6 NUTLEY TERRACE, GREATER LONDON

PRELIMINARY ECOLOGICAL ASSESSMENT

A Report to: Mrs Shamim Shafi

Report No: RT-MME-118690-01

Date: January 2015



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REPORT VERIFICATION AND DECLARATION OF COMPLIANCE

This study has been undertaken in accordance with British Standard 42020:2013 "Biodiversity, Code of practice for planning and development".

Report Version	Date	Completed by:	Checked by:	Approved by:
Final	26/01/2015	Jeffrey Grant BSc (Hons) Grad CIEEM (Ecological Project Officer) and Stephanie Bradbury BSc (Hons) (Ecological Project Officer)	Lucy Philpott MSc CEnv, MCIEEM, MArborA (Principal Technical Ecological Consultant)	Dr Philip Fermor CEnv, MCIEEM (Managing Director)

The information which we have prepared is true, and has been 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.

DISCLAIMER

The contents of this report are the responsibility of Middlemarch Environmental Ltd. It should be noted that, whilst every effort is made to meet the client's brief, no site investigation can ensure complete assessment or prediction of the natural environment.

Middlemarch Environmental Ltd accepts no responsibility or liability for any use that is made of this document other than by the client for the purposes for which it was originally commissioned and prepared.

VALIDITY OF DATA

The findings of this study are valid for a period of 24 months from the date of survey. If works have not commenced by this date, an updated site visit should be carried out by a suitably qualified ecologist to assess any changes in the habitats present on site, and to inform a review of the conclusions and recommendations made.

NON-TECHNICAL SUMMARY

Middlemarch Environmental Ltd was commissioned by KSR Architects LLP on behalf of Mrs Shamim Shafi to carry out an initial ecological appraisal at the site of a proposed development at 6 Nutley Terrace in London Borough of Camden. To fulfil this brief an ecological desk study and a walkover survey (in accordance with Phase 1 Habitat Survey methodology) were undertaken.

The ecological desk study identified one statutory nature conservation site and nine non-statutory nature conservation sites within a 1 km radius of the survey area; Belsize Wood is a Local Nature Reserve (LNR) located 870 m north-east of the survey area and the nearest non-statutory site is Frognal Court Wood, a Site of Borough Importance for Nature Conservation (Grade II) located 330 m west of the survey area. The desk study provided records of protected/notable species, including bats, other terrestrial mammals, amphibians and birds.

The walkover survey was undertaken on 8th January 2015 by Jeffrey Grant, Ecological Project Officer. At the time of the survey, the site was occupied by a two-storey house with associated hardstanding, wooden shed and garden habitats. The garden was dominated by amenity grassland with planted shrub beds, and several scattered trees were also present.

The key ecological features on site in relation to the works proposed include the early-mature trees as these have intrinsic value and cannot be readily replaced if lost. They may also support nesting birds and foraging bats whilst the house has the potential to support roosting bats. The garden habitats are considered to offer suitable foraging habitat for terrestrial mammals and potential terrestrial habitat for common amphibians.

In order to ensure compliance with wildlife legislation and relevant planning policy, the following recommendations are made:

- **R1 Habitat Loss and Enhancement:** Biodiversity enhancement measures should be incorporated into the landscaping scheme of any proposed works to maximise the ecological value of the site.
- **R2 Trees:** The existing trees on or overhanging the site should be retained and protected prior to the commencement of any works on site.
- **R3 Roosting Bats:** The recommendations made in the Daytime Bat Survey Report (RT-MME-118690-02) should be followed.
- **R4 Foraging Bats:** Bats are likely to use trees for foraging and commuting. Therefore, in line with paragraph 125 of the National Planning Policy Framework, the development should aim to limit the impact of light pollution on bats through the careful use of lighting in critical areas only and at a low level with minimum spillage.
- **R5 Terrestrial Mammals including Badger and Hedgehog**: Any excavations that need to be left overnight should be covered or fitted with mammal ramps to ensure that any animals that enter can safely escape. Any open pipework with an outside diameter of greater than 120 mm must be covered at the end of each work day to prevent animals entering/becoming trapped.
- **R6** Hedgehog and Common Amphibians: Vegetation clearance/removal should be undertaken in a sensitive manner to avoid harming hedgehogs and common amphibians. If any are found during the course of site-based works they should be removed carefully to a suitably undisturbed location within the near vicinity. In the event that a great crested newt or reptile is found on site, all works should cease and a suitably qualified ecologist should be contacted for advice.
- **R7 Nesting Birds:** Vegetation clearance should be undertaken outside the nesting bird season. The nesting bird season is weather dependent but generally extends between March and September inclusive. If this is not possible then any vegetation that is to be removed or disturbed should be checked by an experienced ecologist for nesting birds immediately prior to works commencing. If birds are found to be nesting any works which may affect them would have to be delayed until the young have fledged and the nest has been abandoned naturally.

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1. INTRODUCTION

1.1 **PROJECT BACKGROUND**

In December 2014, KSR Architects LLP, on behalf of Mrs Shamim Shafi, commissioned Middlemarch Environmental Ltd to undertake an initial ecological appraisal of the site of a proposed development at 6 Nutley Terrace in the London Borough of Camden. This assessment is required to inform a planning application associated with the demolition of the existing house and the construction of a new multi-unit dwelling.

To assess the existing ecological interest of the site an ecological desk study was carried out, and a walkover survey was undertaken on 8th January 2015. In addition, Middlemarch Environmental Ltd has been commissioned to undertake a Daytime Bat Survey at this site, the findings of which are detailed in Report RT-MME-118690-02.

1.2 SITE DESCRIPTION AND CONTEXT

The development site is located off Nutley Terrace in the London Borough of Camden, centred at National Grid Reference TQ 2663 8496. It is a rectangular parcel of land measuring approximately 0.15 ha in size and is generally flat in topography, though there is a small embankment in the southern half of the site.

At the time of the survey, the site was occupied by a two-storey house with associated hardstanding, wooden shed and garden habitats. The garden was dominated by amenity grassland with planted shrub beds, and several scattered trees were also present.

The site was bordered by Nutley Terrace to the north and residential properties with associated gardens to the east, south and west. The wider landscape is dominated by residential development, interspersed with school grounds, recreational grounds, and hospital grounds.

1.3 DOCUMENTATION PROVIDED

The conclusions and recommendations made in this report are based on information provided by the client regarding the scope of the project. Documentation made available by the client is listed in Table 1.1.

Document Name / Drawing Number	Author
Location Plan: NUT2-L01	KSR Architects
Existing Site Plan: NUT2-020	KSR Architects
Proposed Site Plan: NUT2-100	KSR Architects
Proposed Lower Ground Floor: NUT2-102	KSR Architects
Proposed First Floor Plan: NUT2-104	KSR Architects
Proposed Second Floor Plan: NUT2-105	KSR Architects
Proposed Third Floor Plan: NUT2-106	KSR Architects

Table 1.1: Documentation Provided by Client

2. METHODOLOGIES

2.1 DESK STUDY

An ecological desk study was undertaken to determine the presence of any designated nature conservation sites and protected species that have been recorded within a 1 km radius of the site. This involved contacting appropriate statutory and non-statutory organisations which hold ecological data relating to the survey area. Middlemarch Environmental Ltd then assimilated and reviewed the desk study data provided by these organisations.

The consultees for the desk study were:

- Natural England MAGIC website for statutory conservation sites; and,
- Greenspace Information for Greater London environmental records centre.

The data collected from these consultees is discussed in Chapter 3. Selected raw data are provided in Appendix 1. In compliance with the terms and conditions relating to its commercial use, the full desk study data is not provided within this report.

The desk study data also included a review of relevant local planning policy with regard to biodiversity and nature conservation.

2.2 PHASE 1 HABITAT SURVEY

The walkover survey was conducted following the Phase 1 Habitat Survey methodology of the Joint Nature Conservation Committee (JNCC, 2010) and the Institute of Environmental Assessment (IEA, 1995). Phase 1 Habitat Survey is a standard technique for classifying and mapping British habitats. The aim is to provide a record of habitats that are present on site. During the survey, the presence, or potential presence, of protected species was noted.

Whilst every effort is made to notify the client of any plant species listed on Schedule 9 of the Wildlife and Countryside Act (1981, as amended) present on site, it should be noted that this is not a specific survey for these species.

Data recorded during the field survey are discussed in Chapter 4.

3. DESK STUDY RESULTS

3.1 INTRODUCTION

All relevant ecological data provided by the consultees was reviewed and the results from these investigations are summarised in Sections 3.2 and 3.3. Selected data are provided in Appendix 1.

3.2 NATURE CONSERVATION SITES

Reference to the Multi Agency Geographical Information for the Countryside (MAGIC) website and the data provided by the local biological records centre indicates that one statutory nature conservation site and nine non-statutory nature conservation sites occur within a 1 km radius of the survey area. These sites are summarised in Table 3.1.

Site Name	Designation	Proximity to Survey Area	Description
UK Statutory Site			
Belsize Wood	LNR	870 m north- east	A wide variety of trees are found on site including oak <i>Quercus</i> sp., wild cherry <i>Prunuv avium</i> and horse-chestnut <i>Aesculus hippocastanum</i> . There is a pond, bird feeding area, large insect house, stag beetle <i>Lucanus cervus</i> loggeries, bird boxes and other biodiversity enhancing features, helping to support a broad diversity of insect species and a number of common birds.
Non-statutory Sites			
Frognal Court Wood	SBINC(II)	330 m west	Many different trees make up the canopy of this small wood including sycamore Acer pseudoplatanus, ash <i>Fraxinus</i> <i>excelsior</i> , poplar <i>Populus</i> sp., wild cherry and lime <i>Tilia x</i> <i>europaea</i> . There are a variety of shrubs beneath which compose an understorey and the ground flora includes bluebell <i>Hyacinthoides non-scripta</i> , bramble <i>Rubus</i> <i>fruticosus</i> agg. and bittersweet <i>Solanum dulcamara</i> . Many species of bird frequent the wood.
West Hampstead Railsides, Medley Orchard and Westbere Copse	SBINC(I)	470 m west	These wooded railsides include a nature reserve and an old orchard. Much of the length aside the Thameslink line is densely covered in secondary woodland, scrub and tall herb communities. A small part of this stretch is Westbere Copse which is managed as a nature reserve. The Medley Orchard is an old orchard, immediately adjacent to the railway behind the gardens of Medley Road. Old orchards are a rare habitat in London and the fruit trees can support important communities of invertebrates.
Green Triangle	SBINC(II)	660 m south- west	This is a community garden with an area of sycamore woodland and a wildlife pond with hemp-agrimony <i>Eupatorium cannabinum</i> at its margin, supporting common frogs <i>Rana temporaria</i> .
Hampstead Parish Church	SBINC(I)	690 m north- west	The churchyard contains a good number of fine mature trees and dense planted shrubberies. The grassland is indicative of old slightly acidic meadowland. There are patches of diverse and well-established tall herbaceous vegetation which includes both native species and introduced species planted on graves. Some of the older limestone tombstones have a covering of various mosses and lichens, as well as a number of ferns.
Frognal Lane Gardens	SLINC	800 m north- west	The small communal garden contains a good number of mature trees, beneath which grow a good selection of wildflowers. A small pond has been planted with various aquatic plants including soft rush <i>Juncus effusus</i> and water-starwort <i>Callitriche</i> sp.

Table 3.1: Summary of Nature Conservation Sites Within 1 km of Survey Area (cont)

Site Name	Designation	Proximity to Survey Area	Description
Broadhurst Gardens Meadow	SBINC(II)	830 m south- west	The communal grounds of houses in Broadhurst Gardens consist of a meadow of varying grass heights and a perimeter belt of trees and shrubs. The site abounds with insects such as butterflies, beetles, hoverflies and grasshoppers.
Hampstead Heath	SMINC	870 m north- east	This extensive site includes areas of ancient woodland proving deadwood habitat for a range of specialist invertebrates, a small wet flush containing several London rare plant species, and acid grassland supporting several characteristic species. In several places heathland restoration is being attempted. The many ponds and watercourses on site offer further botanical, entomological and ornithological interest.
Belsize Wood Local Nature Reserve	SBINC(II)	870 m north- east	The northern part of this site is poorly vegetated at ground level due to trampling. Ash, sycamore and Swedish whitebeam <i>Sorbus intermedia</i> are common canopy trees in the north of the site. The southern part of this site is designated as an LNR.
Kentish Town City Farm, Gospel Oak Railsides and Mortimer Terrace Nature Reserve	SBINC(I)	890 m north- east	A large area of green railside land, with an adjacent city farm and a woodland nature reserve. The railsides support a mosaic of habitats, including sizeable blocks of secondary woodland interspersed with scrub, grassland and tall herbs. Mortimer Terrace Nature Reserve is mostly sycamore woodland, though a wide range of native trees and shrubs have been planted, as have woodland flowers such as bluebells. Kentish Town City Farm has a good wildlife garden with a pond planted with native marginal plants. This is home to a healthy population of common frogs.

LNR: Local Nature Reserve.

SLINC: Site of Local Importance for Nature Conservation.

SMINC: Site of Metropolitan Importance for Nature Conservation.

SBINC(I): Site of Borough Importance for Nature Conservation (Grade I).

SBINC(II): Site of Borough Importance for Nature Conservation (Grade II)

Table 3.1 (cont'd): Summary of Nature Conservation Sites Within 1 km of Survey Area

No Sites of Special Scientific Interest (SSSIs) are located within a 1 km radius of the survey area, however the survey area does fall within a SSSI Impact Risk Zone for Hampstead Heath Woods, located 1.84 km north-east. Despite this, the proposed development does not fall within any of the categories of concern.

3.3 **PROTECTED / NOTABLE SPECIES**

Table 3.2 and the following text provide a summary of protected and notable species records within a 1 km radius of the study area. It should be noted that the absence of records should not be taken as confirmation that a species is absent from the search area.

Species	No. of Records	Most Recent Record	Proximity of Nearest Record to Study Area	Species of Principal Importance?	Local BAP?	Legislation / Conservation Status
Mammals – bats						
Common pipistrelle Pipistrellus pipistrellus	12	2012	250 m west	-	~	ECH 4, WCA 5, WCA 6
Pipistrelle species <i>Pipistrellus</i> sp.	7	2004	650 m south-west	#	~	ECH 4, WCA 5, WCA 6
Vesper species Verspertillionidae sp.	2	2004	670 m west	#	~	ECH 2 #, ECH 4, WCA 5, WCA 6
Soprano pipistrelle Pipistrellus pygmaeus	2	2009	680 m north	~	~	ECH 4, WCA 5, WCA 6
Brown long-eared bat Plecotus auritus	1	2009	680 m north	~	~	ECH 4, WCA 5, WCA 6

Table 3.2: Summary of Protected/Notable Species Records Within 1 km of Survey Area (cont)

Species	No. of Records	Most Recent Record	Proximity of Nearest Record to Study Area	Species of Principal Importance?	Local BAP?	Legislation / Conservation Status
Daubenton's bat <i>Myotis daubentonii</i>	1	1993	960 m north	-	~	ECH 4, WCA 5, WCA 6
Mammals – other			•			
Hedgehog <i>Erinaceus europaeus</i>	5	2000	590 m north	~	~	WCA 6
Amphibians						
Common frog Rana temporaria	25	2010	250 m west	-	~	WCA 5 S9(5)
Common toad Bufo bufo	6	2002	490 m north	~	~	WCA 5 S9(5)
Birds			•	•		
House sparrow Passer domesticus	14	2009	70 m north	✓	~	Red
Herring gull Larus argentatus	16	2010	580 m north	~	~	Red
Lesser redpoll Carduelis flammea	2	1987	680 m north-west	~	~	Red
Spotted flycatcher Muscicapa striata	1	1983	680 m north-west	✓	~	Red
Dunnock Prunella modularis	3	2010	790 m north	✓	~	Amber
Song thrush Turdus philomelos	5	2009	790 m north	✓	~	Red
Starling Sturnus vulgaris	3	2009	790 m north	✓	~	Red
Redwing Turdus iliacus	1	2011	920 m north	-	-	WCA 1i
Peregrine falcon Falco peregrinus	2	2006	Confidential†	-	\checkmark	WCA 1i
Invertebrates	1		1	1	r	Г
Small square-spot Diarsia rubi	10	2011	360 m north	✓	~	-
Grey dagger Acronicta psi	9	2007	360 m north	✓	~	-
Mullein wave Scopula marginepunctata	7	2007	360 m north	✓	~	-
Brindled beauty Lycia hirtaria	6	2007	360 m north	✓	~	-
White ermine Spilosoma lubricipeda	6	2007	360 m north	✓	~	-
Sallow Xanthia icteritia	3	2007	360 m north	✓	~	-
Rustic Hoplodrina blanda Knot grass	3	2007	360 m north	~	~	-
Acronicta rumicis	6	2006	360 m north	~	~	-
Ennomos fuscantaria	4	2006	360 m north	~	✓	-
Atethmia centrago	4	2006	360 m north	✓	~	-
Mouse moth Amphipyra tragopoginis	4	2006	360 m north	✓	~	-
Shoulder-striped wainscot Mythimna comma	3	2006	360 m north	✓	~	-
Dot moth Melanchra persicariae	2	2006	360 m north	✓	~	-
Dusky brocade Apamea remissa	2	2006	360 m north	✓	✓	-

 Table 3.2 (cont'd): Summary of Protected/Notable Species Records Within 1 km of Survey Area (cont)

6 Nutley Terrace, Greater London Preliminary Ecological Assessment

Species	No. of Records	Most Recent Record	Proximity of Nearest Record to Study Area	Species of Principal Importance?	Local BAP?	Legislation / Conservation Status
False mocha	4		360 m north			Clatus
Cyclophora porata	1	2006	360 m north	v	-	-
Rosy minor <i>Mesoligia literosa</i>	1	2006	360 m north	\checkmark	~	-
Deep-brown dart Aporophyla lutulenta	4	2005	360 m north	~	~	-
Buff ermine Spilosoma luteum	3	2005	360 m north	\checkmark	~	-
Oak hook-tip Drepana binaria	2	2005	360 m north	~	~	-
Blood-vein <i>Timandra comae</i>	2	2005	360 m north	~	~	-
Small phoenix Ecliptopera silaceata	2	2005	360 m north	~	~	-
Mottled rustic Caradrina morpheus	2	2005	360 m north	~	~	-
Dusky-lemon sallow Xanthia gilvago	3	2004	360 m north	~	~	-
Lackey (moth) Malacosoma neustria	1	2000	360 m north	~	~	-
Double dart Graphiphora augur	1	2000	360 m north	~	~	-
Brown-spot pinion Agrochola litura	1	2000	360 m north	\checkmark	~	-
Beaded chestnut Agrochola lychnidis	1	2000	360 m north	\checkmark	~	-
Large nutmeg Apamea anceps	1	2000	360 m north	\checkmark	~	-
Cinnabar <i>Tyria jacobaeae</i>	1	2000	360 m north	✓	~	-
Stag beetle Lucanus cervus	4	1999	380 m north	✓	✓	ECH 2, WCA 5 S9(5)
Plants						
Cornflower Centaurea cyanus	1	2011	560 m north	~	-	-
Corn marigold Glebionis segetum	1	2011	560 m north	-	-	VU
Bluebell Hyacinthoides non-scripta	2	2011	640 m west	-	~	WCA 8 S13(2)
Welsh poppy <i>Meconopsis cambric</i>	6	2011	760 m north-west	-	-	NS
Field woundwort Stachys telephium	4	2011	760 m north-west	-	-	NT
Spreading bellflower <i>Campanula patula</i>	3	2010	760 m north-west	✓	-	NS, EN
Chamomile <i>Chamaemelum nobile</i>	1	2003	780 m south-west	~	~	VU
Stinking hellebore Helleborus foetidus	1	1992	830 m north	-	-	NS
Box Buxus sempervirens	1	2003	840 m north	-	-	NR
Wild cabbage Brassica oleracea	1	2010	890 m north	-	-	NS
Round-headed leek Allium sphaerocephalon	1	1998	990 m north	-	-	WCA 8

Table 3.2 (cont'd): Summary of Protected/Notable Species Records Within 1 km of Survey Area (cont)

Key:

#: Species dependent.

†: Records are confidential and therefore proximity is not provided within the report.

ECH 2: Annex II of the European Communities Council Directive on the Conservation of Natural Habitats and Wild Fauna and Flora. Animal and plant species of community interest whose conservation requires the designation of Special Areas of Conservation.

ECH 4: Annex IV of the European Communities Council Directive on the Conservation of Natural Habitats and Wild Fauna and Flora. Animal and plant species of community interest in need of strict protection.

WCA 1i: Schedule 1 Part 1 of Wildlife and Countryside Act 1981 (as amended). Birds protected by special penalties at all times.

WCA 5: Schedule 5 of Wildlife and Countryside Act 1981 (as amended). Protected animals (other than birds).

WCA 5 S9(5): Schedule 5 Section 9(5) of Wildlife and Countryside Act 1981 (as amended). Protected animals (other than birds). Protection limited to selling, offering for sale, processing or transporting for purpose of sale, or advertising for sale, any live or dead animal, or any part of, or anything derived from, such animal.

WCA 6: Schedule 6 of Wildlife and Countryside Act 1981 (as amended). Animals which may not be killed or taken by certain methods.

WCA 8: Schedule 8 of Wildlife and Countryside Act 1981 (as amended). Protected plants and fungi.

WCA 8 S13(2): Schedule 8 Section 13(2) of Wildlife and Countryside Act 1981 (as amended). Protection limited to selling, offering for sale, possessing or transporting for purpose of sale, or advertising for sale, any live or dead plant, or any part of, or anything derived from, such plant.

Red: Bird species of high conservation concern.

Amber: Bird species of medium conservation concern.

EN: Endangered species.

NR: Nationally Rare species.

NS: Nationally Scarce species.

NT: Near Threatened species.

VU: Vulnerable species.

Species of Principal Importance: Species of Principal Importance for Nature Conservation in England. Local BAP: London Biodiversity Action Plan.

Note. This table does not include reference to the Berne Convention (Convention on the Conservation of European Wildlife and Natural Habitats), the Bonn Convention on the Conservation of Migratory Species of Wild Animals or the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES).

Table 3.2 (cont'd): Summary of Protected/Notable Species Records Within 1 km of Survey Area

3.4 INVASIVE SPECIES

Table 3.3 provides a summary of invasive species records within a 1 km radius of the study area. It should be noted that the absence of records should not be taken as confirmation that a species is absent from the search area.

Species	No. of Records	Most Recent Record	Proximity of Nearest Record to Study Area	Legislation / Conservation Status
Flora				
Cherry laurel Prunus laurocerasus	4	2007	Potentially on site*	LISI
Goat's-rue Galego officinalis	2	2007	Potentially on site*	LISI
Japanese knotweed <i>Fallopia japonica</i>	5	2007	360 m west	WCA9, LISI
False-acacia Robinia pseudoacacia	3	2003	360 m west	LISI
Green alkanet Pentaglottis sempervirens	28	2013	550 m north-east	LISI
Parrot's-feather Myriophyllum aquaticum	1	2002	570 m west	WCA9, LISI
Butterfly-bush Buddleia davidii	17	2013	610 m west	LISI

 Table 3.3: Summary of Invasive Species Records Within 1 km of Survey Area (cont)

Species	No. of Records	Most Recent Record	Proximity of Nearest Record to Study Area	Legislation / Conservation Status
Cotoneaster Cotoneaster sp.	4	2003	650 m north-east	WCA9 #, LISI
Turkey oak <i>Quercus cerris</i>	5	2012	690 m north-west	LISI
Three-cornered garlic Allium triquetrum	2	2011	690 m north-west	WCA9, LISI
Bluebell Hyacinthoides x massartiana	1	2009	690 m north-west	LISI
Evergreen oak <i>Quercus ilex</i>	12	2013	730 m north-west	LISI
Snowberry Symphoricarpos albus	9	2010	730 m north-west	LISI
Tree-of-heaven Ailanthus altissima	3	2011	740 m south-west	LISI
Rhododendron Rhododendron ponticum	2	2003	800 m north-west	WCA9, LISI
Spanish bluebell <i>Hyacinthoides hispanica</i>	1	2010	880 m east	LISI
Small balsam Impatiens parviflora	1	1976	Potentially within 1 km**	LISI
Fauna				
Signal crayfish Pacifastacus leniusculus	2	2009	980 m north-east	WCA9, LISI

#: Species dependent.
*: Grid reference provided straddles site boundary.
**: Record with 1 km² accuracy.

WCA9: Schedule 9 of Wildlife and Countryside Act 1981 (as amended). Invasive, non-native, plants and animals. LISI: London Invasive Species Initiative

Table 3.3 (cont'd): Summary of Invasive Species Records Within 1 km of Survey Area

4. PHASE 1 HABITAT SURVEY

4.1 INTRODUCTION

The results of the Phase 1 Habitat Survey are presented in the following sections. An annotated Phase 1 Habitat Survey Drawing (Drawing C118690-01-01) is provided in Chapter 7. This drawing illustrates the location and extent of all habitat types recorded on site. Any notable features or features too small to map are detailed using target notes. Photographs taken during the field survey are presented in Chapter 8.

The survey was carried out on 8th January 2015 by Jeffrey Grant, Ecological Project Officer. Table 4.1 details the weather conditions at the time of the survey.

Parameter	Condition
Temperature (°C)	9
Cloud (%)	30
Wind (Beaufort)	F2
Precipitation	Dry

Table 4.1: Weather Conditions During Field Survey

4.2 SURVEY CONSTRAINTS AND LIMITATIONS

January is not an optimal time for completing botanical assessments however, given the nature of the habitats present, this was not considered to be a significant constraint to a robust initial site assessment.

4.3 HABITATS

The following habitat types were recorded on site during the field survey:

- Amenity grassland;
- Building;
- Fencing;
- Hardstanding;
- Introduced shrub;
- Scattered scrub;
- Scattered trees; and,
- Wall.

These habitats are described below. They are ordered alphabetically, not in order of ecological importance.

Amenity grassland

Well-maintained, short-sward amenity grassland dominated the southern extent of the site (Plate 1). There was also a small area of amenity grassland to the east of the site between the building and the boundary wall (Plate 2). Both areas of grassland had poor species diversity; species included perennial rye-grass *Lolium perenne*, red fescue *Festuca rubra*, dandelion *Taraxacum officinale* agg and creeping buttercup *Ranunculus repens*.

Building

The north of the site was occupied by a two-storey, brick-built house with a concrete-tiled, mansard style roof containing skylights (Plate 3). A number of lifted and broken roof tiles were noted, particularly around the skylights, and lifted lead flashing was noted in places along the hipped ends of the roof. The brickwork was in good condition with no gaps noted, and the doors and windows of the building were all set in tightly fitted wooden and uPVC frames.

A wooden garden shed with a felt pitched roof was present in the garden to the south of the house (Plate 4). The wooden slats of the walls and the felt of the roof were tightly sealed but gaps were noted above and beneath the door.

For further details of the buildings, refer to the Daytime Bat Survey Report (RT-MME-118690-02).

Fencing

Wooden fencing measuring approximately 1.8 m in height delineated the southern boundary of the site and the western boundary up to the house. This was noted to have occasional ivy *Hedera helix* growing in places.

Hardstanding

Extensive areas of block paving and concrete slab hardstanding were recorded around the buildings on site and were used for pedestrian and vehicular access (Plate 5). A rubble pile was noted at the eastern end of the path which bordered the grassland in the south of the site (Target Note 2). These areas were generally devoid of vegetation, though common grass species had begun to colonise in the gaps in the block paving.

Introduced shrub

A number of planted shrub beds and a rockery border were located around the site (Target Note 3, Plates 6 and 7). Species present included bracken *Pteridium aquilinum*, common mallow *Malva sylvestris*, common nettle *Urtica dioica*, cotoneaster *cotoneaster sp*, cypress *Cupressus* sp., daffodil *Narcissus pseudonarcissus subsp*. *Pseudonarcissus*, daisy *Bellis perennis*, garden strawberry *Fragaria ananassa*, geranium *Geranium* sp., holly *Ilex aquifolium*, ivy, lavender *Lavandula angustifolia*, mullein *Verbascum* sp, palm *Arecaceae* sp., peony *Paeonia mascula*, primrose *Primula vulgaris*, privet *Ligustrum* sp, red-hot-poker *Kniphofia uvaria*, rose *Rosa* sp., rosemary *Rosmarinus officinalis*, sedge *carex* sp., and toadflax *Linaria vulgaris*.

Scattered scrub

A single stand of elder *Sambucus nigra* was recorded along the eastern site boundary. This measured approximately 3 m in height.

Scattered trees

A number of scattered deciduous trees were present on site, including two early-mature lime *Tilia x europaea* trees measuring between 12 m and 14 m in height located near the entrance (Plate 8). An early-mature sessile oak *Quercus petraea* tree measuring approximately 13 m tall was located on the embankment in the southern part of the site, near to the western boundary, and an early-mature London plane *Platanus x hispanica* measuring approximately 10 m tall was located next to the eastern boundary, also on the embankment (Plates 9 and 10). Two early-mature whitebeams *Sorbus aria* agg. were located in the south-eastern corner of the site and a young apple *Malus* sp. tree measuring approximately 4 m in height was located nearby (Plate 11). The trees were all in good condition.

A tree stump was noted along the eastern boundary. This covered with sawdust indicating that its removal was recent (Target Note 1, Plate 12).

Wall

A brick wall formed the northern boundary and extended part way along both the eastern and western boundaries of the site. This varied in height from approximately 1.5 m to 1.8 m, and supported ivy and cotoneaster in places which had begun to encroach from the adjacent shrub beds (Plate 13).

4.4 FAUNA

During the survey field signs of faunal species were recorded. The time of year at which the survey is undertaken will affect species or field signs directly recorded during the survey.

Birds

Blackbird *Turdus merula* was observed on site during the field survey.

4.5 INVASIVE PLANT SPECIES

No invasive plant species were recorded on site during the survey.

5. DISCUSSIONS AND CONCLUSIONS

5.1 SUMMARY OF PROPOSALS

It is understood that proposals for the site involve the demolition of the existing house and the construction of a new residential development composed of six apartments, with associated hardstanding and soft landscaping. All early-mature trees are proposed to be retained.

5.2 NATURE CONSERVATION SITES

The desk study exercise identified one statutory nature conservation site and nine non-statutory nature conservation sites within a 1 km radius of the survey area. The significance of these sites to the proposed development is discussed below.

UK Statutory Site

Belsize Wood is a Local Nature Reserve (LNR) located 870 m north-east of the survey area. Due to the relatively large distance and built-up nature of the intervening habitats, any detrimental impacts to the wildlife of this site is unlikely.

Non-Statutory Sites

The nearest non-statutory site is Frognal Court Wood, a Site of Borough Importance for Nature Conservation (Grade II) located 330 m west of the survey area. The remaining sites identified in Table 3.1 are located over 470 m away from the survey area. Due to the distance and lack of connectivity, no impact upon these sites is anticipated.

5.3 HABITATS

The ecological importance of the habitats present on site is determined by their presence on the list of Habitats of Principal Importance in England and on the Local BAP. It also takes into account the intrinsic value of the habitat. Those habitats which are considered to be of intrinsic importance and have the potential to be impacted by the site proposals are highlighted as notable considerations.

A discussion of the implications of the site proposals with regard to the habitats present on site is provided in the text below. A separate discussion of the value of the habitats on site to protected or notable species is provided in Section 5.4.

Amenity grassland

Amenity grassland is a common habitat that is well represented in the surrounding area. The example on site was well-maintained with poor species diversity and as such, is not a notable consideration.

Building

Buildings are a common habitat that are not usually a notable consideration in their own right but can support protected/notable species as discussed in Section 5.4.

Fencing

Fencing is a common habitat that can easily be replaced. The example on site is not a notable consideration in its own right but the vegetation it supports may help to support protected/notable species as discussed in Section 5.4. Habitat enhancement suggestions are made in Section 6.2.

Hardstanding

Hardstanding is a common habitat that is deemed to have no ecological value and therefore it is not a notable consideration.

Introduced shrub

Introduced shrub is a common habitat that is well represented in the surrounding area. The example on site supported mostly common and non-native species that can easily be replaced and as such, is not a notable consideration. However, it may support protected/notable species as discussed in Section 5.4. Habitat enhancement suggestions are made in Section 6.2.

Scattered scrub

Scrub is a common habitat that tends to establish relatively quickly. The example on site was limited in extent and as such, is not a notable consideration. However, it may support protected/notable species as discussed in Section 5.4. Habitat enhancement suggestions are made in Section 6.2.

Scattered trees

It is considered that the young trees on site can easily be replaced unlike the early-mature specimens which have intrinsic value. Therefore the early-mature trees are a notable consideration. Plans show the retention of the existing trees and as such, a recommendation regarding their protection is made in Section 6.2.

Wall

Walls are a common habitat that can easily be replaced. The example on site is not a notable consideration in its own right but it may help support protected/notable species as discussed in Section 5.4.

Habitats considered to be of relevance to the proposed development are summarised in Table 5.1.

Habitat Type	Habitat of Principal Importance?	Local BAP Habitat?	Summary of Potential Impacts
Scattered trees	-	-	Damage if not properly protected

Table 5.1: Summary of Potential Impacts on Notable Habitats

5.4 PROTECTED/NOTABLE SPECIES

The following paragraphs consider the likely impact of the site proposals on protected or notable species. This is based on those species highlighted in the desk study exercise (Chapter 3) and other species for which potentially suitable habitat occurs within or adjacent to the survey area.

Mammals - bats

The desk study provided records of six different species of bat within a 1 km radius of the survey area; the nearest record was of common pipistrelle located 250 m west. The buildings on site were generally in good condition but the Daytime Bat Survey revealed a number of lifted and broken roof tiles and areas of lifted lead flashing which provide potential ingress points and roosting locations for bats (refer to Report RT-MME-118690-02 for details). The trees were all in good condition with no features that could potentially be utilised by roosting bats (e.g. woodpecker holes, rot holes, split limbs, areas of delaminate bark, cracks or crevices). However, the trees and shrubs offer suitable foraging opportunities and link to more suitable foraging habitat via adjacent garden boundaries. Therefore, bats are a notable consideration and recommendations are made in Section 6.3.

Mammals - other

Hedgehog

The desk study provided five records of hedgehog within a 1 km radius of the survey area; the nearest record was located 590 m north. The site is considered to provide suitable foraging and refuge habitat for this species and as such, recommendations are made in Section 6.3.

Badger

The desk study did not provide any records of badger and no evidence of badger activity (e.g. setts, latrines, tracks, prints or hair) was found during the survey. However, the site offers suitable foraging habitat for this species and therefore badgers may pass through the site on occasion. As such, a precautionary recommendation regarding foraging terrestrial mammals is made in Section 6.3.

Amphibians

The desk study provided 31 records of common amphibians within a 1 km radius of the survey area; the nearest record was of common frog located 250 m west. The site is considered to offer limited suitable terrestrial habitat for common amphibians and there is no suitable breeding habitat (standing water) present on site. Reference to Ordnance Survey mapped data shows no waterbodies with the potential to provide suitable aquatic habitat within a 500 m radius of the site, though there may be unmapped garden ponds in the surrounding area. Therefore, a precautionary recommendation regarding vegetation clearance is made in Section 6.3.

Reptiles

The desk study did not provide any records of reptiles and the site is largely considered to be sub-optimal for this species group due to it predominantly comprising building, hardstanding and well-maintained grassland. However, there are isolated areas of more suitable habitat present, such as the rockeries and therefore a precautionary recommendation is made in Section 6.3.

Birds

The desk study provided records of a range of birds within a 1 km radius of the survey area, including protected species and species of conservation concern. Furthermore, blackbird was recorded on site during the survey. The buildings, trees, scrub and shrubs provide suitable nesting habitat for birds, particularly common garden species. Therefore, if building demolition or vegetation clearance works are undertaken during the bird nesting season then there is potential for impact upon nesting birds. As such, a recommendation regarding the timing of works is made in Section 6.3.

Invertebrates

Stag beetle

The desk study provided four records of stag beetle within a 1 km radius of the survey area; the nearest record was located 380 m north. There is no suitable decaying deadwood habitat for this species present on site and as such, stag beetle is not a notable consideration in relation to the proposed development. Habitat enhancement suggestions are made in Section 6.2.

Other

The desk study provided 29 records of notable moth species within a 1 km radius of the survey area; the nearest records for each species was located 360 m north. The site offers some suitable habitat for invertebrates, particularly common species, however it is considered unlikely that the site will support any rare species due to the common and widespread status of the habitats and plants present. Due to the presence of more suitable habitat within the surrounding area, no long-term impact upon invertebrates is anticipated. Habitat enhancement suggestions are made in Section 6.2.

Plants

The desk study provided records of a range of notable plant species within a 1 km radius of the survey area; the nearest records were of cornflower and corn marigold located 560 m north. No notable plant species were recorded on site during the survey and it is considered unlikely that the site will support any rare species due to the common and widespread status of the habitats present. Therefore plants are not a notable consideration in relation to the proposed development.

Other Species

The following protected species are not considered to be material considerations due to the lack of desk study records and absence of suitable habitats within the development site and its surroundings: brown hare *Lepus europeaus*, dormouse *Muscardinus avellanarius*, harvest mouse *Micromys minutus*, otter *Lutra lutra*, pine martin *Martes martes*, polecat *Mustela putorius*, red squirrel *Sciurus vulgaris*, water vole *Arvicola amphibius*, and white-clawed crayfish *Austropotamobius pallipes*.

Summary

Species considered to be of relevance to the proposed development are summarised in Table 5.2.

Species / Species Group	Species of Principal Importance?	Local BAP Species?	Summary of Potential Impacts
Mammals – bats	#	\checkmark	Loss of suitable habitat, direct harm or injury, lighting.
Mammals – other	#	#	Loss of suitable habitat, direct harm or injury
Amphibians	#	#	Loss of suitable habitat, direct harm or injury
Reptiles	✓	✓	Loss of suitable habitat, direct harm or injury
Birds	#	#	Loss of suitable habitat, direct harm or injury
Key:	•		

#: Species dependent

 Table 5.2: Summary of Potential Impacts on Notable Species

5.5 INVASIVE PLANT SPECIES

The desk study provided records of a range of invasive plant species within a 1 km radius of the survey area, however no invasive plant species were recorded on site during the survey. As such, invasive plant species are not a notable consideration in relation to the proposed development.

A summary of legislation and policy relevant to the ecology of the site is included in Appendix 2.

6. **RECOMMENDATIONS**

All recommendations provided in this section are based on Middlemarch Environmental Ltd's current understanding of the site proposals, correct at the time the report was compiled. Should the proposals alter, the conclusions and recommendations made in the report should be reviewed to ensure that they remain appropriate.

6.1 NATURE CONSERVATION SITES

There are no recommendations regarding nature conservation sites.

6.2 HABITATS

The following recommendations are made regarding the habitats present on site:

- **R1 Habitat Loss and Enhancement:** In accordance with the provision of Chapter 11 of the National Planning Policy Framework (Conserving and Enhancing the Natural Environment) and Local Planning Policy, biodiversity enhancement measures should be incorporated into the landscaping scheme of any proposed works to maximise the ecological value of the site. This will involve, for example:
 - Planting of habitats which will be of value to wildlife, such as:
 - native seed/fruit bearing species
 - nectar-rich species to attract bees and butterflies
 - native woody scrub species for birds
 - native and wildlife attracting climbing species
 - species which attract night flying insects which will be of value to foraging bats, for example: evening primrose *Oenothera biennis*, goldenrod *Solidago virgaurea*, honeysuckle *Lonicera periclymenum* and fleabane *Pulicaria dysenterica*.

• Provision of nesting/roosting habitat, such as installation of nest boxes for species such as house sparrow, dense scrub or native thicket for species such as song thrush, and bat boxes for species such as pipistrelle.

- Provision of hedgehog passes under fence lines.
- Creation of hibernation habitat for herpetofauna and hedgehogs.
- Creation of deadwood habitat for stag beetle/invertebrates.
- Creation of a pond.
- **R2 Trees:** The existing trees on or overhanging the site should be retained and protected in accordance with British Standard 5837: 2012 "Trees in relation to design, demolition and construction recommendations". Protection should be installed on site prior to the commencement of any works on site.

6.3 PROTECTED / NOTABLE SPECIES

To ensure compliance with wildlife legislation and relevant planning policy, the following recommendations are made:

- **R3 Roosting Bats:** The recommendations made in the Daytime Bat Survey Report (RT-MME-118690-02) should be followed.
- **R4 Foraging Bats:** Bats are likely to use trees for foraging and commuting. Therefore, in line with paragraph 125 of the National Planning Policy Framework, the development should aim to limit the impact of light pollution on bats through the careful use of lighting in critical areas only and at a low level with minimum spillage.

- **R5** Terrestrial Mammals including Badger and Hedgehog: Any excavations that need to be left overnight should be covered or fitted with mammal ramps to ensure that any animals that enter can safely escape. Any open pipework with an outside diameter of greater than 120 mm must be covered at the end of each work day to prevent animals entering/becoming trapped.
- **R6** Hedgehog and Common Amphibians: Vegetation clearance/removal should be undertaken in a sensitive manner to avoid harming hedgehogs and common amphibians. If any are found during the course of site-based works they should be removed carefully to a suitably undisturbed location within the near vicinity. In the event that a great crested newt or reptile is found on site, all works should cease and a suitably qualified ecologist should be contacted for advice.
- **R7** Nesting Birds: Vegetation clearance should be undertaken outside the nesting bird season. The nesting bird season is weather dependent but generally extends between March and September inclusive. If this is not possible then any vegetation that is to be removed or disturbed should be checked by an experienced ecologist for nesting birds immediately prior to works commencing. If birds are found to be nesting any works which may affect them would have to be delayed until the young have fledged and the nest has been abandoned naturally.

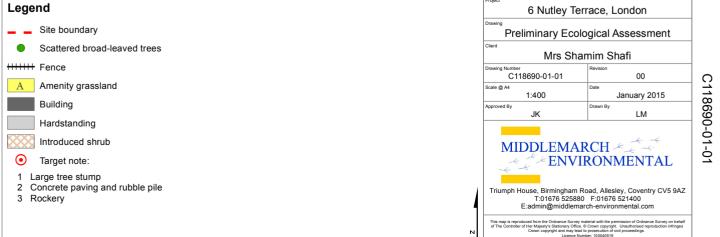
6.4 INVASIVE PLANT SPECIES

There are no recommendations regarding invasive plant species.

7. DRAWINGS

Drawing C118690-01-01 Phase 1 Habitat Map





8. PHOTOGRAPHS



Plate 1: Amenity grassland dominating the southern extent of the site



Plate 2: Amenity grassland between the building and boundary wall



Plate 3: View of house, looking north



Plate 5: Block paving





Plate 6: Introduced shrub bed



Plate 7: Rockery areas



Plate 8: Lime tree near site entrance



Plate 9: Sessile oak near western boundary



Plate 10: London plane and whitebeam trees along eastern boundary



Plate 11: Apple tree in south of site



Plate 13: Western boundary wall with encroaching shrub species



Plate 12: Tree stump

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- Middlemarch Environmental Ltd (2015) *Daytime Bat Survey: 6 Nutley Terrace, Greater London*. Report RT-MME-118690-02.

APPENDICES

APPENDIX 1: Summary of Statutory Nature Conservation Sites Within 1	km
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APPENDIX 2: Overview of Relevant Legislation and Policy

APPENDIX 1

Summary of Statutory Nature Conservation Sites Within 1 km

Site Check Report

Report generated on Tue Jan 20 2015 Centroid Grid Ref: TQ266849

The following features have been found in your search area:

Local Nature Reserves (England)

Reference: 1421538 Name: BELSIZE WOOD Hectares: 0.27 Hyperlink: <u>http://www.lnr.naturalengland.org.uk/special/lnr/lnr_details.asp?themeid=1421538</u>

SSSI Impact Risk Zones (England) - For use by Local Planning Authorities to assess planning applications for likely impacts on SSSIs

1. DOES PLANNING PROPOSAL FALL INTO ONE OR MORE OF THE CATEGORIES BELOW? 2. IF YES, CHECK THE CORRESPONDING DESCRIPTION(S) BELOW. LPA SHOULD CONSULT NATURAL ENGLAND ON LIKELY RISKS FROM THE FOLLOWING:

All Planning Applications

Infrastructure: Pipelines, pylons and overhead cables. Any transport proposal including road, rail and by water (excluding routine maintenance).

Wind & Solar Energy

Quarry: Planning applications for quarries, including: new proposals, Review of Minerals Permissions (ROMP), extensions, variations to conditions etc.

Non Residential: Large infrastructure such as warehousing / industry where total net additional gross internal floorspace following development' is 1000m² or more.

Residential: Residential development of 100 units or more.

Rural Residential: Any residential development of 100 or more houses outside existing settlements/urban areas.

Air Pollution: Pig & Poultry Units. Any other development/ industrial or commercial process that could cause AIR POLLUTION.

Combustion: General combustion processes >20MW energy input. Inc.: energy from waste incineration, other incineration, landfill gas generation plant, pyrolysis/gasification, anaerobic digestion, sewage treatment Waste: Landfill. Inc.: inert landfill, non-hazardous landfill, hazardous landfill.

Composting: Any composting proposal with more than 75000 tonnes maximum annual operational throughput. Inc.: open windrow composting, in-vessel composting, anaerobic digestion, other waste management.

Discharges: Any discharge of water or liquid waste that is more than 5m³/day. The water needs to either be discharged to ground (i.e. to seep away) or to surface water, such as a beck or stream. Discharges to mains Water Supply.

Guidance: /Metadata_for_magic/SSSI IRZ User Guidance v1.9 MAGIC 03November2014.pdf

Ancient Woodland (England)

No Features found

National Nature Reserves (England) No Features found

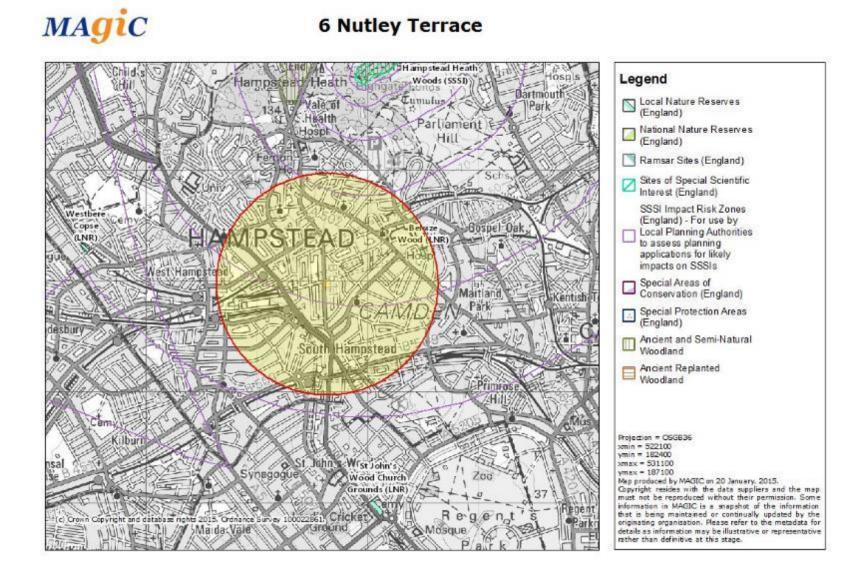
Ramsar Sites (England)

No Features found

Sites of Special Scientific Interest (England) No Features found

Special Areas of Conservation (England) No Features found

Special Protection Areas (England) No Features found



APPENDIX 2

Overview of Relevant Legislation and Policy

This section provides an overview of the framework of legislation and policy which underpins nature conservation and is a material consideration in the planning process in England.

GENERAL BIODIVERSITY LEGISLATION AND POLICY

Conservation of Habitats and Species Regulations 2010, as amended (Habitats Regulations 2010, as amended)

The Habitats Regulations 2010 consolidate and update the Conservation (Natural Habitats, &c.) Regulations 1994 and all its various amendments. The Habitats Regulations 2010 are the principal means by which the EEC Council Directive 92/43 (The Habitats Directive) as amended is transposed into English and Welsh law.

The Habitats Regulations 2010 place 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 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.

The Habitats Regulations 2010 were amended in August 2012 to ensure clearer transposition of the provisions of Articles 2, 3, 4(4) (second sentence) and Article 10 of the Wild Birds Directive, by giving additional and specific duties to relevant bodies. A number of amendments were also made to transpose more clearly certain elements of the Habitats Directive.

The Wildlife and Countryside Act (WCA) 1981 (as amended)

The WCA, as amended, consolidates and amends pre-existing national wildlife legislation in order to implement the Bern Convention and the Birds Directive. It complements the Habitat Regulations 2010 (as amended), offering protection to a wider range of species. The Act also provides for the designation and protection of national conservation sites of value for their floral, faunal or geological features, termed Sites of Special Scientific Interest (SSSIs).

Schedules of the act provide lists of protected species, both flora and fauna, and detail the possible offences that apply to these species. All relevant species specific legislation is detailed later in this Appendix.

The Countryside and Rights of Way (CRoW) Act 2000

The CROW Act, introduced in England and Wales in 2000, amends and strengthens existing wildlife legislation detailed in the WCA. It places a duty on government departments and the National Assembly for Wales to have regard for biodiversity, and provides increased powers for the protection and maintenance of SSSIs. The Act also contains 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 Natural Environment and Rural Communities (NERC) Act 2006

Section 40 of the NERC 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 superseded Section 74 of the CRoW Act 2000.

The Hedgerow Regulations 1997

The Hedgerow Regulations make provision for the identification of important hedgerows which may not be removed without permission from the Local Planning Authority.

UK Biodiversity Action Plan

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

The UK BAP required that conservation of biodiversity was addressed at a County level through the production of Local BAPs. These were complementary to the UK BAP, however were 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.

Species and Habitats of Material Consideration for Planning in England

In 2011, the government published the 'Biodiversity 2020: A strategy for England's wildlife and ecosystem services' to replace the previous England Biodiversity Strategy. In 2012 the UK BAP was replaced by the UK Post-2010 Biodiversity Framework.

Previous planning policy (and some supporting guidance which is still current, e.g. ODPM Circular 06/2005, now under revision), refers to UK BAP habitats and species as being a material consideration in the planning process. Equally many local plans refer to BAP priority habitats and species. Both remain as material considerations in the planning process but such habitats and species are now described as Species and Habitats of Principal Importance for Conservation in England, or simply priority habitats and priority species under the UK Post-2010 Biodiversity Framework. The list of habitats and species remains unchanged and is still derived from Section 41 list of the Natural Environmental and Rural Communities (NERC) Act 2006. As was previously the case when it was a BAP priority species hen harrier continues to be regarded as a priority species although it does not appear on the Section 41 list.

NATIONAL PLANNING POLICY FRAMEWORK AND PRACTICE GUIDANCE

In early 2012, the National Planning Policy Framework (NPPF) replaced much previous planning policy guidance, including Planning Policy Statement 9: Biological and Geological Conservation. The government circular 06/05: Biodiversity and Geological Conservation - Statutory Obligations and Their Impact within the Planning System, which accompanied PPS9, still remains valid. A presumption towards sustainable development is at the heart of the NPPF. This presumption does not apply however where developments require appropriate assessment under the Birds or Habitats Directives.

Chapter 11, on conserving and enhancing the natural environment, sets out how the planning system should contribute to and enhance the natural and local environment by minimising impacts on biodiversity and, where possible, provide net gains in biodiversity. Opportunities to incorporate biodiversity gains into a development should be encouraged.

If a proposed development would result in significant harm to the natural environment which cannot be avoided (through the use of an alternative site with less harmful impacts), mitigated or compensated for (as a last resort) then planning permission should be refused.

In March 2014 the Department for Communities and Local Government released guidance to support the National Planning Policy Framework (NPPF), known as the National Planning Practice Guidance (NPPG).

This has been produced to provide guidance for planners and communities which will help deliver high quality development and sustainable growth in England. The guidance includes a section entitled 'Natural Environment: Biodiversity, ecosystems and green infrastructure' which sets out information with respect to the following:

- the statutory basis for minimising impacts on biodiversity and providing net gains where possible;
- the local planning authority's requirements for planning for biodiversity;
- what local ecological networks are and how to identify and map them;

- the sources of ecological evidence;
- the legal obligations on local planning authorities and developers regarding statutory designated sites and protected species;
- the considerations for local (non-statutory) designated sites;
- definition of green infrastructure;
- where biodiversity should be taken into account in preparing a planning application;
- how development can enhance biodiversity;
- how policy is applied to avoid, mitigate or compensate for significant harm to biodiversity and how mitigation and compensation measures can be ensured; and,
- the consideration of ancient woodlands and veteran trees in planning decisions.

LOCAL PLANNING POLICY - LONDON BOROUGH OF CAMDEN

http://camden.gov.uk/ccm/navigation/environment/planning-and-built-environment/planning-policy/

The Local Development Framework (LDF) is a collection of planning documents that (in conjunction with national planning policy and the London Plan) sets out the strategy for managing growth and development in the borough, including where new homes, jobs and infrastructure will be located. The LDF replaced the former Unitary Development Plan (UDP) in November 2010.

Core Strategy (2010-2025)

The Core Strategy is a central part of the LDF which sets out the key elements of the Council's planning vision and strategy for the borough. It was adopted at a Full Council meeting on the 8th November 2010. The policy of relevance to ecology is detailed below:

Policy CS15 – Protecting and Improving our Parks and Open Spaces and Encouraging Biodiversity The Council will protect and improve Camden's parks and open spaces. We will:

a) protect open spaces designated in the open space schedule as shown on the

Proposals Map, including our Metropolitan Open Land, and other suitable land of 400sqm or more on large estates with the potential to be used as open space;

b) tackle deficiencies and under-provision and meet increased demand for open space by:

- providing additional open space at King's Cross;

- securing additional on-site public open space in the growth areas of Euston, West Hampstead Interchange, Holborn and Tottenham Court Road, and other parts of Central London. Where the provision of on-site public open space is not practical on a particular site in these areas, the Council will require a contribution to the provision of additional public open space on identified sites in the vicinity. If it can be demonstrated to the Council's satisfaction that no such suitable sites are available, we will require improvements to other open spaces in the area;

- securing improvements to publicly accessible open land on the Council's housing estates; and

- securing other opportunities for additional public open space.

c) secure from developments that create an additional demand for open space, where opportunities arise, improvements to open spaces, including to:

- the facilities provided, such as play and sports facilities;

- access arrangements; and

- the connections between spaces.

The Council will protect and improve sites of nature conservation and biodiversity, in particular habitats and biodiversity identified in the Camden and London Biodiversity Plans in the borough by:

d) designating existing nature conservation sites;

e) protecting other green areas with nature conservation value, including gardens, where possible;

f) seeking to improve opportunities to experience nature, in particular in South and West Hampstead, Kentish Town and central London, where such opportunities are lacking;

g) expecting the provision of new or enhanced habitat, where possible, including through biodiverse green or brown roofs and green walls;

h) identifying habitat corridors and securing biodiversity improvements along gaps in habitat corridors; i) working with The Royal Parks, the London Wildlife Trust, friends of parks groups and local nature

conservation groups to protect and improve open spaces and nature conservation in Camden;

j) protecting trees and promoting the provision of new trees and vegetation, including additional street trees.

The Council will preserve and enhance the historic, open space and nature conservation importance of Hampstead Heath and its surrounding area by:

k) working with the City of London, English Heritage and Natural England to manage and improve the Heath and its surrounding areas;

I) protecting the Metropolitan Open Land, public and private open space and the nature conservation designations of sites;

m) seeking to extend the public open space when possible and appropriate;

n) taking into account the impact on the Heath when considering relevant planning applications;

o) protecting views from Hampstead Heath and views across the Heath and its surrounding area;

p) improving the biodiversity of, and habitats in, Hampstead Heath and its surrounding area, where opportunities arise.

The Council will preserve and enhance the Regent's Canal by:

q) balancing the differing demands on the Canal, its towpath and adjoining land;

r) implementing opportunities to make the Canal a safer place;

s) applying the guidance in the Regent's Canal Conservation Area Management Strategy;

t) implementing opportunities to provide additional nature conservation areas and improve the role of the Canal and its adjoining land as a habitat corridor (green chain);

u) working with British Waterways, Natural England, other land owners/developers, users and the local community to improve the Canal and towpath.

Local Plan

The Council is preparing a new draft Local Plan to ensure Camden has robust and up-to-date planning policies to deliver sustainable growth, sustainable communities and other local priorities. The Local Plan will replace the existing Core Strategy and Development Policies documents. The Council intends on publishing the draft of the Local Plan for comment in early 2015.

LOCAL PLANNING POLICY - CITY OF LONDON

http://www.cityoflondon.gov.uk/services/environment-and-planning/planning/planning policy/Pages/default.aspx

Core Strategy

The Core Strategy (adopted in 2011) sets out the vision and key policies for planning in the City. With respect to ecology the relevant policies are:

Policy CS15: Sustainable Development and Climate Change. Part of this policy requires development to positively address 'the need to enhance biodiversity and provide for its conservation and enhancement, particularly for the City's flagshipspecies and the City's priority habitats (urban green spaces, churchyards and cemeteries, built structures and the tidal Thames).'

Policy CS19: Open Spaces and Recreation. Part of this policy relates to '*increasing the biodiversity value* of open spaces, paying particular attention to sites of importance for nature conservation such as the River Thames. Protecting the amenity value of trees and retaining and planting more trees wherever practicable.'

Adopted Local Supplementary Planning Documents

Supplementary Planning Documents (SPDs) provide further detailed guidance on policies within the <u>Core</u> <u>Strategy</u>. Those relevant to ecology include:

- **Tree Strategy** seeks to provide a co-ordinated approach to the management of trees in the City of London.
- Smithfield Conservation Area- a section of this document relates the management of open spaces and trees.

'Saved' Unitary Development Plan Policies

The Unitary Development Plan, (UDP) adopted in 2002, was the previous plan for the City. Most of its policies have been superseded by the <u>Core Strategy</u>, but 55 remain in force until the adoption of the <u>Local</u> <u>Plan</u> in early 2015. With respect to ecology the relevant policies are:

Policy ENV 9: Trees and Landscaping aims 'To safeguard all trees that are subject to tree preservation orders and to make tree preservation orders where expedient in the interests of amenity. To protect trees that contribute to the character or appearance of conservation areas. Elsewhere, to seek to retain or replace trees of importance to the townscape of the City and promote enhancement through additional planting where appropriate'.

SPECIES SPECIFIC LEGISLATION

This section contains a summary of legislation with relation to the species present or potentially present in the survey area. The reader should refer to the original legislation for definitive interpretation.

Badger

Badgers and their setts are protected under the Protection of Badgers Act 1992. The Protection of Badgers Act 1992 is based primarily on the need to protect badgers from baiting and deliberate harm or injury, badgers are not protected for conservation reasons. The following are criminal offences:

- To intentionally or recklessly interfere with a sett. Sett interference includes disturbing badgers
- whilst they are occupying a sett, as well as damaging or destroying a sett or obstructing access to it.
- To wilfully kill, injure, take, possess or cruelly ill-treat a badger, or to attempt to do so.

A badger sett is defined in the legislation as:

• 'Any structure or place that displays signs indicating current use by a badger'.

'Current use' is not synonymous with current occupation and a sett is defined as such (and thus protected) as long as signs of current usage are present. Therefore, a sett is protected until such a time as the field signs deteriorate to such an extent that they no longer indicate 'current usage'.

Badger sett interference can result from a multitude of operations including excavation and coring, even if there is no direct damage to the sett, such as through the disturbance of badgers whilst occupying the sett. Any intentional or reckless work that results in the interference of badger setts is illegal without a licence from Natural England³⁰. In England a licence must be obtained from Natural England before any interference with a badger sett occurs.

Bats

Bats and the places they use for shelter or protection (i.e. roosts) receive European protection under The Conservation of Habitats and Species Regulations 2010, as amended (Habitats Regulations 2010, as amended). They receive further legal protection under the Wildlife and Countryside Act (WCA) 1981, as amended. This protection means that bats, and the places they use for shelter or protection, are capable of being a material consideration in the planning process.

Regulation 41 of the Habitats Regulations 2010 (as amended), states that a person commits an offence if they:

- deliberately capture, injure or kill a bat;
- deliberately disturb bats; or
- damage or destroy a bat roost (breeding site or resting place).

Disturbance of animals includes in particular any disturbance which is likely to impair their ability to survive, to breed or reproduce, or to rear or nurture their young, or in the case of animals of a hibernating or migratory species, to hibernate or migrate; or to affect significantly the local distribution or abundance of the species to which they belong.

It is an offence under the Habitats Regulations 2010 (as amended) for any person to have in his possession or control, to transport, to sell or exchange or to offer for sale, any live or dead bats, part of a bat or anything derived from bats, which has been unlawfully taken from the wild.

Whilst broadly similar to the above legislation, the WCA 1981 (as amended) differs in the following ways:

• Section 9(1) of the WCA makes it an offence to *intentionally* (rather than deliberately) kill, injure or take any protected species.

- Section 9(4)(a) of the WCA makes it an offence to *intentionally or recklessly** damage or destroy, *or obstruct access to*, any structure or place which a protected species uses for shelter or protection.
- Section 9(4)(b) of the WCA makes it an offence to *intentionally or recklessly** disturb any protected species while it is occupying a structure or place which it uses for shelter or protection.

*Reckless offences were added by the Countryside and Rights of Way (CRoW) Act 2000.

As bats re-use the same roosts (breeding site or resting place) after periods of vacancy, legal opinion is that roosts are protected whether or not bats are present.

The following bat species are Species of Principal Importance for Nature Conservation in England: Barbastelle Bat *Barbastella barbastellus*, Bechstein's Bat *Myotis bechsteinii*, Noctule Bat *Nyctalus noctula*, Soprano Pipistrelle *Pipistrellus pygmaeus*, Brown Long-eared Bat *Plecotus auritus*, Greater Horseshoe Bat *Rhinolophus ferrumequinum* and Lesser Horseshoe Bat *Rhinolophus hipposideros*.

Birds

The Conservation of Habitats and Species Regulations 2010 (as amended) places a duty on public bodies to take measures to preserve, maintain and re-establish habitat for wild birds.

Nesting and nest building birds are protected under the Wildlife and Countryside Act WCA 1981 (as amended).

Subject to the provisions of the act, if any person intentionally:

- kills, injures or takes any wild bird;
- takes, damages or destroys the nest of any wild bird while that nest is in use or being built; or
- takes or destroys an egg of any wild bird, he shall be guilty of an offence.

Some species (listed in Schedule 1 of the WCA) are protected by special penalties. Subject to the provisions of the act, if any person intentionally or recklessly:

- disturbs any wild bird included in Schedule 1 while it is building a nest or is in, on or near a nest containing eggs or young; or
- disturbs dependent young of such a bird, he shall be guilty of an offence.

Several bird species are Species of Principal Importance for Nature Conservation in England, making them capable of being material considerations in the planning process.

Common amphibians

Common frogs, common toad, smooth newt and palmate newt are protected in Britain under Schedule 5 of the Wildlife and Countryside Act (1981, as amended) with respect to sale only. They are also listed under Annex III of the Bern Convention 1979. Any exploitation of wild fauna specified in Appendix III shall be regulated in order to keep the populations out of danger. The convention seeks to prohibit the use of all indiscriminate means of capture and killing and the use of all means capable of causing local disappearance of, or serious disturbance to, populations of a species.

Common toad is listed as a Species of Principal Importance for Nature Conservation in England.

Great crested newt

Great crested newts (GCN) and the places they use for shelter or protection receive European protection under The Conservation of Habitats and Species Regulations 2010, as amended (Habitats Regulations 2010, as amended). They receive further legal protection under the Wildlife and Countryside Act (WCA) 1981, as amended. This protection means that GCN, and the places they use for shelter or protection, are capable of being a material consideration in the planning process.

Regulation 41 of the Habitats Regulations 2010 (as amended), states that a person commits an offence if they:

- deliberately capture, injure or kill a GCN;
- deliberately disturb GCN;
- deliberately take or destroy eggs of a GCN; or
- damage or destroy a GCN breeding site or resting place.

Disturbance of animals includes in particular any disturbance which is likely to impair their ability to survive, to breed or reproduce, or to rear or nurture their young, or in the case of animals of a hibernating or migratory species, to hibernate or migrate; or to affect significantly the local distribution or abundance of the species to which they belong.

It is an offence under the Habitats Regulations 2010 (as amended) for any person to have in his possession or control, to transport, to sell or exchange or to offer for sale, any live or dead GCN, part of a GCN or anything derived from GCN, which has been unlawfully taken from the wild. This legislation applies to all life stages of GCN.

Whilst broadly similar to the above legislation, the WCA 1981 (as amended) differs in the following ways:

- Section 9(1) of the WCA makes it an offence to *intentionally* (rather than deliberately) kill, injure or take any protected species.
- Section 9(4)(a) of the WCA makes it an offence to *intentionally or recklessly** damage or destroy, *or obstruct access to*, any structure or place which a protected species uses for shelter or protection.
- Section 9(4)(b) of the WCA makes it an offence to *intentionally or recklessly** disturb any protected species while it is occupying a structure or place which it uses for shelter or protection.

*Reckless offences were added by the Countryside and Rights of Way (CRoW) Act 2000.

Hedgehog

Hedgehogs receive some protection under Schedule 6 of the Wildlife and Countryside Act 1981 (as amended); this section of the Act lists animals which may not be killed or taken by certain methods, namely traps and nets, poisons, automatic weapons, electrical devices, smokes/gases and various others. Humane trapping for research purposes requires a licence.

Hedgehogs are a Species of Principal Importance for Nature Conservation in England and are thus capable of being material considerations in the planning process.

Reptiles

All of the UK's native reptiles are protected by law. The two rarest species – sand lizard (*Lacerta agilis*) and smooth snake (*Coronella austriaca*) – benefit from the greatest protection; however these two species have a limited geographical distribution and special habitat requirements. Common lizard (*Zootoca vivipara*), slowworm (*Anguis fragilis*), adder (*Vipera berus*) and grass snake (*Natrix natrix*) are protected under the Wildlife and Countryside Act 1981 as amended from intentional killing or injuring.

In England and Wales, this Act has been amended by the Countryside and Rights of Way Act 2000 (CRoW), which adds an extra offence, makes species offences arrestable, increases the time limits for some prosecutions and increases penalties. The Natural Environment and Rural Communities (NERC) Act 2006 places a duty on Government Departments to have regard for the conservation of biodiversity and maintains lists of species and habitats which are of principal importance for the purposes of conserving biodiversity in England and Wales. All native reptile species are included on these lists.

This is a simplified description of the legislation. In particular, the offences mentioned here may be absolute, intentional, deliberate or reckless. Note that where it is predictable that reptiles are likely to be killed or injured by activities such as site clearance, this could legally constitute intentional killing or injuring.