The Ecology Consultancy

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King's College London, Hampstead Residence, Kidderpore Avenue

Preliminary Ecological Appraisal & Preliminary Bat Roost Assessment

Report for Mount Anvil

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Executive Summary

A Preliminary Ecological Appraisal and a Preliminary Bat Roost Assessment were carried out at the King's College London, Hapstead Residence on Kidderpore Avenue, London Borough of Camden, on the 11th July 2014. The Preliminary Ecological Appraisal includes an assesssment of any ecological constraints applying to the development and recommendations for protecting, managing and enhancing the wildlife value of the site. The Preliminary Bat Roost Assessment involved a detailed inspection of the buildings on-site to evaluate the potential to support roosting bats. The main findings of the survey are as follows:

- The site does not form part of any statutory designated nature conservation site. The nearest such site is Westbere Copse LNR located 960m south-west of the site.
- The site forms part of a non-statutory Site of Importance for Nature Conservation (SINC); King's College Hampstead Campus, a Site of Borough Grade II Importance for Nature Conservation designated for its range of wildlife supporting habitats. There are eight further SINCs within 1km of the proposed development site.
- The site consisted of buildings, hard standing, amenity grassland, introduced shrub, tall ruderal vegetation, small patches of scrub and broadleaved woodland, and scattered trees.
- Three buildings (B5, B7 and B8) on the site were assessed as having moderate potential to support roosting bats. Five buildings (B1, B3, B4, B9 and B10) were assessed as having low potential to support roosting bats. The remaining buildings (B2 and B6) were assessed as having negligible potential to support roosting bats. All species of bat and their roosts are fully protected under the Conservation of Habitats and Species Regulations 2010 (as amended) and under the Wildlife and Countryside Act 1981 (as amended).
- Eight trees (T3, T4, T5, T6, T23, T26, T30 and T50) have been identified as requiring further investigation if they are to be affected as part of the proposed development.
- Buildings assessed as having potential to support roosting bats require further bat surveys to be carried out prior to works. Buildings with negligible potential to support roosting bats do not require further survey regarding bats. Surveys required for this site are detailed in Section 5.
- A birds' nest of an unconfirmed species and a potential house sparrow nest were identified on-site. Furthermore, the small patches of scrub and broadleaved woodland, scattered trees and introduced shrub on-site were considered suitable to support widespread nesting bird species. All nesting birds are protected under the Wildlife and Countryside Act 1981 (as amended).

- No other species were considered likely to be supported within the site.
- The invasive plant species' giant hogweed *Heracleum mantegazzianum* and cotoneaster were recorded on-site. Giant hogweed and five species of cotoneaster are listed under Schedule 9 of the WCA, 1981 (as amended). Under the Act it is an offence to plant or otherwise cause these species to grow in the wild. The giant hogweed on-site was in the process of being eradicated. This process should continue to be conducted with due care. Similarly, care should be taken if removal of the cotoneaster plants is required. Advice is provided in Section 5.
- Further protected species surveys and mitigation measures are recommended due to the potential presence of protected species. Further detail can be found in Section 5 of this report.
- Enhancement measures are also provided to improve the biodiversity on-site. Further detail can be found in Section 5 of this report.

1 Introduction

BACKGROUND

1.1 The Ecology Consultancy was commissioned by Mount Anvil in July 2014, to carry out a Preliminary Ecological Appraisal and Preliminary Bat Roost Assessment of the King's College London, Hampstead Rsidence, Kidderpore Avenue application site in the London Borough of Camden.

1.2 The survey was carried out in order to provide baseline ecological information and to assess the potential for the site to support protected species. The assessment highlights any potential ecological constraints associated with the proposed development and provides recommendations for further surveys, where appropriate, to ensure that the development complies with relevant legislation. This appraisal considers land within the planning application site boundary as indicated in Appendix 1, Figure 1 (hereafter this area is referred to as 'the site').

SCOPE OF THE REPORT

1.3 This report outlines the methodologies and results of the Preliminary Ecological Appraisal and Preliminary Bat Roost Assessment conducted on the 11th July 2014.

1.4 A habitat map and building assessment plan for the site are included in Appendix 1, together with photographs in Appendix 2.

Habitat Survey and Protected Species Assessment

1.5 This assessment is based on a desk top study, an extended field survey using standard Phase 1 habitat survey modified for use in an urban context by the Greater London Authority (GLA, 2002), and a protected species assessment. This approach is designed to identify broad habitat types at a site, to identify the potential of habitats to support protected species, and to assist in providing an overview of the ecological interest at a site. It is generally the most widely used and professionally recognised method for a Preliminary Ecological Appraisal (CIEEM, 2012).

1.6 A full list of plant species identified during the survey is provided in Appendix 3. Scientific names are given after the first mention of a species, thereafter, common names only are used. Nomenclature follows Stace (2010) for vascular plant species. The relevant legislation and policies relating to protected species and habitats are set out in Appendix 4.

Preliminary Bat Roost Assessment

1.7 This assessment is based on a desk top study and a field survey comprising an internal and external building inspection for bats. The methodology of the survey was based on the Bat Conservation Trust *Bat Survey: Good Practice Guidelines, 2nd Edition* (Hundt, 2012). This approach is used to apply suitable mitigation measures, provide recommendations for further surveys where appropriate, and to advise precautionary approaches prior to and during the proposed works.

1.8 The Preliminary Bat Roost Assessment also included a ground-based inspection of the trees within the development footprint in the event that they are proposed to be omitted from the final design.

SITE CONTEXT AND STATUS

1.9 The site comprised a one large building with associated outbuidlings and a walled garden within an area of unmanaged scrub and tall ruderal vegetation, and scattered mature trees.

1.10 The site is located in an urban area with Twyford Abbey Road bordering the southern boundary of the site, residential properties, a church and a school to the east and west, and the A406 North Circular Road to the North. The surrounding landscape consists of residential and commercial properties with an extensive area of light industrial units further to the east. Green spaces located in the vicinity include the Royal Park Recreation Ground, approximately 100m south-west of the site and numerous vegetated habitat corridors including the river Brent 100m to the north, and th London Underground Central Line within 350m to the west.

1.11 The proposed development site totals approximately 5.4 hectares (ha) in size.The National Grid Reference for the centre of the site is TQ 190 831.

DEVELOPMENT PROPOSALS

1.12 The proposed development involves the retention of the site's five Grade II statutorily listed buildings. Kidderpore Hall (part of B5 in Appendix 1, Plan 1), the Maynard Wing (rest of B5), the Chapel (B8) and the old Skeel Library (part of B4) will all be sensitively converted to residential use, and the Summerhouse (B9) will be restored in a new location on the site close to the Chapel.

1.13 Other non-listed buildings will also be retained and sensitively converted to residential use, namely Bay House (B6), Dudin Brown (rest of B4), and Lady Chapman Hall (B3).

1.14 Three existing buildings will be demolished and replaced with new residential buildings: Lord Cameron (B1), Rosalind Franklin (B2) and the Queen Mother's Hall (B7).

1.15 Integrated in the Kidderpore Avenue elevation of the replacement for the Queen Mother's Hall will be an access to a basement area where car parking for residents and visitors will be provided. In total 95 spaces are proposed. The majority of cycle parking requirements will also be accommodated in the basement, amount to 312 spaces. Some cycle parking – in particular that intended to be used by visitors, amounting to 16 spaces – will be provided at ground floor level, carefully integrated into the hard and soft landscaping scheme.

1.16 New buildings are proposed in two locations on the site. The first is between the Chapel and Queen Mother's Hall where 'pavilion' houses are proposed. A terrace of 'townhouses' is proposed between the Chapel and the Maynard Wing on the site of the previously-consented student accommodation development, planning permission for which remains extant by virtue of the development having been commenced.

1.17 The proposed development also includes residents' facilities and a concierge.

2 Methodology

DESK TOP STUDY

2.1 Information regarding the present and historical ecological interest of the site within a 1 kilometre (km) radius was requested from Greenspace Information for Greater London (GiGL, 2014). In addition, a search was made of the on-line mapping service MAGIC (http://magic.defra.gov.uk/) to determine the presence of any statutory designated sites within the same radius.

2.2 Consideration was given to the potential presence of Habitats and Species of Principal Importance for the Conservation of Biodiversity[1] in England under the Natural Environment and Rural Communities (NERC) Act 2006 and the London Biodiversity Action Plan (BAP) were reviewed for those species and habitats that may be, or are potentially, present at the site.

2.3 The following information regarding the present and historical ecological interest of the site and land within a 1km radius was sourced from GiGL and MAGIC:

- Statutory sites of nature conservation importance;
- Non-statutory sites designated as Sites of Importance for Nature Conservation (SINCs) at county level as being of local conservation importance and often recognised in Local Authority development plans;
- Protected, rare and other notable species and;
- Habitats and Species of Principal Importance for the Conservation of Biodiversity in England under the NERC Act 2006 which may be relevant to the site (hereafter referred to as 'Species of Principal Importance' and 'Habitats of Principal Importance').

HABITAT SURVEY

1 56 Habitats of Principal Importance for Biodiversity and 943 Species of Principal Importance for Biodiversity are included in the NERC Act. These are all the habitats and species in England that were identified as requiring action in the UK Biodiversity Action Plan (UK BAP) and continue to be regarded as conservation priorities in the subsequent UK Post-2010 Biodiversity Framework.

2.4 A field survey of the site was carried out on 11th July 2014. Habitats were described and mapped following standard Phase 1 Habitat survey methodology (JNCC, 2010). A full list of plant species identified during the survey for each site, along with an assessment of their abundance[2], is provided in Appendix 3. The site was also surveyed for the presence of invasive plant species as defined by Schedule 9 of the Wildlife and Countryside Act, 1981 (see Appendix 4).

2.5 The survey was conducted by a suitably experienced and qualified ecologist, who is competent in carrying out extended Phase 1 habitat surveys and is a graduate member of the Chartered Institute of Ecology and Environmental Management (GradCIEEM).

PROTECTED SPECIES ASSESSMENT

2.6 The potential of the site to support legally protected species[3], Species of Principal Importance[4] and noteworthy species[5] was assessed from field observations carried out at the same time as the habitat survey, combined with the results of the desk top study.

2.7 The site was inspected for indications of the presence of protected and noteworthy species. Those species considered potentially present, owing to the presence of suitable habitat within the site, were further evaluated, as follows:

- Bats: assessment of buildings and trees present for habitats and features with potential to support roosting bats (fully evaluated through the Preliminary Bat Roost Assessment, below);
- Breeding birds: assessment of the presence of nesting habitat for breeding birds and evidence of recent bird nesting, including territorial activity, faecal marks and old nests; and,

[2] Plant species abundance was recorded using the DAFOR system (where D = dominant, A = abundant, F= frequent, O = occasional and R = rare).
[3] **Legally protected species** include those listed in Schedules 1, 5 or 8 of the Wildlife and Countryside Act, 1981; Schedule 2 of the Conservation of Habitats and Species Regulations 2010; or in the Protection of Badgers Act, 1992.
[4] **Species of Principal Importance** are those listed on Section 41 of the Natural Environment and Rural Communities Act, 2006.
[5] **Noteworthy species** include Species of Principal Importance under the Natural Environment and Rural Communities Act, 2006; Local Biodiversity Action Plan (LBAP) species; Birds of Conservation Concern (Eaton et al. 2009); and/or Red Data Book/nationally notable species (JNCC, undated

- Reptiles: assessment of the presence of suitable habitat for common reptile species.

2.8 If, on the basis of the preliminary assessment or during subsequent surveys, it is considered likely that other protected species may be present, recommendations for further surveys will be made. Without such surveys, it would not be possible to determine presence / likely absence of that species.

Protected Species Assessment Criteria

2.9 The likelihood of occurrence of protected and/or invasive species is ranked as follows and relies on the findings of the current survey and an evaluation of existing data.

- **Negligible** – while presence cannot be absolutely discounted, the site includes very limited or poor quality habitat for a particular species or species group. No local returns from a data search, surrounding habitat considered unlikely to support wider populations of a species/species group. The site may also be outside or peripheral to known national range for a species,
- **Low** – on-site habitat of poor to moderate quality for a given species/species group. Few or no returns from data search, but presence cannot be discounted on the basis of national distribution, nature of surrounding habitats, habitat fragmentation, recent on-site disturbance etc.
- **Moderate** – on-site habitat of moderate quality, providing all of the known key requirements of a given species/species group. Local returns from the data search, within national distribution, suitable surrounding habitat. Factors limiting the likelihood of occurrence may include small habitat area, habitat severance, and disturbance.
- **High** – on-site habitat of high quality for a given species/species group. Local records provided by desk top study. The site is within/peripheral to a national or regional stronghold. Good quality surrounding habitat and good connectivity.
- **Present** – presence confirmed from the current survey or by recent, confirmed records.

2.10 The purpose of this assessment is to identify whether more comprehensive Phase 2 surveys for protected species should be recommended.

PRELIMINARY BAT ROOST ASSESSMENT

2.11 A Preliminary Bat Roost Assessment of the buidlings on-site and the mature and semi-mature trees within the site boundary was conducted at the same time as the habitat survey on 11th July 2014 to assess their potential for supporting roosting bats.

2.12 The survey methodologies for the inspection followed guidelines set out in the Bat Conservation Trust's (BCT) *Bat Surveys: Good Practice Guidelines 2nd Edition* (Hundt, 2012), and the Joint Nature Conservancy Committee's (JNCC) Bat Workers' Manual (Mitchell-Jones and McLeish, 2004).

2.13 Features suitable for use by roosting bats were recorded and mapped, with detailed notes taken. Architectural features, points of disrepair or other gaps, which may provide access/egress and/or roosting points for bats, were also identified. Careful consideration and investigation, where possible, was given to determining if the potential access points would lead into the building structure (cavity walls, soffit boxes, roof voids, etc.) or be limited to crevices.

2.14 Evidence indicating the presence of bats (for example, droppings, feeding remains such as moth wings, scratch marks around suitable crevices, and urine and fur oil stains) was recorded and mapped on a building plan (Appendix 1, Figure 2). Consideration was given to the bat species that would have a preference for any features identified.

2.15 The association of the building with habitats that may encourage bats into and/or through the site (such as linear features including tree lines and hedgerows that bats may use as commuting corridors), were also noted, as these enhance the likelihood of roosts being found and utilised by roosting bats.

2.16 The survey was conducted by a suitably experienced and licenced bat ecologist (Natural England Class Licence CI18, Registration Number CLS02362), who is competent in carrying out bat roost assessments.

Preliminary Bat Roost Assessment Criteria

2.17 The potential for the buildings and trees to support roosting bats is ranked as follows and relies on the findings of the current survey and an evaluation of existing data.

- **Negligible** – While presence cannot be absolutely discounted, no features that could be used by bats for roosting, foraging or commuting are identified. No further surveys are required.

- **Low** – Small number of potential roosting features, most likely less significant ones (i.e. not maternity roosts or hibernacula). Isolated habitat that could be used by foraging bats (e.g. a lone tree or patch of scrub but not parkland) present. Isolated site, which is not connected by prominent linear features (but if suitable foraging habitat is adjacent it may be valuable if it is all that is available). One further survey (dusk emergence and dawn re-entry surveys) for each feature (not each building / tree) is recommended.
- **Moderate** – Several potential roost features in the buildings, trees or other structures. Surrounding habitat is suitable to support foraging bats (e.g. trees, hedgerows, shrub, grassland or water-bodies). The site is connected with the wider landscape by linear features that could be used by commuting bats (e.g. lines of trees, hedgerows and scrub or linked back gardens). Two to three further surveys (dusk emergence and dawn re-entry surveys) for each feature (not each building / tree) are recommended.
- **High** – Buildings, trees or other structures (such as mines, caves, tunnels, ice houses and cellars) with particular features of potential significance for roosting bats. Surrounding habitat of high quality and suitable to support (various species of) foraging bats (e.g. broadleaved woodland, tree-lined watercourses and grazed parkland). The site is connected with the wider landscape by strong linear features that would be used by commuting bats (e.g. river/stream valleys or hedgerows). The site is close to known roosts or other potentially valuable habitat resources. Three further surveys (dusk emergence and dawn re-entry surveys) for each feature (not each building / tree) are recommended.
- **Presence confirmed** – Evidence indicates a building, tree or other structure is used by bats, for example:
    - bats seen roosting or observed flying from a roost or freely in the habitat;
    - droppings, carcasses, feeding remains, etc. found
    - bats heard ‘chattering’ inside on a warm day or at dusk.

  Where possible, the number of bats likely to be using the roost site, and the species of bat(s) would be determined from the evidence available.

SITE EVALUATION

2.18 The site has been evaluated following broad guidance issued by the Chartered Institute of Ecology and Environmental Management[6] (IEEM, 2006), according to a geographic scale (significance at the international level down to the site level) and using a range of criteria for assigning ecological value, as follows:

- Presence of sites or features designated for their nature conservation interest. Examples include internationally or nationally designated sites such as Special Areas of Conservation (SACs), Sites of Special Scientific Interest (SSSIs), National Nature Reserves (NNR) and locally designated sites such as Local Nature Reserves (LNRs) and non-statutory sites such as SINCs;
- Biodiversity value, for example, habitats or species which are rare or uncommon, species-rich assemblages, species which are endemic or on the edge of their range, large populations or concentrations of uncommon or threatened species, and/or plant communities that are typical of valued natural/semi-natural vegetation types;
- Potential value, as addressed by targets to increase the biodiversity value for example of SSSIs, international sites and some BAP species and habitats. If detailed plans exist to enhance the value of such areas, then it may be appropriate to value them as if the intended resource already existed;
- Secondary and supporting value, for example, habitats or features which provide a buffer to valued features or which serve to link otherwise isolated features;
- Presence of Species of Principal Importance for Biodiversity;
- Presence of London BAP Priority Habitats and Species; and,
- Presence of Camden BAP Priority Habitats and Species.

2.19 The ecological interest of the site and the proposed development have also been evaluated in terms of the London Plan and London Borough of Camden Core Strategy policies relating to nature conservation.

[6] Established in 1991, the Institute of Ecology and Environmental Management (IEEM) received the Royal Charter in 2013, becoming the Chartered Institute of Ecology and Environmental Management (CIEEM).

LIMITATIONS

2.20 It should be noted that, whilst every effort has been made to provide a comprehensive description of the site, no investigation can ensure the complete characterisation and prediction of the natural environment.

2.21 It is important to note that, even where data is held, a lack of records for a defined geographical area does not necessarily mean that there is a lack of ecological interest; the area may be simply under-recorded. This is taken into account when interpreting records and also through the Phase 1 habitat survey methodology which identifies where protected species may be supported within the site.

2.22 This Preliminary Ecological Appraisal does not constitute a full botanical survey, or a Phase 2 pre-construction survey that would include accurate GIS mapping for invasive or protected plant species.

2.23 One area in the north of the site was fenced off for health and safety reasons and could not be accessed to allow detailed inspection. However, the area could be fully inspected from a within 15m and the lack of access was considered to pose a minor constraint on the survey findigs.

2.24 There are a large variety of cotoneasters present, which can only be identified to species level in a short period of time within the year. For this reason, those specimens on site have not been identified. Some (but not all) *Cotoneaster* spp. are invasive and their spread must be controlled. Advice regarding this is provided.

2.25 The protected species assessment provides a preliminary view of the likelihood of protected species occurring on-site, based on the suitability of the habitat, known distribution of the species in the local area provided in response to our enquiries, and any direct evidence on the site. It should not be taken as providing a full and definitive survey of any protected species group. It is only valid at the time the survey was carried out.

2.26 The survey of the site was undertaken in July, therefore, the mature trees on site had dense foliage at the time of survey. This foliage obscured the view of the tree canopy which was a limiting factor in conducting a full ground-level inspection to assess the potential of these trees to support roosting bats. Where an assessment was not

possible, further investigation is recommended if those trees will be affected by the proposed development.

2.27 Buildings B8 and B9 could not be accessed internally owing to health and safety issues. This meant that an internal inspection as part of the Preliminary Bat Roost Assessment was not undertaken. Internal evidence of bats is not always apparent and the external inspection was conducted with particular care, with the assessment being conservative, to account for this limitation.

2.28 Despite these limitations, it is considered that this report accurately reflects the habitats present, their biodiversity values and the potential of the site to support protected species.

3 Results

DESK TOP STUDY

3.1 The following records regarding present and historical ecological interest at the site and within a 1km radius were supplied by GiGL and MAGIC. Records are summarised in the paragraphs below.

Statutory Sites of Importance for Nature Conservation

3.2 The proposed development site is not subject to any statutory nature conservation designations, such as Special Protection Areas, SSSI, SAC, NNR or LNR. The nearest such site located within a 1km radius of the proposed development site is Westbere Copse LNR, approximately 960m south-west of the site.

Non-Statutory Sites of Importance for Nature Conservation

3.3 The proposed development site does form part of a non-statutory designated site; King's College Hampstead Campus, a Site of Borough Grade II Importance for Nature Conservation, which is designated for its range of wildlife supporting habitats. There are also eight further SINCs within 1km of the proposed development site. SINCs are identified by the London Borough of Camden to be of Borough and/or Regional importance on account of their wildlife value, and are a material consideration in the planning process.

3.4 The King's College Hampstead Campus Site of Borough Grade II Importance for Nature Conservation has a good range of mature trees, including both native and non-native species. Beneath the trees and shrubs are well-established patches of tall herbs and neutral grassland. Many insect-attracting species are present. Areas of grassland and small areas of shrubbery increase the bird habitats within the site. Details of the eight other SINCs within 1km of the site are described in Table 1 below.

Table 1: Non-statutory sites of Importance for Nature Conservation within 1km of the site.

Site Name	Description and Reason for Designation	Area (ha)	Distance from site (m)
Sites of Metropolitan Importance for Nature Conservation			
Hampstead Heath	Ancient woodlands containing an exceptional number of old and over mature trees, providing dead wood habitat for a range of specialist invertebrates, including nationally rare species. Other habitats present include the small wet flush	317.63	575m NE

Site Name	Description and Reason for Designation	Area (ha)	Distance from site (m)
	(bog), numerous ponds and watercourses, and acid grassland. Heathland restoration is being attempted in places.		
Sites of Borough Grade I Importance for Nature Conservation			
Hampstead Cemetery	This site has a large number of mature trees. In a few places the trees have been allowed to regenerate naturally and are now forming small patches of woodland. There is a wildlife area in the north of the eastern half of the cemetery. Numerous butterflies and birds are found throughout the site.	9.31	200m SW
Branch Hill	Branch Hill consists of several individual blocks of woodland, interposed with small areas of grassland. Branch Hill Allotments are also included in the site. The largest individual block of woodland is Oak Hill Wood. A good number of birds frequent the site.	3.72	450m E
West Hampstead Railsides, Medley Orchard and Westbere Copse	This site comprising railside sections, an old orchard at Medley Gardens and Westbere Copse features a range of habitats including scrub, secondary woodland, semi-improved neutral grassland and tall herbs. Westbere Copse is managed as a nature reserve; common broomrape *Orobanche minor*, a London notable species, has been recorded. The copse and orchard support a variety of invertebrates and common bird species.	7.94	930m SW
Hampstead Parish Churchyard	A churchyard containing a number of mature trees, dense planted shrubberies, grassland and tall herbaceous vegetation. Grassland species present are indicative of an old slightly acidic meadowland.	0.9	790m E
Sites of Borough Grade II Importance for Nature Conservation			
King's College Hampstead Campus	This site has a good range of mature trees, including both native and non-native species. Beneath the trees and shrubs are well-established patches of tall herbs and neutral grassland. Many insect-attracting species are present. Areas of grassland and small areas of shrubbery increase the bird habitats within the site.	0.65	Forms part of the proposed site
Gondar Gardens Covered Reservoir	This undisturbed covered reservoir is vegetated mostly with neutral grassland, with a moderate diversity of wildflowers. Typical grassland butterflies are present and this is the only known site in Camden with slow worms *Anguis fragilis* present. Small areas of woodland are present. This provides habitat for common birds.	1.1	630m SW
Sites of Local Importance for Nature Conservation			

Site Name	Description and Reason for Designation	Area (ha)	Distance from site (m)
160 Mill Lane Community Garden	A small community garden with a good range of scattered trees. The pond contains good numbers of smooth newts *Lissotriton vulgaris*. Behind the pond is a 'wild area' composed of developing woodland scrub.	0.19	700m S
Frognal Lane Gardens	A small private, communal garden, with a good number of mature trees, wild flowers and a small pond.	0.55	625m SW

Protected Species

3.5 Protected Species of Principal Importance for biodiversity and London BAP Priority species have been recorded within a 1km radius of the site. Species that may potentially utilise the site are discussed below. The level of protection afforded to each species and the distance and orientation of the records, as well as the dates of those recorded in the past ten years, are provided.

Bats

3.6 The data search returned records within the past ten years for two bat species within a 1km radius of the site. These include 12 records for common pipistrelle *Pipistrellus pipistrellus* and two records for soprano pipistrelle *Pipistrellus pygmaeus*, with the most recent records for both species being from 2011 at a location 488m north-west of the site.

3.7 A common pipistrelle roost, used by at least three bats, was identified on a site on the south side of Kidderpore Avenue, less than 50m south of the western end of the Kings College Halls of Residence site (The Ecology Consultancy, 2012).

3.8 All bat species are protected under the Conservation of Habitats and Species Regulations 2010 (as amended) and Schedule 5 of the Wildlife and Countryside Act 1981 (as amended). All UK bat species are Species of Principal Importance and listed on the London BAP.

Birds

3.9 The data search returned records for five bird species within the last ten years. Of the species recorded, dunnock *Prunella modularis* recorded at 755m north of the site in 2010, tawny owl *Strix aluco* recorded at 513m north of the site in 2010, and common swift *Apus apus* recorded at 563m north-west of the site in 2009, could potentially utilise the site for nesting and/or foraging.

3.10 All birds, their nests and eggs are protected under the Wildlife and Countryside Act 1981 (as amended). Dunnock is a Species of Principal Importance and is also listed on the London BAP.

Other mammals

3.11 Seven records were returned for hedgehog *Erinaceus europaeus* at 777m south-west of the site in 2004. Hedgehogs receive limited protection under Schedule 6 of the Wildlife and Countryside Act 1981 (as amended); it is listed as a Species of Principal Importance and is also a London BAP species.

Reptiles

3.12 Ten records were returned for slow-worm *Anguis fragilis* at 777m south-west of the site in 2013. Slow-worms and all UK reptiles are protected under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended). They are also listed as a Species of Principal Importance and are a London BAP species.

EXTENDED PHASE 1 HABITAT SURVEY

Overview

3.13 Please refer to the habitat map (Figure 1) in Appendix 1 for the locations of the features of ecological interest described below.

3.14 The proposed development site comprised a number of inter-connected buildings used as student accommodation, a detached building in the western corner and a derelict chapel in the northern corner of the site, as well as two small single-storey buildings along the northern boundary, one of which was surrounded by scaffolding. The site was dominated by amenity grassland located in a large central garden, a quadrangle in the centre of the student accommodation buildings, a large area in the west of the site and along the southern boundary of the site. Areas of introduced shrub were situated around the edges of the quadrangle, the central garden, bordering the grassland in the west of the site and adjacent to the buildings. A number of scattered trees were present on-site, including along the western and southern boundaries, amongst the introduced shrub to the south of the derelict chapel and within the quadrangle. A very small patch of broadleaved woodland was situated at the south-eastern end of the detached building in the west of the site and a patch of continuous scrub was located in the north-western corner of the site to the west of the derelict chapel. Areas of hard standing bordered the inter-connected buildings and the large central garden, criss-crossed the quadrangle and formed a car park in the north-eastern corner. Tall ruderal vegetation

was present around the edges of the car park and along the northern boundary. A small section of the site in the north-western corner of the site beyond the derelict chapel was inaccessible on safety grounds.

Buildings and Hard Standing

Buildings

3.15 The site contained eleven buildings, some of which run contiguously together, (labelled as B1-B9) of varying age, size and construction; and one small outbuilding (B10). Buildings included six halls of residence and a disused chapel. Buildings on site were all between one and four storeys tall and most were brick constructions with flat, hipped or mansard roofs. One small structure, and one outbuilding (B9 and B10) were almost completely obscured by overgrown vegetation. A metal bike shed was present in the north east corner of the site. The location of each building is shown in Appendix 1, Plan 2, and described in detail in the Preliminary Bat Roost Assessment section below. Photographs are provided in Appendix 2.

Hard standing

3.16 Areas of hard standing were located around the entirety of B1, to the east of B2 in the form of a car park, to the north of B3, to the east and north of B5, and to the north and south of B6. Pathways bordered the large central garden, criss-crossed the quadrangle, bordered the south and east of B7, and intersected the smaller patch of amenity grassland in the south of the site.

Amenity grassland

3.17 Four areas of amenity grassland dominated the site. The grassland area located in the west of the site and in the large central garden consisted of dominant perennial rye-grass *Lolium perenne* and abundant self-heal *Prunella vulgaris,* with frequent daisy *Bellis perennis*, dandelion *Taraxacum* sp. and white clover *Trifolium repens,* and occasional Yorkshire fog *Holcus lanatus* and creeping buttercup *Ranunculus repens*. The quadrangle consisted of dominant perennial rye-grass with occasional annual meadow-grass *Poa annua* and daisy. The amenity grassland along the southern border of the site (Appendix 2, Photograph 1) consisted of patches of moss, abundant perennial rye-grass and occasional daisy, annual meadow-grass, red fescue *Festuca rubra* and common bent *Agrostis capillaris*.

Introduced shrub

3.18 Areas of introduced shrub included linear hedges and bushes to the east and west of B1, to the west of B2, to the south of B3, on all sides of B4, and to the north, west and south of B6. Holly *Ilex aquifolium* and *Cotoneaster* spp. were abundant species; frequent species included Japanese barberry *Berberis thunbergii*, privet *Ligustrum* sp., ivy *Hedera helix*, dogwood *Cornus* sp., cherry laurel *Prunus laurocerasus*, spotted laurel *Aucuba japonica*, *Fuchsia* sp., Mexican orange blossom *Choisya ternata* and red bistort *Persicaria amplexicaulis*; and occasional species included hornbeam *Carpinus betulus* elder *Sambucus nigra*, hazel *Corylus avellana*, *Rosa* sp., bramble *Rubus fruticosus* agg., *Hebe* sp., common rhododendron *Rhododendron ponticum*, tree mallow *Lavatera arborea,* rose of Sharon Hypericum calycinum, Welsh poppy *Meconopsis cambric*, lavender *Lavandula* sp., butterfly bush *Buddleja davidii*, *Viburnum* sp., pendulous sedge *Carex pendula* and *Hydrangea* sp. Species with a rare occurrence on-site included Japanese aralia *Fatsia japonica*, rosemary *Rosmarinus officinalis*, pheasant berry *Leycesteria formosa*, bear's breeches *Acanthus mollis*, mock orange *Philadelphus* sp., Oregon grape *Mahonia aquifolium*, *Yucca* sp. and bamboo.

3.19 Denser areas of shrub were present to the west of B7 and to the south of B8. Species included abundant holly, spotted laurel, cherry laurel and common rhododendron, occasional hawthorn *Crataegus monogyna* and weigela *Weigela* sp., and ornamental currant *Ribes sanguineum* occurred rarely.

3.20 A linear flowerbed along the northern edge of the central garden featured a range of planted native and non-native flowers and shrubs. Species included dogwood, Japanese barberry, lavender, weigela, geranium *Geranium* sp., pendulous sedge, Christmas berry *Photinia x fraseri* 'Red Robin', California poppy *Eschscholzia californica,* Darwin's barberry *Berberis darwinii*, lungwort *Pulmonaria officinalis*, great mullein *Verbascum thapsus*, knotweed *Persicaria microcephala* 'Red Dragon', purple sage *Salvia officinalis*, Russian sage *Perovskia atriplicifolia*, *Penstemon* sp., montbretia *Crocosmia x crocosmiiflora* 'Lucifer', catmint *Nepeta* sp., hedge bindweed *Calystegia sepium*, and Canadian goldenrod *Solidago canadensis*.

Scattered trees

3.21 Four semi-mature holly trees and a single semi-mature elder lined the south-eastern boundary, whilst off-site, adjacent to the eastern boundary stood a mature London plane *Platanus x hispanica* and a semi-mature Leyland cypress *x Cuprocyparis*

leylandii. A mature sycamore *Acer pseudoplatanus* was also located off-site, adjacent to the north-eastern corner of the site.

3.22 A single specimen of the following trees were located along the southern boundary of the site: mature maidenhair tree *Ginkgo biloba*, purple-leaved plum *Prunus cerasifera*, Turkey oak *Quercus cerris*, lime *Tilia* sp., ash *Fraxinus excelsior*, and semi-mature magnolia *Magnolia* sp. and spindle *Euonymous europea*. A line of semi-mature holly also bordered the southern aspect of B6.

3.23 A number of mature trees were situated within and around the periphery of the quadrangle. These included a large, triple-stemmed hornbeam, walnut *Juglans regia*, cherry *Prunus* sp., dove tree *Davidia involucrata* and an Indian bean tree *Catalpa bignonioides.* A semi-mature hawthorn and an immature magnolia were also located within the quadrangle.

3.24 A single monkey puzzle *Araucaria araucana* stood to the south of the central garden area, along with an immature birch *Betula* sp. and goat willow *Salix caprea*. To the west of the central garden area, amongst the introduced shrubs were a Turkey oak, four mature silver birch *Betula pendula* and two semi-mature rowan *Sorbus aucuparia*. Adjacent to the southern aspect of the chapel (B8) stood two fig *Ficus* sp.

3.25 Amongst the scrub and the introduced shrubs to the west of B7 and along the western site boundary (see Appendix 2, Photograph 2), a number of single mature trees were present. These included beech *Fagus sylvatica*, lime, ash and Turkey oak. There was also an immature laburnum *Laburnum anagyroides*, semi-mature hawthorn, cherry and Lawson cypress *Chamaecyparis lawsoniana,* and immature and semi-mature limes.

Scrub

3.26 An area of scrub was situated in the north-western corner of the site to the west and north of the derelict chapel. Species consisted predominantly of elder and hazel with an understorey dominated by bramble and tall ruderal species such as common nettle *Urtica dioica*, with occasional green alkanet *Pentaglottis sempervirens* and cow parsley *Anthriscus sylvestris.* There were also numerous self-seeded saplings of ash and sycamore present (see Appendix 2, Photograph 3).

Semi-natural broadleaved woodland

3.27 A group of mature and semi-mature trees located to the south-east of B7 was sufficiently dense to form a very small patch of semi-natural broadleaved woodland. Species included cherry, silver birch, goat willow, hazel and pedunculate oak *Quercus robur.* The understorey was dominated by common nettles and cow parsley.

Tall ruderal vegetation

3.28 Tall ruderal vegetation was growing extensively along the northern site boundary and around the margins of the car park in the north-eastern corner of the site (see Appendix 2, Photograph 4). There were also small patches either side of the steps on the western side of the quadrangle. Abundant species included common nettle, ground elder *Aegopodium podagraria*, ivy, docks *Rumex* spp. and bramble. Frequent species included green alkanet, herb Robert *Geranium robertianum*, creeping thistle *Cirsium arvense,* Canadian fleabane *Conyza canadensis*, dandelion *Taraxacum* spp., prickly lettuce *Lactuca serriola*, hedge mustard *Sisymbrium officinale*, and willowherbs *Epilobium* spp. Occasional species included yellow corydalis *Pseudofumaria lutea*, butterfly bush, sow-thistle *Sonchus* sp., common mallow *Malva sylvestris*, wood avens *Geum urbanum* and the self-seeded saplings of sycamore, holly and ash. Species with rare distribution on-site included Hart's tongue-fern *Asplenium scolopendrium* and spurge *Euphorbia* sp.

Fauna Observations

3.29 During the survey a number of common birds were observed on-site. Robins *Erithacus rubecula* were seen foraging and heard singing, particularly in the scrub in the north-west of the site. Woodpigeon *Columba palumbus* and blackbird *Turdus merula* were also recorded. A number of house sparrow *Passer domesticus* were seen flying from behind dense ivy growing on the eastern aspect of building B9 (see Appendix 2, Photograph 5), indicating the potential presence of a nest. An active birds' nest, the species of which could not be confirmed, was located between a drainpipe and the wall of the southern aspect of building B3 (see Appendix 2, Photograph 6).

Target notes

3.30 Refer to Figure 1 in Appendix 1 for the locations of the features of ecological interest labelled as target notes and described below:

- Target Note 1 (TN1): An inaccessible, fenced off part of the site, located behind the derelict chapel. The habitat appeared to be a continuation of the scrub and self-seeded saplings present to the south-west of this area;
- Target Note 2 (TN2): The remnants of two buildings, which had been demolished at an earlier date, located either side of building B9. This area was also inaccessible due to health and safety. However, it could be fully observed and consisted of recently cut tall ruderal vegetation and a few remaining tall ruderals including creeping thistle, ivy and self-seeded saplings of trees (see Appendix 2, Photograph 7);
- Target Note 3 (TN3): A small patch of the invasive species giant hogweed *Heracleum mantegazzianum* was present amongst the scrub habitat. It was in the process of being treated for its eradication;
- Target Note 4 (TN4): Another small patch of giant hogweed was present beside a group of self-seeded tree saplings. It was also in the process of being treated for its eradication;
- Target Note 5 (TN5): Another small patch of giant hogweed was present amongst the introduced shrubs (see Appendix 2, Photograph 8). It was also in the process of being treated for its eradication;
- Target Note 6 (TN6): The location of the aforementioned potential house sparrow nest;
- Target Note 7 (TN7): The location of the aforementioned active birds' nest between drainpipe and wall of B3; and
- Target Note 8 (TN8): A metal bike shed.

PROTECTED SPECIES ASSESSMENT

3.31 The habitats on site were evaluated as to their likelihood to provide sheltering, roosting, nesting and foraging habitat for all protected, noteworthy and invasive species. Those species identified as being present or potentially present, owing to suitable habitat being supported within the site, were:

- Bats;
- Breeding birds; and,
- Reptiles.

Fauna Observations

3.32 No suitable habitat was identified on-site or nearby with the potential to support other protected species including; amphibians, badger *Meles meles*, great crested newt *Triturus cristatus*, hazel dormouse *Muscardinus avellanarius* or riparian mammals (water vole *Arvicola amphibious* and otter *Lutra lutra*).

3.33 The likelihood of those species identified being present within the site is evaluated in Table 2 below, based on the results of the desk top study, observations made during the site survey, and assessment of the suitability of on-site and adjoining habitat.

3.34 The presence of invasive plant species, for which national legislation exists, is also considered. The relevant legislation and policies relating to protected species and habitats are set out in Appendix 4.

BAP Species and Habitats

3.35 The survey area has the potential to support the following London BAP habitats; 'Built structures' and species; 'Bats', and 'House sparrow'.

Table 2: Protected and Invasive Species Assessment.

Habitat/species	Main legislation and policy (see Appendix 4)	Reason for consideration	Likelihood of occurrence
Bats	Schedule 2 of the Conservation of Habitats and Species Regulations 2010 (as amended). Schedule 5 of the Wildlife and Countryside Act 1981 (as amended).	The site contains potential roosting habitat, (i.e. buildings and mature trees). The site was situated within an urban environment comprising extensive residential properties, gardens and amenity spaces with potential to be used by bats for roosting, commuting and foraging. The data search provided records for two species of bat within 1km of the site. A roost is known to exist within 50m of the site.	**Buildings – MODERATE:** Three buildings within the site (B5, B7 and B8) were assessed as having moderate potential to support roosting bats due to the presence of suitable features, including lifted or missing tiles, ridge vents and holes in masonry. **Buildings - LOW**: Five buildings within the site (B1, B3, B4, B9 and B10) were assessed as having low potential to support roosting bats due to the presence of suitable features, including lifted or missing tiles and holes in masonry; or to account for constraints on the building inspections. **Buildings - NEGLIGIBLE**: Two buildings within the site (B2 and B6) were assessed as having negligible potential to support roosting bats due to the absence of suitable features. **Trees – LOW:** The majority of the mature and semi-mature trees within the site did not support features that would be considered suitable for roosting bats. However, eight trees were identified as having low potential to support roosting bats due to the presence of suitable features (T50), or because they could not be properly assessed due to large size (T6) dense foliage (T3) or ivy coverage (T4, T5, T23, T26 and T30) obscuring parts of the trees.
Breeding birds	Wildlife and Countryside Act 1981 (as amended).	The site contains suitable breeding and foraging habitat (i.e. scattered trees, scrub, shrubs and buildings). Records of dunnock, a Species of Principal Importance and London BAP species were provided from the data search.	**PRESENT:** An active birds' nest of an unconfirmed species was identified on the southern aspect of building B3 and a potential house sparrow nest was identified amongst ivy on the eastern aspect of building B9. Other common bird species were also observed and heard during the survey. Furthermore, the small patch of woodland, scrub, scattered trees and introduced shrub throughout the site were considered suitable to support a moderate number of common breeding bird species such as blackbird.

Table 2: Protected and Invasive Species Assessment.

Habitat/species	Main legislation and policy (see Appendix 4)	Reason for consideration	Likelihood of occurrence
Widespread Reptiles	Schedule 5 of the Wildlife and Countryside Act, 1981 (as amended).	On site habitats of potential for common reptiles (i.e. grassland, woodland and scrub). The data search provided records of slow-worm, a Species of Principal Importance and London BAP species, within 1km of the site.	**NEGLIGIBLE**: The close-mown amenity grassland and small areas of scrub and woodland habitats offer very limited basking and/or foraging potential for common reptile species. These are limited in extent and provide few refugia and hibernation opportunities. Roads represent barriers to the movement of reptiles between the site and the location of records of slow worm.
Invasive species			
Invasive species	Section 14 and Part II of Schedule 9 of the Wildlife and Countryside Act 1981 (as amended).	Invasive species are widespread in many habitats, commonly found on disturbed sites and along water courses.	**PRESENT:** Giant hogweed was present at three locations on-site (see Target Notes section), but was in the process of being eradicated. For the purpose of this report it has been assumed the cotoneaster specimens within the introduced shrub habitat on-site are invasive specimens given the seasonal constraint identifying these.

PRELIMINARY BAT ROOST ASSESSMENT

B1 – Lord Cameron's Hall

External inspection

3.36 B1 was a four-storey brick building with the bottom floor partially below ground level. The building had solid brick walls, although a section on the northern elevation appeared to have a cavity wall. The brickwork was generally in good condition. There were brick and corrugated metal sheet plant rooms constructed on the flat roof. A single-storey brick extension was present on the northern elevation which had a tight-fitted timber fascia board. All windows and doors were in good condition. Clay tile louvered vents were noted on the northern elevation (Appendix 2, Photograph 9).

3.37 Features with potential to provide access/egress for bats or to support roosting bats included:

- Holes in masonry where external fittings had been removed on the southern and eastern elevations (Appendix 2, Photograph 10);
- A gap behind a section of lead flashing on the northern elevation; and
- Gaps between clay tile louvered vents in the northern elevation.

Internal inspection

3.38 B1 was in use as halls of residence at the time of survey with all areas of the building in regular use. No roof voids were present within the building. No internal inspection was undertaken.

Assessment

3.39 No bats, or evidence of bats, were noted during the inspection. Few features suitable to support, or provide access/egress points for roosting bats were noted. Therefore, building B1 was assessed as having **low** potential to support roosting bats.

B2 – Rosalind Franklin Hall

External inspection

3.40 B2 was an L-shaped four-storey brick building with the bottom floor only at ground level on the eastern elevation due to being built into a slope. The building had cavity brick walls, with concrete lintels above all windows and a flat roof. The brickwork was generally in good condition. All windows and doors were in good condition. Some metal louvered vents on the western elevation had a fine wire mesh behind them.

3.41 Features with potential to provide access/egress for bats or to support roosting bats included:

- Two small holes in masonry where external fittings had been removed on the northern and eastern elevations.

Internal inspection

3.42 B2 was in use as halls of residence at the time of survey with all areas of the building in regular use. No roof voids were present within the building. No internal inspection was undertaken.

Assessment

3.43 No bats, or evidence of bats, were noted during the inspection. Very few features with limited suitability to support, or provide access/egress points for roosting bats were noted. Therefore, building B2 was assessed as having **negligible** potential to support roosting bats.

B3 – Lady Chapman Hall

External inspection

3.44 B3 was a four-storey brick building with a single-storey, flat roofed extension on the northern elevation. The top floor had been built into the mansard roof with windows mounted in several dormers. The roof had flat clay tiles and domed ridge tiles. Although slipped and missing tiles were noted, none of those that could be inspected created any gaps. It was not possible to view the north-facing pitch of the roof. The building had solid brick walls that were generally in good condition. All windows and doors were in good condition.

3.45 No features with potential to provide access/egress for bats or to support roosting bats were recorded.

Internal inspection

3.46 B3 was in use as halls of residence at the time of survey with all areas of the building in regular use. A shallow roof void was present above the top floor rooms. The roof had a trapezoid shape and a scissor truss support structure made of rough-hewn timbers. Tight-fitted timber sarking was present below the roof tiles. Due to the restricted dimensions of the void and the presence of large closed water tanks, only a small area of the void was inspected.

Assessment

3.47 No bats, or evidence of bats, were noted during the inspection. No features suitable to support, or provide access/egress points for roosting bats were noted. However, slipped or missing tiles were noted and the state northern pitch of the roof is not known.

Therefore, building B3 was conservatively assessed as having **low** potential to support roosting bats.

B4 – Dudin Brown Hall

External inspection

3.48 B4 was a three-storey brick building with the top floor built into the complex hipped roof. The top floor windows were mounted in several dormers. The roof had flat clay tiles and domed ridge tiles. There were hanging tiles on the side of some dormers. The roof was generally in good condition. A small tower was present in the centre of the building. The tower had wooden louvered vents that had a fine wire mesh behind them. The building had solid brick walls that were generally in good condition. A single-storey was present on the northern elevation of the building. This extension had a flat concrete roof with a glass sky-light in the centre. All windows and doors were in good condition.

3.49 Features with potential to provide access/egress for bats or to support roosting bats included:

- Gaps below slipped and missing tiles on one hipped roof section in the centre of the building;
- A gap below a hip ridge tile on the north western corner; and
- Gaps behind hanging tiles on one dormer window on the eastern end of B4 (Appendix 2, Photograph 11).

Internal inspection

3.50 B4 was in use as halls of residence at the time of survey with all areas of the building in regular use. One roof void was present within one small hipped roof section on the northern side of the building. The void was open to the rough-hewn roof timbers and tight-fitted timber sarking. One section of missing sarking exposed a modern breathable roofing membrane. The condition of the roofing membrane indicated that the building had been re-roofed in the last five years. The void contained a large, closed water tank.

Assessment

3.51 No bats, or evidence of bats, were noted during the inspection. Few features suitable to support, or provide access/egress points for roosting bats were noted. Therefore, building B4 was assessed as having **low** potential to support roosting bats.

B5 – Maynard Hall

External inspection

3.52 B5 was a four-storey brick building with the top floor built into the hipped roof. The top floor windows were mounted in several dormers. The roof had flat clay tiles and a combination of domed clay ridge tiles and lead ridges in different areas. There were hanging tiles on the side of some dormers. The roof was generally in moderate condition. A small tower was present in the centre of the building with clay hanging tiles and timber walls. The building had solid brick walls that were generally in good condition. A single storey flat roof section was present in the eastern part of the building adjoining B6. All windows and doors were in good condition. A small outbuilding to the north of B5 was well-sealed.

3.53 Features with potential to provide access/egress for bats or to support roosting bats included:

- Gaps below slipped and missing tiles on the east, west and north-facing roof pitches (Appendix 2, Photograph 12);
- A gap below a hip ridge tile on a south eastern corner; and
- A gap in the masonry on the eastern elevation.

Internal inspection

3.54 B5 was in use as halls of residence at the time of survey with all areas of the building in regular use. No roof voids were present within the building. No internal inspection was undertaken.

Assessment

3.55 No bats, or evidence of bats, were noted during the inspection. However, several features suitable to support, or provide access/egress points for roosting bats were noted. Therefore, building B5 was assessed as having **moderate** potential to support roosting bats.

B6 – Bay House

External inspection

3.56 B6 was a three-storey building with the top floor built into the mansard roof. The top floor had no external windows but skylights were present in the roof, including a large glass panel section in the centre of the flat roof. The roof had slate tiles and bitumen felt ridges. The roof was generally in good condition. A flat roof section was present on the north eastern section of the building, adjoining B5. The building had rendered walls of

unknown masonry, which was in good condition. All windows and doors were in good condition.

3.57 No features with potential to provide access/egress for bats or to support roosting bats were recorded.

Internal inspection

3.58 B5 was not in use at the time of survey. The lower floors consisted of large well-lit rooms. The top floor was built into the roof, with small moderately lit rooms centred around a stairwell lit by large sky-lights. Boarding was present below the roofing materials. One hole in the ceiling exposed timber sarking below the roof tiles.

Assessment

3.59 No bats, or evidence of bats, were noted during the inspection. No features suitable to support, or provide access/egress points for roosting bats were noted. Therefore, building B6 was assessed as having **negligible** potential to support roosting bats.

B7 – Queen Mother Hall

External inspection

3.60 B7 was a three-storey brick building with the top floor partially within the hipped roof. Small windows, in the roof were present above those in the walls and a window was present in the Dutch gable end on the western elevation. The roof had flat clay tiles and domed clay ridge tiles. Four ridge vents were present along the apex ridge (Appendix 2, Photograph 13). The eastern pitch of the roof extended to the level of the ground floor ceiling. The roof was generally in good condition. The building had cavity brick walls with weep holes present above the windows on the north and south elevations. The walls were generally in good condition. All windows and doors were in good condition.

3.61 Features with potential to provide access/egress for bats or to support roosting bats included:

- Gaps in the ridge vents on the apex ridge;
- A gap below raised tile on the eastern pitch; and
- Weep holes above the windows in the northern and southern elevations.

Internal inspection

3.62 B7 was in use as halls of residence at the time of survey with all areas of the building in regular use. A deep roof void was present in the building. The roof had a queen post roof structure made of rough-hewn timbers. A bitumen felt liner was present below the

roof tiles. This was generally in good condition but sections sagged and gaps were present around the ridge vents. A large closed water tank was present in the roof void. The light levels in the void were moderate to high due to the presence of the window in the Dutch gable end.

Assessment

3.63 No bats, or evidence of bats, were noted during the inspection. However, several features suitable to support, or provide access/egress points for roosting bats were noted. Therefore, building B7 was assessed as having **moderate** potential to support roosting bats.

B8 – Chapel

External inspection

3.64 B8 was a tall single-storey building with a hipped roof. The roof had slate tiles and lead ridges. The roof was generally in good condition. A timber fascia board was present, but a portion had come away on the southern elevation (Appendix 2, Photograph14). The building had rendered walls. The walls were generally in good condition but a long, narrow crack was present on the southern elevation. Windows were present high on the walls. These were in good condition but some had been left open. The door in the eastern elevation had been left ajar but boarding was present behind it.

3.65 Features with potential to provide access/egress for bats or to support roosting bats included:

- Gaps under the ridge on the north eastern corner; and,
- A gap into the eaves where the fascia board had come away.

Internal inspection

3.66 B8 was disused at the time of survey and could not be accessed internally because of health and safety concerns.

Assessment

3.67 No bats, or evidence of bats, were noted during the inspection. However, some features suitable to support, or provide access/egress points for roosting bats were noted and no internal access was possible. Therefore, building B8 was conservatively assessed as having **moderate** potential to support roosting bats.

B9 – Summerhouse

External inspection

3.68 B9 was a small ornamental pavilion which had been almost completely overgrown by scrub vegetation (Appendix 2, Photograph 5). A scaffold roof had been constructed over the structure to provide some shelter. A pitched roof with damaged slate tiles could be seen. A timber barge board was present on the southern elevation.

3.69 Features with potential to provide access/egress for bats or to support roosting bats included:

- Gaps under the slate tiles on the south western corner; and,
- A gap behind the timber barge board on the south western corner.

Internal inspection

3.70 B9 was disused at the time of survey and could not be accessed internally because of health and safety concerns.

Assessment

3.71 No bats, or evidence of bats, were noted during the inspection. However, some features suitable to support, or provide access/egress points for roosting bats were noted and no internal access was possible. Therefore, building B9 was conservatively assessed as having **low** potential to support roosting bats.

B10 – Outbuilding

External inspection

3.72 B9 was a small garage which had been almost completely overgrown by ivy (Appendix 2, Photograph 15). The structure of the building could not be seen. A door in the eastern elevation had been left open.

Internal inspection

3.73 B10 was disused at the time of survey and could not be accessed internally because of health and safety concerns.

Assessment

3.74 No bats, or evidence of bats, were noted during the inspection. Other than the open door, no features with potential to provide access/egress for bats or to support roosting bats were noted but the dense ivy-coverage may have obscured suitable features. Therefore, building B10 was conservatively assessed as having **low** potential to support roosting bats.

Ground-based Tree Inspection

3.75 The site contained scattered mature and semi-mature trees. Eight trees, labelled in-line with the Arboracultural Report (ref) as T3, T4, T5, T6, T23, T26, T30 and T50, were either assessed as having low potential to support roosting bats (T50) or could not be fully assessed due to large size (T6), dense foliage (T3) or dense ivy coverage (T4, T5, T23, T26, T30).

4 Evaluation

4.1 Habitats and species on-site were evaluated following standard guidance on ecological impact assessment published by the Chartered Institute of Ecology and Environmental Management (IEEM, 2006) using the recommended geographic frame of reference.

Features of International Value

4.2 Features of international value are principally sites covered by international legislation or conventions, such as those sites designated under the Habitats Regulations which implements the Natural Habitats and Wild Fauna and Flora (92/43/EC) (Habitats Directive). Sites designated at this level include SACs and SPAs as well as Ramsar sites which are designated for habitats and / or important populations of certain species.

4.3 There are no sites of international importance for nature conservation within 1km of the site and they do not meet any of the criteria for designation at this scale.

Features of National Value

4.4 Features of National value include statutory sites such as Sites of Special Scientific Interest (SSSIs) which are designated under the Wildlife and Countryside Act 1981 (as amended) as well as species such as common reptile species which are subject to national legislation rather than international legislation.

4.5 The site does not form part of a site of national importance for nature conservation. None of the habitats or populations or assemblages of species present, or likely to be present, would warrant designation at the national level using appropriate criteria (Guidelines for selection of biological SSSIs http://jncc.defra.gov.uk/page-2303).

4.6 National legislation also provides protection to certain species in addition to those covered by international legislation, including bats. While such species may be present, the population of any one species may not be of national importance in terms of diversity, size or rarity.

4.7 Specific targets exist that apply to the conservation of species that are designated Species of Principal Importance under the NERC Act (2006). While some common but declining Species of Principal Importance may be present, it is not considered that they would occur in nationally important numbers.

Features of County (i.e. Greater London) Value

4.8 The site is not designated as a Site of Metropolitan Importance and they do not support habitats of value at this level.

4.9 Species of Principal Importance and London BAP species, such as some species of bat and bird, may utilise the habitats on-site. However, the vegetation types and likely species assemblages at the site is not sufficient to warrant value at the county scale.

4.10 The site has potential to support the London BAP species house sparrow. However, it is unlikely that the number of pairs in the immediate vicinity of the site would exceed county value.

Features of District (i.e. London Borough of Camden) Value

4.11 The site is designated as a Site of Borough Grade II Importance. It is designated for its range and abundance of wildlife supporting habitats, particularly for breeding birds. As such, this site is considered to be of district value.

4.12 The broadleaved semi-natural woodland, scattered trees, scrub, shrub and buildings are likely to support nesting birds.

4.13 The buildings and trees on-site support features potentially suitable for roosting bats. The desktop study suggests that limited suitable habitat in the immediate area is capable of supporting low numbers of foraging and commuting bats. Any bat populations present on-site are likely to be of biodiversity value at the local level only. This assessment requires verification by further bat surveys (see Section 5). Therefore, due to the urban location, limited extent of the habitats and the abundance of similar habitats in the surrounding area, any bird and bat populations present are likely to be small and would be of biodiversity value at the local level only.

Features of Local (i.e. 1-5km radius) Value

4.14 The buildings and trees on-site support features potentially suitable for roosting bats. The desktop study suggests that limited suitable habitat in the immediate area is capable of supporting low numbers of foraging and commuting bats. Any bat populations present on-site are likely to be of biodiversity value at the local level only. This assessment requires verification by further bat surveys (see Section 5).

Features of value within the immediate vicinity of the site

4.15 The broadleaved semi-natural woodland, scattered trees, scrub, shrub and buildings are likely to support nesting birds. Due to the urban location, limited extent of the habitats and the abundance of similar habitats in the surrounding area, any bird populations present are likely to be small and would be of biodiversity value within the immediate vicinity of the site.

4.16 The data search returned records of hedgehog in the area. Suitable habitats to support hedgehogs are present on and in the immediate vicinity of the site. However, the urban location and limited extent of the habitats, the number of individuals likely to use the site is low and would be of biodiversity value within the immediate vicinity of the site.

LOCAL PLANNING POLICY

4.17 On the basis of the survey undertaken, it is considered that a number of policies contained in the London Borough of Camden Core Strategy are relevant to the site, as followed in Table 3 below. The full text of the relevant policies from this document and those of the Mayor of London's Plan are contained in Appendix 4.

Table 3: London Borough of Camden Core Strategy 2010-2025 polices relevant to the site

Policy	Relevance to the site
POLICY CS15 Protecting and improving our parks and open spaces and encouraging biodiversity *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;* *g) expecting the provision of new or enhanced habitat, where possible, including through biodiverse green or brown roofs and green walls;* *j) protecting trees and promoting the provision of new trees and vegetation, including additional street trees.*	Measures to maintain the integrity of the Site of Borough Grade II Importance will be implemented. The site has high potential for nesting birds and moderate potential for roosting bats to be present. However, assuming that the recommendations made within this report in respect to the timing of works outside the nesting bird period, and further dusk emergence and dawn re-entry surveys for bats are undertaken, this is unlikely to present a constraint to the development in this case. Opportunities exist to enhance the value of the proposed development for wildlife

Table 3: London Borough of Camden Core Strategy 2010-2025 polices relevant to the site

Policy	Relevance to the site
The Council will preserve and enhance the historic, open space and nature conservation importance of Hampstead Heath and its surrounding area by: *p) improving the biodiversity of, and habitats in, Hampstead Heath and its surrounding area, where opportunities arise.*	

5 Conclusions and Recommendations

CONCLUSIONS

5.1 On the basis of the Preliminary Ecological Appraisal, protected species assessment and Preliminary Bat Roost Assessment, the habitats on-site consisted of buildings, hard standing, introduced shrub, amenity grassland, semi-natural broadleaved woodland, scattered trees, scrub and tall ruderal vegetation. The site was therefore assessed as being of ecological value up to district level.

5.2 Features with potential to support roosting bats were recorded on-site. Therefore, B5, B7 and B8 were assessed as having moderate potential to support roosting bats. Buildings B1, B3, B4, B9 and B10 were assessed as having low potential to support roosting bats due to the presence of suitable features or because of restricted access, or views. Buildings B2 and B6 were assessed as having negligible potential to support roosting bats. Eight trees were assessed as having low potential to support roosting bats due to the presence of suitable features (T50) or due to limitations to inspection (T3, T4, T5, T6, T23, T26 and T30).

5.3 The woodland, scrub, introduced shrub and mature and semi-mature trees on-site had moderate potential to support common nesting bird species, including house sparrow.

5.4 No other species were considered likely to be supported within the site.

5.5 The potential presence of protected species, namely bats and common breeding birds, will require further surveys and/or mitigation measures to be undertaken at these sites. Advice regarding this is summarised below. Recommendations are also provided to improve the ecological value of the site.

RECOMMENDATIONS

5.6 The following further protected species surveys and mitigation measures are recommended to avoid a legal offence and ensure legal compliance under The Mayor's Biodiversity Strategy Proposal 3 (Appendix 4); and the London Borough of Camden Core Strategy 2010-2025.

Protected Species Surveys

Bats

5.7 In line with good practice guidelines, buildings assessed as having moderate potential to support roosting bats (B5, B7 and B8) must be subject to two dusk emergence and/or pre-dawn re-entry surveys to determine the presence or likely absence of roosting bats within the buildings. Buildings assessed as having low potential to support roosting bats (B1, B3, B4, B9 and B10) must be subject to one dusk emergence or pre-dawn re-entry survey. Buildings assessed as having negligible potential require no further surveys.

5.8 Eight trees (T3, T4, T5, T6, T23, T26, T30 and T50) must be subject to further investigation in the form of climbed inspections, one dusk emergence survey or one dawn re-entry survey if they are to be affected by the proposed development.

5.9 Dusk emergence and dawn re-entry surveys must be carried out during the active season for bats (May – August, inclusive) and in suitable weather and temperature conditions, i.e. warm, dry and calm. Each feature identified during the Preliminary Bat Roost Assessment as having potential to support roosting bats will be observed by a surveyor. Each surveyor will be equipped with a BatBox Duet bat detector and a Roland Edirol recording device which will be used to identify the bat species present and evidence their recordings.

Protected Species Mitigation

Breeding birds

5.10 All nesting birds are protected under the Wildlife and Countryside Act 1981 (as amended). The site contains a small area of broadleaved woodland and scrub, scattered trees and introduced shrub that have potential to support common nesting bird species. Where the proposed works require the removal of this habitat, any vegetation clearance (cutting to 150mm above ground) must be carried out outside of the main bird nesting season (March to late August, inclusive) to avoid any potential offences relating to nesting birds (Newton *et al.*, 2004). A nest was identified on building B3 and a suspected nest was identified on B10. Any external refurbishment works or demolition of these buildings should also be undertaken of the main bird nesting season.

5.11 Where this is not possible, a search for nesting birds up to 48 hours prior to vegetation clearance taking place must be undertaken by an experienced ecologist. If any nests are found, the nests are to be protected by an exclusion zone around the nest. Works may then proceed up to, but not within, this exclusion zone until such time as an ecologist confirms the young have fledged the nest. If nesting birds are found at any

time during clearance works, work must stop immediately and an ecologist must be consulted immediately.

Other species

5.12 If any unexpected discoveries of other protected species are made on-site during redevelopment works, then all activities in the immediate vicinity must be halted immediately and further advice must be sought from an ecologist immediately.

Lighting

5.13 Research has found that bats are sensitive to artificial lighting and that excessive lighting can delay bats from emerging, thus shortening the time available for foraging, as well as causing bats to move away from suitable foraging grounds or roost sites to alternative dark areas (Jones, 2000). The site has been identified as having potential to support roosting bats and the following measures should be considered as part of future artificial lighting schemes to maintain the value of the site for bats and other light-sensitive wildlife.

5.14 Lighting that is required for security or safety reasons should use a lamp of no greater than 2000 lumes (150 Watts) and should comprise sensor activated low pressure sodium or mercury lamps (Jones, 2000; BCT, 2008).

5.15 Lighting should be directed to where it is needed with minimal light spillage. This can be achieved by limiting the height of the lighting columns and by using as steep a downward angle as possible and/or a shield or hood that directs the light below the horizontal plane (Jones, 2000; BCT, 2008).

5.16 Artificial lighting should not directly illuminate any potential bat roosting features that are included within the proposed development.

Habitat Retention and Protection

Trees

5.17 There are currently tree preservation orders (TPOs) affecting two trees on-site[7]. These are the Turkey oak and beech on the western boundary of the site. Retained mature and semi-mature trees on-site must be fully protected in accordance with BS 5837 2012 *Trees in relation to design, demolition and construction* (BSI, 2012).

Control of Invasive Species

5.18 Giant hogweed and cotoneaster spp. were present at the site. At the time of survey, the giant hogweed was in the process of being eradicated. This process should be continued with due care and diligence to ensure complete eradication of this species on-site.

5.19 The cotoneaster species' on-site could not be identified due to the timing of the survey, therefore a precautionary approach is advised. Should the works involve the removal of any planted shrubbery at the site, it is recommended that either the cotoneaster s identified at the appropriate time of year by a specialist and advice followed. Alternatively, as a precaution, the cotoneaster spp. present are dug up in advance and either burnt on-site or buried, either on-site or in landfill, at a depth sufficient to prevent vegetative spreading or seed dispersal.

Habitat Enhancements and Recommendations

5.20 The following recommendations have been prepared as a guide to protect and enhance the biodiversity value of the site beyond the baseline conditions through the provision of habitat for Species and Habitats of Principal Importance and those listed under the London BAP.

Biodiverse Green Roofs

5.21 To demonstrate the highest feasible and viable sustainability standards in-line with the London Plan Policies 5.11, 7.18 and 7.19, it is recommended that a low-nutrient biodiverse roof is incorporated into the proposed building designs with additional habitat features such as temporary pools and rotting wood that will enhance the wildlife

[7] Information taken from the arboricultrual report conducted by Crown Consultants in July 2014.

value of the site. Habitat features can be designed specifically to attract target species, such as the London BAP species house sparrow.

5.22 Biodiverse green roofs are established with a minimum substrate depth of 80mm and seeded with a wildflower mix such as the Emorsgate ER1F wildflowers for green roofs seed mixture[8] before plug planting with additional wildflower species. It is recommended that the design of the green roof follows guidance provided in The Green Roof Code of Best Practice for the UK (The Green Roof Organisation, 2011) and advice should be sought from a professional green roof consultancy such as The Green Roof Consultancy (http://greenroofconsultancy.com/) in order to design the specification of the green roof in-line with the environmental goals of the development.

Vegetation planting schemes of value to wildlife

5.23 Landscape proposals are yet to be confirmed; however, particularly given the non-statutory SINC status of the site, any new planting schemes should comprise native and non-native plant species of known value to wildlife throughout the site. It is acknowledged that using nectar-rich native species in planting schemes will attract insects and provide a potential food source for bats (Hundt, 2012). Where possible, larger shrubs / trees should be under-planted with smaller shrubs and herbaceous perennials to create greater structure within the planting scheme and to provide a dense cover for wildlife. A list of suitable plant species can be found on the Royal Horticultural Society website (www.rhs.gov.uk).

5.24 It is recommended that sustainable horticultural practices are employed to minimise off-site ecological impacts. These include:

- All native plant material should be sourced from suppliers who have adopted Flora Locale's Code of Practice for collectors, growers and suppliers of native flora http://www.floralocale.org;
- The use of peat-free composts and soil conditioners to reduce the loss of important peat bogs;

[8] http://wildseed.co.uk/mixtures/view/57

- Feeding of plants using organic based fertilisers and improving the soil structure by incorporating organic material, preferably composted municipal waste;
- The use of drought tolerant plants and mulches to reduce evaporation and the amount of mains water needed for horticulture, and;
- Minimising the use of pesticides (herbicides, insecticides, and fungicides) to prevent cumulative fatal effects to animals via the food chain. Where use is unavoidable, non-residual chemicals should be applied.

Provision of bird nesting and bat roosting opportunities

5.25 Additional bird nesting and bat roosting opportunities could be included through the provision of artificial boxes.

5.26 Bird nesting boxes are recommended to be erected on the new building fascia, the existing buildings and/or any suitable mature and semi-mature trees to be retained within the site boundary. It is recommended that Schwegler (2011) woodcrete boxes are used as these require the least maintenance and include a broad range of designs, are long lasting compared to wooden boxes and insulate occupants from extremes of temperature and condensation. A minimum of three woodcrete bird boxes should be erected on trees, walls and buildings out of the reach of the general public. Models 1B hole-fronted, 26mm entrance hole and 32mm entrance hole, and 2H open-fronted 120mm opening are the most appropriate. Ideally boxes should be positioned so they face in an easterly or westerly direction. They should be at least 3 metres above ground level and ideally higher. They should be attached using Schwegler fixings. Boxes should be cleaned annually in the autumn with old nests removed annually between October and January, and boxes repaired or replaced as necessary.

5.27 'Woodcrete' bat boxes could also be placed on retained trees and/or buildings. Model 2F for smaller bats is generally recommended and these should be placed adjacent to exisiting trees and vegetation.

5.28 The enhancements and landscape recommendations detailed in this report will improve the wildlife value of the area thereby contributing to London BAP Priority Species and Habitats and Species of Principal Importance objectives. These recommendations will also ensure that the proposed redevelopment of this site meets the requirements of Policy 7.19 – biodiversity and access to nature of the London Plan (2011) and the Camden Core Strategy 2010-2025 which aims to enhance biodiversity.

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Appendix 1: Habitat Map

Figure 1: Habitat Survey Map of the King's College Halls, Kidderpore Avenue site

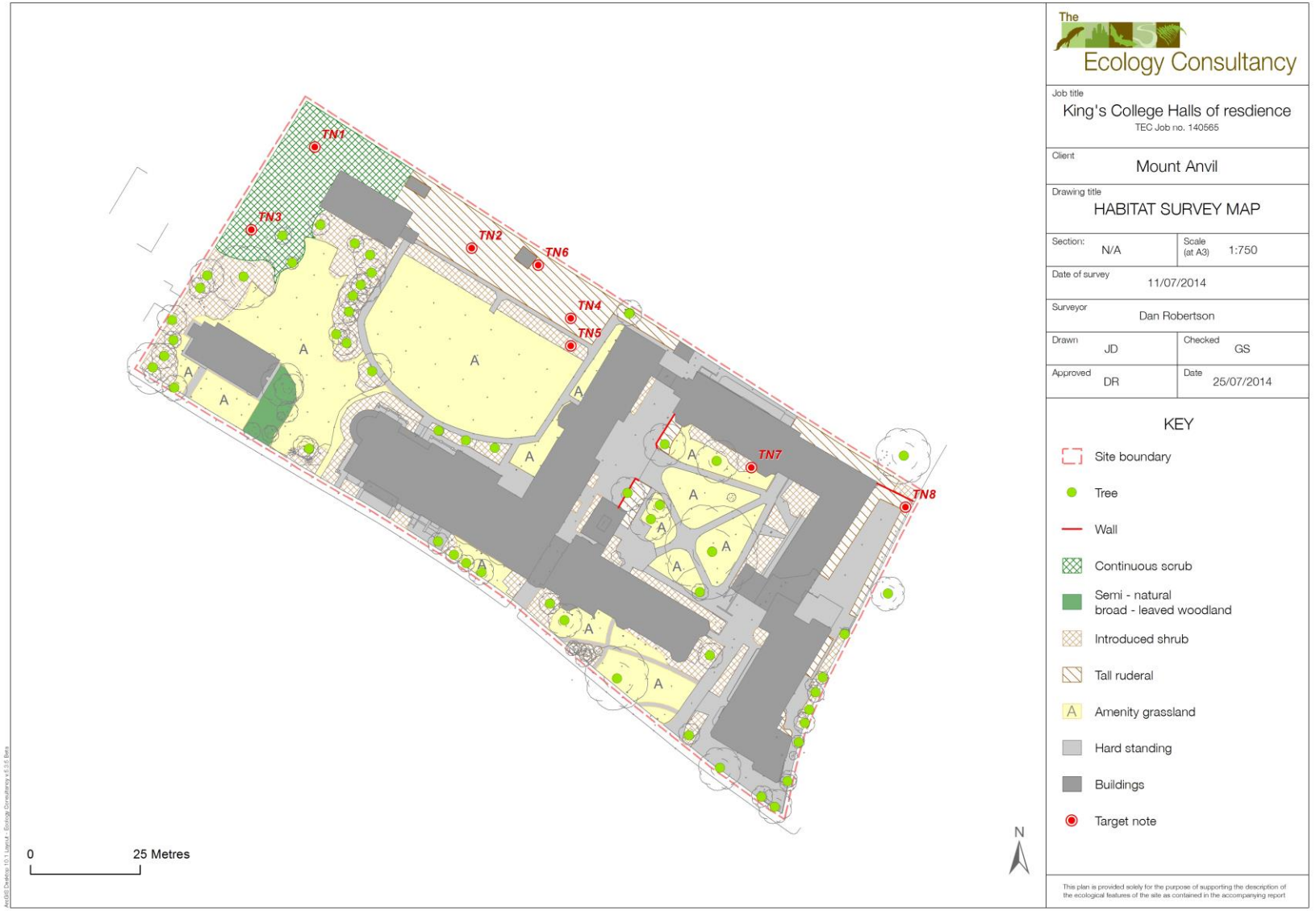
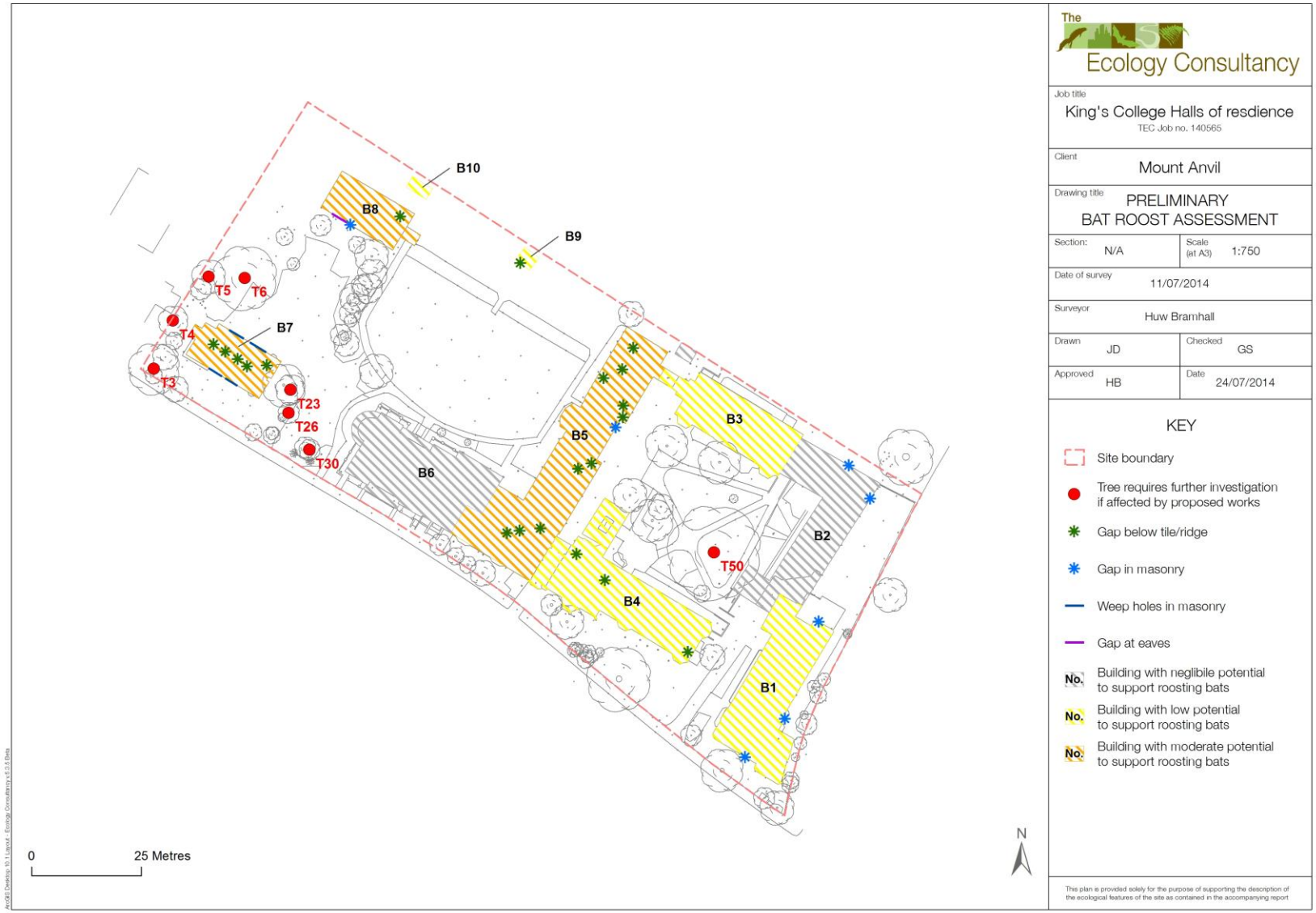


Figure 2: Building Assessment plan of the King's College Halls, Kidderpore Avenue site



Appendix 2: Photographs

Photograph 1
Amenity grassland, introduced shrub and scattered trees along the southern boundary viewed looking west

Photograph 2
Introduced shrub merging into scrub along the western boundary. View north.

Photograph 3
Continuous scrub in the north-western corner of the site. View north.

Photograph 4
Car park in north-eastern corner of the site with tall ruderal vegetation growth around the edges.

Photograph 5
Building along northern boundary with scaffolding and dense ivy cover from which house sparrows were observed. View north

Photograph 6
Active birds' nest between the drainpipe and southern aspect of B3. View north.

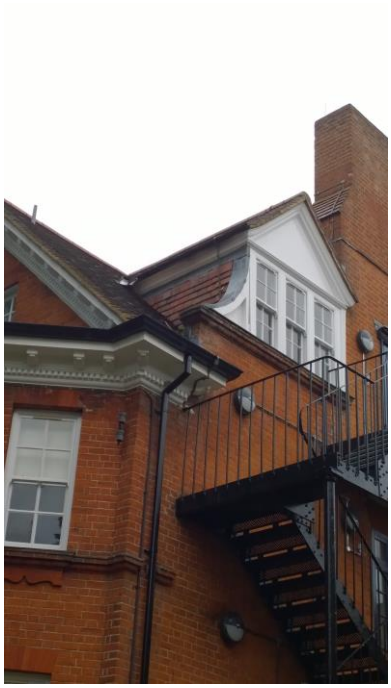
Photograph 7
Location of the remnants (foundations) of two buildings that had been demolished and where tall ruderal vegetation had been recently cut. View north-east.

Photograph 8
One of three locations on-site with giant hogweed presence. All the specimens were in the process of eradication.

Photograph 9
Clay tile louvered vents on northern elevation of B1.

Photograph 10
Gaps in masonry created by removal of external fixtures on eastern elevation of B1.

Photograph 11
Gap behind lifted hanging tiles on dormer at eastern end of B4.



Photograph 12
Gaps below lifted tiles on western elevation of B5.

Photograph 13
Northern elevation of B7 including ridge vents.

Photograph 14
Damage to facia on southern elevation of B8 creating gap at eaves.

Photograph 15
Building B10 showing dense ivy coverage.

Appendix 3: Plant Species List

Plant Species List for King's College Halls, Kidderpore Avenue, London Borough of Camden compiled from the Preliminary Ecological Assessment habitat survey carried out on the 11th July 2014.

Scientific nomenclature follows Stace (2010) for vascular plant species. Vascular plant common names follow the Botanical Society of the British Isles 2003 list, published on its web site, www.bsbi.org.uk. Please note that this plant species list was generated as part of a Phase 1 habitat survey, does not constitute a full botanical survey and should be read in conjunction with the associated Phase 1 Report.

Abundance was estimated using the DAFOR scale as follows:
D = dominant, A = abundant, F = frequent, O = occasional, R = rare, LD =locally dominant e=edge only, p=planted, s=seedling or sucker, t=tree, y = young tree.

Latin Name	Common name	Abundance	Qualifiers
Acanthus mollis	Bear's breeches	R	p
Acer pseudoplatanus	Sycamore	O	s
Aegopodium podagraria	Ground elder	A	
Agrostis capillaris	Common bent	O	
Anthriscus sylvestris	Cow parsley	O	
Araucaria araucana	Monkey puzzle	R	t
Asplenium scolopendrium	Hart's-tongue fern	R	
Aucuba japonica	Spotted laurel	F	p
Bellis perennis	Daisy	F	
Berberis darwinii	Darwin's barberry	R	p
Berberis thunbergii	Japanese barberry	F	p
Betula sp.	Birch	O	y
Betula pendula	Silver birch	F	t
Buddleja davidii	Butterfly bush	F	
Calystegia sepium	Hedge bindweed	R	s
Carex pendula	Pendulous sedge	O	p
Carpinus betulus	Hornbeam	O	t/p
Catalpa bignonioides	Indian bean tree	R	t
Chamaecyparis lawsoniana	Lawson cypress	R	t
Choisya ternata	Mexican orange blossom	F	p
Cirsium arvense	Creeping thistle	F	
Conyza canadensis	Canadian fleabane	F	
Cornus sp.	Dogwood	F	p

Latin Name	Common name	Abundance	Qualifiers
Corylus avellana	Hazel	F	
Cotoneaster spp.	Cotoneaster	A	p
Crataegus monogyna	Hawthorn	O	t
Crocosmia x crocosmiiflora	Montbretia 'Lucifer'	O	p
Davidia involucrata	Dove tree	R	t
Epilobium sp.	Willowherb	F	
Eschscholzia californica	California poppy	O	p
Euonymous europea	Spindle	R	t
Euphorbia sp.	Spurge	R	
Fagus sylvatica	Beech	R	t
Fatsia japonica	Japanese aralia	R	p
Festuca rubra	Red fescue	O	
Ficus sp.	Fig	R	p
Fraxinus excelsior	Ash	F	t
Fuchsia sp.	Fuchsia	F	p
Geranium sp.	Geranium	O	p
Geranium robertianum	Herb Robert	F	
Geum urbanum	Wood avens	O	
Ginkgo biloba	Maidenhair tree	R	t
Hebe spp.	Hebe	O	p
Hedera helix	Ivy	D	
Heracleum mantegazzianum	Giant hogweed	O	
Holcus lanatus	Yorkshire fog	O	
Hydrangea sp.	Hydrangea	O	p
Hypericum calycinum	Rose of Sharon	O	p
Ilex aquifolium	Holly	D	t/p
Juglans regia	Walnut	R	t
Laburnum anagyroides	Laburnum	R	t
Lactuca serriola	Prickly lettuce	F	
Lavandula sp.	Lavender	O	p
Lavatera arborea	Tree mallow	O	p
Leycesteria formosa	Pheasant berry	R	p
Ligustrum sp.	Privet	F	p
Lolium perenne	Perennial rye-grass	D	
Magnolia sp.	Magnolia	O	t
Mahonia aquifolium	Oregon grape	R	p

Latin Name	Common name	Abundance	Qualifiers
Malva sylvestris	Common mallow	O	
Meconopsis cambric	Welsh poppy	O	
Nepeta sp.	Catmint	R	p
Penstemon sp.	Penstemon	O	p
Pentaglottis sempervirens	Green alkanet	O	
Periscaria amplexicaulis	Red bistort	F	p
Periscaria microcephala	Knotweed 'Red Dragon'	R	p
Perovskia atriplicifolia	Russian sage	R	p
Philadelphus sp.	Mock orange	R	p
Photinia x fraseri	Christmas berry	R	p
Poa annua	Annual meadow-grass	O	
Prunella vulgaris	Self-heal	A	
Prunus sp.	Cherry	F	t
Prunus cerasifera	Purple-leaved plum	R	t
Prunus laurocerasus	Cherry laurel	F	p
Pseudofumaria lutea	Yellow corydalis	O	
Pulmonaria officinalis	Lungwort	R	p
Quercus cerris	Turkey oak	O	t
Quercus robur	Pedunculate oak	R	t
Ranunculus repens	Creeping buttercup	O	
Rhododendron ponticum	Common rhododendron	A	p
Ribes sanguineum	Ornamental currant	R	p
Rosa sp.	Rose	O	p
Rosmarinus officinalis	Rosemary	R	p
Rubus fruticosus agg.	Bramble	F	
Rumex sp.	Dock	F	
Salix caprea	Goat willow	R	y
Salvia officinalis	Purple sage	R	p
Sambucus nigra	Elder	F	t
Sisymbrium officinale	Hedge mustard	F	
Solidago canadensis	Canadian goldenrod	R	p
Sonchus sp.	Sow-thistle	O	
Sorbus aucuparia	Rowan	O	t
Taraxacum spp.	Dandelion	F	
Tilia sp.	Lime	F	t
Trifolium repens	White clover	F	

Latin Name	Common name	Abundance	Qualifiers
Urtica dioica	Common nettle	A	
Verbascum thapsus	Great mullein	R	p
Viburnum sp.	Viburnum	O	p
Weigela sp.	Weigela	O	p
Yucca sp.	Spanish dagger	R	p

Appendix 4: Legislation and Planning Policy

Important notice: This section contains details of legislation and planning policy applicable in Britain only (i.e. not including the Isle of Man, Northern Ireland, the Republic of Ireland or the Channel Islands) and is provided for general guidance only. While every effort has been made to ensure accuracy, this section should not be relied upon as a definitive statement of the law.

A NATIONAL LEGISLATION AFFORDED TO SPECIES

The objective of the EC Habitats Directive[9] is to conserve the various species of plant and animal which are considered rare across Europe. The Directive is transposed into UK law by The Conservation of Habitats and Species Regulations 2010 (as amended) (formerly The Conservation (Natural Habitats, &c.) Regulations 1994 (as amended)) and The Offshore Marine Conservation (Natural Habitats, &c.) Regulations 2007 (as amended).

The Wildlife and Countryside Act 1981 (as amended) is a key piece of national legislation which implements the Convention on the Conservation of European Wildlife and Natural Habitats (Bern Convention) and implements the species protection obligations of Council Directive 2009/147/EC (formerly 79/409/EEC) on the Conservation of Wild Birds (EC Birds Directive) in Great Britain.

Since the passing of the Wildlife & Countryside Act 1981, various amendments have been made, details of which can be found on www.opsi.gov.uk. Key amendments have been made through the Countryside and Rights of Way (CRoW) Act (2000).

Other legislative Acts affording protection to wildlife and their habitats include:

- Deer Act 1991;
- Countryside and Rights of Way (CRoW) Act 2000;
- Natural Environment & Rural Communities (NERC) Act 2006;
- Protection of Badgers Act 1992:
- Wild Mammals (Protection) Act 1996.

Species and species groups that are protected or otherwise regulated under the aforementioned domestic and European legislation, and that are most likely to be affected by

[9] Council Directive 92/43/EEC on the Conservation of Natural Habitats and of Wild Fauna and Flora

development activities, include herpetofauna (amphibians and reptiles), badger, bats, birds, dormouse, invasive plant species, otter, plants, red squirrel, water vole and white clawed crayfish.

Explanatory notes relating to species protected under The Conservation of Habitats and Species Regulations 2010 (as amended) (which includes smooth snake, sand lizard, great crested newt and natterjack toad), all bat species, otter, dormouse and some plant species) are given below. **These should be read in conjunction with the relevant species sections that follow.**

- In the Directive, the term 'deliberate' is interpreted as being somewhat wider than intentional and may be thought of as including an element of recklessness.
- The Conservation of Habitats and Species Regulations 2010 (as amended) does not define the act of 'migration' and therefore, as a precaution, it is recommended that short distance movement of animals for e.g. foraging, breeding or dispersal purposes are also considered.
- In order to obtain a European Protected Species Mitigation (EPSM) licence, the application must demonstrate that it meets all of the following three 'tests': i) the action(s) are necessary for the purpose of preserving public health or safety or other imperative reasons of overriding public interest including those of a social or economic nature and beneficial consequence of primary importance for the environment; ii) that there is no satisfactory alternative and iii) that the action authorised will not be detrimental to the maintenance of the species concerned at a favourable conservation status in their natural range.

Bats

All species of bat are fully protected under The Conservation of Habitats and Species Regulations 2010 (as amended) through their inclusion on Schedule 2. Regulation 41 prohibits:

- Deliberate killing, injuring or capturing of Schedule 2 species (e.g. all bats)
- Deliberate disturbance of bat species as:
    - a) to impair their ability:
        - (i) to survive, breed, or reproduce, or to rear or nurture young;
        - (ii) to hibernate or migrate[3]
    - b) to affect significantly the local distribution or abundance of the species
- Damage or destruction of a breeding site or resting place

- Keeping, transporting, selling, exchanging or offering for sale whether live or dead or of any part thereof.

Bats are also currently protected under the Wildlife and Countryside Act 1981 (as amended) through their inclusion on Schedule 5. Under this Act, they are additionally protected from:

- Intentional or reckless disturbance (at any level);
- Intentional or reckless obstruction of access to any place of shelter or protection:
- Selling, offering or exposing for sale, possession or transporting for purpose of sale.

How is the legislation pertaining to bats liable to affect development works?

A European Protected Species Mitigation (EPSM) Licence issued by the relevant countryside agency (e.g. Natural England) will be required for works liable to affect a bat roost or for operations likely to result in a level of disturbance which might impair their ability to undertake those activities mentioned above (e.g. survive, breed, rear young and hibernate). The licence is to allow derogation from the relevant legislation but also to enable appropriate mitigation measures to be put in place and their efficacy to be monitored.

The legislation may also be interpreted such that, in certain circumstances, important foraging areas and/or commuting routes can be regarded as being afforded *de facto* protection, for example, where it can be proven that the continued usage of such areas is crucial to maintaining the integrity of a local population.

Birds

With certain exceptions, all birds, their nests and eggs are protected under Sections 1-8 of the Wildlife and Countryside Act 1981 (as amended). Among other things, this makes it an offence to:

- Intentionally kill, injure or take any wild bird;
- Intentionally take, damage or destroy the nest of any wild bird while it is in use or being built;
- Intentionally take or destroy an egg of any wild bird:
- Sell, offer or expose for sale, have in his possession or transport for the purpose of sale any wild bird (dead or alive) or bird egg or part thereof.

Certain species of bird, for example the barn owl, black redstart, hobby, bittern and kingfisher receive additional special protection under Schedule 1 of the Act and Annex 1 of the European

Community Directive on the Conservation of Wild Birds (2009/147/EC). This affords them protection against:

- Intentional or reckless disturbance while it is building a nest or is in, on or near a nest containing eggs or young;
- Intentional or reckless disturbance of dependent young of such a bird.

How is the legislation pertaining to birds liable to affect development works?

To avoid contravention of the Wildlife and Countryside Act 1981 (as amended), works should be planned to avoid the possibility of killing or injuring any wild bird, or damaging or destroying their nests. The most effective way to reduce the likelihood of nest destruction in particular is to undertake work outside the main bird nesting season which typically runs from March to August[10]. Where this is not feasible, it will be necessary to have any areas of suitable habitat thoroughly checked for nests prior to vegetation clearance.

Those species of bird listed on Schedule 1 are additionally protected against disturbance during the nesting season. Thus, it will be necessary to ensure that no potentially disturbing works are undertaken in the vicinity of the nest. The most effective way to avoid disturbance is to postpone works until the young have fledged. If this is not feasible, it may be possible to maintain an appropriate buffer zone or standoff around the nest.

Herpetofauna (Amphibians and Reptiles)

The sand lizard *Lacerta agilis*, smooth snake *Coronella austriaca*, natterjack toad *Epidalea calamita* and great crested newt *Triturus cristatus* receive full protection under The Conservation of Habitats and Species Regulations 2010 (as amended) through their inclusion on Schedule 2. The pool frog *Pelophylax lessonae* is also afforded full protection under the same legislation. Regulation 41 prohibits:

- Deliberate killing, injuring or capturing of species listed on Schedule 2
- Deliberate disturbance of any Schedule 2 species as:
  - a) to impair their ability
    - (i) to survive, breed, or reproduce, or to rear or nurture young;

[10] It should be noted that this is the main breeding period. Breeding activity may occur outwith this period (depending on the particular species and geographical location of the site) and thus due care and attention should be given when undertaking potentially disturbing works at any time of year.

- (ii) in the case of animals of a hibernating or migratory species, to hibernate or migrate
- b) to affect significantly the local distribution or abundance of the species
- Deliberate taking or destroying of the eggs of a Schedule 2 species
- Damage or destruction of a breeding site or resting place
- Keeping, transporting, selling, exchanging or offering for sale whether live or dead or of any part thereof.

With the exception of the pool frog, these species are also currently listed on Schedule 5 of the Wildlife and Countryside Act 1981 (as amended). Under this Act, they are additionally protected from:

- Intentional or reckless disturbance (at any level)
- Intentional or reckless obstruction of access to any place of shelter or protection
- Selling, offering or exposing for sale, possession or transporting for purpose of sale.

Other species of herpetofauna are protected solely under Schedule 5 of the Wildlife & Countryside Act 1981 (as amended). Species such as the adder Vipera berus, grass snake Natrix natrix, common lizard Zootoca vivipara and slow-worm Anguis fragilis are listed in respect to Section 9(1) & (5). For these species, it is prohibited to:

- Intentionally kill or injure these species
- Sell, offer or expose for sale, possess or transport for purpose of sale these species, or any part thereof.

Common frog Rana temporaria, common toad Bufo bufo, smooth newt Lissotriton vulgaris and palmate newt L. helveticus are listed in respect to Section 9(5) only which affords them protection against sale, offering or exposing for sale, possession or transport for the purpose of sale.

How is the legislation pertaining to herpetofauna liable to affect development works?

A European Protected Species (EPSM) Mitigation Licence issued by the relevant countryside agency (e.g. Natural England) will be required for works liable to affect the breeding sites or resting places of those amphibian and reptile species protected under The Conservation Habitats and Species Regulations 2010 (as amended). A licence will also be required for operations liable to result in a level of disturbance which might impair their ability to undertake those activities mentioned above (e.g. survive, breed, rear young and hibernate). The licences are to allow derogation from the relevant legislation but also to

enable appropriate mitigation measures to be put in place and their efficacy to be monitored. Although not licensable, appropriate mitigation measures may also be required to prevent the intentional killing or injury of adder, grass snake, common lizard and slow worm, thus avoiding contravention of the Wildlife and Countryside Act 1981 (as amended).

Wild Mammals (Protection) Act 1996

All wild mammals are protected against intentional acts of cruelty under the above legislation. This makes it an offence to:

- Mutilate, kick, beat, nail or otherwise impale, stab, burn, stone, crush, drown, drag or asphyxiate any wild mammal with intent to inflict unnecessary suffering.

To avoid possible contravention, due care and attention should be taken when carrying out works (for example operations near burrows or nests) with the potential to affect any wild mammal in this way, regardless of whether they are legally protected through other conservation legislation or not.

B NATIONAL AND EUROPEAN LEGISLATION AFFORDED TO HABITATS

Statutory Designations: National

Nationally important areas of special scientific interest, by reason of their flora, fauna, or geological or physiographical features, are notified by the countryside agencies as statutory **Sites of Special Scientific Interest** (SSSIs) under the National Sites and Access to the Countryside Act 1949 and latterly the Wildlife & Countryside Act 1981 (as amended). As well as underpinning other national designations (such as **National Nature Reserves** which are declared by the countryside agencies under the same legislation), the system also provides statutory protection for terrestrial and coastal sites which are important within a European context (Natura 2000 network) and globally (such as Wetlands of International Importance). See subsequent sections for details of these designations. Improved provisions for the protection and management of SSSIs have been introduced by the Countryside and Rights of Way Act 2000 (in England and Wales).

The Wildlife & Countryside Act 1981 (as amended) also provides for the making of **Limestone Pavement Orders**, which prohibit the disturbance and removal of limestone from such designated areas, and the designation of **Marine Nature Reserves**, for which byelaws must be made to protect them.

Statutory Designations: International

Special Protection Areas (SPAs), together with **Special Areas of Conservation** (SACs) form the **Natura 2000** network. The Government is obliged to identify and classify SPAs under the EC Birds Directive (Council Directive 2009/147/EC (formerly 79/409/EEC)) on the Conservation of Wild Birds). SPAs are areas of the most important habitat for rare (listed on Annex I of the Directive) and migratory birds within the European Union. Protection afforded SPAs in terrestrial areas and territorial marine waters out to 12 nautical miles (nm) is given by The Conservation of Habitats & Species Regulations 2010 (as amended). The Offshore Marine Conservation (Natural Habitats, &c.) Regulations 2007 (as amended) provide a mechanism for the designation and protection of SPAs in UK offshore waters (from 12-200 nm).

The Government is obliged to identify and designate SACs under the EC Habitats Directive (Council Directive 92/43/EEC on the Conservation of Natural Habitats and of Wild Fauna and Flora). These are areas which have been identified as best representing the range and variety of habitats and (non-bird) species listed on Annexes I and II to the Directive within the European Union. SACs in terrestrial areas and territorial marine waters out to 12 nautical miles are protected under The Conservation of Habitats & Species Regulations 2010 (as amended). The Offshore Marine Conservation (Natural Habitats, &c.) Regulations 2007 (as amended) provide a mechanism for the designation and protection of SACs in UK offshore waters (from 12-200 nm).

Ramsar sites are designated under the Convention on Wetlands of International Importance, agreed in Ramsar, Iran, in 1971. The Convention covers all aspects of wetland conservation and wise use, in particular recognizing wetlands as ecosystems that are globally important for biodiversity conservation. Wetlands can include areas of marsh, fen, peatland or water and may be natural or artificial, permanent or temporary. Wetlands may also incorporate riparian and coastal zones adjacent to the wetlands. Ramsar sites are underpinned through prior notification as Sites of Special Scientific Interest (SSSIs) and as such receive statutory protection under the Wildlife & Countryside Act 1981 (as amended) with further protection provided by the Countryside and Rights of Way (CRoW) Act 2000. Policy statements have been issued by the Government in England and Wales highlighting the special status of Ramsar sites. This effectively extends the level of protection to that afforded to sites which have been designated under the EC Birds and Habitats Directives as part of the Natura 2000 network (e.g. SACs & SPAs).

Statutory Designations: Local

Under the National Sites and Access to the Countryside Act 1949 Local Nature Reserves (LNRs) may be declared by local authorities after consultation with the relevant countryside agency. LNRs are declared for sites holding special wildlife or geological interest at a local level and are managed for nature conservation, and provide opportunities for research and education and enjoyment of nature.

Non-Statutory Designations

Areas considered to be of local conservation interest may be designated by local authorities as a Wildlife Site, under a variety of names such as County Wildlife Sites (CWS), Listed Wildlife Sites (LWS), Local Nature Conservation Sites (LNCS), Sites of Biological Importance (SBIs), Sites of Importance for Nature Conservation (SINCs), or Sites of Nature Conservation Importance (SNCIs). The criteria for designation may vary between counties.

Together with the statutory designations, these are defined in local and structure plans under the Town and Country Planning system and are a material consideration when planning applications are being determined. The level of protection afforded to these sites through local planning policies and development frameworks may vary between counties.

Regionally Important Geological and Geomorphological Sites (RIGS) are the most important places for geology and geomorphology outside land holding statutory designations such as SSSIs. Locally-developed criteria are used to select these sites, according to their value for education, scientific study, historical significance or aesthetic qualities. As with local Wildlife Sites, RIGS are a material consideration when planning applications are being determined.

C NATIONAL PLANNING POLICY

The National Planning Policy Framework (NPPF))

The National Planning Policy Framework (NPPF) replaced Planning Policy Statement (PPS9) in April 2012 as the key national planning policy concerning nature conservation. The NPPF emphasises the need for suitable development. The Framework specifies the need for protection of designated sites and priority habitats and priority species. An emphasis is also made for the need for ecological networks via preservation, restoration and re-creation. The protection and recovery of priority species – that is those listed as UK Biodiversity Action Plan priority species – is also listed as a requirement of planning policy. In determining a planning application, planning authorities should aim to conserve and enhance biodiversity by ensuring that: designated sites are protected from adverse harm; there is appropriate mitigation or compensation where significant harm cannot be avoided; opportunities to incorporate

biodiversity in and around developments are encouraged; planning permission is refused for development resulting in the loss or deterioration of irreplaceable habitats including aged or veteran trees and also ancient woodland.

The Natural Environment and Rural Communities Act 2006 and The Biodiversity Duty

The Natural Environment and Rural Communities (NERC) Act came into force on 1st October 2006. Section 40 of the Act requires all public bodies to have regard to biodiversity conservation when carrying out their functions. This is commonly referred to as the 'biodiversity duty'.

Section 41 of the Act (Section 42 in Wales) requires the Secretary of State to publish a list of habitats and species which are of 'principal importance for the conservation of biodiversity.' This list is intended to assist decision makers such as public bodies in implementing their duty under Section 40 of the Act. Under the Act these habitats and species are regarded as a material consideration in determining planning applications. A developer must show that their protection has been adequately addressed within a development proposal.

D REGIONAL AND LOCAL PLANNING POLICY

The London Plan

The Mayor's Spatial Strategy for Greater London (2009) deals with matters of strategic importance for London. Chapter 7 –London's Living Places and Spaces sets out the policy areas that impact amongst other factors the quality and function of green infrastructure and biodiversity. Policies 7.16 – Green Belt, 7.17- Metropolitan Open Land, 7.18 – Protecting local natural space and addressing local deficiency address the proposals relating to these factors.

Policy 7.16: Green Belt

Strategic- A: The Mayor strongly supports the current extent of London's Green Belt, its extension in appropriate circumstances and its protection from inappropriate development.

Planning decisions- B: The strongest protection should be given to London's Green Belt, in accordance with PPG2. Inappropriate development should be refused, except in very special circumstances. Forms of development that might be appropriate together with high quality management practices that improve access to and/or the environmental and landscape quality of London's Green Belt, while ensuring it continues to meet its statutory purposes, will be supported.

Policy 7.17: Metropolitan Open Land

Strategic - A: The Mayor strongly supports the current extent of Metropolitan Open Land (MOL), its extension in appropriate circumstances and its protection from development having an adverse impact on the openness of MOL.

Planning decisions - B: The strongest protection should be given to London's Metropolitan Open Land and inappropriate development refused, except in very special circumstances, giving the same level of protection as in the Green Belt. Essential ancillary facilities for appropriate uses will only be acceptable where they maintain the openness of MOL..

LDF preparation

C: Any alterations to the boundary of MOL should be undertaken by Boroughs through the LDF process, in consultation with the Mayor and adjoining authorities.

D: To designate land as MOL boroughs need to establish that the land meets at least one of the following criteria:

a) *it contributes to the physical structure of London by being clearly distinguishable from the built up area*
b) *it includes open-air facilities, especially for leisure, recreation, sport, the arts and cultural activities, which serve either the whole or significant parts of London*
c) *it contains features or landscapes (historic, recreational, biodiversity) of either national or metropolitan value d it forms part of a Green Chain or a link in the network of green infrastructure and meets one of the above criteria.*

Policy 7.18: Protecting local natural space and addressing local deficiency
LDF preparation

A: When assessing local open space needs LDFs should:

a) *include appropriate designations and policies for the protection of local open space*
b) *identify areas of public open space deficiency, using the open space hierarchy set out in Table 7.2 as a benchmark for all the different types of open space identified in the hierarchy*
c) *ensure that future open space needs are planned for in areas with the potential for substantial change such as Opportunity Areas, Regeneration Areas, Intensification Areas and other local areas.*

B: Use the CABESpace/Mayor of London Best Practice Guidance 'Open Space Strategies' as guidance for developing policies on the proactive creation, enhancement and management of open space.

Connecting with London's Nature: The Mayor's Biodiversity Strategy (GLA, 2002) includes a number of policies and proposals for protecting green spaces and important species that are relevant to the site.

Proposal 3: Conserving species through the planning system states that:

''The Mayor will and boroughs should resist development that would have a significant adverse impact on the population or conservation status of protected species or priority species.

Proposal 6: Greening new developments states that:

"The Mayor will and boroughs should ensure that new development capitalises on opportunities to create, manage and enhance wildlife habitat and natural landscape. Priority should be given to sites within or near to areas deficient in accessible wildlife sites, areas of regeneration, and adjacent to existing wildlife sites".

A recent technical report (GLA, 2008) on living roofs and walls has been published to support the London Plan (2009) and the new London habitat – Built Structures. In outline, it includes the following key policies;

''The major will and boroughs should expect major developments to incorporate living roofs and walls where feasible and reflect this principle in LDF policies. It is expected that this will include roof and wall planting that delivers as many of these objectives as possible;

- Accessible roof space
- Adapting to and mitigating climate change
- Sustainable urban drainage
- Enhancing biodiversity
- Improved appearance

Boroughs should also encourage the use of living in smaller developments and extensions where the opportunity arises''.

London Borough of Camden Core Strategy

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:

- 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.

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:

- designating existing nature conservation sites;
- protecting other green areas with nature conservation value, including gardens, where possible;
- expecting the provision of new or enhanced habitat, where possible, including through biodiverse green or brown roofs and green walls; and,
- 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:

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

E SPECIES AND HABITATS OF MATERIAL CONSIDERATION FOR PLANNING IN ENGLAND

In recent years there has been some confusion and uncertainty over the use of Biodiversity Action Plan (BAP) list as a material planning consideration in England. The uncertainty has arisen as a consequence of the publication of Biodiversity 2020: A strategy for England's wildlife and ecosystem services (2011) to replace the previous England Biodiversity Strategy, coupled with the replacement of the UK BAP itself with the UK Post-2010 Biodiversity Framework (2012). Biodiversity issues are now devolved. These new strategies and

framework resulted in changes in the terminology used to describe priority habitats and species in England.

Previous planning policy (and some supporting guidance which is still current, eg ODPM Circular 06/2005, now under revision), refers to UK BAP 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. 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. So the same species and habitats are of material consideration for planning purposes as previously was the case, they are just referenced using different terminology.

Given the relatively recent nature of these changes you will still see references in local plans and some Government or Government agency documents and circulars to BAP habitats and species. As stated above these same habitats and species remain material considerations in planning albeit they are now referred to either as habitats and species of principal importance or simply priority habitats and priority species.

http://www.naturalengland.org.uk/ourwork/conservation/biodiversity/protectandmanage/habsandspeciesimportance.aspx

F REGIONAL AND LOCAL BAPS

The UK plan also encourages the production of local Biodiversity Action Plans at the County or District level. The London Biodiversity Action Plan contains 14 Habitat Action Plans (HAPs) and 12 Species Action Plans (SAPs).

Specific HAPs and SAPs, which are of potential relevance to this site include:

Habitats

- Built Structures.

Species

- Bats; and,
- House sparrow.

It should be noted that all Species of Principal Importance are to be considered a priority within the London Borough of Camden, and where possible actions should be taken to conserve and enhance them.

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