SHELDON HOUSE, CROMWELL ROAD, TEDDNGTON, GREATER LONDON

PRELIMINARY ECOLOGICAL APPRAISAL

A Report to: Clive Chapman Architects

Report No: RT-MME-154365-01

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REPORT VERIFICATION AND DECLARATION OF COMPLIANCE

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

Report Version	Date	Completed by:	Checked by:	Approved by:
Final	09/03/2021	Margarita Smoldareva PGDip BSc (Hons) (Ecological Consultant) and Alex Nunn (Ecological project Assistant)	Paul Roebuck MSc, MCIEEM (South East Manager)	Tom Docker MSc MCIEEM CEcol (Managing Director)

The information which we have prepared is true, and has been prepared and provided in accordance with the Chartered Institute of Ecology and Environmental Management’s Code of Professional Conduct. We confirm that the opinions expressed are our true and professional bona fide opinions.

DISCLAIMER

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

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

VALIDITY OF DATA

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

NON-TECHNICAL SUMMARY

Middlemarch Environmental Ltd. was commissioned by Clive Chapman Architects to carry out a Preliminary Ecological Appraisal at the site of a proposed development at Sheldon House on Cromwell Road, Teddington, Greater London. The current proposals are for the demolition of the existing flat block and garages and development of replacement flats.

The ecological desk study exercise identified two European statutory sites within 5 km of the survey area, two UK statutory sites within 2 km and three non-statutory sites within 1 km. The site is not located within 10 km of a statutory site designated for bats. The desk study provided records of protected/notable species within a 1 km radius of the survey area, including bats, hedgehog, badger, water vole, amphibians including great crested newt, grass snake, birds and invertebrates including stag beetle and Jersey tiger moth.

A walkover survey was carried out on 5th February 2021 by Margarita Smoldareva (Ecological Consultant). The study area predominantly comprised hardstanding with a residential tower block and associated garages at its centre. Amenity grassland and introduced shrubs were noted to the south and a number of mature scattered trees were recorded across the site.

In order to ensure compliance with wildlife legislation and relevant planning policy, recommendations have been made in regard to the following factors:

Habitat Retention and Protection: The development proposals should be designed (where feasible) to allow for the retention of existing notable habitats including scattered mature trees. If retention is not possible, appropriate replacement planting should be incorporated into the soft landscape scheme in accordance with the ecological mitigation hierachy. Only native and/or wildlife attracting species should be planted.

Biodiversity Enhancement: In accordance with the provision of Chapter 15 of the National Planning Policy Framework (Conserving and Enhancing the Natural Environment) and Local Planning Policy, biodiversity enhancement measures should be incorporated into the landscaping scheme of any proposed development to work towards delivering net gains for biodiversity.

Lighting: In accordance with best practice guidance relating to lighting and biodiversity (Miles et al, 2018; Gunnell et al, 2012), any new lighting should be carefully designed to minimise potential disturbance and fragmentation impacts on sensitive receptors, such as bat species.

Roosting Bats: The recommendations made in the Preliminary Bat Roost Assessment (RT-MME-154365-02) must be adhered to.

Nesting Birds: Vegetation and building clearance should be undertaken outside the nesting bird season. The nesting bird season is weather dependent but generally extends between March and September inclusive (peak period March-August). If this is not possible then the vegetation and buildings to be removed or disturbed should be checked by an experienced ecologist for nesting birds immediately prior to works commencing. If birds are found to be nesting any works which may affect them should be delayed until the young have fledged and the nest has been abandoned naturally, for example via the implementation of an appropriate buffer zone (species dependent) around the nest in which no disturbance is permitted until the nest is no longer in use.

Badger and Hedgehog: Any excavations that need to be left overnight should be covered or fitted with mammal ramps to ensure that any animals that enter can safely escape. Any open pipework with an outside diameter of greater than 120 mm must be covered at the end of each work day to prevent animals entering/becoming trapped.

CONTENTS

1. INTRODUCTION

1.1 PROJECT BACKGROUND

In January 2021 Clive Chapman Architects, on behalf of RHP, commissioned Middlemarch Environmental Ltd to undertake a Preliminary Ecological Appraisal of the site of a proposed development at Sheldon House on Cromwell Road, Teddington, Greater London. This assessment is required to inform a planning application associated with the demolition of an existing building to facilitate the development of a new building on the grounds.

To assess the existing ecological interest of the site an ecological desk study was carried out, and a walkover survey was undertaken on 5th February 2021. In addition, Middlemarch Environmental Ltd has been commissioned to undertake a Preliminary Bat Roost Assessment (RT-MME-154365-02) of the existing building.

1.2 SITE DESCRIPTION AND CONTEXT

The site under consideration is an irregular pocket of land consisting of a residential tower block and communal gardens situated on the corner of Cromwell Road, Teddington, Greater London. It is centred at Ordnance Survey Grid Reference TQ 16264 70630 and covers an area of 0.191 ha.

The site contains an access road from Cromwell Road and area of hardstanding which is currently used a car park servicing the apartment building and garages at the centre of the site. There are small patches of introduced shrubs within the hardstanding to the north and west of the site boundary. To the south of the site, there is a communal garden with scattered mature trees and amenity grassland.

The site is bordered to the east by residential buildings on Fairfax Road, to the north by Cromwell Road and further residential buildings, to the west by a neighbouring residential property with associated soft landscaped gardens and to the south by railway embankments and further residential properties.

Notable areas in the wider landscape included Teddington Cemetery and Strawberry Woods Play Area located 1.35 and 1.70 km north-west respectively. The River Thames, Ham Common and Ham House and Gardens (National Trust) were located 900 m north-east, 1.85 km north-east and 2.40 km north respectively. To the south, located 230 m from the survey area, Bushy Park, Hampton Wick and Hampton Court Park are all connected together to form an extensive green space.

2. METHODOLOGIES

2.1 DESK STUDY

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

The consultees for the desk study were:

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

The desk study included a search for:

- 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 species records within a 1 km radius.

The data collected from the consultees is discussed in Chapter 4. Selected raw data are provided in Appendix 1. In compliance with the terms and conditions relating to its commercial use, the full desk study data is not provided within this report.

The desk study also included a review of relevant local planning policy with regard to biodiversity and nature conservation (see Chapter 3).

2.2 PHASE 1 HABITAT SURVEY

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

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

Data recorded during the field survey are discussed in Chapter 5.

3. LEGISLATION AND POLICY

This chapter provides an overview of the framework of legislation and policy which underpins nature conservation and is a material consideration in the planning process in England. The reader should refer to the original legislation for the definitive interpretation.

3.1 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) 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,
- 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. Sections 41 (England) and 42 (Wales) list habitats and species of principal importance to the conservation of biodiversity. These lists superseded Section 74 of the CRoW Act 2000.

The Hedgerow Regulations 1997
The Hedgerow Regulations make provision for the identification of important hedgerows which may not be removed without permission from the Local Planning Authority.

UK Post-2010 Biodiversity Framework
The UK Biodiversity Action Plan (BAP), published in 1994, was the UK Government's response to signing the Convention on Biological Diversity (CBD) at the 1992 Rio Earth Summit. The new UK Post-2010 Biodiversity Framework replaces the previous UK level BAP. The UK Post-2010 Biodiversity Framework covers the period 2011-2020 and forms the UK Government's response to the new strategic plan of the United Nations Convention on Biological Diversity (CBD), published in 2010 at the CBD meeting in Nagoya, Japan. This includes five internationally agreed strategic goals and supporting targets to be achieved by 2020. The five strategic goals agreed were:

- Address the underlying causes of biodiversity loss by mainstreaming biodiversity across government and society;
- Reduce the direct pressures on biodiversity and promote sustainable use;
- To improve the status of biodiversity by safeguarding ecosystems, species and genetic diversity;
- Enhance the benefits to all from biodiversity and ecosystem services; and,
- Enhance implementation through participatory planning, knowledge management and capacity building.

The Framework recognises that most work which was previously carried out under the UK BAP is now focused on the four individual countries of the United Kingdom and Northern Ireland, and delivered through the countries' own strategies. Following the publication of the new Framework the UK BAP partnership no longer operates but many of the tools and resources originally developed under the UK BAP still remain of use and form the basis of much biodiversity work at country level. In England the focus is on delivering the outcomes set out in the Government's 'Biodiversity 2020: a Strategy for England's Wildlife and Ecosystem Services' (DEFRA, 2011). This sets out how the quality of our environment on land and at sea will be improved over the next ten years and follows on from policies contained in the Natural Environment White Paper.

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.

3.2 NATIONAL PLANNING POLICY FRAMEWORK AND PRACTICE GUIDANCE

In February 2019, the National Planning Policy Framework (NPPF) was updated, replacing the previous framework published in 2012 and revised in 2018. The government circular 06/05: Biodiversity and Geological Conservation - Statutory Obligations and Their Impact within the Planning System, which accompanied PPS9, still remains valid. A presumption towards sustainable development is at the heart of the NPPF. This presumption does not apply however where developments require appropriate assessment under the Birds or Habitats Directives.

Chapter 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 incorporate biodiversity improvements in and around development should be encouraged, especially where this can secure measurable net gains for biodiversity.

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).

3.3 LOCAL PLANNING POLICY –LONDON BOROUGH OF RICHMOND UPON THAMES

Local Plan

The new Local Plan for the borough was adopted in July 2018, which replaces previous policies within the Core Strategy and Development Management Plan. The Plan sets out policies and guidance for the development of the borough over the next 15 years. Policies of relevance to ecology are detailed below:

Policy LP 12 Green Infrastructure

Green infrastructure is a network of multi-functional green spaces and green features, which provides multiple benefits for people, nature and the economy.

A. To ensure all development proposals protect, and where opportunities arise enhance, green infrastructure, the following will be taken into account when assessing development proposals:
    a) the need to protect the integrity of the green spaces and features that are part of the wider green infrastructure network; improvements and enhancements to the green infrastructure network are supported;
    b) its contribution to the wider green infrastructure network by delivering landscape enhancement, restoration or re-creation;
    c) incorporating green infrastructure features, which make a positive contribution to the wider green infrastructure network.
B. The hierarchy of open spaces, as set out in the table below, will be protected and used in accordance with the functions shown.

Public Open Space Hierarchy:

Type and size	Main function
Regional Parks (400 ha+)	Large areas, corridors or networks of open space, the majority of which will be publicly accessible and provide a range of facilities and features offering recreational, ecological, landscape, cultural or green infrastructure benefits. Offer a combination of facilities and features that are unique within London, are readily accessible by public transport and are managed to meet best practice quality standards.
Metropolitan parks (60 – 400 ha)	Large areas of open space that provide a similar range of benefits to Regional Parks and offer a combination of facilities at a sub-regional level, are readily accessible by public transport and are managed to meet best practice quality standards.
District parks (20 – 60 ha)	Large areas of open space that provide a landscape setting with a variety of natural features providing a wide range of activities, including outdoor sports facilities and playing fields, children's play for different age groups and informal recreation pursuits as well as visual amenity.
Local parks (2 – 20 ha)	Providing for court games, children's play, sitting out areas, visual amenity and nature conservation areas.
Small local parks and open spaces (less than 2 ha)	Gardens, sitting out areas, children's play spaces or other areas of a specialist nature, including nature conservation areas as well as visual amenity.
Pocket Parks (under 0.4 ha)	Small areas of open space that provide natural surfaces and shaded areas for informal play and passive recreation that sometimes have seating and play equipment as well as visual amenity.

Linear open spaces (variable)	Open spaces and towpaths alongside the Thames and other waterways; paths, disused railways; nature conservation areas; and other routes that provide opportunities for informal recreation. Often characterised by features or attractive areas which are not fully accessible to the public but contribute to the enjoyment of the space and visual amenity.

Policy LP 15 Biodiversity

A. The Council will protect and enhance the borough's biodiversity, in particular, but not exclusively, the sites designated for their biodiversity and nature conservation value, including the connectivity between habitats. Weighted priority in terms of their importance will be afforded to protected species and priority species and habitats including National Nature Reserves, Sites of Special Scientific Interest (SSSI) and Other Sites of Nature Importance as set out in the Biodiversity Strategy for England, and the London and Richmond upon Thames Biodiversity Action Plans. This will be achieved by:
    1. protecting biodiversity in, and adjacent to, the borough's designated sites for biodiversity and nature conservation importance (including buffer zones), as well as other existing habitats and features of biodiversity value;
    2. supporting enhancements to biodiversity;
    3. incorporating and creating new habitats or biodiversity features, including trees, into development sites and into the design of buildings themselves where appropriate; major developments are required to deliver net gain for biodiversity, through incorporation of ecological enhancements, wherever possible;
    4. ensuring new biodiversity features or habitats connect to the wider ecological and green infrastructure networks and complement surrounding habitats;
    5. enhancing wildlife corridors for the movement of species, including river corridors, where opportunities arise; and
    6. maximising the provision of soft landscaping, including trees, shrubs and other vegetation that support the borough-wide Biodiversity Action Plan.

B. Where development would impact on species or a habitat, especially where identified in the relevant Biodiversity Action Plan at London or local level, or the Biodiversity Strategy for England, the potential harm should:
    1. firstly be avoided (the applicant has to demonstrate that there is no alternative site with less harmful impacts),
    2. secondly be adequately mitigated; or
    3. as a last resort, appropriately compensated for.

Policy LP 16 Trees, Woodlands and Landscape

A. The Council will require the protection of existing trees and the provision of new trees, shrubs and other vegetation of landscape significance that complement existing, or create new, high quality green areas, which deliver amenity and biodiversity benefits.
B. To ensure development protects, respects, contributes to and enhances trees and landscapes, the Council, when assessing development proposals, will:

<u>Trees and Woodlands</u>

1. resist the loss of trees, including aged or veteran trees, unless the tree is dead, dying or dangerous; or the tree is causing significant damage to adjacent structures; or the tree has little or no amenity value; or felling is for reasons of good arboricultural practice; resist development that would result in the loss or deterioration of irreplaceable habitat such as ancient woodland;
2. resist development which results in the damage or loss of trees that are considered to be of townscape or amenity value; the Council will require that site design or layout ensures a harmonious relationship between trees and their surroundings and will resist development which will be likely to result in pressure to significantly prune or remove trees;
3. require, where practicable, an appropriate replacement for any tree that is felled; a financial contribution to the provision for an off-site tree in line with the monetary value of the existing tree to be felled will be required in line with the 'Capital Asset Value for Amenity Trees' (CAVAT);
4. require new trees to be of a suitable species for the location in terms of height and root spread, taking account of space required for trees to mature; the use of native species is encouraged where appropriate;

5. require that trees are adequately protected throughout the course of development, in accordance with British Standard 5837 (Trees in relation to design, demolition and construction – Recommendations).

The Council may serve Tree Preservation Orders or attach planning conditions to protect trees considered to be of value to the townscape and amenity and which are threatened by development.

Landscape

1. require the retention of important existing landscape features where practicable;
2. require landscape design and materials to be of high quality and compatible with the surrounding landscape and character; and
3. encourage planting, including new trees, shrubs and other significant vegetation where appropriate.

Policy LP 17 Green roofs and walls

Green roofs and/or brown roofs should be incorporated into new major developments with roof plate areas of 100sqm or more where technically feasible and subject to considerations of visual impact. The aim should be to use at least 70% of any potential roof plate area as a green / brown roof.

The onus is on an applicant to provide evidence and justification if a green roof cannot be incorporated. The Council will expect a green wall to be incorporated, where appropriate, if it has been demonstrated that a green / brown roof is not feasible.

The use of green / brown roofs and green walls is encouraged and supported in smaller developments, renovations, conversions and extensions.

Policy LP 18 River corridors

A. The natural, historic and built environment of the River Thames corridor and the various watercourses in the borough, including the River Crane, Beverley Brook, Duke of Northumberland River, Longford River and Whitton Brook, will be protected. Development adjacent to the river corridors will be expected to contribute to improvements and enhancements to the river environment.

Thames Policy Area

B. Development proposals within the Thames Policy Area should respect and take account of the special character of the reach as set out in the Thames Landscape Strategy and Thames Strategy as well as the Council's Conservation Area Statements, and where available Conservation Area Studies, and/or Management Plans.

   Developments alongside and adjacent to the River Thames should ensure that they establish a relationship with the river, maximise the benefits of its setting in terms of views and vistas, and incorporate uses that enable local communities and the public to enjoy the riverside, especially at ground level in buildings fronting the river.

Public Access

C. All development proposals alongside or adjacent to the borough's river corridors should:
   a) Retain existing public access to the riverside and alongside the river; and
   b) Enhance existing public access to the riverside where improvements are feasible; or
   c) Provide new public access to the riverside where possible, and maintain existing points of access to the foreshore subject to health and safety considerations. There is an expectation that all major development proposals adjacent to the borough's rivers shall provide public access to the riverside.
   d) Provide riparian life-saving equipment where required and necessary.

River Thames public riverside walk

D. All development proposals adjoining the River Thames are required to provide a public riverside walk, including for pedestrians and cyclists, which will contribute to the overarching aim of providing a continuous publicly accessible riverside walk. For major developments, applicants will be expected to work with adjoining landowners in case ownership issues would prevent public access. Riverside uses, including river-dependent and river-related uses
E. The Council will resist the loss of existing river-dependent and river-related uses that contribute to the special character of the River Thames, including river-related industry (B2) and locally important

wharves, boat building sheds and boatyards and other riverside facilities such as slipways, docks, jetties, piers and stairs.

This will be achieved by:

1. resisting redevelopment of existing river-dependent or river-related industrial and business uses to non-river related employment uses or residential uses unless it can be demonstrated that no other river-dependent or river-related use is feasible or viable;
2. ensuring development on sites along the river is functionally related to the river and includes river dependent or river-related uses where possible, including gardens which are designed to embrace and enhance the river, and be sensitive to its ecology;
3. requiring an assessment of the effect of the proposed development on the operation of existing river dependent uses or riverside gardens on the site and their associated facilities on- and off-site; or requiring an assessment of the potential of the site for river-dependent uses and facilities if there are none existing;
4. ensuring that any proposed residential uses, where appropriate, along the river are compatible with the operation of the established river-related and river-dependent uses;
5. requiring setting back development from river banks and existing flood defences along the River Thames.

3.4 THE LONDON GENERAL PLAN

The London Plan (consolidated with alterations since 2011)

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.

The 2015-16 Minor Alterations (MALPs) have been prepared to bring the London Plan in line with the national housing standards and car parking policy. The alterations were published on 14th March 2016.

The policies of relevance to ecology are:

Policy 2.18 Green Infrastructure: The Multifunctional Network of Open and Green Spaces

Strategic

A) The Mayor will work with all relevant strategic partners to protect, promote, expand and manage the extent and quality of, and access to, London's network of green infrastructure. This multifunctional network will secure benefits including, but not limited to, biodiversity; natural and historic landscapes; culture; building a sense of place; the economy; sport; recreation; local food production; mitigating and adapting to climate change; water management; and the social benefits that promote individual and community health and well-being.

B) The Mayor will pursue the delivery of green infrastructure by working in partnership with all relevant bodies, including across London's boundaries, as with the Green Arc Partnerships and Lee Valley Regional Park Authority. The Mayor has published supplementary guidance on the All London Green Grid to set out the strategic objectives and priorities for green infrastructure across London.

C) In areas of deficiency for regional and metropolitan parks, opportunities for the creation of green infrastructure to help address this deficiency should be identified and their implementation should be supported, such as in the Wandle Valley Regional Park.

Planning Decisions

D) Enhancements to London's green infrastructure should be sought from development and where a proposal falls within a regional or metropolitan park deficiency area it should contribute to addressing this need.

E) Development proposals should:

a. incorporate appropriate elements of green infrastructure that are integrated into the wider network
b. encourage the linkage of green infrastructure including the Blue Ribbon Network, to the wider public realm to improve accessibility for all and develop new links, utilising green chains, street trees, and other components of urban greening

LDF Preparation

F) Boroughs should:

a. set out a strategic approach to planning positively for the creation, protection, enhancement and management of networks of green infrastructure by producing green infrastructure strategies that cover all forms of green and open space and the interrelationship between these spaces. These should identify priorities for addressing deficiencies and should set out positive measures for the design and management of all forms of green and open space. Delivery of local biodiversity action plans should be linked to these strategies.

b. ensure that in and through DPD policies, green infrastructure needs are planned and managed to realise the current and potential value of these to communities and to support delivery of the widest range of linked environmental and social benefits

c. in London's urban fringe support, through appropriate initiatives, the vision of creating and protecting an extensive and valued recreational landscape of well-connected and accessible countryside around London for both people and wildlife.

Policy 7.19 Biodiversity and Access to Nature

Strategic

A) The Mayor will work with all relevant partners to ensure a proactive approach to the protection, enhancement, creation, promotion and management of biodiversity in support of the Mayor's Biodiversity Strategy. This means planning for nature from the beginning of the development process and taking opportunities for positive gains for nature through the layout, design and materials of development proposals and appropriate biodiversity action plans.

B) Any proposals promoted or brought forward by the London Plan will not adversely affect the integrity of any European site of nature conservation importance (to include special areas of conservation (SACs), special protection areas (SPAs), Ramsar, proposed and candidate sites) either alone or in combination with other plans and projects. Whilst all development proposals must address this policy, it is of particular importance when considering the following policies within the London Plan: 1.1, 2.1-2.17, 3.1, 3.3, 3.7, 5.4A, 5.14, 5.15, 5.17, 5.20, 6.3, 6.9, 7.14, 7.15, 7.25 – 7.27 and 8.1. Whilst all opportunity and intensification areas must address the policy in general, specific locations requiring consideration are referenced in Annex 1.

Planning Decisions

C) Development Proposals should:

a. wherever possible, make a positive contribution to the protection, enhancement, creation and management of biodiversity

b. prioritise assisting in achieving targets in biodiversity action plans (BAPs), and/ or improving access to nature in areas deficient in accessible wildlife sites

c. not adversely affect the integrity of European sites and be resisted where they have significant adverse impact on European or nationally designated sites or on the population or conservation status of a protected species or a priority species or habitat identified in a UK, London or appropriate regional BAP or borough BAP.

D) On Sites of Importance for Nature Conservation development proposals should:

a. give the highest protection to sites with existing or proposed international designations (SACs, SPAs, Ramsar sites) and national designations (SSSIs, NNRs) in line with the relevant EU and UK guidance and regulations

b. give strong protection to sites of metropolitan importance for nature conservation (SMIs). These are sites jointly identified by the Mayor and boroughs as having strategic nature conservation importance

c. give sites of borough and local importance for nature conservation the level of protection commensurate with their importance.

E) When considering proposals that would affect directly, indirectly or cumulatively a site of recognised nature conservation interest, the following hierarchy will apply:

1 avoid adverse impact to the biodiversity interest
2 minimize impact and seek mitigation
3 only in exceptional cases where the benefits of the proposal clearly outweigh the bio diversity impacts, seek appropriate compensation.

LDF preparation
F) In their LDFs, Boroughs should:

a. use the procedures in the Mayor's Biodiversity Strategy to identify and secure the appropriate management of sites of borough and local importance for nature conservation in consultation with the London Wildlife Sites Board.
b. identify areas deficient in accessible wildlife sites and seek opportunities to address them
c. include policies and proposals for the protection of protected/ priority species and habitats and the enhancement of their populations and their extent via appropriate BAP targets
d. ensure sites of European or National Nature Conservation Importance are clearly identified.
e. identify and protect and enhance corridors of movement, such as green corridors, that are of strategic importance in enabling species to colonise, re-colonise and move between sites.

Policy 7.21 Trees and Woodland
Strategic
A) Trees and woodlands should be protected, maintained, and enhanced, following the guidance of the London Tree and Woodland Framework (or any successor strategy). In collaboration with the Forestry Commission the Mayor has produced supplementary guidance on Tree Strategies to guide each borough's production of a Tree Strategy covering the audit, protection, planting and management of trees and woodland. This should be linked to a green infrastructure strategy.

Planning decisions
B) Existing trees of value should be retained and any loss as the result of development should be replaced following the principle of 'right place, right tree'. Wherever appropriate, the planting of additional trees should be included in new developments, particularly large-canopied species.

LDF preparation
C) Boroughs should follow the advice of paragraph 118 of the NPPF to protect 'veteran' trees and ancient woodland where these are not already part of a protected site.
D) Boroughs should develop appropriate policies to implement their borough tree strategy.

Policy 7.28 Restoration of the Blue Ribbon Network
Planning decisions
A) Development proposals should restore and enhance the Blue Ribbon Network by:

a. taking opportunities to open culverts and naturalise river channels
b. increasing habitat value. Development which reduces biodiversity should be refused
c. preventing development and structures into the water space unless it serves a water related purpose.
d. protecting the value of the foreshore of the Thames and tidal rivers
e. resisting the impounding of rivers
f. protecting the open character of the Blue Ribbon Network.

LDF preparation
B) Within LDFs boroughs should identify any parts of the Blue Ribbon Network where particular biodiversity improvements will be sought, having reference to the London River Restoration Action Plan.

Policy 7.30 London's Canals and Other Rivers and Waterspaces
Planning decisions
A) Development proposals along London's canal network and other rivers and waterspace (such as reservoirs, lakes and ponds) should respect their local character and contribute to their accessibility and active water related uses, in particular transport uses, where these are possible.
B) Development within or alongside London's docks should protect and promote the vitality, attractiveness and historical interest of London's remaining dock areas by:

a. preventing their partial or complete in-filling
b. promoting their use for mooring visiting cruise ships and other vessels
c. encouraging the sensitive use of natural landscaping and materials in and around dock areas
d. promoting their use for water recreation
e. promoting their use for transport LDF preparation

C) Within LDFs boroughs should identify any local opportunities for increasing the local distinctiveness and use of their parts of the Blue Ribbon Network.

Draft London Plan

The current 2016 consolidation Plan is still the adopted Development Plan. However, the Draft London Plan is a material consideration in planning decisions. It gains more weight as it moves through the process to adoption, however the weight given to it is a matter for the decision maker. It is anticipated that new plan will be fully adopted Early 2020. Draft policies of relevance to ecology are detailed below as outlined within "Intend to Publish Version December 2019":

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 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 set factors, 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.
C. Existing green cover retained on site should count towards developments meeting interim target scores set out in (B).

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 1km 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 of 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.

4. DESK STUDY RESULTS

4.1 INTRODUCTION

The data search was carried out in January 2021 by Greenspace Information for Greater London CIC. All relevant ecological data provided by the consultees was reviewed and the results from these investigations are summarised in Sections 4.2 to 4.4. Selected data are provided in Appendix 1.

4.2 NATURE CONSERVATION SITES

Statutory and non-statutory nature conservation sites located in proximity to the survey area are summarised in Table 4.1.

Site Name	Designation	Proximity to Survey Area	Description
European Statutory Sites			
Richmond Park	SAC	2.75 km north-east	Legally underpinned by Richmond Park SSSI, Richmond Park SAC has been managed as a royal deer park since the seventeenth century, producing a range of habitats of value to wildlife. In particular, Richmond Park is of importance for its diverse deadwood beetle fauna associated with the ancient trees found throughout the parkland. Many of these beetles are indicative of ancient forest areas where there has been a long continuous presence of over-mature timber. The site is at the heart of the south London centre of distribution for stag beetle *Lucanus cervus.*
South West London Waterbodies	RAMSAR/ SPA	4.00 km west	South West London Waterbodies RAMSAR / SPA is underpinned by several SSSIs. The site comprises a number of reservoirs and former gravel pits in the Thames Valley adjacent to Heathrow Airport between Windsor and Hampton Court which support internationally important numbers of gadwall *Anas strepera* and shoveler *Anas clypeata*
UK Statutory Sites			
Bushy Park and Home Park	SSSI / SINC (Metropolitan)	210 m south	Part of Bushy Park and Home Park SSSI is also designated as a SINC. The site is of special interest for its nationally important saproxylic (dead and decaying wood associated) invertebrate assemblage, population of veteran trees and acid grassland communities. These features occur within and are supported by the wider habitat mosaic. The saproxylic invertebrates include those associated with heartwood decay, bark and sapwood decay and with fungal fruiting-bodies found within the veteran trees. This area provides an extensive and varied open space on the edge of London. The parks contain several nationally scarce plants. Extensive areas of two distinctive lowland dry acid grassland types are also present in a mosaic alongside neutral grassland, bracken, wetland areas and woodland.
Ham Lands	LNR	1.00 km north-east	Ham Land LNR is an extensive area of grassland and scrub with abundant wildlife. The unique mosaic of different vegetation types on the site attract many butterfly and bird species. In the summer the site supports a large number of wildflowers.
Non-statutory Sites			
Churchyard of St Mary with St Alban, Teddington	SINC (Local)	700 m north-east	An attractive churchyard with colorful, flowery grassland and some large trees, formed of habitats including semi-improved neutral grassland and secondary woodland.

Table 4.1: Summary of Nature Conservation Sites (continues)

Site Name	Designation	Proximity to Survey Area	Description
Non-statutory Sites (continued)			
The Copse at Hampton Wick and Normansfield Hospital	SINC (Local)	800 m south-east	A wooded nature reserve and the landscaped grounds of a former hospital.
River Thames and Tidal Tributaries	SINC (Metropolitan)	930 m north-east	The River Thames and the tidal sections of creeks and rivers comprise a number of valuable habitats. The mud-flats, shingle beach, inter-tidal vegetation, islands and river channel support species from freshwater, estuarine and marine communities which are rare in London. The site is of importance for wildfowl and wading birds. providing important feeding areas for the nationally rare black redstart *Phoenicurus ochruros.* The Thames is important for fish, with over 100 species present. Many of the tidal creeks are important fish nurseries, including for notable species. Other habitats include areas of saltmarsh, a very rare habitat in London, with a population of the nationally scarce marsh sow-thistle *Sonchus palustris*. Wetlands support the only London population of the nationally rare cut-grass *Leersia oryzoides*. The small islands support important invertebrate communities, as well as a number of heronries. Chiswick Eyot, one of the islands, is a Local Nature Reserve supporting a diverse flora with numerous London rarities, both native and exotic.
Key: SAC: Special Area of Conservation SPA: Special Protection Area SSSI: Site of Special Scientific Interest RAMSAR: Site listed on The Convention on Wetlands of International Importance (Ramsar Convention) SINC: Site of Importance for Nature Conservation Metropolitan: Site of Metropolitan Importance. Local: Site of Local Importance.			

Table 4.1: Summary of Nature Conservation Sites (continued)

One Site of Special Scientific Interest (SSSI) is located within a 2 km radius of the survey area. This was, Bushy Park and Home Park SSSI, located 210 m south. The site falls within the Impact Risk Zone for Richmond Park SAC.

4.3 PROTECTED / NOTABLE SPECIES

Table 4.2 and the following text provide a summary of protected and notable species records within a 1 km radius of the study area. It should be noted that the absence of records should not be taken as confirmation that a species is absent from the search area.

Species	No. of Records	Most Recent Record	Proximity of Nearest Record to Study Area	Species of Principal Importance?	Legislation / Conservation Status
Mammals – Bats					
Unidentified bat *Vespertilionidae* sp.	135	2008	115 m south-east	#	#
Unidentified bat *Chiroptera* sp.	4	2019	191 m north-east	#	#
Serotine bat *Eptesicus serotinus*	11	2019	191 m north-east	-	ECH 4, WCA 5, WCA 6
Unidentified myotis *Myotis* sp.	1	2019	191 m north-east	-	ECH 4, WCA 5, WCA 6
Unidentified nyctalus *Nyctalus* sp.	3	2019	191 m north-east	#	#

Table 4.2: Summary of Protected/Notable Species Records Within 1 km of Survey Area (continues)

Species	No. of Records	Most Recent Record	Proximity of Nearest Record to Study Area	Species of Principal Importance?	Legislation / Conservation Status
Mammals – Bats (continued)					
Leisler's bat *Nyctalus leisleri*	10	2019	191 m north-east	-	ECH 4, WCA 5, WCA 6
Noctule *Nyctalus noctula*	19	2019	191 m north-east	✓	ECH 4, WCA 5, WCA 6
Nathusius's Pipistrelle *Pipistrellus nathusii*	1	2019	191 m north-east	-	ECH 4, WCA 5, WCA 6
Soprano pipistrelle *Pipistrellus pygmaeus*	67	2019	191 m north-east	✓	ECH 4, WCA 5, WCA 6
Common pipistrelle *Pipistrellus pipistrellus*	38	2009	323 m north	-	ECH 4, WCA 5, WCA 6
Pipistrelle *Pipistrellus* sp.	8	2005	439 m north	#	ECH 4, WCA 5, WCA 6
Daubenton's bat *Myotis daubentonii*	19	2012	643 m south-east	-	ECH 4, WCA 5, WCA 6
Brown long-eared bat *Plecotus auritus*	3	2005	849 m south-west	✓	ECH 4, WCA 5, WCA 6
Mammals - Other					
Hedgehog *Erinaceus europaeus*	155	2020	115 m south-east	✓	WCA 6
Water vole *Arvicola amphibius*	10	2004	673 m south-west	✓	WCA 5
Badger *Meles meles*	2	2009	†	-	WCA 6, PBA
Amphibians					
Common frog *Rana temporaria*	143	2004	115 m south-east	-	WCA 5 S9(5)
Common toad *Bufo bufo*	11	2020	388 m north-west	✓	WCA 5 S9(5)
Great crested newt *Triturus cristatus*	1	1999	820 m south-west	✓	ECH 2, ECH 4, WCA 5
Reptiles					
Grass snake *Natrix helvetica*	1	2004	911 m south-west	✓	WCA 5 S9(1) WCA 5 S9(5)
Birds					
Kingfisher *Alcedo atthis*	56	2019	296 m east	-	WCA1i
Brambling *Fringilla montifringilla*	4	2001	296 m east	-	WCA1i
Redwing *Turdus iliacus*	106	2017	296 m east	-	WCA1i
Merlin *Falco columbarius*	3	2003	439 m north	-	WCA1i
Red kite *Milvus milvus*	4	2017	439 m north	-	WCA1i
Fieldfare *Turdus pilaris*	32	2017	777 m south-east	-	WCA1i
Black redstart *Phoenicurus ochuros*	1	1992	820 m south-west	-	WCA1i
Firecrest *Regulus ignicapilla*	3	2015	820 m south-west	-	WCA1i
Greenshank *Tringa nebularia*	2	2001	820 m south-west	-	WCA1i
Hoopoe *Upupa epops*	1	1992	820 m south-west	✓	WCA1i

Table 4.2: Summary of Protected/Notable Species Records Within 1 km of Survey Area (continues)

Species	No. of Records	Most Recent Record	Proximity of Nearest Record to Study Area	Species of Principal Importance?	Legislation / Conservation Status
Birds (continued)					
Green sandpiper *Tringa ochropus*	1	2001	922 m south	-	WCA1i
Cetti's warbler *Cettia cetti*	18	2017	†	-	WCA1i
Dartford warbler *Sylvia undata*	16	2003	†	-	WCA1i
Peregrine *Falco peregrinus*	5	2014	†	-	WCA1i
Eurasian hobby *Falco subbuteo*	47	2015	†	-	WCA1i
Golden Oriole *Oriolus oriolus*	1	1992	†	-	WCA1i
Barn owl *Tyto alba*	3	2017	†	-	WCA1i
Invertebrates					
Stag beetle *Lucanus cervus*	303	2020	89 m east	✓	ECH 2, WCA 5 S9(5)
Jersey tiger moth *Euplagia quadripunctaria*	2	2018	733 m north	-	ECH 2

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

ECH 2: Annex II of the European Communities Council Directive on the Conservation of Natural Habitats and Wild Fauna and Flora. Animal and plant species of community interest whose conservation requires the designation of Special Areas of Conservation.
ECH 4: Annex IV of the European Communities Council Directive on the Conservation of Natural Habitats and Wild Fauna and Flora. Animal and plant species of community interest in need of strict protection.
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 5 S9(5): Schedule 5 Section 9(5) of Wildlife and Countryside Act 1981 (as amended). Protected animals (other than birds). Protection limited to selling, offering for sale, processing or transporting for purpose of sale, or advertising for sale, any live or dead animal, or any part of, or anything derived from, such animal.
WCA 6: Schedule 6 of Wildlife and Countryside Act 1981 (as amended). Animals which may not be killed or taken by certain methods.

Species of Principal Importance: Species of Principal Importance for Nature Conservation in England.

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

Table 4.2: Summary of Protected/Notable Species Records Within 1 km of Survey Area (continued)

Birds

The desk study provided records of a further sixteen species of bird within a 1 km radius of the survey area listed as Species of Principal Importance. Records of species included lapwing *Vanellus vanellus,* grey partridge *Perdix perdix* and tree sparrow *Passer montanus.* A further seventeen species were listed that are present on the RSPB Birds of Conservation Concern list as 'red'. Species included mistle thrush *Turdus viscivorus,* fieldfare *Turdus pilaris* and whinchat *Saxicola rubetra.*

The desk study also provided records of twenty-seven species of bird listed as Species of Local Conservation concern including redshank *Tringa tetanus* and shoveler *Spatula clypeata.* Records of several other notable bird species located within a 1 km radius of the survey area, were also provided.

Bony fish
A single record of European eel *Anguilla anguilla*, a Species of Principal Importance, was provided with the desk study located 849m south-west.

Invertebrates
The desk study identified numerous notable species of invertebrates, including dragonflies, grasshoppers, crickets, damselflies, true bugs, beetles, moths, butterflies, molluscs, true flies, ants, bees, sawflies and wasps. Records included those of the variable chafer *Gnorimus variabilis* and mab's lantern *Philorhizus quadrisignatus*, both of which are beetles listed as Species of Principal Importance. Records of moths and butterflies were also provided that included records of Species of Principal Importance; these included the rosy minor moth *Litoligia literosa* and small heath butterfly *Coenonympha pamphilus.*

Plants
The desk study provided records of seventeen notable and protected plant species within a 1 km radius of the survey area including true fox-sedge *Carex vulpina*, a Species of Principal Importance. Other species included a fungi known as bearded tooth *Hericium erinaceus;* listed on Schedule 8 of Wildlife and Countryside Act 1981 (as amended). Protected plants and fungi. Several records of nationally scarce species were also provided as well as twelve Species of Local Conservation Concern. Species include mistletoe *Viscum album* and arrowhead *Sagittaria sagittifolia.*

The nationally rare cut-grass *Leersia oryzoides* and nationally scarce marsh sow-thistle *Sonchus palustris* are also known to be present within River Thames and Tidal Tributaries (SINC).

4.4 INVASIVE SPECIES

Table 4.3 provides a summary of invasive species records within a 1 km radius of the study area. It should be noted that the absence of records should not be taken as confirmation that a species is absent from the search area.

Species	No. of Records	Most Recent Record	Proximity of Nearest Record to Study Area	Legislation / Conservation Status
Water fern *Azolla filiculoides*	3	1999	110 m east	LISI 2, WCA 9
Rhododendron *Rhododendron ponticum*	2	2004	710 m south-west	LISI 2, WCA 9
Least duckweed *Lemna minuta*	2	1012	720 m east	LISI 4
Canadian waterweed *Elodea canadensis*	3	2002	780 m south-west	LISI 4, WCA 9
Giant hogweed *Heracleum mantegazzianum*	1	1993	780 m south-west	LISI 3, WCA 9
Goat's-rue *Galega officinalis*	1	1990	780 m south-west	LISI 4
Orange balsam *Impatiens capensis*	10	2012	780 m south-west	LISI 2
Parrot's-feather *Myriophyllum aquaticum*	1	2002	800 m north-east	LISI 3, WCA 9
Kashmir Balsam *Impatiens balfourii*	1	2003	860 m north-east	LISI 2
Green alkanet *Pentaglottis sempervirens*	5	1999	900 m north-east	LISI 6
Cherry laurel *Prunus laurocerаus*	5	2009	900 m north-east	LISI 3
Turkey oak *Quercus cerris*	60	2011	900 m north-east	LISI 5
False-acacia *Robinia pseudoacacia*	43	2011	900 m north-east	LISI 4
Snowberry *Symphoricarpos albus*	3	1999	900 m north-east	LISI 2
Himalayan balsam *Impatiens glandulifera*	4	2004	910 m north	LISI 3, WCA 9

Table 4.3: Summary of Invasive Species Records Within 1 km of Survey Area (continues)

Species	No. of Records	Most Recent Record	Proximity of Nearest Record to Study Area	Legislation / Conservation Status
Cotoneaster *Cotoneaster* sp.	3	2007	950 m north-east	LISI 2, WCA 9
Gallant soldier *Galinsoga parviflora*	1	1999	950 m north-east	LISI 3
Butterfly-bush *Buddleia davdii*	5	2009	960 m west	LISI 3
Nuttall's waterweed *Elodea nuttallii*	1	2004	960 m south	LISI 4, WCA 9
Japanese knotweed *Fallopia japonica*	3	2009	970 m north-east	LISI 3, WCA 9
Evergreen oak *Quercus ilex*	12	2011	980 m south-west	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 4.3: Summary of Invasive Species Records Within 1 km of Survey Area (continued)

5. PHASE 1 HABITAT SURVEY

5.1 INTRODUCTION

The results of the Phase 1 Habitat Survey are presented in the following sections. An annotated Phase 1 Habitat Survey Drawing (Drawing C154365-01) is provided in Chapter 8. This drawing illustrates the location and extent of all habitat types recorded on site. Any notable features or features too small to map are detailed using target notes. Photographs taken during the field survey are presented in Chapter 9.

The survey was carried out on 5th February 2021 by Margarita Smoldareva (Ecological Consultant). Table 5.1 details the weather conditions at the time of the survey.

Parameter	Condition
Temperature (ºC)	9
Cloud (%)	10
Wind (Beaufort)	F0
Precipitation	Nil

Table 5.1: Weather Conditions During Field Survey

5.2 SURVEY CONSTRAINTS AND LIMITATIONS

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

5.3 HABITATS

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

- Amenity grassland;
- Buildings;
- Fence;
- Hardstanding;
- Introduced shrubs;
- Scattered trees; and,
- Wall.

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

Amenity grassland
In the south of the site was an area of short-mown amenity grassland which was in use as a communal garden for residents of the block of flats (Plates 9.1 – 9.2). Species noted within this habitat included perennial rye-grass *Lolium perenne*, clover *Trifolium repens*, ivy *Hedera helix* with moss and nettle *Urtica dioica* in places.

Buildings
Block of flats
A six storey, flat roofed, block of flats with operating lift tower (Plate 9.3) was located in the centre of the survey area. The ground floor of the building housed five garages which were assumed to be in regular use. On the roof of the flats was a boiler/plant room which was inaccessible at the time of the survey (Target Note 5).

External garages
To the east of the block of flats were three single storey garages with flat bitumen roofs, these were noted to be in a generally good state of repair (Target Note 7) (Plate 9.4).

The buildings within the survey area were subject to a Preliminary Bat Roost Assessment (PRA) on the same day as the field survey. For full building details please refer to the PRA Report (RT-MME-154365-02).

Fence
Wooden panel fencing
The south-west site boundary was delineated by wooden panel fencing standing at approximately 1.8 m height (Plates 9.1 – 9.2).

Wire fencing
An approximately 4 m long length of wire fencing defined the boundary between the south of the site and the railway embankment (Target Note 2). The lower part of the fencing had been damaged and showed signs of being used as a push through for mammals such as foxes (Target Note 1).

Hardstanding
Tarmacadam hardstanding formed the access road and car park of the site, on the day of the survey these were clear of litter and did not contain any colonising plants.

Introduced shrub
Small areas of introduced shrub were noted along the north-western and northern boundaries of the survey area associated with the carpark (Target Note 9). An additional area of introduced shrub was noted within the communal gardens to the west. Species recorded during the field survey included spotted-laurel *Aucuba japonica*, Sarcococca *Sarcococca* sp*.,* box *Buxus sempervirens,* spindle *Euonymus sp.* and yew *Taxus baccata*.

Scattered trees
Scattered trees were noted along the eastern site boundary and within the car park and communal garden (Plates 9.1 – 9.3). These consisted of birch *Betula* sp., beech *Fagus sylvatica*, cedar *Thuja* sp., Scot's pine *Pinus sylvestris*, Italian cypress *Cupressus sempervirens* and ash *Fraxinus excelsior*. The majority of these trees were mature and had recently had their height reduced (Target Notes 8 and 10).

At the time of the survey most of the knotholes within the trees were being used by ring-necked parakeet *Psittacula krameria* (Target Note 4).

Wall
The majority of the site boundary was defined by brick walls of approximately 1.8 m in height (Plate 9.3). The walls were in generally good condition with Hart's tongue fern *Asplenium scolopendrium* noted on the wall forming the western site boundary (Target Note 3).

5.4 FAUNA

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

Birds
The following bird species were observed on site during the field survey: ring-necked parakeet, blue tit *Cyanistes caeruleus* and feral pigeon *Columba livia*.

Mammals
Grey squirrel *Sciurus carolinensis* were recorded on site and were noted to be using holes made by woodpecker for nesting.

5.5 INVASIVE PLANT SPECIES

No invasive plant species were noted during the field survey.

6. DISCUSSIONS AND CONCLUSIONS

6.1 SUMMARY OF PROPOSALS

It is understood that the proposals include the demolition of the existing residential block of flats to make way for the development of a new property to take its place.

6.2 NATURE CONSERVATION SITES

The desk study exercise identified two European statutory sites within 5 km of the survey area, two UK statutory sites within 2 km and three non-statutory sites within 1 km. The site is not located within 10 km of a statutory site designated for bats. The significance of these sites to the proposed development is discussed below.

European Statutory Sites
The two European statutory sites identified by the desk study within 5 km of the survey area were Richmond Park Special Area of Conservation (SAC) and South West London Water Bodies RAMSAR and Special Protection Area (SPA). These were located 2.75 km north-east and 4.00 km west respectively. Due to the nature of the intervening built up habitat and large intervening distance between the proposed working area and these nature conservation sites; it is deemed that any effect that the works may have on European statutory sites will be negligible.

UK Statutory Sites
Of the two UK statutory sites within 2 km of the survey area Bushy Park and Home Park Site of Special Scientific Interest (SSSI) was the closest, located 210 m south. Given the distance between the proposed development site and this nature conservation site no direct impacts are anticipated as a result of the proposed development. The survey area also falls within a SSSI Impact Risk Zone for this conservation site and Richmond Parks SAC/SSSI. As the proposed development is for the replacement of the block of flats on site the nature of these works are not deemed to meet with any of the Risk Categories (see Appendix 1) associated with the SSSIs. As the block of flats is being replaced and no new residences are planned the proposed development will not cause increased recreational pressure upon nature conservation sites and as such Bush Park and Home Park SSSI is not a notable consideration to the proposed development.
Ham Lands Local Nature Reserve (LNR) was the second UK statutory site identified by the desk study within 2 km of the survey area, this site was located 1.00 km north-east. Due to the nature of the intervening built up habitat and large intervening distance between the proposed development and this nature conservation sites; it is deemed that any effect that the works may have upon Ham Lands LNR will be negligible.

Non-Statutory Sites
The three non-statutory sites identified within 1 km of the survey area were: Churchyard of St Mary with St Alban, Teddington, The Copse at Hampton Wick and Normansfield Hospital and River Thames and Tidal Tributaries. These were located 700 m north, 800 m south-east and 930 m north-east respectively. Due to the nature of the intervening built up habitat and intervening distance between the proposed working area and these nature conservation sites; it is deemed unlikely that the proposed development would have negligible impacts upon non-statutory sites and as such they are not a notable consideration to the proposed development.

6.3 HABITATS

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

A discussion of the implications of the site proposals with regard to the habitats present on site is provided in the text below. A separate discussion of the value of the habitats on site to protected or notable species is provided in Section 6.4.

Amenity grassland and introduced shrub
These habitats are common in the local area, considered to have low ecological value and can easily be replaced if removed. While it is understood that part of the amenity grassland is to be turned into hardstanding as part of the development plans, this is not deemed to be a notable consideration.

Scattered trees
Early-mature and mature trees have intrinsic value and cannot be easily replaced if removed. Therefore, the mature trees on site are notable considerations to the proposed development. Details of the proposed development plans provided by the client indicate that a Scot's pine and an Italian cypress (Target Note 6) are to be removed as part of the proposals, the remaining trees are to be retained.

In the absence of appropriate protection measures there is the potential for the retained trees to be indirectly impacted by the proposed development works (e.g. root compaction due to use/storage of heavy vehicles and machinery). Therefore, a recommendation regarding the replacement and protection of trees within the survey area is made in Section 7.2.

Buildings, fencing, hardstanding and wall
The remaining habitats are of negligible ecological value and are well represented locally. Removal of these habitats would have minimal impacts on the ecology of the local area and therefore they are not deemed to be a notable consideration in relation to the proposed development.

Habitats considered to be of relevance to the proposed development are summarised in Table 6.1.

Habitat Type	Habitat of Principal Importance?	Local BAP Habitat?	Summary of Potential Impacts
Scattered trees	-	-	Accidental damage, root damage/compaction etc.

Table 6.1: Summary of Potential Impacts on Notable Habitats

6.4 PROTECTED/NOTABLE SPECIES

The following paragraphs consider the likely impact of the site proposals on protected or notable species. This is based on those species highlighted in the desk study exercise (Chapter 4) and other species for which potentially suitable habitat occurs within or adjacent to the survey area.

Mammals
Bats
Records of at least eight bat species within 1 km of the survey area were provided with the desk study, the closest of which was of an unidentified bat species 115 m south-east.

The Preliminary Bat Roost Assessment, which was undertaken at the same time as the field survey, identified the block of flats to have high potential for supporting roosting bats. While the trees within the survey area were also noted to offer potential bat roosting features these were occupied by ring-necked parakeet at the time of the survey. The trees which are planned to be removed as part of the proposed development were not considered likely to support roosting bats. The potential for bats to use the block of flats for roosting deems roosting bats to be a notable consideration to the proposed development and a recommendation with regard to this has been made in Section 7.3.

The scattered trees and shrubs within the survey area and the railway corridor to the south of the site offer potential foraging and commuting opportunities for bats. As there is the potential for bat commuting routes to be disrupted by new lighting implemented as a result of the proposed development a recommendation has been made in Section 7.2.

Badger
The desk study provided two records of badger within 1 km of the survey area, no direct evidence of badger (e.g. setts, latrine or footprints) was recorded during the field survey.

Areas suitable for foraging badger within the survey area are limited to the amenity grassland and introduced shrubs. None of the habitats on site were considered suitable for sett building. The railway embankment to

the south of the site provided suitable foraging and commuting opportunities for this species as well as potential sett building opportunities. As a mammal push through was noted in the fence between the railway embankment and the proposed development site there is a chance that badger may pass through the site. Thus, to prevent harm coming to this species during the construction phase of the proposed development a precautionary recommendation has been made in section 7.3.

Hedgehog
The desk study provided one hundred and fifteen records of hedgehog within 1 km of the survey area, the closest of which was located 115 m south-east. The amenity grassland and introduced shrubs noted within the survey area were considered suitable for foraging hedgehog. Additionally, the mammal push through in the south of the site provided connectivity off the site to suitable foraging, commuting and refuge habitats for this species.

As the site is connected to the wider landscape by the railway embankment it is considered likely that hedgehog may pass through the site while foraging. Thus, to prevent harm coming to this species during the construction phase of the proposed development a precautionary recommendation has been made in section 7.3.

Aquatic mammals – water vole and otter
The desk study provided ten records of water vole and no records of otter *Lutra lutra* within 1 km of the proposed development site.

No watercourses were noted within or adjacent to the survey area during the field survey. Due to the lack of suitable habitats on or in proximity to the site aquatic mammals are not deemed to be a notable consideration to the proposed development.

Amphibians
Records of common frog, common toad and great crested newt were provided with the desk study, the closest record for each of these species was located 115 m south-east, 388 m north-west and 820 m south-west respectively.

No waterbodies suitable for amphibians to use as breeding sites were recorded within the survey area during the field survey. Furthermore, reference to Ordnance Survey data and mapped imagery indicates that there are no areas of standing water within 500 m of the survey site.

Suitable terrestrial habitat for amphibians within the proposed development area was limited to the introduced shrub, as the amenity grassland was maintained at a short sward. The railway embankment adjacent to the south may provide more suitable terrestrial and hibernation opportunities for these species, however, given the lack of suitable breeding sites within 500 m it is considered unlikely that amphibians would be encountered within or adjacent to the survey area. Thus, amphibians are not a notable consideration to the proposed development.

Reptiles
A single record of grass snake, 911 m south-west, was provided with the desk study.

Habitats considered suitable for reptiles were limited within the survey area, with the amenity grassland being maintained at a short sward, the introduced shrub was the only habitat considered viable for supporting reptiles. Nevertheless, these areas were limited in extent and isolated between sub-optimal habitats. The distance of the record provided with the desk study and the lack of suitable hibernacula for these species on site deems them not to be a notable consideration to the proposed development.

Birds
The desk study provided records of a number of bird species listed on Schedule 1 of the Wildlife and Countryside Act 1981 (as amended), although due to their habitat requirements and the relatively small scale of the works, these species are unlikely to be impacted by the proposed works.

The scattered trees and building within the survey area provided suitable nesting habitat for a range of common and generalist bird species, some of which were observed during the field survey. In order to avoid damaging nests within the survey area during the construction phase of development a recommendation has

been made in Section 7.3. An additional recommendation related to improving the site for birds is also included in Section 7.2.

Invertebrates
The desk study provided three hundred and three records of stag beetle, with the closest located 89 m east. As no suitable larval habitat for stag beetle, namely buried rotting wood, was recorded on site this species is not a notable consideration to the proposed development. However, a recommendation related to enhancing the value of the site for stag beetle is made in Section 7.2.

Two records of Jersey tiger moth were also provided with desk study, the closest of these records was located 733 m north. Given the large distance between the closest record and the survey area in addition to the relatively small abundance of herbaceous food plants suitable for the larvae of this species Jersey tiger moth is not a notable consideration to the proposed development.

The desk study also provided several records of notable invertebrate species within a 1 km radius. While some vegetative habitats are due to be impacted as a result of the proposed development, no floral species which may support notable invertebrates were recorded during the field survey and as such the notable species listed are unlikely to be significantly impacted by clearance of any habitats within the survey area. Although no negative impacts are anticipated for terrestrial invertebrates as a result of the proposed development a recommendation has been made in Section 7.2, this relates to improving the value of the site for invertebrate species.

Bony fish
European eel were recorded within 1 km of the survey area, however, given the lack of suitable aquatic habitat within or adjacent to the survey area they are not deemed to be a notable consideration to the proposed development.

Other Species
In addition to the species discussed above dormouse *Muscardinus avellanarius* and white-clawed crayfish *Austropotamobius pallipes* are not considered to be material considerations due to the lack of desk study records and absence of suitable habitats within the development site.

Summary
Species considered to be of relevance to the proposed development are summarised in Table 6.2.

Species / Species Group	Species of Principal Importance?	Summary of Potential Impacts
Bats	#	Loss of suitable habitat, direct harm or injury, disturbance through increase in lighting.
Badger	-	Direct harm or injury
Hedgehog	✓	Loss of suitable habitat, direct harm or injury.
Birds	#	Loss of suitable habitat, direct harm or injury
Key: #: Species dependent		

Table 6.2: Summary of Potential Impacts on Notable Species

6.5 INVASIVE PLANT SPECIES

The desk study provided records of a number of plant species listed on the London Invasive Species Initiative and Schedule 9 of the Wildlife and Countryside Act 1981 (as amended) the closest of which was of water fern 110 m east.

Given the lack of invasive species noted during the field survey and the distance between the proposed development site and the closest record, invasive plant species are not deemed to be a notable consideration to the proposed development.

7. RECOMMENDATIONS

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

The ecological mitigation hierarchy should be applied when considering development which may have a significant effect on biodiversity. The ecological mitigation hierarchy, as set out in the National Planning Policy Framework (NPPF), and the National Planning Practice Guidance (NPPG) should follow these principles:

- **Avoidance** – development should be designed to avoid significant harm to valuable wildlife habitats and species.
- **Mitigation** – where significant harm cannot be wholly or partially avoided, it should be minimised by design or through the use of effective mitigation measures.
- **Compensation** – where, despite whatever mitigation would be effective, there would still be significant residual harm, as a last resort, compensation should be used to provide an equivalent value of biodiversity.

7.1 NATURE CONSERVATION SITES

No recommendations are made with regard to nature conservation sites.

7.2 HABITATS

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

R1 **Habitat Retention and Protection:** The development proposals should be designed (where feasible) to allow for the retention of existing notable habitats including scattered mature trees. Protection measures comprise:

- Trees: Any trees on or overhanging the site, which are retained as a part of any proposed works should be protected in accordance with British Standard 5837: 2012 "Trees in relation to design, demolition and construction - recommendations". Protection should be installed on site prior to the commencement of any works on site.

If retention is not possible, appropriate replacement planting should be incorporated into the soft landscape scheme in accordance with the ecological mitigation hierachy. Only native and/or wildlife attracting species should be planted.

R2 **Biodiversity Enhancement:** In accordance with the provision of Chapter 15 of the National Planning Policy Framework (Conserving and Enhancing the Natural Environment) and Local Planning Policy, biodiversity enhancement measures should be incorporated into the landscaping scheme of any proposed development to work towards delivering net gains for biodiversity. Enhancement measures include:

- Planting of habitats which will be of value to wildlife, such as:
  - native seed/fruit bearing species to provide foraging habitat for mammals and birds;
  - nectar-rich species to attract bees, butterflies and moths;
  - wildflower grassland margins to provide larval food for caterpillars and to attract butterfly and moth species such as wall and small heath; and,
  - species which attract night flying insects which will be of value to foraging bats, for example: evening primrose *Oenothera biennis*, goldenrod *Solidago virgaurea*, honeysuckle *Lonicera periclymenum* and fleabane *Pulicaria dysenterica*.
- Inclusion of a green roof in the soft landscaping plan to improve the ecological value of the site.
- Inclusion of hedgehog passes under any fence lines to allow connectivity between the site and the wider area, particularly to the railway embankment to the south.

- Provision of nesting/roosting habitat, such as installation of nest boxes for species such as house sparrow, dense scrub for species such as song thrush, and bat boxes for species such as pipistrelle.
- Creation of deadwood habitat for stag beetle to lay eggs.

R3 **Lighting:** In accordance with best practice guidance relating to lighting and biodiversity (Miles et al, 2018; Gunnell et al, 2012), any new lighting should be carefully designed to minimise potential disturbance and fragmentation impacts on sensitive receptors, such as bat species. Examples of good practice include:

- Avoiding the installation of new lighting in proximity to key ecological features, such as the railway corridor to the south.
- Using modern LED fittings rather than metal halide or sodium fittings, as modern LEDs emit negligible UV radiation.
- The use of directional lighting to reduce light spill, e.g. by installing bespoke fittings or using hoods or shields. For example, downlighting can be used to illuminate features such as footpaths whilst reducing the horizontal and vertical spill of light.
- Implementing controls to ensure lighting is only active when needed, e.g. the use of timers or motion sensors.
- Use of floor surface materials with low reflective quality. This will ensure that bats using the site and surrounding area are not affected by reflected illumination.

7.3 PROTECTED / NOTABLE SPECIES

To ensure compliance with wildlife legislation, the following recommendations are made:

R4 **Roosting Bats:** The recommendations made in the Preliminary Bat Roost Assessment (RT-MME-154365-02) must be adhered to.

R5 **Nesting Birds:** Vegetation and building clearance should be undertaken outside the nesting bird season. The nesting bird season is weather dependent but generally extends between March and September inclusive (peak period March-August). If this is not possible then the vegetation and buildings to be removed or disturbed should be checked by an experienced ecologist for nesting birds immediately prior to works commencing. If birds are found to be nesting any works which may affect them should be delayed until the young have fledged and the nest has been abandoned naturally, for example via the implementation of an appropriate buffer zone (species dependent) around the nest in which no disturbance is permitted until the nest is no longer in use.

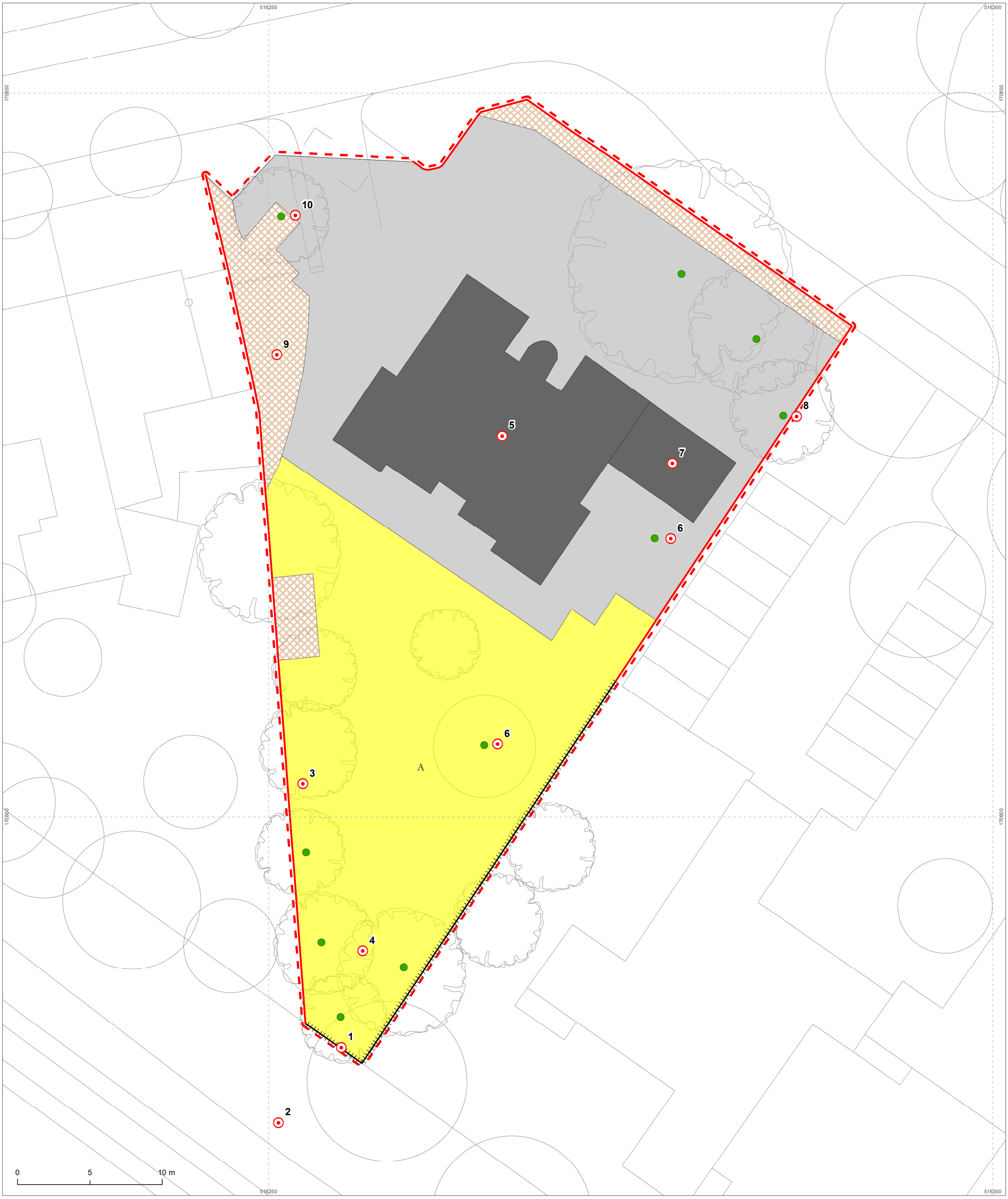
R6 **Badger and Hedgehog:** Any excavations that need to be left overnight should be covered or fitted with mammal ramps to ensure that any animals that enter can safely escape. Any open pipework with an outside diameter of greater than 120 mm must be covered at the end of each work day to prevent animals entering/becoming trapped.

7.4 INVASIVE PLANT SPECIES

No recommendations are made with regard to invasive plant species.

8. DRAWINGS

Drawing C154365-01– Phase 1 Habitat Map



Legend

- Site boundary
- Scattered tree
- Fence
- Wall
- A — Amenity grassland
- Building
- Hardstanding
- Introduced shrub

Target note

1 Mammal push-through
2 Railway embankment
3 Ferns on brick wall
4 Ring-necked parakeets nesting
5 Building with bat roosting features
6 Tree to be removed
7 Garages with bat roosting features
8 Mature beech tree
9 Shrub border
10 Silver birch tree

Project	Sheldon House, Cromwell Road, Teddington, Greater London
Drawing	Phase 1 Habitat Map
Client	Clive Chapman Architects
Drawing Number	C154365-01
Revision	00
Scale @ A3	1:250
Date	March 2021
Approved By	MS
Drawn By	VO

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N

C154365-01

9. PHOTOGRAPHS

Plate 9.1: Amenity grassland and scattered trees in the south of the site

Plate 9.2: Amenity grassland, scattered trees and hardstanding in the south of the site

Plate 9.3: Flat block at the centre of the survey area with scattered trees and brick wall boundary

Plate 9.4: Garage terrace adjacent to the flat block

Plate 9.5: Small patch of introduced shrub in north-west adjacent to carpark

Plate 9.6: Small patch of introduced shrub in north-west adjacent to carpark

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APPENDICES

APPENDIX 1: Summary of Statutory Nature Conservation Sites

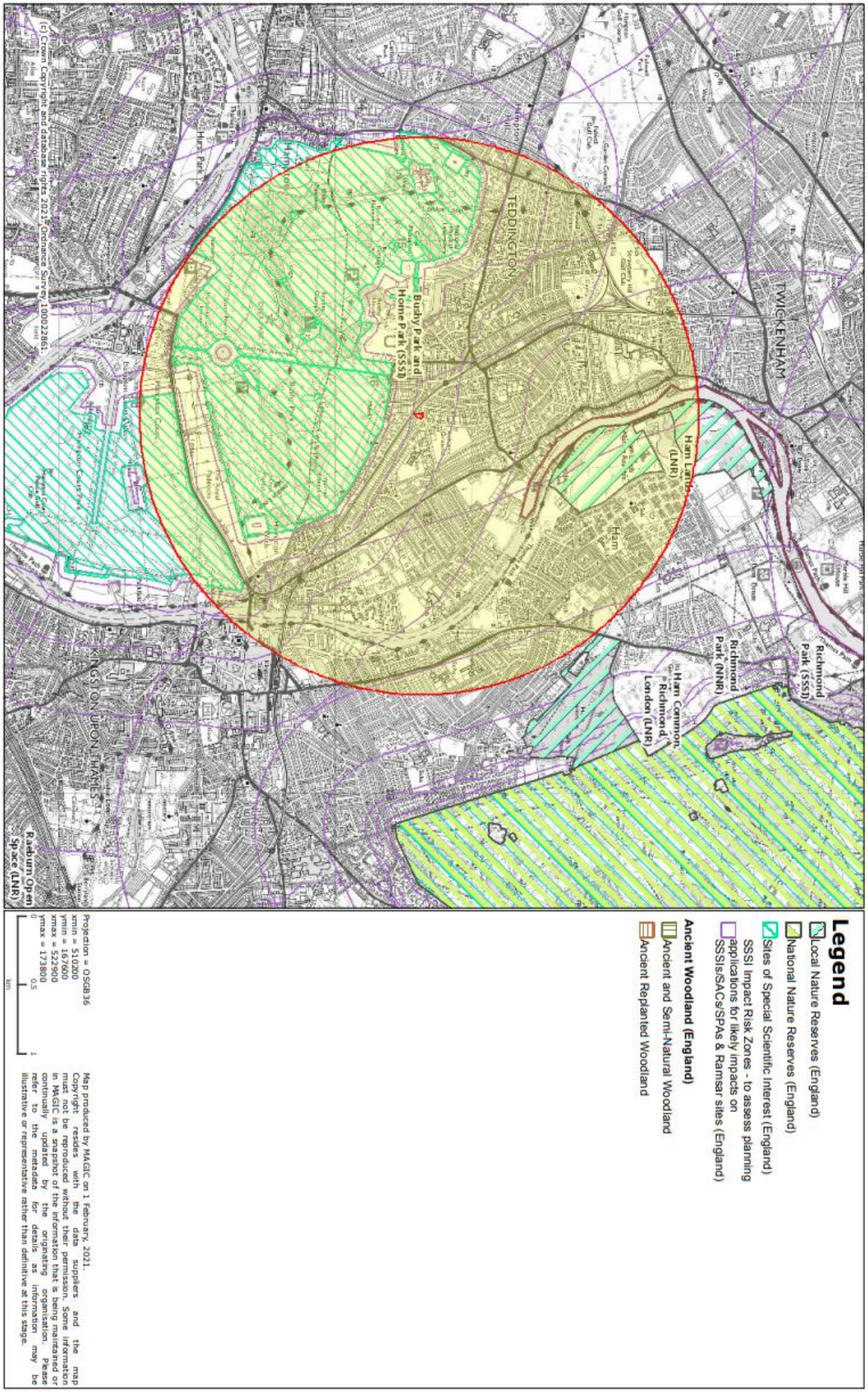
APPENDIX 2: Overview of Relevant Species Specific Legislation

APPENDIX 1

Summary of Statutory Nature Conservation Sites

MAGIC

UK Statutory Sites within a 2 km Radius



MAGIC

EU Statutory Sites Within a 5 km Radius

Site Check Results: UK

Local Nature Reserves (England)

Reference
1008934
Name
HAM LANDS
Hectares
60.01
Hyperlink
https://designatedsites.naturalengland.org.uk/SiteLNRDetail.aspx?SiteCode=L1008934

Ancient Woodland (England)

No Features found

National Nature Reserves (England)

No Features found

Sites of Special Scientific Interest (England)

Name
Bushy Park and Home Park SSSI
Reference
1477753
Natural England Contact
Conservation Delivery Team
Natural England Phone Number
0845 600 3078
Hectares
540.39
Citation
2000738
Hyperlink
http://designatedsites.naturalengland.org.uk/SiteDetail.aspx?SiteCode=s2000738

Site Check Report Report generated on Mon Feb 01 2021
You selected the location: Centroid Grid Ref: TQ16267061
The following features have been found in your search area:

SSSI Impact Risk Zones - to assess planning applications for likely impacts on SSSIs/SACs/SPAs & Ramsar sites (England)

1. DOES PLANNING PROPOSAL FALL INTO ONE OR MORE OF THE CATEGORIES BELOW?
2. IF YES, CHECK THE CORRESPONDING DESCRIPTION(S) BELOW. LPA SHOULD CONSULT NATURAL ENGLAND ON LIKELY RISKS FROM THE FOLLOWING:
All Planning Applications
Infrastructure
Airports, helipads and other aviation proposals.
Wind & Solar Energy
Minerals, Oil & Gas
Planning applications for quarries, including: new proposals, Review of Minerals Permissions (ROMP), extensions, variations to conditions etc. Oil & gas exploration/extraction.
Rural Non Residential
Residential
Rural Residential
Air Pollution
Any development that could cause AIR POLLUTION (incl: industrial/commercial processes, livestock & poultry units, slurry lagoons/manure stores).
Combustion
All general combustion processes. Incl: energy from waste incineration, other incineration, landfill gas generation plant, pyrolysis/gasification, anaerobic digestion, sewage treatment works, other incineration/ combustion.
Waste
Mechanical and biological waste treatment, inert landfill, non-hazardous landfill, hazardous landfill, household civic amenity recycling facilities construction, demolition and excavation waste, other waste management.
Composting
Any composting proposal. Incl: open windrow composting, in-vessel composting, anaerobic digestion, other waste management.
Discharges
Any discharge of water or liquid waste of more than 20m³/day to ground (ie to seep away) or to surface water, such as a beck or stream.
Water Supply
Notes 1

Notes 2
GUIDANCE - How to use the Impact Risk Zones
/Metadata_for_magic/SSSI IRZ User Guidance MAGIC.pdf

Site Check Results: European

Ramsar Sites (England)
Name
SOUTH WEST LONDON WATERBODIES
Reference
UK11065
Hectares
830.26

Special Areas of Conservation (England)
Name
RICHMOND PARK
Reference
UK0030246
Hectares
846.43
Hyperlink
http://jncc.defra.gov.uk/protectedsites/sacselection/sac.asp?eucode=UK0030246

Special Protection Areas (England)
Name
SOUTH WEST LONDON WATERBODIES
Reference
UK9012171
Hectares
830.26

Proposed Ramsar Sites (England)
No Features found

Possible Special Areas of Conservation (England)
No Features found

Potential Special Protection Areas (England)
No Features found

APPENDIX 2

Overview of Relevant Species Specific Legislation

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

- To intentionally or recklessly interfere with a sett. Sett interference includes disturbing badgers whilst they are occupying a sett, as well as damaging or destroying a sett or obstructing access to it.

- To wilfully kill, injure, take, possess or cruelly ill-treat a badger, or to attempt to do so.

A badger sett is defined in the legislation as:

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

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

Badger sett interference can result from a multitude of operations including excavation and coring, even if there is no direct damage to the sett, such as through the disturbance of badgers whilst occupying the sett. Any intentional or reckless work that results in the interference of badger setts is illegal without a licence from Natural England[30]. In England a licence must be obtained from Natural England before any interference with a badger sett occurs.

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

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.

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.

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.

Stag beetle

The stag beetle is in decline globally. It is listed on Annex II of the European Communities Council Directive on the Conservation of Natural Habitats and Wild Fauna and Flora (a list of animal and plant species of community interest whose conservation requires the designation of Special Areas of Conservation). Stag beetle also receives protection under Schedule 5 of the Wildlife and Countryside Act 1981, as amended, making the following activities illegal: selling, offering for sale, processing or transporting for purpose of sale, or advertising for sale, any live or dead animal, or any part of, or anything derived from, such animal. Stag beetle is also listed as a Species of Principal Importance for Nature Conservation in England and a priority species on the London BAP.