

Quality Assurance

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Declaration of Compliance

This study has been undertaken in accordance with British Standard 42020:2013 “Biodiversity, Code of Practice for Planning and Development”. The information which we have prepared is true, and has been prepared and provided in accordance with the Chartered Institute of Ecology and Environmental Management’s Code of Professional Conduct. We confirm that the opinions expressed are our true and professional bona fide **opinions**.

Disclaimer

The contents of this report are the responsibility of Middlemarch Environmental Ltd. It should be noted that, whilst every effort is made to meet the client’s brief, no site investigation can ensure complete assessment or prediction of the natural environment. Middlemarch Environmental Ltd accepts no responsibility or liability for any use that is made of this document other than by the client for the purposes for which it was originally commissioned and prepared.

Validity of Data

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

Non-Technical Summary

Project Background

In January 2023 Ed Toovey Architects commissioned Middlemarch to undertake a Preliminary Ecological Appraisal of the site of a proposed development at University College School, Hampstead. This assessment is required to inform a planning application associated with the development of new teaching accommodation.

Scope of Appraisal

To fulfil the above brief, an ecological desk study and a walkover survey (in accordance with Phase 1 Habitat Survey methodology) were undertaken. The survey was carried out on 18th January 2023 by Jamie Fletcher (Principal Ecological Consultant) and Meg Cookson (Ecological Field Officer). An initial review of the ecological data was subsequently carried out to determine the features of ecological importance on site as well as a preliminary assessment of the potential impacts the proposed development could have on these features.

Material Considerations

Based on the current understanding of the site proposals and anticipated impacts the following ecological features have been identified as material considerations:

Hampstead Parish Churchyard SINC, line of trees, native hedgerow, scattered trees, standing water, amphibians, bats, birds, hedgehog, invertebrates and invasive plant species.

Recommendations

In order to ensure compliance with wildlife legislation and relevant planning policy and to secure a net gain for biodiversity overall, the following recommendations are made (full details are provided in Chapter 7):

Nature Conservation Sites	The proposed works could potentially impact upon Hampstead Parish Churchyard SINC. The Local Planning Authority (London Borough of Camden Council) should therefore be consulted.
Further Ecological Surveys	A Preliminary Bat Roost Assessment of the buildings and trees should be undertaken.
Scheme Design	The proposed development should be designed in accordance with ecological mitigation hierarchy as set out in the National Planning Policy Framework (NPPF), and the National Planning Practice Guidance (NPPG). In accordance with the principles of the Environment Act 2021 the development should also secure an overall net gain for biodiversity.
Management Plans and Strategies	A Construction Ecological Management Plan (CEMP) and Landscape and Ecology Management Plan (LEMP) should be produced for the site. The CEMP should include a Method Statement to ensure that proposed development does not result in the spread of any invasive plant species.

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1. Introduction

1.1. Project Background

In January 2023 Ed Toovey Architects commissioned Middlemarch to undertake a Preliminary Ecological Appraisal of the site of a proposed development at University College School, Hampstead. This assessment is required to inform a planning application associated with the development of new teaching accommodation.

The purpose of the Preliminary Ecological Appraisal is to identify the features of ecological importance on site and provide a preliminary assessment of the potential impacts the proposed development could have on these features. In addition, Middlemarch has been commissioned to undertake a Biodiversity Metric Assessment (RT-MME-158263-02) and a Biodiversity Enhancement Strategy (RT-MME-158263-03).

1.2 Site Description and Context

Table 1.1 provides a brief summary of the site and its surroundings.

Attribute	Description
Location	University College School, Frognal, Hampstead
National Grid Reference	TQ 26267 85401
Site Area (ha)	0.7
Topography	The site was set upon two distinct levels, with the western part of the site abutting Frognal being largely flat and the eastern part of the site being located on significantly higher tiered ground.
Land Cover (on site)	The site is dominated by buildings and hardstanding, with some areas of amenity grassland, shrub, and hedgerow.
Land Cover (site surrounds)	The wider landscape is dominated by residential development with associated gardens. South-west of the site is an area of commercial development. Hampstead Heath is located approximately 660 m north of the site.

Table 1.1: Summary of Site and Surroundings

1.3 Documentation Provided

The conclusions and recommendations made in this report are based on information provided by the client regarding the scope of the project. Documentation made available by the client is listed in Table 1.2.

Document / Drawing Number	Author
UCS Project 200 Masterplan Development Design & Access Statement	Ed Toovey Architects
UCS Project 200 East Development Proposed Ground Floor Plan	Ed Toovey Architects

Table 1.2: Documentation Provided by Client

2. Methods

2.1 Desk study

An ecological desk study was undertaken to determine the presence of any designated nature conservation sites and protected species in proximity to the site. This involved contacting appropriate statutory and non-statutory organisations which hold ecological data relating to the survey area. Middlemarch then assimilated and reviewed the desk study data provided by these organisations.

The consultees for the desk study were:

- Natural England - MAGIC website for statutory conservation sites; and,
- Greenspace Information for Greater London CIC

The desk study included a search for:

- Landscape Scale Conservation Initiatives;
- European statutory nature conservation sites in the UK (now referred to as the 'National Site Network') within a 5 km radius of the site (extended to 10 km for any statutory site designated for bats);
- UK statutory sites within a 2 km radius; and,
- Non-statutory sites and protected/notable habitats and species records within a 1 km radius.

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

The desk study also included a review of relevant local planning policy with regard to biodiversity and nature conservation (see Appendix 1).

2.2 Phase 1 Habitat Survey

A field survey was conducted following the Phase 1 Habitat Survey methodology of the Joint Nature Conservation Committee¹ and the Institute of Environmental Assessment². Phase 1 Habitat Survey is a standard technique for classifying and mapping British habitats. The aim is to provide a record of habitats that are present on site. During the survey, a Habitat Condition Assessment was carried out to determine the ecological status of each habitat recorded. The condition assessment was assessed using published criteria in Panks *et al.* (2022)³, the details of which are presented in Section 8.

During the survey, the presence or potential presence of protected species was noted where observed. This included a review of suitable habitat opportunities or field signs of notable species

¹ Joint Nature Conservation Committee (2010). *Handbook for Phase 1 Habitat Survey: A technique for environmental audit (reprint)*. Joint Nature Conservation Committee, Peterborough.

² Institute of Environmental Assessment. (1995). *Guidelines for Baseline Ecological Assessment, Institute of Environmental Assessment*. E&FN Spon, An Imprint of Chapman and Hall. London.

³ Panks, S., White, N., Newsome, A., Nash, M., Potter, J., Heyton, M., Mayhew, E., Alvarez, M., Russell, T., Cashon, C., Goddard, F., Scott, S.J., Heaver, M., Scott, S.H., Treweek, J., Butcher, B. and Stone, D. (2022) *The Biodiversity Metric 3.1 – Auditing and accounting for biodiversity: Technical Supplement*. Natural England.

groups (amphibians, bats, birds, terrestrial and aquatic invertebrates, terrestrial and aquatic mammals, plants and reptiles).

The survey was carried out on 18th January 2023 by Jamie Fletcher (Principal Ecological Consultant) and Meg Cookson (Ecological Field Officer). Table 2.1 details the weather conditions at the time of the survey.

Parameter	Condition
Temperature (°C)	5
Cloud (%)	20
Wind (Beaufort)	F1
Precipitation	Nil

Table 2.1: Weather Conditions During Field Survey

Field Survey Constraints and Limitations

The survey was carried out in January. The recommended timeframe for completing a Preliminary Ecological Appraisal is March – October. It is possible that some plant species were in a period of winter dormancy or were yet to germinate and so may have been under-recorded or underestimated.

2.3 Preliminary Evaluation

The Preliminary Evaluation is an initial review of the ecological data to determine which features are likely to be a material consideration for the proposed development at the site. A material consideration is an ecological feature that by virtue of its legal status, its inclusion in any national policy or plan, rarity or contribution to local ecological networks, is worthy of further consideration in the planning system. Typical material considerations include statutory or non-statutory nature conservation sites, species protected by law, Habitat and Species of Principal Importance in England as defined by the Natural Environment and Rural Communities (NERC) Act 2006 or other ecological corridors and biodiversity opportunities areas outlined in local policy.

3. Desk Study

3.1 Landscape Initiatives

The site is not located within any landscape initiative areas.

3.2 Nature Conservation Sites

Statutory and non-statutory nature conservation sites located in proximity to the survey area are summarised in Table 3.1.

Site Name	Designation	Proximity to the Survey Area	Description
UK Statutory Sites			
Belsize Wood	LNR	1,160 m east	This LNR includes a bird feeding area, a pond, deadwood habitat for stag beetle <i>Lucanus cervus</i> , and bird boxes. This site has a wide diversity of insect species.
Hampstead Heath Woods	SSSI	1,460 m north-east	A long-established woodland with an abundance of old and over-mature trees providing dead wood habitat for a range of invertebrate species. Included within this site is an adjacent small valley with an acidic flush and developing bog-moss communities.
Adelaide	LNR	1,620 m south-east	Habitats within this site include a meadow, a pond, areas of scrub and a small woodland.
Westbere Copse	LNR	1,720 m west	This site contains habitats including meadows, a pond, deadwood habitat for stag beetle <i>Lucanus cervus</i> , and a bird feeding station. 25 species of birds and 150 species of plants have been recorded here. Protected and notable species include common frog <i>Rana temporaria</i> , common toad <i>Bufo bufo</i> , and newts.
Non-statutory Sites			
Hampstead Parish Churchyard	SINC Borough Grade I	70 m north	This site is split into two parts with the southern section containing a number of mature trees. The grassland is dominated by perennial rye-grass <i>Lolium perenne</i> . To the northern section is St. John's Additional Burial Ground, which includes patches of diverse and well-established tall herbaceous vegetation, including both native and exotic species planted on graves.

Table 3.1: Summary of Nature Conservation Sites (continues)

Site Name	Designation	Proximity to the Survey Area	Description
Non-statutory Sites (continued)			
Frognal Lane Gardens	SINC Local	300 m west	A community garden surrounded by housing which contains a number of trees; the most notable being the large London planes <i>Platanus x hispanica</i> . Areas of grassland where mowing is relaxed support tall herbs. Around the perimeter there are planted ornamental shrub beds both of native and exotic species. This site is used by numerous birds including starling <i>Sturnus vulgaris</i> . Nest boxes have been installed within the gardens.
Frognal Court Wood	SINC Borough Grade II	360 m south	The woodland comprises many different species of tree, particularly ash <i>Fraxinus excelsior</i> . The ground flora is limited due to dense shade and is dominated by ivy <i>Hedera helix</i> . Bird species that use the site include long-tailed tit <i>Aegithalos caudatus</i> , wren <i>Troglodytes troglodytes</i> , greenfinch <i>Chloris chloris</i> , and song thrush <i>Turdus philomelos</i> .
West Hampstead Railsides, Medley Orchard and Westbere Copse Local Nature Reserve	SINC Borough Grade I	400 m south-west	This SINC comprises a number of sections of railside, an old orchard at Medley Gardens, Westbere Copse Local Nature Reserve, and The Jane Evans Nature Reserve in West Hampstead. The railsides hold extensive areas dominated by secondary woodland and scrub, as well as a small pond, a small spring and wildflower meadows. The London notable species common broomrape <i>Orobanche minor</i> has been recorded here.
Branch Hill	SINC Borough Grade I	490 m north-west	This site consists of several individual blocks of woodland with small areas of grassland. Incorporated into this site is the private grounds of three large houses and the Branch Hill Allotments. Areas of woodland and grassland are found within the site providing a habitat for many bird species. These include great spotted woodpecker <i>Dendrocopos major</i> , tawny owl <i>Strix aluco</i> , goldcrest <i>Regulus regulus</i> and kestrel <i>Falco tinnunculus</i> .

Table 3.1 (continued): Summary of Nature Conservation Sites (continues)

Site Name	Designation	Proximity to the Survey Area	Description
Non-statutory Sites (continued)			
Hampstead Heath	SINC Metropolitan	660 m north	This site includes one of the capital's few bogs with expansive areas of grassland and ancient woodland. Other important habitats include bog, secondary woodland, veteran trees, and many ponds and watercourses.
Hampstead Green	SINC Local	760 m east	This SINC comprises a small triangular grassland area that is managed as a wildflower meadow that supports a variety of herbs including bluebells <i>Hyacinthoides</i> sp. Mature pedunculate oak <i>Quercus robur</i> are found around the perimeter of the grassland.
Broadhurst Gardens Meadow	SINC Borough Grade II	840 m south-west	A communal garden with a meadow of varying grass heights and a perimeter belt of trees and shrubs. There is a diverse community of insects, including butterflies, beetles, hoverflies, and grasshoppers.
King's College Hampstead Campus	SINC Borough Grade II	880 m north-west	This site contains a range of mature trees of both native and non-native species. Within places these are almost dense enough to form a woodland. Species include silver birch <i>Betula pendula</i> , ash, and lime <i>Tilia x europaea</i> . These trees support various bird species.
160 Mill Lane Community Garden	SINC Local	930 m west	A much-reduced small community garden with a range of scattered trees. Within this site is a relatively large and well stocked pond known to hold a population of smooth newts <i>Lissotriton vulgaris</i> . Behind the pond is a 'wild area', with a developing woodland, scrub, and a good quantity of dead wood providing invertebrate habitat.
Key: SSSI: Site of Special Scientific Interest LNR: Local Nature Reserve SINC: Site of Importance for Nature Conservation Metropolitan: Sites of Metropolitan Importance Borough: Sites of Borough Importance (Borough I and Borough II)			

Table 3.1: Summary of Nature Conservation Sites (continued)

The survey area is located within a SSSI Impact Risk Zone; this being Hampstead Heath SSSI as described within Table 3.1.

3.3 Habitats

Table 3.2 summarises known priority or notable habitats within a 1 km radius of the site.

Habitat Type	No. of Records	Location of Nearest Record
Deciduous Woodland	47	150 m north
Traditional Orchards	2	550 m north
Good quality semi-improved grassland (Non Priority)	8	660 m north
Woodpasture and Parkland BAP	2	760 m north-east
Lowland Heathland	9	900 m north-east
Open Mosaic	1	970 m south-west

Table 3.2: Summary of Priority/Notable Habitats

3.4 Protected / Notable Species

Table 3.3 and the following text provide a summary of protected and notable species records within a 1 km radius of the study area. It should be noted that the absence of records should not be taken as confirmation that a species is absent from the search area.

Species	No. of Records	Most Recent Record	Proximity of Nearest Record to Survey Area	Species of Principal Importance?	Legislation / Conservation Status
Amphibians					
Common frog <i>Rana temporaria</i>	18	2019	270 m south-west	-	WCA 5 S9(5)
Common toad <i>Bufo bufo</i>	6	2016	535 m north-east	✓	WCA 5 S9(5)
Birds					
Peregrine <i>Falco peregrinus</i>	5	2011	†	-	WCA1i
Bittern <i>Botaurus stellaris</i>	1	2011	370 m north-east	✓	WCA1i
Red kite <i>Milvus milvus</i>	2	2019	725 m west	-	WCA1i
Redwing <i>Turdus iliacus</i>	42	2022	790 m east	-	WCA1i
Invertebrates					
Stag beetle <i>Lucanus cervus</i>	9	2020	520 m south-east	✓	ECH 2, WCA 5 S9(5)

Table 3.3 (continued): Summary of Protected/Notable Species Records (continues)

Species	No. of Records	Most Recent Record	Proximity of Nearest Record to Survey Area	Species of Principal Importance?	Legislation / Conservation Status
Mammals - Bats					
Soprano pipistrelle <i>Pipistrellus pygmaeus</i>	80	2020	230 m south-west	✓	ECH 4, WCA 5, WCA 6
Common pipistrelle <i>Pipistrellus pipistrellus</i>	133	2020	230 m south-west	-	ECH 4, WCA 5, WCA 6
Nathusius's Pipistrelle <i>Pipistrellus nathusii</i>	3	2020	230 m south-west	-	ECH 4, WCA 5, WCA 6
Unidentified bat <i>Vespertilionidae</i> sp.	1	2002	270 m south-west	#	#
Noctule <i>Nyctalus noctula</i>	31	2020	360 m south	✓	ECH 4, WCA 5, WCA 6
Pipistrelle <i>Pipistrellus</i> sp.	8	2019	420 m south-west	#	ECH 4, WCA 5, WCA 6
Unidentified bat <i>Chiroptera</i> sp.	1	2010	665 m south-east	#	#
Brown long-eared bat <i>Plecotus auritus</i>	1	2009	720 m east	✓	ECH 4, WCA 5, WCA 6
Daubenton's bat <i>Myotis daubentonii</i>	2	1993	870 m north-east	-	ECH 4, WCA 5, WCA 6
Leisler's bat <i>Nyctalus leisleri</i>	2	2014	985 m north-west	-	ECH 4, WCA 5, WCA 6
Serotine bat <i>Eptesicus serotinus</i>	2	2014	985 m north-west	-	ECH 4, WCA 5, WCA 6
Mammals - Others					
Badger <i>Meles meles</i>	2	2018	†	-	WCA 6, PBA
Hedgehog <i>Erinaceus europaeus</i>	29	2020	325 m west	✓	WCA 6

Table 3.3 (continued): Summary of Protected/Notable Species Records (continues)

Species	No. of Records	Most Recent Record	Proximity of Nearest Record to Survey Area	Species of Principal Importance?	Legislation / Conservation Status
Key:					
ECH 2: Annex II of the European Communities Council Directive on the Conservation of Natural Habitats and Wild Fauna and Flora. Animal and plant species of community interest whose conservation requires the designation of Special Areas of Conservation.					
ECH 4: Annex IV of the European Communities Council Directive on the Conservation of Natural Habitats and Wild Fauna and Flora. Animal and plant species of community interest in need of strict protection.					
PBA: Protection of Badgers Act 1992.					
WCA 1i: Schedule 1 Part 1 of Wildlife and Countryside Act 1981 (as amended). Birds protected by special penalties at all times.					
WCA 5: Schedule 5 of Wildlife and Countryside Act 1981 (as amended). Protected animals (other than birds).					
WCA 5 S9(1): Schedule 5 Section 9(1) of Wildlife and Countryside Act 1981 (as amended). Protected animals (other than birds). Protection limited to intentional killing, injury or taking.					
WCA 6: Schedule 6 of Wildlife and Countryside Act 1981 (as amended). Animals which may not be killed or taken by certain methods.					

Table 3.3 (continued): Summary of Protected/Notable Species Records

Birds

The desk study returned records of seven bird species listed as Species of Principal Importance within a 1 km radius, comprising lesser redpoll *Acanthis cabaret*, cuckoo *Cuculus canorus*, lesser spotted woodpecker *Dryobates minor*, yellowhammer *Emberiza citrinella*, house sparrow *Passer domesticus*, dunnoek *Prunella modularis*, and song thrush *Turdus philomelos*.

There were records of five bird species listed on the RSPB Red list comprising swift *Apus apus*, greenfinch *Chloris chloris*, house martin *Delichon urbicum*, house martin *Delichon urbicum* and whinchat *Saxicola rubetra*. Additionally, there were records of two species of bird species listed on the RSPB Amber List, comprising grey wagtail *Motacilla cinerea* and tawny owl *Strix aluco*.

Invertebrates

The desk study returned records of six butterfly species listed as Species of Principal Importance within a 1 km radius, comprising small heath butterfly *Coenonympha pamphilus*, wall butterfly *Lasiommata megera*, small copper butterfly *Lycaena phlaeas*, large skipper butterfly *Ochlodes sylvanus*, Essex skipper butterfly *Thymelicus lineola*, and small skipper butterfly *Thymelicus sylvestris*.

The desk study returned records of 29 moth species listed as Species of Principal Importance within a 1 km radius, including grey dagger moth *Acronicta psi*, knot grass moth *Acronicta rumicis*, beaded chestnut moth *Agrochola lychnidis*, and mouse moth *Amphipyra tragopoginis*.

Plants

The desk study provided records of two plant species listed as Species of Principal Importance within 1 km radius comprising spreading bellflower *Campanula patula* and cornflower *Centaurea cyanus*.

In addition to the desk study data provided by GiGL, species data obtained through ongoing ecological monitoring surveys of the site undertaken by Frogna Gardens and local experts and enthusiasts has also been reviewed. Associated species records primarily relate to invertebrates, with the identification of *Phycosoma inornatum* believed to be the first record of this species of spider in London. Additional invertebrate species identified on site include *Megalephyphantes collinus* (spider), *Pholcus phalangioides* (spider), *Erigone dentipalpis* (spider), *Tenuiphantes tenuis* (spider), *Neriene clathrate* (spider), *Linyphia triangularis* (spider), *Pachygnatha degeeri* (spider), *Zygiella x-notata* (spider), *Araneus diadematus* (spider), *Hahnina nava* (spider), *Nigma walckenaeri* (spider), *Anyphaena numida* (spider), *Clubiona terrestris* (spider), harvestman *Leiobunum rotundum* (spider), *Nephrotoma flavipalpis* (cranefly), oak bush-cricket *Meconema thalassinum*, rose chafer beetle *Cetonia aurata*, hairy-footed flower bee *Anthopora plumipes*, yellow-legged mining bee *Andrena flavipes*, *Heliophus pendulus* (hoverfly), southern hawkler *Aeshna cyanea* (dragonfly), common froghopper *Phileaneus spumarius*, *Platyarthus hoffmannseggi* (woodlouse) and leather bug *Leptoglossus occidentalis*.

Amphibian species recorded on site include smooth newt *Lissotriton vulgaris* and common frog *Rana temporaria*, with both previously recorded breeding in the ponds on site.

3.5 Invasive Species

Table 3.4 provides a summary of invasive species records within a 1 km radius of the study area. It should be noted that the absence of records should not be taken as confirmation that a species is absent from the search area.

Species	No. of Records	Most Recent Record	Proximity of Nearest Record to Survey Area	Legislation / Conservation Status
Butterfly-bush <i>Buddleia davidii</i>	20	2019	110 m north	LISI 3
Evergreen oak <i>Quercus ilex</i>	9	2012	110 m north	LISI 5
Green alkanet <i>Pentaglottis sempervirens</i>	36	2013	110 m north	LISI 6
Snowberry <i>Symphoricarpos albus</i>	10	2010	110 m north	LISI 2
Three-cornered garlic <i>Allium triquetrum</i>	3	2011	110 m north	WCA 9
Turkey oak <i>Quercus cerris</i>	22	2017	110 m north	LISI 5
Parrot's-feather <i>Myriophyllum aquaticum</i>	1	2002	170 m south-west	LISI 3, WCA 9
Cherry laurel <i>Prunus lauroceraus</i>	21	2007	210 m north	LISI 3

Table 3.4: Summary of Invasive Species Records (continues)

Species	No. of Records	Most Recent Record	Proximity of Nearest Record to Survey Area	Legislation / Conservation Status
Rhododendron <i>Rhododendron ponticum</i>	6	2003	210 m north	LISI 2, WCA 9
Highclere holly <i>Ilex aquifolium x perado = I. x altaclerensis</i>	2	2018	220 m north-east	LISI 5
Giant hogweed <i>Heracleum mantegazzianum</i>	2	2003	320 m west	WCA 9
False-acacia <i>Robinia pseudoacacia</i>	33	2020	340 m east	LISI 4
Tree-of-heaven <i>Ailanthus altissima</i>	2	2018	340 m east	LISI 3
Goat's-rue <i>Galega officinalis</i>	1	2007	370 m south-west	LISI 4
Small balsam <i>Impatiens parviflora</i>	8	2003	460 m north	LISI 2
Tree cotoneaster <i>Cotoneaster frigidus</i>	3	2018	460 m north	LISI 2
Cotoneaster <i>Cotoneaster</i> sp.	7	2015	730 m north	LISI 2, WCA 9
Few-flowered garlic <i>Allium paradoxum</i>	2	2003	760 m north-east	WCA 9
Himalayan balsam <i>Impatiens glandulifera</i>	5	2010	820 m north	LISI 3, WCA 9
Japanese knotweed <i>Fallopia japonica</i>	8	2019	930 m south-west	LISI 3, WCA 9
Pink purslane <i>Claytonia sibirica</i>	3	2003	670 m north	LISI 5

Key:

WCA 9: Schedule 9 of Wildlife and Countryside Act 1981 (as amended). Invasive, non-native, plants and animals.

LISI 2: London Invasive Species Initiative – Species of high impact or concern present at specific sites that require attention (control, management, eradication etc).

LISI 3: London Invasive Species Initiative – Species of high impact or concern which are widespread in London and require concerted, coordinated and extensive action to control/eradicate.

LISI 4: London Invasive Species Initiative – Species which are widespread for which eradication is not feasible but where avoiding spread to other sites may be required.

LISI 5: London Invasive Species Initiative – Species for which insufficient data or evidence was available from those present to be able to prioritise.

LISI 6: London Invasive Species Initiative – Species that were not currently considered to pose a threat or have the potential to cause problems in London.

Table 3.4: (continued) Summary of Invasive Species Records

4. Survey Results

4.1 Introduction

A Phase 1 Habitat Survey Drawing (Drawing C158263-01-01), illustrating the location and extent of all habitat types recorded on site, is provided in Chapter 8. Detailed habitat descriptions and a summary of the condition assessment for each habitat type using Panks *et al.* (2022)³ is also included in Chapter 8.

4.2 Habitats

Table 4.1 details the types, extent and ecological condition of the habitats which were recorded on site during the field survey visit. Photographs taken during the field survey are presented in Chapter 9.

Habitat	Area (ha) / Length (km)	Condition	Photo Reference
Allotment	0.017 ha	N/A	Plate 1
Amenity grassland	0.189 ha	Poor	Plate 2
Buildings	0.965 ha	N/A	Plates 3, 4 and 6
Dense scrub	0.010 ha	N/A	Plate 5
Fence	0.295 km	N/A	-
Hardstanding	0.702 ha	N/A	Plate 6
Hedge ornamental non-native	0.044 km	N/A	Plate 7
Introduced shrub	0.198 ha	N/A	Plate 8
Line of trees	0.278 km	Moderate/Poor	Plate 9
Native hedgerow	0.057 km	Moderate/Poor	Plate 10
Native species rich hedgerow	0.010 km	Moderate	Plate 11
Scattered scrub	8 no.	N/A	-
Scattered trees	30 no.	Good/Moderate/Poor	Plate 12
Standing water	0.003 ha	N/A	Plate 13
Tall ruderal	0.015 ha	N/A	Plate 14
Wall	0.293 km	N/A	-

Table 4.1: Summary of Habitats Recorded on Site

Of the habitats recorded on site, allotment, native species-rich hedgerow and standing water were all present within the 'Nature Garden' area of the site, in addition to buildings, scattered trees, amenity grassland, wall and fence.

4.3 Protected / Notable Species

Table 4.2 summarises the suitability of the site for protected/notable species and any species/evidence of species that were recorded during the survey. The time of year at which the survey is undertaken will affect species or field signs directly recorded during the survey.

Species/Group	Description
Amphibians	The pond on site could provide suitable aquatic habitat for amphibians to use for breeding. The amenity grassland, scrub, hedgerows and introduced shrub could also be used by amphibians for foraging and commuting.
Bats	The buildings could be suitable for bats to use for roosting. The surrounding gardens are likely to be used by bats for foraging, and therefore they may commute across the site, with the hedgerows and lines of trees likely to be of particular value.
Birds	The scattered trees, scrub, and hedgerows could all provide nesting opportunities for birds.
Hedgehog	The amenity grassland, scrub, and hedgerows provide suitable foraging habitat for hedgehogs, and hedgehogs may commute across the site.
Invertebrates	The scattered trees, line of trees, scrub, amenity grassland, standing water, introduced shrub and scrub habitats are likely to provide habitat for a range of invertebrate species. Deadwood habitat also provides suitable habitat for stag beetle larvae.

Table 4.2: Summary of Species/Species Evidence Recorded on Site

4.4 Invasive Species

Several invasive plant species were recorded on site during the field survey. These included two species listed on Schedule 9 of Wildlife and Countryside Act 1981 (as amended), wall cotoneaster *Cotoneaster horizontalis* and three-cornered garlic *Allium triquetrum*, as well as six species included on the London Invasive Species Initiative (LISI), comprising butterfly-bush *Buddleia davidii*, Spanish bluebell *Hyacinthoides hispanica*, cherry laurel *Prunus laurocerasus*, holm oak *Quercus ilex*, Turkey oak *Quercus cerris*, and Franchet's cotoneaster *Cotoneaster franchetii*.

5. Preliminary Evaluation

5.1 Landscape Initiatives

The site is not located within any landscape initiative areas, and as such they are not a material consideration for the proposed development.

5.2 Nature Conservation Sites

UK Statutory Sites

The site is located within an impact risk zone for Hampstead Heath SSSI. SSSI's are statutory nature conservation sites of national importance and therefore Hampstead Heath SSSI is capable of being a material consideration for the proposed development.

Three LNR's are located within a 2 km radius of the site, comprising Belsize Wood, Adelaide, and Westbere Copse. These are all over 1 km away from the site and the intervening habitat is predominantly urban development, which results in poor connectivity for biodiversity. Therefore, none of these LNR's are material considerations for the proposed development.

Non-Statutory Sites

There are ten SINC's located within a 1 km radius of the site. The closest of these is Hampstead Parish Churchyard, which is located 70 m north of the site. Given this proximity it is a material consideration for the proposed development.

The other nine SINC's are all located over 300 m from the site and are separated from the site by urban development. As such, there is poor connectivity for biodiversity, and given the nature of the development, impacts on these non-statutory sites are not anticipated. These other nine SINC's are not material considerations for the proposed development.

5.3 Habitats

An evaluation of the importance of each habitat recorded on site is summarised in Table 5.1.

Habitat Type	Material Consideration?	Rationale
Amenity grassland	No*	Amenity grassland is a common, widespread habitat with low ecological value, and it can easily be replaced.
Buildings	No	The buildings only provide limited opportunities for biodiversity.
Dense scrub	No*	The dense scrub has potential to be valuable for biodiversity, however it is a common and widespread habitat in the wider landscape. There is also only a small area of this habitat present on site.
Fence	No	The fences do not provide any opportunities for biodiversity.
Hardstanding	No	The areas of hardstanding only provide limited opportunities for biodiversity.

Table 5.1: Preliminary Evaluation of Habitats (continues)

Habitat Type	Material Consideration?	Rationale
Hedge ornamental non-native	No*	This hedgerow is composed of non-native plant species, and therefore is only of limited ecological value.
Introduced shrub	No*	Non-native scrub is of limited value for biodiversity, and is a widespread habitat in the wider landscape. It can be easily replaced post-construction.
Line of trees	Yes	The lines of trees contribute to the structure of the site and increase connectivity for biodiversity across the site and through the wider landscape. Given the maturity of the trees they are not easily replaced post-construction.
Native hedgerow	Yes	The native hedgerows are likely to have value for biodiversity and may increase connectivity across the site. They are likely to meet the Habitat of Principal Importance criteria and contribute to the habitat diversity and structure within the site.
Scattered trees	Yes	The scattered trees contribute to the structure of the site and are valuable for biodiversity. Given the maturity of some of the trees, they are not easily replaced post-construction.
Standing water	Yes	The ponds on site do not meet the criteria to be considered as Habitats of Principal Importance, however they are valuable for biodiversity and contribute to the habitat diversity of the site.
Tall ruderal	No*	Tall ruderal is a common, widespread habitat with some ecological value, however it can easily be replaced.
<p>Key:</p> <p>*All habitats have the capacity to be important in the context of the site as they contribute to the overall biodiversity value of the site when quantified using a biodiversity metric tool. For example, habitats of high quality and those of low quality with a high spatial coverage can still be of intrinsic importance for achieving biodiversity net gain targets irrespective of whether they are a material consideration (refer to Section 2.3) or not.</p>		

Table 5.1 (continued): Preliminary Evaluation of Habitats

5.4 Protected / Notable Species

An evaluation of the potential presence of protected / notable species on site is summarised in Table 5.2.

Species/Species Group	Material Consideration?	Rationale
Amphibians	Yes	The ponds on site are suitable for amphibians to use for breeding, and there is suitable terrestrial habitat on site. The absence of ponds within a 500 m radius of the site, as well as presence of roads make it unlikely that great crested newt will occur. However, this does not rule out the presence of common amphibian species. The desk study returned records of common frog and common toad from within a 1 km radius of the site. Common toad is a Species of Principal Importance, and all amphibians afford limited protection under the Wildlife and Countryside Act 1981 (as amended).
Aquatic mammals	No	There is no suitable aquatic habitat for aquatic mammals either on or adjacent to the site.
Badger	No	The desk study returned two records of badger from within a 1 km radius of the site. The field survey found no evidence of badgers, and the site is unlikely to provide suitable habitat for badgers to use for foraging and sett building.
Bats	Yes*	There are records of at least eight bat species within a 1 km radius of the site. The building and mature trees may be used by bats for roosting. The scattered trees, lines of trees, and hedgerows are likely to be valuable for foraging and commuting between nearby gardens. Several bat species are Species of Principal Importance, and all afford full protection under the Wildlife and Countryside Act 1981 (as amended) and the Conservation of Habitats and Species Regulations 2017 (as amended).
Birds	Yes	The desk study returned records of four bird species which are included on Schedule 1 of Wildlife and Countryside Act 1981 (as amended), however none of these are likely to breed on site, as the site either does not have suitable habitat or is outside of their breeding range. There were records of seven bird species which are Species of Principal Importance. These could use the hedgerows, scrub, or trees for nesting. All birds and their nests are protected by the Wildlife and Countryside Act 1981 (as amended).
Dormouse	No	The desk study did not return any records of dormouse from within a 1 km radius of the site, and there is not suitable habitat for this species on site.
Hedgehog	Yes	The desk study returned 29 records of hedgehog from within a 1 km radius of the site. There is suitable habitat for hedgehog to use for foraging, commuting, and refuge. Hedgehogs are a Species of Principal Importance and receive protection under Schedule 6 of Wildlife and Countryside Act 1981 (as amended).

Table 5.2: Preliminary Evaluation of Species (continues)

Species/Species Group	Material Consideration?	Rationale
Invertebrates (aquatic)	No	The ponds on site are likely to provide suitable habitat for common aquatic invertebrate species. However, given the small size of the ponds and the absence of running water, rare or notable species are unlikely to be supported.
Invertebrates (terrestrial)	No	The habitats on site are likely to support a range of common terrestrial invertebrate species. The desk study returned nine records of stag beetle from within a 1 km radius of the site. Furthermore, species records collated by Frognaal Gardens have identified a range of invertebrate species including both rare and widespread and common species.
Reptiles	No	The desk study did not return any records of reptiles and the habitats on site are only of minimal suitability for reptiles.
<p>Key: * Features assessed as material consideration based on available evidence such as existing records or habitat suitability. Conclusions should be evaluated if and when further information about the status of the species becomes available.</p>		

Table 5.2 (continued): Preliminary Evaluation of Species

5.5 Invasive Species

The field survey recorded several invasive plant species on site. These are therefore a material consideration for the proposed development.

6. Preliminary Impact Assessment

6.1 Summary of Proposals

The proposals are for the demolition of the Giles Slaughter building, five courts building, and maintenance hut. These will be replaced with a new two-storey building and new tennis courts on the roof of a section of this building. Furthermore, the 'Nature Garden' in the north of the site may also need to be removed to facilitate the proposed development. New landscaping and planting is proposed as part of this development.

Construction Phase

The following activities are likely to be associated with the proposed development during the construction phase.

- Site clearance and ground preparation;
- Use and movement of heavy goods vehicles and machinery;
- Storage of plant, materials and waste; and,
- Presence of and movement of site personnel.

Operational Phase

The following activities are likely to be associated with the operational phase of the proposed development.

- Permanent siting of buildings and structures;
- Frequent movement of heavy goods vehicle, cars and other forms of transportation;
- Use of associated lighting;
- Presence of and movement of site personnel; and,
- Maintenance of landscaping.

6.2 Nature Conservation Sites

UK Statutory Sites

The site is within the impact risk zone for Hamstead Heath SSSI. The proposed development does not fall within the categories covered by this impact risk zone, therefore no adverse impacts on this SSSI are anticipated.

Non-Statutory Sites

Hampstead Parish Churchyard SINC is located 70 m north of the site and therefore further investigation will be required to understand how the proposed development could impact upon this SINC.

6.3 Habitats

Table 6.1 below summarises the potential impacts on habitat features that are likely to occur as a result of the construction and operational activities of the proposed development described in Section 6.1 above. Impacts are considered before mitigation. Only habitats considered to be a material consideration in the planning system are included in the impact assessment.

Habitat Type	Summary of Potential Impacts
Line of trees	<ul style="list-style-type: none"> ● Habitat loss and fragmentation ● Habitat damage or degradation during construction works, lighting or inappropriate post-construction landscape management
Native hedgerow	<ul style="list-style-type: none"> ● Habitat loss and fragmentation ● Habitat damage or degradation during construction works, lighting or inappropriate post-construction landscape management
Scattered trees	<ul style="list-style-type: none"> ● Loss of trees or damage to trees
Standing water	<ul style="list-style-type: none"> ● Habitat loss ● Habitat damage or degradation, for example through polluted runoff

Table 6.1: Summary of Potential Impacts on Notable Habitats

Should the 'Nature Garden' need to be removed to facilitate the proposed development then an alternative location should be identified on site where a new 'Nature Garden' can be created, comprising habitats of high value to biodiversity.

6.4 Protected / Notable Species

Table 6.2 below summarises the potential impacts on species/species groups that are likely to occur as a result of the construction and operational activities of the proposed development described in Section 6.1 above. Only species/species groups considered to be a material consideration in the planning system are included in the impact assessment.

Species / Species Group	Summary of Potential Impacts
Amphibians	<ul style="list-style-type: none"> ● Killing/injuring of an amphibian or damage/destruction of amphibian habitat ● Net loss of aquatic and terrestrial habitat opportunities for amphibians
Bats	<ul style="list-style-type: none"> ● Killing or injury of bat and/or damage, disturbance or fragmentation of a bat roost during construction phase. ● Physical loss or fragmentation of bat foraging/dispersal habitat ● Habitat fragmentation, degradation or displacement of foraging routes due to light spill
Birds	<ul style="list-style-type: none"> ● Killing or injury of nesting birds or damage/destruction of a bird nest during construction phase or as a result of inappropriate post-construction landscape management ● Potential loss of suitable nesting habitat
Hedgehog	<ul style="list-style-type: none"> ● Harm/injury during construction phase ● Potential loss and fragmentation of suitable refuge/dispersal habitat
Invertebrates	<ul style="list-style-type: none"> ● Harm/injury during construction phase ● Potential loss and fragmentation of suitable habitat

Table 6.2: Summary of Potential Impacts on Protected/Notable Species

6.5 Invasive Plant Species

The proposed development could result in the disturbance or spread of an invasive plant species such as wall cotoneaster or three-cornered garlic during the construction phases or as a result of inappropriate post-construction landscape management.

7. Recommendations

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

R1 Consultation with Non-statutory Bodies: The proposed works could potentially impact upon Hampstead Parish Churchyard SINC. The Local Planning Authority (London Borough of Camden Council) should therefore be consulted.

R2 Ecological Surveys: The Preliminary Ecological Appraisal has highlighted the presence or potential presence of protected and notable species. It is recommended that the following species surveys are undertaken:

- Bats – Preliminary Bat Roost Assessment

All further ecological surveys should be undertaken in accordance with best practice methodologies, during the appropriate survey windows. Please refer to Appendix 3.

R3 Scheme Design: The proposed development should be designed in accordance with the ecological mitigation hierarchy as set out in the National Planning Policy Framework (NPPF), and the National Planning Practice Guidance (NPPG). The mitigation hierarchy requires all development schemes to apply the following principles:

- *Avoidance* – the proposed development should seek to avoid/minimise losses of trees and hedgerow in the first instance and incorporate these features in the landscaping layout of the scheme accordingly. This will help to further avoid and minimise impacts to protected and notable species.
- *Mitigation* – where significant harm cannot be wholly or partially avoided, adverse effects should be minimised by design or through the use of effective mitigation measures such as minimising light spill.
- *Compensation* – where unavoidable losses occur and mitigation cannot be provided, compensation for significant residual harm will be required as a last resort or planning permission could be refused. Compensation should include the remediation of lost habitats and/or connectivity, the creation of new habitats of ecological value and providing novel compensation solutions to minimise effects on protected or notable species to ensure compliance with UK wildlife legislation.

In accordance with the principles of the Environment Act 2021 the development should also secure an overall net gain for biodiversity. Biodiversity Net Gain is a planning process that aims to leave biodiversity on site in a better state than it was before, going beyond solely avoiding, mitigating and compensating adverse effect on biodiversity and actively seeking to enhance the site's biodiversity value overall. A Biodiversity Metric tool should be used to help guide and quantify the baseline and proposed value of the scheme.

R4 Construction Ecological Management Plan (CEcMP): A Construction Ecological Management Plan should be produced for the site setting out the safeguards and appropriate working practices that will be employed to minimise adverse effects on biodiversity and ensure compliance with UK Wildlife Legislation. The details of the CEcMP will be informed by the final site design and ongoing ecological survey works but should include as a minimum:

- Development standoffs and safeguards for all retained habitats,
- A method statement to ensure that the proposed works do not result in the spread of any invasive plant species,
- Covering open excavations and pipework to avoid accidental entrapment of terrestrial mammals,
- Construction timetables to avoid sensitive periods such as nesting bird season,
- Vegetation management measures to minimise the risk to protected or notable species; and,
- Compliance with any specific mitigation measures that will be required to acquire a Development Licence for works affecting protected species

The CEcMP should be submitted to the Local Planning Authority for Approval and implemented in full thereafter.

R5 Landscape and Ecology Management Plan (LEMP): A Landscape and Ecology Management Plan should be produced setting out the detailed establishment and management of all on site compensation and enhancement measures. In accordance with Biodiversity Net Gain Best Practice Principles, and the principles of the Environment Act 2021, the LEMP should cover a period of 30 years from the date of commencement with provisions for long-term monitoring and contingency actions linked to the Biodiversity Net Gain objectives of the project.

The LEMP should be submitted to the Local Planning Authority for approval (typically to discharge planning conditions) and should be implemented in full thereafter.

8. Drawings

Drawing C158263-01-01 – Phase 1 Habitat Map



Legend

- Site boundary
- X Scattered scrub
- Scattered tree
- ||||| Fence
- Line of trees
- ~ Native species-rich intact hedgerow
- Species-poor intact hedgerow
- Wall
- A Amenity grassland
- Building
- Dense scrub
- Hardstanding
- Introduced shrub
- Other habitat: allotment
- Standing water
- Tall ruderal
- Target note - Habitat Parcel

- Target note
- 1 Butterfly bush
- 2 Log pile
- 3 Bat/ bird boxes, insect hotel
- 4 Hedgehog house
- 5 Wendy house
- 6 Living willow walkway (3 m height)
- 7 Raised planters
- 8 Astroturf area (4 m x 4m)
- 9 Pile of cut buddleia and bramble brush
- 10 Beehives
- 11 Spanish bluebell
- 12 Three cornered garlic
- 13 Wall cotoneaster
- 14 Cherry laurel
- 15 Shipping container
- 16 Storage/ bin area
- 17 Holm oak
- 18 Cotoneaster Franchetti

Project University College School, Hampstead	
Drawing Phase 1 Habitat Map	
Client Ed Toovey Architects	
Drawing Number C158263-01-01	Revision 00
Scale @ A3 1:850	Date February 2023
Approved By MC	Drawn By BD

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C158263-01-01
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The following tables include full habitat descriptions and summarise the condition assessment for habitats and hedgerows using Panks *et al.* (2022)³.

Area Habitat				Condition Sheet Criteria Score														Total Score	Condition Assessment
Polygon / Line Ref.	Phase 1 Habitat Type	UK Hab Habitat Equivalent	Habitat Description	Condition Sheet Used	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13		
AG1	Amenity Grassland	Grassland – Other neutral grassland	All of the amenity grassland on site was intensely managed. These areas were closely mown and had a low uniform sward height of 5 cm. Dominant species included perennial rye-grass <i>Lolium perenne</i> , Yorkshire fog <i>Holcus lanatus</i> , plantain <i>Plantago</i> sp., comfrey <i>Symphytum</i> sp., cleavers <i>Galium</i> sp., nettle <i>Urtica dioica</i> and ribwort plantain <i>Plantago lanceolata</i> . Identification was restricted by the mowing regime. Forb growth was relatively high within the grassland. Occasional dandelions were noted. The species richness was approximately eight species per square metre.	Grassland Low Distinctiveness	F	F	P	P	P	F	F							3	Poor
IS1	Introduced Shrub	Urban – Introduced shrub	There was a small introduced garden area in the south corner of the site, with scattered trees. Introduced shrub species included lavender <i>Lavandula</i> sp., <i>Geranium</i> sp., strawberry <i>Fragaria x ananassa</i> , red valerian <i>Centranthus ruber</i> , dock <i>Rumex</i> sp., <i>Skimmia</i> sp., <i>Hypericum</i> sp., <i>Salvia</i> sp., dog-rose <i>Rosa canina</i> , <i>Magnolia</i> sp., and ornamental grass and sedge species. Common ivy <i>Hedera helix</i> and dog-rose were encroaching on the site.	N/A														N/A	N/A
IS2	Introduced Shrub	Urban – Introduced shrub	Entrance planting, central block planting and north block bank species included firethorn <i>Pyracantha</i> sp., <i>Skimmia</i> sp., Japanese holly <i>Ilex crenata</i> , Wilson's honeysuckle <i>Lonicera nitida</i> , <i>Begonia</i> sp., <i>Hebe</i> sp., spindle <i>Euonymus</i> sp., periwinkle <i>Vinca</i> sp., <i>Choisya</i> sp., spotted laurel <i>Aucuba japonica</i> , <i>Viburnum</i> sp., New Zealand flax <i>Phormium tenax</i> , daffodil <i>Narcissus</i> sp. There are stands of buddleia <i>Buddleja davidii</i> scattered throughout this habitat.	N/A														N/A	N/A
IS3	Introduced Shrub	Urban – Introduced shrub	Along the western edge of the tennis courts species included barberry <i>Berberis</i> sp., <i>Viburnum</i> sp., gorse <i>Ulex europaeus</i> , firethorn, <i>Ceanothus</i> sp., <i>Choisya</i> sp., holly <i>Ilex aquifolium</i> , bamboo, <i>Skimmia</i> sp., <i>Hebe</i> sp., Leyland cypress <i>X Cupressocyparis leylandii</i> , wall cotoneaster <i>Cotoneaster horizontalis</i> , Franchet's cotoneaster <i>Cotoneaster franchetii</i> , lavender <i>Lavandula</i> sp., holly <i>Ilex</i> sp., rose <i>Rosa</i> spp., holm oak <i>Quercus ilex</i> , buddleia, and New Zealand flax.	N/A														N/A	N/A
IS4	Introduced Shrub	Urban – Introduced shrub	A 6m x 6m parcel of introduced shrub lies in a raised bed beneath the northern red oak tree to the south of the site. Species planted included daffodil <i>Narcissus</i> sp., ferns, and <i>Rhododendron</i> sp.	N/A														N/A	N/A
IS5	Introduced Shrub	Urban – Introduced shrub	The planting parcel along the top tier north section of the site included species such as Japanese spindle <i>Euonymus japonicus</i> , <i>Skimmia</i> sp., <i>Hypericum</i> sp., <i>Choisya</i> sp., <i>Prunus</i> sp., <i>Pittosporum</i> sp., barberry, mallow <i>Malva</i> sp., <i>Hebe</i> sp., rosemary <i>Rosmarinus officinalis</i> , <i>Cyclamen</i> sp., <i>Cornus</i> sp., <i>Geranium</i> sp., <i>Hydrangea</i> sp., lords-and-ladies <i>Arum maculatum</i> , and <i>Ceanothus</i> sp. Stands of cherry laurel <i>Prunus laurocerasus</i> and buddleia are scattered throughout the planting.	N/A														N/A	N/A
W1	Standing Water	Lakes – Ponds (Non-Priority Habitat)	A sunken barrel holding clear standing water and moderate amounts of vegetation was located in the south corner of the site. It measured approximately 1 m by 1 m and was half covered by duckweed <i>Lemna</i> sp. The pond itself was unshaded.	N/A														N/A	N/A

Area Habitat				Condition Sheet Criteria Score														Total Score	Condition Assessment
Polygon / Line Ref.	Phase 1 Habitat Type	UK Hab Habitat Equivalent	Habitat Description	Condition Sheet Used	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13		
W2	Standing Water	Lakes – Ponds (Non-Priority Habitat)	A 3 m x 4 m pond present in the nature garden area. The water was good quality, and aquatic plant species included waterlily and frogbit <i>Hydrocharis morsus-ranae</i> .	N/A														N/A	N/A
N/A	Fence	Urban – Built Linear Features	A 2.5 m cast iron fence set within brick plinths surrounded the site. This changed to solid brick on the northern and eastern boundaries of the site. There was suspended deadwood on the brick wall which surrounded the allotment, and ivy was encroaching along the eastern boundary.	N/A														N/A	N/A
N/A	Hardstanding	Urban – Developed land; sealed surface	Tarmac, stone slabs, and asphalt surfaces make up the predominant surface area of the site, with the majority being amenity playgrounds and parking spaces. There were various stone paths through the allotment.	N/A														N/A	N/A
N/A	Buildings	Urban – Developed land; sealed surface	B1 is a mixture of storeys faced with red brick and large windows throughout, comprising the reception, sports centre, and drama theatre. The structure had a flat roof and was identified as good condition. B2 are a group of listed baroque Edwardian-style buildings characterised by red brick and steep pitched roofs with carved stone. The structure was in good condition. B3 comprises two separate buildings linked by a bridge corridor between. The building was in good condition, with red clay bricks throughout and a flat roof. B4 is a single storey building at ground level, with most of the roof utilised for a tennis court at the same raised height as the two adjacent courts. It is a concrete frame structure with brick cladding. This building is to be demolished as part of the new proposals. B5 is made up of simple materials and construction faced with timber cladding on the north side. As part of the proposals, it is intended to demolish the building. B6 is a simple timber frame and timber boarded single storey building used for maintenance and storage. As part of the proposals, it is intended to demolish this building.	N/A														N/A	N/A
BS1	Dense Scrub	Heathland and shrub - Bramble scrub	A square parcel of dense scrub with species such as bramble <i>Rubus fruticosus agg.</i> , buddleia, and ivy. The scrub was approximately 2 m high.	N/A														N/A	N/A
BS2	Tall Ruderal	Heathland and shrub - Bramble scrub	Ground flora species beneath mature apple trees included nettle, wood avens <i>Geum urbanum</i> , comfrey, creeping buttercup <i>Ranunculus repens</i> , thistle <i>Cirsium sp.</i> , mustard, and ivy. Bramble is dominant.	N/A														N/A	N/A
N/A	Fence	Urban - Built linear features	A small section (8 m) of iron fencing was placed at the western boundary of the allotment.	N/A														N/A	N/A
N/A	Fence	Urban - Built linear features	A 2 m high brick wall supported the northern red oak tree and introduced shrub area.	N/A														N/A	N/A
N/A	Fence	Urban - Built linear features	A 2 m high wooden trellis was positioned in the north-east corner of the site.	N/A														N/A	N/A

Area Habitat				Condition Sheet Criteria Score														Total Score	Condition Assessment
Polygon / Line Ref.	Phase 1 Habitat Type	UK Hab Habitat Equivalent	Habitat Description	Condition Sheet Used	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13		
T1-T6, T8	Scattered Tree	Urban – Urban Tree	Seven Turkey oaks <i>Quercus cerris</i> were in the south-west corner of the site, and all had a height of around 7 m.	Urban trees	F	P	F	P	F	P								3	Moderate
T7	Scattered Tree	Urban – Urban Tree	A <i>Prunus</i> sp. tree was located in the south-west corner of the site, and had a height of around 7 m.	Urban trees	P	P	F	P	F	P								4	Moderate
T9	Scattered Tree	Urban – Urban Tree	An approximately 4 m tall <i>Prunus</i> sp. tree.	Urban trees	P	P	F	F	F	P								3	Moderate
T10, T11, T14-T16, T25-T28	Scattered Tree	Urban – Urban Tree	These trees comprised a pear <i>Pyrus</i> sp. sapling, four semi-mature cherry <i>Prunus</i> sp. trees, three young, approximately 5 m tall birch <i>Betula</i> sp. trees, and one apple <i>Malus pumila</i> sapling.	Urban trees	P	P	F	P	F	P								4	Moderate
T12, T13	Scattered Tree	Urban – Urban Tree	Two mature apple trees, which were both approximately 8 m tall.	Urban trees	P	P	P	P	F	P								5	Good
T17-T23	Scattered Tree	Urban – Urban Tree	Seven young cypress trees, which were all approximately 5 m high.	Urban trees	F	P	F	F	F	P								2	Poor
T24	Scattered Tree	Urban – Urban Tree	A mature northern red oak <i>Quercus rubra</i> , which was approximately 12 m high.	Urban trees	F	P	P	P	P	P								5	Good

Key:
P – Criteria passed
F – Criteria failed

Table 8.1: Habitat Descriptions and Condition Assessments

Hedgerows				Condition Sheet Criteria Score										Condition Assessment
Ref.	Phase 1 Habitat Type	UK Hab Habitat Equivalent	Description	A1	A2	B1	B2	C1	C2	D1	D2	E1*	E2*	
H1	Hedgerow	Native Hedgerow	A species poor intact hedge made up of beech <i>Fagus sylvatica</i> . The hedge was 2 m high and 1 m wide with a small amount of garden privet <i>Ligustrum ovalifolium</i> . This hedge was frequently managed (tightly pruned) and bordered the southern corner of the site.	P	F	P	P	F	P	F	P	F	P	Moderate
H2	Hedgerow	Native Hedgerow	A species poor intact hedge made up of beech. The hedge was 1.5 m high, and 0.5 m wide. This hedge was frequently managed (tightly pruned) and bordered the amenity grassland in the south-west corner of the site.	F	F	P	P	F	P	P	P	F	P	Moderate
H3	Hedgerow	Native Hedgerow	A mixture of small ornamental hedgerows which were intensively managed and were 1 m high and 0.5 m wide. These hedges consisted of garden privet and Japanese holly.	F	F	P	P	F	P	F	P	F	P	Poor
H4	Hedgerow	Native Species Rich Hedgerow	A recently planted species rich hedgerow, which was 2 m high. Species included hazel <i>Corylus avellana</i> , hawthorn <i>Crataegus monogyna</i> , crab apple <i>Malus sylvestris</i> , and guelder rose <i>Viburnum opulus</i> .	P	F	F	P	P	P	P	P	F	P	Moderate
H5	Hedgerow	Hedge Ornamental Non-native	A regularly managed bay <i>Laurus nobilis</i> non-native hedgerow situated on either side of the memorial. This hedge measured approximately 2 m high and 1m wide.											N/A
L1	Scattered Trees	Line of Trees	A line of four semi-mature crab apple trees, which were around 5 m tall.	P	F	F	F	P						Poor

Hedgerows				Condition Sheet Criteria Score										
Ref.	Phase 1 Habitat Type	UK Hab Habitat Equivalent	Description	A1	A2	B1	B2	C1	C2	D1	D2	E1*	E2*	Condition Assessment
L2	Scattered Trees	Line of Trees	A line of 13 mature lime <i>Tilia</i> sp. trees around 12 m tall with an additional 3 m birch <i>Betula</i> sp. tree, which lined the western boundary of the site.	P	F	P	F	P						Moderate
L3	Scattered Trees	Line of Trees	A line of four semi-mature lime trees, which measured approximately 5m tall.	P	P	F	F	P						Poor
L4	Scattered Trees	Line of Trees	A line of 20 apple trees of varying ages along the eastern boundary brick wall of the site. Deadwood was present in low quantities. A number of the trees were mature/over mature and presented features for bats and birds. Ground flora consisted of introduced shrub included in the top tier north/top tier south planting.	P	P	P	F	P						Moderate
L5	Scattered Trees	Line of Trees	A line of mature hornbeams <i>Carpinus betulus</i> , multi-stemmed due to low pollarding.	P	P	P	F	P						Moderate

Key:
*Applicable to hedgerows with trees only

Table 8.2: Hedgerow Descriptions and Condition Assessments

9. Photographs



Plate 1: Allotment



Plate 2: Amenity Grassland



Plate 3: Main School Building



Plate 4: Leisure Centre Building



Plate 5: Dense Bramble and Buddleia Scrub



Plate 6: Hardstanding Playground, Footpath and Parking Area



Plate 7: Ornamental Non-Native Hedging



Plate 8: Example of Introduced Shrub



Plate 9: Line of Fruit Trees Along Boundary Wall



Plate 10: Native Hedgerow – Beech



Plate 11: Recently Planted Native Species-Rich Hedgerow



Plate 12: Example of Scattered Tree



Plate 13: Standing Water



Plate 14: Tall Ruderal

Appendix 1

General Biodiversity Legislation and Policy

The Conservation of Habitats and Species Regulations 2017 (as amended) (the Habitats Regulations 2017) and the Conservation of Habitats and Species Regulations (Amendment) (EU Exit) Regulations 2019 (the Habitats Regulations 2019)

The Habitats Regulations 2017 (as amended) transposed the land and marine aspects of the Habitats Directive (Council Directive 92/43/EEC) and certain elements of the Wild Birds Directive (Directive 2009/147/EC) (known as the Nature Directives) into English and Welsh law. Changes have been made to parts of the Habitats Regulations 2017 so that they operate effectively from 1 January 2021. The changes are made by the Habitats Regulations 2019, which transfer functions from the European Commission to the appropriate authorities in England and Wales.

All other processes or terms in the 2017 Regulations remain unchanged and existing guidance is still relevant.

The obligations of a competent authority in the 2017 Regulations for the protection of sites or species do not change. A competent authority is a public body, statutory undertaker, minister or department of government, or anyone holding public office.

The Habitats Regulations 2019 have created a 'National Site Network' on land and at sea, including both the inshore and offshore marine areas in the UK. The National Site Network includes:

- Existing Special Areas of Conservation (SACs), which are designated due to their importance to the habitats and species listed in Annexes I and II of the Habitats Directive;
- Existing Special Protection Areas (SPAs), which are designated due to their importance for wild birds in accordance with the Wild Birds Directive; and,
- New SACs and SPAs designated under these Regulations.

SACs and SPAs in the UK no longer form part of the European Union's Natura 2000 ecological network. Any references to Natura 2000 in the 2017 Regulations and in guidance now refers to the new National Site Network. However, guidance provided by Freeths (2020)⁴ recommends that SACs and SPAs can continue to be referred to as "European sites" / "European marine sites".

Designated Wetlands of International Importance (known as Ramsar sites) do not form part of the National Site Network. Many Ramsar sites overlap with SACs and SPAs and may be designated for the same or different species and habitats. All Ramsar sites remain protected in the same way as SACs and SPAs.

The 2019 Regulations establish management objectives for the National Site Network. The network objectives are to:

- Maintain or, where appropriate, restore habitats and species listed in Annexes I and II of the Habitats Directive to a favourable conservation status; and,

⁴ Freeths (2020). *The Habitats Regulations Assessment regime after 31 December 2020 – how will it look?* Available: <https://www.freeths.co.uk/2020/10/22/the-habitats-regulations-assessment-regime-after-31-december-2020-how-will-it-look/?cmpredirect>

- Contribute to ensuring, in their area of distribution, the survival and reproduction of wild birds and securing compliance with the overarching aims of the Wild Birds Directive.

The appropriate authorities must also have regard to the:

- Importance of protected sites;
- Coherence of the National Site Network; and,
- Threats of degradation or destruction (including deterioration and disturbance of protected features) on SPAs and SACs.

The network objectives contribute to the conservation of UK habitats and species that are also of pan-European importance, and to the achievement of their favourable conservation status within the UK.

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

The WCA, as amended, consolidates and amends pre-existing national wildlife legislation in order to implement the Bern Convention and the Birds Directive. It complements the Habitat Regulations 2017 and the Habitats Regulations 2019, offering protection to a wider range of species. The Act also provides for the designation and protection of national conservation sites of value for their floral, faunal or geological features, termed Sites of Special Scientific Interest (SSSIs).

Schedules of the act provide lists of protected species, both flora and fauna, and detail the possible offences that apply to these species.

The Countryside and Rights of Way (CROW) Act 2000

The CROW Act, introduced in England and Wales in 2000, amends and strengthens existing wildlife legislation detailed in the WCA. It places a duty on government departments and the National Assembly for Wales to have regard for biodiversity, and provides increased powers for the protection and maintenance of SSSIs. The Act also contains lists of habitats and species (Section 74) for which conservation measures should be promoted, in accordance with the recommendations of the Convention on Biological Diversity (Rio Earth Summit) 1992.

The Natural Environment and Rural Communities (NERC) Act 2006

Section 40 of the NERC Act places a duty upon all local authorities and public bodies in England and Wales to promote and enhance biodiversity in all of their functions. Section 102 of The Environment Act 2021 (Commencement No. 5 and Transitional Provisions) Regulations 2022 makes amendments to Section 40 of the NERC Act. The revisions strengthen the requirement for public authorities to assess how they can take action to conserve and enhance biodiversity, and then take these actions.

Sections 41 (England) and 42 (Wales) list habitats and species of principal importance to the conservation of biodiversity. These lists superseded Section 74 of the CROW Act 2000.

The Hedgerow Regulations 1997

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

Species and Habitats of Material Consideration for Planning in England

Previous planning policy (and some supporting guidance which is still current, e.g. ODPM Circular 06/2005, now under revision), refers to UK BAP habitats and species as being a material consideration in the planning process. Equally many local plans refer to BAP priority habitats and species. Both remain as material considerations in the planning process but such habitats and

species are now described as Species and Habitats of Principal Importance for Conservation in England, or simply priority habitats and priority species under the UK Post-2010 Biodiversity Framework. The list of habitats and species remains unchanged and is still derived from Section 41 list of the Natural Environmental and Rural Communities (NERC) Act 2006. As was previously the case when it was a BAP priority species hen harrier continues to be regarded as a priority species although it does not appear on the Section 41 list.

National Planning Policy Framework and Practice Guidance

In July 2021, the National Planning Policy Framework (NPPF) was updated, replacing the previous framework published in 2012 and revised in 2018 and 2019. A presumption towards sustainable development is at the heart of the NPPF. This presumption does not apply however where developments require appropriate assessment under the Birds or Habitats Directives.

Chapter 15, on conserving and enhancing the natural environment, sets out how the planning system should contribute to and enhance the natural and local environment by:

- protecting and enhancing existing sites of biodiversity value;
- minimising impacts on and providing net gains for biodiversity; and,
- establishing coherent ecological networks.

If a proposed development would result in significant harm to the natural environment which cannot be avoided (through the use of an alternative site with less harmful impacts), mitigated or compensated for (as a last resort) then planning permission should be refused. With respect to development on land within or outside of a Site of Special Scientific Interest (SSSI) which is likely to have an adverse effect (either alone or in-combination with other developments) would only be permitted where the benefits of the proposed development clearly outweigh the impacts on the SSSI itself, and the wider network of SSSIs. Development resulting in the loss of deterioration of irreplaceable habitats (such as ancient woodland and ancient or veteran trees) should be refused unless there are wholly exceptional reasons for the development, and a suitable compensation strategy is provided.

Chapter 15 identifies that development whose primary objective is to conserve or enhance biodiversity should be supported and opportunities to improve biodiversity in and around developments should be integrated as part of their design, especially where this can secure measurable net gains for biodiversity or enhance public access to nature.

Chapter 11, making effective use of the land, sets out how the planning system should promote use of land in meeting the need for homes and other uses, while safeguarding and improving the environment and ensuring safe and healthy living conditions. Substantial weight should be given to the value of using suitable brownfield land within settlements for homes and other identified needs. Opportunities for achieving net environmental gains, including new habitat creation, are encouraged.

In March 2014 the Department for Communities and Local Government released guidance to support the National Planning Policy Framework (NPPF), known as the National Planning Practice Guidance (NPPG). This has been produced to provide guidance for planners and communities which will help deliver high quality development and sustainable growth in England.

The guidance includes a section entitled 'Natural Environment: Biodiversity, geodiversity and ecosystems and green infrastructure', which was updated in July 2019. This document sets out information with respect to the following:

- the statutory basis for seeking to conserve and enhance biodiversity;

- the local planning authority's requirements for planning for biodiversity;
- what local ecological networks are and how to identify and map them;
- how plan-making bodies identify and safeguard Local Wildlife Sites, including Standard Criteria for Local Wildlife Sites;
- the sources of ecological evidence;
- the legal obligations on local planning authorities and developers regarding statutory designated sites and protected species;
- definition of green infrastructure;
- where biodiversity should be taken into account in preparing a planning application;
- how policy should be applied to avoid, mitigate or compensate for significant harm to biodiversity and how mitigation and compensation measures can be ensured;
- definitions of biodiversity net gain including information on how it can be achieved and assessed; and,
- the consideration of ancient woodlands and veteran trees in planning decisions and how potential impacts can be assessed.

The NPPG July 2019 issue also includes a section entitled 'Appropriate assessment: Guidance on the use of Habitats Regulations Assessment' which provides information in relation to Habitats Regulations Assessment processes, contents and approaches in light of case law. This guidance will be relevant to those projects and plans which have the potential to impact on European Sites and European Offshore Marine Sites identified under the Conservation of Habitats and Species Regulations 2017 (as amended).

Local Planning Policy - Camden Borough of London Council

Camden Local Plan

The Local Plan was adopted by the Council on the 3rd July 2017 and sets out the Council's planning policies (and replaces the Core Strategy and Development Policies planning documents, adopted in 2010). The Local Plan will cover the period from 2016-2031.

The policy which relates to ecology is Policy A3. It is intended to support the London Biodiversity Strategy and the Camden Biodiversity Action Plan (BAP) by ensuring Camden's growth is accompanied by a significant enhancement in the borough's biodiversity.

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.

Hampstead Neighbourhood Plan

The Council formally adopted the Hampstead Neighbourhood Plan on 8 October 2018. The policies of relevance to ecology are detailed below:

Policy NE1: Local Green Spaces

1. Local Green Spaces will be fully protected in accordance with the National Planning Policy Framework.
2. Development that causes harm to Local Green Spaces will not be permitted, except in very special circumstances.
3. The following sites are designated Local Green Spaces (see Map 5):
 - 1) Branch Hill House Site of Importance for Nature Conservation and two additional areas
 - 2) Oak Hill Park
 - 3) South End Green and Mansfield Allotments
 - 4) World Peace Garden, South Hill Park
 - 5) Oriol Place Garden
 - 6) Hampstead Green
 - 7) Keats House and Garden
 - 8) Holly Hill Bank
 - 9) Fenton House Gardens
 - 10) Pedestrian walk from Admirals Walk to Windmill Hill
 - 11) Burgh House Gardens
 - 12) Gertrude Jekyll's Garden and Communal Gardens of Wells House
 - 13) Heath Hurst Gardens
 - 14) Garden of The Pryors

4. Spaces with existing protected designations not in the list above, such as Hampstead Heath, Camden-designated Public and Private Open Spaces and Sites of Importance for Nature Conservation, are also considered important local spaces and are shown in Appendix 4: Open Spaces and Biodiversity Corridors.

Policy NE2: Trees

1. Development will protect trees that are important to local character, streetscape, biodiversity and the environment.
2. Any development that proposes removal of a tree on the Important Tree List should provide justification for the proposed tree removal(s) and details of replacement tree planting to mitigate against the loss of canopy cover, included within the application. Any trees removed to facilitate development shall be replaced by trees of a large [15m+] ultimate size where the site allows.
3. If a tree replacement enforcement notice is in place, the proposed development must allow for the trees' replacement.
4. Where there are no existing trees on a site, unless it can be demonstrated as unfeasible or non-viable, development should allow space for the future planting of trees well suited to local conditions, as noted above.

Veteran trees

5. Planning proposals are required to ensure that veteran trees are fully protected in accordance with Natural England's "Standing Advice for Ancient Woodland and Veteran Trees". Root protection zones of veteran trees will be at least 15 metres radius for each tree, deadwood should be retained where possible. Canopy reduction to facilitate construction will only be acceptable in exceptional circumstances such as where canopy reduction is required to give access for construction machinery and it is demonstrated that there are no alternatives.
6. Tree root protection for veteran trees should provide for any likely activities that may occur during construction.

Policy NE3: Biodiversity Corridors

1. Development proposals, where appropriate, should include measures to protect and assist in the restoration of Hampstead's tree lines and biodiversity corridors, reducing the incidence of breaks and the length of gaps.
2. The following sites are designated Biodiversity Corridors. Corridors indicated with an asterisk contain historic tree lines. Please refer to Map 5 above and Appendix 4.
 - A. Well and Flask Walks + NW Gayton Road*
 - B. Rear gardens 5-41 Christchurch Hill
 - C. Rear gardens between Denning and Willow Roads*
 - D. Rear gardens between Downshire Hill and Pilgrims Lane*
 - E. Heath Edge Gardens, Parliament Hill & South Hill Park*
 - F. Rear gardens Hampstead Hill Gardens*
 - G. North-western Frogna
 - H. Hampstead Grove, Admirals Walk, Upper & Lower Terrace*
 - I. Holly Hill to CR&PW boundary
 - J. Shepherds Walk, Spring Walk and Spring Path
 - K. Western Frogna rear gardens: Redington Road to HNF/RFNF boundary
3. Proposals for property that include part of the above should not diminish the ability of biodiversity corridors to provide habitat and the free movement of wildlife.

4. Subject to their scale and location, proposals should establish the quality of the existing biodiversity through relevant ecological appraisal and species surveys. Applicants should show in their proposals how they plan to enhance both biodiversity and habitats.

Policy NE4: Supporting biodiversity

1. In order to enhance biodiversity, development proposals will be encouraged to:
 - a. Use restrained exterior lighting in low blue content white or yellow light only.
 - b. Increase canopy cover as part of any landscaping scheme.
 - c. Increase where feasible the area of permeable surfaces, particularly those that incorporate biodiversity-enhancing features such as gravel turf (eg. Schotterrasen), having regard for ground conditions, effectiveness and viability.
2. Development proposals should seek to protect or enhance the status or population of priority habitats, species and wildlife movement.

The London Plan 2021

The London Plan is the overall strategic plan for London, setting out an integrated economic, environmental, transport and social framework for the development of London over the next 20–25 years. It is the policies in this document that form part of the development plan for Greater London, and which should be taken into account in taking relevant planning decisions, such as determining planning applications.

This London Plan runs from 2019 to 2041. It was formally published by the Mayor on 2nd March 2021. This is a new plan, replacing all previous versions.

The policies of relevance to ecology are:

Policy G1 Green Infrastructure

- A. London's network of green and open spaces, and green features in the built environment, should be protected and enhanced. Green infrastructure should be planned, designed and managed in an integrated way to achieve multiple benefits.
- B. Boroughs should prepare green infrastructure strategies that identify opportunities for cross-borough collaboration, ensure green infrastructure is optimised and consider green infrastructure in an integrated way as part of a network consistent with Part A.
- C. Development Plans and area-based strategies should use evidence, including green infrastructure strategies, to:
 - 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.
- D. Development proposals should incorporate appropriate elements of green infrastructure that are integrated into London's wider green infrastructure network.

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 except where very special circumstances exist,
 - 2) subject to national planning policy tests, the enhancement of the Green Belt to provide appropriate multi-functional beneficial uses for Londoners should be supported.
- B. Exceptional circumstances are required to justify either the extension or de-designation of the Green Belt through the preparation or review of a Local Plan.

Policy G3 Metropolitan Open Land

- A. Metropolitan Open Land (MOL) is afforded the same status and level of protection as Green Belt:
 - 1) MOL should be protected from inappropriate development in accordance with national planning policy tests that apply to the Green Belt
 - 2) boroughs should work with partners to enhance the quality and range of uses of MOL.
- B. The extension of MOL designations should be supported where appropriate. Boroughs should designate MOL by establishing that the land meets at least one of the following criteria:
 - 1) it contributes to the physical structure of London by being clearly distinguishable from the built-up area
 - 2) 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
 - 3) it contains features or landscapes (historic, recreational, biodiverse) of either national or metropolitan value
 - 4) it forms part of a strategic corridor, node or a link in the network of green infrastructure and meets one of the above criteria.
- C. Any alterations to the boundary of MOL should be undertaken through the Local Plan process, in consultation with the Mayor and adjoining boroughs. MOL boundaries should only be changed in exceptional circumstances when this is fully evidenced and justified, taking into account the purposes for including land in MOL set out in Part B.

Policy G4 Open Space

- A. Development Plans should:
 - 1) undertake a needs assessment of all open space to inform policy.
 - 2) Assessments should identify areas of public open space deficiency, using the categorisation set out in Table 8.1 (the reader should refer to the full text within the plan) as a benchmark for the different types required. Assessments should take into account the quality, quantity and accessibility of open space
 - 3) include appropriate designations and policies for the protection of open space to meet needs and address deficiencies
 - 4) promote the creation of new areas of publicly accessible open space particularly green space, ensuring that future open space needs are planned for, especially in areas with the potential for substantial change
 - 5) ensure that open space, particularly green space, included as part of development remains publicly accessible.
- B. Development proposals should:
 - 1) not result in the loss of protected open space
 - 2) where possible create areas of publicly accessible open space, particularly in areas of deficiency.

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 (the reader should refer to the full text within the plan), 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 (excluding B2 and B8 uses).

- C. Existing green cover retained on site should count towards developments meeting the interim target scores set out in (B) based on the factors set out in Table 8.2.

Policy G6 Biodiversity and Access to Nature

- A. Sites of Importance for Nature Conservation (SINCs) should be protected.
- B. Boroughs, in developing Development Plans, should:
- 1) use up-to-date information about the natural environment and the relevant procedures to identify SINCs and ecological corridors to identify coherent ecological networks
 - 2) identify areas of deficiency in access to nature (i.e. areas that are more than 1 km walking distance from an accessible Metropolitan or Borough SINC) and seek opportunities to address them
 - 3) support the protection and conservation of priority species and habitats that sit outside the SINC network, and promote opportunities for enhancing them using Biodiversity Action Plans
 - 4) seek opportunities to create other habitats, or features such as artificial nest sites, that are of particular relevance and benefit in an urban context
 - 5) ensure designated sites of European or national nature conservation importance are clearly identified and impacts assessed in accordance with legislative requirements.
- C. Where harm to a SINC is unavoidable, and where the benefits of the development proposal clearly outweigh the impacts on biodiversity, the following mitigation hierarchy should be applied to minimise development impacts:
- 1) avoid damaging the significant ecological features of the site
 - 2) minimise the overall spatial impact and mitigate it by improving the quality or management of the rest of the site
 - 3) deliver off-site compensation of better biodiversity value.
- D. Development proposals should manage impacts on biodiversity and aim to secure net biodiversity gain. This should be informed by the best available ecological information and addressed from the start of the development process.
- E. Proposals which reduce deficiencies in access to nature should be considered positively.

Policy G7 Trees and Woodlands

- A. London's urban forest and woodlands should be protected and maintained, and new trees and woodlands should be planted in appropriate locations in order to increase the extent of London's urban forest – the area of London under the canopy of trees.
- B. In their Development Plans, boroughs should:
- 1) protect 'veteran' trees and ancient woodland where these are not already part of a protected site
 - 2) identify opportunities for tree planting in strategic locations.
- C. Development proposals should ensure that, wherever possible, existing trees of value are retained. If planning permission is granted that necessitates the removal of trees 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 or another appropriate valuation system. 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.

Policy SI 17 Protecting and enhancing London's waterways

- A. Development Plans should support river restoration and biodiversity improvements.
- B. Development proposals that facilitate river restoration, including opportunities to open culverts, naturalise river channels, protect and improve the foreshore, floodplain, riparian and adjacent terrestrial habitats, water quality as well as heritage value, should be supported. Development proposals to impound and narrow waterways should be refused.
- C. Development proposals should support and improve the protection of the distinct open character and heritage of waterways and their settings.
- D. Development proposals into the waterways, including permanently moored vessels, should generally only be supported for water-related uses or to support enhancements of water-related uses.
- E. Development proposals along London's canal network, docks, other rivers and water space (such as reservoirs, lakes and ponds) should respect their local character, environment and biodiversity and should contribute to their accessibility and active water-related uses. Development Plans should identify opportunities for increasing local distinctiveness and recognise these water spaces as environmental, social and economic assets.
- F. On-shore power at water transport facilities should be considered at wharves and residential moorings to help reduce air pollution.

Appendix 2

Relevant Species Legislation

Bats

Bats and the places they use for shelter or protection (i.e. roosts) receive legal protection under the Conservation of Habitats and Species Regulations 2017 (Habitats Regulations 2017) and the Conservation of Habitats and Species Regulations (Amendment) (EU Exit) Regulations 2019 (Habitats Regulations 2019). They receive further legal protection under the Wildlife and Countryside Act (WCA) 1981, as amended. This protection means that bats, and the places they use for shelter or protection, are capable of being a material consideration in the planning process.

Regulation 41 of the Habitats Regulations 2017, states that a person commits an offence if they:

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

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

It is an offence under the Habitats Regulations 2017 for any person to have in his possession or control, to transport, to sell or exchange or to offer for sale, any live or dead bats, part of a bat or anything derived from bats, which has been unlawfully taken from the wild.

Changes have been made to parts of the Habitats Regulations 2017 so that they operate effectively from 1st January 2021. The changes are made by the Habitats Regulations 2019, which transfer functions from the European Commission to the appropriate authorities in England and Wales.

All other processes or terms in the 2017 Regulations remain unchanged and existing guidance is still relevant.

The obligations of a competent authority in the 2017 Regulations for the protection of species do not change. A competent authority is a public body, statutory undertaker, minister or department of government, or anyone holding public office.

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

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

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

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

The reader should refer to the original legislation for the definitive interpretation.

The following bat species are Species of Principal Importance for Nature Conservation in England: barbastelle bat *Barbastella barbastellus*, Bechstein's bat *Myotis bechsteinii*, noctule *Nyctalus noctula*, soprano pipistrelle *Pipistrellus pygmaeus*, brown long-eared bat *Plecotus auritus*, greater horseshoe bat *Rhinolophus ferrumequinum* and lesser horseshoe bat *Rhinolophus hipposideros*. Species of Principal Importance for Nature Conservation in England are material considerations in the planning process. The list of species is derived from Section 41 list of the Natural Environmental and Rural Communities (NERC) Act 2006.

Common amphibians

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

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

Hedgehog

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

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

Nesting Birds

The Conservation of Habitats and Species Regulations 2017, (Habitats Regulations 2017) and the Conservation of Habitats and Species Regulations (Amendment) (EU Exit) Regulations 2019 (Habitats Regulations 2019) places a duty on public bodies to take measures to preserve, maintain and re-establish habitat for wild birds.

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

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

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

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

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

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

Appendix 3

Survey Calendar

SPECIES SURVEY CALENDAR

This calendar helps identify the seasonal constraints associated with many ecological and protected species surveys.

Recommended survey time 

Possible survey time 

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Extended Phase 1 Habitat Survey	Recommended survey time											
Botanical Survey				Recommended survey time								
Bats (initial bat survey)	Recommended survey time											
Bats (activity survey)				Possible survey time	Recommended survey time				Possible survey time			
Bats (hibernation survey)	Recommended survey time		Possible survey time									Recommended survey time
Great Crested Newt (habitat assessment)	Recommended survey time											
Great Crested Newt (presence/absence survey)			Recommended survey time									
Reptiles			Recommended survey time				Possible survey time		Recommended survey time			
Badger	Recommended survey time											
Water Vole			Possible survey time	Recommended survey time					Possible survey time			
Otter	Recommended survey time											
Birds (winter birds)	Recommended survey time											Recommended survey time
Birds (nesting bird)			Recommended survey time					Possible survey time				
Dormouse	Possible survey time		Recommended survey time									
White Clawed Crayfish				Recommended survey time	Possible survey time		Recommended survey time					