



QA**28 Redington Road – Preliminary Ecological Appraisal**

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1.0 EXECUTIVE SUMMARY

1.1 Greengage Environmental Ltd was commissioned to undertake a Preliminary Ecological Appraisal by Thomas Croft Architects of 28 Redington Road, Hampstead in the London Borough of Camden.

1.2 Planning permission has been granted for the development which seeks renovation and refurbishment of the existing building including side and rear extension (Planning ref: 2019/6407/P). This document is a report of this survey and has produced to discharge planning condition 9 which states:

'Prior to any works on site, a phase 1 habitat survey should be undertaken of the entire site to determine its habitat value and potential for protected species (e.g. bats, reptiles, hedgehogs). The survey should be undertaken by a suitable qualified ecologist who is a member of the Chartered Institute of Ecology and Environmental Management. (CIEEM). An assessment of impacts for the proposed landscaping should be considered along with recommendations for enhancement for wildlife.'

1.3 In accordance with the above planning condition, this survey aimed to establish the ecological value of this site and the presence/likely-absence of notable and/or legally protected species in order to inform appropriate mitigation, compensation and enhancement actions in light of proposed development works.

1.4 The survey area extends to 0.2 hectares and comprises a three-storey residential property with associated driveway and garden with introduced shrub and scattered trees. At the time of survey, the improved grassland in the rear garden been cleared and much of this space comprised bare ground.

1.5 Previous surveys undertaken by Greengage in 2016 and 2019 which confirmed likely absence of reptiles within the garden space but confirmed presence of roosting bats in the existing building. Three roosts were identified and characterised as summer day roosts used by a small number of individual common pipistrelle (*Pipistrellus pipistrellus*) and soprano pipistrelle (*P. pygmaeus*) bats.

1.6 Given the absence of reptiles in previous survey, and the fact the site is isolated from other areas of suitable reptile habitat, it is considered unlikely that reptiles would have dispersed into this area ahead of clearance of improved grassland.

1.7 The updated PEA confirmed that conditions are similar to those described in the previous ecology survey reports with exception of the improved grassland and therefore, the site has the potential to support the following species;

- Confirmed presence of foraging and commuting bats;
- Confirmed presence of roosting bats in the existing residential building;
- Moderate potential for bat roosts in some trees on site;

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- High potential to support nesting birds;
 - Low potential to support UK Biodiversity Action Plan species hedgehog (*Erinaceus europaeus*).
- 1.8 A European Protected Species Mitigation (EPSM) licence is currently being prepared to enable commencement of works affecting the confirmed roosts in the existing residential building.
- 1.9 It is understood that the trees with moderate bat potential are to be retained. Bat sensitive lighting should be incorporated into the scheme to ensure light levels do not exceed current levels on the trees with moderate roosting potential and suitable bat foraging and commuting habitat.
- 1.10 It is also recommended that any clearance of vegetation on site should be taken outside of breeding bird season (March-August inclusive), unless a suitably qualified ecologist confirms absence prior to clearance.
- 1.11 Any clearance of scrub or dense ground cover should be preceded by a thorough hand search to check for hedgehogs, particularly if undertaken during hibernation season (October-April). In the event that a hedgehog is discovered, the hedgehog should be relocated to nearby suitable habitat that will not be impacted by the development.
- 1.12 Mitigation, compensation and enhancements concepts are discussed, which should be factored into design and approach at site.
- 1.13 Assuming key mitigation actions identified by the results of the further surveys are implemented, alongside enhancements for the site including wildlife friendly landscaping, bird and bat boxes and invertebrate habitat features, then the proposal stand to result in an increase in value for biodiversity.

2.0 INTRODUCTION

2.1 Greengage was commissioned to undertake a Preliminary Ecological Appraisal by Thomas Croft Architects of 28 Redington Road, Hampstead in the London Borough of Camden.

2.2 This document is a report of this survey and has produced to discharge planning condition 9 for the development which seeks renovation and refurbishment of the existing building including side and rear extension. Planning condition 9 states:

'Prior to any works on site, a phase 1 habitat survey should be undertaken of the entire site to determine its habitat value and potential for protected species (e.g. bats, reptiles, hedgehogs). The survey should be undertaken by a suitable qualified ecologist who is a member of the Chartered Institute of Ecology and Environmental Management. (CIEEM). An assessment of impacts for the proposed landscaping should be considered along with recommendations for enhancement for wildlife.'

2.3 In accordance with the above planning condition, this survey aimed to establish the ecological value of this site and the presence/likely-absence of notable and/or legally protected species in order to inform appropriate mitigation, compensation and enhancement actions in light of proposed development works.

SITE DESCRIPTION

2.4 The site is approximately 0.2 hectares and is approximately centred on National Grid Reference TQ257858 and OS Co-ordinates 525798, 185861.

2.5 The site supports a three storey residential property with associated driveway and garden space. The building is a brick built structure with a pitched and tiled roof which links to a small annex block. The garden, that extends some distance to the rear of the property, supports a number of mature trees and shrub beds. At the time of survey, the improved grassland in the garden been cleared and much of this space comprises bare ground. There is an area of scattered trees and shrubs towards at the front along Redington road which also had evidence of recent clearance in the form of wood chippings.

2.6 The site is set in the urbanised area of Hampstead Village. A green part of north London, Hampstead is characterised by an abundance of large residential properties with gardens and tree lined streets, as well as the network of parks including Hampstead Heath (located just 350m from the site at its closest point); accordingly, there is plenty of green space in the area, with well-defined green links to and from the site.

3.0 METHODOLOGY

3.1 The PEA (which included an Extended Ecological Phase 1 Survey) was undertaken in accordance with guidance in the Joint Nature Conservation Committee (JNCC) (2010) Handbook for Phase 1 Habitat Survey¹ and the Chartered Institute of Ecological and Environmental Management (CIEEM) (2017) Guidelines for Preliminary Ecological Appraisal², in accordance with BS42020:2013: Biodiversity³. The overall assessment consisted of:

- Site specific biological information gained from statutory and non-statutory consultation; and
- A site walkover, protected species scoping assessment and phase 1 habitat survey.

3.2 The site-specific consultation provided the ecological context for the site survey carried out on the 14th August 2020.

3.3 The survey boundary and existing site is shown at Figure 1.

3.4 Greengage undertook the site walkover during overcast but dry weather conditions. Features within the site boundary and accessible features immediately bordering it were evaluated and the extent and distribution of habitats and plant communities were recorded, and supplemented with target notes on areas or species requiring further commentary. Fauna using the area were recorded and areas of habitat suitable for statutorily protected species were identified where present, with an active search carried out for evidence of such use.

DESK TOP REVIEW

3.5 A review of readily available ecological information and other relevant environmental databases (included Defra's Multi-Agency Geographic Information for the Countryside (MAGIC) website⁴) was undertaken for the site and its vicinity. In addition, a biological records search from Greenspace Information for Greater London (GiGL) were reviewed to identify the location and citations of local non-statutory designated sites and presence of records for notable and protected species. This provided the overall ecological context for the site, to better inform the Phase 1 Survey.

ON SITE SURVEYS

Flora

3.6 The extent and distribution of different habitats on site were identified and mapped according to the standard Phase 1 Survey methodologies, supplemented with target notes describing the dominant botanical species and any features of interest. Any present protected plant species and invasive/non-natives were also noted. A habitat map has been produced to illustrate the results, as shown at Figure 1.

Fauna

- 3.7 The Phase 1 Survey specifically included assessments to identify the potential value for notable, rare and protected species at site. This involved identifying potential habitats in terms of refugia, breeding sites and foraging areas in the context of species known to be present locally and regionally.
- 3.8 The likelihood of occurrence is ranked as follows:
- Negligible - While presence cannot be absolutely discounted, the site includes very limited or poor-quality habitat for a particular species. The site may also be outside the known national range for a species;
 - Low - On-site habitat is poor to moderate quality for a given species, with few or no information about their presence from desk top study. However, presence cannot be discounted due to the national distribution of the species or the nature of on-site and surrounding habitats;
 - Moderate - The on-site habitats are of moderate quality, providing most or all of the key requirements for a species. Several factors may limit the likelihood of occurrence, habitat severance, habitat disturbance and small habitat area;
 - High - On-site habitat of high quality for given species. Site is within a regional or national stronghold for that particular species with good quality surroundings and good connectivity; and
 - Present - Presence confirmed for the survey itself or recent, confirmed records from information gathered through desk top study.
- 3.9 The species surveyed for included:

Badger (Meles meles)

- 3.10 The potential for badger to inhabit or forage within the study area was assessed. Evidence of badger activity includes the identification of setts (a system of underground tunnels and nesting chambers), grubbed up grassland (caused by the animals digging for earthworms, slugs, beetles etc.), badger hairs, paths, latrines and paw prints.

Bat Species (Chiroptera)

- 3.11 The site visit was undertaken in daylight and the evaluation of bat potential comprised an assessment of natural features on site that aimed to identify characteristics suitable for bat roosts, foraging and commuting. In accordance with Bat Conservation Trust's *Good Practice Guidelines*⁵ and methods given in English Nature's (now Natural England) *Bat Mitigation Guidelines*⁶ consideration was given to:
- The availability of access to roosts for bats;
 - The presence and suitability of crevices and other places as roosts; and

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- Signs of bat activity or presence.
- 3.12 Definite signs of bat activity were taken to be:
- The bats themselves;
 - Droppings;
 - Grease marks;
 - Scratch marks; and
 - Urine spatter.
- 3.13 Signs of possible bat presence were taken to be:
- Stains; and
 - Moth and butterfly wings.
- 3.14 Features with potential as roost sites include mature trees with holes, crevices or splits (the most utilised trees being oak, ash, beech, willow and Scots pine), caves, bridges, tunnels and buildings with cracks or gaps serving as possible access points to voids or crevices.
- 3.15 Additionally, linear natural features such as tree lines, hedgerows and river corridors are often considered valuable for commuting and semi-natural habitats such as woodland, meadows and waterbodies can provide important foraging resources. Consideration was given to the presence of these features both immediately within and adjacent to the assessment area.

Great Crested Newt (*Triturus cristatus*)

- 3.16 An assessment was carried out to identify any potential habitats that may support great crested newt (GCN) and other native amphibians. The aquatic and terrestrial habitats required generally include small, still ponds or water bodies suitable for breeding; and woodland or grassland areas where there is optimal invertebrate prey potential.

Reptiles

- 3.17 The potential for reptile species on site was assessed during the walkover survey. Possible species include grass snake (*Natrix natrix*), smooth snake (*Coronella austriaca*), adder (*Vipera berus*), common and sand lizard (*Lacerta vivipara* and *L. agilis*) and slow worm (*Anguis fragilis*). These native reptile species generally require open areas with low, mixed-height vegetation, such as heathland, rough grassland, and open scrub or,

in the case of grass snake, waterbody margins. Suitable well drained and frost-free areas are needed so they can survive the winter.

Dormouse (*Muscardinus avellanarius*)

- 3.18 During the walkover survey the potential for dormouse to be present on site was assessed. This included observations for suitable habitat such as well-layered woodland, scrub and linking hedgerows, particularly those comprised of species offering suitable food sources such as honeysuckle and hazel, in addition to direct evidence such as characteristically gnawed hazelnuts, chewed ash keys and honeysuckle flowers, or nests.

Water Vole (*Arvicola terrestris*)

- 3.19 Water vole potential was assessed during the walkover survey. The potential is identified by the presence of ditches, rivers, dykes and lakes with holes and runs along the banks. Latrines, footprints or piles of food can also be noted.

Otter (*Lutra lutra*)

- 3.20 Where desktop review or consultation indicates the presence of otter in a river catchment, the presence of water bodies with good cover and potential holt (den) sites would be noted. Spraint, footprints or food remains can also be noted.

Birds

- 3.21 During the walkover survey, the potential for breeding, wintering and migratory birds was assessed. In particular, this includes areas of trees, scrub, heathland and wetlands that could support nests for common or notable species.

Invertebrates

- 3.22 As part of the walkover survey the quality of invertebrate habitat and the potential for notable terrestrial and aquatic invertebrate species was considered. There is a wide variety of habitats suitable for invertebrates including wetland areas, heathland, areas of bare sandy soil, ephemeral brownfield vegetation and meadows.

Biodiversity Action Plan priority species/ Species of Principal Importance

- 3.23 Where consultation and desk-study indicates the presence of BAP priority species (Species of Principal Importance) not protected by statute, effort was made to establish the potential for the site to support these species.

London Invasive Species (LISI) Species

- 3.24 During the walkover survey a visual search for the presence of LISIS species was conducted.

SURVEYORS

- 3.25 James Bumphrey, who undertook the PEA and reviewed this report, has an undergraduate degree in Environmental Sciences (BSc Hons), a Master's degree in Environmental Consultancy, a Natural England Great Crested Newt Licence (2018-35160-CLS-CLS). James has 7 years' experience undertaken ecological surveys and assessments on site such as this.
- 3.26 Laura Thomas, who prepared this report, has an undergraduate degree in Biology (BSc Hons) and a Master's degree in Evolutionary and Behavioural Ecology and is a Graduate member of CIEEM. Laura has over 4 years' experience in the commercial sector.
- 3.27 This report was written by Laura Thomas and reviewed and verified by Mike Harris who confirms in writing (see the QA sheet at the front of this report) that the report is in line with the following:
- Represents sound industry practice;
 - Reports and recommends correctly, truthfully and objectively;
 - Is appropriate given the local site conditions and scope of works proposed; and
 - Avoids invalid, biased and exaggerated statements.

CONSTRAINTS

- 3.28 The PEA was undertaken during an optimal time of year during ideal conditions by a suitably qualified ecologist. It was possible to access all areas of the site.
- 3.29 No significant constraints that stand to impact conclusions drawn in this report therefore presented themselves.

4.0 RESULTS

DESK TOP REVIEW

Designations

- 4.1 Consultations with the local biological record centre (GiGL) and the MAGIC dataset have confirmed that there are no statutory designations of national or international importance within the boundary of the site.
- 4.2 There is however one Statutory Site of Special Scientific Interest (SSSI) and two Local Nature Reserves (LNR) within a 2km radius.
- 4.3 Records from GiGL also identified 19 non-statutory Sites of Importance for Nature Conservation (SINC) within 2km of the site boundary. SINC's are recognised by Local Planning Authorities as important wildlife sites.
- 4.4 Table 4.1 below gives the locations and descriptions of a selection of the nearest/most relevant local designations.

Table 4.1 Statutory and Non-Statutory Designated Sites within Search Radius

Site Name	Approximate Location	Description
Statutory Designations		
Hampstead Heath Woods (SSSI and SINC)	0.4km north east	Just over six kilometres from central London, this extensive site is well known for its unique mix of semi-natural and formal habitats. Ancient woodlands contain an exceptional number of old and over-mature trees, providing dead wood habitat for a range of specialist invertebrates, including the nationally rare jewel beetle <i>Agilus pannonicus</i> . Another important habitat is the small wet flush (or bog) containing several species of bog-mosses (<i>Sphagnum</i> spp.) and water horsetail (<i>Equisetum fluviatile</i>), all very rare in London. Acid grassland occurs on the upper slopes, supporting heath bedstraw (<i>Galium saxatile</i>), pill sedge (<i>Carex pilulifera</i>), pignut (<i>Conopodium majus</i>) and other characteristic plants. In several places heathland restoration is being attempted, using heathers (<i>Calluna vulgaris</i> , <i>Erica</i> spp.). Relict heathland invertebrates include the tube-web spider (<i>Atypus affinis</i>) at its only known London site. The many ponds and watercourses on the site are of further botanical, entomological and ornithological interest. Other rare plants include creeping willow (<i>Salix repens</i>), lemon-scented fern (<i>Oreopteris limbosperma</i>) and hard fern (<i>Blechnum spicant</i>). One of north London's most popular open spaces, the Heath has been skillfully managed to integrate wildlife and recreation over the last decade.

Site Name	Approximate Location	Description
Westbere Copse (LNR)	1.4km west south	The site is mainly woodland, with the main trees being sycamore (<i>Acer pseudoplatanus</i>), oak (<i>Quercus robur</i>), aspen (<i>Populus tremula</i>) and ash (<i>Fraxinus excelsior</i>). The understorey is composed of snowberry (<i>Symphoricarpos</i> sp.), elder (<i>Sambucus nigra</i>), elm (<i>Ulmus procera</i>), blackthorn (<i>Prunus spinosa</i>) and hawthorn (<i>Crataegus monogyna</i>), with ground plants which are tolerant of shade such as cow parsley (<i>Anthriscus sylvestris</i>), nettles (<i>Urtica dioica</i>) and ivy (<i>Hedera helix</i>). 25 species of birds and 150 of plants have been recorded at the site, and it also has frogs, toads and newts.
Belsize Wood (LNR)	1.7km east south	The site is deeply shaded and has a rich variety of species, especially of insects. The understorey is dominated hawthorn (<i>Crataegus monogyna</i>) and elder, and the most common canopy trees are ash, sycamore and Swedish whitebeam (<i>Sorbus intermedia</i>). Ground level plants include butcher's-broom (<i>Ruscus aculeatus</i>), enchanter's-nightshade (<i>Circaea lutetiana</i>) and nettles.
Non-Statutory		
King's College Hampstead Campus (SINC)	0.3km west south	The site has a good range of mature trees including both native and non-native species. In places these are almost dense enough to form woodland. Species include silver birch (<i>Betula pendula</i>), ash (<i>Fraxinus excelsior</i>), lime (<i>Tilia x europaea</i>), Turkey oak (<i>Quercus cerris</i>), Lawson's cypress (<i>Cupressus lawsoniana</i>) and a young monkey puzzle tree (<i>Araucaria araucana</i>). There is dense planted shrubbery composed largely of cotoneaster (<i>Cotoneaster</i> sp.), spotted laurel (<i>Aucuba japonica</i>), Portugal laurel (<i>Prunus lusitanica</i>), rhododendron (<i>Rhododendron ponticum</i>), elder (<i>Sambucus nigra</i>), hawthorn (<i>Crataegus monogyna</i>), and laburnum (<i>Laburnum anagyroides</i>). Beneath the trees and shrubs, and at the northern edge of the central garden area are well-established patches of tall herbs and neutral grassland. Many of the species (particularly in the former category) are insect-attracting e.g. lungwort (<i>Pulmonaria</i> sp.), stonecrop (<i>Sedum</i> sp.), sage (<i>Salvia officinalis</i>), with shrubs including viburnum (<i>Viburnum</i> sp.) and Californian lilac (<i>Ceanothus</i> sp.). Colonising tall herbs include herb-robert (<i>Geranium robertianum</i>), wood avens (<i>Geum urbanum</i>) and ground elder (<i>Aegopodium podagraria</i>). To the east of the main area of woodland is a small quadrangle. This contains several large trees, including some particularly fine walnuts (<i>Juglans regia</i>), a very large hornbeam (<i>Carpinus betulus</i>) and a handkerchief tree (<i>Davidia involucreata</i>). Beneath the trees is grass with small areas of shrubbery. This adds to the bird habitats on the site. There is no access to the general public.

Site Name	Approximate Location	Description
Branch Hill (SINC)	0.4km north east	Branch Hill consists of several individual blocks of woodland, interposed with small areas of grassland. It also incorporates the private grounds of three large houses: Combe Lodge, Oak Hill House and Heysham House. Branch Hill Allotments adjacent to Frogna Rise and Oak Hill Way are also included in the site. The largest individual block of woodland is Oak Hill Wood. This contains numerous mature trees including hornbeam (<i>Carpinus betulus</i>), horse chestnut (<i>Aesculus hippocastanum</i>), yew (<i>Taxus baccata</i>), beech (<i>Fagus sylvatica</i>), sweet chestnut (<i>Castanea sativa</i>), oak (<i>Quercus sp.</i>) and ash (<i>Fraxinus excelsior</i>). Amongst the understorey species are holly (<i>Ilex aquifolium</i>), elder (<i>Sambucus nigra</i>) and cherry laurel (<i>Prunus laurocerasus</i>). Connected to Oak Hill Wood by wide wooded avenues of common lime, poplar (<i>Populus sp.</i>) and yew (<i>Taxus baccata</i>) is a smaller area of woodland and scrub in the north-west corner of the site. It is dominated by sycamore (<i>Acer pseudoplatanus</i>) with an understorey in which holly is abundant and accompanied by a small number of species including hawthorn (<i>Crataegus monogyna</i>), elder, cherry laurel and bramble (<i>Rubus fruticosus</i>). To the south is the wooded ground of Oak Hill House (mostly composed of sycamore and oak). To the north-east are wooded grounds and a high density of mature trees. This connects with the private wooded area (chiefly composed of sycamore, oak, yew and lime) aside Firecrest Drive. A good number of birds visit the site including jay, great spotted woodpecker, tawny owl, nuthatch, goldcrest, long-tailed tit and kestrel.
Hampstead Cemetery (SINC)	0.6km west	This is a peaceful cemetery within a busy part of Camden. The site has a large number of mature trees particularly ash (<i>Fraxinus excelsior</i>). Other trees include pedunculate oak (<i>Quercus robur</i>), yew (<i>Taxus baccata</i>), sycamore (<i>Acer pseudoplatanus</i>), Norway maple (<i>A. platanoides</i>), silver birch (<i>Betula pendula</i>), Lombardy poplar (<i>Populus nigra 'Italica'</i>), Pissard's plum (<i>Prunus pissardi</i>) and Swedish whitebeam (<i>Sorbus intermedia</i>). In a few places these have been allowed to regenerate freely and are now forming small patches of woodland. There is a woodland in the north of the eastern half of the cemetery which is dominated by field maple (<i>Acer campestre</i>) with elder (<i>Sambucus nigra</i>), yew and hawthorn (<i>Crataegus monogyna</i>) and a ground flora of ivy (<i>Hedera helix</i>). Small white, speckled wood, holly blue, meadow brown and small copper butterflies have been recorded here. A wildflower meadow has been sown in the northwest area. Birds recorded in the cemetery include jay, green woodpecker, long-tailed tit, goldcrest, willow warbler and linnet.

Site Name	Approximate Location	Description
Green Triangle (SINC)	1.4km south	This is an attractive community garden surrounded by housing. A good number of trees form a high canopy, these include an impressive multi-trunked sessile oak (<i>Quercus petraea</i>), sycamore (<i>Acer pseudoplatanus</i>), ash (<i>Fraxinus excelsior</i>), yew (<i>Taxus baccata</i>), silver birch (<i>Betula pendula</i>), rowan (<i>Sorbus aucuparia</i>) and field maple (<i>Acer campestre</i>). The understorey supports a variety of native and exotic shrubs and young trees, including elder (<i>Sambucus nigra</i>), hazel (<i>Corylus avellana</i>), guelder rose (<i>Viburnum lantana</i>), Portugal laurel (<i>Prunus lusitanica</i>), Oregon grape (<i>Mahonia aquifolium</i>) and magnolia (<i>Magnolia</i> sp.). The herb layer contains a variety of species providing an attraction for invertebrates. In the more shaded areas ground ivy (<i>Glechoma hederacea</i>), wood avens (<i>Geum urbanum</i>), wood dock (<i>Rumex sanguineus</i>) and ground elder (<i>Aegopodium podagraria</i>) are abundant. In less shaded spots species include dusky crane's-bill (<i>Geranium phaeum</i>), lemon balm (<i>Melissa officinalis</i>), Canadian goldenrod (<i>Solidago canadensis</i>) and the London notable species hemp-agrimony (<i>Eupatorium cannabinum</i>). Dead wood around the site provides valuable invertebrate habitat.

Biodiversity Action Plans

- 4.5 UK Biodiversity Action Plans (BAPs) have been developed which set priorities for nationally important habitats and species. To support the BAPs, Species/Habitat Statements (otherwise known as Species/Habitat Action Plans) were produced that provide an overview of the status of the species and set out the broad policies that can be developed to conserve them. A list of priority species of conservation importance was also developed.
- 4.6 The UK BAP was succeeded in 2012 by the *UK-Post 2012 Biodiversity Framework* which informed the creation of the *Biodiversity 2020* strategy; England's contribution towards the UK's commitments under the *United Nations Convention of Biological Diversity*.
- 4.7 Despite this, the UK BAP priority species lists and conservation objectives still remain valid through integration with local BAPs (which remain valid), and in the form of the Habitats and Species of Principle Importance list (as required under section 41 of the Natural Environment and Rural Communities (NERC) Act).
- 4.8 There were no UK BAP priority habitats present at site or in the immediate vicinity.
- 4.9 Local Biodiversity Action Plans (LBAPs) ensure that national action plans (the UK BAP/Biodiversity 2020) are translated into effective action at the local level and establish targets and actions for locally characteristic species and habitats.
- 4.10 The LBAPs considered to be of relevance to this site are the London BAP and the Camden BAP.

London BAP

- 4.11 The London BAP lists 26 priority habitats and species to protect and enhance, which are of importance to London's nature conservation. Notable features of the London BAP that are of relevance to this report are:
- The onus placed on the importance of built structures to local wildlife;
 - The bat Species Action Plan (SAP);
 - The house sparrow (*Passer domesticus*) SAP; and
 - Stag beetle (*Lucanus cervus*).

Camden BAP

- 4.12 The Camden BAP translates the UK Biodiversity framework, England Biodiversity Strategy and the regional London BAP targets onto the local level. The Plan outlines a series of actions to ensure that biodiversity is safeguarded in the borough and that Camden's residents are given opportunities to access the natural environment.
- 4.13 The focus and content of the BAP has been informed by an evidence base (the Camden Biodiversity Audit) and policy requirements. This was further shaped through stakeholder engagement, including a biodiversity workshop with key partners. As a result there are three key areas of focus, all of relevance to this assessment:
- Access to Nature;
 - The Built Environment; and
 - Open Spaces and Natural Habitats.

Species Record

- 4.14 The information provided in the biological data search from GiGL identified records of a number of protected and BAP priority species within 2km search radius of the site. Among others, these include the following species of relevance to the site:
- Stag Beetle;
 - Great crested newt (*Triturus cristatus*);
 - Palmate newt (*Lissotriton helveticus*);
 - Slow-worm (*Anguis fragilis*);
 - Swift (*Apus apus*);
 - Short-eared Owl (*Asio flammeus*);
 - House Sparrow;
 - Black Redstart (*Phoenicurus ochruros*);

- Tawny Owl (*Strix aluco*);
- Barn Owl (*Tyto alba*);
- Eurasian Badger (*Meles meles*);
- West European Hedgehog (*Erinaceus europaeus*);
- Bat species including common pipistrelle (*Pipistrellus pipistrellus*), soprano pipistrelle (*Pipistrellus pygmaeus*), Nathusius's pipistrelle (*Pipistrellus nathusii*), serotine (*Eptesicus serotinus*), Daubenton's (*Myotis daubentonii*), whiskered/Brandt's (*Myotis mystacinus/brandtii*), Natterer's (*Myotis nattereri*), Leisler's (*Nyctalus leisleri*), noctule (*Nyctalus noctula*) and Brown Long-eared Bat (*Plecotus auritus*).

- 4.15 The species listed above are primarily those known to be in the area that may be impacted by any proposals at the site, or that stand to benefit as a consequence of potential ecological enhancements at the site and inform site-specific mitigation and enhancement recommendations described in the following chapter.

DETAILED DESCRIPTION OF SITE

Habitats

- 4.16 The habitats presented across the assessment site consist of the following Joint Nature Conservation Committee (JNCC) Phase 1 Habitat categories, as mapped at Figure 1:
- Scattered trees (A3.1);
 - Introduced shrub (A3.1);
 - Bare ground (B4); and
 - Building/Hardstanding (J3.6).

Scattered trees

- 4.17 The rear garden has scattered trees throughout. Species include beech (*Fagus sylvatica*), oak (*Quercus* sp.), scots pine (*Pinus sylvestris*), sycamore (*Acer pseudoplatanus*), holly (*Ilex aquifolium*), horse chestnut (*Aesculus hippocastanum*), ash (*Fraxinus excelsior*), silver birch (*Betula pendula*), copper beech (*Fagus sylvatica* f. *purpurea*) and ornamental cherry (*Prunus* sp.).

Figure 4.1 Scattered trees in the rear garden



- 4.18 There are several trees along Redington road such as copper beech (*Fagus sylvatica f. purpurea*), *Prunus* sp. and *Laburnum* sp.

Introduced shrub

- 4.19 Introduced shrub was noted in the front and rear garden areas, species include buddleja, michaelmas daisy (*Aster amellus*), *Verbena* sp., valerian (*Valeriana officinalis*), lavender (*Lavandula* sp.), *Rosa* sp and common broom (*Cytisus scoparius*).

Figure 4.2 Introduced shrub in the front garden area



Bare ground

- 4.20 The grassland in the rear garden had been cleared at the time of survey leaving bare ground.

Figure 4.3 Bare ground



Building/Hardstanding

- 4.21 The only building on site comprised a three storey brick built residential property with a pitched and tiled roof which links to a small annex block. Hardstanding comprised the associated driveway and rear patio space.

Figure 4.4 28 Redington Road building



Target notes

- 4.22 The following target notes are in relation to Figure 1. These notes describe notable features at the site that are otherwise not picked up by the habitat key or site description.

Target note 1

- 4.23 Target note 1 refers to the oak and scots pine which have moderate potential for bats (see photograph 6 in Appendix 1).

DETAILED DESCRIPTION OF SITE

Species

Badger

- 4.24 No evidence of badger activity including active and inactive setts, latrines or footprints was identified. The shrub provides some value as foraging habitat however no evidence of foraging was observed.
- 4.25 Therefore, the potential for the site to support badgers is **negligible**.

Bats

Foraging

- 4.26 The trees and shrubs on site are likely to attract small numbers of invertebrate prey species providing value for foraging bats. However, the site is predominantly building/hardstanding and bare ground of negligible value for foraging bats.

4.27 Previous surveys undertaken in July 2016 and 2019 identified the site as having relatively low commuting and foraging activity however the surveys were focused largely on the buildings.

4.28 Given that conditions remain largely the same as during the time of previous survey the site is considered to have **confirmed presence** of foraging bats.

Roosting

4.29 There are numerous opportunities for roosting bats including gaps beneath the fascia's and soffits, and gaps beneath roof tiles. The emergence/re-entry surveys undertaken in 2019 identified three roost locations which were classified as summer day roosts used by a small number of individual common and soprano pipistrelle day roosts.

4.30 Furthermore, several mature/veteran trees feature cavities and crevices were noted as having the potential to provide roosting opportunities.

4.31 Therefore, the site has **confirmed presence** of roosting bats within the buildings and **moderate** potential in several mature trees on site.

Reptiles

4.32 A reptile survey in 2016 of the rear garden confirmed likely absence of reptiles. As the site is unconnected from other areas of suitable reptile habitat and it is highly unlikely that reptiles would have dispersed onto site.

4.33 The garden previously supported improved grassland which has since been cleared leaving no suitable reptile habitat.

4.34 As such, the site has **negligible** potential to support reptiles.

Great Crested Newts

4.35 There are no ponds and limited suitable terrestrial habitat on site to support Great Crested Newt at any stage of their lifecycle. Furthermore, no ponds within 500m have been recorded using 1:25000 and 1:50000 OS maps.

4.36 Therefore, the site is considered to have **negligible** potential to support reptiles.

Birds

4.37 The buildings were lacking in nesting opportunities for birds and no active or inactive nests were observed during the survey.

4.38 Suitable habitat for nesting exists within the trees and shrub on site, particularly for small passerine species. Birds identified during the survey rose-ringed parakeet (*Psittacula krameri*), green woodpecker (*Picus viridis*), wood pigeon (*Columba*

palumbus), robin (*Erithacus rubecula*), blue tit (*Cyanistes caeruleus*). A tawny owl was also observed during the bat survey.

- 4.39 Overall, the site is considered to have **high** potential to support nesting birds.

Invertebrates

- 4.40 The available habitat is reasonably common and is likely to be of value for a range of common species. There is small areas of deadwood on site which could provide foraging resources and shelter for saproxylic invertebrates recorded in the area.

- 4.41 Overall, the site is considered to have **low** potential to support notable invertebrates.

Other Protected Species

- 4.42 Value for other key protected species such as otter, water vole and dormouse was deemed negligible given the location of the site, and nature of the existing habitats.

Other BAP Species

- 4.43 The site supports features suitable for hibernating hedgehogs in the form of introduced shrub.

LISI Species

- 4.44 During the site visit an assessment of the presence of LISI species was made. Buddleja was identified as present. This species is listed as category 3 species.

5.0 EVALUATION AND DISCUSSION

BASELINE SUMMARY

5.1 The assessment site and its surroundings have potential to support the following ecological receptors of note, which could therefore be impacted upon by any future prospective development proposals, as indicated in Table 5.1 below. Comment on further recommendations for each receptor is provided; further detail and discussion can be found at paragraph 5.2 onward:

Table 5.2 Baseline Summary

Receptor	Presence/Potential Presence	Comments
Designated Sites: Statutory	Present off site	None within or adjacent to the site that stand to be impacted. Given the small scale of the proposed development, distance from the statutory LNR which lies 0.4km north east and presence of significant physical barriers of residential housing and road networks between the proposed development and LNR, impacts are considered to be highly unlikely.
Designated Sites: Non-Statutory	Present off site	None within or adjacent to the site that stand to be impacted. The development is surrounded by residential housing and small road networks. Connectivity to these sites is limited, and accordingly no impacts are predicted as a consequence of the proposed development.
Foraging bats	Confirmed presence	The site has confirmed low levels of commuting and foraging behaviour however the surveys were focusing on the building and the levels are likely higher within the garden. There is more valuable foraging habitat in the wider area however the trees and shrubs on site have value and should be retained where possible or replaced with like for like or better-quality foraging habitat. A bat-sensitive lighting strategy should be implemented during construction and operation. Effort should be made to select the least impactful luminaires, use directional lighting and minimise external lighting at night, in line with established best practice guidance provided by the Bat Conservation Trust and Institute of Lighting Professionals ⁷ .
Roosting bats	Confirmed presence	Features of value for roosting bats are present within the buildings and trees on site. Previous surveys undertaken in 2019 identified common and soprano pipistrelle day roost under the tiles in 3 locations of the buildings.

Receptor	Presence/Potential Presence	Comments
		<p>The details of the level of mitigation required and enhancement recommendations are provided in the specific Bat Survey report (ref: 551312mtAug19FV01_Bats).</p> <p>It is understood that the trees of moderate potential are to be retained. The sensitive lighting strategy should be designed so that lighting levels on these trees do not exceed current levels to ensure any possible roosting opportunities for bats is maintained and improved. If possible, lighting levels should be reduced from current levels. In future should these trees be proposed for removal the impacts upon bat roosting must be reviewed by an ecologist and further survey to assess presence/likely will likely be recommended.</p>
Birds	High	<p>There is moderate value for nesting birds within the vegetation on site. Vegetation clearance should accordingly be undertaken outside of the breeding bird season (taken to run from March to August, inclusive) unless active nests are confirmed absent by an ecologist prior to clearance.</p> <p>Proposals should provide compensatory nesting habitat in the form of wildlife friendly landscaping and bird boxes mounted on retained trees.</p>
Other BAP species	Low	<p>Any clearance of scrub or dense ground cover should be preceded by a thorough hand search to check for hedgehogs, particularly if undertaken during hibernation season (October-April). In the event that a hedgehog is discovered, the hedgehog should be relocated to nearby suitable habitat that will not be impacted by the development.</p> <p>Connectivity should be maintained for hedgehogs through the allowance of 13x13cm gaps in fences/boundary walls. Suitable foraging habitat should be created in landscaped areas.</p>
LISI	Present	<p>Buddleja was observed in the rear garden. This should be removed as part of development.</p>

DISCUSSION AND RECOMMENDATIONS

- 5.2 Given the site has limited ecological value and mitigation measures for the impacts on designated sites, foraging bats and nesting birds is provided in the table above, recommendations made in the following section are ecological enhancement recommendations only.

ENHANCEMENTS

- 5.3 There are opportunities to enhance the ecological value of the site through the development proposals. Habitat should be created to provide value for priority species in line with local conservation objectives, such as those described within the Camden and London BAP.
- Wildlife-friendly landscaping – to include native tree and shrub planting and species-rich ground cover. This should incorporate species of known value to local BAP priority pollinators and include species on the Royal Horticultural Society's Perfect for Pollinator lists⁸. Any grassland provided should incorporate wildlife turf, or products which provide higher provision of wildflowers and nectar sources for pollinators;
 - Vertical greening using native climbing plants should be incorporated within planters against walls. Raised planters of sufficient size should be planted with a mix of species including ivy (*Hedera helix*), old man's beard (*Clematis vitalba*), honeysuckle (*Lonicera periclymenum*), Dwarf morning glory (*Convolvulus tricolor*), Japanese climbing-hydrangea (*Hydrangea anomala*), common jasmine (*Jasminum officinale*). Supporting trellis systems should be in place to support and direct the growth of climbers to cover designated wall areas.
 - Provision of artificial bird nest boxes and bat boxes. House sparrow and all bat species are London and UK BAP priority species and provision of nest boxes/bat boxes integrated within the fabric of the new buildings and/or retained trees and landscaped areas would align with local and national conservation objectives. A selection of bird boxes should be installed including house sparrow terraces; and
 - Invertebrate features should be incorporated within landscaped areas to provide features of interest as well as ecological function. Stag beetle loggeries, habitat panels, solitary beehives or log piles should be placed in suitable locations. incorporated into landscaping. Stag beetle loggeries should be placed in shady areas amongst trees to provide forage and shelter for saproxylic invertebrates in larval stages, whereas solitary beehives and habitat panels should be located in sunny areas.
- 5.4 The development presents the opportunity to benefit a range of taxa through incorporation of ecological features and provision of new habitats that would encourage species to the site. Assuming appropriate mitigation and compensation actions are followed, alongside enhancements described above it should be possible to deliver an increase in value for biodiversity.

6.0 SUMMARY & CONCLUSION

- 6.1 Greengage was commissioned by Thomas Croft Architects to undertake a PEA of a site known as 28 Redington Road, Hampstead in the London Borough of Camden in order to establish the ecological value of this site and its potential to support notable and/or legally protected species.
- 6.2 The PEA and previous surveys identified value for a number of notable and protected species and habitats including:
- Confirmed presence of foraging/commuting bats;
 - Confirmed presence of roosting bats in the existing building;
 - Moderate potential for bat roosts in some trees on site;
 - High potential to support nesting birds; and
 - Low potential to support UK Biodiversity Action Plan species hedgehog.
- 6.3 Key mitigation, compensation and enhancement actions are described to enable legislative and policy compliance (see context at Appendix 2), aiming to achieve an increase in biodiversity value for the site.

FIGURE 1 SITE PLAN AND HABITAT MAP

28 Redington Road



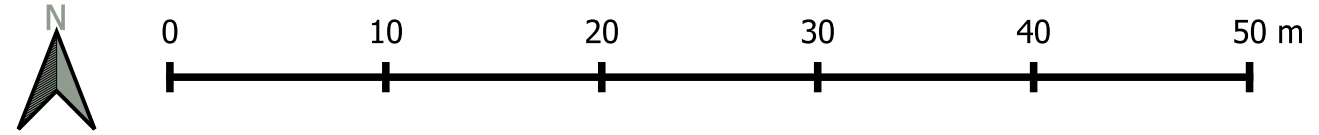
- Red line boundary
- Building
- Hardstanding
- Introduced shrub
- Bare ground
- Scattered Trees
- Target notes



9 Holyrood Street, London SE1 2EL
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Figure 1 Site Plan and Habitat Map

Project Number 551312
September 2020
1 to 400 at A3
[Map Data: Google Satellite]



APPENDIX 1 SITE PHOTOGRAPHS

Photograph 1 – The front elevation and associated drive way



Photograph 2- Scattered trees on site



Photograph 3- Patio in the rear garden



Photograph 4- The rear garden



Photograph 5- The rear elevation of the house



Photograph 6- The two trees on site with moderate bat potential



APPENDIX 2 RELEVANT LEGISLATION AND POLICY

LEGISLATION

Current key legislation relating to ecology includes the Wildlife and Countryside Act 1981 (as amended)⁹; The Conservation of Habitats and Species Regulations 2019 ('Habitats & Species Regulations')¹⁰, The Countryside and Rights of Way Act 2000 (CRoW Act)¹¹, and The Natural Environment and Rural Communities Act, 2006¹².

The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019

The Conservation of Habitats & Species Regulations replace The Conservation (Natural Habitats, etc.) Regulations 1994 (as amended)¹³, and transpose Council Directive 92/43/EEC on the Conservation of Natural Habitats and Wild Fauna and Flora ('EU Habitats Directive')¹⁴, and Council Directive 79/409/EEC on the Conservation of Wild Birds ('Birds Directive')¹⁵ into UK law (in conjunction with the Wildlife and Countryside Act).

Regulation 43 and 47 respectively of the Conservation of Habitats & Species Regulations makes it an offence (subject to exceptions) to deliberately capture, kill, disturb, or trade in the animals listed in Schedule 2 (European protected species of animals), or pick, collect, cut, uproot, destroy, or trade in the plants listed in Schedule 5 (European protected species of plant). Development that would contravene the protection afforded to European protected species requires a derogation (in the form of a licence) from the provisions of the Habitats Directive.

Regulation 63 (1) states: 'A competent authority, before deciding to undertake, or give any consent, permission or other authorisation for, a plan or project which —

(a) is likely to have a significant effect on a European site or a European offshore marine site (either alone or in combination with other plans or projects); and

(b) is not directly connected with or necessary to the management of that site;

must make an appropriate assessment of the implications for that site in view of that site's conservation objectives.'

Wildlife and Countryside Act 1981 (as amended)

The Wildlife and Countryside Act 1981 (as amended) is the principal mechanism for the legislative protection of wildlife in Great Britain. This legislation is the means by which the Convention on the Conservation of European Wildlife and Natural Habitats¹⁶ (the 'Bern Convention') and the Birds Directive and EU Habitats Directive are implemented in Great Britain.

The Countryside and Rights of Way Act 2000

The Wildlife and Countryside Act has been updated by the CRoW Act. The CRoW Act amends the law relating to nature conservation and protection of wildlife. In relation to threatened species it strengthens the legal protection and adds the word 'reckless' to the offences of damaging, disturbing, or obstructing access to any structure or place a protected species uses for shelter or protection, and disturbing any protected species whilst it is occupying a structure or place it uses for shelter or protection.

The Natural Environment and Rural Communities Act 2006

The Natural Environment and Rural Communities Act 2006 states that every public authority must, in exercising its functions, have regard, so far as is consistent with the proper exercise of those functions, to the purpose of conserving biodiversity. Biodiversity Action Plans provide a framework for prioritising conservation actions for biodiversity.

Section 41 of the Natural Environment and Rural Communities Act requires the Secretary of State to publish a list of species of flora and fauna and habitats considered to be of principal importance for the purpose of conserving biodiversity. The list, a result of the most comprehensive analysis ever undertaken in the UK, currently contains 1,149 species, including for example, hedgehog (*Erinaceus europaeus*), and 65 habitats that were listed as priorities for conservation action under the now defunct UK Biodiversity Action Plan¹⁷ (UK BAP). Despite the devolution of the UK BAP and succession of the UK Post-2010 Biodiversity Framework¹⁸ (and Biodiversity 2020 strategy¹⁹ in England), as a response to the Convention on Biological Diversity's (CBD's) Strategic Plan for Biodiversity 2011-2020²⁰ and EU Biodiversity Strategy (EUBS)²¹, this list (now referred to as the list of Species and Habitats of Principal Importance in England) will be used to guide decision-makers such as public bodies, including local and regional authorities, in implementing their duty under section 41 of the Natural Environment and Rural Communities Act 2006 'to have regard' to the conservation of biodiversity in England, when carrying out their normal functions.

Biodiversity Action Plans

Non-statutory Biodiversity Action Plans (BAPs) have been prepared on a local and regional scale throughout the UK over the past 15 years. Such plans provide a mechanism for implementing the government's broad strategy for conserving and enhancing the most endangered ('priority') habitats and species in the UK for the next 20 years. As described above the UK BAP was succeeded in England by Biodiversity 2020 although the list of priority habitats and species remains valid as the list of *Species of Principal Importance for Nature Conservation*.

Regional and local BAPs are still valid however and continue to be updated and produced.

Detail on the relevant BAPs for this site are provided in the main text of this report.

Legislation Relating to Nesting Birds

Nesting birds, with certain exceptions, are protected from intentional killing, destruction of nests and destruction/taking of eggs under the Wildlife and Countryside Act 1981 (as

amended) and the CRow Act. Any clearance of dense vegetation should therefore be undertaken outside of the nesting bird season, taken to run conservatively from March to August (inclusive), unless an ecologist confirms the absence of active nests prior to clearance.

Legislation Relating to Bats

All UK bats and their roosts are protected by law. Since the first legislation was introduced in 1981, which gave strong legal protection to all bat species and their roosts in England, Scotland and Wales, additional legislation and amendments have been implemented throughout the UK.

Six of the 18 British species of bat have Biodiversity Action Plans (BAPs) assigned to them, which highlights the importance of specific habitats to species, details of the threats they face and proposes measures to aid in the reduction of population declines.

Although habitats that are important for bats are not legally protected, care should be taken when dealing with the modification or development of an area if aspects of it are deemed important to bats such as flight corridors and foraging areas.

The Wildlife & Countryside Act 1981 (WCA) was the first legislation to provide protection for all bats and their roosts in England, Scotland and Wales (earlier legislation gave protection to horseshoe bats only.)

All eighteen British bat species are listed in Schedule 5 of the Wildlife and Countryside Act, 1981 and under Annexe IV of the Habitats Directive, 1992 as a European protected species. They are therefore fully protected under Section 9 of the 1981 Act and under Regulation 43 of the Conservation of Habitats and Species Regulations 2017, which transposes the Habitats Directive into UK law. Consequently, it is an offence to:

- Deliberately capture, injure or kill a bat;
- Intentionally or recklessly disturb a bat in its roost or deliberately disturb a group of bats;
- Damage or destroy a bat roosting place (even if bats are not occupying the roost at the time);
- Possess or advertise/sell/exchange a bat (dead or alive) or any part of a bat; and
- Intentionally or recklessly obstruct access to a bat roost.

This legislation applies to all bat life stages.

The implications of the above in relation to the proposals are that where it is necessary during construction to remove trees, buildings or structures in which bats roost, it must first be determined that work is compulsory and if so, appropriate licenses must be obtained from Natural England.

Legislation Relating to Natura 2000 Sites and Habitats Directive Annex I/II Species

European Commission Council Directive 92/43/EEC on the Conservation of Natural Habitats and Wild Fauna and Flora ('EU Habitats Directive'), and Council Directive 79/409/EEC on the Conservation of Wild Birds ('Birds Directive') form the cornerstones of nature conservation legislation across EU member states. Priority species requiring protection across Europe are listed in the Annexes of these Directives. Regulation 63(1) of the Conservation of Habitats and Species Regulations 2017 and Offshore Marine Conservation Regulations, 2007 (as amended) transpose these directives into UK law and set the basis for the designations of protected sites (known as Natura 2000 sites; Special Areas of Conservation under the Habitat Directive and Special Areas of Protection under the Birds Directive) that are of importance for habitats, species or assemblages listed on the directive Annexes. In the UK Ramsar sites are also offered the same level of protection as SPAs and SACs however the qualifying species for the designation may differ; Ramsar sites being designated specifically as important wetland habitats.

Under article 6(3) of the Habitats Directive, where projects stand to have likely significant effect (in accordance with the European Court of Justice ruling of C-127/02 Waddenzee cockle fishing) upon the integrity of conservation objectives (i.e. conservation status of the qualifying species or habitats) within the designated sites then the Competent Authority must undertake an Appropriate Assessment.

PLANNING POLICY

National

National Planning Policy Framework

The National Planning Policy Framework (NPPF) 2019²² sets out the Government's planning policies for England, including how plans and decisions are expected to apply a presumption in favour of sustainable development. Chapter 15 of the NPPF focuses on conservation and enhancement of the natural environment, stating plans should 'identify and pursue opportunities for securing measurable net gains for biodiversity'.

It goes on to state: 'if significant harm to biodiversity resulting from a development cannot be avoided (through locating on an alternative site with less harmful impacts), adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused'. Alongside this, it acknowledges that planning should be refused where irreplaceable habitats such as ancient woodland are lost.

Regional

The London Plan: Spatial Development Strategy for Greater London²³ –

The London Plan is comprised of separate chapters relating to a number of areas, including London's Places, People, Economy and Transport. The following policies have been identified within the London Plan, which relate specifically to ecology and this development.

Policy 2.18 Green Infrastructure

Policy 2.18 aims to protect, promote, expand and manage the extent and quality of, and access to, London's network of open and green spaces.

Policy 5.10 Urban Greening

This policy encourages the 'greening of London's buildings and spaces and specifically those in central London by including a target for increasing the area of green space (including green roofs etc) within the Central Activities Zone'.

Policy 5.11 Green Roofs and Development Site Environs

Policy 5.11 specifically supports the inclusion of planting within developments and encourages boroughs to support the inclusion of green roofs.

Policy 5.13 Sustainable Drainage

Policy 5.13 promotes the inclusion of sustainable urban drainage systems in developments and sets out a drainage hierarchy that developers should follow when designing their schemes.

Policy 7.19 Biodiversity and Access to Nature

'The Mayor will work with all the relevant partners to ensure a proactive approach to the protection, enhancement, creation, promotion and management of biodiversity in support of the Mayors Biodiversity Strategy.'

The Draft New London Plan (emerging)

Policy G1 Green infrastructure

- A. London's network of green and open spaces, and green features in the built environment such as green roofs and street trees, should be protected, planned, designed and managed as integrated features of green infrastructure.

- B. Boroughs should prepare green infrastructure strategies that integrate objectives relating to open space provision, biodiversity conservation, flood management, health and wellbeing, sport and recreation.
- C. Development Plans and Opportunity Area Planning Frameworks should:
 - 1. identify key green infrastructure assets, their function and their potential function
 - 2. identify opportunities for addressing environmental and social challenges through strategic green infrastructure interventions.

Policy G2 London's Green Belt

- A. The Green Belt should be protected from inappropriate development:
 - 1. development proposals that would harm the Green Belt should be refused
 - 2. the enhancement of the Green Belt to provide appropriate multi-functional uses for Londoners should be supported.

Policy G5 Urban greening

- A. Major development proposals should contribute to the greening of London by including urban greening as a fundamental element of site and building design, and by incorporating measures such as high-quality landscaping (including trees), green roofs, green walls and nature-based sustainable drainage.
- B. Boroughs should develop an Urban Greening Factor (UGF) to identify the appropriate amount of urban greening required in new developments. The UGF should be based on the factors set out in Table 8.2, but tailored to local circumstances. In the interim, the Mayor recommends a target score of 0.4 for developments that are predominately residential, and a target score of 0.3 for predominately commercial development.

Policy G6 Biodiversity and access to nature

- C. Where harm to a SINC (other than a European (International) designated site) is unavoidable, the following approach should be applied to minimise development impacts:
 - 1. avoid adverse impact to the special biodiversity interest of the site
 - 2. minimise the spatial impact and mitigate it by improving the quality or management of the rest of the site
 - 3. seek appropriate off-site compensation only in exceptional cases where the benefits of the development proposal clearly outweigh the biodiversity impacts.

- D. Biodiversity enhancement should be considered from the start of the development process.
- E. Proposals which create new or improved habitats that result in positive gains for biodiversity should be considered positively, as should measures to reduce deficiencies in access to wildlife sites.

Policy G7 Trees and woodlands

- C. Development proposals should ensure that, wherever possible, existing trees of quality are retained [Category A and B]. If it is imperative that trees have to be removed, there should be adequate replacement based on the existing value of the benefits of the trees removed, determined by, for example, i-tree or CAVAT. The planting of additional trees should generally be included in new developments – particularly large-canopied species which provide a wider range of benefits because of the larger surface area of their canopy.

Supplementary Planning Guidance (SPG): Sustainable Design and Construction 2014

As part of the London Plan 2011 implementation framework, the SPG, relating to sustainable design and construction, was adopted in April 2014 and includes the following sections detailing Mayoral priorities in relation to biodiversity of relevance to The Site.

Nature conservation and biodiversity

The Mayor's priorities include ensuring 'developers make a contribution to biodiversity on their development Site'.

Overheating

Where priorities include the inclusions of 'measures, in the design of schemes, in line with the cooling hierarchy set out in London Plan policy 5.9 to prevent overheating over the scheme's lifetime'

Urban greening

A Priority is for developers to 'integrate green infrastructure into development schemes, including by creating links with wider green infrastructure network'.

Use less energy

'The design of developments should prioritise passive measures' which can include 'green roofs, green walls and other green infrastructure which can keep buildings warm or cool and improve biodiversity and contribute to sustainable urban drainage'.

London Environment Strategy 2018²⁴

The Mayor's Environment Strategy was published in May 2018. This document sets out the strategic vision for the environment throughout London. Although not primarily a planning guidance document, it does set strategic objectives, policies and proposals that are of relevance to the delivery of new development in a planning context, including:

Objective 5.1 Make more than half of London green by 2050

Policy 5.1.1 Protect, enhance and increase green areas in the city, to provide green infrastructure services and benefits that London needs now.

This policy states:

"New development proposals should avoid reducing the overall amount of green cover and, where possible, seek to enhance the wider green infrastructure network to increase the benefits this provides. [...] New developments should aim to avoid fragmentation of existing green space, reduce storm water run-off rates by using sustainable drainage, and include new tree planting, wildlife-friendly landscaping, or features such as green roofs to mitigate any unavoidable loss".

This supports the 'environmental net gain' approach promoted by government in the 25 Year Environment Plan.

Proposal 5.1.1.d The London Plan includes policies to green streets and buildings, including increasing the extent of green roofs, green walls and sustainable drainage.

Objective 5.2 conserving and enhancement wildlife and natural habitats

Policy 5.2.1 Protect a core network of nature conservation sites and ensure a net gain in biodiversity

This policy requires new development to include new wildlife habitat, nesting and roosting sites, and ecologically appropriate landscaping will provide more resources for wildlife and help to strengthen ecological corridors. It states:

"Opportunities should be sought to create or restore priority habitats (previously known as UK Biodiversity Action Plan habitats) that have been identified as conservation priorities in London [and] all land managers and landowners should take BAP priority species into account".

Local

Camden Local Plan 2017²⁵

Policy A3 Biodiversity

The Council will protect and enhance sites of nature conservation and biodiversity. We will:

- a. designate and protect nature conservation sites and safeguard protected and priority habitats and species;
- b. grant permission for development unless it would directly or indirectly result in the loss or harm to a designated nature conservation site or adversely affect the status or population of priority habitats and species;
- c. seek the protection of other features with nature conservation value, including gardens, wherever possible;
- d. assess developments against their ability to realise benefits for biodiversity through the layout, design and materials used in the built structure and landscaping elements of a proposed development, proportionate to the scale of development proposed;
- e. secure improvements to green corridors, particularly where a development scheme is adjacent to an existing corridor;
- f. seek to improve opportunities to experience nature, in particular where such opportunities are lacking;
- g. require the demolition and construction phase of development, including the movement of works vehicles, to be planned to avoid disturbance to habitats and species and ecologically sensitive areas, and the spread of invasive species;
- h. secure management plans, where appropriate, to ensure that nature conservation objectives are met; and
- i. work with The Royal Parks, The City of London Corporation, the London Wildlife Trust, friends of park groups and local nature conservation groups to protect and improve open spaces and nature conservation in Camden.

Trees and vegetation

The Council will protect, and seek to secure additional, trees and vegetation. We will:

- j. resist the loss of trees and vegetation of significant amenity, historic, cultural or ecological value including proposals which may threaten the continued wellbeing of such trees and vegetation;
- k. require trees and vegetation which are to be retained to be satisfactorily protected during the demolition and construction phase of development in line with BS5837:2012

'Trees in relation to Design, Demolition and Construction' and positively integrated as part of the site layout;

l. expect replacement trees or vegetation to be provided where the loss of significant trees or vegetation or harm to the wellbeing of these trees and vegetation has been justified in the context of the proposed development;

m. expect developments to incorporate additional trees and vegetation wherever possible.

Policy CC2 Adapting to climate change

The Council will require development to be resilient to climate change. All development should adopt appropriate climate change adaptation measures such as:

a. the protection of existing green spaces and promoting new appropriate green infrastructure;

b. not increasing, and wherever possible reducing, surface water runoff through increasing permeable surfaces and use of Sustainable Drainage Systems;

c. incorporating bio-diverse roofs, combination green and blue roofs and green walls where appropriate; and

d. measures to reduce the impact of urban and dwelling overheating, including application of the cooling hierarchy.

Any development involving 5 or more residential units or 500 sqm or more of any additional floorspace is required to demonstrate the above in a Sustainability Statement.

Sustainable design and construction measures The Council will promote and measure sustainable design and construction by:

e. ensuring development schemes demonstrate how adaptation measures and sustainable development principles have been incorporated into the design and proposed implementation;

f. encourage new build residential development to use the Home Quality Mark and Passivhaus design standards;

g. encouraging conversions and extensions of 500 sqm of residential floorspace or above or five or more dwellings to achieve "excellent" in BREEAM domestic refurbishment; and

h. expecting non-domestic developments of 500 sqm of floorspace or above to achieve "excellent" in BREEAM assessments and encouraging zero carbon in new development from 2019.

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