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## **Preliminary Ecological Appraisal and Ecological Enhancement Statement**

Independence House  
Richmond  
London  
TW9 2HS

**October 2023**  
**Revision A**

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<b>1.</b>	<b>EXECUTIVE SUMMARY</b>	<b>4</b>
<b>2.</b>	<b>INTRODUCTION AND BACKGROUND</b>	<b>5</b>
	Background	5
<b>3.</b>	<b>LEGISLATION &amp; POLICY</b>	<b>7</b>
	General Wildlife Legislation	7
	Bat Legislation	7
	National Planning Policy	8
	Local Planning Policy	10
<b>4.</b>	<b>METHODOLOGY</b>	<b>16</b>
	Desk Study	16
	Habitat Walkover Survey	16
	Building Inspection	17
	Limitations	18
<b>5.</b>	<b>SURVEY RESULTS</b>	<b>19</b>
	Desk Study	19
	Habitat Walkover Survey	20
	Building Inspection	22
<b>6.</b>	<b>IMPACT ASSESSMENT</b>	<b>27</b>
	Designated Sites	27
	Habitats	27
	Protected Species	27
<b>7.</b>	<b>ENHANCEMENTS</b>	<b>30</b>
	Green Roof	30
	Bats	30
	Bird Boxes	31
	Invertebrate Features	31
<b>8.</b>	<b>REFERENCES</b>	<b>33</b>
	<b>APPENDICES</b>	<b>35</b>

<b>QUALITY CONTROL</b>		
The information which we have prepared and provided is true, and has been prepared and provided in accordance with the Chartered Institute of Ecology and Environmental Management's Code of Professional Conduct.		
Prepared by	Licensed Ecologist Libby Pinches BSc (Hons)	28.09.23
Approved by	Principal Ecologist Olatz Gartzia BSc MSc ACIEEM	29.09.23
Revision A by	Licensed Ecologist Libby Pinches BSc (Hons)	19.10.23
<p>This report remains valid for 12 months from date of issue.</p> <p>Survey data are valid for 12-18 months from the date the survey was undertaken.</p>		

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This report has been prepared for the sole use of the client. Any third party referring to this report or relying on the information contained herein, does so entirely at their own risk.

Whilst every effort has been made to guarantee the accuracy of this report, it should be noted that living creatures are capable of migration and whilst protected species may not have been located during the survey duration, their presence may be found on site at a later date.

The views and opinions contained within the document are based on a reasonable timeframe between the completion of the survey and the commencement of any works. If there is any delay between the commencement of works that may conflict with timeframes laid out within this document, or have the potential to allow the ingress of protected species, a suitably qualified ecologist should be consulted.

It is the duty of care of the landowner/developer to act responsibly and comply with current environmental legislation if protected species are suspected or found prior to works.

## 1. EXECUTIVE SUMMARY

- 1.1. Darwin Ecology Ltd was commissioned by Wimshurst Pelleriti Ltd. to undertake a Preliminary Ecological Appraisal (PEA) and Ecological Enhancement Statement of proposals for the buildings and habitats at Independence House, Richmond, London, TW9 2HS. The assessment was required to support a planning application for the conversion of the current office building into 21 residential units. This assessment was informed by a desk study, habitat walkover survey, and internal / external building inspection.
- 1.2. The habitat walkover survey identified that the site is only comprised of compacted hardstanding and does not support any protected species.
- 1.3. During the building inspection the building was found to have **negligible potential** to support roosting bats due to a lack of suitable void space and crevice dwelling opportunities externally.
- 1.4. Therefore, proposed plans will not directly impact any bat roosts and works can proceed without precautionary measures.
- 1.5. **In the unlikely event that a bat is discovered during the works, all works must cease and a bat licence ecologist contacted for advice.**
- 1.6. The proposed plans include green roofs and ornamental planters. The addition of these habitats and features to the site will increase the ecological value of the site. The proposals will also enhance the site in the long term for protected species including bats, birds and invertebrates through wildlife friendly planting and installation of bat and bird boxes and bee bricks.

## 2. INTRODUCTION AND BACKGROUND

### Background

- 2.1. Darwin Ecology Ltd was commissioned by Wimshurst Pelleriti Ltd. to undertake a PEA and Ecological Enhancement Statement of proposals for the buildings and habitats at Independence House, Richmond, London, TW9 2HS<sup>1</sup>. The assessment was required to support a planning application for the conversion of the current office building into 21 residential units. This assessment was informed by a desk study, habitat walkover survey, and internal / external building inspection.
- 2.2. The proposed drawings on which this assessment is based are provided at **Appendix 1, Proposed Plans**.
- 2.3. The internal / external building inspection followed the Bat Conservation Trust (BCT) Good Practice Guidelines (2016) and the habitat walkover survey followed the Chartered Institute for Ecological and Environmental Management (CIEEM) Guidelines for PEA (2017).
- 2.4. The subsequent Ecological Impact Assessment (EclA) follows the CIEEM Guidelines for EclA in the UK and Ireland (2018).

### Site Overview

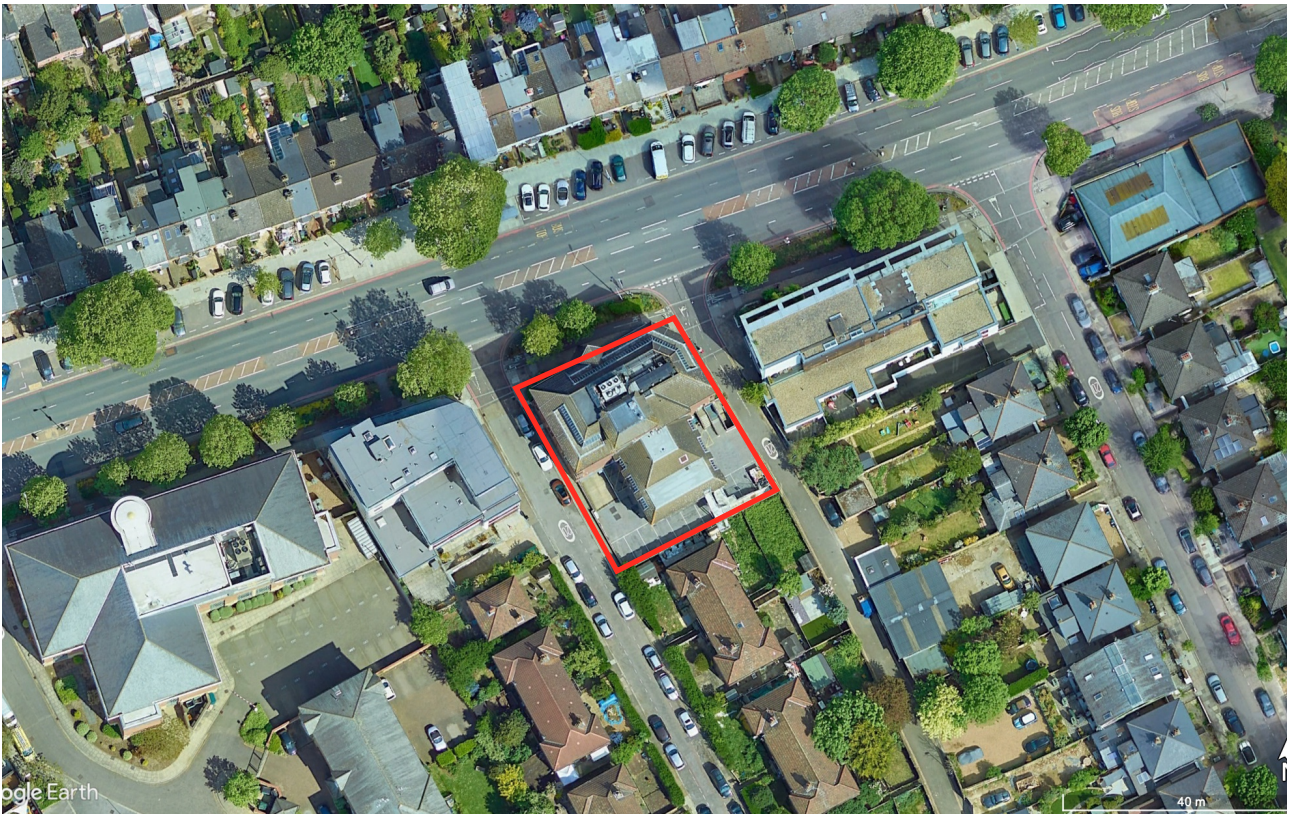
- 2.5. The site is a commercial property comprising a large office building surrounded by concrete hardstanding with a basement car park. It is situated in a developed area and is immediately surrounded by other commercial properties as well as residential properties with associated amenity gardens (see **Figure 1**).
- 2.6. The wider landscape is further developed with commercial and residential properties in all directions with little open green space. 285m northwest, at its closest point, the landscape opens up into recreational grassland including Old Deer Park Sports Ground, Richmond Athletic Park and Royal Mid-Surrey Golf Club with the River Thames just beyond. 530m north of the site begins Royal Botanic Gardens, Kew which comprises an expansive area of grassland and woodland with several large waterbodies. In addition, Richmond Park is located 1.18km south of the site (see **Figure 2**).

### Scope of Assessment

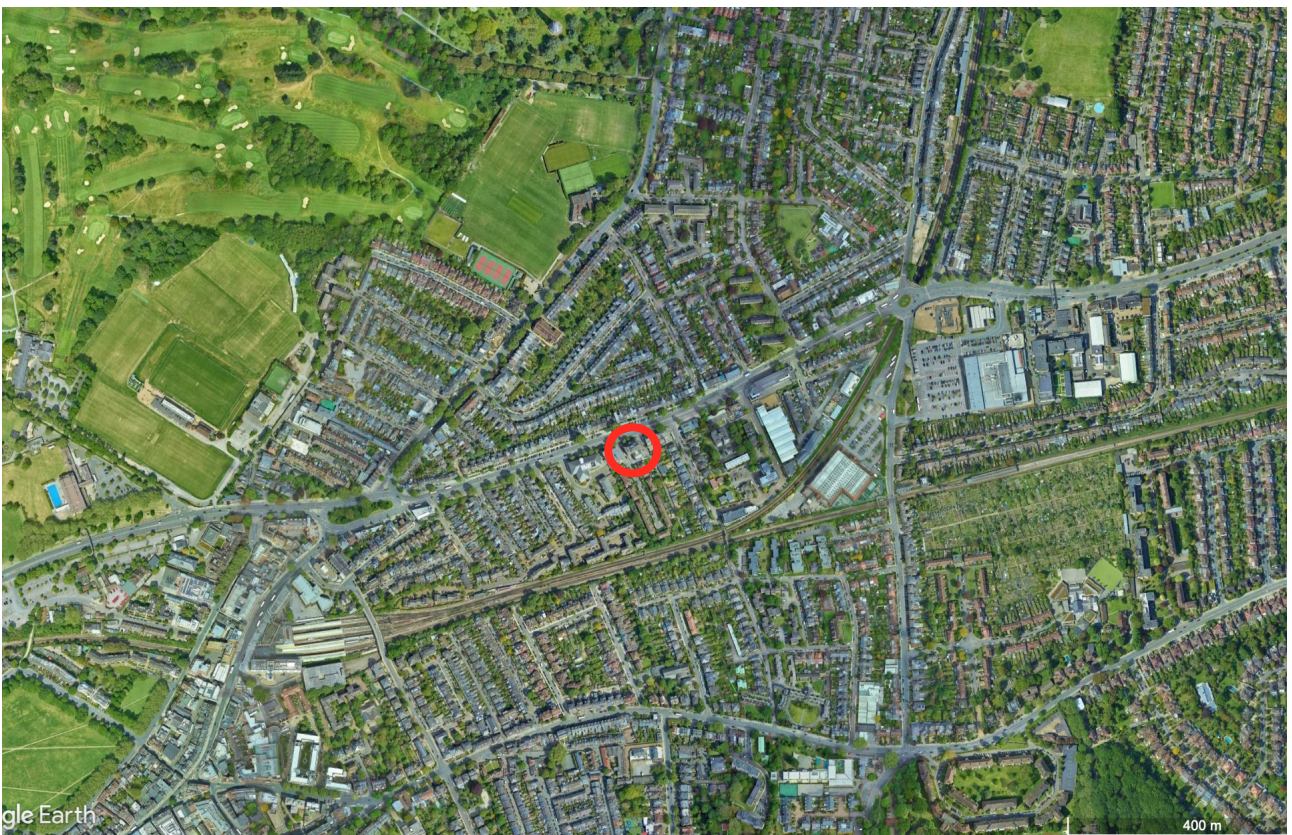
- 2.7. The process of an EclA aims to identify, quantify and evaluate the potential effects of development-related or other proposed actions on habitats, species and ecosystems.
- 2.8. Potential effects on the following ecologically sensitive receptors have been considered during the EclA of Independence House:
  - Statutory designated sites; and
  - On-site habitats of intrinsic importance (such as buildings or discrete habitat features).

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<sup>1</sup> Ordnance Survey (OS) Grid Reference: TQ 18601 75463



**Figure 1:** Site location within the wider landscape (Copyright Google Earth Maps, 2023)



**Figure 2:** Site location within the wider landscape (Copyright Google Earth Maps, 2023)

### 3. LEGISLATION & POLICY

#### General Wildlife Legislation

- 3.1. Wildlife in the United Kingdom (UK) is protected through European and national legislation, supported by national and local policy and guidance. Development can contribute to conservation and enhancement goals outlined by these various legislation and policy by retaining and protecting the most valuable ecological features within a site and incorporating enhancements to provide biodiversity net gain.
- 3.2. This section provides a brief summary of the principle legalisation and policy that triggers the requirement for preliminary and further ecological assessments in the UK. The presence of protected species within a site are a material consideration during the planning process. Preliminary and any necessary further ecological assessments provide an ecological baseline for a site and evaluation of the potential impact of proposals.
- 3.3. It is the responsibility of those involved with development works to ensure that the relevant legislation is complied with at every stage of a project. Such legislation applies even in the absence of related planning conditions or projects outside the scope of the usual planning process (i.e. permitted development projects or projects requiring Listed Building Consent only).

#### Bat Legislation

- 3.4. In England and Wales, all bat species and their roosts are legally protected under the European *Habitats Directive (1992)*; the *Conservation of Habitats and Species Regulations (2017)*; the *Wildlife and Countryside Act (1981) (as amended)*; the *Countryside and Rights of Way Act, 2000*; and the *Natural Environment and Rural Communities Act (NERC, 2006)*.
- 3.5. Barbastelle (*Barbastella barbastellus*), Bechstein's (*Myotis bechsteinii*), greater horseshoe (*Rhinolophus ferrumequinum*), lesser horseshoe (*Rhinolophus hipposideros*), brown long-eared (*Plecotus auritus*), soprano pipistrelle (*Pipistrellus pygmaeus*), and noctule (*Nyctalus noctula*) bats are all species of principal importance in England under *Section 41* of the *Natural Environment and Rural Communities Act 2006*.
- 3.6. You will be committing a criminal offence if you:
  - Deliberately capture, injure or kill a bat;
  - Intentionally or recklessly disturb a bat in its roost or deliberately disturb a group of bats;
  - Damage or destroy a bat roosting place (even if bats are not occupying the roost at the time);
  - Possess or advertise/sell/exchange a bat (dead or alive) or any part of a bat; or
  - Intentionally or recklessly obstruct access to a bat roost.

- 3.7. The government's statutory conservation advisory organisation, Natural England, is responsible for administering European Protected Species licences that permit activities that would otherwise lead to an offence.
- 3.8. A licence can be obtained if the following three tests have been met:
- Regulation 53(9)(a) - there is "no satisfactory alternative" to the derogation, and;
  - Regulation 53(9)(b) - the derogation "will not be detrimental to the maintenance of the population of the species concerned at a favourable conservation status in their natural range" and;
  - Regulation 53(2)(e) - the derogation is for the purposes of "preserving public health or public safety or other imperative reasons of overriding public interest, including those of a social or economic nature and beneficial consequences of primary importance for the environment".

### **National Planning Policy**

- 3.9. The *National Planning Policy Framework (2021)* aims to minimise impacts on biodiversity and provide net gains in biodiversity where possible, contributing to the Government's commitment to halt the overall decline in biodiversity. Chapter 15 'Conserving and enhancing the natural environment' details what local planning policies should seek to consider with regard to planning applications.
- 3.10. Planning policies and decisions should contribute to and enhance the natural and local environment by:
- 174 a) Protecting and enhancing valued landscapes, sites of biodiversity or geological value and soils (in a manner commensurate with their statutory status or identified quality in the development plan);
  - 174 b) Recognising the intrinsic character and beauty of the countryside, and the wider benefits from natural capital and ecosystem services – including the economic and other benefits of the best and most versatile agricultural land, and of trees and woodland;
  - 174 d) Minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures;
  - 175) Plans should: distinguish between the hierarchy of international, national and local designated sites; allocate land with the least environmental or amenity value, where consistent with other policies in this Framework; take a strategic approach to maintaining and enhancing networks of habitats and green infrastructure; and plan for the enhancement



of natural capital at a catchment or landscape scale across local authority boundaries;

176) Great weight should be given to conserving and enhancing landscape and scenic beauty in National Parks, the Broads and Areas of Outstanding Natural beauty which have the highest status of protection in relation to these issues. The conservation and enhancement of wildlife and cultural heritage are also important considerations in these areas, and should be given great weight in National Parks and Broads. The scale and extent of development within all these designated areas should be limited, while development within their settings should be sensitively located and designed to avoid or minimize adverse impacts on the designated area.

3.11. Specific policies regarding habitats and biodiversity comprise:

179) To protect and enhance biodiversity and geodiversity, plans should:

- a) identify, map and safeguard components of local wildlife-rich habitats and wider ecological networks, including the hierarchy of international, national and locally designated sites of importance for biodiversity, wildlife corridors and stepping stones that connect them; and areas identified by national and local partnerships for habitat management, enhancement, restoration or creation and
- b) promote the conservation, restoration and enhancement of priority habitats, ecological networks and the protection and recovery of priority species and identify and pursue opportunities for securing measurable net gains for biodiversity.

180) When determining planning applications, local planning authorities should apply the following principles:

- a) if significant harm to biodiversity resulting from a development cannot be avoid (through locating on an alternative site with less harmful impacts), adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused;
- b) development on land within or outside of Sites of Special Scientific Interest, and which is likely to have an adverse effect on it (either individually or in combination with other developments), should not normally be permitted. The only exception is where the benefits of the development in the location proposed clearly outweigh both its likely impact on the feature of the site that make it of special scientific interest, and any broader impacts on the national network of Sites of Special Scientific Interest;

c) development resulting in the loss or deterioration of irreplaceable habitats (such as ancient woodland and ancient or veteran trees) should be refused, unless there are wholly exceptional reasons and a suitable compensation strategy exists; and

d) development whose primary objective is to conserve or enhance biodiversity should be supported; while opportunities to improve biodiversity in and around development should be integrated as part of their design, especially where this can secure measurable net gains for biodiversity or enhance public access to nature where this is appropriate.

### **Local Planning Policy**

3.12. The local planning policy for the site is the London Borough of Richmond upon Thames Local Plan which sets out policies and guidance for the development of the borough from 2018 to 2033. Relevant policies comprise:

#### *Policy LP 9 - Floodlighting*

Floodlighting, including alterations and extensions, of sports pitches, courts and historic and other architectural features will be permitted unless there is demonstrable harm to character, biodiversity or amenity and living conditions. The following criteria will be taken into account when assessing floodlighting:

- The impacts on local character or historic integrity;
- The impacts on amenity and living conditions;
- The impacts on biodiversity and wildlife;
- The benefits and impacts of the provision of floodlighting on the wider community;
- The benefits and effects on the use and viability of the facility;
- That it meets an identified need as set out within the council's playing pitch strategy; Favourable consideration will be given to the replacement or improvement of existing lighting where it provides improvements to existing adverse impacts.

#### *Policy LP - 10 Local Environmental Impacts, Pollution and Land Contamination*

Light Pollution - the Council will seek to ensure that artificial lighting in new developments does not lead to unacceptable impacts by requiring the following, where necessary:

- An assessment of any new lighting and its impact upon any receptors;
- Mitigation measures, including the type and positioning of light sources;
- Promotion of good lighting design and use of new technologies.

*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:

- 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;
- Supporting enhancements to biodiversity;
- 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;
- Ensuring new biodiversity features or habitats connect to the wider ecological and green infrastructure networks and complement surrounding habitats;
- Enhancing wildlife corridors for the movement of species, including river corridors, where opportunities arise; and
- 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:

- Firstly be avoided (the applicant has to demonstrate that there is no alternative site with less harmful impacts),
- Secondly be adequately mitigated; or
- As a last resort, appropriately compensated for.

*Policy LP 16 - Trees, Woodlands and Landscapes*

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:

Trees and Woodlands

- 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;
- 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;
- 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);
- 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; and
- require that trees are adequately protected throughout the course of development, in accordance with British Standard 5837.

#### Landscape

- require the retention of important existing landscape features where practicable;
- Require landscape design and materials to be of high quality and compatible with the surrounding landscape and character; and
- 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*

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.

- 3.13. The London Plan is also relevant to the site and sees out an integrated economic, environmental, transport, and social framework for the development of London over the next 20-25 years. Relevant policies include:

*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:
  - i. identify key green infrastructure assets, their function and their potential function
  - ii. identify opportunities for addressing environmental and social challenges through strategic green infrastructure interventions.
- C. 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 a number of factors which are laid out in the Plan, but tailored to local circumstances. In the interim, the Mayor recommends a target score of 0.4 for developments that are predominately residential, and a target score of 0.3 for predominately commercial development (excluding B2 and B8 uses).
- C. Existing green cover retained on site should count towards developments meeting the interim target scores set out in (B) based on the factors laid out in the Plan.

*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:
  - i. use up-to-date information about the natural environment and the relevant procedures to identify SINCs and ecological corridors to identify coherent ecological networks;
  - ii. 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;
  - iii. support the protection and conservation of priority species and habitats that sit outside the SINC network, and promote opportunities for enhancing them using Biodiversity Action Plans;
  - iv. seek opportunities to create other habitats, or features such as artificial nest sites, that are of particular relevance and benefit in an urban context; and
  - v. 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:
  - i. avoid damaging the significant ecological features of the site;
  - ii. minimise the overall spatial impact and mitigate it by improving the quality or management of the rest of the site; and
  - iii. 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

**London Borough of Richmond upon Thames Biodiversity Action Plan**

- 3.14. This Local Biodiversity Action Plan (BAP) for the London Borough of Richmond upon Thames sets out the framework for the protection, conservation and enhancement of wildlife within the borough. Through its implementation, the plan protects and manages habitats and species of national, regional or local significance, or those that are in the Red Data Books and on the Red Lists. It is also used by Richmond Council's Planning Department to ensure the impact of new developments and changes to existing developments are minimised to the species and habitats featured in the BAP.

3.15. The main aims of this Richmond upon Thames Biodiversity Action Plan are:

- To conserve and enhance the variety of habitats and species in the London Borough of Richmond upon Thames, in particular those which are of international or national importance, are in decline locally, are characteristic to the borough and/or have particular public appeal, which can raise the profile of biodiversity.
- To ensure that Richmond upon Thames' residents become aware of, and are given the opportunity to become involved in, conserving and enhancing the biodiversity around them.
- To raise awareness and increase stakeholder involvement in maintaining and, where possible, enhancing species and habitats of importance.

## 4. METHODOLOGY

### Desk Study

- 4.1. A desk study was undertaken for designated sites and bat species and habitat records within 2km of the site:
- The MagicMap website was reviewed, to obtain information on any designated sites of nature conservation interest within 2km of the site and details of any EPS licences issued within 1km (extended to 2km for bats);
  - The London Borough of Richmond upon Thames Planning Application Portal was searched for past and pending planning applications that may have associated ecological documents detailing results of bat surveys; and
  - Google Maps and OS Leisure Maps was utilised to view aerial photographs and maps to assess the ecological context of the site within the wider landscape.

### Habitat Walkover Survey

- 4.2. A habitat survey was conducted by Licensed Ecologist Libby Pinches BSc (Hons)<sup>2</sup> on 17th July 2023.
- 4.3. The survey assessed habitats present within the application red line boundary for their potential to support protected species, including:
- Bats;
  - Great crested newt (*Triturus cristatus*) and common amphibians;
  - Reptiles;
  - Other terrestrial mammals, including hedgehog (*Erinaceus europaeus*) and badger (*Meles meles*);
  - Breeding birds; and
  - Invertebrates.
- 4.4. As there is no running water within the site, in combination with their nationally sparse distribution, it is considered highly unlikely that white clawed crayfish (*Austropotamobius pallipes*) would be using the site and they are therefore not considered further in this report.
- 4.5. Otters (*Lutra lutra*) and water voles (*Arvicola amphibious*) are not considered further in this report due to the lack of running water on site and within the wider area. The site also does not offer any suitable habitat for these species.
- 4.6. Dormouse (*Muscardinus avellanarius*) is also not considered further in this report due to the intensely developed land use of the wider area and the lack of any woodland connected to the site.

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<sup>2</sup> Class 1 Bat Licence: 2023-11491-CL17-BAT



- 4.7. The site was also searched for non-native, invasive plant species, with particular care to search for the most commonly occurring and problematic species, such as Japanese knotweed (*Fallopia japonica*), Indian balsam (*Impatiens grandiflora*) and giant hogweed (*Heracleum mantegesianum*).

### Building Inspection

- 4.8. Libby Pinches conducted a internal / external building inspection at the site at Independence House on 17th July 2023 in accordance with the following methodology:

#### *External Survey*

- 4.9. An investigation was carried out of external features with potential for use by roosting bats, such as gaps under roof and ridge tiles, gaps at soffit boxes or fascias. A search for bat droppings was made beneath each potential entry/exit point identified where accessible. The surveyor used binoculars and powerful, low-heat LED torch.

#### *Internal Survey*

- 4.10. An investigation was carried out of the roof voids (including the floor and walls) for signs of bats roosting and the access potential into the roof void for bats. The surveyor looked for bats, bat droppings, likely access points, signs of feeding, dead bats, scratch marks and staining, and made a suitability assessment of the structure of the roof.

#### *Potential to support roosting bats*

- 4.11. Each barn was assessed for its potential to support roosting bats as detailed in **Table 1** below which is taken from the Bat Conservation Trust 2016 guidelines Table 4.1 and Table 7.3.

**Table 1:** Roost Classification from the Bat Conservation Trust (2016) guidelines.

Category	Description of Roosting habitat
Negligible	Negligible habitat features on site likely to be used by roosting bats.
Low	A structure with one or more potential roost sites that could be used by individual bats opportunistically. However, these potential roost sites do not provide enough space, protection, appropriate conditions and or suitable surrounding habitat to be used on a regular basis by large numbers of bats.
Moderate	A structure with one or more potential roost sites that could be used by bats due to their size, shelter, protection, condition and surrounding habitat but unlikely to support a roost of high conservation status.
High	A structure with one or more potential roost sites that are obviously suitable for use by a larger number of bats on a more regular basis and potentially for longer periods of time due to their size, shelter, protection, conditions and surrounding habitat.

## Limitations

- 4.12. The surveyor had full access to the external and internal areas of the property.
- 4.13. Ecological surveys are limited by factors that affect the presence of plants and animals such as the time of the year, weather, migration patterns. The survey was undertaken in July and therefore represents a valid sample of ecological evidence present on that date/season. The report is not designed, nor is it required to present a completed inventory of flora/fauna.
- 4.14. This report remains valid for 2 years from the date of the survey, however, a walkover survey within this period may be required to demonstrate whether or not the habitats have remained as described.
- 4.15. The desk study does not include data from the local environmental records centre (LERC). However, following CIEEM guidelines (2017) it is possible to conduct a robust assessment without the need for LERC data, for example for small-scale projects or on sites such as;
- a field in active arable cultivation where there is no impact on any hedges, trees or water bodies;
  - small areas of cultivated garden/amenity grassland, as above; or
  - small urban sites comprising mostly asphalt or compacted hardstanding.
- 4.16. The site is a small urban site which only comprises compacted hardstanding and buildings. Therefore the lack of LERC data is not considered a limitation to the ecological assessment of the site.

## 5. SURVEY RESULTS

### Desk Study

- 5.1. There are five statutory designated sites identified on MagicMap within 2km of the site which are comprised of a Local Nature Reserve (LNR), a National Nature Reserve (NNR), two Sites of Special Scientific Interest (SSSI), and a Special Area of Conservation (SAC).
- 5.2. A summary of these sites can be found below in **Table 2**.

**Table 2:** Statutory designated sites within 2km of the site at Independence House.

Designated sites	Name and designation type	Reason for designation	Approximate distance from site
<b>Within Site Boundaries</b>	There are no designated sites within the site boundaries		
<b>Within 2km of Site</b>	Isleworth Ait LNR	A 3.5 hectare island in the River Thames comprising mixed wet woodland which is rarely visited by humans. It supports populations of tree creeper <i>Certhia familiaris</i> , kingfisher <i>Alcedo atthis</i> and grey heron <i>Ardea cinerea</i> as well as several rare beetles and two rare species of mollusc; the two-lipped door snail <i>Alinda biplicata</i> and the German hairy snail <i>Pseudotrachia rubiginosa</i>	1.84km west
	Richmond Park NNR	London's largest NNR originally created for deer hunting. Comprises woodland, wetland, meadows, and acid grassland as well as 25 ponds. Wildlife records in the park include 144 bird species, 29 butterfly species, and 11 bat species as well as a population of stag beetle <i>Lucanus cervus</i> .	1.19km south
	Richmond Park SSSI	Richmond Park has been managed as a royal deer park since the 17th 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. In addition the Park supports the most extensive area of dry acid grassland in Greater London.	1.19km south
	Richmond Park SAC	Designated primarily for the populations of stag beetle.	1.19km south
	Syon Park SSI	This site is the only known area of tall grass washland along the Thames in Greater London. The wet grassland grades into drier semi-improved grassland with damp woodland along the fringes. It contains several invertebrate species with a restricted distribution, both locally and nationally.	1.45km northwest

- 5.3. A search of the London Borough of Richmond upon Thames Planning Portal did not identify any relevant ecological documents associated with planning application within 1km of the site and in the last three years.

- 5.4. There are several areas of priority deciduous woodland site within 1km of the site with the nearest located 350m north. All areas of woodland are also registered on the National Forest Inventory 2020 (Woodland - Broadleaved).
- 5.5. Further priority habitats within 1km of the site comprise a large area of woodpasture and parkland BAP located approximately 265m northwest of the site and a large area of good quality semi-improved grassland, located approximately 460m northwest. There are no areas of ancient woodland within 1 km of the application site.

### Habitat Walkover Survey

- 5.6. There are no natural habitats within the site. The site is comprised of primarily concrete hardstanding and buildings, though there are some overgrown ornamental planters along the northern elevation (see **Figure 3**). These planters consist of *Cotoneaster sp.*, firethorn *Pyracantha sp.*, ivy *Hedera helix*, box *Buxus sempervirens*, Japanese aralia *Fatsia japonica*, and *Sorbaria sp.* Some self-seeded butterfly bush *Buddleja davidii* plants were growing through the concrete at its edges.

### HABITAT WALKOVER SURVEY PHOTOGRAPHS




**Images 1 and 2:** The site is entirely made up of hardstanding. Some butterfly bushes have grown through the concrete.



**Image 3:** Overgrown ornamental planting at the front of the building.




\*NOTE Areas are indicative and are not shown to exact scale.

 Site Boundary

 Building

 Ornamental Planting

 Fence

 Hardstanding



**Project:** Independence House

**Figure 3:** Habitat Map

**Date:** September 2023

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## Protected Species

### *Bats*

- 5.7. There are three records of EPS licences for licensable works impacting bats within 2km of the application site:
- EPS licence (2016-27025-EPS-MIT) for the damage of a resting place for common pipistrelle *Pipistrellus pipistrellus*, soprano pipistrelle and serotine *Eptesicus serotinus*, approximately 560m north.
  - EPS licence (2015-9916-EPS-MIT) for the destruction of resting place for soprano pipistrelle, approximately 1.1km north.
  - EPS licence (2019-42630-EPS-MIT) for the destruction of breeding site and resting place for soprano pipistrelle, approximately 1.6km northeast.
- 5.8. There were no trees within the site which would offer suitable roosting opportunities or foraging habitats. The hardstanding has no value for bats and there are no linear features suitable for commuting routes.

### Building Inspection

#### *External Assessment*

- 5.9. The building at Independence House is a former office building. It is a three-storey building of brick construction with a two-storey extension to the south and a basement car park. The roof is covered in large concrete roof and ridge tiles which are very well sealed and no lifting was observed across the roof. There are areas of flat roof which are of cement construct. Lead flashing is present around the edges of these flat roofs and is mostly flat. There is some lifting around window frames which present potential roosting opportunities but this are ultimately unsuitable for bats due to being against metal window frames. A plastic soffit box is present around the building which appeared in good condition and no gaps were observed.

#### *Internal Assessment*

- 5.10. Within the flat roofed two-storey extension there is no distinct loft void and no suitable void roosting opportunities were observed elsewhere.
- 5.11. Within the main three-storey area of the building, one crawl space and one void space were identified. A lift shaft runs through the building and is open from the void space. There is also a basement car park.
- 5.12. The crawl space is located on the second floor and measures 1m wide, 5m long and 1m to the apex. It has a metal frame and breeze block ends. No light ingress was present and no access points were identified. This space is unaccessible to bats and also unsuitable for roosting.

- 5.13. The void space is at the top of the building and measures 6m wide, 7m long and 3m high. It has a timber frame with bitumen felt lining to the tiles on the sloped sections of roof whilst timber sarking is present on the flat area of roof. The northern elevation is open to an area of flat roof though a mesh netting covers this opening. Whilst it is possible for bats to enter this space however the simple timber frame does not offer suitable roosting opportunities. The space is also very draughty due to the opening.
- 5.14. There is a lift shaft present in the building which is open at the top in the void. The shaft is made of concrete and in good condition so does not present any crevice roosting opportunities.
- 5.15. The basement car park measures 25m long, 15m wide, and 5m in height. There are some small rooms in this space for building management and the stairwell and lift. The ceiling of the basement is rough concrete and is wavy in construct. The space is very cool and light ingress comes from some vents to the road level which are covered in wire grating as well as around the entrance door to the car park which is a garage style door with small gaps around its sides.

## BUILDING INSPECTION PHOTOGRAPHS



**Image 4:** A view of the northwest corner of the building.



**Image 5:** A view of the south and west elevations of the building.



**Image 6:** A view of the east elevation of the building.



**Image 7:** A view of the south and east elevations of the building.



**Image 8:** The roof tiles present are large concrete tiles with no lifting and the soffit boxes are in good condition with no gaps.



**Image 9:** Lead flashing is present around the flat roof of the extension. It is mostly flat but there are some gaps around the metal window frame though this is unsuitable for roosting.





**Image 10:** A view of the second floor of the extension. There is no void present in the extension.



**Image 11:** There is a small crawl space on the second floor.



**Image 12:** There is a void space in the main section of the building which has an open side with mesh covering.



**Image 13:** One of the lift shafts present is open from the top floor void space but has no roosting opportunities.



**Image 14:** One of the lift shafts present is open from the top floor void space but has no roosting opportunities.



**Image 15:** View of the basement car park.

*Great crested newt and common amphibians*

- 5.16. There are no EPS licences, Great Crested Newt Pond Survey 2017 - 2019 and licence returns recorded on Magic Map for works impacting great crested newts within 1 km of the site.
- 5.17. There are no ponds on site or within 500m of the site. The hardstanding does not offer any value to great crested newt and common amphibians.
- 5.18. Due to the lack of waterbodies and suitable habitat in combination with the site's location in a very urbanised area, it is considered highly unlikely that great crested newt and common amphibians would be present on site. Therefore, these species are not considered further in this report.

*Reptiles*

- 5.19. The hardstanding does not offer any value to reptiles.
- 5.20. Due to the lack of suitable habitat in combination with the site's location in a very urbanised area, it is considered highly unlikely that reptiles would be present on site. Therefore, these species are not considered further in this report.

*Terrestrial mammals*

- 5.21. No signs of badger activity e.g. latrines, snuffle holes, or sett entrances were recorded on site during the survey or within 30m of the site boundary.
- 5.22. The hardstanding does not offer any value to terrestrial mammals. Hedgehog and badger can be found in urban environments provided there is connectivity through the greener spaces including amenity gardens. The adjacent gardens to the site all have fence boundaries and as such it is unlikely that these species are present.

*Birds*

- 5.23. It appeared that pigeons *Columba palumbus* had been nesting within the main void space of the building. The building otherwise offered little nesting opportunities due to lack of sheltered crevices.
- 5.24. The hardstanding does not offer any value to breeding birds as there are no nesting opportunities present.

*Invertebrates*

- 5.25. The hardstanding does not offer any value to invertebrates due to the lack of plant species. The butterfly bush present may be attractive to invertebrates but is non-native and low in value.

## 6. IMPACT ASSESSMENT

### Designated Sites

- 6.1. It is not anticipated that the proposed works will impact any statutory designated sites, priority habitats or ancient woodlands through land-take. The resulting increase in footfall from the new residences has the potential to cause impacts on surrounding designated sites, green spaces and wildlife sites through increased footfall.
- 6.2. The site is located within Impact Risk Zones (IRZ), relating to Richmond Park SSSI and Syon Park SSSI, which apply restrictions to quarries, industrial/agricultural development, pipelines and underground cables, landfill, large infrastructure, and any applications outside of existing settlements which affect greenspace etc. However the proposed works do not come under any description which would require the local planning authority to consult Natural England.

### Habitats

#### *Status on Site*

- 6.3. The site comprises only hardstanding which is of negligible ecological value. There are no trees on site.

#### *Potential Impacts*

- 6.4. The proposals will not result in the loss of any ecological value within the site.

#### *Recommendations*

- 6.5. The plans include creating green roofs on the existing building and installing raised planters. This will enhance the ecology of the site as it will introduce vegetation to the site where there has previously only been hardstanding. If well designed, created and managed the green roofs can also benefit protected species, primarily invertebrates. Native species will be used in the planting schemes to maximise biodiversity. Species which offer nectar, pollen and seeds will be chosen to benefit local invertebrates and birds.

### Protected Species

#### Bats

##### *Status of Bats on Site*

- 6.6. The buildings on site have been assessed to offer **negligible potential** to support bat roosting.

##### *Potential Impacts*

- 6.7. The proposed plans to convert the existing building will not result in the destruction of a bat roost.

### *Recommendations*

- 6.8. **In the unlikely event that a bat is discovered during the works, all works must cease and a bat licensed ecologist contacted for advice.**
- 6.9. *Lighting:* Any new external lighting must be directed to avoid light spillage onto vegetation, particularly linear habitat features such as woodland edges or potential roosting sites within trees and buildings. Bats are sensitive to light and could potentially avoid the area if access points or the surrounding areas become lit. Appropriate lighting options will prevent a negative impact on bats potentially using the habitats on site and should be approved by a suitably qualified and licensed bat ecologist. If appropriate measures are taken to reduce light spillage from the development, it is likely that there will be no negative impacts on local bat populations. See **Appendix 2** for further information on designing lighting to minimise impacts on bats.

### **Terrestrial Mammals**

#### *Status of Terrestrial Mammals on Site*

- 6.10. The site does not support any terrestrial mammals but there is a small chance that small urban mammals such as hedgehog could access the site during works.

#### *Potential Impacts*

- 6.11. The works will not result in the loss of any suitable terrestrial mammal habitat. If badger or hedgehog are able to access the site during proposed works, they may be injured due to the destructive activity or trapped in any excavations.

#### *Recommendations*

- 6.12. General mitigation measures are considered sufficient to protect terrestrial mammals during demolition and construction works within the application area. In particular any excavations should be covered or protected overnight to prevent entrapment. Ramps should also be placed in any excavations to provide a way out if any animals do become entrapped.

### **Birds**

#### *Status of Birds on Site*

- 6.13. Pigeons appear to nest on the building. There are otherwise no nesting opportunities due to the lack of trees and crevices on the building.

#### *Potential Impacts*

- 6.14. The works will not result in the loss of any suitable bird habitat. Nesting pigeons may be disturbed by the works. However, the creation of a green roof will benefit this species and many other urban bird species in the long term.

## **Invertebrates**

### *Status of Invertebrates on Site*

6.15. The site has no ecological value for invertebrates.

### *Potential Impacts*

6.16. The works will not result in the loss of any suitable invertebrate habitat. The creation of a green roof will benefit invertebrates.

## 7. ENHANCEMENTS

7.1. National planning policy states that all developments should seek to enhance onsite biodiversity whether impacts on protected species are recorded or not. Incorporating enhancement features into new or renovated buildings should be carefully considered. These features can be simple and inexpensive, please see below for specific recommendations.

7.2. The proposed development will include the following enhancements which are illustrated in **Figure 4**:

### **Green Roof**

7.3. The proposed green roofs will greatly increase the ecological value of the site as they will introduce vegetation where there has previously only been hardstanding. Features and practices to create ecologically beneficial green roofs include:

- Use a variety of substrates in addition to soil e.g. sand, crushed concrete, and shingle;
- Create different depths of the substrate to encourage structurally diverse vegetation. Where soil is thin not many plants will grow which creates the bare earth which is vital for so many invertebrates. Where the substrate is thicker, wildflowers will grow. Undulations will create small localised changes to the micro-climate due to varying exposure to sun, wind and rain;
- Keep the coverage of sedum species to less than 30% as whilst they can help establish other species on a green roof, they can reduce the species diversity;
- Choose locally appropriate plant species which cater for a range of invertebrates. Example species include ox-eye daisy, hawkbit, yarrow, white dead nettle, red clover, bird's foot trefoil, common vetch;
- Include deadwood piles as they are important for many invertebrates. Care should be taken over how much weight is on the roof;
- Create south-facing mounds of sand to provide sand banks for bees; and
- Remove any unwanted species that start to grow, in particular butterfly bush.

### **Bats**

7.4. To increase the roosting opportunities for bats in the area, four integrated bat boxes from Bird Brick Houses Ltd will be retrofitted into the existing brick facade on the south, east and west elevations. Bat boxes should be installed at a height of at least 4m, preferably on a southern un-cluttered aspect with good connectivity to linear features such as other mature trees and hedgerows. The location should be determined by a licensed bat ecologist to ensure likelihood of repeated use is increased.

**Bird Boxes**

- 7.5. To increase nesting opportunities for birds, integrated bird boxes from Bird Brick Houses Ltd will be retrofitted into the existing brick facade on all elevations. This brand produces standard boxes, sparrow terrace boxes, swift boxes, and starling boxes. Two of each type of box will be installed on the building. Bird boxes should be installed at least 4 m from ground level and with unobstructed air space in front.

**Invertebrate Features**

- 7.6. In addition, specific features such as bee bricks and bug hotels can be incorporated into the proposal to increase the value of the site for invertebrates. It is recommended that four bee bricks and two bug hotels be created on site. The bee bricks can be retrofitted into the existing brick facade near to the green roofs and small bug hotels can be created on the green roofs out of bricks, plant pot, tiles and vegetation cuttings. See **Appendix 3** for further detail.

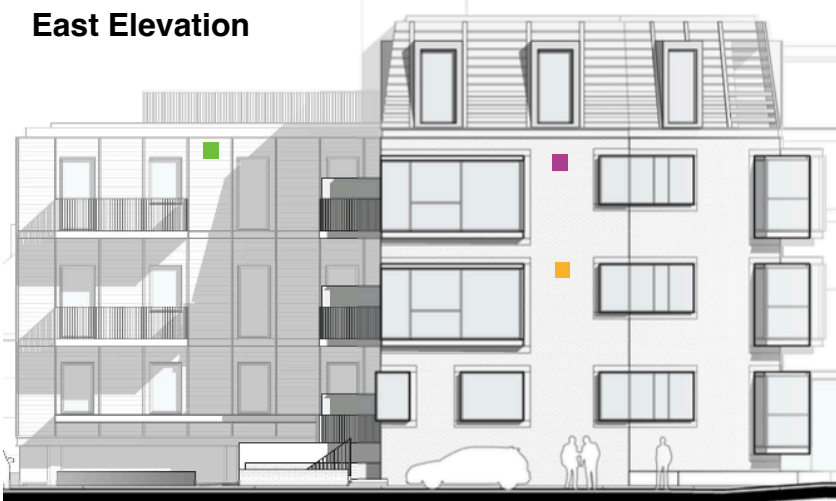
North Elevation



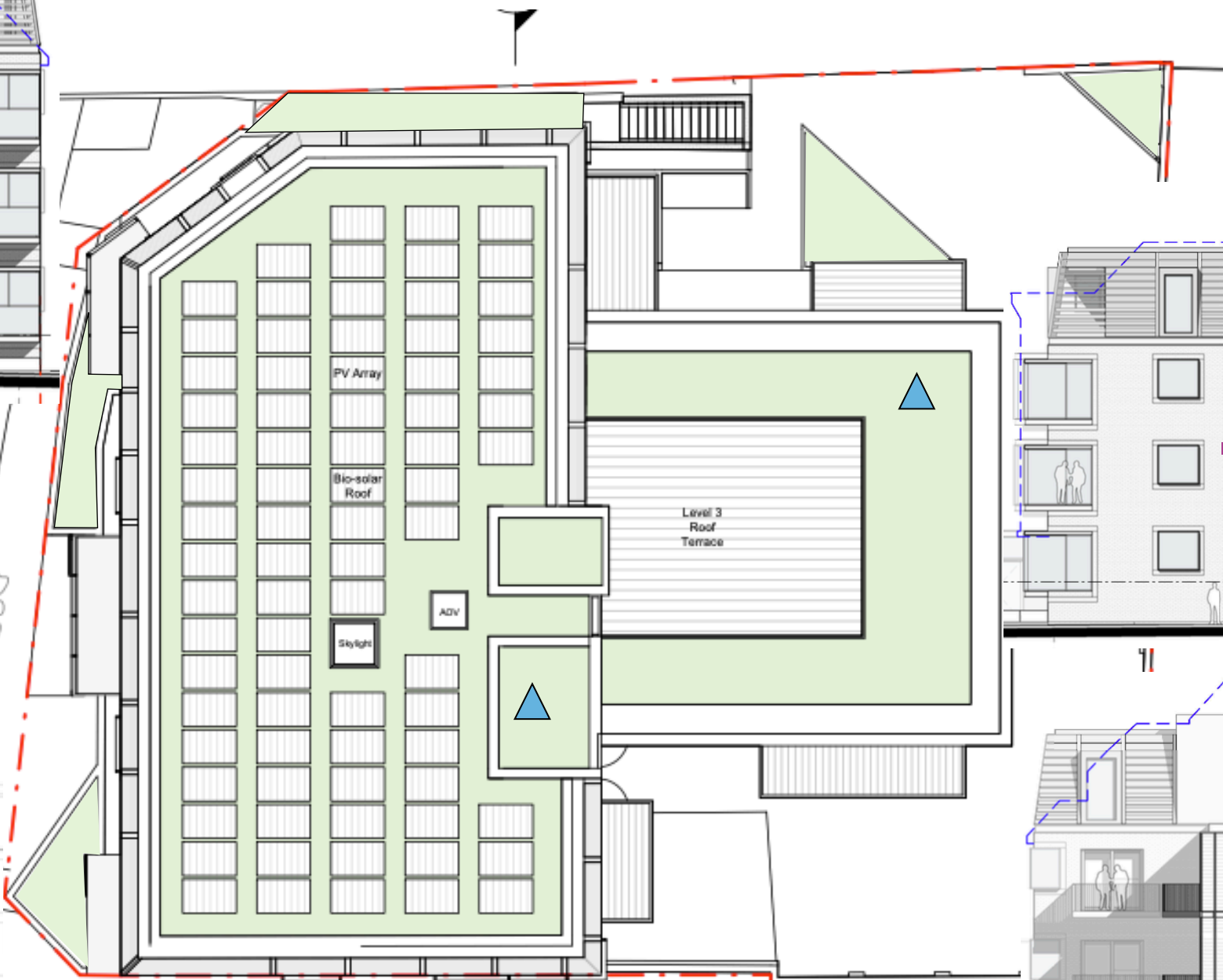
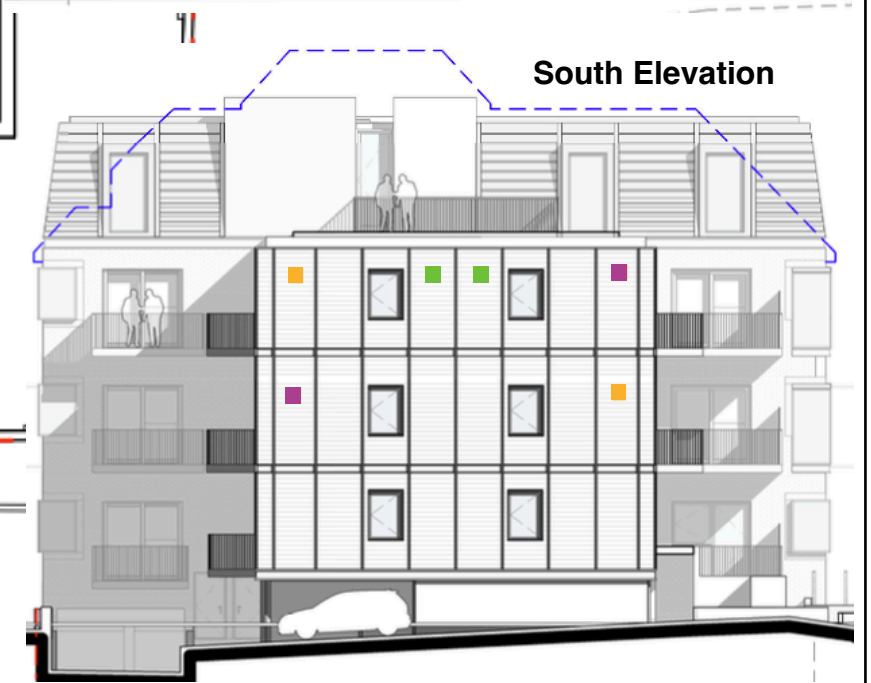
West Elevation



East Elevation



South Elevation



\*NOTE Areas are indicative and are not shown to exact scale.

Plans provided by Wimshurst Pelleriti



X 8 Integrated Bird Boxes



X 2 Bug Hotels



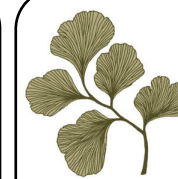
Biodiverse Green Roof/Planting



X 4 Integrated Bat Boxes



X 4 Bee Bricks



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integrating nature conservation

Project: Independence House

Figure 4: Enhancement Strategy

Date: October 2023

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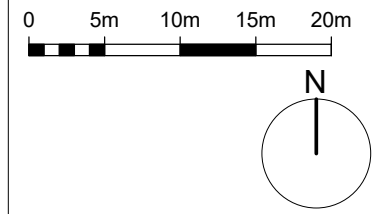
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## **APPENDICES**



**DRAFT**

A 16/08/23 Draft Issue

Revision	Date	Description
A	16/08/23	Draft Issue

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The sizing of all structural service elements must always be checked against the relevant engineers drawings. No reliance should be placed upon information shown on the drawing.

project  
Independence House

drawing title  
Proposed Site Plan

drawing number WPA-0810-0100	revision A
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scale @ A3 1 : 500	first issue date 09/04/17
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drawing purpose  
SKETCH

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## THE IMPACT OF LIGHTING ON BATS

Bats favour a dark environment for both roosting and foraging as they are adapted to low-light conditions. Artificial lighting will disturb bats if the lighting covers roost access points, flight paths or foraging habitats.

The main peak of nocturnal insect abundance occurs at dusk and a delay in emergence results in a lower foraging rate for bats.

Artificial lighting creates a 'vacuum effect' for nocturnal insects. During the night nocturnal insects use the light of the moon\* to navigate. However, artificial lighting and even sky glow above cities obscures the natural moonlight as it is closer

and radiates light in multiple directions.

Some species of bats have been recorded foraging around street lights such as Pipistrelle species and Nyctalus species. However, species that are less tolerant of artificial light are at a disadvantage when foraging as insects are drawn away from these species usual foraging grounds into the zones of artificial light.

Lighting must be considered in context to any development as increased lighting may cause roost abandonment, reduced reproductive success, and reduced foraging. Mitigation to reduce the impacts of lighting for bats is therefore of great importance in bat conservation.

Table 1: Summary of predicted impact of lighting for each species/genus

Impact	High	Medium	Low
Behaviour			
Maternity roost	All species	-	-
Night roost	<i>Rhinolophus hipposideros</i> <i>Rhinolophus ferrumequinum</i> <i>Myotis</i> spp. <i>Plecotus</i> spp.	<i>Pipistrellus</i> spp. <i>Nyctalus</i> spp. <i>Eptesicus serotinus</i> <i>Barbastella barbastellus</i>	-
Emergence	All species	-	-
Foraging	<i>Rhinolophus hipposideros</i> <i>Rhinolophus ferrumequinum</i> <i>Myotis</i> spp. <i>Plecotus</i> spp.	-	<i>Pipistrellus</i> spp. <i>Nyctalus</i> spp. <i>Eptesicus serotinus</i> <i>Barbastella barbastellus</i>
Commuting	<i>Rhinolophus hipposideros</i> <i>Rhinolophus ferrumequinum</i> <i>Myotis</i> spp. <i>Plecotus</i> spp.	-	<i>Pipistrellus</i> spp. <i>Nyctalus</i> spp. <i>Eptesicus serotinus</i> <i>Barbastella barbastellus</i>
Swarming	All species	-	-
Hibernation	All species	-	-

\*For more information see Warrant, E., and Dacke, M. (2016) Visual Navigation in Nocturnal insects. *Physiology*, 31, 182-196.

Sources of light that can disturb bats include; light spill via windows, sport floodlighting, car headlights, roadside lighting, security lighting, aesthetic lighting of waterways, and aesthetic illumination of buildings. Glare will affect bats over greater distance than the target area directly illuminated.

Avoidance is the most effective method, but if this is not possible the following measures should be considered.

### What lighting should I use?

- Low pressure sodium lights or 'warm' LEDs
- Wavelength above 540nm
- Colour temperature below 2700K
- Shielded lights that prevent light spill above a 70 degree angle
- Passive infrared (PIR) motion sensors



### What to avoid:

- Lighting roost entrances, flightpaths, and foraging or commuting routes
- Reflective surfaces beneath lighting
- High level lights
- Non-directional lighting

Lighting should be considered at an early stage allowing impacts to be minimised through the design of the site.

### Key Points

- Keep lighting intensity to the minimum level required
- Limit the times that lights are on to provide some dark periods (e.g. switching installations off between midnight and 5am)
- Dim lighting according to demand
- As an alternative to lighting pathways use paving materials that reflect moonlight
- Low level lighting allows darkness to be retained within higher vegetation
- Set dark habitat buffers - lighting should always be a minimum of 25m from vegetated margins and 40m from waterbodies
- Incorporate dark corridors within the site
- Compensate for the loss of dark areas by enhancing other dark areas
- Consider building design - install internal lighting away from windows



## Insect boxes and bug hotels



The provision of insect boxes and bug hotels provide a valuable resource for invertebrates, providing suitable nesting habitat for important native pollinators such as mason bees and leafcutter bees. They can also provide opportunities for a wide range of species to shelter and over-winter during the colder months.

Bug hotels are highly adaptable, and are therefore suitable for almost all developments and habitats. They can be made easily from a range of waste and plant materials, and more specialist items such as bee bricks can be purchased in order to target specific species.



Image: RSPB

### Bug Hotel

These are easily implemented in almost any situation as bug hotels can be made from a range of materials, such as bricks, plant pots, tree cuttings, logs and broken tiles.

Bug hotels can also be adapted to benefit specific species, such as bees, woodlice, and ladybirds.

Other terrestrial species such as hedgehogs, reptiles and amphibians can also benefit from sheltering in a bug hotel.



### Insect boxes

A range of prefabricated insect boxes such as the Green & Black Bee Brick (left) and the Woodstone Insect Box (above) are available and can be incorporated into or onto buildings or on trees to provide nesting habitats for a range of solitary bee species.