

LEVITT BERNSTEIN

GARAGE BLOCK ADJACENT TO KENNEDY AVENUE, EN3 4EH

Ecological Assessment

JANUARY 2022



Garage Block adjacent to Kennedy Avenue, Enfield, EN3 4EH

Ecological Assessment

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VERSION CONTROL

Version	Date	Author	Changes
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1 INTRODUCTION

1.1 Background

Arcadis Consulting (UK) Limited (Arcadis) was commissioned by Levitt Bernstein on behalf of Enfield Council (the Client) to undertake an ecological assessment to support the feasibility for potential development at a garage block adjacent to Kennedy Avenue, EN3 4EH hereafter referred to as “the Site”.

The objective of this report is to identify potential ecological development constraints due to current ecological conditions on site as based on the findings of a desk study and ecological constraints survey. The report outlines the ecological constraints associated with the Site with regards to biodiversity legislation and policy and provides advice on mitigation and enhancement opportunities, including requirement for any further assessment or licensing, if necessary.

1.2 Site Location & Setting

The Site is located south of Ponders End and accessible from Kennedy Avenue, in Enfield London Borough Council (Enfield Council). The Site is centred at grid reference of TQ 35251 95327 and around the postcode of EN3 4EH.

The Site measures approximately 0.1ha in area and comprised mainly hardstanding with brick-built garage buildings. The immediate surrounding residential area was characterised by terraced housing with detached and semi-detached housing.

No trees subject to Tree Preservation Orders (TPOs) were present within the study area, or within 500m of the Site. Chingford Reservoirs Site of Special Scientific Interest (SSSI) was located approximately 1.2km to the east of the Site, this is also a Site of Metropolitan Importance forming part of the Lee Valley Regional Park. Several sites of local importance were found within 500m of the Site, the closest being Boundary Brook, found 30m south of the Site, this is a small tributary to the River Lee.

The Site boundary for assessment is presented in Figure 2.

2 METHODOLOGY

2.1 Desk Study

Desk-based ecological information was collated from multiple sources.

The Multi-Agency Geographic Information for the Countryside (MAGIC) website¹ was used to search for any statutory or non-statutory designated sites of nature conservation importance within a specific radius of the Site boundary, as follows:

- Special Protection Area (SPA) or Ramsar sites (5km radius);
- Special Areas of Conservation (SACs) (5km radius);
- SSSI (2km radius);
- National Nature Reserves (NNR) (2km radius);
- LNR (2km radius); and
- Woodlands registered on the Ancient Woodland Inventory (AWI) (2km radius).

Records of protected or otherwise notable species of conservation concern (that the Site has the potential to support) located within 1km of the Site boundary were obtained from the following sources:

- National Biodiversity Network Atlas²; and
- London Biodiversity Action Plan (BAP) Priority Species List³.

The locations of trees with Tree Protection Orders (TPOs) were obtained from the search tool on the Enfield Council website⁴.

In addition, the locations of Sites of Importance for Nature Conservation (SINCs) were obtained from Greenspace Information for Greater London (GiGL)⁵ free source data. No citations for these sites were obtained other than where information was publicly accessible.

SINCs fall into three sub designations:

- Sites of Metropolitan Importance for Nature Conservation (SMINCs);
- Sites of Borough Importance for Nature Conservation (SBINCs) Grades I and II; and
- Sites of Local Importance for Nature Conservation (SLINCs).

Waterbodies located within 250m of the Site identified from Ordnance Survey mapping were assessed with regards to their connectivity to the Site and their potential suitability for supporting a population of breeding great crested newt (*Triturus cristatus*).

2.2 Field Survey

This survey was conducted by Ewan Gibson (Ecologist) and Madeleine Czura (Graduate Ecologist) on 18 January 2022. Habitats were classified according to their JNCC Phase 1 habitat categories (JNCC 2010)⁶ as presented on Figure 2. Plants names follow Stace (2019)⁷.

2.3 Limitations

This report has been prepared for Levitt Bernstein in accordance with the terms and conditions of appointment. Arcadis cannot accept any responsibility for any use of or reliance on the contents of this report by any third party. The copyright of this document, including the electronic format shall remain the property of Arcadis.

¹ MAGIC (2002). MAGIC Map Search. [online] Available at <http://magic.defra.gov.uk> [Accessed January 2022]

² National Biodiversity Network <https://nbn.org.uk/> [Accessed January 2022]

³ Greater London Authority (2019), London Priority Species, [Available online] [London Priority Species | London City Hall](#) [Accessed January 2022]

⁴ Enfield Council (2022). Find my Nearest. <https://new.enfield.gov.uk/find-my-nearest/#7> [Accessed January 2022]

⁵ Greenspace Information for Greater London http://discover-london.gigl.org.uk/?theme=SITES_TO_VISIT [Accessed January 2022]

⁶ Joint Nature Conservation Committee (2010), *Handbook for Phase 1 habitat survey - a technique for environmental audit*

⁷ Stace, C. (2019). *New Flora of the British Isles, Fourth Edition*. C&M Floristics, Stowmarket.

This report has been compiled from a number of sources, which Arcadis believes to be trustworthy. However, Arcadis is unable to guarantee the accuracy of information provided by others. The report is based on information available at the time. Consequently, there is a potential for further information to become available, which may change this report's conclusion and for which Arcadis cannot be responsible.

The site survey was completed in January 2022 and thus is limited by only reflecting species seen during the winter season. Given the built nature of the site this is not considered to have adversely affected the findings.

3 SURVEY RESULTS

3.1 Reporting Outline

The results of the desk study and ecological constraints survey are described below, with Sites or features of particular nature conservation interest detailed as appropriate.

Supporting information to be read in conjunction with the results and subsequent discussion are as follows:

- Table 1: Ecological Constraints and Mitigation Summary Table;
- Table 2: Site photographs (at the end of the report); and
- Figure 1: Statutory Designated Sites within 2km/5km of the Site centre (at the end of the report);
- Figure 2: Phase 1 Habitat Map (with target notes) (at the end of the report);
- Figure 3: SINCS in Enfield Council (at the end of the report).

Only information potentially relevant to the development of the Sites is included within the report other information is appended as follows:

- Appendix A: Desk Study Results;
- Appendix B: Bat Habitat Suitability Assessment and London Bat Population Status;
- Appendix C: Selected Legislation, Nature Conservation Status and Policy.

3.2 Desk Study Results

Only desk study results that are potentially relevant to the Site are presented within the report. Detailed status and protections conferred by the relevant designations below are presented in Appendix A and Figure 1. The relevant Site information is summarised below.

- No statutory designated sites, including ancient woodlands or woodlands listed on the Ancient Woodland Inventory (AWI) identified within the vicinity of the Site, had the potential to be significantly impacted by development on the Site (See Appendix A). Chingford Reservoirs SSSI was located approximately 1.2km east of the Site. Due to the size of the Site and the limited number of units that the developable area could accommodate, additional recreational pressures on Chingford Reservoirs SSSI are considered to be negligible.
- Several non-statutory designated sites were present surrounding the Site, the closest being Boundary Brook SLINC. See Figure 3 for the location of SINCS.
- There were records of Himalayan Balsam (*Impatiens glandulifera*) and Japanese Knotweed (*Fallopia japonica*) within 1km of the Site, both of which are non-native invasive species listed on Schedule 9 of the Wildlife and Countryside Act 1981 (as amended)⁸. In addition records of Cherry Laurel (*Prunus laurocerasus*), False-acacia (*Robinia pseudoacacia*), Evergreen Oak (*Quercus ilex*) and Green Alkanet (*Pentaglottis sempervirens*) were also present within 1km of the Site, which, along with all of the above species, are also listed on the London Invasive Species Initiative (LISI)⁹: managed by the London Biodiversity Partnership;
- There were records of brown hare (*Lepus europaeus*) and hedgehog (*Erinaceus europaeus*) located within 500m of the Site, which are London BAP and Species of Principal Importance (S41 species) under Section 41 of the Natural Environment and Rural Communities Act 2006¹⁰;
- There were records of a number of London BAP and Species of Principal Importance S41 bird species within 1km of the Site, notable records included house sparrow (*Passer domesticus*), sand martin (*Riparia riparia*), black redstart (*Phoenicurus ochruros*) and wood pigeon (*Columba palumbus*) along with other species, including grey heron (*Ardea cinerea*) and blackbird (*Turdus merula*);

⁸ Anon (1981) Wildlife and Countryside Act. HMSO, London.

⁹ London Invasive Species Initiative, available at: <http://www.londonisi.org.uk/what-and-where/species-of-concern/> [Accessed January 2022]

¹⁰ The Natural Environment and Rural Communities Act (2006) HMSO, London. Available at: [Natural Environment and Rural Communities Act 2006 \(legislation.gov.uk\)](https://www.legislation.gov.uk/ukpga/2006/15/section/41) [Accessed January 2022]

- There were records of fox (*Vulpes vulpes*) within 500m of the Site and, although not protected for conservation value, foxes are protected from inhumane killing or injury by the Wild Mammal Act (1996)¹¹;
- A brown long-eared bat (*Plecotus auratus*) was recorded within 500m of the Site during a winter hibernation survey in 2017;
- There were no relevant records of protected or notable reptiles, amphibians or of badger.
- Saddlers Mill Stream was present 30m south of the site. This small tributary drain to the River Lee has no connectivity to the site. There is potential for nearby residential gardens to contain small ponds with suitable amphibian habitat.

3.3 Site Overview

The Site measures approximately 0.1ha in area and comprised mainly hardstanding with some limited low-growing vegetation, two blocks of brick-built garage buildings, and two young Ash trees (*Fraxinus excelsior*). A metal fence bordered the north of the site and a wooden fence with Common Ivy growth bordered the southern side. The garage buildings were apparently disused since approximately 2013. These buildings comprised single skin brick walls with corrugated fibreboard roof, the doors were a mix between open and boarded up. Both garage blocks were assessed as low potential to support roosting bats.

The immediate surrounding area was characterised by residential areas to the north and east of the Site including terraced housing with detached and semi-detached housing. The western boundary of the Site includes an industrial building with small crevices in the brickwork assessed as low bat potential.

No trees subject to TPOs were present within the Site, or within 500m of the Site.

3.4 Habitats

Phase 1 habitat categories and descriptions of these habitats are presented below, while the locations of these habitats are presented in Figure 2. Photographs are presented in the Site Photographs in Table 2.

- **Hardstanding (ephemeral emergent vegetation):** Most of the Site was formed of hardstanding concrete with low-growing vegetation between concrete slabs (site photographs, photograph 1).
- **Buildings (garage blocks):** Two blocks of garages were adjacent to the east and west boundaries of the Site with approximately ten garages in each block (twenty in total). Some doors were open while others boarded up. Those with closed doors had gaps that provided potential entry points for bats.
- **Scattered Scrub:** Patches of scattered scrub across the Site supported Ash tree saplings. These saplings grew from gaps in the concrete and were also found on the southern site boundary and behind the eastern garage block. These provided bird nesting potential and small mammal potential.

3.5 Protected and Notable Species

The following protected or notable species have the potential to be present on the Site:

- **Nesting Birds:** There is the potential for nesting birds to utilise the trees including the scattered scrub, dense Common Ivy and the buildings, including species listed on the London BAP and S41 species, such as house sparrow.
- **Roosting Bats:** Features potentially suitable for roosting bats were recorded in the garage blocks (B1 and B2), due to the gaps present in the doors providing entry points. The building immediately adjacent to the west boundary of the Site (B3) also showed a potential access point for bats. There was no internal access to these buildings and internal lining structures were unknown. A precautionary approach was taken and the potential of these feature to support roosting bats was

¹¹ Anon The Wild Mammal Act (1996). HMSO

categorised as 'low' based on Bat Conservation Trust (BCT) guidance¹². Bats are listed on Schedule 5 of the Wildlife and Countryside Act 1981 (as amended), Section 41 species, London BAP species and protected under the Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019¹³; and

- **Small Mammals:** Features including the detritus piles (TN1) were potentially suitable habitat for small mammals such as hedgehog. Hedgehogs are a London BAP and S41 species.

No ponds were recorded within 250m of the Site. A drain was present 30m south of the Site, this had limited connectivity to the Site, so the presence of great crested newt or other amphibians on the Site is unlikely. Overall, within the Site, there was very limited potential for protected or notable species.

3.6 Invasive Species

During the site survey, no invasive species were found to be present, but as this survey was completed in January 2022 during the winter season, some species of plant may not have been visible (e.g. if the dead stalks had been previously removed). A further survey during an optimal time of year (June-September) would confirm the presence or absence of invasive species.

¹² Collins, J. (ed.) (2016). Bat Surveys for Professional Ecologists: Good Practice Guidelines (3rd edn). The Bat Conservation Trust, London.

¹³ Anon (2017). The Conservation of Habitats and Species Regulations 2017 (as amended by the Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019). HMSO, London.

4 POTENTIAL ECOLOGICAL CONSTRAINTS

The potential ecological constraints and associated further works including mitigation are briefly presented below, further detail is presented in Table 1.

4.1 Habitats / Invasive Species

The habitats on the Site were assessed as having limited green infrastructure and no protected or notable floral species. As highlighted above, a small number of young trees and dense Common Ivy were present. No trees subject to a TPO were present within the study area.

An ecologist and arboriculturist should contribute to the evolution of any development and landscaping design for the Site to minimise biodiversity loss and to advise upon the provision of appropriate green infrastructure.

4.2 Protected and Notable Species

The following notable or protected species have the potential to be impacted by the works:

- **Roosting Bats:** The garage blocks (B1 and B2) within the Site and adjacent building (B3) were categorised with a low potential to support roosting bats. As there was no internal access to these buildings, it is recommended that a further inspection is undertaken with full internal access. Should these structures be removed to facilitate new development it is recommended that a pair of suitably qualified ecologists undertake a single emergence survey to confirm the presence or absence of roosting bats;
- **Nesting Birds:** It is likely that nesting birds may utilise the Site and, as such, clearance of vegetation should be avoided during the nesting bird season (March to August inclusive) or be undertaken following a pre-clearance nest check carried out by an ecologist no more than 48 hours before the commencement of works. Replacement nesting opportunities should be provided within any development.

5 LEGISLATION AND KEY POLICY REQUIREMENTS

Potentially relevant Legislation and Policy are presented in Appendix C and further detail with regards to surveys and mitigation required are presented in Table 1.

5.1 Relevant Legislation

Development of the Site would require surveys and or mitigation to fulfil legislative requirements for the following protected species:

- All bat species are afforded full protection under UK and European legislation, including the Wildlife and Countryside Act 1981 (as amended)¹⁴, the Countryside and Rights of Way Act (2000)¹⁵ and the Conservation of Habitats and Species Regulations (2017) (as amended by the Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019)¹⁶ and further survey with regards to bats is recommended; and
- The Wildlife and Countryside Act 1981 (as amended), for nesting birds: works should be timed to avoid the nesting bird season (March to August inclusive) or pre-clearance nest checks carried out by an ecologist would be required;
- Wild Mammals Protection Act (1996) for any mammal species e.g. fox or hedgehog: works would need to ensure that there is no inhumane killing or injury of these species if present during vegetation and scrub removal.

Full details of subsequent works required are included within section 6, Table 1 below.

5.2 Relevant Policy

Elements of national and London policies and plans have the potential to be applicable to any development of the Site, these relate to:

- The safeguarding and replacement of trees to be lost to development;
- Creation and enhancement of biodiversity where possible; and
- The material consideration of S41 species in design and planning such as, house sparrow and hedgehog.

An ecology report addressing the required design and construction mitigation for any proposed development would be required in support of planning.

5.3 Biodiversity Net Gain

In line with the 25 Year Plan for the Environment¹⁷ and the National Planning Policy Framework 2021¹⁸, new development should identify and pursue opportunities for securing measurable net gains for biodiversity and for the wider environment.

The Environment Act 2021¹⁹ introduces a mandatory requirement for biodiversity net gain for new developments, set at 10%, to ensure that new developments enhance biodiversity and create new green spaces for local communities to enjoy. Integrating biodiversity net gain into the planning system will provide a step change in how planning and development is delivered. There is also a strong focus on delivering environmental net gain. This would preferably be achieved onsite, however there are options to deliver these gains offsite and this would be demonstrated via the Biodiversity Metric 3.0 calculator tool²⁰.

¹⁴ Anon (1981) Wildlife and Countryside Act. HMSO, London.

¹⁵ Anon (2000) Countryside and Rights of Way Act. HMSO, London.

¹⁶ Anon (2017). The Conservation of Habitats and Species Regulations 2017 (as amended by the Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019). HMSO, London.

¹⁷ HM Government (2018) 'A Green Future: Our 25 Year Plan to Improve the Environment', HM Government, London.

¹⁸ MHCLG (2021) National Planning Policy Framework

¹⁹ Department for Environment, Food & Rural Affairs (2021): *Environment Act 2021*. [online] Available at: [World-leading Environment Act becomes law - GOV.UK \(www.gov.uk\)](https://www.gov.uk/government/legislation/environment-act-2021) [Accessed December 2021].

²⁰ Natural England (2021): The Biodiversity Metric 3.0. [online] Available at: [http://publications.naturalengland.org.uk/publication/5850908674228224](https://publications.naturalengland.org.uk/publication/5850908674228224) [Accessed December 2021].

Many local planning authorities are also strengthening their policies around biodiversity and green infrastructure in response to the biodiversity and climate emergency. As part of the London Plan – 2021²¹. Policy G5, Urban Greening, requires new developments to incorporate green infrastructure including trees, green roofs, green walls and nature-based sustainable drainage. The Mayor has developed an Urban Greening Factor (UGF) model to assist boroughs and developers in determining the appropriate provision of green infrastructure, currently a target score of 0.4 UGF is recommended for developments that are predominately residential. This can provide a range of benefits in addition to biodiversity such as urban heat island effect reduction, water quality and quantity attenuation, air quality improvements, and amenity which confers health and wellbeing. The latter being particularly important in the most densely developed parts of the city where traditional green space is limited.

The area has biodiversity and ecosystem service value including, noise and air quality attenuation, water volume and quality attenuation, and carbon sequestration. Maximising the biodiversity and ecosystem service potential of the landscape to remain or be included within the soft estate of any development is recommended.

Building integrated vegetation would also be recommended such as the consideration of a biodiversity roof, incorporation of integral bird and bat boxes, micro sustainable drainage systems, the implementation of permeable fencing to benefit small mammals such as hedgehog which is an S41 species currently in decline, sensitive lighting strategy, tree replacement and new tree planting where feasible. Off-site compensation should also be considered if required with the objective to achieve net gain.

²¹ Greater London Authority (2021) London Plan - 2021. Available at: https://www.london.gov.uk/sites/default/files/the_london_plan_2021.pdf

6 SUMMARY OF ECOLOGICAL CONSTRAINTS AND MITIGATION REQUIRED

Table 1 Ecological Constraints and Mitigation Summary Table

Key Issues	Legislation/Policy	Assumption	Further Survey / input?	Seasonal Timing	Mitigation Required	Seasonal Timing	Programme Delay Risk	Survey/ Mitigation Cost Estimate*	Risk Rating
Biodiversity General									
Ecology Report in Support of Planning	Wildlife and Countryside Act 1981 (as amended) London BAP Natural Environment and Rural Communities Act 2006 NPPF 2021	To inform and mitigate any potential design	See below	See below	See below	See below	Early commissioning of Ecologist recommended to input into design	Report for planning £2000- £3000	Low
Roosting Bats (Buildings)									
Buildings (garage blocks B1 and B2) within the Site and buildings adjacent to the site (B3) exhibited features potentially suitable for roosting bats, and were accordingly categorised as having low potential to support roosting/hibernating bats	Schedule 5 of the of the Wildlife and Countryside Act 1981 (as amended) The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019	Assumption is that the garage blocks (B1 and B2) are to be removed for development	It is recommended that the buildings (B1, B2 and B3) are internally inspected with full access by a licenced bat worker to confirm the status of the structure with regards to roosting bats. OR a single emergence survey by two suitably qualified ecologists to confirm the presence or absence of roosting bats.	N/A	Inspection of the buildings (B1, B2 and B3) with full internal access or emergence survey to confirm the status of the structure with regards to roosting bats Should the surveys confirm the presence of roosting bats in a feature to be removed, it is likely that an EPS mitigation licence would be required for the works to proceed. This would require the provision of a method statement for the works and suitable mitigation measures to be put in place.	May - September	N/A	Mitigation £1500 to £2500 for a single emergence survey by two suitably qualified ecologists	Low
Nesting Birds									
All green infrastructure listed below is suitable for nesting birds. These are likely to be removed for development. <ul style="list-style-type: none">Scattered trees overhanging into site; andDense scrub and Common Ivy	Wildlife and Countryside Act 1981 (as amended)	Removed for development / Site investigation.	No (but see mitigation recommendations)	N/A	Remove vegetation outside the core nesting bird season (March to August inclusive) or vegetation removal would need to be supervised by an ecological watching brief and a pre-works check no more than 48 hours before the commencement of works	September to February remove scrub and trees if required	If vegetation removal is required during the nesting bird season and nest are found by the ecological watching brief, a delay of 6 weeks is likely to be required until chicks have fledged.	Mitigation £500 - £1000 per day for ecological supervision / nesting bird check. Design and replacement of green infrastructure not costed	Low
Non-native Invasive species									
Potential presence of invasive species	London Invasive Species Index LISI	If further surveys during summer season find presence of invasive species. Development could cause these species to spread	No	N/A	If present, it would be good practice to remove this species during subsequent development and to implement mitigation to ensure they are not spread	N/A	N/A	N/A Can be undertaken with vegetation clearance for development.	Low

* Cost estimates only, actual costs would depend on the procurement, design and programme of any subsequent development and do not include costs any actual green infrastructure replacement or associated protected species licencing

7 CONCLUSIONS

There are some minor ecological constraints with regard to the development of this Site.

No statutory or non-statutory designated sites (including ancient woodlands or woodlands listed on the Ancient Woodland Inventory (AWI)) identified within the vicinity of the Site have the potential to be significantly impacted by development on the Site. No trees subject to TPOs are present within the Site. Chingford Reservoirs SSSI is located approximately 1.2km east of the site. Due to the nature of the Chingford Reservoirs SSSI, recreational pressures on the designation have been considered, however due to the size of the Site and the limited number of units that the developable area could accommodate, additional recreational pressures are considered to be negligible.

Constraints and opportunities are listed below:

- The Site comprised hardstanding (including some limited vegetation) with two blocks of disused garage blocks. The habitats on Site were generally species-poor with low structural diversity due to the lack of positive management. However, the small amount of vegetation and trees has value in terms of green infrastructure.
- The garage blocks on site were deemed to have low potential for roosting bats taking a precautionary approach due to lack of internal access. Further surveys of either full access inspection or bat emergence surveys should be undertaken to determine presence. If bats are present then a mitigation licence would likely be required for any demolition works to proceed.
- There is potential for nesting birds to be utilising the Common Ivy and scrub within and overhanging into the Site, including species listed on S41 and the London BAP such as house sparrow. Removal of suitable vegetation on Site would need to be conducted outside of the bird nesting season (March – August inclusive) or under an ecological watching brief (including a pre-works check no more than 48 hours before the commencement of works).
- Tree saplings and other vegetation should be replaced within any proposed soft landscaping and these designs should be evolved in liaison with an ecologist and arboriculturist. In addition, rain gardens, biodiversity roofs and other green infrastructure should be considered within any development.
- Biodiversity net gain is a mandatory requirement for new developments, set at 10%, under The Environment Act 2021. There are opportunities for the incorporation of integral bird and bat boxes, micro sustainable drainage, the implementation of permeable fencing to benefit small mammals such as hedgehog which is a S41 species currently in decline, sensitive lighting strategy, tree replacement and new tree planting where feasible.

SITE PHOTOGRAPHS

Table 2: Kennedy Avenue, Site Photographs

Site Photographs	
	
Photograph 1: Hardstanding with emergent vegetation	Photograph 2: Building B1, garage block.
	
Photograph 3: Example of inside single garage with no door	Photograph 4: Ash tree

Site Photographs



Photograph 5: Ash tree



Photograph 6: Detritus pile (TN1), small mammal potential



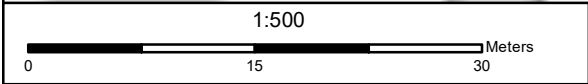
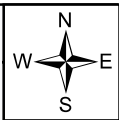
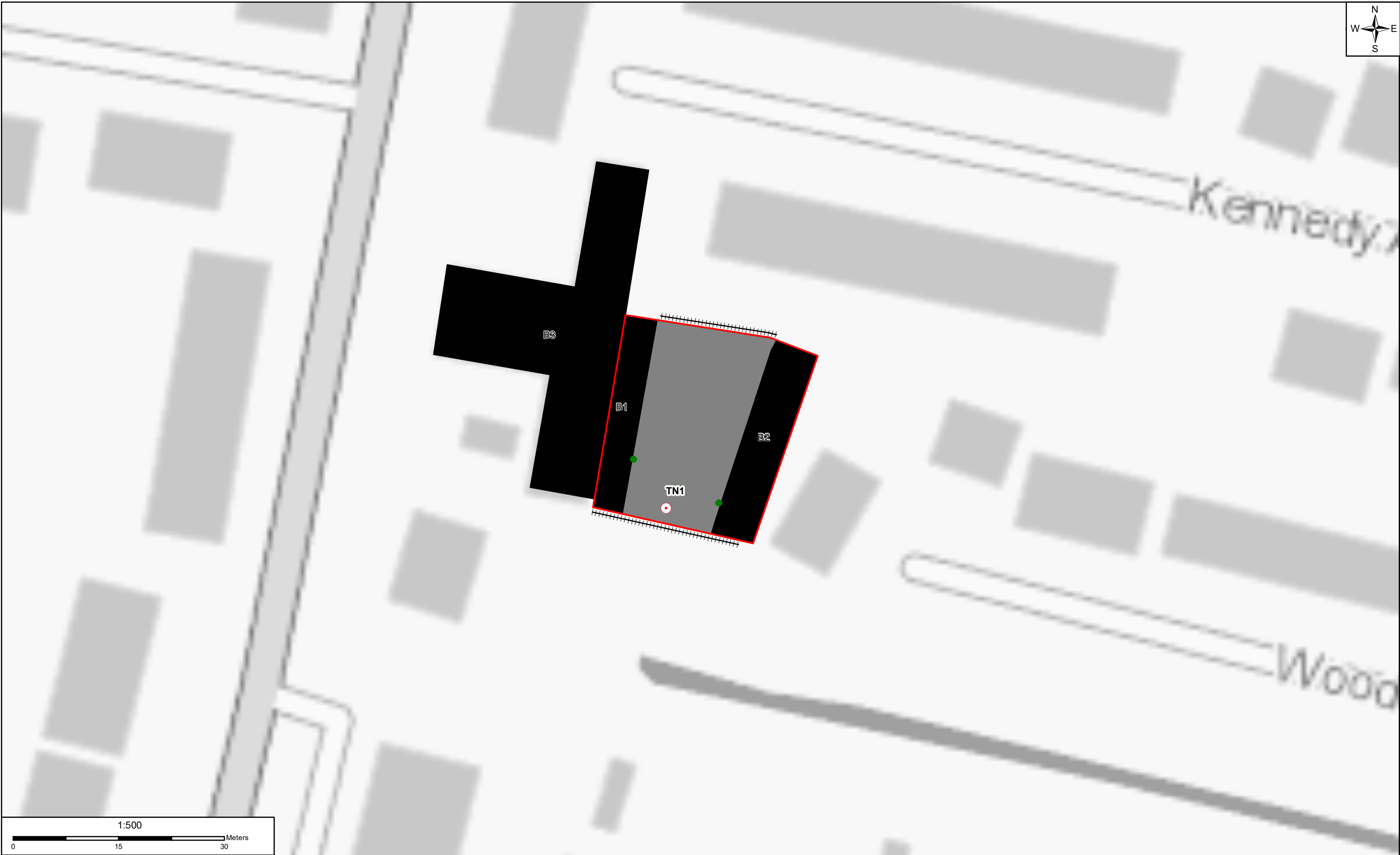
Photograph 7: Wooden fence with common ivy growth, bird nesting potential.



Photograph 8: Building (B3) adjacent to site, crevices in guttering show low bat roosting potential

FIGURE 1: STATUTORY DESIGNATED SITES WITHIN 2KM OF THE SITE CENTRE

FIGURE 2: PHASE 1 HABITAT MAP (WITH TARGET NOTES)



THIS MAP IS BASED UPON THE ORDNANCE SURVEY MATERIAL WITH THE PERMISSION OF ORDNANCE SURVEY ON BEHALF OF THE CONTROLLER OF HER MAJESTY'S STATIONARY OFFICE.
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01	28/01/22	Initial Issue	MS	EG	BM
REV	Date	Description	Drawn	Check	Approv

Legend

- Target note (TN)
- Red line boundary
- Scattered broadleaved tree
- Scattered scrub
- Fence
- Building
- Hardstanding

Client

Levitt Bernstein

Levitt Bernstein
People.Design

Client

Levitt Bernstein,
United Kingdom

Site

Kennedy Avenue , United Kingdom


Suitability Description:			
PRELIMINARY/CONFIDENTIAL			
Designed	E. Gibson	Date 28JAN22	Signed
Drawn	M. Shekaraiah	Date 28JAN22	Signed
Checked	E. Gibson	Date 28JAN22	Signed
Approved	B. Murray	Date 28JAN22	Signed
Scale:	1:500	Datum:	AOD
Original Size:	A3	Grid:	OS
Suitability Code:	S2	Project Number:	10053498

PROJECT:

ENFIELD COUNCIL

TITLE:

Ecological Assessment
Phase 1 Map
Kennedy Avenue



Design & Consultancy
for natural and
built assets

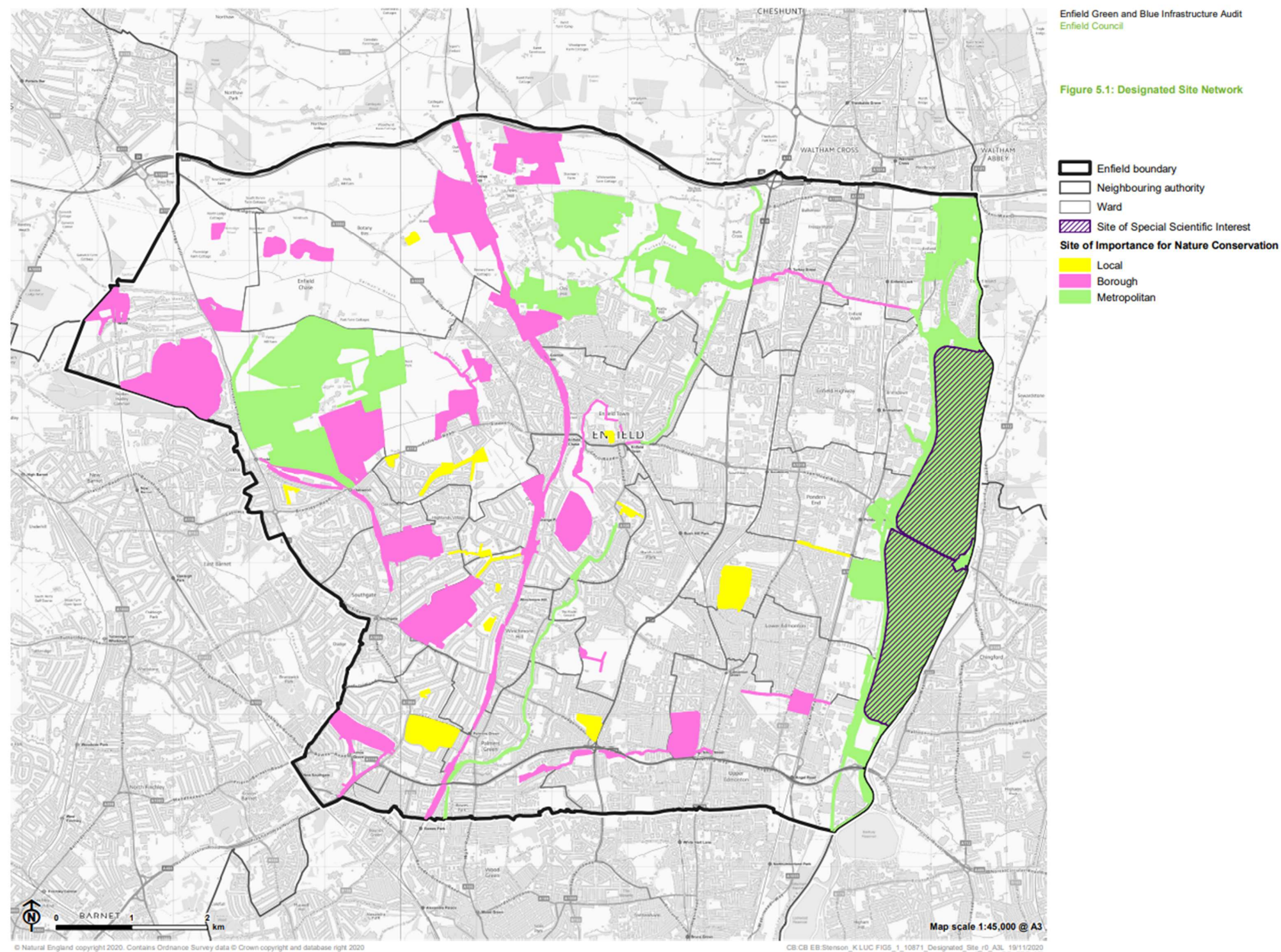
Registered office:
Arcadis House
34 York Way
London
N1 9AB
www.arcadis.com

Coordinating office:
5th Floor 401 Faraday Street
Birchwood Park
Warrington WA3 6GA
Tel: 44 (0)1525 700800

Drawing Number:
10053498-ARC-XX-XX-DR-EC-0015-01

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FIGURE 3: SINC'S IN ENFIELD COUNCIL²²



²² LUC (2021). Review of Enfield Biodiversity Action Plan. Available at: <https://new.enfield.gov.uk/services/planning/review-of-enfield-biodiversity-action-plan-2021-planning.pdf>. [Accessed January 2022]

Appendix A: Desk Study Review

Statutory Designated Sites

The desk study found the following Natura 2000 sites (SPAs, SACs, Ramsar) within 5km of the site.

- Epping Forest SAC; and
- Lee Valley SPA and Ramsar

Within 2km of the Site are the following Statutory Designated Sites:

- Chingford Reservoirs SSSI.

Further detail is presented in Table A1. It was assessed that there was negligible potential for significant impacts to these sites from any development on the Site.

Woodlands registered on the Ancient Woodland Inventory (AWI)

The desk study found no areas of ancient woodland within 2km of the site.

Statutory Designated Sites

Table A.1: Statutory Designated Sites

Site Name	Designation	Size (ha)	Distance (km)	Direction	Description
Special Areas of Conservation (SAC)					
Epping Forest	SAC	1628.87	2.8	East	Habitats present include broad-leaved deciduous woodland, Dry grassland, inland water bodies as well as Heathland. This area is designated due to its Annex 1 habitat, Atlantic acidophilous beech forests, important for a range of rare species, including the moss <i>Zygodon forsteri</i> .
Special Protection Areas (SPA)					
Lee Valley	SPA	452.3	4.9	South	A series of embanked water supply reservoirs, sewage treatment lagoons, and former gravel pits. They support internationally important numbers of wintering Gadwall (<i>Anas strepera</i>) and Shoveler (<i>Anas clypeata</i>) and nationally important numbers of several other bird species. The site also contains a range of wetland and valley bottom habitats, both humanmade and semi-natural, which support a diverse array of wetland fauna and flora.
Ramsar Sites					
Lee Valley	Ramsar	451.3	4.9	South	See above.

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Site Name	Designation	Size (ha)	Distance (km)	Direction	Description
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Sites of Special Scientific Interest (SSSI)

Chingford Reservoirs	SSSI	386.67	1.2	East	Shallow reservoirs that provide open water habitat for wildfowl, gulls and waders. major wintering grounds for wildfowl, including nationally important populations of shoveler and great crested grebe (<i>Podiceps cristatus</i>).
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Overview of Protected, Notable and Invasive Species in London

This section of this report outlines the status of protected and notable species in London. The status of these species on the Site is fully discussed in section 3. Relevant conservation status and legislation is presented in Appendix C.

Non-native invasive species in Greater London

London is an extremely urbanised area and is a major international port for both people and goods, this in addition to its climate and major levels of construction has encouraged the spread of a number of non-native invasive species that are becoming pests. Therefore, in addition to those species listed on Schedule 9 of the Wildlife and Countryside Act 1981 (as amended) there is a London Species Initiative (LSI)^{Error! Bookmark not defined.} Managed by the London Biodiversity Partnership, which lists non-native invasive species that should be controlled in London. Species potentially relevant to the Site include those presented in A2.

Table A.2: Potential Schedule 9 (Wildlife and Countryside Act 1981 (as amended)) or LSI species

Common Name	English Name	Status
Japanese Knotweed	<i>Fallopia japonica</i>	Schedule 9 and LSI
Cotoneaster (numerous)	<i>Cotoneaster</i> spp.	Schedule 9 and LSI
Rhododendron	<i>Rhododendron ponticum</i>	Schedule 9 and LSI
Indian (or Himalayan balsam)	<i>Impatiens glandulifera</i>	Schedule 9 and LSI
Virginia creeper	<i>Parthenocissus quinquefolia</i>	Schedule 9
Montbretia	<i>Crocsmia x crocosmiiflora</i>	LSI
Cherry Laurel	<i>Prunus laurocerasus</i>	LSI
False acacia	<i>Robinia pseudoacacia</i>	LSI
Green alkanet	<i>Pentaglottis sempervirens</i>	LSI
Butterfly-bush	<i>Buddleia davidii</i>	LSI
Snowberry	<i>Symphoricarpos albus</i>	LSI
Tree of heaven	<i>Ailanthus altissima</i>	LSI
Holm oak	<i>Quercus ilex</i>	LSI
Passion flower	<i>Passiflora caerulea</i>	LSI
Spanish bluebell	<i>Hyacinthoides hispanica</i> & <i>H. x massartiana</i>	LSI
Holm oak	<i>Quercus ilex</i>	LSI

Bats in Greater London

From previous Arcadis work in London and from data from the London Bat Group the most likely bats species to be present are common and soprano pipistrelle (*Pipistrellus pipistrellus* and *P. pygmaeus*) which are by far the more frequent, followed by Daubenton's (*Myotis daubentonii* in the vicinity of open water) noctule (*Nyctalus noctula*) and brown long-eared (*Plecotus auritus*). These are all London BAP species and S41 species with the exception of Daubenton's and common pipistrelle. Full details of the conservation status of these species and the results from the London Bat Group Species Action Plan Audit are presented in Appendix B Table B2.

In general, every borough will have bats present, as even in the inner boroughs there are usually some areas of suitable habitat that can provide feeding habitat for small numbers of common and light tolerant bat species such as soprano and common pipistrelles. In general, the outer boroughs with larger areas of more suitable habitat should be expected to have higher numbers of bats and a greater diversity of species.

Birds in Greater London

There are a number of bird species that although relatively common are in decline and have been highlighted as S41 species and priority species in the London BAP and/or Birds of Conservation Concern 5, 2021²³, that have the potential to be present (Table A3).

Table A3: Birds of conservation concern associated with London

Common Name	English Name	Status	Typical London habitats
Black redstart	<i>Phoenicurus ochrurus</i>	L:R	Traditionally found on brownfield sites around the built environment in proximity to standing or tidal Thames water
Dunnock	<i>Prunella modularis</i>	S41:L:	Associated with dense scrub and trees in private gardens and pocket parks
Grey heron	<i>Ardea cinerea</i>	L	associated with tidal Thames and standing water
House sparrow	<i>Passer domesticus</i>	S41:L:R	Associated with dense scrub and trees in private gardens and pocket parks traditionally a species associated with nesting in buildings
Peregrine	<i>Falco peregrinus</i>	L	Tidal Thames and the built environment using tall buildings for roosting and nesting and foraging on other birds particularly pigeons
Song thrush	<i>Turdus philomelos</i>	S41:L:R	Associated with dense scrub and trees in private gardens and pocket parks
Starling	<i>Sturnus vulgaris</i>	S41:L:R	Built environment
Tree sparrow	<i>Passer montanus</i>	S41:L:R	Associated with dense scrub and trees in private gardens and pocket parks

Section 41 = S41: London BAP = L: R = Birds of Conservation Concern Red List

²³ BoCC, 2021. Available online at: https://britishbirds.co.uk/sites/default/files/BB_Dec21-BoCC5-IUCN2.pdf [Accessed January 2022]

Reptiles in Greater London

Records from SARG (Surrey Amphibian and Reptile Group) and the London Biodiversity Action Plan show that the presence of European Protected Species of reptile in the London area is generally very unlikely. Common lizard (*Zootoca vivipara*) and Slow worm (*Anguis fragilis*) are the most likely reptiles to be present followed by Grass snake (*Natrix natrix*) with Adder (*Vipera berus*) being unlikely to be present these are all S41 and London BAP species.

Badger in Greater London

Badger is a London BAP species and can be found using private gardens, woodlands and parklands across London.

Amphibians including Great Crested Newts (GCN) in Greater London

GCN are S41 and London BAP species, that while uncommon are found breeding in ponds associated with private gardens, from data available from Froglife (2012), 71 Sites across Greater London were surveyed where historical GCN records were identified, of which three of these sites were located within Enfield Council ²⁴. Of the other amphibians that are London BAP species Common frog (*Rana temporaria*), palmate newt (*Triturus helveticus*) and Common toad (*Bufo bufo*), common toad is also a S41 species

Other Potentially Relevant S41 and London BAP species

There are a number of other species that have the potential to be relevant to the Site:

- Fox (*Vulpes vulpes*);
- Brown Hare (*Lepus europaeus*); and
- Hedgehog (*Erinaceus europaeus*).

Table A:4: Designated sites descriptions

Designation	Description
Special Areas of Conservation (SAC)	Sites designated under European law and are the most important sites for wildlife in the UK, along with Special Protected Areas (SPAs). SACs are designated under the European Habitats Directive (Council Directive 92/43/EEC). Both the Habitats and Birds Directives provide for the creation of a network of protected areas across the EU, to be known as 'Natura 2000'. The designations aim to conserve important or threatened species and habitats and provide them with increased protection and management
Special Protected Areas (SPAs)	
National Nature Reserve (NNR)	Statutory reserves established for the nation under the Wildlife and Countryside Act, 1981. NNRs may be owned by a relevant national body, e.g. Natural England, or by established agreement; a few are owned and managed by non-statutory bodies. NNRs cover a selection of the most important sites for nature conservation in the UK.
Sites of Special Scientific Interest (SSSI)	Are areas notified under the Wildlife and Countryside Act 1981 by Natural England as being of special interest for nature conservation. SSSI notification forms the statutory bedrock for site protection. Biological SSSIs form a national network of wildlife sites, with each site being of national significance for its nature conservation value. Consultation and some form of agreement with the national statutory conservation agency is mandatory before any listed, potentially damaging development or change in land use can be carried out
Local nature reserves (LNR)	These are land owned, leased or managed by Local Authorities and designated under the National Parks and Access to the Countryside Act. These are sites of some nature conservation value managed for educational objectives. In some cases it is managed by a non-statutory body (e.g. the London Wildlife Trust). Local Authorities have the power to pass bylaws controlling (e.g.) access, special protection measures.

²⁴ Capital Great Crested Newts Revisited (2012). Project report – Public Web Edition

Designation	Description
Sites of Metropolitan Importance for Nature Conservation (SMINCs)	These are sites that contain the best examples of London's habitats. These sites are of strategic significance and are therefore of the highest priority against damage or loss
Sites of Borough Importance for Nature Conservation (SBINCs) Grades I and II	Sites of Borough Importance for Nature Conservation (SBINCs) Grades I and II are important in the context of the borough. The nature conservation quality of these sites varies and so these sites are graded as I or II in relation to their nature conservation potential.
Sites of Local Importance for Nature Conservation (SINCs)	These are sites of particular importance to people nearby (such as residents and schools). Local sites are particularly important in areas otherwise deficient in nearby wildlife sites.

Appendix B: Bat Habitat Suitability and London Population Status

Table B: 1 BCT (2016) – Habitat Suitability Criteria

Suitability	Description Roosting habitats	Commuting and foraging habitats
Negligible	Negligible habitat features on site likely to be used by roosting bats.	Negligible habitat features on site likely to be used by commuting or foraging bats.
Low	<p>A structure with one or more potential roost sites that could be used by individual bats opportunistically.</p> <p>However, these potential roost sites do not provide enough space, shelter, protection, appropriate conditions^a and/or suitable surrounding habitat to be used on a regular basis or by larger numbers of bats (i.e. unlikely to be suitable for maternity or hibernation).</p> <p>A tree of sufficient size and age to contain PRFs but with none seen from the ground or features seen with only very limited roosting potential.</p>	<p>Habitat that could be used by small numbers of commuting bats such as a gappy hedgerow or unvegetated stream, but isolated, i.e. not very well connected to the surrounding landscape by other habitat.</p> <p>Suitable, but isolated habitat that could be used by small numbers of foraging bats such as a lone tree (not in a parkland situation) or a patch of scrub.</p>
Moderate	A structure or tree with one or more potential roost sites that could be used by bats due to their size, shelter, protection, conditions and surrounding habitat but unlikely to support a roost of high conservation status (with respect to roost type only – the assessments in this table are made irrespective of species conservation status, which is established after presence is confirmed).	<p>Continuous habitat connected to the wider landscape that could be used by bats for commuting such as lines of trees and scrub or linked back gardens.</p> <p>Habitat that is connected to the wider landscape that could be used by bats for foraging such as trees, scrub, grassland or water.</p>
High	A structure or tree with one or more potential roost sites that are obviously suitable for use by larger numbers of bats on a more regular basis and potentially for longer periods of time due to their size, shelter, protection, conditions and surrounding habitat.	<p>Continuous, high-quality habitat that is well connected to the wider landscape that is likely to be used regularly by commuting bats such as river valleys, streams, hedgerows, lines of trees and woodland edge.</p> <p>High-quality habitat that is well connected to the wider landscape that is likely to be used regularly by foraging bats such as broadleaved woodland, tree-lined watercourses and grazed parkland.</p> <p>Site is close to and connected to known roosts.</p>

Table B: 2 Bat species status in London from the London Bat Species Action Plan Audit

Common Name	Latin Name	UK Status	London Status	Notes
Greater horseshoe bat	<i>Rhinolophus ferrumequinum</i>	Endangered BAP Priority	Extinct	Last Greater London record from Oxleas Wood in 1953.
Lesser horseshoe bat	<i>Rhinolophus hipposideros</i>	Endangered BAP Priority	Extinct	Last Greater London record from Abbey Wood (Woolwich) in 1952-3.
Whiskered bat	<i>Myotis mystacinus</i>	Vulnerable	Rare	Due to difficulty in separation, these are considered together. Occur rarely and in low numbers in outer London Boroughs such as Hillingdon, Richmond, Bexley and Bromley. One current known (winter) roost only.
Brandt's bat	<i>Myotis brandtii</i>	Vulnerable	Rare	
Natterer's bat	<i>Myotis nattereri</i>	Vulnerable	Scarce	Still relatively few records in Greater London. Most central locations are Highgate Wood and Hampstead Heath, otherwise Richmond and Hounslow and occasionally other outer London Boroughs. 8 current known roosts (mostly winter).
Daubenton's bat	<i>Myotis daubentoni</i>	Not Threatened	Locally frequent but declining	Relatively widespread and strongly associated with ponds, lakes & rivers. Occasional summer roosts have been found in trees on Wimbledon Common and in Ruislip Woods. Contrary to the national trend, this species is apparently declining in London and its sensitivity to increasing ambient light levels is a possible reason. 4 current known winter roosts.
Serotine	<i>Eptesicus serotinus</i>	Vulnerable	Rare; has declined	Serotines are found in outer London Boroughs, especially Bromley, Havering, Sutton and Richmond. 2 current known summer roosts, in Bromley and Teddington.
Noctule	<i>Nyctalus noctula</i>	Vulnerable; declining BAP Priority	Widespread but declining	The status of this large, wide-ranging bat is difficult to assess, but the past two decades have seen a rapid decline in the species and this mirrors the national trend. An exclusively tree-roosting bat; current known roosts number <10 London-wide.
Leisler's bat	<i>Nyctalus leisleri</i>	Vulnerable	Scarce	Leisler's bat has been recorded infrequently in London area, yet sightings have doubled in the last three years. New foraging sites for the species include the Barnes area, Wandsworth Common and Brent Reservoir. 3 current known roosts (Haringey, Bromley and Bexley).

Ecological Assessment

Common Name	Latin Name	UK Status	London Status	Notes
Common pipistrelle	<i>Pipistrellus pipistrellus</i>	Not Threatened	Common	A widespread species, the common pipistrelle is believed to occur in all London boroughs. Roosts are still discovered relatively infrequently, however.
Soprano pipistrelle	<i>Pipistrellus pygmaeus</i>	BAP Priority	Common	Also widespread and probably London's commonest bat. Apparently more associated with wetland habitats than its close relative, <i>P. pipistrellus</i> . Known roosts currently number 15-25?, but many more pass undetected.
Nathusius's pipistrelle	<i>Pipistrellus nathusii</i>	Rare	Rare	Only recently confirmed as a UK breeding species. Detector records from an increasing list of sites include Lesnes Abbey Woods, Chislehurst Ponds and the Wetland Centre at Barnes. 1 known current roost site in bat boxes in Hounslow.
Brown long-eared bat	<i>Plecotus auritus</i>	Declining BAP Priority	Scarce	Brown long-eared bats are fairly secretive and may be under-recorded in Greater London, although reasons for the national decline are also likely to affect London's population. Roosts have been found in Bexley, Bromley, Hillingdon, Wandsworth, Kensington & Chelsea, Barnet, and Richmond.

NB: This audit is based on data from the London Bat Project collected in the mid-1980s, as well as that collected since by the London Bat Group and is therefore not systematic. This audit is the best possible understanding of the status of bats in London that can currently be realised by the London Bat Group.

Appendix C: Selected Legislation, Nature Conservation Status and Policy

Legislation

Table C: 1 Legislation Summary

Receptor	Legislation
Nesting Birds	<p>The legislation relevant to the potential ecological constraints on site associated with nesting birds.</p> <p>All wild birds, their nests and eggs are protected under the Wildlife and Countryside Act 1981 (as amended). Section 1 of the Act makes it an offence to:</p> <ul style="list-style-type: none"> intentionally kill, injure or take any wild bird; intentionally take, damage or destroy the nest of any wild bird while that nest is in use or being built; or intentionally take or destroy an egg of any wild bird. <p>It is also an offence to:</p> <ul style="list-style-type: none"> intentionally disturb any wild bird included in Schedule 1 of the Act while it is building a nest or is in, on or near a nest containing eggs or young; or disturb dependent young of such a bird. Species listed on Schedule 1 include the black redstart, barn owl (<i>Tyto alba</i>), Cetti's warbler (<i>Cettia cetti</i>) and kingfisher (<i>Alcedo atthis</i>). <p>There is no potential for Schedule 1 birds to be nesting on Site, the legislation regarding common nesting birds will be complied with due to the precautionary mitigation previously stated.</p>
Badger	<p>Badgers are protected from inhumane killing or injury under Badgers Act (1992)²⁵, this also protects their setts from damage and prohibits blocking access to their setts.</p>
Bats	<p>The legislation relevant to the constraint identified associated with bats.</p> <p>Bats are protected under the Wildlife and Countryside Act 1981 (as amended) and the Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019.</p> <p>Bats are listed on Schedule 5 of the Wildlife and Countryside Act 1981 (as amended) and are subject to the provisions of Section 9 of the Act, which make it an offence to:</p> <ul style="list-style-type: none"> intentionally or recklessly disturb a wild animal listed on Schedule 5 whilst it is occupying a structure or place which it uses for shelter or protection; intentionally or recklessly obstruct access to any structure or place used for shelter or protection by a wild animal listed on Schedule 5; sell, offer or expose for sale, or to possess or transport for sale alive or dead wild animal listed on Schedule 5 or any part of or anything derived from a wild animal listed on Schedule 5. <p>Bats are also listed on Schedule 2 (European protected species of animals) of the Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019 and are subject to the provisions of Regulation 41 which makes it an offence to:</p> <ul style="list-style-type: none"> deliberately capture, injure or kill any wild animal of a European protected species; deliberately disturb wild animals of any such species (where disturbance is likely to impair their ability to survive, breed or reproduce, rear or nurture their young; or to

²⁵ Protection of Badgers Act 1992 (as amended). Available at: [Protection of Badgers Act 1992 \(legislation.gov.uk\)](https://www.legislation.gov.uk/ukpga/1992/25)

Receptor	Legislation
	<p>hibernate or migrate; or to affect significantly the local distribution or abundance of the species);</p> <ul style="list-style-type: none"> • damage or destroy a breeding Site or resting place of such an animal; or • be in possession of, control, transport, sell or exchange, or offer for sale or exchange any live or dead animal of such a species or any part of a wild animal or anything derived from an animal or any part of an animal of such a species.
Great Crested Newt	<p>Great crested newts are a European Protected Species (EPS), listed on Annex II and IV of the EEC Directive on the Conservation of Natural Habitats and Wild Fauna and Flora, receiving protection under the Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019. This species is also afforded full protection under the Schedule 5 of the Wildlife and Countryside Act 1981 (as amended). Under such legislation it is an offence to:</p> <ul style="list-style-type: none"> • Intentionally or recklessly kill, injure or take a great crested newt; • Possess or control any live or dead specimen or anything derived from a great crested newt; • Intentionally or recklessly damage, destroy or obstruct access to any structure or place used for shelter or protection by a great crested newt; and • Intentionally or recklessly disturb a great crested newt while it is occupying a structure or place which it uses for that purpose.
Reptiles	<p>The relevant legislation relevant to the constraint identified associated with reptiles All native British reptile species are protected under the Wildlife and Countryside Act 1981 (as amended). Reptiles are listed under Schedule 5 of the Act. The four more widespread species including common lizard, slow worm, adder and grass snake are subject to some of the provisions of Section 9 of the Act, which make it an offence to: *</p> <ul style="list-style-type: none"> • intentionally kill or injure a reptile; or * sell, offer or expose for sale, or • to possess or transport for sale alive or dead reptile or any part of, or anything derived from, a reptile.
Other Mammals	<p>Other mammals not protected by their own legislation are protected by the Mammal Act (1996). The Act makes provision for the protection of wild mammals from certain cruel acts.</p> <p>An offence is committed if any person mutilates, kicks, beats, nails, or otherwise impales, stabs, burns, stones, crushes, drowns, drags, or asphyxiates any wild mammal with intent to inflict unnecessary suffering.</p>
Non Native Invasive Species	<p>Numerous species are listed on Schedule 9 (of the Wildlife and Countryside Act 1981, as amended) whereby it is an offence to grow or to cause this species to grow in the wild. A species on Schedule 9 that commonly occurs in London is Japanese Knotweed (<i>Fallopia japonica</i>) which is also covered by the Environmental Protection Act (EPA) 1990 which designates this as a controlled waste.</p>

Nature Conservation Status

• Birds of Conservation Concern (BOCC) (2021)

The UK's leading bird conservation organisations worked together to produce The Population Status of Birds in the UK: Birds of Conservation Concern Five (BoCC).

Commonly referred to as the UK Red List for birds, this is the fifth review of the status of birds in the UK, Channel Islands and Isle of Man, and updates the last assessment in 2015. Using standardised criteria, 245 species with breeding, passage or wintering populations in the UK were assessed by experts from a range of bird NGOs and assigned to the Red, Amber or Green lists of conservation concern.

Table C: 1 Bird Population Status Criteria for Birds of Conservation Concern in the UK

Criteria	Status
	Globally threatened
Red list criteria	<p>Historical population decline in UK during 1800–1995</p> <p>Rapid (> or =50%) decline in UK breeding population over last 25 years Rapid (> or =50%) contraction of UK breeding range over last 25 years</p>
	<p>Historical population decline during 1800–1995, but recovering; population size has more than doubled over last 25 years</p> <p>Moderate (25–49%) decline in UK breeding population over last 25 years</p> <p>Moderate (25–49%) contraction of UK breeding range over last 25 years</p> <p>Moderate (25–49%) decline in UK non-breeding population over last 25 years</p>
Amber list criteria	<p>Species with unfavourable conservation status in Europe, termed Species of European Conservation Concern (SPEC)</p> <p>Five-year mean of 1–300 breeding pairs in UK</p> <p>> or =50% of UK breeding population in 10 or fewer sites, but not rare breeders</p> <p>> or =50% of UK non-breeding population in 10 or fewer sites</p> <p>> or =20% of European breeding population in UK</p> <p>> or =20% of northwest European (wildfowl), East Atlantic Flyway (waders) or European (others) non-breeding populations in UK</p>
Green list	No identified threat to the population's status

Relevant Policy

National

The Site survey, assessment and recommended mitigation ensure compliance with the following policies, any additional enhancement measures would further comply with these policies:

- **The National Planning Policy Framework (NPPF 2021)**²⁶: The NPPF, sets out how the planning system should protect and enhance nature conservation interests. Section 15 is concerned with conserving and enhancing the natural environment (paragraphs 174 and 179).

Planning policies and decisions should contribute to and enhance the natural and local environment by:

- protecting and enhancing valued landscapes, sites of biodiversity or geological value and soils (in a manner commensurate with their statutory status or identified quality in the development plan);
- recognising the intrinsic character and beauty of the countryside, and the wider benefits from natural capital and ecosystem services – including the economic and other benefits of the best and most versatile agricultural land, and of trees and woodland;
- maintaining the character of the undeveloped coast, while improving public access to it where appropriate;
- minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures;
- preventing new and existing development from contributing to, being put at unacceptable risk from, or being adversely affected by, unacceptable levels of soil, air, water or noise pollution or land instability. Development should, wherever possible, help to improve local environmental conditions such as air and water quality, taking into account relevant information such as river basin management plans; and
- remediating and mitigating despoiled, degraded, derelict, contaminated and unstable land, where appropriate.

To protect and enhance biodiversity and geodiversity, plans should:

- Identify, map and safeguard components of local wildlife-rich habitats and wider ecological networks, including the hierarchy of international, national and locally designated sites of importance for biodiversity; wildlife corridors and stepping stones that connect them; and areas identified by national and local partnerships for habitat management, enhancement, restoration or creation ; and
 - promote the conservation, restoration and enhancement of priority habitats, ecological networks and the protection and recovery of priority species; and identify and pursue opportunities for securing measurable net gains for biodiversity.
- **The Natural Environment and Rural Communities Act 2006**²⁷ places a duty upon public bodies to consider S41 lists flora, fauna and habitats (previously UK BAP habitats and species) as a material consideration in planning and to consider enhancement of biodiversity.
 - **Biodiversity 2020: A strategy for England's Wildlife and Ecosystem Services**²⁸ includes a list of Habitats of Principal Importance in England (HPIEs) and Species of Principal Importance in England (SPIEs). These were previously included as Priority Habitats and Priority Species in the UK BAP.
 - **25 Year Plan for the Environment (2018)**²⁹: The underlying case for the valuation of ecosystem services is that it will contribute towards better decision-making, fully taking into account the costs and benefits of development to the natural environment. In its White Paper “The Natural Choice: securing the value of nature (HMG, 2011)³⁰”, and repeated in successive manifestos, the UK Government has stated it wishes to be “the first generation to leave the natural environment of England in a better state than it inherited...”. The Natural Capital Committee (NCC, 2016) was set

²⁶ MHCLG (2021) National Planning Policy Framework .

²⁷ Anon (2006) The Natural Environment and Rural Communities Act HMSO, London

²⁸ Department for Environment, Food and Rural Affairs (2011) *Biodiversity 2020: A strategy for England's Wildlife and Ecosystem Services*

²⁹ HM Government (2018) A Green Future: Our 25 Year Plan to Improve the Environment. January 2018 Available at: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/673203/25-year-environment-plan.pdf

³⁰ HM Government. (2011). The Natural Choice: securing the value of nature. Available at: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/228842/8082.pdf

up to advise on how to deliver this objective, and the natural capital approach (which is based on the concept of valuing services delivered by the environment) is the key mechanism proposed to achieve this. The advice of the NCC has been central to the Government's 25-Year Plan to Improve the Environment, published in January 2018 ³¹, whereby it has been acknowledged that protecting and growing natural capital is a vital component for economic success. It is also important to note that the application of this approach is not related to the total value of ecosystems but, rather, to valuing changes in ecosystem services.

London

- **London Invasive Species Initiative (LISI)**: Managed by the London Biodiversity Partnership, LISI lists non-native invasive species that should be controlled in London.
- **The London Plan (2021)** ³²: The London Plan – 2021 advocates a green infrastructure approach to conservation of the natural environment recognising its social and economic value. It also moves to recognise the practical actual financial value. There is also now the drive for development to incorporate quality green space (i.e. enhancements). This includes an Urban Greening Factor for demonstration of these enhancements (Policy G5). The most relevant chapter in the Plan is Chapter 8 Green Infrastructure and Natural Environment, with other relevant sections in the rest of the Plan, including Chapter 9 Sustainable Infrastructure. Relevant policies include G2 Greenbelt, G3 Metropolitan Open Land, G4 Open space, G5 Urban greening, G6 Biodiversity and access to nature, G7 Trees and woodlands, G8 Food growing and G9 Geodiversity.
- **The London Plan (2016), Housing Supplementary Planning Guidance (March 2016)** ³³: With regards to housing, recently a dedicated supplementary planning guidance has been produced, the relevant elements of which are presented below
 - Standard 40 and Policy 7.19 “Biodiversity and access to nature promotes a proactive approach to the protection, promotion and management of biodiversity across the capital” and that “Proposals for development should give full consideration to their direct and indirect effects on ecology. Ecological improvements can be achieved as part of Sustainable Urban Drainage Systems and incorporated into green or brown roofs, green walls and soft landscaping.”
 - Policies 7.19 and 7.21 “supporting biodiversity, protecting London’s trees, ‘green corridors and networks”.
 - Development proposals should also enhance provision of green infrastructure in the public realm, helping to mitigate and adapt to climate change (Policy 5.10 Urban Greening), extend tree cover (Policy 7.21), improve biodiversity (Policy 7.19).
 - Public, communal and private open spaces should be protected and enhanced, and where possible new open spaces should be created. This is supported by Policy 2.18 Green Infrastructure, Policy 7.18 Protecting open space, Policy 7.19 Biodiversity and Policy 7.21 Trees and Woodlands.
- **The London Plan (2011), Sustainable Design and Construction Supplementary Planning Guidance (April 2014)** ³⁴:
 - Mayor’s Priority - Developments should contribute to the Mayor’s target to increase tree cover across London by 5% by 2025.
 - Mayor’s Priority - There is no net loss in the quality and quantity of biodiversity.
 - Mayor’s Priority - Developers make a contribution to biodiversity on their development site.
 - Mayor’s Priority - Any loss of a tree/s resulting from development should be replaced with an appropriate tree or group of trees for the location, with the aim of providing the same canopy cover as that provided by the original tree/s.

³¹ HM Government (2018) A Green Future: Our 25 Year Plan to Improve the Environment. January 2018 Available at: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/673203/25-year-environment-plan.pdf

³² Greater London Authority (2021) London Plan - 2021. Available at: https://www.london.gov.uk/sites/default/files/the_london_plan_2021.pdf

³³ Greater London Authority (2016) London Plan 2016 Implementation Housing Supplementary Planning Guidance adopted in March 2016

³⁴ Greater London Authority (2011), The London Plan *Sustainable Design and Construction Supplementary Planning Guidance adopted in April 2014*

- **London Environment Strategy – (2018)**³⁵ The environment strategy highlights the importance of green infrastructure and Natural Capital designed and managed to:
 - Promote healthier living;
 - Lessen the impacts of climate change;
 - Improve air quality and water quality;
 - Encourage walking and cycling;
 - Store carbon; and
 - Improve biodiversity and ecological resilience.

³⁵ Greater London Authority (2018), London Environment Strategy. Available at: https://www.london.gov.uk/sites/default/files/london_environment_strategy_0.pdf

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