Ecological Appraisal

151 Shaftesbury Avenue

Royal London Mutual Insurance Society Limited

30 May 2024

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Author:	Tanishia Gearing
Checker:	Chris Birch
Approver:	Chris Birch
HM Project No:	32099

HM Office:

The Hub
Fowler Avenue
Farnborough Business Park
Hampshire
GU14 7JF

T: +44 (0)1252 550 500
hilsonmoran.com
@HilsonMoran
hilson_moran
Hilson Moran

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Contents

1. Executive Summary

The ecological appraisal provides an assessment of the constraints and opportunities for the site, establishing a baseline through desk-based study and a walkover survey and identification of enhancement delivery and potential for additional opportunities through review of the architectural and landscaping proposals.

The baseline environment has been established, based on the findings of a desk study and a walkover survey as part of this ecological appraisal. This ensures any ecological features assessed at the site are deemed up to date.

The ecological appraisal identifies a range of mitigation measures that should be implemented through the Construction Phase, including implementation of appropriate ecological training through the site induction and toolbox talk processes and the completion and recording of monitoring undertaken on site. Mitigation consideration is also highlighted for the detailed design stages, such as consideration of lighting provision. The appraisal also reviews the landscaping proposals to identify their potential to deliver biodiversity enhancement to the site and local.

The site was assessed to have 0 baseline habitat units, which means it is not possible for a net gain score to be calculated, however the site has achieved the trading standards. The BREEAM Ecological Change Calculator assessed the site to achieved a post-development score of 105%.

The assessment identifies the BREEAM Refurbishment and Fitout 2014 credit achievement potential for the development:

BREEAM LE02- Protection of Ecological Features: 1 credit of 1 available

- The protection of ecological features within the site and surrounding area are protected during the clearance and fitout phases. Owing to the lack of ecological features on the site, this credit is met.

BREEAM LE03: Not Applicable

BREEAM LE04- Enhancing Site Ecology: potential for 1 credits of 2 available:

- A professional was appointed at an appropriate time to advise on the development and report on enhancing and protecting ecological value, provided in this Ecological Appraisal Report;
- Recommendations of ecological enhancements were issued within the report and discussions of incorporation into the design have occurred.

BREEAM LE05: potential for 2 credits of 2 available:

- Provisional input that should be included within a Landscape and Ecology Management Plan has been provided and recommendations made to ensure compliance with legislative requirements and for attainment of additional requirements.

- To ensure the attainment of maximum credits available to the development, recommendations made in this appraisal should be fully understood and implemented in the construction phase and continued landscaping and lighting design.

2. Introduction

2.1. Background

Hilson Moran has been commissioned by Royal London Mutual Insurance Society Limited (RLMID Ltd) to complete an ecological appraisal of Shaftesbury House at 151 Shaftesbury Ave, London (National Grid Reference TQ 30010 81188). The location is identified in Figure 2-1.

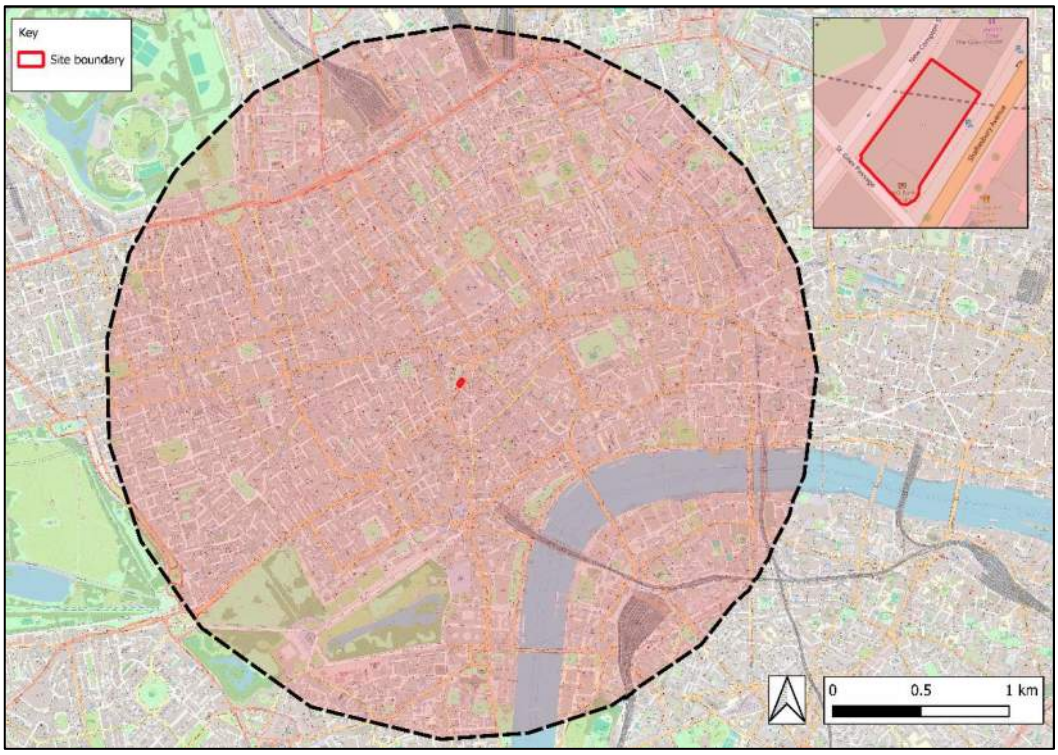

Figure 2-1 151 Shaftesbury Avenue Site Location (Contains Ordnance Survey data © Crown copyright and database right 2022)

The proposed development comprises complete refurbishment, retention and extension to optimise office floor space delivery and provide excellent sustainability credentials. In addition to work to the facades, the ground floor would be transformed and activated, enlivening this stretch of Shaftesbury Avenue.

The proposed works would revitalise the existing building and enhance the quality of the existing workspaces for all of the buildings occupiers. The proposed development would transform the existing arrival and entrance experience, providing high quality Grade A workspace with enhanced cycling and shower facilities.

The proposed works for which planning permission is being sought include the following key project benefits:

- A re-branded sustainable building achieved via retrofit and extension. The vast majority of the existing structure is reused, reducing the extent of demolition;

- Deliver a new massing that serves to reactivate this portion of Shaftesbury Avenue;
- Deliver high quality Grade A workspaces, providing modern flexible and adaptable floorplates;
- New façade treatments and high performance glazing to improve energy performance and rationalise and enhance the appearance of the building whilst being respectful of adjacent conservation areas and Listed Buildings;
- Adopting up-to-date fire engineering principles in design and construction for the new scheme;
- Provide modern all electric energy with new efficient MEP services and roof plant, including photo-voltaics;
- Provide enhanced amenity to encourage cycling;
- Increase the external communal and private roof garden spaces alongside providing green roofs to raise urban greening and for increased biodiversity;
- Reactivating the ground and lower ground floors, interfacing with the public realm, creating an active frontage and enlivening the street scene; and
- Attract additional footfall and high-quality occupiers to the area to support local businesses and add vitality.

2.2. Purpose

The purpose of this ecological appraisal is to confirm the achievement potential of the proposed development within BREEAM Refurbishment and Fitout 2014 and ensure recommendations required to meet credit requirements are identified and to support the application through the planning process and determination period. This will be completed through a review of existing ecological information, including that submitted for planning and any post-planning work associated with planning conditions, and updated to ensure these reflect current conditions.

2.3. Scope

The ecological appraisal has been prepared for the planning application and BREEAM assessment of 151 Shaftesbury Avenue, identified in Figure 2-2.

Figure 2-2 151 Shaftesbury Avenue Boundary and Development Area

2.4. Structure

Following this introductory section, a brief overview of the relevant legislation and planning policy framework is given in Section 3. Section 4 summarises the methodology applied in the ecological appraisal and Section 4 details the baseline in biodiversity terms based on the findings of the desk-study and field survey. Section 5 presents a discussion of the potential implications from the development upon biodiversity features present and recommendations for mitigation, with landscaping proposals and the enhancement of biodiversity presented in Section 6. Provisional input into a Landscape and Ecology Management Plan, comprising the long-term recommendations for management of features of biodiversity value, are included in Section 7 with Section 8 providing a Summary and Conclusions.

Appendices and references can be found at the end of the document, with document control information included at the front.

2.5. Declaration of Conformity

The appraisal has been carried out by Tanishia Gearing, MRes BSc CIEEM, with 3 years of professional ecological experience. Tanishia holds a Qualifying membership of the Chartered Institute of Ecology and Environmental Management (CIEEM) and, as such, is considered to be a suitable qualified ecologist.

I confirm that the field survey and reporting has been completed in accordance with best practice principles outlined by CIEEM and is an accurate and realistic assessment of site conditions and potential enhancement works. The report complies with the CIEEM Code of Conduct, British Standard 42020 and BREEAM criteria.

2.6. Disclaimer

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3. Legislative and Policy Context

This report has been prepared with due regard and consideration to applicable legislation and national and local planning policy. Detailed information regarding these documents is provided in Appendix A.

3.1. Legislation

Legislative protection is afforded to a range of sites, habitats and species through a number of national statutes. The principal means by which features of biodiversity interest are protected are:

- The Environment Act 2021[1];
- The Conservation of Habitats and Species Regulations 2017 (as amended)[2];
- The Wildlife and Countryside Act 1981 (as amended)[3];
- The Countryside and Rights of Way (CRoW) Act 2000[4]; and,
- The Natural Environment and Rural Communities (NERC) Act 2006[5].

The various national legislative statutes, including those identified above, provide protection to a range of ecologically significant sites and species. The legislative protection for the different sites and different species varies according to their sensitivity, rarity and the scale at which they are intrinsically valuable. Those of relevance to this assessment including: Local Nature Reserve (LNR), breeding birds, bats and plant species. Full details of the legislative protection for these sites and species are listed in Appendix A.

Additional sites of ecological importance can be identified by the local authority, such as Sites of Borough Importance for Nature Conservation, however these are not statutorily protected.

The Environment Act 2021 makes provision for targets, plans and policies for improving the natural environment. Section 98 in Part 6 of the Act makes provision for biodiversity gain to be a condition of planning permission, with Schedule 14 identifying the objective being at least 10 % when comparing the post-development site to the pre-development site. However, as planning permission was granted for the development prior to the being passed into statute, and completion of the transitional period of 2 years, it is not considered relevant for this appraisal.

3.2. Planning Policy

3.2.1. National

The National Planning Policy Framework (NPPF)[6] sets out policies which will apply to the preparation of local plans, and to development management decisions. The framework sets out the Government's economic, environmental and social planning policies for England. Taken together, these policies articulate the Government's vision of sustainable development, which should be interpreted and applied locally to meet local aspirations.

The NPPF is supported by planning practice guidance[7], which provides further information on key issues in the implementation of policies identified in the NPPF. Further information on the NPPF and supporting planning practice guidance are given in Appendix A.

3.2.2. Metropolitan

The London Plan[8] is the strategic planning document for London, produced by the Greater London Authority (GLA), setting out an integrated economic, environmental, transport and social framework for the development of London over 20 – 25 years. The London Plan requires all Borough development plans to be in general conformity with it.

Relevant policies within the current London Plan include:

- Policy D7 Public Realm;
- Policy G1 Green Infrastructure;
- Policy G3 Metropolitan Open Land;
- Policy G4 Open Space;
- Policy G5 Urban Greening;
- Policy G6 Biodiversity and Access to Nature; and,
- Policy G7 Trees and Woodland.

3.2.3. Local

Local planning policy for Camden is derived from the Camden Local Plan[9], which was adopted in July 2017. The Camden Local Plan sets out the council's strategic objectives and policies for planning in the Camden district, helping to create conditions to harness the benefits of economic growth, reducing inequality and securing sustainable neighbourhoods.

The vision of the Local Plan is to "make Camden a better borough- a place where everyone has a chance to *succeed and where nobody gets left behind. A place that works for everyone*". The vision is supported by three key objectives, which are:

1. Developing new solutions with partners to reduce inequality and improve health and wellbeing.
2. Creating conditions for and harnessing the benefits of economic growth.
3. Investing in our communities to ensure sustainable neighbourhoods.

The plan includes a number of policies of relevance to the development, biodiversity and nature conservation, which are:

- Policy A1- Managing the impact of development.
- Policy A2- Open Space.
- Policy A3- Biodiversity.
- Policy A4- Noise and Vibration.

3.3. Biodiversity Action Plans

3.3.1. National

The UK BAP has been replaced by the Post-2010 Biodiversity Framework[10], which addresses the changes in the strategic thinking of the Convention on Biological Diversity's Strategic Plan for Biodiversity 2011 – 2020. The new Framework includes new priorities for UK-level work for the convention on Biological Diversity and provides a broad structure to enable action across the UK.

Whilst the BAP has been replaced, the UK priority habitat and species continue to be regarded as conservation priorities in the UK Post-2010 Biodiversity Framework[11].

The UK BAP identifies 65 habitats and 1,150 species that are considered to be of conservation concern.

3.3.2. Metropolitan

The London BAP[12] was prepared by the London Biodiversity Partnership to protect and enhance London's biodiversity. The Plan aimed to ensure that rare species are maintained and that common species remain common, and so contribute to the maintenance of national and global biodiversity. It also aimed to enable the local community to be in contact with nature, especially those that do not have ways to access the countryside.

Although the London Biodiversity Partnership has been disbanded as a result of a lack of funding, regional and organisational delivery of the Plan continues and the aims of the Plan remain relevant.

In order to achieve the aims of the Plan, the BAP identified a number of habitat and species of nature conservation importance taking into account the UK BAP, and targets and actions have been set up to be implemented for their enhancement.

The London BAP identified 15 priority habitats and 214 priority species. A number of Habitat Action Plans and Species Action Plans have been developed, including some important habitats identified for which no action plans have been developed. Those habitats and species of particular note for the assessment include:

Habitats	**Species**
Parks and Urban Greenspaces	Bats
Built Structures	House sparrow (*Passer domesticus*)
Private Gardens	Black redstart (*Phoenicurus ochruros*)
	Dunnock (*Prunella modularis*)
	Peregrine (*Falco peregrinus*)
	Song thrush (*Turdus philomelos*)
	Spotted flycatcher (*Muscicapa striata*)

	Starling (*Sturnus vulgaris*)
	Hedgehog (*Erinaceus europaeus*)

3.3.3. Local

The Camden Biodiversity Strategy[13] provides a strategic focus to ensure species and habitats are understood and considered throughout the decision-making process, and directly supports the overall aim of the Camden Council's Local Planning Policy to shape the local environment. The BAP provides a framework to ensure all legislative requirements and regional and national targets for protecting, conserving and enhancing biodiversity are met at a local level.

In order to achieve the aims of the Plan, the BAP identified a number of habitat and species of nature conservation importance taking into account the UK BAP, and targets and actions have been set up to be implemented for their enhancement.

The Biodiversity Strategy identities BAP identifies eight priority habitats and nine priority species

Habitats	**Species**
Woodland (native broadleaved)	Bats (*Chiroptera sp.*)
Meadows and Pastures	House sparrow (*Passer domesticus*)
Standing water (including canals)	Black redstart (*Phoenicurus ochruros*)
Acid Grassland	Dunnock (*Prunella modularis*)
Reedbed	Peregrine (*Falco peregrinus*)
Heathland	Song thrush (*Turdus philomelos*)
Rivers and Streams	Hedgehog (*Erinaceus europaeus*)
Orchards	Toads (*Bufonidae sp.*)
	Stag beetles (*Lucanidae sp.*)

4. Methodology

4.1. British Standard 42020: Biodiversity- Code of Practice for Planning and Development

This ecological appraisal and reporting has been completed in line with, and with reference to, British Standard (BS) 42020: Biodiversity- Code of Practice For Planning and Development14. BS 42020 was developed to bridge the gap between specific best practice guidelines and professional Codes of Conduct and build upon relevant legislation and policy relating to biodiversity.

BS 42020 provides a framework for the assessment of biodiversity and recommendations for the content and detail of reporting on biodiversity features with the aim of improving standards within the profession. This ecological appraisal, including reporting, has been produced in consideration of and compliance with BS 42020.

4.2. Desk Study

Information regarding local biological records was collected through an online search of information sources and a data request to the local biological records centre, Greenspace Information for Greater London (GIGL). Information requested from the local biological records centre included statutory and non-statutory designated sites, notable habitats and legally protected and ecologically significant species. To supplement this request, the following web-based resources were used to collate historical biological records and site conditions within the study area:

- Multi-Agency Geographic Information for the Countryside (MAGIC) website (**www.magic.defra.gov.uk**);
- National Biodiversity Network (NBN) Atlas website (**www.nbnatlas.net**)[1];
- Aerial imagery from Google Earth;
- UK Biodiversity Action Plan website (http://jncc.defra.gov.uk);
- London Biodiversity Action Plan (now hosted by https://www.gigl.org.uk);
- London Tree Map (https://london.gov.uk);
- Greenspace Information for Greater London Biodiversity Hotspots for Planning (https://data.london.gov.uk); and,
- Camden Local Plan.

As species distributions are variable over time, information obtained through the desk study has been restricted to records from 2005 and onwards to ensure records are up-to-date. Any species with no record in the last 16 years are unlikely to remain present within the study area.

[1] Data available under Open Government Licence (OGL), Creative Commons No rights reserved licence (CC0) and Creative Commons licence with attribution (CC-BY) utilised.

4.3. Habitat Appraisal

The habitats present within the field survey have been classified and mapped following the UK Habitat (UKHab) Classification methodology[15], a comprehensive habitat classification system that was developed to establish a single system that can be used to identify habitats and provide better coordination between the various existing classifications (e.g. Annex I habitats and BAP priority Habitats). The methodology is well suited to urban areas, with secondary classifications enabling clearer mapping of features of urban greening, and is well suited to application by both remote-sensing observation and walkover surveys, or a combination of both methods.

The UKHab classification is hierarchical, with the professional edition utilised for the appraisal and all habitats and assessments to be taken to Level 4 where possible2. Considering the scale of the proposal and the urban context of the site, where habitats are often present at small extent and provide contrast to the surrounding developed land, the fine-scale Minimum Mapping Unit (MMU) of 25m2 for area-based habitats and 5m length for linear features has been utilised.

An initial appraisal of the site has been completed by remote sensing, using aerial imagery and existing site photography to establish habitats present on the site in as much detail as possible. As the site is principally urban in nature, many if the habitats are relatively common with a significant proportion of habitats present falling within the u1-built-areas and gardens category. From this, distinction between the Level 4 and, for developed land, Level 5 categories for the majority of the site is relatively straight forward and whilst Level 5 is not required, mapping to this level has been undertaken for urban habitats to provide distinction across the site. However, other habitats present in the survey area, including g-grassland and h3-dense scrub, can only be identified at a high level and require further investigation to identify accurately to Level 4.

Following of from the remote sensing exercise, a walkover survey of the site was carried out to ensure mapping of areas is accurate, establishing species lists for the various habitats and identify semi-natural habitats to Level 4 of the UKHab classification where this was not possible through remote sensing. The walkover survey was carried out on the 24th August 2023 by a suitably qualified ecologist, Tanishia Gearing MRes, QCIEEM. The survey was undertaken on a reasonable day, with a temperature of 18°c and Beaufort Scale 2. Vegetation present in the study area was identified in accordance with Blamey *et al*[16].

4.4. Assessment Methodology

CIEEM's guidelines on Preliminary Ecological Appraisal[17] identifies that the appraisals should provide an indication of the ecological value of features present following the methodology provided in CIEEM's Guidelines for Ecological Impact Assessment in the UK and Ireland18.

For this, it is essential to distinguish between the biodiversity value of a receptor and its legal status. Features of high biodiversity value may not necessarily attract legal

[2] The only exception being modified grassland, where sub-categories at Level 4 are not available for the habitat type.

protection and vice versa. For example, a viable area of ancient woodland is likely to be of high biodiversity value even if it does not receive any formal statutory designation.

In accordance with the CIEEM guidelines, each biodiversity features should be assessed as valuable, or potentially valuable, based on the following geographic frame of reference; some examples of ecological receptors that may be potentially valuable at each geographic scale are presented below:

- International – *e.g*. existing or warranting designation as a Special Area of Conservation (SAC) and/or of significant conservation status for Europe;
- National – *e.g*. existing or warranting designation as a Site of Special Scientific Interest (SSSI) and/or of significant conservation status for England;
- Metropolitan – *e.g*. existing or warranting designation as a Site of Metropolitan Importance for Nature Conservation (SMINC) and/or of significant conservation status for Greater London;
- Borough – *e.g*. existing or warranting designation as a Site of Borough Importance for Nature Conservation (SBINC) or Local Nature Reserve (LNR) and/or of significant conservation status for Camden;
- Local – *e.g*. existing or warranting designation as a Site of Local Importance for Nature Conservation (SLINC) and/or of significant conservation status within a local context (e.g. within 1 km of the proposed scheme);
- Within the immediate survey area only – *e.g*. habitats or species populations of significant conservation status for the site and immediate surrounding lands;
- Negligible – *e.g.* habitats or species whose presence does not contribute to the local biodiversity resource or has negative effects on local biodiversity (e.g. invasive species).

4.5. Certification

BREEAM Refurbishment and Fitout 2014 is an assessment system that allows the sustainability of a development to be established against a number of criteria, including energy and water efficiency, sustainable resource use, re-use of land, pollution prevention and impacts on biodiversity and ecology. Buildings are graded from ‘Pass’ to ‘Outstanding’ depending on their overall sustainability performance.

Details of each ‘Land-use and Ecology’ credit applicable to biodiversity are given below.

4.5.1. LE02 – Protection of Ecological Features

The aim of this credit is to recognise where existing features of ecological value both on site and the surrounding area have been protected prior to and during site operations.

1 credit is awarded where evidence is provided to demonstrate that all existing features of ecological value within or surrounding the development have been adequately protected from damage during clearance, site preparation or refurbishment/fit-out

activities. The basis of the appropriate protection should come from recommendations by the suitably qualified ecologists (SQE).

4.5.2. LE04 – Enhancing Site Ecology

The aim of these credits is to recognise any steps taken to enhance the site ecology, based upon the advice of a SQE.

1st credit is awarded where evidence is provided to demonstrate that the design team (or client) has implemented measures recommended by the SQE to enhance the ecological value of the site, based upon the site survey.

2nd credit- not appliable simple buildings only

4.5.3. LE05 – Long-Term Impact on Biodiversity

The aim of these credits is to encourage long term protection and enhancement of biodiversity on the site and the surrounding area. This includes the provision of Landscape and Habitat Management plan to outline measures and their implementation.

Credits are available where evidence of the implementation of measures to manage and maintain ecology throughout the project following relevant UK and EU legislation relating to the protection of biodiversity. Where the development of a landscape and ecology management plan, or equivalent, has been developed and implemented. **The number of credits applicable** is dependent upon the number of enhancements incorporated into the development**.** 1 credit is available when 0-2 enhancements are incorporated, and **2 credits are available** where 3+ enhancements have been incorporated.

4.6. Limitation

The methods employed for the completion of the ecological assessment are not considered to give rise to any significant limitations, following best practice guidance and utilising up-to-date information.

5. Baseline

5.1. Desk Study

5.1.1. Statutory and Non-Statutory Designated Sites

The desk study showed that there were no statutory designated sites within a 2km radius of the site, however a total of 34 non-statutory sites, specifically Sites of Importance to Nature Conservation (SINC). Additionally, there is one proposed SINC, which is the River Thames and tidal tributaries, which is already included within the listed Metropolitan SINC. The sites present area identified in Table 5-1 and Figure 5-1.

Table 5-1 Designated Sites in the Study Area

Site	Area (ha)	Proximity to Site (km)
Site of Metropolitan Importance for Nature Conservation		
River Thames and tidal tributaries	2304.92	0.62 south
St Jame's Park, Green Park and Buckingham Palace Gardens	57.54	1.38 south
Regent's Park	132.06	2.64 northwest
Hyde Park and Kensington Gardens	249.65	3.16 southwest
Site of Borough Importance for Nature Conservation		
Lambeth Palace Gardens, Garden Museum & St Mary's Churchyard	4.38	2.10 south
Site of Borough Importance for Nature Conservation – Grade I		
Marlborough House Garden	1.41	1.20 south
Westminster Abbey, Great Cloister and College Garden	0.6	1.89 south
Site of Borough Importance for Nature Conservation – Grade II		
Middle Temple Garden (Westminster section)	0.07	1.15 southeast
Temple Gardens	2.20	1.22 southeast
Park Square Gardens	2.24	1.65 northwest
Portman Square and Manchester Square	1.38	1.91 west
Site of Local Importance for Nature Conservation		
Phoenix Garden	0.12	0.11 west
Lincoln's Inn Fields	2.93	0.70 east
Russell Square	2.49	0.72 north
Victoria Embankment Gardens: Main Garden	1.88	0.84 south

Site	Area (ha)	Proximity to Site (km)
St James's Square	0.92	1.02 south
Victoria Embankment Gardens: Whitehall Garden	0.84	1.03 southeast
Victoria Embankment Gardens: Temple Section	0.27	1.06 southeast
Gordon Square	0.92	1.15 north
Coram's Fields	2.70	1.21 north
St George's Gardens	1.06	1.27 north
St Andrew's Gardens	0.66	1.39 north
Calthorpe Community Garden	0.44	1.44 north
Mount Street Gardens	0.61	1.62 southwest
Wilmington Square	0.39	1.70 northeast
St John's Gardens	0.14	1.74 northeast
Spa Fields Gardens	0.84	1.77 northeast
Skinner Street Open Space	0.38	1.84 northeast
Lloyd Square	0.19	1.86 northeast
Christchuch Gardens	0.51	1.87 southeast
Paddington Street Gardens	1.18	1.91 northwest
Waterloo Millennium Green	0.55	2.03 southeast
St Paul's Cathedral gardens	0.71	2.09 east
Archbishop's Park	3.75	2.14 south

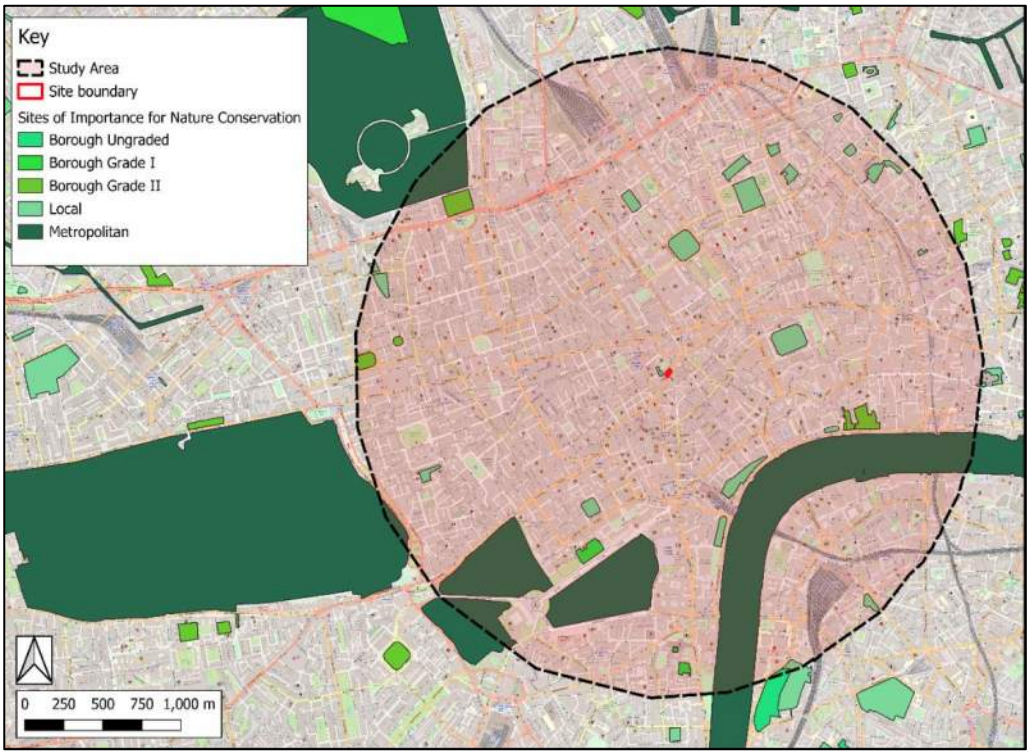

Figure 5-1 Non-Statutory Designated Sites within Study Area *(Contains public sector information licensed under the Open Government Licence v3.0 and Ordnance Survey data © Crown copyright and database right 2022)*

5.1.2. Notable Habitats

The study area does not have any areas of ancient woodland, however three priority habitats were found within the study area. These comprise deciduous woodland, mudflats and traditional orchard, as well as areas where no main habitat is identified but additional priority habitats are present. Deciduous woodland is seen across the majority of the study area, with the largest areas being seen to the southwest of the site within Green Park and St James Park. This is also where the additional habitat areas are found. There are several areas of mudflats, however these are concentrated to the banks of the Thames, seen on both the north and south bank. Traditional orchard is only found in one area, with a very small section bordering the study area in the south, found within the Lambeth Palace Garden. These priority habitats are identified within Figure 5-2.

5.1.3. Biodiversity Indicators

The biodiversity potential of the development is also indicated in the GiGL's Biodiversity Hotspots for Planning resource, which identifies areas according to the presence of known designated sites, BAP priority habitats as well as protected and priority species. Areas with a score of 0 identify locations with no currently known protected sites, habitats or species, whilst areas with a score of 3 indicate potential impact on all three

areas of the criteria. Scores in between have the potential to impact one or two of the three categories identified.

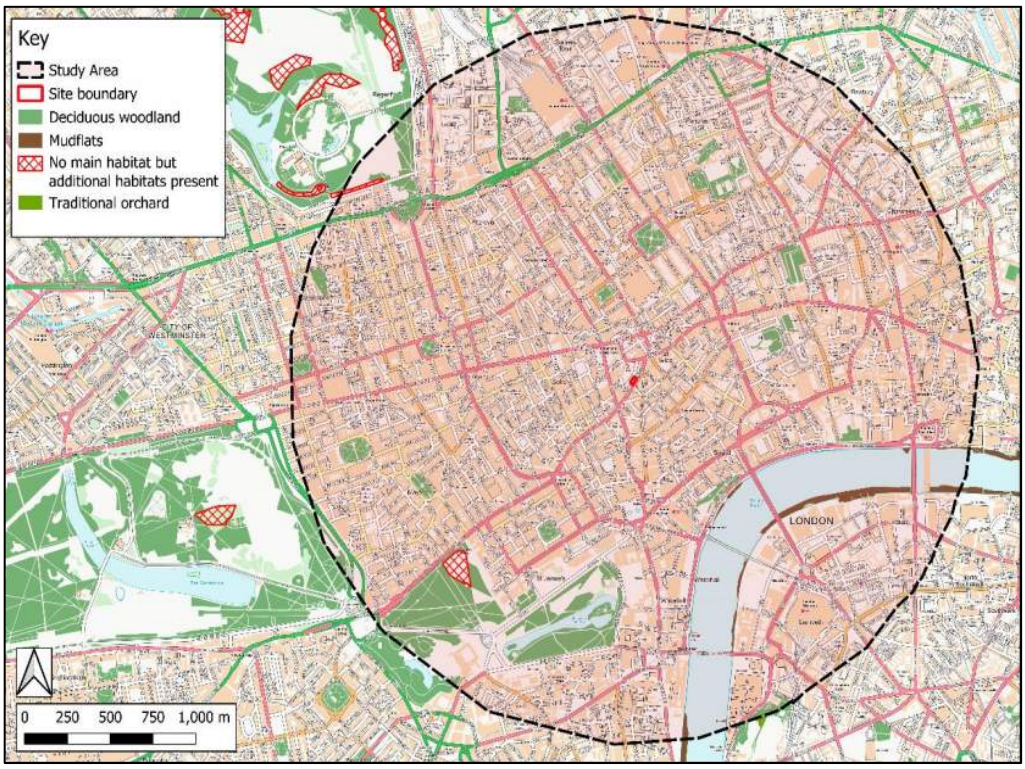

Figure 5-2 UK BAP Priority Habitats Within 2km of the Proposed Development
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As illustrated in Figure 5-3, the development site resides entirely within an area with a score of 2, indicating the presence of two of the three areas of biodiversity potential. There are a number of areas highlighted within the study area as having high biodiversity potential, notably the Thames Tideway, St James and Green Park and Corams Field Pitches. This demonstrates that the site is in an area of moderate biodiversity potential, and reflects the opportunities that can be delivered through the development and associated enhancements.

5.1.4. Protected and Ecologically Significant Species

Biological Records Centre

The data returned by GiGL identified the presence of a number of legally protected and ecologically significant species within the study area, however this incorporates a wide variety of habitat types including parks and gardens, green corridors, cemeteries and graveyards, estuarine, intertidal foreshores and other greenspaces as well as densely urbanised areas. Consequently, the information provided has been carefully analysed to identify species considered likely to be present within the habitats associated within the development site and surrounding areas to help inform understanding of species with potential to be utilising the development area.

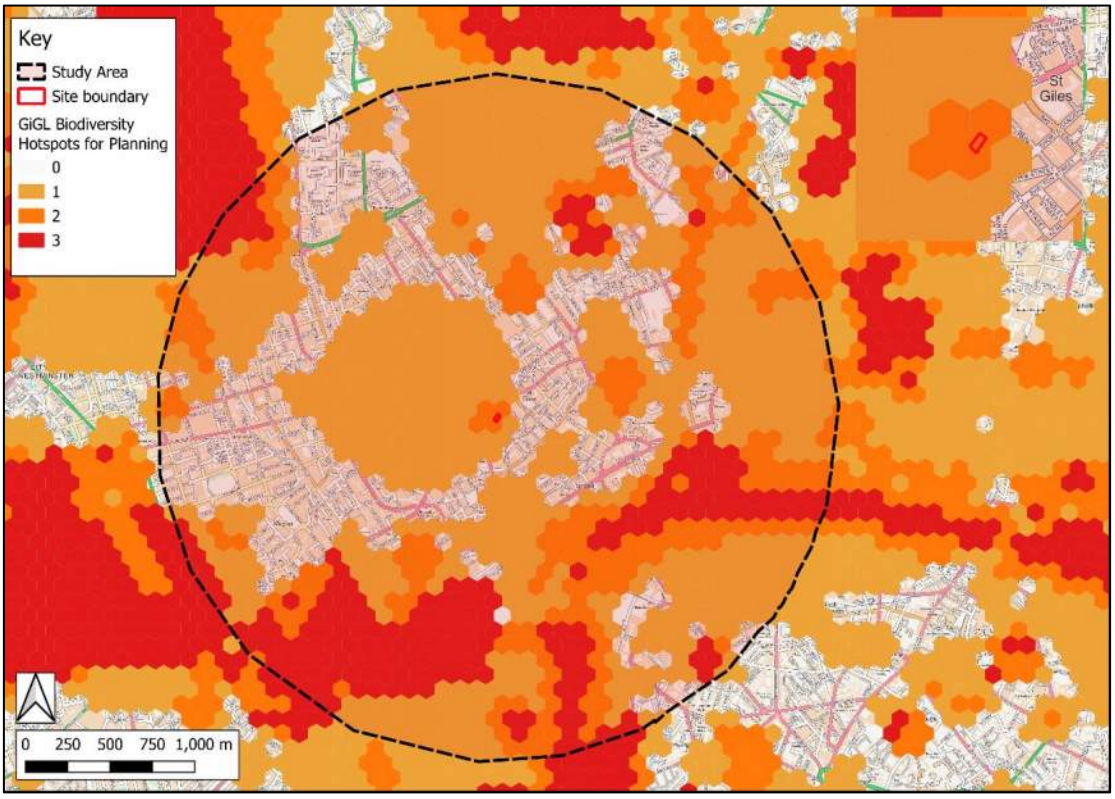


Figure 5-3 GiGL Biodiversity Hotspots for Planning *(Map displays GiGL data, November 2019; Contains Ordnance Survey data © Crown copyright and database right 2022)*

The information provided by GiGL highlighted a total of 60 species of bird which were classified as being specifically protected or ecologically significant, through identification as a BAP priority species, red or amber listed species of conservation concern or a local species of conservation concern. Those species potentially present within the development site and immediately surrounding habitats, based on proximity, most recent records and typical habitat requirements are identified in Table 4-2.

Table 5-2 Bird Species Associated with Development Site Habitats Identified within the Study Area

Species		Most Recent Record	Closest Record (m)
Lesser Redpoll	*Acanthis cabaret*	2017	1406 NE
Common Sandpiper	*Actitis hypoleucos*	2019	946 SE
Swift	*Apus apus*	2019	415 SE
Pochard	*Aythya ferina*	2023	682 S
Scaup	*Aythya marila*	2019	1450 SW
Goldeneye	*Bucephala clangula*	2022	1223 S
Black Tern	*Chlidonias niger*	2013	1055 SE
Greenfinch	*Chloris chloris*	2021	489 N
Marsh Harrier	*Circus aeruginosus*	2016	1563 N
Lesser Whitethroat	*Curruca curruca*	2019	1401 SE
House Martin	*Delichon urbicum*	2019	1127 S
Lesser Spotted Woodpecker	*Dryobates minor*	2015	1450 SW
Merlin	*Falco columbarius*	2019	1450 SW
Pied Flycatcher	*Ficedula hypoleuca*	2017	128 5E
Brambling	*Fringilla montifringilla*	2017	1450 SW
Shag	*Gulosus aristotelis*	2017	887 SE
White-tailed Eagle	*Haliaeetus albicilla*	2006	1450 SW
Mediterranean Gull	*Ichthyaetus melanocephalus*	2019	1334 S
Wryneck	*Jynx torquilla*	2014	1745 E
Herring Gull	*Larus argentatus*	2023	415 SE
Lesser Black-backed Gull	*Larus fuscus*	2022	415 SE
Baltic Gull	*Larus fuscus fuscus*	2019	415 SE
Black-tailed Godwit	*Limosa limosa*	2009	1630 S
Nightingale	*Luscinia megarhynchos*	2012	1450 SW
Gadwall	*Mareca strepera*	2023	682 S
Red Kite	*Milvus milvus*	2019	895 N
Grey Wagtail	*Motacilla cinerea*	2022	388 N
Spotted Flycatcher	*Muscicapa striata*	2015	852 NE

Species		Most Recent Record	Closest Record (m)
House Sparrow	*Passer domesticus*	2020	145 E
Dunnock	*Prunella modularis*	2022	480 W
Firecrest	*Regulus ignicapilla*	2017	762 SE
Kittiwake	*Rissa tridactyla*	2006	977 SE
Woodcock	*Scolopax rusticola*	2019	364N
Common Tern	*Sterna hirundo*	2019	977 SE
Tawny Owl	*Strix aluco*	2021	1301S
Starling	*Sturnus vulgaris*	2022	365 W
Sandwich Tern	*Thalasseus sandvicensis*	2013	977 SE
Song Thrush	*Turdus philomelos*	2022	758 E
Fieldfare	*Turdus pilaris*	2019	758 E
Mistle Thrush	*Turdus viscivorus*	2021	415 SE

A total of 12 mammal species were identified within the study area as being legally protected or ecologically significant, however not all of these species are relevant to the site, such as marine mammals or mammals requiring semi-natural habitats. A summary of species relevant to the site are identified within Table 5-3.

Table 5-3 Mammal Species Associated with Development Site Habitats Identified in the Study Area

Species		Most Recent Record	Closest Record
West European Hedgehog	*Erinaceus europaeus*	2022	184 SW
Bat	*Chiroptera*	2017	521 NE
Noctule Bat	*Nyctalus noctula*	2011	1482 S
Pipistrelle Bat species	*Pipistrellus*	2021	694 NW
Nathusius's Pipistrelle	*Pipistrellus nathusii*	2014	1216 N
Common Pipistrelle	*Pipistrellus pipistrellus*	2021	65 NW
Soprano Pipistrelle	*Pipistrellus pygmaeus*	2017	65 NW
Long-eared Bat species	*Plecotus*	2008	1739 S
Bats	*Vespertilionidae*	2016	69 NW

The data received also identified the presence of two species of amphibian, one species of reptile, two species of fern, 31 species of flowering plants, and 28 species of invertebrates. Species of note include purple emperor (*Apatura iris*) approximately 1.1km east of the site and maidenhair fern (*Adiantum cappilus-veneris*), approximately 1.8km northwest of the site.

National Biodiversity Framework

A search of the National Biodiversity Network Atlas resource[19] identified a number of additional species not identified in the GiGL records, although many of these are not ecologically significant or legally protected. Of note within the data are the presence of redwing (*Turdus iliacus*), herring gull (*Larus argentatus*) and common gull (*Larus canus*). There are also a number of records of bees within the information.

The data also identified the presence of a number of the BTO urban indicator bird species, including: blackbird (*Turdus merula*), blue tit (*Cyanistes caeruleus*), carrion crow (*Corvus corone*), chaffinch (*Fringilla coelebs*), great tit (*Parus major*), jay (*Garrulus glandarius*), long-tailed tit (*Aegithalos caudatus*), magpie (*Pica pica*), mallard (*Anas platyrhynchos*), pied wagtail (*Motacilla alba*), robin (*Erithacus rubecula*), woodpigeon (*Columba palumbus*) and wren (*Troglodytes troglodytes*).

MAGIC

A search of the MAGIC database identified three previously granted EPS licences in the study area, all related to bats:

- Case reference 2014-6253-EPS-MIT approximately 1.5km from the site boundary, covering the destruction of a resting place relating to common pipistrelles.
- Case reference 2014-6253-EPS-MIT-1, approximately 1.5km from the site boundary, covering the destruction of a resting place relating to common pipistrelles.
- Case reference 2017-30911-EPS-MIT,approximately 1.9 km from the site boundary, covering the destruction of a resting place relating to soprano pipistrelles.

5.2. Field Survey

5.2.1. Habitats

The following sections describe the habitats that were identified in the field survey area according to the UKHab classification definitions and following CIEEM best practice guidance. The habitat descriptions should be read in conjunction with the UKHab

classification survey map, with Figure 5-4 identifying the area-based habitats. Site photographs are included in Appendix B.

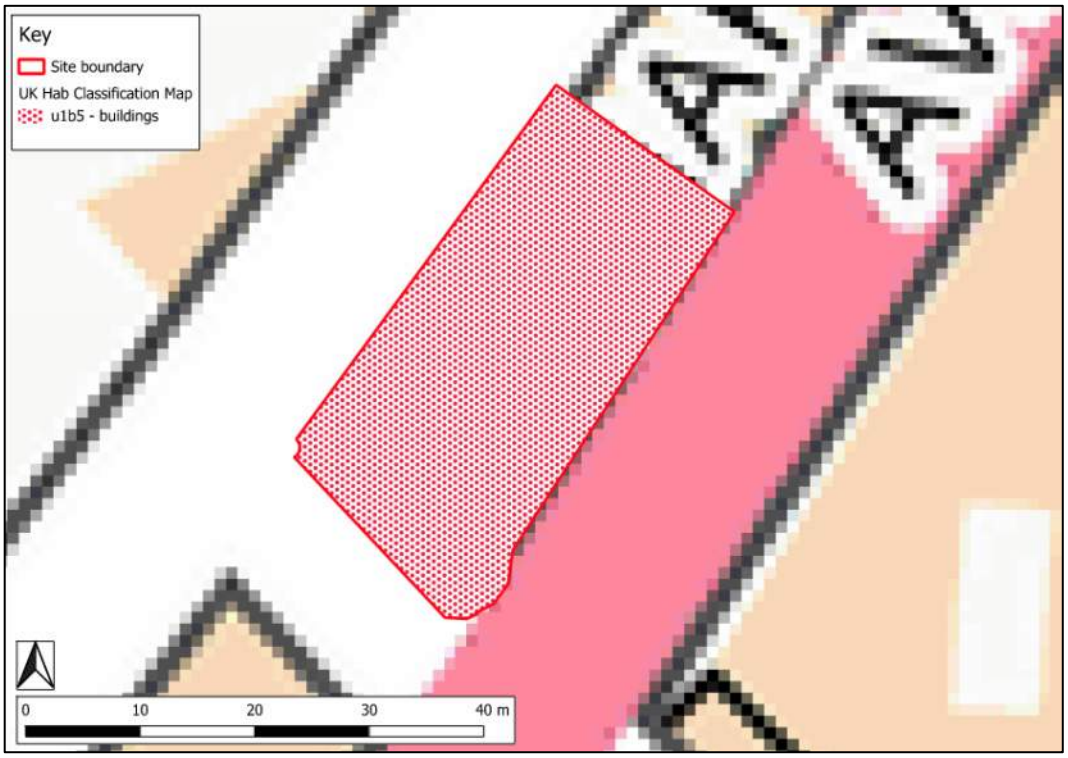


Figure 5-4 UK Habitat Classification Map

5.2.1.1. U1 Built-up Areas and Gardens

U1b5 Buildings

The site consisted of a single commercial building, comprising 7 storey above ground and an accessible roof top. The building was occupied at the time of survey. Although there were planters present at the roof level, filled with ornamental plants, they did not meet the minimum mapping unit (MMU) so were not included, making the habitat entirely building, shown in Figure 5-4.

5.2.2. Species

Flora

The presence of floral species was limited due to the lack of natural or semi-natural environments within the site. As a result, the site was deemed to be of **negligible biodiversity value** with regard to flora**.**

Birds

No bird species were identified during the survey within the field area. The site is likely frequented by urban bird species, however, no evidence of nesting or usage was observed. As a result, the site was **deemed to be of negligible biodiversity value** with regard to bird species**.** Nevertheless, the presence of nesting birds of any species could be a constraint to the development.

Bats

No evidence of bats was identified during the survey within the structure of the building. There were no obvious cavities within the building structure that could accommodate roosting bats. The connectivity to the wider environment is good considering the urban context of the site, with a SINC located around 100m to the west of the site. As a result of the likely absence of roosting bats within the development site, but the potential use of the immediate area for foraging, the site was **considered to be of low biodiversity value** with regard to bat species**.**

Other Notable Species

No further species were evidenced during the survey.

5.3. Conclusion

The development site entirely comprised building habitat, with no additional greening to the site. As a result, the site is considered to be of no more than low biodiversity value.

Considering the extent of the proposed development works, the construction zone within the site can be considered to be of ‘low ecological value’. Consequently, the development is eligible for the first credit available under BREEAM LE02, provided the credit criteria are met following assessment by the BREEAM Assessor.

6. Ecological Impacts and Mitigation

The proposal for 151 Shaftesbury Avenue, includes refurbishment of the existing storeys and the addition of an extra storey, which is to include a considerable roof garden area, and green roof area above this.

As discussed in Section 5.3, the development site is considered to be of low ecological value as a result of the dominance of artificial habitats within the site.

The recommendations have been made in consideration of Clause 10 of BS 42020, on the implementation of development: biodiversity on construction sites.

6.1. Potentially Damaging Activities

6.1.1. Design

The design of the proposed developed has very limited implications to the site's existing biodiversity value.

The development design does, however, provides a number of opportunities for enhancement associated with the addition of a green roof area on the roof level and roof gardens located on the ninth floor. These enhancement are discussed further in Section 7. Consideration has been given to the potential landscaping of the proposed development with the aim of maximising the inclusion of urban greening whilst maintaining the commercial use of terraces and outside roof garden area.

6.1.2. Construction

The main potential for impacts associated with the proposed development would occur during the construction phase, with the undertaking of construction activities.

The development has the potential to give rise to indirect effects on the local biodiversity as a result of the generation of noise and dust. Impacts associated with noise are unlikely to be significant in the urban environment, in particular as a result of extensive development activities that have occurred in the surrounding over the recent years. This has likely resulted in habituation to an increased level of noise.

With regards to dust, there are no particularly sensitive features present within 50m of the development site, which is the screening criteria for assessment following the Institute of Air Quality Management's best practice guidelines[20] .

6.1.3. Operation

Considering the urban nature of the development site and level of activity in the surrounding area, adverse impacts upon biodiversity during the operation of the site are considered unlikely. Appropriate management of enhancements provided, discussed further in Section 8, will ensure the enhancements continue to benefit biodiversity in the long-term.

6.2. Changes in Habitat Extent

As discussed in Section 5.3, the habitats identified in the pre-planning ecological assessment of the development site are considered to be the most appropriate baseline against which to assess the BREEAM requirements. Based on the habitats characterised during the field survey, the development site was identified as supporting 0 biodiversity units, as identified in Appendix D. Within the statutory biodiversity net gain metric, a net gain score is not possible with a baseline of 0 units, however the landscaping designs meet trading standards for the sites net gain accreditation. Owing to the score of the baseline site habitats, the redevelopment of the site equates to a minimal change in ecological values in line with the terms of the BREEAM LE03 credit. However, when considering the contribution of the landscaping proposals, the development will deliver a positive overall net change in biodiversity.

6.3. Protection of Biodiversity

As the development site consists of artificial habitats with a low supporting potential for either flora or fauna, the risk to biodiversity as a result of the development is low. However, there are protection measures, or mitigation, for biodiversity recommended for the construction phase, which should be implemented as part of a biodiversity method statement or inclusion within a wider Construction and Environmental Management Plan (CEMP).

The mitigation measures identified in this Section provide a precautionary approach to ensure the biodiversity is protected on sire during the construction phases, particularly in the event of any changes in circumstance from the baseline surveys. The approach minimises potential risks to the contractor and construction programme associated with such changes (*e.g.* the establishment of nesting birds), as well as safeguarding biodiversity features.

6.3.1. General Measures

Ecology can often be seen as a hindrance to development, with the presence of protected species hampering development. However, this is often caused by a lack of awareness of the presence of flora and fauna on site, the reason for their protection, and the activities that can be lawfully conducted whilst animals in particular are using the site.

Lighting

Impacts upon potential biodiversity value associated with the developed site and their potential use by nocturnal species can be avoided by appropriate lighting establishment. Any lighting utilised within the development should consider the potential for impact on environmental receptors whilst creating a safe and accessible environment, and should follow best practice guidance provided by the Institute of Lighting Professionals (ILP)[21]. Whilst this is focussed on bats, it will have benefits to all nocturnal species and could include the following:

- All luminaires should lack UV elements when manufactured. Metal halide or fluorescent sources should not be used;
- LED luminaires should be used where possible due to their sharp cut-off, lower intensity, good colour rendition and dimming capability;
- A warm white spectrum (ideally < 2,700 Kelvin) should be adopted to reduce blue light component;
- Luminaires should feature peak wavelengths higher than 550 nm to avoid the component of light most disturbing to bats;
- Internal luminaires can be recessed where installed in proximity to windows to reduce glare and light spill;
- The used of specialist bollard or low-level downward directional luminaires to retain darkness above can be considered. However, this often comes at a cost of unacceptable glare, poor illumination efficiency, a high upward light component and poor facial recognition, and their use should only be used as directed by a lighting professional;
- Column heights should be carefully considered to minimise light spill;
- Only luminaires with an upward light ration of 0 % and with good optical control should be used;
- Luminaires should always be mounted on the horizontal, *i.e.* no upward tilt;
- As a last resort, accessories such as baffles, hoods or louvres can be used to reduce light spill and direct it only to where it is needed; and/or,
- Ensure lights are switched off when they are not needed, where appropriate, either through the use of programmable fixtures or by PIR/motion sensor activation.

Inclusion of the above recommendations within the construction phase, in particular ensuring light is directed away from peripheral areas and are switched off overnight, will also ensure impacts in construction are minimised.

6.3.2. Habitats of Ecological Value

6.3.3. Species

The following best practice measures and mitigation options have been identified to minimise or negate the potential adverse effects on biodiversity, and have considered the potential for changes in circumstances as a result of species establishing themselves between the survey and commencement of construction activities.

Breeding Birds

The potential presence of breeding birds could comprise a constraint to the development, depending on the construction phase programme. Although presence of breeding birds was deemed unlikely during the preliminary walkover survey, this does not completely rule out the possibility and therefore mitigation measures should be followed.

If works are scheduled to commence during the bird nesting season (typically Match to August inclusive, although this is weather dependent), the site should be checked for any

nesting birds during prior to commencement of works daily, within areas more protected from the weather (e.g. terraces).

In the even that a nest of any species identified on site, works within the immediate vicinity should cease immediately and further ecological advice sought. If further assessment by a suitably qualified ecologist confirms that the nest is inactive, then works may proceed. However, if the further assessment deems the nest to be active, then further consideration will be required as to whether certain activities can be carried out within the immediate vicinity of the nest. However, the structure that is supporting the nest will need to remain until the young have fledged, and deemed inactive by an ecologist if during nesting season, or post-August.

This approach will ensure that the development does not have a detrimental effect on birds using the site and the contractor/developer will remain compliant with wildlife legislation.

Bats

Although bats have been deemed as unlikely to be roosting within the development site, the construction of the development has the potential to impact bats, as the bats are likely present within the immediate vicinity, as records have been returned of bats within 100m of the development site, likely within Phoenix Garden. Mitigation has largely been covered within Section 6.3.1, relating to lighting. Within the construction and operational phases of the development, illumination of the site during the night unless necessary should be avoided, and where necessary, light should be directional where possible to avoid light spill to the Phoenix Garden SINC located to the west of the site.

6.3.4. Recording and Monitoring

It is recommended that a record of the training given to site personnel in the induction, and keeps a diary or log of site inspections carried out. The effectiveness of the measures described above should also be recorded, along with any actions required, such as the use of a falconer to discourage birds from the site.

For example, '*Thursday 24 March 2023. Site inspection carried out by [NAME]. Pair of pigeon noted investigating the 3rd floor steel frame. Falconer called in to discourage birds from the site and prevent them from nesting*'.

In addition to this, the environmental procedures outlined above should be subject to regular review to ensure the measure are effectively implemented and where deficiencies are identified remedial action should be taken and documented.

6.4. Conclusion

Protection measures have been identified to ensure impacts on biodiversity are avoided or, through mitigation measures, minimised in line with planning policy and legislative requirements. No semi-natural or natural habitat were present within the sites. The development is, therefore, **eligible for the one credit available under LE02**.

7. Ecological Enhancement

7.1. Habitats

Although the development site is not in an area of deficiency in relation to access to nature, identified in the biological records, enhancement of the local environment is proposed as part of the development to deliver a range of benefits locally. These will include biodiversity and other ecosystem services, such as access to nature, complying with the planning policy requirements associated with the provision of a net gain in biodiversity terms.

The proposed development incorporates a terrace on the eighth floor, a roof garden on the ninth floor and a green roof at the roof level. The current designs yield a 105% increase in on-site biodiversity, owing to a baseline of zero.

Where relevant, recommendations have been made as to the types of plants that should be included, where possible, and a minimum number of plant species for the habitat types identified to support identification of the BREEAM credits that could be achieved.

7.1.1. Green Roof

Green roofs are one of the principal methods of imparting biodiversity enhancement in the urban environment, and alongside biodiversity enhancement provide a range of ecosystem services that include the regulation of temperature[22], mitigation of the urban heat island effect[23], protection of watersheds by intercepting runoff[24], and uptake of pollution from rainwater[25] and air[26].

There are two types of green roof habitats, extensive green roof and intensive green roof habitats. Extensive green roof habitats are characterised by a thinner layer of growing medium/substrate, usually between 50mm and 200mm, and are relatively lightweight. However, because of the thin substrate layer, the extensive roof environment is a relatively harsh one for plant growth as a result of limited water availability, wide temperature fluctuation, high exposure to wind and solar radiation. As a result, a relatively small range of plant species is normally used for this type of green roof, with stonecrop (*Sedum*) species being the most commonly used[27]. An alternative to the sedum habitat is the provision of brownfield habitat, with a gravel and/or sandy substrate supporting ruderal species, often of local provenance such wild carrot (*Daucus carota*) and ox-eye daisy (*Leucanthemum vulgare*), as well as stonecrop species with a floral coverage of up to 70%. However, such habitats can appear to be untidy due to the visibility of bare substrate.

Intensive green roofs are characterised by a thick layer of growing medium/substrate, usually greater than 200 mm, in which a wide range of plants and vegetation can be grown. Intensive green roofs are capable of supporting a relatively high species diversity, with complementary resource use allowing for greater productivity and stability of the environment. As a result, the habitat has a greater diversity in structure, with a range of species creating a varied three-dimensional structure which is capable of intercepting more light[28], and therefore temperatures on such roofs are lower than habitats with a

monoculture[29]. The greater structural diversity and complementary use of resources also increases the habitat's resistance to environmental change, with the habitat naturally responding to fluctuations in environmental conditions and being more resilient to pests or invasion by weeds[30].

7.1.2. Podium Landscaping

The inclusion of landscape planting on terrace areas can provide both amenity value to occupants and additional supporting value for biodiversity. As green roof habitats are not suitable for inclusion in high access areas, planting on roof terraces is often better suited to the introduction of more formal landscaping within raised planters or incorporated into the roof structure (similar to a green roof). Planting can comprise a range of types, typically wildflower or shrub species, with the latter providing natural screening to break terrace spaces up into different zones. Amenity uses can also be integrated into the landscape planting, with raised planters incorporating benches/seating, and as a result providing an 'oasis' at the podium level.

The final landscaping scheme should ensure the planting schedule incorporates a wide variety of wildflowers and shrubs that have a known value to wildlife, such as those identified by the Royal Horticultural Society in their Plants and Pollinators resource31. In addition to this, good horticultural practice should be implemented, such as the use of peat-free composts, mulches and soil conditioners.

7.1.3. Change in Habitat Area

The landscaping proposals have been assessed with regards to their ecological value to ascertain the change in value from pre-development site to the post-development site.

7.2. Conclusion

The proposed development incorporates a range of planting that will significantly enhance the ecological value of the development site and the surrounding area, with additional recommendations for consideration in the landscape design and for the provisions of artificial habitat aids that will further this enhancement and aid functionality of the habitat for faunal species. The implementation of the recommended measures will contribute to the enhancement of local urban biodiversity and improve habitat opportunities for both targeted and common species locally.

8. Long-Term Recommendations

The following recommendations for long-term management of the site have been prepared in consideration of BS42020 Clause 11.1 on Post-development management of habitats and species. The recommendations outlined below should be adopted as part of a Landscape and Ecology Management Plan (LEMP), which would satisfy the LE05 mandatory requirement to produce a five-year plan, however it should be noted that the following section do not comprise such a plan in isolation. The following sections have been prepared such that they can be lifted into a LEMP with additions or updates to the text as required to provide detail regarding the final enhancements incorporated and additional detail not available at this time.

Although the landscape provision is subject to further development and may change to that presented, the following has been prepared in the basis of the current landscaping provision to demonstrate the long-term management requirements of the post development site. The LEMP will need to be prepared in the basis of the following, incorporating any subsequent changes to design of type.

8.1. Biodiversity Features

8.1.1. On-Site

The development on 151 Shaftesbury Avenue site will include the provision of several types of landscaping across the site, including the presence of a green roof habitat and terrace landscaping being found on the 9th floor.

The landscape proposals are currently at an early stage and are therefore subject to further development through the detailed design stages of the scheme.

8.1.2. Surrounding Area

The site is located within a well-developed part of London, however there are seminatural areas within the surrounding environment. These include the Phoenix Garden, approximately 100 m west of the site, Lincolns's Inn Fields approximately 700 m east and the River Thames and Tidal Tributaries approximately 600 m south. The development activities are deemed to have a limited impact to the nearby areas, owing to the current lack of greening within the existing building. Recommendations have been given within this report to mitigate any potential impact that could occur, for example nesting birds moving into the site.

8.1.3. Benefits to Occupiers and Broader Community

Beneficial effects to the tenants and the broader community will be realised through ecosystem services and directly to people as a result of beneficial effects to health and wellbeing through increased access to nature.

8.2. Post-Construction Review

Upon completion of the external elements of the construction phase with potential to influence biodiversity, *i.e.*, installation of habitat and species enhancements, it is recommended that an ecological review of the developed site is undertaken. The review should report on the outcomes of the development with particular attention given to the effectiveness of the implementation of the mitigation recommendations and enhancement design, celebrating success, and identifying areas for improvement.

8.3. Site Management

8.3.1. Aims and Objections

The overall aim of the long-term management of biodiversity is to 'realise the biodiversity potential of ecological enhancements provided by the completed development, maximising the biodiversity value of the final developed site and maintaining such value'. In order to achieve this aim the following objectives have been set:

- To manage landscaped areas for the benefit of biodiversity whilst maintaining an aesthetically appealing amenity landscaping;
- To ensure artificial aids are maintained in an appropriate condition commensurate to their purpose; and,
- To ensure maintenance activities do not themselves have an adverse impact on biodiversity.

8.3.2. Management Recommendations

Habitats

New planting should be conducted by an appropriately qualified and experienced contractor at an appropriate time of year. Preferably, planting should be conducted during cooler months to avoid undue stress caused by higher summer temperatures and low rainfall. Watering should be undertaken for all new planting during the first summer post-planting to ensure a good first season establishment if required.

In order to maintain a diverse mix of species in landscaping areas and aid development, the following management actions, where applicable to the final planting, and best practice guidance from Bauder32 for green roofs should be included:

- Removal of dead vegetation from landscape areas and, where applicable due to planting type, strimming of wildflowers in late autumn, except where seed heads are to be retained for autumn and winter interest, and grasses with the removal of all arisings from the site;
- Removal of invasive and undesirable species and all saplings;
- Maintenance of a variety of species to provide aesthetic and biodiversity benefits;

- Removal of unwanted leaf litter that has fallen onto the roof surface in spring and autumn, to ensure this does not smother the vegetation beneath;
- Inspect all drainage infrastructure, including removal of chamber lids, to ensure drainage infrastructure is clear of debris and vegetation are in working order;
- Ensure all flashing and termination bars are in good condition and sealants and mortar pointing are not degraded;
- Removal of any vegetation which has invaded into drainage outlets, inspection chambers, walkways and vegetation barriers;
- Ensure any new plant or equipment included at roof level is appropriately affixed and does not penetrate waterproofing;
- The application of fertiliser could help aid establishment and promote growth, with application limited to 80 mg/m2 slow-release organic fertiliser if required; and,
- Herbicides and insecticides should be avoided.

For the remaining vegetation the following tasks are recommended:

- *Plant encroachment* – the edges of habitat areas and any areas intended to remain bare should be checked for signs of encroachment beyond the intended area of planting, and removed where appropriate. The vegetation should be retained during the maintenance visit and can be used to repair any unintentional bare patches in planting;
- Monitor plant colour and growth rate:
    - the colour and growth rate of vegetation should be checked as an indicator of the health of the habitat and understanding of the dominance of the habitat by one species;
    - if plants are showing signs of distress despite recent regular rainfall, then the application of fertiliser should be considered;
- *Weeding* – any undesirable species or saplings, such as grasses, thistles, nettles and butterfly bush, should be removed manually only, and the subsequent area treated as a bare patch as detailed below;
- *Pruning* – management of shrub and herbaceous planting, including pruning and cutting, should be conducted when flowering has completed (i.e. mid-Autumn), and all arisings should be removed from the site;
- *Repairing bare patches* – bare patches could be repaired using vegetation cuttings from surrounding areas of abundant growth during the main growing season of March/April or from late August until the end of September;
- *Fertiliser* – the application of fertiliser should be undertaken following the landscape architects or manufacturers specification, although may not be appropriate for green roof habitats within the landscaping;
- *Irrigation* – irrigation is dependent on requirements for visual appearance, although consideration is also required in relation to BREEAM credits relating

to water use. If the intention is for maintenance of cover and interest over a prolonged period then irrigation will assist in this;

- Herbicides – the use of herbicides should be avoided in order to promote a health invertebrate population to establish in the landscape habitat.

The planting has the potential to offer refuge and resources to bird and invertebrate species, and therefore it is recommended that it is managed appropriately. Any significant management works associated with woody vegetation should avoid the bird breeding season, unless a check has been conducted by an experienced person to ensure no nesting birds are present or likely to be influenced by an activity.

8.3.3. Works Schedule

A number of constraints, which should be identified in the final Landscape and Ecology Management Plan, will influence the timing at which maintenance activities can be carried out. The constraints associated with the developed site are an important consideration in the implementation of management actions, with completion during unsuitable periods potentially damaging the ecological resource and working against the aims and objectives of the Landscape and Ecology Management Plan. Table 7.1 provides an indicative schedule for the management of biodiversity features for the first 5 years post-construction, although this could be adopted beyond this period and for as long as would be required. Although the schedule identifies appropriate times to implement commonly required management actions, such as weeding of landscape areas, it should be noted that if monitoring of the site identifies the requirement for immediate action this should be implemented regardless of the schedule but mindful of constraints.

The maintenance schedule provided has been aimed at the maintenance of features for biodiversity potential, and further input may be required from a landscape architect to ensure aesthetic and recreational considerations are incorporated.

Table 8-1 Landscape and Ecology Management Plan Works Schedule

Action	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec
Green Roof												
Weeding, where necessary												
Litter and debris collection												
Water (subject to weather conditions), if required												

Action	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec
Strimming of wildflowers/grasses												
Plant encroachment												
Plant health check												
Repair of bare patches in habitats												
Inspection of drainage, flashing and termination bars												
Landscape Planting												
Weeding												
Litter and debris collection												
Fertiliser application												
Water (subject to weather conditions), if required												
Plant encroachment												
Trimming and pruning												
Plant health check												
Replacement planting												

The works schedule, in whatever form it is adopted, should be reviewed annually to ensure it remains fit for purpose and that the aim and objectives of the Landscape and Ecology Management Plan are being achieved. If the review suggests the aim and objectives are being missed, then the schedule should be revised accordingly.

8.3.4. Monitoring and Remedial Measures

Monitoring of the site is an important part of the Landscape and Ecology Management Plan, as this ensures that the management actions implemented are having a positive impact on the biodiversity of the site. Where actions are not working, or mitigation measures are ineffective for some reason, remedial measures can then be implemented to reduce such effects.

The following monitoring should be carried out as part of the Plan to measure the success of the management against the aims and objectives of the Plan.

8.3.4.1. Construction

Routine inspections of the existing site and new construction, to include a review of mitigation measures incorporated into the construction phase to ensure they are appropriate and effective in achieving their purpose and any alterations necessary should be carried out. This should be completed approximately once per week and appropriately documented, including any alterations carried out.

The installation of enhancement measures, including both habitat and artificial habitat aids, should be overseen to ensure installation is carried out in line with the recommendations and manufacturer guidelines. The habitats installed may require maintenance during the construction period, such as watering in the first few weeks to aid establishment. The record or actions/events should be updated to reflect any actions taken to maintain enhancements through the remainder of the construction period, including periodic review of such features to ensure they are in good condition. Where habitats will be in place for a prolonged period prior to handover, the implementation of management actions identified in Section 3 should be undertaken by the Principal Contractor to ensure the habitats remain as planted/installed.

Monitoring visits to review the condition of installed habitats should be increased during periods of extreme weather and importantly during periods of prolonged hot and dry weather and droughts. This will be necessary to ensure the health of the habitat is maintained and management actions, notably watering, can be implemented where necessary before the health of the system is affected.

8.3.4.2. Habitats

Any landscape planting should be monitored for the duration of the Plan to ensure the appropriate species establish and remain present, although the frequency of monitoring could be decreased over time as the habitat establishes.

It is recommended that monitoring is undertaken every other month by an experienced person during the first growing season, to ensure the appropriate species mix establishes and appropriate management actions are implemented. Where necessary, watering of the landscape planting may also be required. In the second growing season monitoring should be undertaken every third month, reducing to a minimum of twice a year during the growing season from the third year. The monitoring should ensure the species present remain in accordance with the intended planting schedule, even if the species

present do not fully match (i.e. there may be some losses of species), ensuring a monoculture does not develop.

In the event that monitoring identifies the establishment of an undesirable plant species or community or the failure for some species to establish, remedial actions should be implemented. The remedial measures should include the implementation of management actions to remove undesirable species or increase in management procedures such as watering and, if necessary, may require the provision of new planting to increase the presence of native species.

In addition to this, monitoring visits should also be undertaken in periods of extreme weather and importantly during periods of prolonged hot and dry water and droughts. This will be necessary to ensure the health of the habitat is maintained and management actions, notably watering, can be implemented where necessary before the health of the system is affected.

8.3.4.3. Artificial Habitat Aids

It is recommended that monitoring of the artificial nesting aids for birds, bats and invertebrates should be undertaken to ascertain whether they are being utilised or if they should be relocated to increase their likelihood of occupation. As a result, it is recommended that an annual monitoring check is undertaken to determine whether the boxes have been in use, and where they are unused measures to attract target species should be considered, if appropriate. The monitoring checks are likely to comprise visual assessments for field signs between April and August, although further detailed inspection between November and February, for bird boxes only, may be necessary during routine maintenance.

8.4. Responsibility

The final Landscape and Ecology Management Plan should identify, by name and role, the person that is responsible for the Plan's implementation. The named person will be responsible for ensuring the Plan is implemented and recommendations are followed and actions undertaken, but it is not necessary for them to be the person undertaking such actions.

As the Plan is associated with the long-term management post-development, it is likely that the responsible person will be part of the site management team. However, the Plan should also identify the person responsible for the implementation of ecological enhancements, during the construction period, within the Plan to ensure appropriate actions are undertaken in the construction phase and the document is included in the information handed over upon completion of the building construction works.

8.5. Reporting

The final Landscape and Ecology Management Plan should be a working document, and should be updated when circumstances require. For example, if monitoring identifies that

a particular management practice is ineffective or the named responsible person changes, then the Plan should be revised and updated.

The responsible person should also prepare a yearly report to the site owner, providing a summary of the outcomes of the maintenance and monitoring works that have been carried out and detailing any remedial measures necessary. By providing this information for the annual site review the aim and objectives of the Plan can be reviewed regarding achievement.

8.6. Delivery Mechanisms

The delivery mechanisms, most important funding across the 5 year Plan period, is an important aspect of the Landscape and Ecology Management Plan, ensuring sufficient resource is made available to deliver a sustainable long-term Plan for the maintenance of biodiversity interest on the site.

The Landscape and Ecology Management Plan should set out the details for the legal and funding mechanism(s) by which the long-term implementation of the Plan will be secured by the developer with the management body responsible for its delivery. The Plan should also set out, where results from monitoring show that the aim and objectives of the Plan are not being met, how contingencies and/or remedial action will be secured to ensure the development still delivers the fully functioning biodiversity objectives of the approved scheme.

9. Summary and Conclusion

9.1. Baseline

The development site is dominated by artificial habitat. At the time of survey there was no measurable landscaping present around the site. The site is located in an urban area, although there is an area of semi-natural habitat approximately 100m to the west of the site.

9.2. Impacts and Mitigation

The development at 151 Shaftesbury Avenue has some potential for adverse effects on local biodiversity. However, the development will result in the addition of semi-natural habitats, as well as further enhancements through the addition of artificial aids.

Appropriate mitigation measures, in line with BS42020, have been identified to ensure biodiversity is considered throughout the development and to ensure any potential risk to the programme and biodiversity is minimised throughout. These include appropriate measures and consideration of lighting implications on the site and consideration of the potential change in condition of potential features on the site to ensure any subsequent changes are identified.

9.3. Enhancement

Enhancements of the development site is proposed through the inclusion of a variety if landscaping elements across the building including the provision of a green roof habitat and terrace landscaping across the ninth. The landscaping is at an early stage in the design process, however the general recommendations have been given to maximise the biodiversity element of planting.

The final development site will provide foraging resources for invertebrates, bats and birds, and will enhance the habitat in the urban fabric locally. In addition to this, artificial faunal habitat aids have been recommended to improve the biodiversity value of the site, and the local area, for invertebrates, bats and birds.

9.4. Long-Term Management

Recommendations for the long-term management of the final site, specifically the green roof habitat and artificial aids, have been provided in accordance with BS 42020, which will ensure the biodiversity enhancement continues to provide benefits for a minimum of five-years post-construction. The information provided should be used to create a LEMP that can be provided to the building management body and sets out the responsibility and delivery mechanisms. The latter two of these will require additional information to be fully compliant with BS 42020.

The LEMP could also be used to help the main contractor through the construction phase, setting out the enhancement measures to be provided (including maintenance measures

that are required to ensure habitat enhancements installed are maintained in a good condition up to handover).

9.5. Certification

The development site has been classified within this ecological appraisal, including the consideration of the pre-planning baseline as being of 'low ecological value' with habitats present in the pre-development site being dominated by artificial habitats. As there are no semi-natural or natural features within the site, no ecological features within the site need to be protected. The proximity to Phoenix Gardens requires thought in terms of protecting the ecological features, however access to site should be conducted via the public access roads, and works should follow the good practice principles laid out in Section 8.3.2. **The development is eligible to achieve 1 credits under BREEAM LE02, provided that the credit criteria are met following assessment by the BREEAM assessor.**

A SQE was appointed at the appropriate stage and conducted a site walkover, on which this ecological appraisal was based. Recommendations of further enhancements that could be incorporated into the design have been issued within this report. **Providing that enhancements are incorporated into the development, then the development would be eligible to achieve 1 credit for BREEAM LE04, provided that the credit criteria are met following assessment by the BREEAM assessor.**

Provisional inputs into a long-term management plan for the habitats and ecological enhancements created on the site, in accordance with BS 42020, has been prepared by Hilson Moran and included within this report. The information should be used to create a Landscape and Ecology Management Plan for the development which could support the introduction of enhancements by the Main Contractor and should be handed over to the building management body(ies) post-completion. **If all recommendations are incorporated into the development, then the final plan would satisfy the BREEAM LE05 and achieve 2 of the available 2 credits.**

Consequently, 4 of the 5 credits for BREEAM can be achieved, provided the necessary recommendations are implemented and evidenced and the BREEAM Assessor is satisfied that all of the credit criteria are met. Inclusion of the enhancement measures as part of the development will have a benefit to local biodiversity and contribute towards targets contained within the London and City of London BAPs. The credits available could provide a significant contribution to the overall BREEAM rating achieved by the proposed development and contribute to the biodiversity value locally.

Appendix A Legislative and Planning Context

A.1 Legislative Framework

A.1.1 Environment Act 2021

The Environment Act 2021 makes provision for targets, plans and policies for improving the natural environment. Part 6 of the Act deals with nature and biodiversity, principally setting out the requirement for biodiversity net gain in planning but also including requirements relating to local nature recovery strategies and conservation.

Section 98 of the Act makes provision for biodiversity gain to be a condition of planning permission, with Schedule 14 identifying the objective being at least 10 % when comparing the post-development site to the pre-development site. Schedule 14 also identifies the methodology by which this is established and the process by which offsite biodiversity gains can be delivered.

The Act incorporates a transition period for biodiversity net gain of 2 years between its Royal Assent and enforcement of the requirement, bringing the mandatory net gain requirement in place in late 2023.

A.1.2 Conservation of Habitats and Species Regulations 2017 (as amended)

The Conservation of Habitats and Species Regulations 2017 (as amended), which consolidate the Conservation of Habitats and Species Regulations 2010 and subsequent amending instruments, is the main legislation governing the protection of biodiversity and is derived from European Council Directive 92/43/EEC (otherwise known as the Habitats Directive). These Regulations provide protection for sites, habitats and species that are of conservation importance at the European or international level. The Regulations provide the framework for the designation and protection of 'European sites', including Special Protection Areas (SPAs) and Special Areas of Conservation (SACs). The Regulations also provide legislative protection to species, identified as 'European Protected Species' (EPS) within Schedule 2 of the Regulations.

The Conservation of Habitats and Species Regulations 2017 are amended by The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019, which ensures the continuity of the legislation following the departure of the UK from the European Union.

A.1.3 Wildlife and Countryside Act 1981 (as amended)

The Wildlife and Countryside Act 1981 (as amended) comprises the principal means of protecting wildlife in the UK, including the identification and protection of Sites of Special Scientific Interest (SSSIs), and provides the mechanism by which a number of international directives are implemented in the UK.

A.1.4 Countryside and Rights of Way (CRoW) Act 2000

The Countryside and Rights of Way (CRoW) Act 2000 strengthens the Wildlife and Countryside Act 1981 (as amended) in relation to the protection of SSSIs and threatened species.

A.1.5 Natural Environment and Rural Communities (NERC) Act 2000

The Natural Environment and Rural Communities (NERC) Act 2006 places an obligation on public bodies and statutory undertakers to ensure due regard to the conservation of biodiversity.

A.2 Statutory Protected Sites and Species

A.2.1 Sites

Statutory protection for sites of ecological importance or value has derived from various international conventions, European Directives and national legislation. The designations for protected sites in the UK include:

- Special Area of Conservation (SAC) – designated under the European Council Directive on the Conservation of Natural Habitats and of Wild Flora and Fauna, targeting particulate habitats (listed on Annex I) and/or species (listed on Annex II) identified as being of European Importance;
- Special Protection Area (SPA) – designated under the European Council Directive on the Conservation of Wild Birds for the protection of wild birds and their habitats (including particularly rare and vulnerable species listed in Annex I of the Directive, and migratory species);
- Ramsar – listed under the Convention on Wetlands of International Importance for the protection of internationally important wetland habitat, especially as waterfowl habitat. Although not directly legislated, through the NPPF the government expects them to be given the same level of protection as SACs and SPAs;
- Site of Special Scientific Interest (SSSI – notified under the Wildlife and Countryside Act 1981 (as amended) or the National Parks and Access to the Countryside Act 1914, as being of special nature conservation interest for its plant or animal communities, habitats, geological or landform features;
- National Nature Reserve (NNR) – designated under the Wildlife and Countryside Act 1981 (as amended) as a nationally important nature reserve on account of its habitat, flora or fauna interest;
- Local Nature Reserve (LNR) – established by Local Authorities under s21 of the National Parks and Access to the Countryside Act 1914 as a locally important nature reserve on account of its habitat, flora or fauna interest.

A.2.2 Species

The following summarises the legislative protection afforded to species identified as potentially present within the field survey area.

Flora

All wild plants are protected under Schedule 13 of the Wildlife and Countryside Act 1981 (as amended), which makes it an offence to uproot a plant, defined as to '*dig up or otherwise remove the plant from the land on which it is growing*', without permission from the land owner or occupier. A number of higher and lower plants receive additional protection under Schedule 8 of the Act, which makes it an offence to intentionally pick, uproot, destroy or trade in these plants.

Schedule 9 of the Act identifies invasive plant species and makes it an offence to plant these species or otherwise cause them to grow in the wild. The protection has been strengthened through the inclusion of a new schedule, as a result of Section 23 of the Infrastructure Act 2015, which enables environmental authorities to required works to be undertaken to remove or prevent their establishment. Any material containing Japanese knotweed (*Fallopia japonica*) or giant hogweed (*Heracleum mantegazzianum*) is identified as 'controlled waste' under the Environmental Protection Act 1990 and must be disposed of appropriately.

Birds

All wild birds in England and Wales are protected under Part 1 of the Wildlife and Countryside Act 1981 (as amended), which makes it an offence to intentionally kill, injure or take any wild bird, or take, damage or destroy the nest (whilst being built or in use) or its eggs. Additional protection is afforded to species listed in Schedule 1 of the Act from disturbance whilst it is building a nest, or at a nest containing eggs or young, or disturb the dependent young of such a bird.

Furthermore, provisions under Section 10, Part 1, of the Conservation of Habitats and Species Regulations 2017 require local planning authorities to have regard to '*the preservation, maintenance and re-establishment of a sufficient diversity and area of habitat for wild birds in the UK*' in the exercising of their functions. As a result, it is important to consider any habitat loss as a result of development and opportunities for the provision of habitats.

European Protected Species

All European Protected Species (EPS) in England and Wales are fully protected through inclusion within the Conservation of Habitats and Species Regulations 2017 (as amended). Under this legislation it is an offence to deliberately capture, injure or kill individuals of any native EPS. It is also a strict liability offence to damage or destroy sites or places which EPS use as a breeding site or resting place. EPS are also protected under the Regulations from deliberate disturbance which is likely to:

a) impair its ability:
    i. to survive, breed or reproduce, or to rear or nurture their young; or,
    ii. in the case of animals of a hibernating or migratory species to hibernate or migrate; or,
b) to affect significantly the local distribution or abundance of the species to which they belong.

It may be possible to apply for a licence from Natural England to allow activities that would otherwise be an offence under these Regulations. However, it is an offence to breach a condition imposed by any such licence.

All EPS are also partially protected in England and Wales through their inclusion in Schedule 5 of the Wildlife and Countryside Act 1981 (as amended). Under this legislation, it is an offence to intentionally or recklessly disturb a bat whilst it is using a place of rest or shelter.

EPS potentially present within the masterplan site and immediately surrounding areas include all species of bats.

A.3 Planning Policy

A.3.1 National Planning Policy

National planning policy guidance in relation to ecology and nature conservation is provided through the National Planning Policy Framework (NPPF), with planning practice guidance provided by the Ministry of Housing, Communities and Local Government. The conservation and enhancement of the natural environment is a key strategic policy in the NPPF, and Chapter 15 of the NPPF sets out the Government's planning policies on this. Paragraph 180 states that '*planning policies and decisions should contribute to and enhance the natural and local environment by:*

- *protecting and enhancing valued landscapes, sites of biodiversity or geological value and soils;*
- *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;*
- *minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures*'.

The NPPF also states in Paragraph 181 that '*plans should: distinguish between the hierarchy of international, national and locally 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*'.

Paragraph 186 of the NPPF identifies a number of principles that should be applied by local planning authorities in the determination of planning applications, which include:

- '*if significant harm to biodiversity resulting from a development cannot be avoided (through locating on an alternative site with less harmful impacts), adequately mitigated or, as a last resort, compensated for, then planning permission should be refused;*
- *development on land within or outside a SSSI, 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 features of the site that make it of special scientific interest, and any broader impacts on the national network of SSSIs;*
- *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,*
- *development whose primary objective is to conserve or enhance biodiversity should be supported; while opportunities to improve biodiversity in and around developments should be integrated as part of their design, especially where this can secure measurable net gains for biodiversity or enhance public access to nature where this is appropriate*'.

Planning practice guidance provided by the Ministry of Housing, Communities and Local Government includes further guidance on biodiversity, ecosystems and green infrastructure within the planning process. Paragraph 018 (Reference ID 8-018-20190721) identifies that information on biodiversity impacts and opportunities should inform all stages of development, with planning applications requiring an ecological survey where the type and location of development are such that the impact on biodiversity may be significant and existing information is lacking or inadequate. The guidance also identified that detailed species surveys should only be required by local planning authorities where clearly justified, for example if there is a reasonable likelihood of a protected species being present and affected by the development.

A.3.2 Metropolitan Planning Policy

The London Plan is the strategic planning document for London, produced by the Greater London Authority (GLA), setting out an integrated economic, environmental, transport and social framework

for the development of London over 20 – 25 years. The London Plan requires all borough development plans to be in general conformity with it.

The following identify the London Plan policies of relevance to this assessment.

Policy D8 Public Realm

Development Plans and development proposals should:

a) encourage and explore opportunities to create new public realm where appropriate;
    i) incorporate green infrastructure such as street trees and other vegetation into the public realm to support rainwater management through sustainable drainage, reduce exposure to air pollution, moderate surface and air temperature and increase biodiversity.

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;
d) Development proposals should incorporate appropriate elements of green infrastructure that are integrated into London's wider green infrastructure network.

Policy G3 Metropolitan Open Land

a) Metropolitan Open Land (MOL) is afforded the same status and level of protection as Green Belt:
    i. MOL should be protected from inappropriate development in accordance with national planning policy tests that apply to the Green Belt;
    ii. Boroughs should work with partners to enhance the quality and range of uses of MOL.
b) The extension of MOL designations should be supported where appropriate. Boroughs should designate MOL by establishing that the land meets at least one of the following criteria:
    i. It contributes to the physical structure of London by being clearly distinguishable from the built-up area;
    ii. It includes open air facilities, especially for leisure, recreation, sport, the arts and cultural activities, which serve either the whole or significant parts of London;
    iii. It contains features or landscapes (historic, recreational, biodiverse) of either national or metropolitan value;

iv. It forms part of a strategic corridor, node or a link in the network of green infrastructure and meets one of the above criteria.

Policy G4 Open Space

b) Development proposals should:

i. not result in the loss of protected open space;

ii. where possible create areas of publicly accessible open space, particularly in areas of deficiency.

Policy G5 Urban Greening

a) Major development proposals should contribute to the greening of London by including urban greening as a fundamental element of site and building design, and by incorporating measures such as high-quality landscaping (including trees), green roofs, green walls and nature-based sustainable drainage;

b) Boroughs should develop an Urban Greening Factor (UGF) to identify the appropriate amount of urban greening required in new developments. The UGF should be based on the factors set out in Table 8.2 [of the Policy], but tailored to local circumstances. In the interim, the Mayor recommends a target score of 0.4 for developments that are predominately residential, and a target score of 0.3 for predominately commercial development (excluding B2 and B8 uses);

c) Existing green cover retained on site should count towards developments meeting the interim target scores set out in b) based on the factors set out in Table 8.2 [of the Policy].

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 of 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;

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;

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.

Policy G7 Trees and Woodland

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:

i. Protect 'veteran' trees and ancient woodland where these are not already part of a protected site;

ii. 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 other 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 areas of their canopy.

A.3.3 Local Planning Policy

Local planning policy for the Camden is derived from the Local Plan, which was adopted in July 2017. The Local Plan sets out the Council's planning policies, replacing the previous Core Strategy and Development Policies Planning Documents, and aims to achieve the Council's vision through strategic objectives:

- provide democratic and strategic leadership fit for changing times;
- develop new solutions with partners to reduce inequalities and improve the physical and mental health and wellbeing of local residents;
- create conditions for and harnessing the benefits of economic growth;
- invest in our communities to ensure sustainable neighbourhoods; and
- deliver value for money services by getting it right first time.

The Local Plan includes a number of policies of relevance to this assessment, which include the following.

Policy A1 Managing the Impact of Development

The Council will seek to protect the quality of life of occupiers and neighbours. We will grant permission for development unless this causes unacceptable harm to amenity.

We will:

a) *seek to ensure that the amenity of communities, occupiers and neighbours is protected;*

b) *seek to ensure development contributes towards strong and successful communities by balancing the needs of development with the needs and characteristics of local areas and communities;*

c) *resist development that fails to adequately assess and address transport impacts affecting communities, occupiers, neighbours and the existing transport network; and*

d) *require mitigation measures where necessary. The factors we will consider include:*

e) *visual privacy, outlook;*

f) *sunlight, daylight and overshadowing;*

g) *artificial lighting levels;*

h) *transport impacts, including the use of Transport Assessments, Travel Plans and Delivery and Servicing Management Plans;*

i) *impacts of the construction phase, including the use of Construction Management Plans;*

j) *noise and vibration levels;*

k) *odour, fumes and dust;*

l) *microclimate;*

m) *contaminated land; and*

n) *impact upon water and wastewater infrastructure.*

Policy A2 Open Space

The Council will protect, enhance and improve access to Camden's parks, open spaces and other green infrastructure.

Protection of open spaces

In order to protect the Council's open spaces, we will:

a. *protect all designated public and private open spaces as shown on the Policies Map and in the accompanying schedule unless equivalent or better provision of open space in terms of quality and quantity is provided within the local catchment area;*

b. *safeguard open space on housing estates while allowing flexibility for the re-configuration of land uses. When assessing development proposals we will take the following into account:*

    i. *the effect of the proposed scheme on the size, siting and form of existing open space and the functions it performs;*

ii. *whether the open space is replaced by equivalent or better provision in terms of quantity and quality; and*

iii. *whether the public value of retaining the open space is outweighed by the benefits of the development for existing estate residents and the wider community, such as improvements to the quality and access of the open space.*

c. *resist development which would be detrimental to the setting of designated open spaces;*

d. *exceptionally, and where it meets a demonstrable need, support smallscale development which is associated with the use of the land as open space and contributes to its use and enjoyment by the public;*

e. *protect non-designated spaces with nature conservation, townscape and amenity value, including gardens, where possible;*

f. *conserve and enhance the heritage value of designated open spaces and other elements of open space which make a significant contribution to the character and appearance of conservation areas or to the setting of heritage assets;*

g. *give strong protection to maintaining the openness and character of Metropolitan Open Land (MOL);*

h. *promote and encourage greater community participation in the management of open space and support communities seeking the designation of Local Green Spaces through the neighbourhood planning process;*

i. *consider development for alternative sports and recreation provision, where the needs outweigh the loss and where this is supported by an up-to-date needs assessment*

j. *preserve and enhance Hampstead Heath through working with partners and by taking into account the impact on the Heath when considering relevant planning applications, including any impacts on views to and from the Heath; and*

k. *work with partners to preserve and enhance the Regent's Canal, including its setting, and balance the differing demands on the Canal and its towpath.*

New and enhanced open space

To secure new and enhanced open space and ensure that development does not put unacceptable pressure on the Borough's network of open spaces, the Council will:

l. *seek developer contributions for open space enhancements using Section 106 agreements and the Community Infrastructure Levy (CIL). The Council will secure planning obligations to address the additional impact of proposed schemes on public open space taking into account the scale of the proposal, the number of future occupants and the land uses involved;*

m. *apply a standard of 9 sqm per occupant for residential schemes and 0.74 sqm for commercial and higher education developments while taking into account any funding for open spaces through the Community Infrastructure Levy;*

n. *give priority to securing new public open space on-site, with provision off-site near to the development only considered acceptable where provision on-site is not achievable. If there is no realistic means of direct provision, the Council may accept a financial contribution in lieu of provision;*

o. *ensure developments seek opportunities for providing private amenity space;*

p. *give priority to play facilities and the provision of amenity space which meet residents' needs where a development creates a need for different types of open space;*

q. *seek opportunities to enhance links between open spaces recognising the multiple benefits this may bring;*

r. *tackle deficiencies to open space through enhancement measures; and*

s. *seek temporary provision of open space where opportunities arise.*

Policy A3 Biodiversity

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

a. *designate and protect nature conservation sites and safeguard protected and priority habitats and species;*

b. *grant permission for development unless it would directly or indirectly result in the loss or harm to a designated nature conservation site or adversely affect the status or population of priority habitats and species;*

c. *seek the protection of other features with nature conservation value, including gardens, wherever possible;*

d. *assess developments against their ability to realise benefits for biodiversity through the layout, design and materials used in the built structure and landscaping elements of a proposed development, proportionate to the scale of development proposed;*

e. *secure improvements to green corridors, particularly where a development scheme is adjacent to an existing corridor;*

f. *seek to improve opportunities to experience nature, in particular where such opportunities are lacking;*

g. *require the demolition and construction phase of development, including the movement of works vehicles, to be planned to avoid disturbance to habitats and species and ecologically sensitive areas, and the spread of invasive species;*

h. *secure management plans, where appropriate, to ensure that nature conservation objectives are met; and*

i. work with The Royal Parks, The City of London Corporation, the London Wildlife Trust, friends of park groups and local nature conservation groups to protect and improve open spaces and nature conservation in Camden.

Trees and vegetation

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

j. resist the loss of trees and vegetation of significant amenity, historic, cultural or ecological value including proposals which may threaten the continued wellbeing of such trees and vegetation;

k. require trees and vegetation which are to be retained to be satisfactorily protected during the demolition and construction phase of development in line with BS5837:2012 'Trees in relation to Design, Demolition and Construction' and positively integrated as part of the site layout;

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

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

A.4 Biodiversity Action Plans

A.4.1 UK Biodiversity Action Plan

The UK BAP has been replaced by the Post-2010 Biodiversity Framework, which addresses the changes in the strategic thinking of the Convention on Biological Diversity's Strategic Plan for Biodiversity 2011-2020. The new Framework includes new priorities for UK-level work for the Convention on Biological Diversity and provides a broad structure to enable action across the UK. Whilst the UK BAP has been replaced, the UK BAP priority habitats and species continue to be regarded as conservation priorities in the UK Post-2010 Biodiversity Framework.

The UK BAP identifies 65 habitats and 1,150 species that are considered to be of conservation concern.

Although a number of the species present within the study area are included in the UK BAP, only common pipistrelle and song thrush have been included in a Species Action Plan.

Common Pipistrelle

Although it remains the most abundant and widespread bat species in the UK, the pipistrelle is thought to have undergone a significant decline in numbers. Estimates from the National Bat Colony Survey suggest a population decline of approximately 70% between 1978 and 1993. Factors identified as causing loss or decline of the species population include:

- A reduction in insect prey abundance, due to high intensity farming practice and inappropriate riparian management;
- Loss of insect-rich feeding habitats and flyways, due to loss of wetlands, hedgerows and other suitable prey habitats;
- Loss of winter roosting sites in buildings and old trees;

- Disturbance and destruction of roosts, including the loss of maternity roosts due to the use of toxic timber treatment chemicals.

The Species Action Plan identifies the objectives and targets as the maintenance of existing populations and range of pipistrelle, and restoration of populations to pre-1970 numbers.

Song Thrush

Although a common and widespread species, song thrush are declining throughout the UK as a result of changes in food supply and availability of nest sites as a result of changes in farming practice, predation by corvids and foxes and competition with blackbirds. The aims of the Species Action Plan are to halt the decline in numbers by 2000, maintain the range and population levels of the species and, where possible, restore them to that of the 1970 estimate, and identify and implement priority research in order to formulate future conservation action.

A.4.2 London Biodiversity Action Plan

The London BAP was prepared by the London Biodiversity Partnership to protect and enhance London's biodiversity. The Plan aimed to ensure that rare species are maintained and that common species remain common, and so contribute to the maintenance of national and global biodiversity. It also aimed to enable the local community to be in contact with nature, especially those that do not have ways to access the countryside.

Although the London Biodiversity Partnership has been disbanded as a result of a lack of funding, regional and organisational delivery of the Plan continues and the aims of the Plan remain relevant.

In order to achieve the aims of the Plan, the BAP identified a number of habitat and species of nature conservation importance taking into account the UK BAP, and targets and actions have been set up to be implemented for their enhancement.

The London Plan identified 15 priority habitats and 214 priority species. A number of Habitat Action Plans and Species Action Plans have been developed, with the following action plans considered to be relevant to the assessment.

London Parks and Green Spaces

The Action Plan provides a focus to look at ways to improve the nature conservation value of London's parks and green spaces, alongside their other uses. It provides support to parks and green space managers and promotes the values and benefits of biodiversity for both parks and people. The scope of the plan includes, but is not limited to, housing estates, churchyards, cemeteries, squares, woodland, heaths and Commons and parks.

Bats

At least eight species of bat are known to breed in Greater London. The soprano pipistrelle is by far the most common and occurs in all London boroughs. The common pipistrelle, noctule and Daubenton's bats are also regularly recorded and widespread.

In London, some population trends are apparent that contradict those of the rest of the UK. A 1999 survey which sampled bat activity at sites across the region concluded that there was a significant decline in the overall bat population of Greater London within the preceding decade, reflected most obviously by a lack of records for noctule, Leisler's bat and serotine. Since then, soprano and

common pipistrelle appear to be recovering well, the decline in noctule has gathered pace and apparently Daubenton's bat is now also causing concern.

The Species Action Plan aims to: reverse the current population declines in London's bats; and, to redress Londoner's misconceptions about bats and secure their status as culturally valued animals. To support this, the following relevant actions have been identified:

- resistance of development impacts on protected or priority species;
- mitigation of development impacts on protected or priority species.

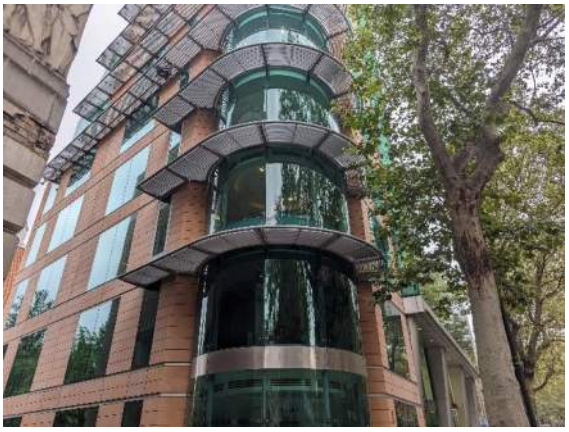
House Sparrow

There is much evidence that this once abundant bird has declined dramatically in recent years. It is now common knowledge that house sparrows have disappeared, or become far less common, in many places where they were formerly abundant. This applies both in the centre of London and many of the suburbs, as well as some of the surrounding towns and indeed a number of cities in other parts of the country such as Bristol and Edinburgh.

A number of factors have been identified for their decline, including a reduction in food supply, predation, disease, reduction in nest site availability and pest control.

The Species Action Plan aims to: raise awareness of the need for biodiversity conservation by focussing attention on the decline in house sparrow and its importance as a cultural emblem; and, to establish the cause(s) of decline in the population of house sparrow and, if possible, undertake measures to reverse the decline.

Appendix B Site Photographs



Photograph 1: 151 Shaftesbury Avenue Southern façade, leading to St Giles Passage.

Photograph 2: Roof of 151 Shaftesbury Avenue, facing northeast.

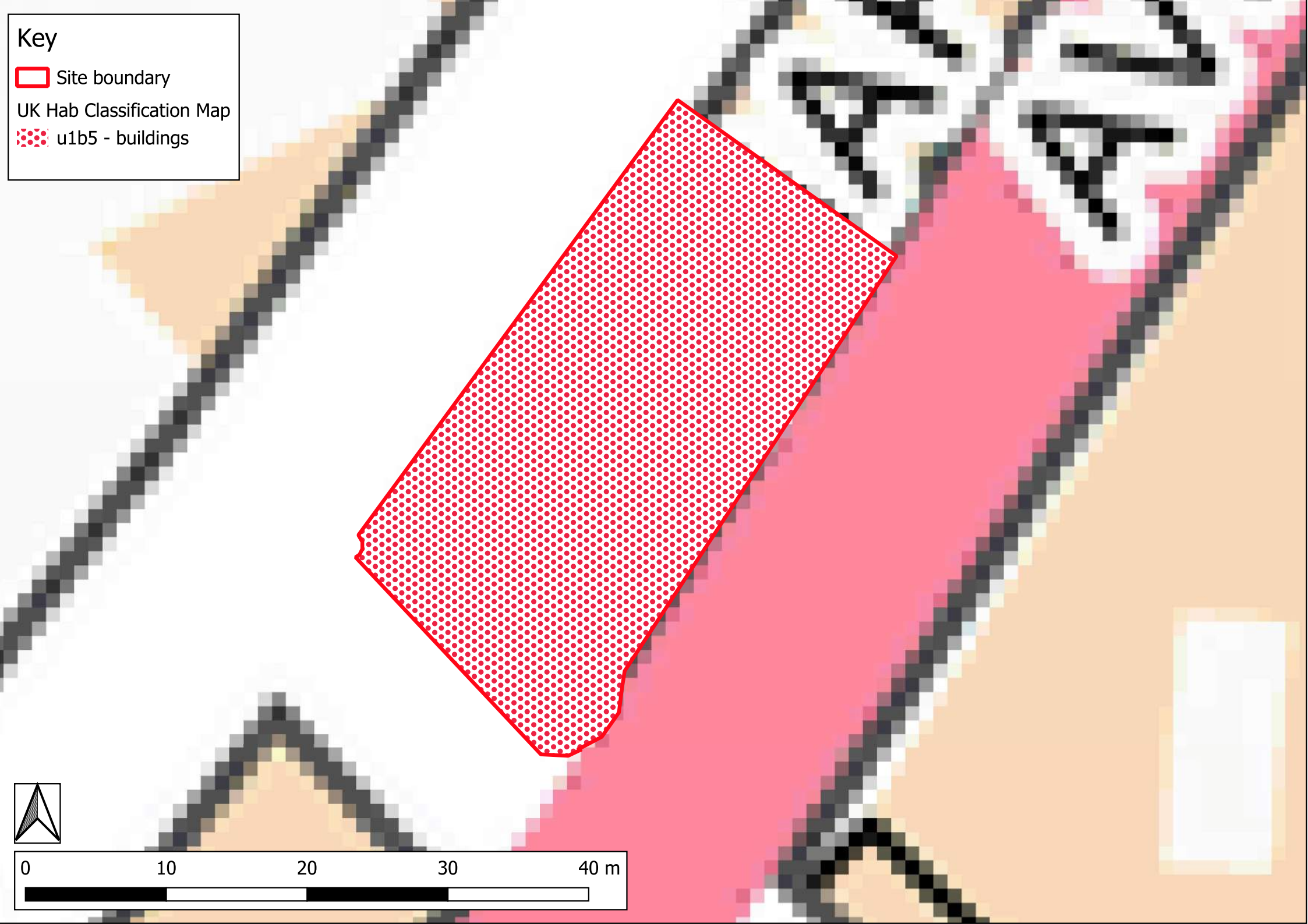
Photograph 3: Roof of 151 Shaftesbury Avenue, facing south, showing planters.

Photograph 4: Decked area and planters present on the roof of 151 Shaftesbury Avenue.

Photograph 5: Decked area and planters present on the roof of 151 Shaftesbury Avenue.

Photograph 6: St Giles passage showing southwest façade of 151 Shaftesbury Avenue

Appendix C Pre-Planning Habitat Map


Key
Site boundary
UK Hab Classification Map
u1b5 - buildings
0
10
20
30
40 m

Appendix D Enhancement Calculation

151 Shaftesbury Avenue

Headline Results

Return to results menu

Scroll down for final results ⚠

On-site baseline	*Habitat units*	0.00		
	Hedgerow units	0.00		
	Watercourse units	0.00		
On-site post-intervention (Including habitat retention, creation & enhancement)	*Habitat units*	0.11		
	Hedgerow units	0.00		
	Watercourse units	0.00		
On-site net change (units & percentage)	*Habitat units*	0.11	N/A	Zero baseline units - % cannot be calculated
	Hedgerow units	0.00	0.00%	
	Watercourse units	0.00	0.00%	
Off-site baseline	*Habitat units*	0.00		
	Hedgerow units	0.00		
	Watercourse units	0.00		
Off-site post-intervention (Including habitat retention, creation & enhancement)	*Habitat units*	0.00		
	Hedgerow units	0.00		
	Watercourse units	0.00		
Off-site net change (units & percentage)	*Habitat units*	0.00	0.00%	
	Hedgerow units	0.00	0.00%	
	Watercourse units	0.00	0.00%	
Combined net unit change (Including all on-site & off-site habitat retention, creation & enhancement)	*Habitat units*	0.11		
	Hedgerow units	0.00		
	Watercourse units	0.00		
Spatial risk multiplier (SRM) deductions	*Habitat units*	0.00		
	Hedgerow units	0.00		
	Watercourse units	0.00		

FINAL RESULTS

Total net unit change (Including all on-site & off-site habitat retention, creation & enhancement)	*Habitat units*	0.11	
	Hedgerow units	0.00	
	Watercourse units	0.00	
Total net % change (Including all on-site & off-site habitat retention, creation & enhancement)	*Habitat units*	N/A	0 baseline units - % cannot be calculated
	Hedgerow units	0.00%	
	Watercourse units	0.00%	
Trading rules satisfied?	Yes ✓		

Unit Type	Target	Baseline Units	Units Required	Unit Deficit	
Habitat units	10.00%	0.00	0.00	0.00	No additional area habitat units required to meet target ✓
Hedgerow units	10.00%	0.00	0.00	0.00	No additional hedgerow units required to meet target ✓
Watercourse units	10.00%	0.00	0.00	0.00	No additional watercourse units required to meet target ✓

BREEAM, CEEQUAL & HQM Change in Ecolgical Value Calculator

BREEAM UK delivered by bre | HOME QUALITY MARK delivered by bre | CEEQUAL delivered by bre

NB: All assessment details below must be completed before result will be given			
1	Site Name	151 Shaftesbury Avenue	
2	Development Footprint Area	820	
3	Unit of Area	Square Metres	Note: Must be applied consistently throughout the assessment
4	Have statutory obligations been met?	Yes	
5	Is Area Based Habitat Pre Development Biodiversity Unit score 0?	Yes	
6	If 5 is "Yes", what percentage of Development Footprint does habitat created, that's distinctiveness is not 0, cover?	56.00%	
7	Are any Linear (Watercourse) Habitats present Pre Development?	No	
8	If yes, are all habitats present in "Good" condition Pre Development and remain untouched throughout development?	N/A	Note: If 7 and 8 are both "Yes", or 7 is "No" then Linear (Watercourse) habitats can be filtered out for the purpose of credit award
9	Can Linear (Watercourse) Habitats be filtered out?	Yes	Check this cell before selecting from the drop down menu, 10, below.
10	If applicable, should Linear (Watercourse) Habitats be filtered out?	Yes	Note: No should only be selected where new habitat is created and reward is sought for this creation. It is automatically filtered if none of the specified habitat is present Pre or Post Development.
11	Are any Linear (Foliage) Habitats present Pre Development?	No	
12	If yes, are all habitats present in "Good" condition Pre Development and remain untouched throught development?	N/A	Note: If 11 and 12 are both "Yes", or 11 is "No" then Linear (Watercourse) habitats can be filtered out for the purpose of credit award
13	Can Linear (Foliage) Habitats be filtered out?	Yes	Check this cell before selecting from the drop down menu, 14, below.
14	If applicable, should Linear (Foliage) Habitats be filtered out?	Yes	Note: No should only be selected where new habitat is created and reward is sought for this creation. It is automatically filtered if none of the specified habitat is present Pre or Post Development

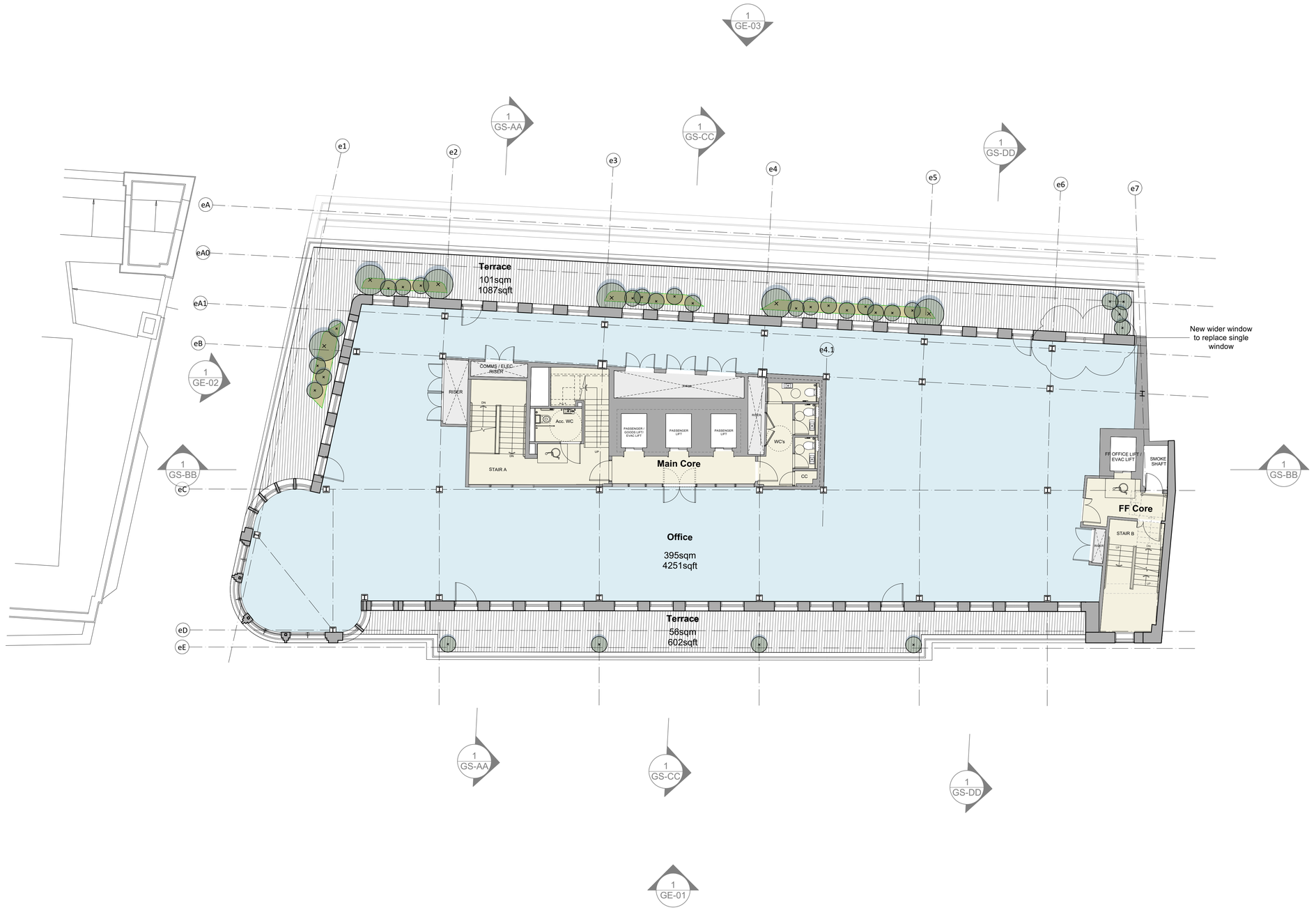
	Area Based Habitats	Linear (Watercourse) Habitats	Linear (Foliage) Habitats
Pre Development	0	0	0
Post Development	1025	0	0
Post Development % of Pre Development	*105%*	*Filtered for purpose of credit award*	*Filtered for purpose of credit award*

Total Post Development % of Pre Development (Lowest Score)	*105%*	*Net Gain*

Cells that are white with a black border require the user to input information, either by selecting from the available options or entering the required data.

Cells that are light grey (with/without black border) contain information for the user and/or automated calculation. They do not require the user to input or select data.

Appendix E Landscape Proposals



GENERAL NOTES.

All dimensions to be checked on site prior to commencement of any works, and/or preparation of any shop drawings.

Sizes of and dimensions to any structural elements are indicative only. See structural engineers drawings for actual sizes / dimensions.

Sizes of and dimensions to any service elements are indicative only. See service engineers drawings for actual sizes and dimensions.

This drawing to be read in conjunction with all other Architect's drawings, specifications and other Consultants' information.

All proprietary systems shown on this drawing are to be installed strictly in accordance with the Manufacturers/Suppliers recommended details.

Any discrepancies between information shown on this drawing and any other contract information or manufacturers/suppliers recommendations is to be brought to the attention of the Architect

DO NOT SCALE FROM THIS DRAWING.

NOTES.

Measured Survey Information received from Plowman Craven on 08/08/23.

Key

- Office
- Retail
- Reception
- Circulation
- Changing Facilities
- Pavilion
- Plant

REV.	DATE	NOTE	DRAWN
P6	02/02/24	Stage 2 Final Issue	LJ
P5	29/11/23	Stage 2 Frozen Issue	LJ
P4	06/09/23	Updated planters	PA
P3	24/08/23	Stage 2 Frozen Issue	PA
P2	14/07/23	Stage 2 'Chilled' Issue	
P1	10/06/22	Stage 1 Issue	RM

BGY
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+ 44 20 7033 9913
BGY.CO.UK

CLIENT
RLAM

PROJECT
151 Shaftesbury Avenue

DRAWING
Proposed Eighth Floor Plan

SCALE
1:100 @ A1
1:200 @ A3

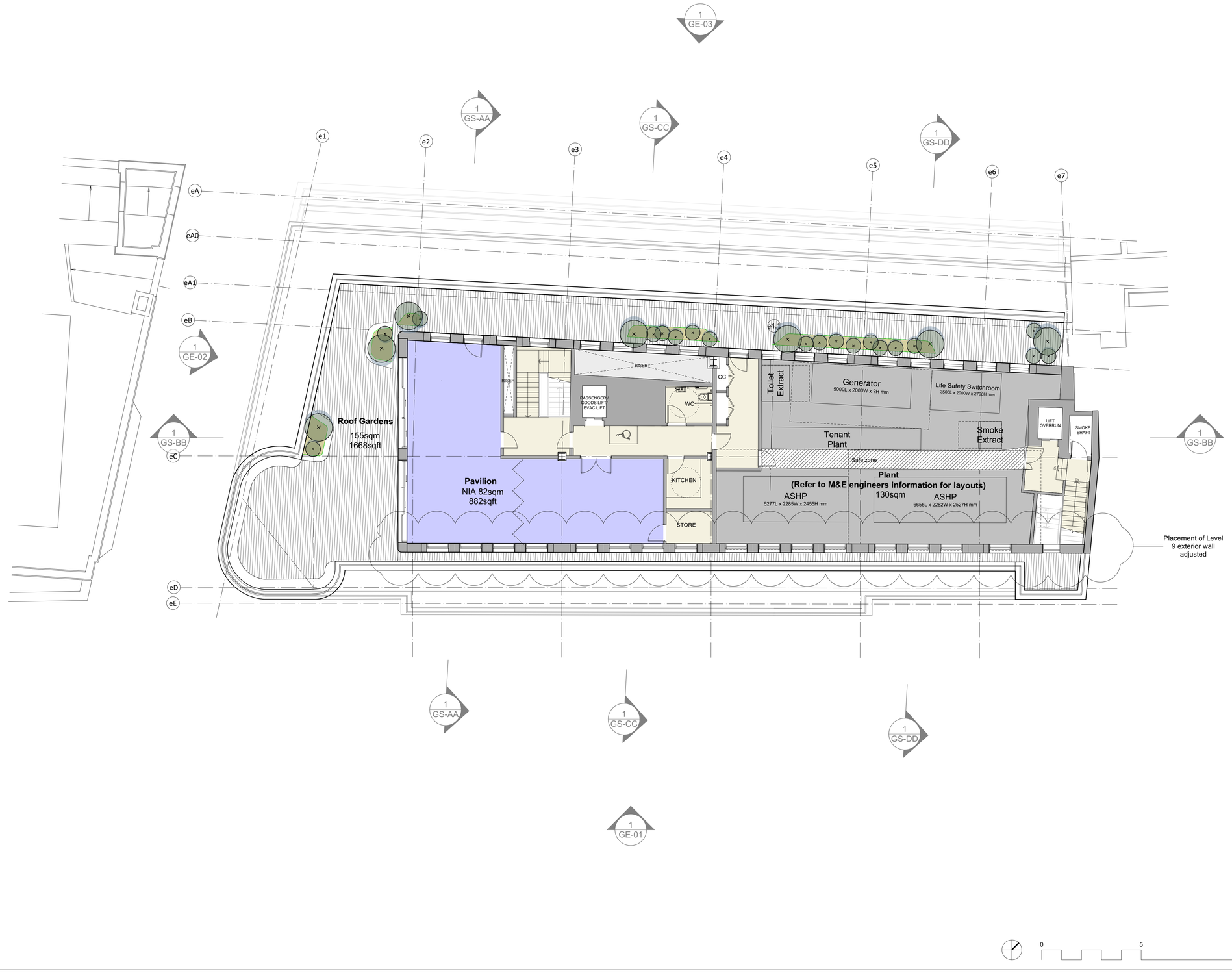
DATE
10/06/22

STATUS
PLANNING

APPROVED
AW

DWG No.
1232_GA-08

REVISION
P6



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DO NOT SCALE FROM THIS DRAWING.

NOTES.

Measured Survey Information received from Plowman Craven on 08/08/23.

Key

- Office
- Retail
- Reception
- Circulation
- Changing Facilities
- Pavilion
- Plant

REV.	DATE	NOTE	DRAWN
P6	02/02/24	Stage 2 Final Issue	LJ
P5	29/11/23	Stage 2 Frozen Issue	LJ
P4	06/09/23	Planters update	PA
P3	24/08/23	Stage 2 Frozen Issue	PA
P2	14/07/23	Stage 2 'Chilled' Issue	
P1	10/06/22	Stage 1 Issue	RM

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+ 44 20 7033 9913
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PROJECT
151 Shaftesbury Avenue

DRAWING
Proposed Ninth Floor Plan

SCALE
1:100 @ A1
1:200 @ A3

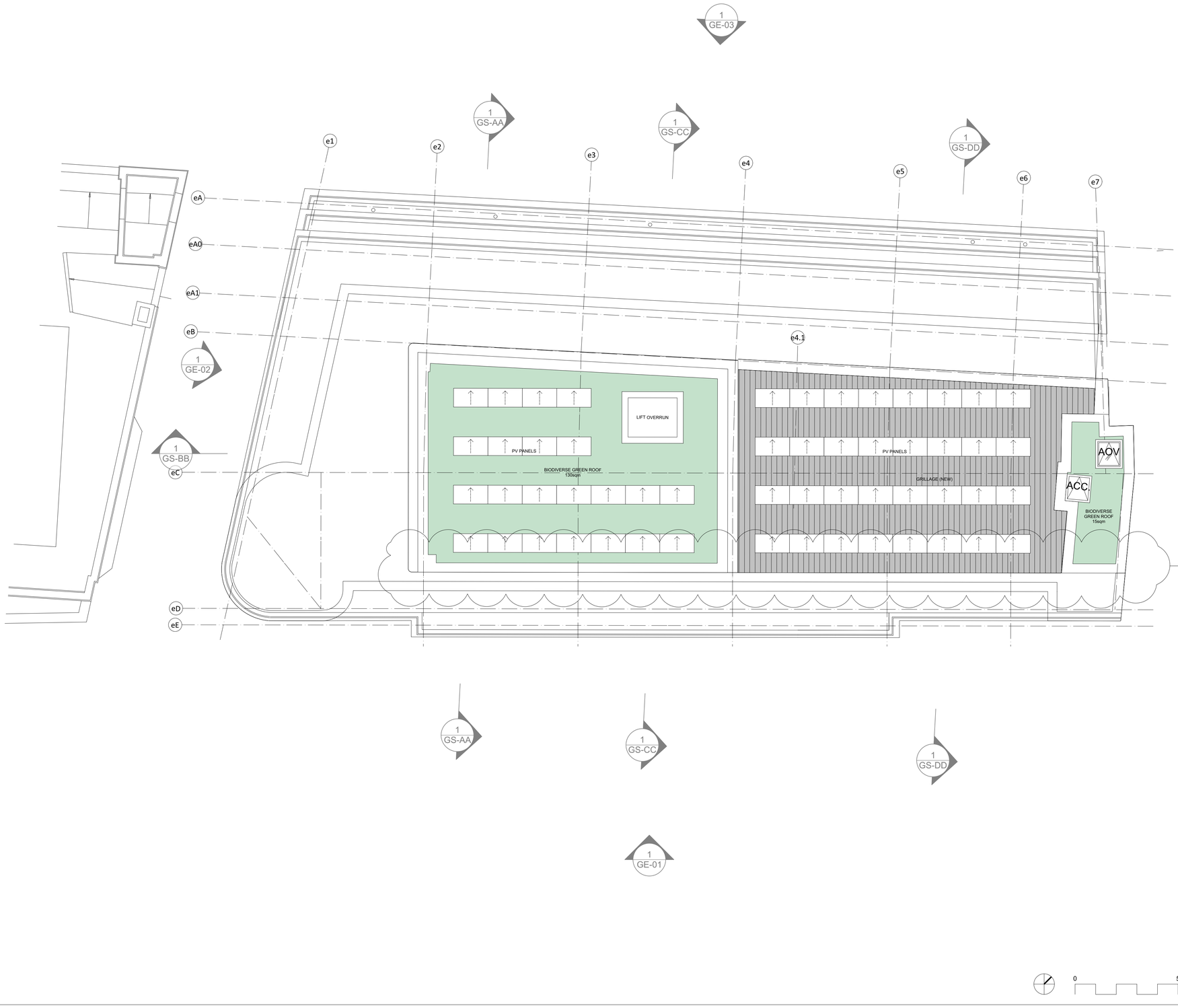
DATE
10/06/22

STATUS
PLANNING

APPROVED
AW

DWG No.
1232_GA-09

REVISION
P6



GENERAL NOTES.

All dimensions to be checked on site prior to commencement of any works, and/or preparation of any shop drawings.

Sizes of and dimensions to any structural elements are indicative only. See structural engineers drawings for actual sizes / dimensions.

Sizes of and dimensions to any service elements are indicative only. See service engineers drawings for actual sizes and dimensions.

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DO NOT SCALE FROM THIS DRAWING.

NOTES.

Measured Survey Information received from Plowman Craven on 08/08/23.

Key

- Office
- Retail
- Reception
- Circulation
- Changing Facilities
- Pavilion
- Plant

REV.	DATE	NOTE	DRAWN
P5	02/02/24	Stage 2 Final Issue	LJ
P4	29/11/23	Stage 2 Frozen Issue	LJ
P3	24/08/23	Stage 2 Frozen Issue	PA
P2	14/07/23	Stage 2 'Chilled' Issue	
P1	10/06/22	Stage 1 Issue	RM

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+ 44 20 7033 9913
BGY.CO.UK

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PROJECT
151 Shaftesbury Avenue

DRAWING
Proposed Roof Plan

SCALE
1:100 @ A1
1:200 @ A3

DATE
10/06/24

STATUS
PLANNING

APPROVED
AW

DWG No.
1232_GA-RF

REVISION
P5

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