CHEVRON
A WORK-ZONE SAFETY COMPANY
GREEN SERVICES

300 Grays Inn Road, London

Preliminary Ecological Assessment and BREEAM Ecology Report

May 2023

Document Control

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Executive Summary

I. Chevron Green Consultancy (CGC) were commissioned by Platignum Properties Limited to conduct a Preliminary Ecological Appraisal (PEA) on the existing building and outdoor space at 300 Grays Inn Road, London, WC1X 8DX.

II. The assessment is focused towards the BREEAM Ecology Credits LE02: Ecological value of site and protection of ecological features, LE03: Minimising impact on existing site ecology and LE04: Enhancing site ecology (BREEAM International New Construction version 6, 2022).

III. The site currently consists of a seven-storey building on the main Grays Inn Road with a three storey rear extension on Acton Street. 300 Grays Inn Road is in use as a BUPA Health Centre / Clinic. There is a small courtyard accessed from Acton Street which is used for bin storage, cycle store and parking and flat roof area accessible on the 7th storey and on top of the 7th storey.

IV. Frederick Street, a residential road with associated gardens is present to the rear of the building and business properties are located adjacent to the frontage on Grays Inn Road.

V. The proposal for the site involves the refurbishment and extension of the building to provide residential flats (Class C3) and commercial, business and service use (Class E) including external alterations for new facades to all elevations, the introduction of terraces, reconfiguration of entrances and servicing arrangements, new hard and soft landscaping, provision of cycle parking and other ancillary works.

VI. The Preliminary Ecological Appraisal was conducted on 19th April 2023 by CGC's Ruth Frith (Environmental Manager). It found no vegetative habitats on site, offsite within the zone of influence nearby green spaces, scattered urban trees and residential gardens were identified.

VII. A Preliminary Roost Assessment found limited internal and external roosting opportunities onsite. It is considered there is a low potential for foraging or commuting bats to be present onsite due to the suitable habitats off site and a low potential for roosting bats within the courtyard / basement area of the Site. One Phase II bat survey will be required prior to the commencement of the proposed works on site.

VIII. The site was determined as providing low potential for breeding birds within limited opportunities onsite.

IX. Key recommendations made for mitigating potential impacts will be developed through the design phase and may include measures such as sensitive lighting design, pollution control, green roofs and incorporation of bird and bat boxes.

BREEAM Summary

Issue	Available Credits	Credits likely to be Awarded based on evidence	Summary
LE02: Ecological value of site and protection of ecological features	2	2	*The SQE has identified the site as being 'low ecological value'* – if the Phase II bat survey proves no likelihood of the site utilised by bats. *All existing features within the site boundary and zone of influence will be adequately protected during construction* – if the advisories are complied with within this PEA. *The principle contractor will comply with the ecological protection recommended by the SQE.*
LE03: Minimising impact on existing site ecology	N/A	N/A	*This issue is not applicable to BREEAM International New Construction Version 6.*
LE04: Enhancing site ecology	3	3	*A SQE has been appointed at the beginning of Concept Design stage*- Ruth Frith *The SQE has provided an ecology report with appropriate ecological recommendations for the enhancement of the site's ecology*- The report is based on a site visit and survey by the SQE. *At least 50% of the recommendations within the ecology report for enhancement of site ecology will be implemented in the final design and build*- evidence will be required through implementation and incorporation into final plans.

1. Introduction

1.1 Background

1.1.1 Chevron Green Consultancy (GCG) were commissioned by Platignum Properties Limited to conduct a Preliminary Ecological Appraisal (PEA) on the existing building and outdoor space at 300 Grays Inn Road, London, WC1X 8DX (Grid Reference: TQ30608269) hereafter known as 'the Site'.

1.1.2 The PEA includes a desk study and a walkover to identify ecological constraints associated with the development proposal. The Sites potential to support legally protected species or habitats of high nature conservation value was assessed and recommendations for mitigation and enhancement are provided to ensure optimum ecological value.

1.1.3 As part of the PEA, a Preliminary Roost Assessment (PRA) was conducted both internally and externally of the buildings onsite. A PRA includes a site walkover to identify any evidence of bats utilising the site and the suitability of the sites features to support roosting bats.

1.2 Site Setting and Description of the Project

1.2.1 The Site is within the Inner London National Character Area (112) in Clerkenwell and surrounded by the adjoining Farringdon to the south, Islington and Angel to the North and Covent Garden and Soho to the west (Figure 1).

1.2.2 300 Grays Inn Road is located within the Greater London built up area. Grays Inn Road (A5200) is located at the front of the building with quieter residential streets surrounding. London Kings Cross Station and St Pancras international are located approximately 0.5km north.

Figure 1 Site Location (Source; Google maps)

1.2.3 The site occupies a prominent corner site on the junction of Acton Street and Gray's Inn Road, in the Bloomsbury Conservation Area in the London Borough of Camden. The existing building is a part three, part eight storey building currently occupied by BUPA within a commercial, business and service (Class E) use, a small area of hard standing is located to the rear accessed from Acton Street, the whole site constitutes 834m^2.

1.2.4 There is an outside courtyard area accessible from Acton Street through an archway in the three storey building. This area all constitutes hard standing and is used for bin storage, cycle store and parking.

1.2.5 A basement is also present, viewed from the outside courtyard, but no access to this area was provided.

1.2.6 A PEA survey was required to satisfy the BREEAM Ecology Credits LE2, LE03 and LE04 for the proposal involving the redevelopment of 300 Grays Inn Road, stripping back of the existing façade and extension skyward and a further two storey extension on the residential street Acton road.

1.2.7 The PRA assessment was conducted as although centrally located within an urban landscape, potential roosting features may be present and pockets of suitable foraging habitat occur

within the surrounds which may provide foraging and roosting opportunity for London's common bat species.

1.3 Aims and Scope of Report

1.3.1 The aim of this report is to provide an initial appraisal of any notable[1] and/or protected habitats and species which occur or have the potential to occur on or near the proposed development site and which may be impacted by the works. The report follows the 'Guidelines for Preliminary Ecological Appraisal'[2].

1.3.2 The objectives are to:

- Identify any designated sites for nature conservation and habitats within the zone of influence (ZoI)
- Assess the likelihood of protected and notable species being present on, near or adjacent to proposed works
- Provide a habitat map with target notes showing key features of ecological interest
- Provide recommendations on further survey requirements.

1.4 Zone of Influence (ZoI)

1.4.1 The current guidance on ecological impact assessments[3] recommends that all ecological features that occur within a ZoI for a proposed development are investigated. The ZoI includes:

- Areas directly within the land take for the proposed development and access.
- Areas which will be temporarily affected during construction.
- Areas likely to be impacted by hydrological disruption.
- Areas where there is a risk of pollution and noise disturbance during construction and/or operation.

[1] Notable refers to any widely accepted lists habitats or species of conservation importance such as Habitats and Species of Principal

[2] CIEEM (2017). Guidelines for Preliminary Ecological Appraisal. Chartered Institute of Ecology and Environmental Management: Winchester.

[3] CIEEM (2018). Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater, Coastal and Marine version 1.1. Chartered Institute of Ecology and Environmental Management: Winchester.

2. Planning Policy

2.1 Introduction

2.1.1 This section provides a brief summary of current National and Local Planning Policy that is relevant to this development. The original policy documents should be referred to for the full text and most up to date policy.

European legislation and international conventions

2.1.2 The construction and operational activities for the development should comply with International and European legislation. The following EC Directives and international conventions are relevant to the ecological assessment:

2.1.3 Convention on Biological Diversity 1992.

- Bern Convention on the Conservation of European Wildlife and Natural Habitats (1979).
- Bonn Convention on the Conservation of Migratory Species of Wild Animals (1979).
- Ramsar Convention on Wetlands 1971.
- EC Directive on the Conservation of Natural Habitats and of Wild Fauna and Flora (Habitat Directive 1992) as amended (92/43/EEC).
- EC Directive on the Conservation of Wild Birds (Birds Directive 1979) as amended (79/409/EEC).

National

2.1.4 The construction and operational activities must comply with UK nature conversation legislation, and with national and local biodiversity policies. The key national policies which influence the ecology and nature conservation assessments are:

- Conservation of Habitats and Species Regulations 2017 (as amended) (CHSR)[4].
- Wildlife and Countryside Act (W&CA) 1981 (as amended).
- Environment Act 2021[5].
- The Natural Environmental and Rural Communities (NERC) Act 2006[6].
- National Planning Policy Framework (NPPF) 2021[7].

[4] This remains relevant within the UK post-Brexit – see Changes to the Habitats Regulations 2017 - GOV.UK (www.gov.uk)

[5] Formerly The Environment Bill which received Royal Assent on 9 November 2021, meaning it is now an Act of Parliament

[6] Section 40 of the NERC Act is amended by the Environment Act 2021

[7] Ministry of Housing, communities and local Government, National Planning Policy Framework 2021

- UK Biodiversity Action Plan (UKBAP)[8].

2.1.5 The Environment Act provides a legal framework for environmental governance and makes provisions about targets, plans and policies for improving the natural environment. Part 6 of the Act relates to Nature and Biodiversity, Schedule 14 of the Act makes provision for biodiversity gain to be a condition of planning permissions in England. The government is introducing a mandatory requirement for developers to provide 10% biodiversity net gain in respect of development as would be required under the Town and Country Planning Act 1990 (TCPA 1990)[9]

2.1.6 The Natural Environment and Rural Communities Act 2006 requires public bodies, including local authorities, 'to have regard to the conservation of biodiversity in England' when carrying out their normal functions. Section 41 of this Act refers to a published list of species and habitats of 'principal importance for the conservation of biodiversity in England'. This Act provides an aid to guide public bodies in implementing their duty.

2.1.7 Chapter Fifteen of the NPPF relates to conserving and enhancing the natural environment and requires that planning policies and decisions made by Local Authorities in England should contribute to and enhance the natural and local environment. This includes but is not limited to taking the following measures:

- Conserve and enhance biodiversity
- Protect the habitats of these species from further decline
- Protect the species and habitats from the adverse effect of development

2.1.8 Relevant legislation and policy are provided in Appendix D.

Local

2.1.9 The construction and operational activities must comply with Local nature conversation legislation, and local biodiversity policies. The key local policies which influence the ecology and nature conservation assessments are presented within the Camden Local Plan (2017)[10] Policy A3 Biodiversity. Relevant policy includes;

- Grant permission for development unless it would directly or indirectly result in the loss or harm to the status or population of priority habitats and species
- Seek the protection of features with nature conservation value, including gardens.

[8] The UK BAP lists of priority species and habitats have been used to help draw up statutory lists of priority species and habitats in England which now form Section 41 of the NERC Act.

[9] https://www.legislation.gov.uk/ukpga/1990/8/contents

10 https://www.camden.gov.uk/camden-local-plan1

- Assess developments against their ability to realise benefits for biodiversity through the layout, design and materials used in the built structure and landscaping elements proportionate to the scale of development proposed.
- Require the demolition and construction phase of development to be planned to avoid disturbance to habitats and species and ecologically sensitive areas, and the spread of invasive species.
- Secure management plans, where appropriate, to ensure that nature conservation objectives are met
- The Council will 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 and positively integrated as part of the site layout
- 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.
- Expect developments to incorporate additional trees and vegetation wherever possible.
- Where on-site provision is not possible, the impact should be mitigated through works to create, reinstate or enhance habitats nearby. Enhancements will be secured through the use of planning conditions and where appropriate, planning obligations.
- In many developments, it should be feasible to incorporate biodiversity enhancing measures. These can include biodiverse-rich landscaping, sustainable urban drainage systems, 'species features' such as bird and bat boxes, artificial roosts for bats, tree planting and green roofs and walls. The Council will negotiate the provision of biodiverse living roofs in all suitable developments.

2.2 Quality Assurance and Environmental Management

2.2.1 All ecologists involved in the production of this report abide by CIEEM's and IEMA's code of professional conduct. All surveys and assessments were undertaken in accordance with the BS 42020:2013 Biodiversity: Code of practice for planning and development[11]. As per the advice note from CIEEM On the Lifespan of Ecological Reports & Surveys[12]; the findings presented in this report are valid for up to 18 months (July 2024).

[11] British Standards Institute (2013). BS 42020:2013 Biodiversity. Code of practice for planning and development. British Standards Institution: London.

[12] British Standards Institute (2013). *BS 42020:2013 Biodiversity. Code of practice for planning and development.* British Standards Institution: London.

3. Methodology

3.1 Desk Study

3.1.1 The Multi-Agency Geographic Information for the Countryside (MAGIC) database was accessed on the 25th April of February 2023 in order to establish the presence of statutory designated sites located within the vicinity of the site. This included a search for National Network Sites (NSN) such as Special Protection Areas (SPAs), Special Areas of Conservation (SACs) and Ramsar sites within 2km of the site and a search for nationally designated sites including Sites of Special Scientific Interest (SSSI's), Local Nature Reserves (LNRs) and National Nature Reserves (NNRs) within 1km of the site. A search for SAC's designated for bats within 10km of the site was also undertaken, The MAGIC data base was also used to identify any granted mitigation licenses within 2km of the site and Habitats of Principle Importance.

3.1.2 A search for any waterbodies located within 250m of the Site was undertaken using Ordnance Survey (OS) maps and satellite aerial images.

3.1.3 The NBN Atlas open licence data (CC0, CC-BY and OGL) provided the following data on 25th April 2023:

3.1.4 Records of non-statutory designated sites (Local Wildlife Sites LWS), Sites of Importance for Nature Conservation (SINC), Site of Nature Conservation Interest (SNCI) etc.) within 1km of the site boundary; and

3.1.5 Records of legally protected and notable species (flora and fauna) within 1km of the site boundary, including priority species and Species of Principal Importance for the Conservation of diversity in England notified under Section 41 of the Natural Environment and Rural Communities (NERC) Act 2006 and as listed in the England Biodiversity List.

3.1.6 Details and locations of Tree Preservation Orders (TPO) within 100m of the site boundary.

3.2 UKHabs Survey

3.2.1 Ecological Site Survey was undertaken on the 19th April 2023 by Ruth Frith (CEnv MIEMA).

3.2.2 A field survey was undertaken to identify and classify all habitat types and features within the Site using the UK Habitat Classification System (UKHab) and included a search for evidence of the presence of, and an assessment of the site's suitability to support, protected and notable

species as recommended by the Chartered Institute of Ecology and Environmental Management (CIEEM)[13] The field survey covered all accessible areas of the site.

3.2.3 All habitats on site pre-development were identified and categorised using UKHab classification Version 1.1 (UKHab Ltd, 2020). This system of classification was chosen as an appropriate habitat categorisation system as it has become the base habitat classification for Biodiversity Net Gain (BNG) assessment in England under the Environment Act 2021 and for Natural Capital baseline assessments.

3.3 Potential Roost Assessment

3.3.1 A preliminary roost assessment was made for any trees and buildings on site, following current best practice guidelines (Collins, 2016). Features of any built structures were assessed for their suitability to support roosting bats, using a high-powered torch and binoculars. Structures were classified as having negligible, low, moderate or high potential suitability. The same was conducted for habitats on site, as to their suitability for foraging and commuting. Both assessments made use of field observations and data collated for the desk study. The assessment was carried out by a competent surveyor with experience of conducting bat roosting assessments.

Table 1. Guidelines for assessing the potential suitability of sites for bats (adapted from Collins, 2016).

Suitability	Description: Roosting habitats	Description: Commuting and foraging habitats
Negligible	Negligible habitat features on site likely to be used by roosting bats.	Negligible habitat features on site likely to be used by commuting or foraging bats.
Low	A structure with one or more potential roost sites that could be used by individual bats opportunistically. However, these potential roost sites do not provide enough space, shelter, protection, appropriate conditions and/or suitable surrounding habitat to be used on a regular basis or by large numbers of bats (i.e. unlikely to be suitable for maternity or hibernation).	Habitat that could be used by small numbers of commuting bats such as gappy hedgerow or unvegetated streams, but isolated, i.e. not very well connected to the surrounding landscape by other habitat. Suitable, but isolated habitat that could be used by small numbers of foraging bats such as a lone tree or a patch of scrub.
Moderate	A structure or tree with one or more potential roost sites that could be used by bats due to their size, shelter, protection,	Continuous habitat connected to the wider landscape that could be used by bats for

[13] CIEEM (2017). Guidelines for Preliminary Ecological Appraisal

	conditions and surrounding habitat but unlikely to support a roost of high conservation status.	commuting such as lines of trees and scrub or linked back gardens. Habitat that is connected to the wider landscape that could be used by bats for foraging such as trees, scrub, grassland or water.
High	A structure or tree with one or more potential roost sites that are obviously suitable for use by larger numbers of bats on a more regular basis and potentially for longer periods of time due to their size, shelter, protection, conditions and surrounding habitat.	Continuous, high-quality habitat that is well connected to the wider landscape that is likely to be used regularly by commuting bats such as river valleys, lines of trees and woodland edge. High-quality habitat that is well connected to the wider landscape that is likely to be used regularly by foraging bats such as broadleaved woodland, tree-lined water courses and grazed parkland. Site is close to and connected to known roosts.

3.4 BREEAM Assessment Methodology

3.4.1 The development proposal has been assessed against specific BREEAM Land Use and Ecology Credits within sections LE02: Ecological value of site and protection of ecological features, LE03: Minimising impact on existing site ecology and LE04: Enhancing site ecology. The assessment and has been undertaken using the BREEAM UK New Construction manual version 6 (2022)[14].

3.4.2 The site survey evaluated the site's ecological baseline looking at current and potential ecological value and condition, direct and indirect risks to ecological value and capacity and feasibility for enhancement to the sites ecological value.

3.4.3 The survey was performed by Ruth Frith BSc (Hons) CEnv MIEMA, a Suitably Qualified Ecologist ("SQE").

[14] https://files.bregroup.com/breeam/technicalmanuals/sd/uk-new-construction-version-6/

3.5 Survey Constraints and Limitations

3.5.1 It has been assumed all the information provided to CGC by third parties has been accurate.

3.5.2 The site survey is based on the conditions encountered and the information available at the time, as with any survey, it is a documentation of what the surveyor observes on the specific date and their interpretation of those observations.

3.5.3 No site visit can ensure prediction of the natural environment and the movement of species in response to variables such as weather or seasonality.

3.5.4 Signs of bats in concealed locations may not have been visible to the surveyor.

3.5.5 Access to the basement of the building or the third storey flat roof was not available. The flat roof was viewed from the fourth storey window.

3.5.6 Access to the top of the building was not safely available but photographs were provided by members of staff with permitted access to this area.

3.5.7 Not all potential bat roosting features were accessible to the surveyor and therefore assessments are based upon the potential for these features to provide suitable roosting opportunities.

3.5.8 The absence of certain protected or rare species does not preclude their presence in the survey area. There is always the risk of protected or rare species being over-looked, either owing to the timing of the survey or the scarcity of species.

4. Results

4.1 Desktop Study

4.1.1 The Site occurs within an urban landscape within the Greater London built up area. The Site is within the Inner London National Character Area (112) in Clerkenwell and surrounded by the adjoining Farringdon to the south, Islington and Angel to the North and Covent Garden and Soho to the west. London Kings Cross Station and St Pancras international are located approximately 0.5km north.

4.1.2 Grays Inn Road (A5200) is located at the front of the building with quieter residential streets in the surrounding streets and immediately behind along Acton Street and Frederick Street, with their associated gardens.

4.1.3 Nearby is a mix of properties with many residential streets as well as businesses and other establishments including Westminster Kingsway College, Hotels, Cafes, Restaurants and shops.

4.1.4 Numerous green spaces are also close to the site, including, St Georges Gardens, St Andrews Gardens, Brunswick Square Gardens, Calthorpe Community Garden and Recent Square Gardens. There are also numerous residential gardens and scattered individual trees along many of the local roads, including the Grays Inn Road and adjoining Acton Street, Harrison Street, Sidmouth Street.

Figure 2: Location of the Site and surrounding land use (Source: Google Satellite, 2023)

Protected Species

4.1.5 A number of protected and notable species have been recorded within 2km of the site. These are discussed within the protected species survey results below.

Statutory Designated Sites

4.1.6 There are no NSN sites or statutory designated sites within 2km of the site and no Special Areas of Conservation (SAC), designated for bats within 10km.

Non-Statutory Designated Sites

4.1.7 There are 18 Sites of Importance for Nature Conservation Interest (SINC) and one Local Nature Reserve within 1km of the Site (source; Greenspace information for Greater London, GIGL) presented within Table 2.

Table 2: Non-Statutory designated sites within 1km of the Site (source; Greenspace information for Greater London, GIGL)

Site Name	Distance from the Site
Camley Street Nature Park Local Nature Reserve (LNR): Cross and St Pancras. The reserve provides natural habitat for birds, butterflies, amphibians and a rich variety of plant life. Species - Rare earthstar fungi; reed warblers, kingfishers, geese, mallards, and reed buntings; bats.	0.8km N
Camley Street Natural Park SINC	0.8km N
Calthorpe Community Garden SINC	0.12km S
St Georges Garden SINC	0.2km SW
St Andrews Garden SINC	0.3km S
Corams Field SINC	0.32km SW
Russel Square Gardens SINC	0.9km SW
Gordon Square SINC	0.9km W
Lloyd Square SINC	0.4km E
Wilmington Square SINC	0.56km SE
Spa Fields Gardens SINC	0.75km SE
Skinner Street Open Space SINC	0.85km SE
Spa Green Gardens SINC	0.83km E
Claremont Square Reservoir SINC	0.68km ENE
Claremont Close Lawns SINC	0.77km ENE
Culpepper Community Garden SINC	0.94km NE
London's Canals SINC	0.75km N
St Pancras Gardens SINC	1km NNW

Priority Habitats

4.1.8 One habitat of principle importance was identified within 1km. Details of which are outlined in Table 3.

Table 3: Priority habitats with 1km (Source. MAGIC)

Priority Habitat	Distance from site
Deciduous Woodland	• 8 areas of deciduous woodland within St Georges Gardens 0.2km Southwest • 16 areas of deciduous woodland within Coram Fields 0.26km Southwest • 7 areas of deciduous woodland off Theobolds Road 0.85km South • 18 areas of deciduous woodland within Russel Square Gardens 0.9km West • 6 areas of deciduous woodland within Tavistock Square Gardens East 0.75km West • 9 areas of deciduous woodland within Myddelton Square Gardens 0.7km East • 2 areas of deciduous woodland within Camley Street Natural Park 0.9km North

European Protected Species Licence Records

4.1.9 Consultation with the MAGIC website revealed two records of bat mitigation licences within 2km of the site. Details of these records are summarised below in table 4.

Table 4: Non-statutory designated sites within 1km of the site (Source. MAGIC)

Mitigation licence reference number	Year	Species	Distance from site
2014-6253-EPS-MIT	18/02/2015 – 31/03/2020	Common pipistrelle Pipistrellus pipistrellus Allowing destruction of a resting place	1.4km southwest of the Site.
2017-30911-EPS-MIT	11/09/2017 – 04/09/2022	Soprano pipistrelle *Pipistrellus pygmaeu* Allowing destruction of a resting place and breeding site	1.3km west of the Site.

4.2 Site Survey

Habitats

4.2.1 The site visit was undertaken during a daytime visit on 19th April 2023. The daytime temperature was 9˚C with overcast cloud. Ruth Frith conducted the PEA and PRA.

4.2.2 The Site constitutes a single a seven-storey red brick building with frontage on the Grays Inn Road (See Figure 3). Adjoining to the rear along Acton Street the building is a three-storey yellow brick extension, both parts of the building are flat roofed with access to a small flat roof area on the seventh floor.

4.2.3 There is an outside courtyard area accessible from Acton Street through an archway in the three-storey building. This area is all hard standing and is used for bin storage, cycle store and parking. See figure 5.

4.2.4 A basement is also present, viewed from the outside courtyard, but no access to this area was provided. See figure 6.

4.2.5 There were no areas of planting or vegetation within the buildings footprint.

4.2.6 A description of the onsite habitats identified are provided below.

Figure 3: The exterior from Grays Inn Road

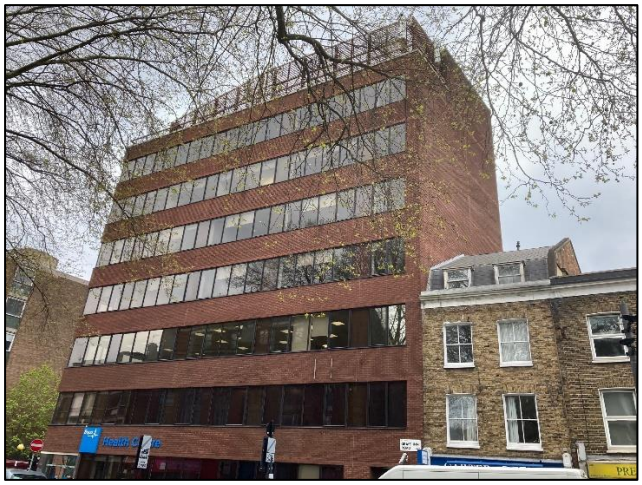
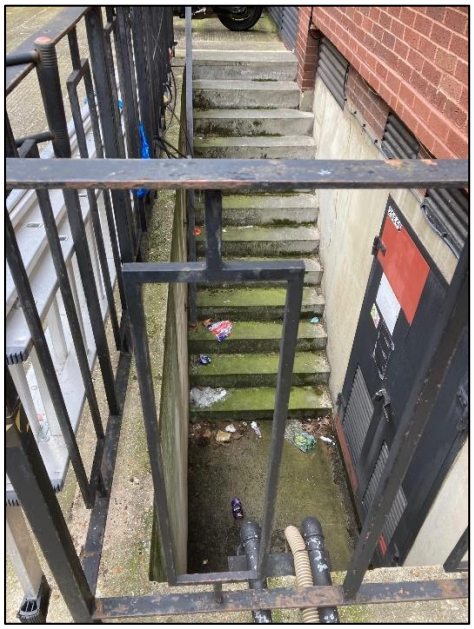


Figure 4: The exterior from Acton Street

Figure 5: Showing the external courtyard area.

Figure 6: showing the basement access from the courtyard area.



Developed Land; sealed surface *(UK Habs Code: ub1)*

4.2.7 The Site constitutes 834m^2 of hard standing, which includes the seven and three-storey extension, and outside courtyard area.

4.2.8 A description of the habitats identified off site are provided below.

Deciduous woodland

4.2.9 There are several areas of deciduous woodland, offsite (see table 3). The closest located 0.2km southwest (St Georges Gardens) and is separated from the site by roads and numerous buildings.

4.2.10 The deciduous woodlands are noted to be a habitat of principle importance.

Scattered broadleaved trees

4.2.11 There are numerous broadleaved trees located along Grays Inn Road and the adjoining streets.

4.2.12 Many of the trees are mature and include species such as London Plane, Lime, Whitebeam, Cherry and Maple, see Figure's 7-9.

Figure 7 & 8: Showing scattered trees on the surrounding streets

Figure 9: Showing scattered trees on the surrounding streets

Developed Land *(UK Habs Code: ub1)*

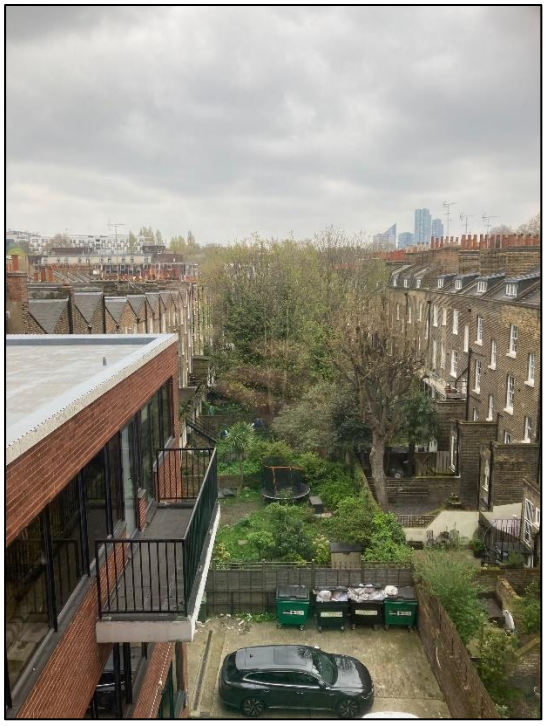
4.2.13 The Site is located within the urban built up areas of Greater London which constitutes densely situated residential properties, hotels, road, pavements, cafes, restaurants, business premised and other organization premises.

Figure 10: Showing nearby buildings and business

Gardens *(UK Habs Secondary Code: 230, 231)*

4.2.14 Although access was not available, utilising online aerial imagery identifies numerous vegetated private gardens immediately east of the Site. Further assessment of the habitat types within the gardens was not possible, but many contained semi-mature / mature trees, viewed from the courtyard and from inside the upper floors of the Site buildings.

Figure 11: Showing neighbouring gardens to the rear of 300 Grays Inn Road.



Protected and Notable Species

4.2.15 A description of the sites suitability to support protected and notable species is outlined below.

Nesting Birds

4.2.16 The desk study for birds within 2km of the site showed numerous records of birds, including

4.2.17 Field fare *Turdus pilaris*, Kingfisher *Alcedo atthis*, Tufted Duck *Aythya fuligula*, Canada goose *Branta canadaensis*, Goldeneye *Bucephala clangula*, Brambling *Fringilla montifringilla*.

4.2.18 The site itself provides no suitable vegetation for nesting birds.

4.2.19 The flat roofs of the buildings and the outdoor courtyard area have the potential to provide a nest location for species such as feral pigeon *Columba domestica*. There were no evidence of birds utilising these areas at the time of survey. Netting present in the flat roof area is likely to discourage birds from nesting within this area.

4.2.20 Overall there is a **low** potential for nesting birds to be present onsite.

Other protected species

4.2.21 The desk study returned no records of protected species within 2km. There is no habitat suitable within the Site or zone of influence. Overall, there is a **negligible** potential for protected species to be present onsite, they will not be considered further this this report.

Common Reptiles

4.2.22 The desk study confirmed 1 records of slow worm *Anguis fragilis* within 2km of the Site. There is no habitat suitable for reptiles within the Site. The neighboring gardens may provide some suitable habitat for reptiles, however the roads and highly urbanised nature of the of the surrounding area would lower the suitability for reptile communities to be present in isolated plots. Overall here is a **negligible** suitability for reptiles to be present on Site.

4.2.23 As there are no suitable habitat for reptiles onsite, they will not be considered further in this report.

Notable Mammals

Hedgehog Erinaceus europaeus

4.2.24 No records of hedgehog have been identified within 2km of the Site. The Site offers no suitable habitat for hedgehogs and is a highly disturbed from traffic, noise and lighting with no vegetation present. The wider landscape offers more suitability with residential streets and gardens.

4.2.25 The habitats onsite provide no opportunities for foraging and sheltering hedgehogs, therefore the site has **negligible** potential to support hedgehogs.

4.2.26 As there are no suitable habitat for hedgehog onsite, they will not be considered further in this report.

Invasive Species

4.2.27 The desk study identified 2 records of Japanese Knotweed *Fallopia japonica* within 2km of the Site. The site survey observed no evidence of invasive species present within the Site.

4.2.28 As there no records or evidence of invasive species onsite they will not be considered further in this report.

4.3 Preliminary Roost Assessment (PRA)

4.3.1 The desk study returned records of one common pipistrelle and two protected species license applications have been applied for in relation to bats within 2km of the Site (see table 4).

4.3.2 Although the location of 300 Grays Inn Road is within an urban landscape the Site is close to adjacent older buildings, scattered mature and semi mature trees and there are many pockets of green space which include areas of trees which may provide roosting opportunities and be used by foraging and commuting bats; providing some likelihood of bats to be present in the vicinity of the Site.

4.3.3 300 Grays Inn Road is constructed of well-sealed brickwork which showed no evidence of crevices or gaps within the mortar.

4.3.4 The building comprised three areas of flat roofs;

- The roof of the third storey of the extension along Acton Street was viewed from the 4th storey window of the main building and showed no evidence for entry points. The roof was fully sealed with membrane and asphalt covering.
- The roof of the 6th floor of the main building is present along the side adjoining Grays Inn Road. This area was access by the surveyor through the boiler room on the 7th floor. The roof was fully sealed with membrane and asphalt covering. Louvre panels were present on all sides, providing screening to the air conditioning units. The brickwork was well sealed. Some gaps were observed around the metal vent entry points into the boiler room and through the gaps in the louvre doors. Two gaps in the brickwork were present, one which contained cables running in / out of the building. The only roof areas were flat and fully sealed with membraneand asphalt covering.
- Access to the roof of the 7th story was not safely available to the surveyor but photographs were provided by members of staff with permitted access to this area.

Similar to the 3rd storey roof the roof was fully sealed with membrane and asphalt covering and showed no evidence for entry points. A metal container and air conditioner infrastructure was present on this roof, however provided negligible suitability for bats roosting.

4.3.5 The flat roofs show no sign of suitability for roosting bats.

4.3.6 Inside the boiler room the space was relatively open, lit and at times noisy due to the equipment present. Some excrement was observed on one of the walls, access to inspect more closely was not available and considered to likely be pigeon. No evidence of bat guano was observed inside the boiler room.

4.3.7 Internally 300 Grays Inn Road is in use as a BUPA Health Centre / Clinic. Not all the internal spaces were accessed, however the same format was consistent throughout with internal stud walls present and suspended ceilings, creating a network of examination rooms, offices and corridors.

4.3.8 A small courtyard was accessed from archway in the building on Acton Street which is used for bin storage, cycle store and parking. The brick work of the buildings from this aspect was well sealed brickwork which showed no evidence of crevices or gaps within the mortar.

4.3.9 A basement is present, viewed from the outside courtyard, but no access to this area was provided. Louvre vents were present into the basement which may provide an entry point for bats. Residential street gardens backed onto the courtyard area. Access to the gardens was not permitted but could be viewed from the courtyard and the upper storeys of the building. Semi mature and mature scattered trees were present and could provide roosting opportunities as well as a corridor for foraging and commuting bats.

4.3.10 Due to the lack of access to check the features within the basement to confirm or rule out suitability, and due to its location adjacent to residential gardens a **low** potential for roosting bats to be present is considered suitable for the basement.

4.3.11 See appendix A for PRA Photos.

Table 5: Bat suitability on and off site

	Onsite Suitability	Offsite Suitability
Roosting	Internal - access points to building interior included: ▪ Gaps into the boiler room, which itself was considered negligible suitability for roosting bats. ▪ Gaps into the basement of which no access was permitted.	Adjacent older buildings and mature / semi mature offsite scattered trees were considerd likely to provide oppotunities for roosting bats.
Commuting	The site itself offered low suitability for commuting bats.	The adjacent gardens, scattered trees and green spaces may be used by commuting bats.
Foraging	The site itself offered low suitability for foraging bats.	The adjacent gardens, scattered trees and green spaces could be utilised by bats for the purpose of foraging.

4.3.12 Gaps into the boiler room on the sixth floor may provide access for opportunistic bat roost, but the conditions in the boiler room do not support favorable conditions for bats and it is considered very unsuitable for maternity or hibernation roosts due to the levels of human disturbance, the lighting within the boiler room and noise from machinery. Due to the negligible internal and extremely limited external roosting opportunities at this point of the building, lessened by the height on the sixth storey and its position in an overall lit urban setting, there is considered a **negligible** potential for roosting bats to be present.

4.3.13 Due to the suitable habitats off site, there is potential for commuting and foraging bats to be encountered onsite, however the busy, lit urban setting is expected to reduce the overall suitability. Overall, there is considered a **low** potential for foraging or commuting bats to be present onsite.

4.4 BREEAM Results

4.4.1 This assessment has been undertaken with all the information available at the time of writing. As such, an additional survey for ecology is still to be undertaken.

Issue	Available Credits	Credits likely to be Awarded based on evidence
LE02: Ecological value of site and protection of ecological features	**2**	**2**
• *The SQE has identified the site as being 'low ecological value'* The SQE has identified the site as being 'low ecological value' in terms of utilising the BREEM checklist for defining land of low ecological value. To date, an ecological assessment has been conducted which incorporates a Preliminary Roost Assessment (PRA). The SQE has advised a Phase II survey to be conducted to determine as to whether the site is suitable for roosting bats. If the Phase II bat survey proves no likelihood of the site utilised by bats, these credits can be awarded.		
• *All existing features within the site boundary and zone of influence will be adequately protected during construction* The PEA has scoped out the likelihood of the construction phase to impact protected species and habitats, there has been recommendations made for controlled lighting, protection of excavation and pollution control. Compliance is monitored against all relevant UK, and EU or International legislation relating to the ecology of the site - negative impacts from site preparation and construction works are to be managed according to the mitigation hierarchy (avoidance, protection, limitation or control of the negative impacts on features of ecological value on site)		
• *The principle contractor will comply with the ecological protection recommended by the SQE*. As above. The Project Manager is to be made aware of the PEA and its required actions.		
LE03: Minimising impact on existing site ecology	**N/A**	**N/A**
This issue is not applicable to BREEAM International New Construction Version 6.		
LE04: Enhancing site ecology	**3**	**3**
• *A SQE has been appointed at the beginning of Concept Design stage.* Consultant Ruth Frith BSc (Hons) Royal Holloway, MIEMA, an Environmental Manager and holder of Natural England Level 1 Dormouse license. With 15 years' experience in the environmental field has been appointed as the SQE for the site pre-planning submission.		
• *The SQE has provided an ecology report with appropriate ecological recommendations for the enhancement of the site's ecology The report is based on a site visit or survey by the SQE*. An appropriate ecological baseline survey was carried out and report produced by SQE Ruth Frith BSc (Hons) MIEMA which addresses the above. As such, the provision of recommendations and enhancements for the site is considered to be acceptable. The Ecological Assessment and PRA considered the presence / likely absence of protected species and habitats. With the assumption that SQE recommendations for any mitigation following outcome of the recommended Phase II bat emergence / re-entry survey are complied with.		
• *At least 50% of the recommendations within the ecology report for enhancement of site ecology will be implemented in the final design and build.* The PEA has provided advisories for enhancements for the benefit of biodiversity, if the SQE receive evidence that enhancements have been incorporated, the SQE will recommend the achievement of the third credit.		

5. Evaluation, Impacts and Recommendations

5.1 Introduction

5.1.1 This section presents the conclusions of the PEA. It provides an assessment of the potential impacts and likely ecological constraints to the proposed works and provides recommendations for any further survey work or mitigation measures considered necessary. An outline of protected species legislation relevant to the findings of this report is provided in Appendix B.

5.2 Potential Impacts

Habitats

5.2.1 There are no habitats of principal importance within the Site. The proposals will not result in a reduction of the areas of deciduous woodland habitats of principal importance identified within the Zone of Influence.

Protected Species

Birds

5.2.2 There is low suitability for nesting birds on site. If the works are undertaken during the bird nesting season, there is a potential for nests to be destroyed and the legislation relating to nesting birds contravened.

Bats

5.2.3 Internal and extremely limited external roosting opportunities, lessened by the overall lit urban setting, there is considered a overall **low** potential for roosting bats to be present onsite.

5.2.4 The plant room and sixth floor roof were assessed with **negligible** bat roosting potential. The basement was assessment with **low** bat roosting potential, due to potential bat entry points (which lack of access could not confirm or discount) and proximity to adjacent gardens which may provide opportunities and offsite roosting, foraging and commuting opportunities.

5.2.5 One Phase II bat survey will be required prior to the commencement of the proposed works on site. This would be concentrated to the courtyard and basement area.

5.2.6 The Phase II survey would involve surveyors located in key spots to watch for bats emerging/re-entering the areas highlighted. Phase II surveys are seasonally restricted to between May and September (inclusive) when bats are more regularly active and must be undertaken prior to any works commencing on site. If the phase II survey confirms bats are

roosting on the site, a Natural England Protected Species Licence will be required before works can commence on these buildings.

5.3 Recommendations for Mitigation

5.3.1 Demolition and stripping back of buildings are recommended to occur outside of the bird breeding season which extends from March-August. If however building destructive works must commence during the nesting bird season then an ecologist must inspect the features, a maximum of 48hrs prior to removal. If nests are found, work is to be halted and the nest left undisturbed with an exclusion zone until the nest is no longer in use.

5.3.2 Lighting spill will negatively impact nocturnal species. Mitigation will be applied by only lighting specific areas such as entrance ways, using a minimal level of lighting and lowering the height of lights.

5.3.3 Pollution control measures to prevent impacts from pollution and run off should be implemented following CIRIA 2001 C532[15]. Measures are also to be employed to ensure dust is minimised during the construction works.

5.3.4 Excavations should be covered over night or ramps installed to prevent animals becoming trapped or to allow trapped animals to escape.

5.3.5 Noise disturbance should be minimised by avoiding vehicle and machinery idling.

5.3.6 Following the outcome of the recommended bat survey further mitigation may be advised.

5.4 Recommendations for Enhancement

5.4.1 In accordance with the NPPF, works should not only avoid, mitigate or compensate for ecological impacts, but also seek to enhance biodiversity within the area. Therefore, enhancement measures for the proposed site option should be implemented.

5.4.2 Any ecological enhancement should be linked to existing wildlife corridors where practical and possible or proposed establishment for wildlife corridors and sanctuary areas on site. There is potential by following best practice principles for achieving overall gains for wildlife and ensuring the functions of the relevant legislation and policies are achieved.

5.4.3 Within the outdoor landscaping areas, it is advised planting incorporates specimens which are locally suited to the environment, able to persist in urban environments and provide a beneficial nectar source for invertebrates throughout the year. Within these landscaped areas, invertebrate boxes or 'bug hotels' could be incorporated.

[15] Control of water pollution from construction sites. Guidance for consultants and contractors (C532), CIRIA (2001)

5.4.4 Where possible, bird boxes are to be erected on north or east facing elevations to avoid the midday sun, these boxes would benefit from being within the vicinity of green areas, 2-4m above the ground with clear flight paths. Bird box specifications advised include; starling boxes, sparrow terraces, and if possible, swift bricks built into the façade.

5.4.5 Depending on the outcome of the required Phase II survey, bat boxes are to be erected on the south facing elevation where it can receive direct sunlight. It is advised these boxes are situated within the vicinity of greenery, poisoned at least 3-4m above the ground sheltered from strong winds with a clear flight path and away from artificial lights. If possible bat bricks could be incorporated into the new façade.

5.4.6 Providing habitat at roof level, especially within urban areas, can have significant benefits for wildlife, notably invertebrates, birds and bats. An extensive green roof is recommended for the development as it is lightweight, requires a shallow growing medium and does not require irrigation. Its ability to be laid as a pre-planted mat ensures it will establish quickly and give high aesthetic finish immediately after installation. Extensive green roofs are comprised of mosses, sedums, succulents and grasses.

Appendix A: PRA PHOTOS

Figure 1. Exterior of 300 Grays Inn Road, showing well sealed brickwork

Figure 2. Exterior of 300 Grays Inn Road, showing well sealed brickwork

Figure 3 Surrounding streets with scattered mature trees

Figure 4 Surrounding streets with scattered mature trees

Figure 5 Surrounding streets with older adjacent properties

Figure 6 Surrounding streets with scattered mature trees

Figure 7 Surrounding streets with older adjacent properties

Figure 8 Well sealed flat roof of 3rd Storey

Figure 9 Flat roof of 6th storey, accomodating building maintenance equipment and louvre screening panels

Figure 3 Lourve doors into the boiler room from 6th storey flat roof

Figure 11 Well sealed brickwork on 6th Storey flat roof area

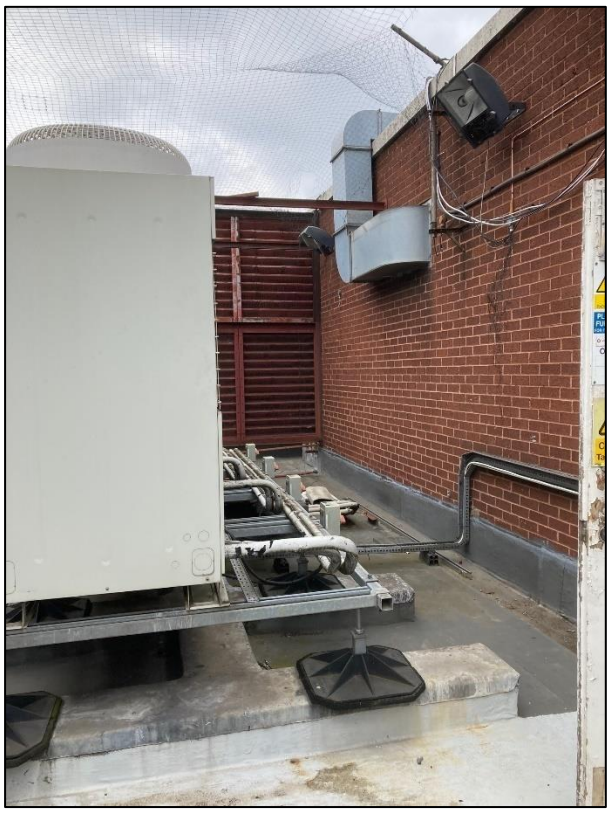


Figure 12 6th Storey flat roof area - gap in the brickwork

Figure 13 7th Storey flat roof accomodating metal container and building maintenance infrastructure

Figure 14 Example of the interior empty office space

Figure 15 Exterior courtyard areas

Figure 16 Exterior courtyard areas

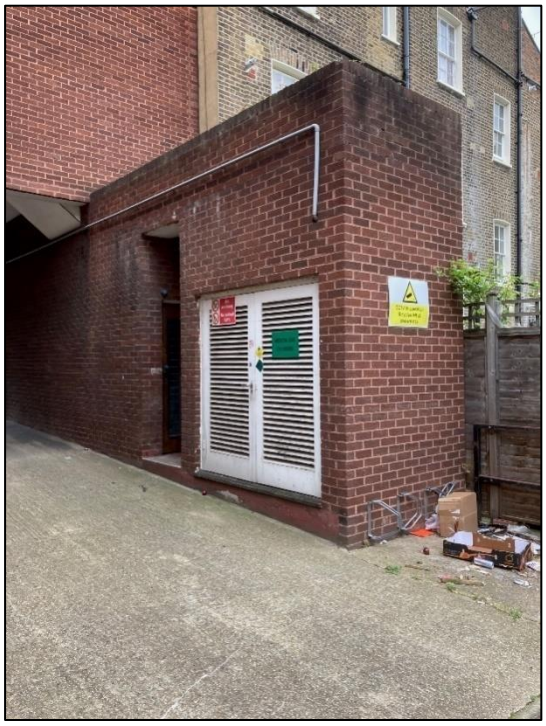


Figure 17 Bike store

Figure 18 Courtyard, access to the the basement. No access inside the basement permitted.

Figure 19 Exterior courtyard areas and adjacent residential gardens and buildings

Figure 20 Adjacent residential gardens and trees

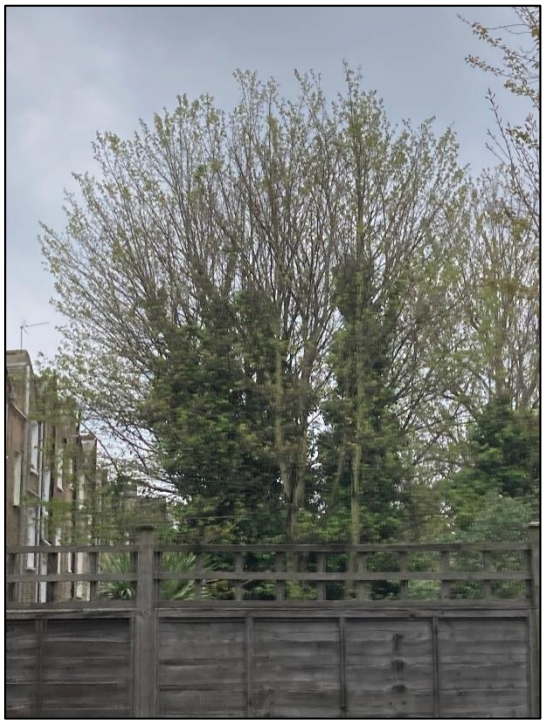


Figure 21 Interior of the boiler room, lit and open

Figure 22 Interior of the boiler room, lit and open

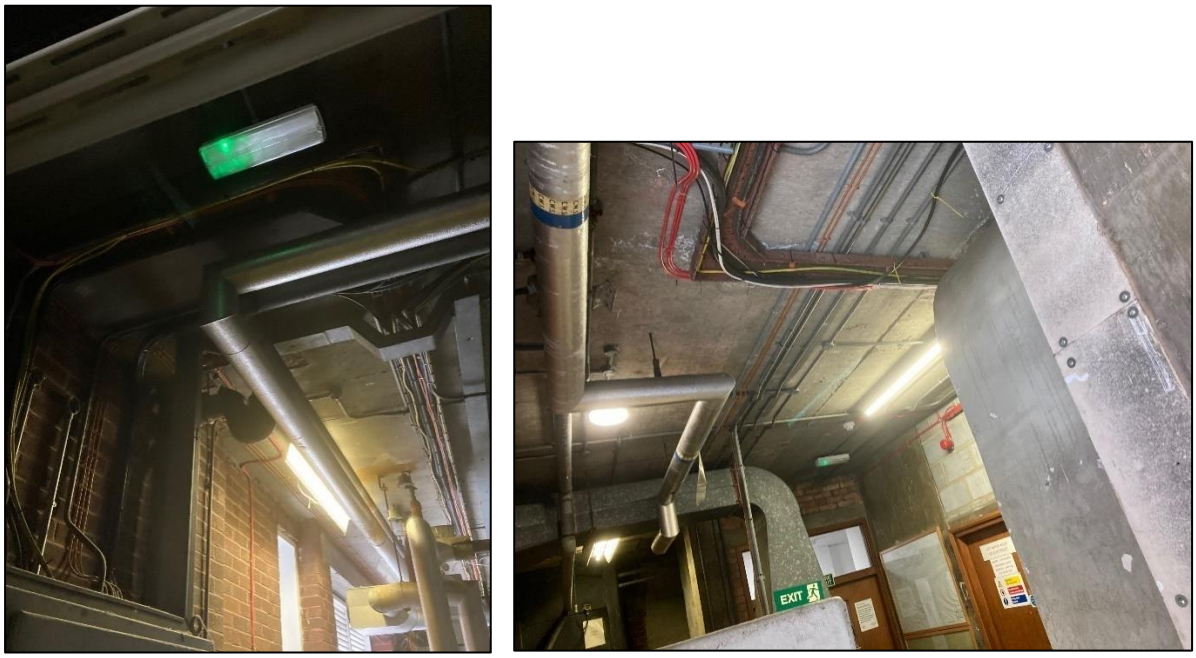


Figure 23 Interior of the boiler room, excrement on the wall

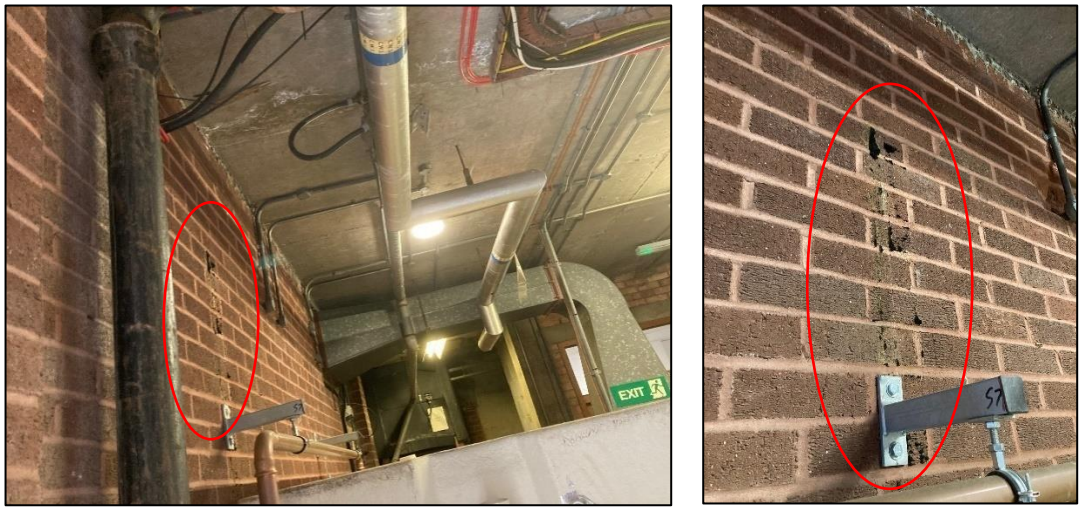


Figure 24 Entry points around metal ducting and louvre doors.

Appendix D: Protected Species Legislation

A summary of key protected species legislation is outlined below. The original legislation should be referred to for the full text.

Species	Legislation
Bats *Chiroptera*	All bat species are protected under the Conservation of Habitat and Species Regulations 2017 (as amended) and Wildlife and Countryside Act (WCA) 1981 (as amended). This means it is illegal to: • Deliberately capture, injure or kill a bat; • Intentionally or recklessly disturb a bat in its roost or deliberately disturb a group of bats; • Damage or destroy a bat roosting place (even if bats are not occupying the roost at the time); • Possess or advertise/sell/exchange a bat (dead or alive) or any part of a bat; and • Intentionally or recklessly obstruct access to a bat roost.
Badgers *Meles meles*	Badgers and their setts are afforded protection under the Protection of Badgers Act 1992. This Act is in regard to welfare legislation for badgers, due to history persecution, rather than their distribution which is widespread and abundant throughout the countryside. Under this act it is an offence to: • Capture, kill, injure and cruelly or ill-treat a badger; • Damage, obstruct or destroy a sett; and, • Disturb a badger when within a sett.

Species	Legislation
Otter *Lutra lutra*	Protected in the UK under the Wildlife and Countryside Act, 1981. Priority Species under the UK Post-2010 Biodiversity Framework. European Protected Species under Annex IV of the European Habitats Directive. This means it is illegal to: • Capture, kill, disturb or injure otters (on purpose or by not taking enough care) • Damage or destroy a breeding or resting place (deliberately or by not taking enough care) • Obstruct access to their resting or sheltering places (deliberately or by not taking enough care) • Possess, sell, control or transport live or dead otters, or parts of otter
Water vole *Arvicola amphibius*	The water vole is fully protected under Schedule 5 of the Wildlife and Countryside Act 1981 and is a priority conservation species. You're breaking the law if you: • Intentionally capture, kill or injure water voles Damage, destroy or block access to their places of shelter or protection (on purpose or by not taking enough care) • Disturb them in a place of shelter or protection (on purpose or by not taking enough care) • Possess, sell, control or transport live or dead water voles or parts of them (not water voles bred in captivity)
Dormice *Muscardinus avellanarius*	Dormice are protected under the Conservation of Habitat and Species Regulations 2017 (as amended) and by the Wildlife and Countryside Act 1981 (as amended). This makes it illegal to: • Intentionally or deliberately injure, kill, or take any wild dormouse;

Species	Legislation
	• Intentionally or deliberately damage, destroy or obstruct any access to any structure or place used for shelter, breeding, or protection by a dormouse; • Or to intentionally or recklessly disturb a dormouse whilst it is using such a structure or place; or • Possess or advertise/sell/exchange a dormouse (dead or alive) or any part of a dormouse.
Great crested newts (GCN) *Triturus cristatus*	GCN are fully protected by the Conservation of Habitats and Species Regulations 2017 (as amended) and under the WCA 1981 (as amended). This makes it illegal to: • Intentionally or deliberately kill, injure or take any GCN; • Possess or control any live or dead specimen, or anything derived from a GCN; • Intentionally or deliberately damage, destroy or obstruct any access to any structure or place used for shelter, breeding, or protection by a GCN; • Or to intentionally or recklessly disturb a great crested newt whilst it is using such a structure or place.
Widespread reptile species (Slow worm *Anguis fragilis,* Grass snake *Natrix helvetica,* Common lizard *Zootoca vivipara,* and Adder *Vipera berus).*	All UK reptile species are protected under the WCA 1981 (as amended) making it illegal to: • Intentionally or deliberately injure, kill, or take any wild reptile; • Possess or advertise/sell/exchange a reptile (dead or alive) or any part of a reptile.
Breeding Birds	All wild birds in the UK are protected under the WCA 1981 (as amended) making it illegal to: • Kill, injure or take any wild bird; • Take, damage or destroy the nest of any wild bird while it is being built or in use; • Take or destroy the eggs of any wild bird; and

Species	Legislation
	• Possess or control (e.g. for exhibition or sale any wild bird or egg unless obtained legally).