) and the Conservation of Habitats and Species Regulations 2010, and seven species of bats are UK Biodiversity Action Plan priority species. The legislation makes it an offence to:

- ▶ Intentionally kill, injure or take a bat.
- ▶ Possess or control a live or dead bat, any part of a bat, or anything derived from a bat.
- ▶ Intentionally or recklessly damage, destroy or obstruct access to any place that a bat uses for shelter or protection. This is taken to mean all bat roosts whether bats are present or not.
- ▶ Intentionally or recklessly disturb a bat while it is occupying a structure or place that it uses for shelter or protection.
- ▶ Make a false statement in order to obtain a licence for bat work.

### **Birds**

Birds are protected by the Wildlife and Countryside Act, 1981 (as amended). This legislation makes it an offence to intentionally kill, injure or take away any wild bird. It is also an offence to take, damage or destroy the nest of any wild bird while it is in use or being built or to take or destroy the egg of any wild bird. In addition, certain species are listed on Schedule 1 of the WCA (such as kingfisher *Alcedo atthis*). This makes it an additional offence to intentionally or recklessly disturb the adults while they are in and around their nest or intentionally or recklessly disturb their dependent young. Such species are considered to be in greater need of legal protection or of high nature conservation priority.

A list of birds of conservation concern is set out within "Red" and "Amber" lists (RSPB, 2009). Birds on the Red list are those of high conservation concern and include common and widespread species which have experienced steep declines in numbers, such as the house sparrow *Passer domesticus* and starling *Sturnus vulgaris*. Birds on the Amber list are of medium conservation concern and include species still considered to be common and widespread such as dunnock *Prunella modularis*.

### **Dormouse (*Muscardinus avellanarius*)**

Dormouse is fully protected by the Wildlife and Countryside Act 1981 (and subsequent amendments) and the Conservation of Habitats and Species Regulations 2010. The legislation makes it an offence to:

- ▶ Intentionally kill, injure or take a dormouse.

- ▶ Possess or control a live or dead dormouse, any part of, or anything derived from a dormouse.
- ▶ Intentionally or recklessly damage, destroy or obstruct access to any place that a dormouse uses for shelter or protection.
- ▶ Intentionally or recklessly disturb a dormouse while it is occupying a structure or place that it uses for shelter or protection.

#### ***Great crested newt (Triturus cristatus; GCN) (and natterjack toad Bufo calamita)***

GCN is fully protected by the Wildlife and Countryside Act 1981 (and subsequent amendments) and the Conservation of Habitats and Species Regulations 2010. The legislation makes it an offence to:

- ▶ Intentionally kill, injure or take a GCN.
- ▶ Possess or control a live or dead GCN, any part of, or anything derived from a GCN.
- ▶ Intentionally or recklessly damage, destroy or obstruct access to any place that a GCN uses for shelter or protection.
- ▶ Intentionally or recklessly disturb a GCN while it is occupying a structure or place that it uses for shelter or protection.

#### ***Otter Lutra lutra***

Otter is fully protected by the Wildlife and Countryside Act 1981 (and subsequent amendments) and the Conservation of Habitats and Species Regulations 2010. The legislation makes it an offence to:

- ▶ Intentionally kill, injure or take an otter.
- ▶ Possess or control a live or dead otter, any part of, or anything derived from an otter.
- ▶ Intentionally or recklessly damage, destroy or obstruct access to any place that an otter uses for shelter or protection.
- ▶ Intentionally or recklessly disturb an otter while it is occupying a structure or place that it uses for shelter or protection.

#### ***Reptiles***

The four common species (slow-worm *Anguis fragilis*, common lizard *Zootoca vivipara*, adder *Vipera berus* and grass snake *Natrix natrix*) are partially protected under the Wildlife and Countryside Act 1981 (as amended). They are protected against intentional killing and injuring and trade (i.e. sale, barter and exchange, transporting for sale and advertising to sell or buy). The handling and translocation of these reptiles does not require a licence.

Smooth snake *Coronella austriaca* and sand lizard *Lacerta agilis* are fully protected by the Wildlife and Countryside Act 1981 (and subsequent amendments) and the Conservation of Habitats and Species Regulations 2010. The legislation makes it an offence to:

- ▶ Intentionally kill, injure or take a smooth snake or sand lizard.
- ▶ Possess or control a live or dead smooth snake or sand lizard, any part of, or anything derived from a smooth snake or sand lizard.
- ▶ Intentionally or recklessly damage, destroy or obstruct access to any place that a smooth snake or sand lizard uses for shelter or protection.
- ▶ Intentionally or recklessly disturb a smooth snake or sand lizard while it is occupying a structure or place that it uses for shelter or protection.

#### ***Water vole Arvicola terrestris***

Water vole is fully protected by the Wildlife and Countryside Act 1981 (and subsequent amendments). The legislation makes it an offence to:

- ▶ Intentionally kill, injure or take an otter.
- ▶ Possess or control a live or dead otter, any part of, or anything derived from an otter.
- ▶ Intentionally or recklessly damage, destroy or obstruct access to any place that an otter uses for shelter or protection.
- ▶ Intentionally or recklessly disturb an otter while it is occupying a structure or place that it uses for shelter or protection.

### **Weeds Act 1959 / Ragwort Control Act 2003**

This legislation provides for orders to be made for control where notifiable weed species such as ragwort are said to be a problem. The act does not make it illegal to have ragwort (or other weed species) on your land, make it illegal to allow ragwort to spread, or force landowners automatically to control it. However, if DEFRA is satisfied that there are injurious weeds to which this Act applies growing upon any land it may serve upon the occupier of the land a notice in writing requiring them, within the time specified in the notice, to take such action as may be necessary to prevent the weeds from spreading.

### **Planning context**

#### **National Planning Policy Framework (Section 11: Conserving and enhancing the natural environment)**

The National Planning Policy Framework (NPPF), published in March 2012, outlines the Government's commitment to the conservation of wildlife and natural features. It is concerned with:

- ▶ *Protecting and enhancing valued landscapes, geological conservation interests and soils;*
- ▶ *Recognising the wider benefits of ecosystem services;*
- ▶ *Minimising impacts on biodiversity and providing net gains in biodiversity where possible, contributing to the Government's commitment to halt the overall decline in biodiversity, including by establishing coherent ecological networks that are more resilient to current & future pressures;*
- ▶ *Preventing both new and existing development from contributing to or being put at unacceptable risk from, or being adversely affected by unacceptable levels of soil, air, water or noise pollution or land instability; and*
- ▶ *Remediating and mitigating despoiled, degraded, derelict, contaminated and unstable land, where appropriate.*

The NPPF requires that local planning authorities set criteria based policies against which proposals for development on or affecting protected wildlife or geodiversity sites or landscape areas can be judged. Distinctions should be made between the hierarchy of international, national and locally designated sites, so that protection is commensurate with their status and gives appropriate weight to their importance and the contribution that they make to wider ecological networks.

To minimise impacts on biodiversity and geodiversity, the NPPF states that planning policies should:

- ▶ *plan for biodiversity at a landscape-scale across local authority boundaries;*
- ▶ *identify and map components of the local ecological networks, including the hierarchy of international, national and locally designated sites of importance for biodiversity, wildlife corridors and stepping stones that connect them and areas identified by local partnerships for habitat restoration or creation;*
- ▶ *promote the preservation, restoration and re-creation of priority habitats, ecological networks and the protection and recovery of priority species populations, linked to national and local targets, and identify suitable indicators for monitoring biodiversity in the plan;*
- ▶ *aim to prevent harm to geological conservation interests; and*



- ▶ *where Nature Improvement Areas are identified in Local Plans, consider specifying the types of development that may be appropriate in these Areas.*

When determining planning applications, local planning authorities should aim to conserve and enhance biodiversity by applying the following principles:

- ▶ *if significant harm resulting from a development cannot be avoided (through locating on an alternative site with less harmful impacts), adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused;*
- ▶ *proposed development on land within or outside a Site of Special Scientific Interest likely to have an adverse effect on a Site of Special Scientific Interest (either individually or in combination with other developments) should not normally be permitted. Where an adverse effect on the site's notified special interest features is likely, an exception should only be made where the benefits of the development, at this site, clearly outweigh both the impacts that it is likely to have on the features of the site that make it of special scientific interest and any broader impacts on the national network of Sites of Special Scientific Interest;*
- ▶ *development proposals where the primary objective is to conserve or enhance biodiversity should be permitted;*
- ▶ *opportunities to incorporate biodiversity in and around developments should be encouraged;*
- ▶ *planning permission should be refused for development resulting in the loss or deterioration of irreplaceable habitats, including ancient woodland and the loss of aged or veteran trees found outside ancient woodland, unless the need for, and benefits of, the development in that location clearly outweigh the loss; and*
- ▶ *the following wildlife sites should be given the same protection as European sites:*
  - *potential Special Protection Areas and possible Special Areas of Conservation;*
  - *listed or proposed Ramsar sites; 26 and*
  - *sites identified, or required, as compensatory measures for adverse effects on European sites, potential Special Protection Areas, possible Special Areas of Conservation, and listed or proposed Ramsar sites.*

The policies within the NPPF (and additional guidance contained within Circular 06/2005) are a material planning consideration.

#### ***UK Biodiversity Action Plan Designations and Birds of Conservation Concern and Red Data Book Listings***

Note that BAP designations and status as RSPB Birds of Conservation Concern or Red Data Book species does not offer any further legal protection, but planning authorities are required to prevent these species from being adversely affected by development in accordance with National Planning Policy and the CROW and NERC Acts.

The United Kingdom Biodiversity Action Plan (UKBAP), first published in 1994 and updated in 2007, is a government initiative designed to implement the requirements of the Convention of Biological Diversity to conserve and enhance species and habitats. The UKBAP contains a list of priority habitats and species of conservation concern in the UK, and outlines biodiversity initiatives designed to enhance their conservation status. Lists and Broad and Local habitats are also included. The priority habitats and species correlate with those listed on Section 41 and 42 of the NERC Act.

The UKBAP requires that conservation of biodiversity is addressed at a County level through the production of Local BAPs. These are complementary to the UKBAP, however are targeted towards species of conservation concern characteristic of each area. In addition, a number of local authorities and large organisations have produced their own BAPs. UKBAP and Local BAP targets with regard to species and habitats are a material consideration in the planning process.

## ***Regional and Local Planning Context***

### The London Plan (July 2011)

The London Plan is the overall strategic plan for London, and sets out a fully integrated economic, environmental, transport and social framework for the development of the capital to 2031. It forms part of the development plan for Greater London and its policies guide decisions on planning applications by councils and the Mayor.

### London Biodiversity Action Plan

The London Biodiversity Action Plan identifies priority habitats that are of particular importance for biodiversity in London. The BAP also identifies 214 species which are under particular threat in London.

### Local Development Framework 2010

The Local Development Framework for Camden 2010 sets out a strategy for managing growth and development in the borough, including where new homes, jobs and infrastructure will be located. The following policies are of particular relevance to biodiversity and green infrastructure planning:

- ▶ *Core Strategy Policy 15: Protecting and improving our parks and open spaces and encouraging biodiversity;*
- ▶ *Development Policy 22: Promoting sustainable design and construction; and*
- ▶ *Development Policy 31: Provision of, and improvements to, open space and outdoor sport and recreation facilities.*

### Camden Planning Guidance

Camden planning guidance has also been produced in line with the Local Development Framework which provides guidance regarding a range of planning issues. Parts which are relevant to this report are listed below:

- ▶ *Chapter 1. Design (Section 6) Landscape design and trees;*
- ▶ *Chapter 3. Sustainability (Section 10) Brown roofs, green roofs and green walls; and*
- ▶ *Chapter 3. Sustainability (Section 13) Biodiversity.*

### Supplementary Planning Document: Sites of Nature Conservation Importance in Camden

Under the policies and procedures set out in the London Plan and the Mayor's Biodiversity Strategy, Boroughs are expected to designate Sites of Nature Conservation Importance (SNCI) in their Unitary Development Plan (UDP). The London Borough of Camden replacement UDP was adopted in June 2006. The Schedule of Open Spaces contained in Appendix 5 of the replacement UDP 2006 contains the designation of SNCI and whether they are of Metropolitan, Borough or of Local importance.

### Camden Local Biodiversity Action Plan

The Camden BAP translates the UK Biodiversity framework, England Biodiversity Strategy and the regional London BAP targets onto the local level. The Plan outlines a series of actions to ensure that biodiversity is safeguarded in the borough and that Camden's residents are given opportunities to access the natural environment.

## Appendix IV: Legal and Technical Limitations

- This report has been prepared by Urban Edge Environmental Consulting Ltd (UEEC Ltd) with all reasonable skill, care and diligence within the terms of the contract made with the Client to undertake this work, and taking into account the information made available by the Client. No other warranty, expressed or implied, is made as to the professional advice included in this report or any other services provided by us.
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- The advice provided in this report does not constitute legal advice. As such, the services of lawyers may also be considered to be warranted.
- Unless otherwise stated in this report, the assessments made assume that the sites and facilities that have been considered in this report will continue to be used for their current planned purpose without significant change.
- All work carried out in preparing this report has utilised and is based upon UEEC Ltd's current professional knowledge and understanding of current relevant UK standards and codes, technology and legislation. Changes in this legislation and guidance may occur at any time in the future and may cause any conclusions to become inappropriate or incorrect. UEEC Ltd does not accept responsibility for advising the Client or other interested parties of the facts or implications of any such changes;
- This report has been prepared using factual information contained in maps and documents prepared by others. No responsibility can be accepted by UEEC Ltd for the accuracy of such information;
- Populations of animals and plants are often transient in nature and a single survey visit can only provide a general indication of species present on site. Time of year when the survey was carried out and other variations will also influence the results of the survey (e.g. it is possible that some flowering plant species which flower at other times of the year were not observed). While no biological survey can guarantee that all cues and signs of protected or notable species will be recorded, the authors are confident that key indicators of these species being present on site were noted. The possibility nonetheless exists for other species to be present on the site which were not recorded or otherwise indicated by the survey.
- Any works undertaken as a consequence of the recommendations provided within this report should be subjected to the necessary health & safety checks and full risk assessments.

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**Urban Edge Environmental Consulting Ltd**

Unit 5 | Westergate Business Centre | Brighton | BN2 4QN

T: 01273 68 67 66 | E: [enquiries@ueec.co.uk](mailto:enquiries@ueec.co.uk)

[www.ueec.co.uk](http://www.ueec.co.uk) |  [@UrbanEdgeEnviro](https://twitter.com/UrbanEdgeEnviro)

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## Urban Edge Environmental Consulting Ltd

Unit 5 | Westergate Business Centre | Brighton | BN2 4QN

T: 01273 68 67 66 | E: [enquiries@ueec.co.uk](mailto:enquiries@ueec.co.uk)

[www.ueec.co.uk](http://www.ueec.co.uk) |  @UrbanEdgeEnviro

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